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January 5, 2015

VIA ELECTRONICALLY

Hon. Herbert H. Hilliard, Chairman
Tennessee Regulatory Authority
c/o Sharla Dillon, Dockets and Records Manager
502 Deaderick Street, 4th Floor
Nashville, TN 37243

RE: In Re: Petition of Piedmont Natural Gas Company, Inc. for Approval of a CNG Infrastructure Rider to its Approved Rate Schedules and Service Regulations, TRA Docket No. 14-00086

Dear Chairman Hilliard:

Attached for filing please find the *Tennessee Fuel and Convenience Store Association's Responses to Discovery Requests of Piedmont Natural Gas Company* in the above-captioned matter. (Please note that copies of sections of the Tennessee Code Annotated which may be referenced have not been provided with this filing.)

As required, an original of this filing, along with four (4) hard copies, will follow. Should you have any questions concerning this filing, or require additional information, please do not hesitate to let me know.

Very truly yours,

BUTLER SNOW LLP

Melvin J. Malone

clw
Attachments
c: Parties of Record

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BEFORE THE TENNESSEE REGULATORY AUTHORITY
NASHVILLE, TENNESSEE

IN RE:	)	
	)	
PETITION OF PIEDMONT NATURAL GAS COMPANY, INC. FOR APPROVAL OF A CNG INFRASTRUCTURE RIDER TO ITS APPROVED RATE SCHEDULES AND SERVICE REGULATIONS	)	**Docket No. 14-00086**

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION'S RESPONSES TO DISCOVERY REQUESTS OF PIEDMONT NATURAL GAS

Tennessee Fuel and Convenience Store Association ("TFCA"), by and through counsel, hereby submits its responses to the Discovery Requests propounded by Piedmont Natural Gas.

GENERAL OBJECTIONS

1. TFCA objects to all requests that seek information protected by the attorney-client privilege, the work-product doctrine and/or any other applicable privilege or restriction on disclosure.

2. TFCA objects to the definitions and instructions accompanying the requests to the extent the definitions and instructions contradict, are inconsistent with, or impose any obligations beyond those required by applicable provisions of the Tennessee Rules of Civil Procedure or the rules, regulations, or orders of the Tennessee Regulatory Authority.

3. The specific responses set forth below are based on information now available to TFCA, and TFCA reserves the right at any time to revise, correct, add to or clarify the objections or responses and supplement the information produced.

4. TFCA objects to each request to the extent that it is unreasonably cumulative or duplicative, or seeks information obtainable from some other source that is more convenient, less burdensome or less expensive.

5. TFCA objects to each request to the extent it seeks information outside TFCA's custody or control.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

1. Reference Carr's testimony, p. 17. Why would the so-called cross-subsidization problem continue to exist if Piedmont converted its CNG business to an unregulated business where the unregulated entity would buy the CNG assets from Piedmont?

RESPONSE:

Contrary to the implication of the question, Dr. Carr did not assert in his pre-filed testimony that the cross-subsidization would "continue to exist if Piedmont converted its CNG business to an unregulated business where the unregulated entity would buy the CNG assets from Piedmont." Rather, Dr. Carr testified that the vague suggestions that appear in Piedmont's response to TFCA Discovery Request No. 46 are not sufficient to alleviate the anti-competitive concerns raised by Piedmont's proposal.[1] Under Piedmont's proposal, cross-subsidization would continue until such time as the rates paid by Piedmont's natural gas distribution customers were no longer increased in order to reduce the rates paid by its CNG fueling customers. When and if this would occur under Piedmont's scenario of an unregulated Piedmont entity purchasing CNG assets from a regulated Piedmont entity would depend on the specific details of the transaction. Piedmont did not present any such specificity.

[1] *Pre-Filed Testimony of TFCA Witness Dr. Scott Carr*, TRA Docket No. 14-00086, p. 17, L. 1- p. 18, L. 19 (Dec. 11, 2014).

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

2. Reference Carr's testimony, p. 9-10. Identify any and all additional support for Carr's conclusion that a subsidy is inconsistent with the intent of the legislation establishing TCA sec. 65-5-103(d).

RESPONSE:

Contrary to the implication of the question, Dr. Carr did not assert in his pre-filed testimony that "a subsidy is inconsistent with the intent of the legislation establishing Tenn. Code Ann. § 65-5-103(d)." Rather, Dr. Carr testified, "The legislative history explicitly indicates that House Bill No. 191 is intended to disallow *cross-subsidies of the type proposed by Piedmont.*"[2] [italics added]. The basis for this conclusion is provided in Dr. Carr's testimony and also in TFCA Witness Mr. Ron Jones' Pre-filed Testimony at pages 7 – 9 and in Exhibit 1 to Mr. Jones' testimony.

[2] *Id.* at p. 10, L. 13.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

3. Reference Carr's testimony, p. 14. Identify and describe in detail any and all similarities between the petroleum industry referenced in the Statement of Purpose for the Petroleum Trade Practices Act and the CNG market in Tennessee.

RESPONSE:

Identifying "any and all similarities" between the petroleum industry and the CNG market in Tennessee would require an extensive detailed analysis of both industries. As for similarities, CNG and petroleum products are both used as transportation fuels in trucks, cars, and other vehicles. Indeed, CNG and petroleum fuels can be used to fuel the same vehicles (*i.e.*, "mixed fuel" and "dual fuel" vehicles use CNG and petroleum fuel in combination, and "bi-fuel" vehicles can use either CNG or petroleum fuel). As a result, CNG and petroleum fuels are economic substitutes for each other. Further, CNG and petroleum fuels are (or can be) sold at the same retail outlets[3] and are (or can be) sold through independent retail outlets or through retail outlets owned by vertically integrated firms.[4]

[3] *See, e.g., Piedmont's Response to TRA Staff Discovery Request No. 10*, TRA Docket No. 14-00086.
[4] "A firm that participates in more than one successive stage of the production or distribution of goods and services is vertically integrated." Carlton, Dennis and Jeffrey Perloff, *Modern Industrial Organization*, 2000, p. 377.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

4. Reference Carr's testimony, p. 15. Identify and describe in detail any analysis or assessment of the current CNG market in Tennessee conducted by witness Carr to support his conclusion that Piedmont's proposal would act as a barrier to entry for other potential entrants in the CNG fueling industry. Also, please produce all documents, studies, data and analyses relied upon by Carr to reach this conclusion.

RESPONSE:

Dr. Carr's Pre-filed Testimony documents his analyses and assessments in this matter. These analyses and assessments were conducted in light of the following definition provided by Nobel Laureate George Stigler:

> A barrier to entry may be defined as a cost of producing (at some or every rate of output) which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry.[5]

Further, see TFCA Response to Piedmont Discovery Request 12 below (specifically, the second of the two Piedmont Discovery Requests having the number 12).

[5] Stigler, George J., *The Organization of Industry*, 1983, p. 67

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

5. Explain whether the TFCA considers the current CNG market in Tennessee to be a mature market with robust competition.

RESPONSE:

The TFCA has not undertaken a study to determine whether "the current CNG market in Tennessee [is a] mature market with robust competition." Such a study would presumably be based on a procedure, such as the procedures used by the U.S. Department of Justice and the Federal Trade Commission for analyzing mergers,[6] to define the relevant product and geographic markets and to determine the degree of competition in those markets. In this procedure, an important consideration would be competition between CNG and other transportation fuels.

[6] See the U.S. Department of Justice and Federal Trade Commission's *Horizontal Merger Guidelines* (http://www.ftc.gov/sites/default/files/attachments/merger-review/100819hmg.pdf).

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr

6. Reference Carr's testimony, p. 15. What is the rate that is appropriate so there is no subsidization?

RESPONSE:

It is unclear why this data request references page 15 of Dr. Carr's testimony. The appropriate rates so that there is no cross-subsidization of the type proposed by Piedmont would be a set of rates under which the rates paid by Piedmont's natural gas distribution customers are not increased in order to reduce the rates paid by its CNG fueling customers.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by the TFCA

7. What was the specific error by the TRA in approving Rate Schedule 342 in Docket No. 11-00144?

RESPONSE:

This item is unclear and requires clarification in order for a response to be formulated.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr and Mr. Ron Jones

8. Identify and describe in detail any and all experience of TFCA's witnesses with the development of alternative fuel markets in general or CNG in particular.

RESPONSE:

Dr. Carr has analyzed the development of the distribution of ethanol as a transportation fuel within the state of California in the following matters: (1) United States District Court, Southern District of New York, In re: Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation, MDL No. 1358, Master File No. 1:00-1898 (SAS), City of Merced Redevelopment Agency (Plaintiff) v. Exxon Mobil Corp. et al (Defendants), Case No.: 08-CV-06306 (SAS); (2) United States District Court, Southern District of New York, In re: Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation, MDL No. 1358, Master File No. 1:00-CIV-1898 (SAS), Orange County Water District (Plaintiff) v. Unocal Corporation., et al. (Defendants), Case No.: 04-CV-04968 (SAS); and (3) United States District Court, Southern District of New York, In re: Methyl Tertiary Butyl Ether ("MTBE") Products Liability Litigation, MDL No. 1358, Master File No. 1:00-1898 (SAS), City of Fresno (Plaintiff) v. Chevron USA, Inc., et al. (Defendants), Case No.: 04-CIV-04793 (SAS).

Witness Ron Jones' testimony is based on his 22 years combined experience as a former regulatory utility analyst, a former regulatory utility Senior Policy Advisor, a former Chairman of the Consumer Affairs Committee of the National Association of Regulatory

Utility Commissioners (NARUC), a former member of the NARUC Board of Directors, and a former Tennessee Regulatory Authority Director.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr and Mr. Ron Jones

9. Identify and describe in detail any and all experience of TFCA's witnesses with the use of natural gas as a vehicle fuel including, but not limited to, academic, consultative or operational.

RESPONSE:

See response to TFCA Response to Piedmont Discovery Request No. 8 above.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by the TFCA

10. Identify all reports, studies, data and analyses relied upon by TFCA witnesses to support the conclusion that the TRA should treat retail CNG vehicle fuel as an unregulated service.

RESPONSE:

There is no specific reference in the question delineating where TFCA witnesses articulated such a conclusion. In the context implied by Piedmont's question, TFCA has been unable to locate such a conclusion in its witnesses' pre-filed testimony. TFCA Witness Mr. Ron Jones testified that Piedmont's Petition should be denied in the entirety.[7] In the alternative of his recommendation to the Authority to deny Piedmont's Petition for the reasons set forth in his testimony, Mr. Jones secondarily outlined certain safeguards that should be adopted by the Authority, under certain conditions, in an attempt to protect Piedmont's captive ratepayers and to guard the public interest, including, but not limited to, the creation of a non-regulated subsidiary. But, this secondary course was only identified by Mr. Jones in the event the Authority finds that the statute at issue permits cross-subsidies like the one proposed by Piedmont and that Piedmont's Petition is otherwise compliant with state law and TRA rules and orders and satisfies the public interest.[8]

[7] *Pre-Filed Testimony of TFCA Witness Mr. Ron Jones,* TRA Docket No. 14-00086, p. 4, LL 5-6 (Dec. 11 2014).
[8] *Id.* at 4, LL 6-10. *See also, id.* at 22, LL 7-9.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by the TFCA

11. Explain TFCA's position as to why Tennessee legislators specifically passed new legislation authorizing alternative methods for regulated utilities to recover alternative fuel infrastructure equipment and costs.

RESPONSE:

The legislation and the legislative history speak for themselves.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by the TFCA

12. Explain TFCA's position as to under what circumstances a utility could recover infrastructure capital costs consistent with the intent of TCA sec. 65-5-103(d).

RESPONSE:

The legislation and the legislative history speak for themselves. For an example of such a circumstance, please see the Pre-filed Testimony of TFCA Witness Mr. Ron Jones, p. 21, LL 7-13, TRA Docket No. 14-00086.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr and Mr. Ron Jones

12. Identify and produce any and all documents reviewed by TFCA witnesses in preparation for the filing of their testimony.

RESPONSE:

The requested documents are attached.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Dr. Scott Carr and Mr. Ron Jones

13. Identify and produce any and all documents constituting written work product and/or testimony by the TFCA's witnesses related to CNG.

RESPONSE:

The Pre-filed Testimony in this docket by the TFCA witnesses constitutes their written work product and/or testimony related to CNG.

TENNESSEE FUEL AND CONVENIENCE STORE ASSOCIATION
DOCKET NO. 14-00086
REQUEST FROM PIEDMONT NATURAL GAS

Response prepared by Mr. Ron Jones

14. Reference Jones' testimony, p. 7-8. Identify and describe in detail any and all additional support for Jones' conclusion that TCA sec. 65-5-103(d) does not allow recovery from ratepayers' costs incurred in constructing or operating CNG motor fuel stations.

RESPONSE:

Support for Mr. Jones' testimony "that TCA sec. 65-5-103(d) does not allow recovery from ratepayers' costs incurred in constructing or operating CNG motor fuel stations" is contained in his Pre-filedTestimony.

Respectfully submitted,

BUTLER SNOW LLP

By:_____

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Attorneys for Tennessee Fuel and Convenience Store Association

Materials Reviewed by Dr. Carr

Document

01 Petition of Piedmont Natural Gas Company, Inc. For Aproval of a CNG Infrastructure Rider to Its Approved Rate Schedules and Service Regulations, dated August 29, 2014.
02 Proposed changes to Rate Schedule 342 and new Rate Schedule 343, dated August, 29, 2014.
03 Testimony and Exhibits of Daniel P. Yardley On Behalf Of Piedmont Natural Gas Company, Inc., dated September 2, 2011.
04 Piedmont Natural Gas Company's conditional CNG Infrastructure Rider annual filing, dated September 30, 2014.

05 Piedmont Natural Gas Company, Inc.'s Testimony and Exhibits of Pia K. Powers and Ken Valentine, dated October 7, 2014.
06 Piedmont Natural Gas Company, Inc.'s supplemental testimony of Ken Valentine, dated October 31, 2014.

07 Piedmont Natural Gas Company, Inc.'s Responses to the Consumer Advocate and Protection Division's First Set of Data Requests, dated October 23, 2014.
08 Piedmont Natural Gas Company, Inc.'s Responses to the Consumer Advocate and Protection Division's Supplemental Data Requests, dated November 14, 2014.
09 Piedmont Natural Gas Company, Inc.'s Responses to the TRA's First Set of Data Requests, dated October 23, 2014.

10 Piedmont Natural Gas Company, Inc.'s Responses to the Tennessee Fuel and Convenience Store Association's First Set of Data Requests, dated October 23, 2014.
11 Piedmont Natural Gas Company, Inc.'s Responses to Tennessee Fuel and Convenience Store Association's Supplemental Discovery Requests dated November 14, 2014
12 Tennessee General Assembly, HB 191 session transcript, dated March 13, 203
13 Tennessee General Assembly, House Business and Utilities Sub committee transcript, dated March 6, 2013

14 Memorandum of Understanding to "develop a functional and affordable original equipment manufacturer (OEM) fleet natural gas vehicle (NGV)".
15 U.S. Congressional Research Service, "Agriculture: A Glossary of Terms, Programs, and Laws, 2005 Edition". p. 69

16 Carlton, Dennis and Jeffrey Perloff, *Modern Industrial Organization*, 2000, pp. 79 & 377.
17 James C. Bonbright, *Principles of Public Utility Rates*, 1961, p. 8.
18 Stephen Breyer, *Regulation and its Reform*, 1982, p. 32.
19 Kahn, Alfred E., The Economics of Regulation, 1988, Vol. I, p. 11.
20 US LEC of Tenn., Inc. v. Tenn. Regulatory Auth., No. M2004-01417-COA-R12-CV, 2006 Tenn. App. LEXIS 243, at *19 (Tenn. Ct. App. Apr. 16, 2006)
21 Tennessee Code Ann. § 47-35-603(b)
22 Tennessee Code Ann. § 4-3-1109
23 Tennessee Code Ann. § 4-22-101
24 Tennessee Code Ann. § 4-22-101(b)
25 Tennessee Code Ann. § 67-5-601
26 Tennessee Code Ann. § 65-4-101
27 Tennessee Code Ann. § 64-7-102
28 Tennessee Code Ann. § 65-5-103
29 Tennessee Code Ann. § 67-4-2004(9)
30 State of Tennessee Public Chapter No. 245, House Bill No. 191
31 State of Tennessee Public Chapter No. 423, House Bill No. 1272

Materials Reviewed by Ron Jones

	Document
01	Petition of Piedmont Natural Gas Company, Inc. For Aproval of a CNG Infrastructure Rider to Its Approved Rate Schedules and Service Regulations, dated August 29, 2014.
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11	Piedmont Natural Gas Company, Inc.'s Responses to Tennessee Fuel and Convenience Store Association's Supplemental Discovery Requests dated November 14, 2014
12	*Testimony on HB 191 Before the House Business and Utilities Sub Committee*, Tennessee General Assembly (March 6, 2013) (Statement of James M. Allison, Chairman, Tennessee Regulatory Authority)
13	*Testimony on HB 191 Before the House Finance Ways & Means Committee*, Tennessee General Assembly (March 13, 2013) (Statement of James M. Allison, Chairman, Tennessee Regulatory Authority)
14	Memorandum of Understanding to "develop a functional and affordable original equipment manufacturer (OEM) fleet natural gas vehicle (NGV)".
15	*US LEC of Tenn., Inc. v. Tenn. Regulatory Auth.*, No. M2004-01417-COA-R12-CV, 2006 Tenn. App. LEXIS 243 (Tenn. Ct. App. Apr. 17, 2006)
16	Tennessee Code Ann. § 47-35-603(b) *Scott, should this citation be § 47-25-603(b)?*
17	Tennessee Code Ann. § 4-3-1109
18	Tennessee Code Ann. § 4-5-601
19	Tennessee Code Ann. § 4-22-101
20	Tennessee Code Ann. § 4-22-101(b)
21	Tennessee Code Ann. § 65-5-103
22	Tennessee Code Ann. § 65-5-104
23	Tennessee Code Ann. § 65-4-115
24	Tennessee Code Ann. § 65-4-122
25	Tennessee Code Ann. § 67-4-2004(9)
26	TRA Rule 1220-4-1-.07 SPECIAL CONTRACTS
27	State of Tennessee Public Chapter No. 245, House Bill No. 191
28	State of Tennessee Public Chapter No. 423, House Bill No. 1272
29	*Gulf States Utilities Co. v. Federal Power Comm'n*, 411 U.S. 747 (1973).
30	*Bellsouth BSE v. Tenn. Regulatory Auth.*, No. M.2000-00868-COA-R12-CV, 2003 Tenn. App. LEXIS 123 (Tenn. Ct. App. Feb. 18, 2003)
31	*Federal Power Comm'n v. Sierra Pac. Power Co.*, 350 U.S. 348 (1956).
32	*Bellsouth Telecom. v. Greer*, 972 S.W.2d 663 (Tenn. Ct. App. 1997)
33	*CF Industries v. Tennessee Public Service Com.*, 599 S.W.2d 536 (Tenn. Sup. Ct. 1980)
34	*Tenn. Am. Water Co. v. Tenn. Regulatory Auth.*, No. M2009-00553-COA-R12-CV
35	Fillpink, Eric, *Serving The "Public Interest"* - Traditional vs Expansive Utilty Regulation, 2009, p.3.
36	McDermott, Karl, *Cost of Service Regulation*, 2012, p.5
37	National Regulatory Research Institute, *Briefing Paper - Natural Gas Vehicles: What State Public Utility Commissions Should Know and Ask*, December 2010
38	National Regulatory Research Institute, *Alternative Rate Mechanisms and Their Compatability with State Utility Commission Objectives*, April 2014

Regulation and Its Reform

Stephen Breyer

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is that a particular industry is subject to "predatory pricing." Competition leads some firms to price below costs, driving their competitors out of business. The remaining firm then raises its prices to excessive levels, leaving the public worse off than before.

For a firm to have an incentive to price predatorily, however, two preconditions must be met: (1) the predator must be powerful enough to outlast its competitors once prices are cut below variable costs; and (2) reentry into the market must be so difficult that the predator can maintain prices well above costs long enough to recoup its prior losses. Unless a firm is reasonably certain that both these conditions will obtain, it is irrational for it to attempt predatory pricing.[50]

For this reason, it seems unlikely that predatory pricing will ever justify regulation. In fact, regulation can make predatory pricing easier, since it often provides the barriers to entry necessary for a potential predatory pricer to succeed. Furthermore, the antitrust laws make predatory pricing unlawful.[51] Those firms suffering its consequences can bring antitrust suits and appeal to enforcement agencies. Of course, the enforcement agencies may not be effective, but that is no argument for regulation since the regulatory agency is as likely to be ineffective.

Moreover, unfortunately, ordinary price competition is easily confused with predatory pricing. The former generally involves low-cost firms charging lower prices that take business from higher-cost firms;[52] the latter involves short-term prices well below costs, set with the object of destroying competition and later recouping losses through prices well above cost. Those advocating regulation on these grounds in the transportation field may well have confused the two.

Other Justifications

The reader should be aware of several other possible justifications for regulatory systems. While important, they have been used less often in the United States than elsewhere to justify governmental regulation of individual firms.

Unequal bargaining power. The assumption that the "best" or most efficient allocation of resources is achieved by free-market forces rests in part upon an assumption that there is a "proper" allocation of bargaining power among the parties affected. Where the existing division of such bargaining power is "unequal," it may be thought that regulation is justified in order to achieve a better balance. It is sometimes argued, for instance, that the "unequal bargaining power" of small sellers requires special legislative protection. While in principle one might regulate the "monopoly buyer" in order to protect these sellers, the more usual congressional response is to grant an exemption from the antitrust laws, thus allowing the sellers to organize in order to deal more effectively with the buyer. This rationale underlies the exemption granted not only to labor, but also to agricultural and fishing cooperatives.[53]

HB 191 March 13, 2013 House of Representatives Finance Ways & Means Committee

Chairman: Okay we'll take item 39, House Bill 191 out of order. Leader McCormick you're recognized.

McCormick: Thank you Mr. Chairman. House Bill 191 is an administration bill in cooperation with the TRA. It has several components but basically it realigns the TRA's funding mechanism which will result in over $1 Million in fee reductions passed down to utilities and hopefully to the consumers too. It also enables the adoption of best practices for more efficient rate reviews which means we're going to bring in and see…

Chairman: Bill's been moved and properly seconded. Do we have questions on the bill? Chairman Sargent, you're recognized.

Sargent: thank you Mr. Chairman. Leader McCormick, let me, I have two questions I'd like to ask and I think you probably know what they are. One of these, we're going to do an annual rate review and normally we did a review after 4 or 5 years and they had a full blown hearing. When we do this will there actually be a review or is it just going to be that they ask for a half percent or a ¾ percent of an increase is that going to be automatic or will they actually have an annual review and see why they need that increase?

McCormick: That's a good question. What they're going to do, as you know in the past, they'd wait several years, 3 to 5 years and longer sometimes and then go in and have a full blown case where a lot of lawyers were hired and a lot of fights and negotiating positions and that type thing. What this does is gives the TRA the ability to really on a constant basis keep an eye on these companies and give them some rate, usually increases I suspect, based on some expenses that they really don't have any control over. It'll be more of, I'd say, a CPA driven process rather than a legal driven process but with the clear understanding that it could turn into a legal process if the system breaks down. So, it has the safeguards of the old system but some efficiencies in the new system.

Sargent: You feel doing it like this, the consumers are still going to be protected and have all the protections they had before?

McCormick: I do feel like it and I had some questions myself. I'm carrying the legislation but I think we need to ask tough questions about legislation that we carry not just other people's legislation and something that keeps cropping up that reassures me is that the Commission will have the ability and as the words are written to act in the public interest. Which is vaguely defined which I think gives them a lot of authority to go in if the system is being abused to step in and change things if they need to in the public interest.

Sargent: Chairman, thank you for that. For those, I just wanted to make sure that we had that on the record. The other question I have is under Section 5. Section 5 as you know where natural gas companies would be able to set up, and there's been a lot of talk about this, set up

their own substation or sell natural gas for cars and trucks. Is that, do you see that as the intent of the legislation?

McCormick: You know Chairman, this is one that just came up yesterday and I hate to make this last any longer but I don't want to give you the wrong answer. If I have the Committee's permission I'd like to call up possibly Chairman Allison to address that question, if that's okay with the Chairman too and both Chairmen.

Chairman: Without objection we're out of session. If you would, come forward and state your name for the record.

Allison: I'm Jim Allison, I'm the Chairman of the Tennessee Regulatory Authority. The answer to your question is what it deals with is a procedural change in how we will go about looking at those rates. It does not guarantee recovery, it does not say that there will be any cross-subsidization of the fuel, motor fuel dispenser by residential consumers or anything of that nature but the alternative rate making procedures, all of them, are permissive and it would require that finding that the public interest, like the Leader stated.

Chairman: You're recognized.

Sargent: Thank you Mr. Chairman. My question is, is it the intent of natural gas companies to go into set up, I'll say natural gas stations through-out the state and have the rate payers paying for that infrastructure and not as a commercial entity? Is there, I want to make sure we don't have rate payers paying for infrastructure where we have commercial entities out there that have to basically pay for their own infrastructure.

Allison: There is no intent in this legislation to allow any other class of consumers to subsidize the facilities that would go into providing natural gas as a motor fuel.

Sargent: And is also your understanding that natural gas companies do not intend to set up stations throughout the state? And they're going to lead back to the retailers of the Mapcos and the Exxons and the Shell stations of the world to do that?

Allison: I can't really address what the intentions of the natural gas companies are but as the Regulatory Authority we will assure there is no cross-subsidization going on as we implement the various rates.

Sargent: Okay. Thank you. Thank you Mr. Chairman.

Chairman: Representative Armstrong, you're recognized.

Armstrong: Thank you Mr. Chairman and Chairman Sargent brings up a very interesting question as it relates to, you know, natural gas vehicles and of course, realizing that natural gas is becoming the transportation fuel. Certainly I didn't know if the agency had looked at the conversion from petroleum based fuel to natural gas and setting up the rules and regulations

along that line. Even if you look at the available information that's out there, all our utilities, they're converting the coal fired plants, the TVA's just converted to natural gas at some of their largest, some of their largest facilities over to natural gas and then with all of the reports about how much natural gas is available in this country with all the finings (?) or the shale gas and the fracking and all of this, have we looked at a comprehensive study of Tennessee looking at the use of natural gas and also as a transportation fuel? Because I think the last statistic that I saw that natural gas on a BTU level would cost about $1.29 per gallon if we switched over from gas that's costing what $4.40 a gallon now. Has this agency looked at going in that direction for natural gas fueling and for providing those infrastructures?

Allison: There's a lot of talk nationally about, not only natural gas, but other alternative fuels. For example, I drove up here from Shelbyville in an electric car yesterday. So, it's an emerging part of the technology of our country. At the TRA we have had some limited experience with natural gas as a motor fuel, we do have at least one and I think perhaps 2 natural gas companies that have established refueling stations. They are not on the side of the interstate where everybody knows where they are but they are for people who have limited natural gas vehicles already and we've established tariffs for those dispensing facilities already so we have looked at it in a limited sense but I would have to say in a comprehensive sense we have not had a formal study like you're suggesting.

Armstrong: And when you mention tariffs, we know we've got taxes on our fuel to pay for road costs but when it comes to electric vehicles, when it comes to natural gas vehicles, there's no money being collected for the infrastructure and I'm kind of following along with the Chairman was talking about. Certainly we can even get into how other states actually distribute gas to not only commercial but to residential, you know, in Georgia an individual gets to choose which company, which market they buy gas from and the utility is only the deliverer of that. In Tennessee we've got a different type of structure and I didn't know if you were looking at that, where the utility only charges you for the transportation but you pay a commodity price from someone else. And Texas has a totally deregulating both electric and natural gas. Are we looking at some of these because there's a significant difference in natural gas prices to consumers in Georgia is a big difference than what we pay here in Tennessee. In Tennessee we pay different rates in between different consumers. The only ones subject to any type of hedge, whether it's low or high, are the private companies but certainly those utilities out here that are making money off the commodity price, have we looked at basically talking to them and saying, hey, put in your infrastructure cost and let the consumer have a choice and let the businesses have a choice where they buy their natural gas?

Allison: There is some of that going on in the natural gas industry all, already in Tennessee. For example, we have a number of large users of natural gas that buy directly from alternative sources and then use the local distribution company just for a delivery mechanism so there are situations in place in Tennessee where that's occurring as well. It hasn't been penetrated to the individual homeowner level. I used to work in Georgia it's got its plusses and minuses, to deal with that. It becomes a very complex arena but it hasn't penetrated down to the individual level here in Tennessee yet but we do have a number of large consumers who already do just that.

Armstrong: Okay, but your experience in Georgia, certainly, I think it would benefit the residential consumers to look at that option and see if it would be some savings on that residential user. And I didn't know if you had plans within the TRA to look at things of that nature.

Allison: We don't have anything specifically planned but we'll certainly talk about it after the discussion today.

Chairman: Any further questions for the Chairman? Seeing none. Thank you for being with us today. Without objection, we're back in session. Leader McCormick?

McCormick: I renew my motion Mr. Chairman.

Chairman: Any further questions. Seeing none. Is there objections to questions? Hearing none, all in favor of moving house bill 191 to full finance, say aye, those opposed. Bill moves out.

Tennessee General Assembly
Utilities Committee
HB 191/SB 197

Chairman: Alright, we'll go to item number seven, House Bill 191. Leader McCormick, you're recognized.

McCormick: thank you Mr. Chairman and I thought I'd come up here because we'll probably need to call on a couple of folks to come up here and give their opinions on the Bill, of course, with the permission of the Committee. This is the TRA Bill that's brought really jointly by the Administration and the TRA and it does several things and if I could, I'll go over the basic outline of it and focus in on one section that I think will have the most discussion on but I think this is the place to have the discussion. There are basically 5 sections that make changes, Section 1 would say that the TRA Directors are eligible for state employee health insurance benefits and those type things. That was the original intention and this makes that more clear. The second Section also clarifies some, there's actually some ambiguity relative to the conflict of interest prohibitions for the Directors, this does not make it easier, it just makes it clearer what they can and can't do and it's clean up language. Section 3 talks about implementing optional cost based services at the request of the utility and cover the cost for doing so. Again, that's not a huge change. Section 4 will realign the fee structure basically to reflect who is being regulated and let them pay the fees rather than have companies that are not being regulated, any or very much, and reduce their fees. This will also result in a savings of a little over a million dollars a year in the budget, which the TRA has worked very hard to make sure they could meet that and hopefully save rate payers over a million dollars a year in the process. Now, Section 5 is the section that I'm sure that our folks here will a want to focus in on and what this does, it creates a new section authorizing the implementation of alternative regulatory methods for utility rate reviews and cost recovery. And this is in lieu of the current process where they have general rate cases every few years. Sometimes they settle them, sometimes they hire lots of lawyers and spend lots of money and take a lot of time and we read a lot about it in the newspaper and they have very contentious issues. Basically, what they are wanting to do in this is have more of an annual review and rather than having those big rate cases. Now, it won't keep us from having rate cases, we can still have them, but hopefully, we'll have less of them. In my opinion, I think a good way to say it is, is we're bringing in CPAs to review it more regularly and probably not using lawyers as much to have big rate review cases.

Chairman: We have a motion on the Bill, do I hear a second? We have a motion and second. And we do have an amendment on it; do you want to talk about it?

McCormick: I believe that's what I just explained, was the amendment.

Chairman: Ok, alright do we have a motion on the amendment? We have a motion and second on the amendment. Does anybody have any questions on the amendment? Representative Potey?

Potey: Uh, yes, I've got one. Where it says it's going to empower the TRA to make these rules, are these rules come before Gov Ops? Who oversees the rules that they're making to make sure, who check them?

McCormick: I think all rules have to come through Gov Ops at some point for review.

Potey: Even the TRA, so these rules will come? Okay.

McCormick: Yes, they'll come through and I'll let them, if that's not correct they'll get a chance in a second. That is correct. And Mr. Chairman, I think it's only fair, we have had some objections to the Bill, especially for that last Section, from the Attorney General's office and with your permission I'd like to have them come up and state their case and then hopefully have the TRA Directors come up and state theirs.

Chairman: We want to go ahead; do we have any more questions on the amendment? If not, I think we're going to go ahead and vote the amendment. Without objection, we'll go ahead and vote on the amendment. All in favor say aye, opposed? And that is amendment number 3640. The amendment passes, now we're back on the Bill. I think if it's okay with you Leader we'll go out of recess and hear from whoever you want to bring up or however you want to work it. We want to hear from the Attorney General? Is anybody here from the Attorney General's Office? Would you all like to come up and let us hear from you please? If you wouldn't mind stating your name and your position and then we'll hear your testimony. Turn your microphone on please sir.

Vance: My name's Vance Broemel, I'm with the Consumer Advocate and Protection Division of the Office of the Attorney General and with me here today is Ryan McGehee who is also from the Consumer Advocate and Protection Division and under the statute that created us we have the duty and authority to have cases at the Tennessee Regulatory Authority and also to participate in legislative and judicial proceedings and that's why we're here today here on this House Bill 191 and in particular, Section 5. As Leader McCormick pointed out there are numerous sections here. We are not speaking on the inspection fee portion of the Bill which has to do with fees paid by regulated companies, they're going down for some and up for others but we're not speaking on that. We simply note that those fees whatever they are can be recovered by the companies by rate payers. We're here today to speak on Section 5 which changes greatly the way rates will be set in Tennessee if it's passed. What this does, in our opinion, is make it more likely that rates will increase for businesses and households who are customers of regulated companies. And the reason for this is that this Bill greatly reduces the risk that the regulated companies/utilities, gas and water in particular, will have as businesses because they'll be allowed to recover, virtually immediately, their expenses in capital investments. Now heretofore, as was pointed out by Leader McCormick we had rate cases and in that you have a general hearing, you consider all the expenses, all the capital investments of a company and then you project going forward what they think their expenses will be for the coming year and a rate is set on that with the addition that any investment that the company has made they get to recover a rate of return on that. And this is similar to any business. If you have a start-up company and it's difficult to attract

capital you would want a high rate of return. Similarly, if you had a safe investment in bonds or a CD the rate of return would be less. What the TRA does is look at the company and decide what level of risk does it have and then that's expressed as a percentage, usually, let say just take a round figure, a utility could get a rate of return of 10%, that means that on all their investments, if they have $50 million in investments, they get their projected expenses plus a rate of return on that $50 million and each side presents testimony, our group has accountants that we have, now they are contract accountants and they present testimony, the TRA has a hearing and then decides the case, sets the rates. What this Bill does, is it takes the last rate case and that's still in effect, that's still there but in addition it allows companies to come and say we want recovery for this expense, we had some new project or whatever, well in traditional rate cases all those things are suppose to be figured into their projected rates and they're covered in the rates. Here what we're afraid of is that the risk, since the company is recovering these expenses virtually immediately, the risk should go down but there's nothing in the Bill to reflect that decrease or decline in risk. Therefore, we think rates will be unnecessarily high for consumers. We would point out that the TRA has full authority to do this without this Bill. They have set what's called alternative rate making mechanisms in the past, they could do this today and we think it would be better to do that because then you'd have input from concerned persons. You would have more flexibility and it wouldn't necessarily be the Legislature's framework, it would be the TRA, who, that's their responsibility to set rates and they have expertise to say how this should be done. We think it would be better in that kind of hearing. We would also point out, and I know this is fairly complicated, this Office did send a letter with a memo attached and we hope you all have it and if not we'd be glad to get it to you and the idea is that we are concerned about this potential increase in rates and we would also point out that by and large, the utilities of Tennessee, particularly the larger ones are doing very well financially. If you look at their stock prices from 2008 to the present in some cases it's virtually doubled and so they're not under financial stress, there's no idea in the Bill that that is the reason it is being done. Our concern, another one of our major concerns is not only will this likely increase rates but the way rate cases work, once this rate is set and you have a rate of return on it, if the company can become more efficient they get the benefit of the savings. In other words if you set a rate and the customer is charged say $50 a month and the company gets real efficient and can do things for, you know, it costs them less than they projected, they get that savings. Under this system where they just simply submit a Bill and say we want reimbursement, we think they'll lose that efficiency. So in summary, that's our concern that this is a really big shift in the way rates are set. I know there's been some concern about rate case expense we agree that that can be a problem. We think that can be addressed at the TRA. I would point out that we've had three major cases with Tennessee American Water, Atmos, and Piedmont in the last few years. We've settled them. There were no hearings. The expenses were rather minimal. The expenses come when there's problems in discovery as we call it, it's kind of a legal term, we try to get information from the company. But that, we're very aware of that, we're very conscious of it and we do try to hold the expenses down. So, if there are any questions, we'd be glad to entertain them. Either myself or Mr. McGehee. That concludes our remarks.

Chairman: Okay. Mr. Broemel, in your testimony I thought you just said that they can currently do this now?

Vance: Yes.

Chairman: If they can do it now, why do you object to them doing it in the Bill?

Vance: Well, because we think that it would be more input from more concerned parties and there could be more flexibility. In the Bill itself, it states that they can develop rules and procedures. We think it would be better to do that all at the same time. in the past, there was a Bill here about something called decoupling where the idea was that if consumers conserve there was concern that the companies would not be making their projected rate of return, the Legislature made a general policy statement about the TRA should hear cases where the companies can present this concern with conservation and then they will make a determination and they did that and they developed a system to cover those cases. So in other words until you really have a full case with all the implications, we think it is not a wise idea to set this kind of framework as it were in a vacuum. It would be better to have them do it when there's much more to consider.

Ryan: If I may, if you lock in the specific mechanisms that you have here now, with the guaranteeing the return on equity along those, the procedures that encompass that, it makes it difficult for the TRA and our office to present safeguards for consumers, to prevent over-earning, to adjust the return on equity because the risk is being shifted to the customers. Here you're locking them in under the old system when they were slightly more riskier. Here we're moving to a system where you are shifting the risk and there should be an adjustment there, the return on equity. We actually had a company on the record agree with us in the past case that these things do shift risk but this Bill does address that and does not allow for that flexibility. Another aspect of this, of the Bill, is that it does not have a rate cap which previous legislation, in 2009, legislation or this Committee or the Commerce Committee chose to put a summer study. There was a rate cap in there but there's not one here so there are some things that are locked-in that are going to limit flexibility in the future.

Chairman: I believe we have a question from Representative Curtis?

Curtis: Thank you Mr. Chairman. Toward the end of your statement you made the, I believe I heard this correctly, that in estimating what their expenses are going to be they could end up overestimating what their expense is going to be and if they were to conserve and had a savings they would keep that, retain that profit.

Vance: Right.

Curtis: Then I understood that correctly. Is there anything that you can think of, we're giving through the rule making authority; the TRA is going to have to go through rule making procedures. Is there anything in this statute that's being proposed that would prevent them through rule making to recapture that money?

Vance: I don't, it's ah, I suppose they could try it but it, there's nothing in the statute that allows them to do that and we just don't know how that would work.

Curtis: I'll just ask that question when they're presenting.

Chairman: Leader McCormick.

McCormick: Thank you Mr. Chairman and I've got a couple of questions. Did y'all say that the TRA could do this without legislation? They could basically implement this program right now? Or just that Section?

Vance: A large part, Section 5, in the past they have done extensive regulation in I believe it was the early 90s with phone companies going to what we would call an alternative form of rate making where they allowed them to have a projected rate of return and if they were over earning then they would have a review of that and recapture it. They did that all without legislation, yes.

McCormick: Okay.

Ryan: There are a number of items they've already done as well like the commodity cost of gas is passed on to consumers, rates are adjusted annually for gas companies based on the weather, you know if you have a mild winter the rates go up if you have a very cold winter the rates can go down. There are already a number of pass-throughs already in effect and that's all without legislative authority. Specific, ...

McCormick: And I'll ask the same question when the TRA folks get up but if they can go ahead and implement this without legislation I'd rather get 3 votes than 50 so we'll see what the TRA folks say about that. I know in Section c of 5 it says, talking about recovery operational expenses, capital cost or both associated with the investment in other programs including the rate of return approved by the Authority at the public utility's most recent general rate case, now could I take that to mean that if, let's say that the water company's electric rates go up because TVA raises them and the power board raises them in return, and they have to pay an extra $10,000 you know, in their Bill next year, are you saying that they'll be able to charge $11,000 if they get a 10% rate of return on a simple Bill, a simple expense like that? Or is it just things that have to do with capital improvements.

Vance: Yeah, I think it would be capital improvements and they would get a recovery of that increase, perhaps, depending on the circumstances and that's one of our concerns. When you have a rate case you take into consideration all the expenses. Here they're singling out one that went up but see they may have gotten more efficient with their labor cost and that's gone down but there's no provision in this Bill to look at what went down. It's only what goes up and that's our concern. In a rate case you look at all expenses, some go up, some go down, you come to a global understanding but here, that's a good example. Say if electric went up they could come in with a high electric Bill and say we need to raise rates but they wouldn't be telling you that they've got a new computer

system or smart meters that read meters more efficiently and they don't need as many people doing that and there's no off-set. So that's the very kind of thing we're very concerned with. About just looking at what goes up.

McCormick: Would the TRA not be able to take that into account? Or would they be legally prohibited from taking that into account?

Vance: Well, there's nothing in the Bill, it just talks about you're authorized to get this expense. And in fact, it just says you look at the rate of the last rate case, there's nothing about other expenses. That's another concern, when you quoted the last rate case, we all know that capital markets can change. Some of these companies haven't been in for years and years, they might have a rate of return of say 12% and the TRA is prohibited from adjusting that and so you need, this Bill says you look at what happened at the last rate case and as we all know with the economy you need much more current financial data. And that's another concern of ours.

McCormick: Okay so you're saying if a company had a good rate case 5 or 6 years ago they might never want a rate case.

Vance: Right.

McCormick: But I suppose you guys could initiate a rate case, couldn't you?

Vance: We have in the past, I mean it's getting into kind of history I suppose, but we did it once with Atmos, it was expensive and very contentious, if I can use that word in the sense that they were over earning some $5 or $6 million a year. We did do that and brought it in and did reduce their rates so we do have that power at the current time but with this annual rate review and these trackers, it's to me, very unclear whether we'll be able to do that in the future.

Ryan: and Leader McCormick another big concern here is that not every company can decide to do annual rate review. They can cherry pick with a specific tracker and the rest of their rates would not be looked at, it would just be those expenses that flow into that tracker and the return that's guaranteed on that.

McCormick: But you could still initiate a rate review but you're saying it would be very expensive and very…

Vance: Well, and it would really be a cross-purpose with this Bill. I think the company's would complain that they've chosen an annual rate review and these trackers and they don't need to have a rate case and I, you know, I guess it just would be up in the air what would happen. We would probably ask for one but whether we would get it, I'll point out with the Atmos case, our initial request that those rates be reduced was dismissed and we had to come back again so if anybody knows the law you can make an argument, whether the agency will accept it, I don't know.

McCormick: Okay. I would certainly want to have the legislative intent that a company couldn't take advantage, well for instance we had a long period of low interest rates and cheap capital and if somebody's hanging on to 14% rate of return from ten years ago, that's something we'd need to guard against and make sure in the legislative intent and if this were to pass we would want to do that. One other question is the rate cap you're talking about, what would be a reasonable rate cap as far as annual increases go, do you think? And again, put it in the law.

Ryan: I would like to see or at least I would, this is me speaking, I haven't discussed this with General Cooper specifically, you know, a rate cap not only on the annual rate review but also on the trackers themselves and you know I think just off the top of my head, a 3% cap would be good.

McCormick: Well, you're not old enough to remember the 70s but if you'd done that in 1974 you could have wiped out some of these, even being monopolies, you could have wiped them out based on that.

Ryan: I know a lot of people speculate that we're heading back that way but you know we're not in that kind of inflationary period just yet.

McCormick: It's coming. Thank you Mr. Chairman.

Chairman: Representative Potey.

Potey: Thank you Mr. Chairman. I want to go back to the TRA. I thought if somebody came for a rate increase the TRA had the right to look at their entire budget, their entire profit/loss, they're not going to just look at one section so I'm not following where this would happen. If they had a profit in one area because they recouped that money, the next time they came for a rate increase that would be taken into account. Is that not correct?

Vance: That's correct under the current situation; under a rate case but this Bill changes that entirely. It, for 2 or 3 pages, it goes on and on about all, you can recover for a singled out expense, it will not look at its total expense, no.

Potey: So if this goes though the TRA would not have that authority?

Vance: No. I mean, whether they have the, under this Bill they wouldn't. We were speaking to Leader McCormick I suppose we could ask for an entirely new rate case but the intent of this Bill is to avoid or not have rate cases which means you would not be looking at their entire expenses.

Ryan: And there are several mechanisms under the Bill, not just annual rate review that would allow the company to cherry pick where you don't look at the other operations and revenues.

Potey: Thank you.

Vance: I'd just like to point out that this Office is very concerned about investments in Tennessee and to the best of my recollection we've never opposed a capital project to put in pipes, valves, whatever, particularly with a water company in Chattanooga, so it's not that we want to cut down on recovery of capital expenses we just want to do it in a way that we think is fair to all parties.

Chairman: Okay. Do we have any other questions? If not, we will let you all go back and ask the other side to come up and give their side. Is it going to be you Mr. Allison? And Tim?

Allison: I'm Jim Allison, I'm the Chairman of the Tennessee Regulatory Authority and with me today are Jean Stone, our General Counsel and Ed Taylor, our Executive Director. I'll make some comments and we'll do our best to answer any comments you may have. This Bill basically does 2 things. The first thing it does is reduce the regulatory burden on the utility companies in the state of Tennessee by about $1.1 million a year by reducing our regulatory fees. The second primary piece of the Bill is what was just discussed, the alternative regulation. I want to make it clear to the Committee that this is not new stuff. Georgia, South Carolina, Mississippi, Alabama, Virginia and a whole host of other states across this country have already done a number of these things. It's procedural in nature. It does not substantively change what the TRA can do or cannot do. Now the Attorney General's office is focused in a very narrow sense of what the Bill says on the rate of return. What they've missed is that before the Regulatory Authority will allow a company to enter into one of these alternative rate making processes is that we have to go through a process to establish and conclude that going into one of these alternative methods is in the public interest. In doing that, we will look at a whole variety of things, including the rate of return. Now, there's another piece of the alternative field that will permit company's and it's all permissive, none of the company's have to do any of this and the TRA does not have to accept any of this, we have to agree that it's in the public interest before we enter into any of these alternative methods. But another piece of the Bill would require, if a company opts into it, is annual rate, an annual rate filings. By making an annual rate filing, it will keep up more up to date on the cost, the returns, the expenses of all of these companies so that when we're dealing with the rate of return issue that was brought up earlier we're not going to being a apposition of not having looked at it for 5 or 6 or 8 years, in fact, the law requires them to have a general rate case in the last 5 years to enter into this rate review, so we'll be looking at their rates every year if they opt into this annual rate review. If their rate of review gets out of kilter with the current market conditions then the Authority can, and we have in the past, brought proceedings to open up the entire rate spectrum and we can do that here even if they go into this. As far as the trackers are concerned, again these are in wide use around the country, it's an effort to streamline the regulatory process, the example that was used here earlier was a good one. If a water company uses a lot of power to pump their water, has a major rate increase from TVA, why open up every piece of their rates just to look at that? Now, again we would have to certify that it's in the public interest before we do that, but why not have a proceeding that would allow you to

just look at that one piece. You may have just had a general rate increase last year, again we can stay on top of that on a regular basis by this annual review and we will look at that. We've got a staff that will be looking at that on a regular basis. If the rate of return gets out of kilter we can open up a rate case to look at the rate of return. There's nothing in here that prohibits us from doing that and we will continue to do that just like we've done in the past. I'm going to kind of shut-up and try to answer any questions you have but the bottom line is that the Authority has looked at this we're very comfortable that we can continue to carry out our responsibilities with this Bill as it's written. Again, it's permissive, both on the part of the utility system to opt into it and it's permissive on our part to allow them to opt into it because we have to certify that it's in the public interest.

Chairman: Thank you very much. I have a question, when I heard about some of the parts of this Bill I understood that this change should help do away with a lot of legal expenses on both sides by bringing up a host of lawyers to argue and all that savings, as I understand it will go back to the rate payers? Is that correct?

Allison: That's correct. The intent of this Bill is to make the process more accounting driven, analyst driven more than it is attorney driven. Again, I know there's a lot of attorneys in the Legislature so I don't want to say too much bad about attorneys but, I've been on both sides of rate cases now. I've spent my career working in the utility district, I've testified before regulatory agencies in 6 states. I know how frustrating it is to write those million dollar checks to the law firms and I also know how frustrating it is on the part of the regulator for us to have to say, okay, it's okay for you to go recover that million dollar check that you wrote to the law firm from your rate payers and what we're interested in doing is trying to make government more efficient, more streamlined and we're prepared to do everything we can at the Tennessee Regulatory Authority to make that happen and we think this Bill moves us in that direction.

Chairman: I have one other question that might be a little off. I was asked to ask this by the Fuel and Convenience Store Association, is it the intent of this legislation to permit regulated, natural gas companies to subsidize their retail or wholesale alternative motor vehicle transportation fuel operations with rate payer funds?

Allison: The answer to that is no. The Bill, again, is procedural in nature, there's no substantive change to policy to the State of Tennessee other than the fact that it will hopefully streamline the regulatory process.

Chairman: Thank you. Leader McCormick.

McCormick: Thank you Mr. Chairman and I need to ask some questions. I'm the sponsor of the Bill and I support the Bill but also have an obligation, well not only to the rate payers of my area but to the members of my caucus and the General Assembly so I want to ask a couple of questions along those lines. You talked a minute ago, let's say about Chattanooga, the water company had a bigger electric Bill and it went up and you

can look at the line item and see where it went up, would that be considered an operational expense?

Allison: That is an operational expense, yes sir.

McCormick: Well the law says that any operational expenses can be recovered plus the rate of return so if they're going to make it 10% or 12% profit on paying their water Bill? That's what I'm reading here.

Allison: No sir. The rate of return is on invested capital. It's intended to cover for the cost of the capital, is the way we apply it to a rate case so if there is a capital component to that and I don't specifically what section you're looking at but it involves operating expenses as well as capital expenditure but the rate of return is on capital expenses not operating expenses.

McCormick: Well I better read it to you then, it's in Sections 5 c and it says the Authority shall grant recovery and shall authorize a separate recovery mechanism or adjust rates to recovery operational expenses, capital costs, or both, association with the investment of other programs. So maybe that's how you get out of just paying the Bill, but certainly if I were the company I would say that my light Bill is associated investment and other programs including the rate of return approved by the Authority at the public utility's most recent rate case. Maybe we need to get somebody from the industry to come up here and say that if your light Bill goes up by $10,000 are you going to give us a Bill for $11,000 and let the rate payers pay for it, that's the real question.

Allison: If you want the industry to address it you're welcome but it's well settled in rate case methodology that the rate of return is applied only to capital expenditures and it involves both debt as well as equity return so you have both elements of the return in there.

McCormick: It may be well settled but we're changing it with this right here from the way I'm reading it, but I'm not a lawyer we may need to go to the senate and find some lawyers to come over here but I mean that's what it says so I think we probably need to find out if it says what it means or if it means something else but it specifically says recover operational expenses including the rate of return approved by the Authority of a public utility's most recent general rate case so I'll ask some of the people that are with some of these companies maybe after the meeting if they can give me some feedback.

Allison: Well our attorney is here with us, she can address it more detailed if you wish too but the rate of return is intended to apply to the capital cost piece of that paragraph. It says to recover operational expenses capital cost or both including the rate of return approved by the Authority at the public utility's most recent general rate case pursuant to, that rate of return would apply only to the capital investment not the operation expenses.

McCormick: Okay. Thank you very much.

Chairman: Representative Curtis.

Curtis: Thank you Mr. Chairman. You heard the question I asked the Attorney General's office, they made the comment that an entity before the TRA on a rate review case they would say they were going to do some capital expenditures, there's going to be X amount of dollars and the rate was based upon that but through efficiencies they brought in way under the budget uh, you would have the ability to still look at that, that they calculated that incorrectly? I mean without that ability the incentive would be to always overestimate your expenditures to have a higher rate and reap the profits.

Allison: Not only will we still have the opportunity we'll have an enhanced opportunity with the annual rate filing. Otherwise in the current situation we may look at it every three, four, five, six years now all of our utilities except 1 have been in within a fairly recent period of time for a general rate case so we don't have anybody out there that's gone 20 years without a general rate case or anything like that but this Bill would give us an enhanced opportunity to look at those expenses.

Curtis: Right. The other thing that occurred to me while they were testifying, you're not preventing the Attorney General's office to ask questions about a rate setting or something of that nature? They're still going to have the ability to bring something to your attention, am I correct?

Allison: That's correct and at any time and we focused earlier on some comments on the rate of return, anytime they feel like a company's rate of return is excessive they are certainly permitted by statute to file a petition requesting us to look at that and we have historically have always accepted those.

Curtis: Thank you sir. I think the fact there's a little bit, it seems like it's vague, the Bill, in places but the fact that you're going to have rule making authority, that's not preventing you from being able to address all these areas that are not spelled out.

Allison: That's correct sir.

Curtis: Thank you.

Chairman: Representative Hill.

Hill: Thank you Mr. Chairman and of course Mr. Chairman thank you so much for being here and I appreciate the intent of the legislation. Just a couple of quick questions, you said earlier in your statement, you said that this is really conforming into what other states are doing? And that, you know I think some of the questions on, I believe it's Section 5 of the legislation, do other states do that as well? As it sits?

Allison: Yes, they, and I don't have the exact number but it's a long list of states that have entered into some of these alternative rate making and the Attorney General quoted

our last audit report in theirs with some comments. If you read the entire paragraph it will say in there that this is clearly a national trend to move in this direction.

Hill: Okay. Thank you so much.

Chairman: Representative Potey.

Potey: Two questions. One, what would you say is a good rate of return right now that would be approved?

Allison: The overall rate of return will reflect both the cost of debt as well as the cost of equity. The debt cost right now are fairly low, we've seen some rate cases and I'm going to look to staff to correct me if I misspeak here, where the overall rate of return in around 6-7% but the debt component of that is on the low end of that, the equity number's up on the higher end of that. It's set in an individual case depending on the riskiness of it. We've got some utilities that are well established with relatively low equity numbers, return numbers. We've got others that are fairly risky propositions. We've got one that just bought a company out of bankruptcy and it's a pretty risky proposition and has a higher equity rate of return than the others.

Potey: Ok and my last question, you said that most of the utilities are fairly current in their, you've audited and such, what's the one that's oldest? What's the longest one out there?

Allison: Again, I'm going to ask the staff to correct me if I misspeak but I believe it's Kingsport Power, the electric utility we regulate up in upper East Tennessee and I believe they are somewhere around 8 or 9 years out.

Jean: I believe they are more like 18 or 19 years at this point but they're rates are extremely low in comparison with other electric rates in that area.

Chairman: Do we have any other questions while we're out of session? Leader McCormick.

McCormick: Thank you Mr. Chairman and one more and you may have answered this and I was in a sidebar conversation but my question is in Section 5 can the TRA, do you have the authority to this without a vote of the Legislature? To make these changes?

Allison: We have instituted some trackers in some fairly limited situation and again I'll defer to our attorney to comment on the legalities of it, but we feel like it's prudent to clarify the nature of these and get legislative authorization before we go further with it and that's the reason we're supporting the Bill. We think it clarifies it and resolves any questions about whether or not instituting some of these trackers is appropriate or not but I would invite Ms. Stone to comment on the legality piece of it.

Jean: I think that's absolutely correct and I will just add that rate setting is traditionally a legislative function and so it is entirely appropriate in my opinion to come to the Legislature to ask you all to set the policy and the perimeters for rate setting including alternative methods.

McCormick: Thank you.

Chairman: Do we have any other questions while we're out of session? If not, we'll go back in session. Thank you all for coming up. Representative Towne's we're glad to see you come in today. Welcome. We're back on the Bill do we have any other discussions on the Bill? If not, are we ready to vote on the Bill? All in favor please say aye, opposed? Aye's have it. This Bill moves out to Finance Ways and Means.



Memorandum of Understanding

This Memorandum of Understanding (MOU) describes a coordinated effort between the undersigned States (States) to attract automobile manufacturers in the U.S. to develop a functional and affordable original equipment manufacturer (OEM) fleet natural gas vehicle (NGV) that will also meet public demand. The States recognize the benefits and unique attributes of clean burning natural gas and understand the significant opportunity compressed natural gas (CNG) presents to save State and taxpayer dollars by encouraging an energy future that utilizes domestic energy resources to fuel our nation's transportation needs. Through the joint solicitation of a Multi-State Request for Proposal (Joint-RFP) that aggregates annual State fleet vehicle procurements, the States will endeavor to provide a demand base sufficient to support the design, manufacture, and sale of functional and affordable OEM NGVs by automotive manufacturers in the United States.

In anticipation of soliciting a Joint-RFP, the States will endeavor to coordinate with local agencies, municipalities, and companies to determine the number of NGVs each State can commit to purchase and the required specifications necessary to meet fleet needs. The Joint-RFP shall require that the ultimate cost of an OEM NGV should be comparably priced to an equivalent gasoline powered model and that warranty and reliability concerns are not compromised. Simultaneously, the States understand the need for continued development and expansion of CNG fueling infrastructure and should endeavor to encourage private investment, predicated on demonstrating an anticipated increase in State NGVs, to meet growing demand.

Pursuant to the terms of the Joint-RFP, to be executed at a later date, the States intend, where practical, to transition new fleet vehicle acquisitions, in committed volumes, to a resulting OEM NGV. Such future acquisitions should, when economically feasible, rely on traditional distribution channels that incorporate local businesses in procurement processes. In continued recognition of the benefits of CNG, the States should also endeavor to pursue fleet vehicle conversions to CNG, where economically compelling, based on a life-cycle cost analysis. The States will also reach out to fellow Governors to determine broader interest and participation in the principles and process outlined in this MOU.

This MOU embodies the principle understandings of the States but shall not create any legal relationship, rights, duties, or obligations binding or enforceable at law or in equity. Notwithstanding the foregoing, each State shall in good faith endeavor to reach a mutually agreeable and economically beneficial Joint-RFP, as contemplated herein. This MOU does not create additional state power, enhance existing state power, or interfere with federal authority or law. This MOU shall continue to demonstrate the States' understanding until execution of the Joint-RFP, or until otherwise discontinued by either State.

Set forth by:

State of Oklahoma

Mary Fallin

Mary Fallin, Governor
November 9, 2011

State of Colorado

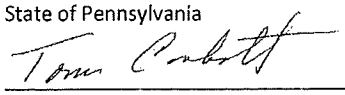
John Hickenlooper, Governor
November 9, 2011

State of Wyoming



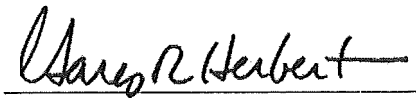
Matthew H. Mead, Governor
November 9, 2011

State of Pennsylvania



Tom Corbett, Governor
November 9, 2011

State of Utah



Gary R. Herbert, Governor
November 16, 2011

State of Maine



Paul R. LePage, Governor
December 2, 2011

State of New Mexico



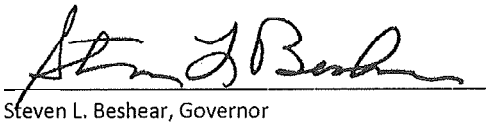
Susana Martinez, Governor
December 22, 2011

State of West Virginia



Earl Ray Tomblin, Governor
January 16, 2012

State of Kentucky



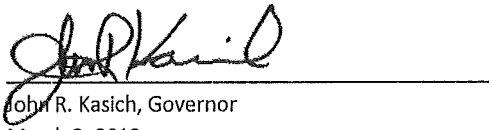
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State of Texas



Rick Perry, Governor
February 6, 2012

State of Ohio



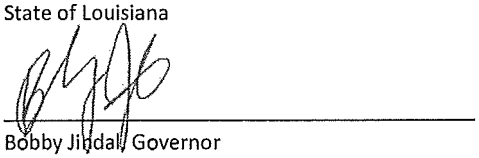
John R. Kasich, Governor
March 2, 2012

State of Mississippi



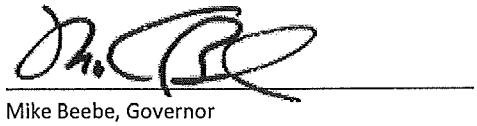
Phil Bryant, Governor
March 21, 2012

State of Louisiana



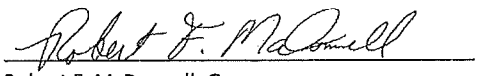
Bobby Jindal, Governor
April 16, 2012

State of Arkansas



Mike Beebe, Governor
July 24, 2012

State of Virginia



Robert F. McDonnell, Governor
October 2, 2012

Order Code 97-905

CRS Report for Congress
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Agriculture: A Glossary of Terms, Programs, and Laws, 2005 Edition

Updated June 16, 2005

Jasper Womach, Coordinator
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Resources, Science, and Industry Division

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Agriculture: A Glossary of Terms, Programs, and Laws, 2005 Edition

Summary

Note: a searchable Web version of this product is available. It may contain more recent changes than the printed version, which is updated less frequently. The URL is [http://www.congress.gov/erp/lists/agglossary.html].

The complexities of federal farm and food programs have generated a unique vocabulary. Common understanding of these terms (new and old) is important to those involved in policymaking in this area. For this reason, the House Agriculture Committee requested that CRS prepare a glossary of agriculture and related terms (e.g., food programs, conservation, forestry, environmental protection, etc.). Besides defining terms and phrases with specialized meanings for agriculture, the glossary also identifies acronyms, abbreviations, agencies, programs, and laws related to agriculture that are of particular interest to the staff and Members of Congress. CRS is releasing it for general congressional use with the permission of the Committee.

The approximately 2,500 entries in this glossary were selected in large part on the basis of Committee instructions and the informed judgment of numerous CRS experts. Time and resource constraints influenced how much and what was included. Many of the glossary explanations have been drawn from other published sources, including previous CRS glossaries, those published by the U.S. Department of Agriculture and other federal agencies, and glossaries contained in the publications of various organizations, universities, and authors. In collecting these definitions, the compilers discovered that many terms have diverse specialized meanings in different professional settings. In this glossary, the definitions or explanations have been written to reflect their relevance to agriculture and recent changes in farm and food policies.

This glossary is in alphabetical order and contains an explanation for each term. Acronyms and abbreviations are not followed by an explanation. However, except for private organizations and associations, the abbreviations likely are defined under their full name.

The definitions and explanations are not legal in nature, but are explanatory. Hence, this document should not be used as a legal or administrative reference. For those purposes, the Statutes at Large, U.S. Code, and the Code of Federal Regulations are the more appropriate resources.

Crop scouting — Precise assessments of pest pressure (typically insects) and crop performance to evaluate economic risk from pest infestations and the potential effectiveness of pest control interventions. Scouting is usually sold as a commercial service to farmers.

Crop share rent — In contrast to cash rent, the tenant farmer pays the landlord a share of the crop. This arrangement puts the landlord, like the tenant operator, at risk from variation in yields and prices. For the farm operator, crop share rent is a mechanism for sharing risks with the landlord. In relation to commodity programs for supporting prices and farm incomes, cash rent landlords do not have a beneficial interest in the commodity and are not eligible payments.

Crop year — The calendar year during which a crop is harvested. This contrasts with the marketing year, which is the 12-month marketing period after harvest.

Cropland — Land used primarily for the production of row crops, close-growing crops, and fruit and nut crops. It includes cultivated and noncultivated acreage, but not land enrolled in the Conservation Reserve Program. Approximately 377 million acres are in cropland, and another 32.7 million acres are enrolled into the Conservation Reserve Program, according to the 1997 National Resources Inventory (NRI). Comparing data from NRIs over the past 20 years, the total amount of cropland (including CRP land) has declined by less than 3%. However, increases and decreases are far greater in many states; for example, Alabama's cropland (including CRP land) dropped from 4.5 million acres to 3.5 million acres, while South Dakota's grew from 16.9 million acres to 18.4 million acres. Cropland is 30% of all non-federal rural lands.

Cropping systems — A general term that describes how a producer might grow a crop. A basic distinction is between conventional tillage and conservation tillage.

Cross compliance — A no-longer-used requirement that a farmer who participates in a price support program for one crop must also participate in price support programs for other crops grown on the same farm. See Conservation compliance.

Cross subsidization — The practice of charging higher prices to one group of consumers in order to subsidize lower prices for another group. State trading enterprises with monopoly control over marketing agricultural exports are sometimes alleged to cross subsidize, but lack of transparency in their operations makes it difficult if not impossible to determine if that is the case.

CRP — Conservation Reserve Program.

Crush spread — In the soybean futures market, the simultaneous purchase of soybean futures and the sale of soybean meal and soybean oil futures to establish a processing margin. See Gross processing margin.

CSCE — Coffee, Sugar, and Cocoa Exchange, which merged with the New York Cotton Exchange in 1998, to become the New York Board of Trade. [www.nybot.com].

CSE — Consumer support estimate.

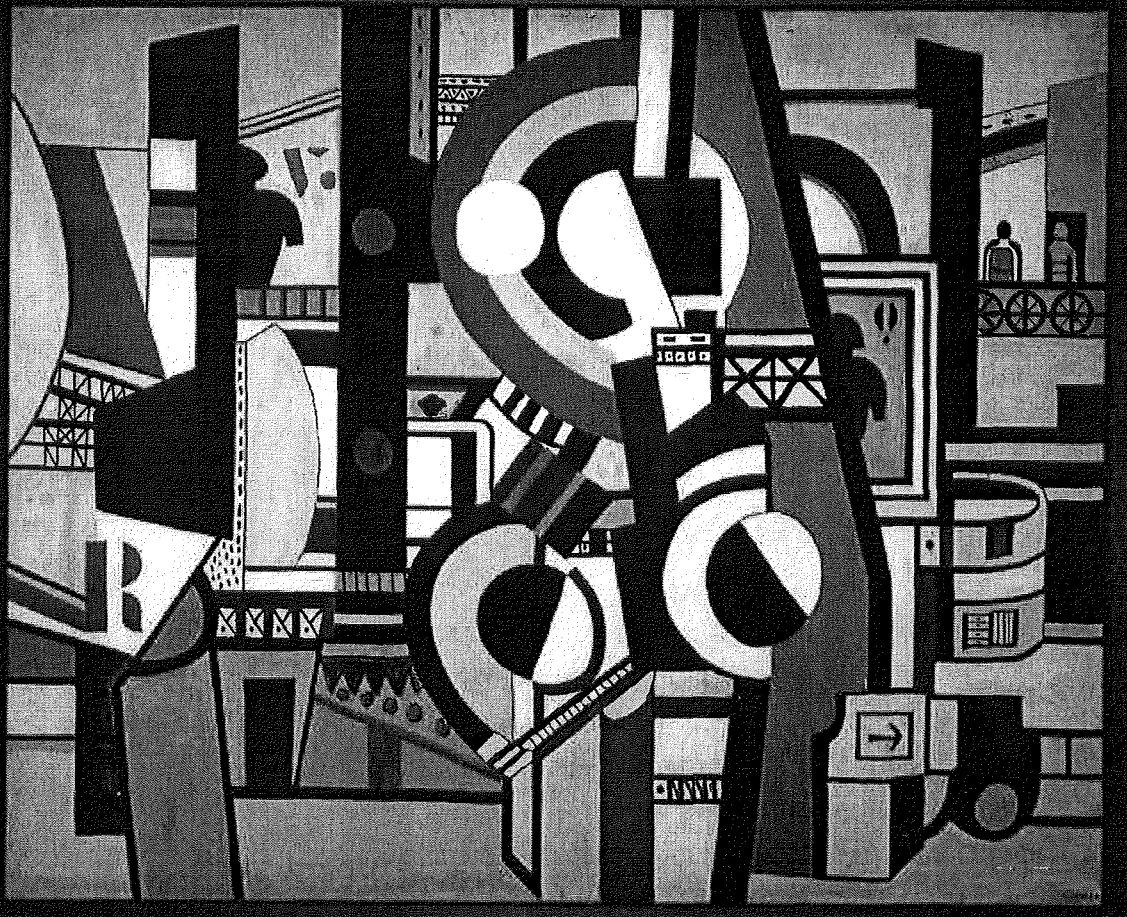
CSFP — Commodity Supplemental Food Program.

CSP — Conservation Security Program

CSPI — Center for Science in the Public Interest. [www.cspinet.org].

MODERN INDUSTRIAL ORGANIZATION

THIRD EDITION



DENNIS W. CARLTON ◆ JEFFREY M. PERLOFF

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industry output, only produce one-fifth the output of the average firm. Despite entry, the four largest firms in an industry stay in that group on average for over 10 years (Caves 1998). Birch (1987), using Dun and Bradstreet data for all sectors (not just manufacturing), finds that about half of all new entrants fail within five years and that despite their high rate of failure, entrants over a period of a few years are a significant source for the creation of (net) new jobs. However, employment by entrants accounts for a disproportionately small share of total employment and does not generate a disproportionately higher share of employment growth (Davis, Haltwanger, and Schuk 1996).

Identifying Barriers to Entry

Bain (1956) pioneered the modern approach to analyzing barriers to entry. He identified three such barriers:

- Absolute cost advantage
- Economies of large-scale production that require large capital expenditures
- **Product differentiation:** related products that have varying characteristics so that consumers do not view them as perfect substitutes (for example, Apple computers are not perfect substitutes for IBM computers)

An absolute cost advantage allows an incumbent firm to earn excess profits without fear of entry. For example, suppose Firm A can produce at a constant cost of $2 per unit, whereas all other potential firms could produce at a cost of $5. Firm A can set its price at $4, which is above its per unit cost, earn an unusually high profit, and yet not fear entry. Because it is less clear that the other two barriers fit our definition of long-run entry barriers, let us examine them in more detail.

If both an incumbent and a new entrant can enjoy the same benefits of economies of scale, why should an incumbent be able to earn excess profits? Some argue that a new entrant would have difficulty raising money (or be unwilling to invest its own money) to finance a large expenditure. It is not necessarily true that it is more difficult to raise money for large than small projects.[17] If capital markets work properly (banks and others are willing to loan money for profitable activities), raising capital should be no more difficult for a profitable large-scale project than for a profitable small-scale project. There should be many investors for good projects.

But is it reasonable that the scale of a firm has no effect on the incentives to enter? If large *sunk* costs are associated with entry and if entry is unsuccessful, the entrant's losses are large. In such a setting, threats of strategic behavior (for example, vigorous price cutting) may prevent new entry. The greater the risk of encountering strategic behavior and the greater the potential loss, the more potent is the

[17]Dunne, Roberts, and Samuelson (1988) find that existing firms that choose to enter a new business enter at a larger scale than do newly created firms. Possibly, capital market imperfections are more easily overcome by existing firms than by entrepreneurs without track records or existing firms are more confident of their likely success.

Vertical Integration and Vertical Restrictions

CHAPTER

12

Outside the firm, price movements direct production, which is coordinated through a series of exchange transactions on the market. Within a firm, these market transactions are eliminated and in place of the complicated market structure with exchange transactions is substituted the entrepreneur-coordinator, who directs production. It is clear that these are alternative methods of coordinating production.

—Ronald Coase (1937)

A firm that participates in more than one successive stage of the production or distribution of goods or services is **vertically integrated.** Nonvertically integrated firms buy the inputs or services they need for their production or distribution processes from other firms. A nonintegrated firm may write long-term, binding contracts with the firms with which it deals, in which it specifies not only price, but also other terms or forms of behavior. Contractual restraints on nonprice terms are called **vertical restrictions** (or restraints). For example, manufacturers commonly restrict their distributors by determining their sales territories, setting inventory requirements, and, where legal, setting the minimum retail price they can charge.

Some firms choose to vertically integrate and perform all production and distribution activities themselves. Most firms partially vertically integrate. For example, they may produce goods, but rely on others to market them. A restaurant that bakes its own pies instead of buying them ready-made is partially integrated.

Some firms are not vertically integrated, but buy from a small number of suppliers or sell through a small number of distributors. These firms often write complex contracts that restrict the actions of those with whom they deal. These vertical restrictions can approximate the outcome from vertically merging. Other firms buy in the open market from any number of anonymous firms. For example, they may buy wheat from a wheat broker without knowing who grew it or using any formal long-term contracts. Such firms place no restrictions on their suppliers.

Caution
As of: December 10, 2014 7:25 PM EST

Gulf States Utilities Co. v. Federal Power Com.

Supreme Court of the United States

December 5, 1972, Argued ; May 14, 1973, Decided

No. 71-1178

Reporter
411 U.S. 747; 93 S. Ct. 1870; 36 L. Ed. 2d 635; 1973 U.S. LEXIS 128; 1973-1 Trade Cas. (CCH) P74,493

GULF STATES UTILITIES CO. v. FEDERAL POWER COMMISSION ET AL.

Prior History: CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT.

Disposition: *147 U. S. App. D. C. 98, 454 F.2d 941*, affirmed.

Core Terms

Cities, public utility, issuance, securities, public interest, anticompetitive, antitrust, financing, anticompetitive conduct, authorization, allegations, regulated, bonds, purposes, interstate commerce, conditions, electric, security issue, stock, Cooperative, investigate, proceeds, operations, practices, electric energy, anti trust law, transmission, generating, short-term, issues

Case Summary

Procedural Posture

Petitioner public utility appealed a judgment from the United States Court of Appeals for the District of Columbia Circuit finding that respondent Federal Power Commission should review the utility's request to issue securities pursuant to *16 U.S.C.S. § 824c* to determine its anticompetitive effect and impact on the public interest, and remanding to the Commission for review of the utility's request to issue securities.

Overview

The utility requested approval from the Commission to issue securities to restructure its debt pursuant to *16 U.S.C.S. § 824c*. Respondent cities serviced by the utility opposed the request on grounds that such debt restructuring was anticompetitive and not in the public's interest. The Commission summarily concluded that the cities' concerns did not apply where securities were to be issued merely for refinancing purposes. The reviewing court remanded, noting that the Commission's conclusory statements did not afford a proper basis for review. The United States Supreme Court found that *§ 824c* empowered the Commission with broad powers to authorize the issue of a security by a public utility only if it found such issue was for a lawful object and compatible with the public interest. The Court concluded that nothing in the language of *§ 824c* indicated that the public interest standard was to be confined only to the utility's financial considerations. Remand was proper because the Commission gave an inadequate explanation of its reason for disposing of the cities' objection on the merits. Accordingly, the Court could not review the action for abuse of discretion.

Outcome

The judgment remanding the utility's case to the Commission for a determination as to whether the utility's request to issue securities was anticompetitive or not in the public interest was affirmed. The securities statute requiring the utility to seek approval to issue securities authorized the Commission to review the request in light of the public's interest in and any anticompetitive effects of the request.

LexisNexis® Headnotes

Securities Law > Public Utility Holding Companies > Prohibited & Unlawful Transactions

HN1 See *16 U.S.C.S. § 824c*.

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

HN2 The mandate that § 204 of the Federal Power Act, *16 U.S.C.S. § 824c*, imposes upon the Federal Power Commission is a broad and impressive one. Section 204(a) empowers the Commission to authorize the issue of a security by a public utility only if it finds that such issue is

for some lawful object, within the corporate purposes of the applicant and compatible with the public interest. This requires the Commission to inquire into and to be satisfied with the purposes of the issue and its lawfulness. And even if its "object" is lawful, the necessary inquiry is not ended, for, in addition, the object must be "compatible with the public interest."

Energy & Utilities Law > Regulators > US Federal Energy Regulatory Commission > General Overview

Energy & Utilities Law > Antitrust Issues > Administrative Considerations

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

Governments > Local Governments > Duties & Powers

HN3 The Federal Power Commission must consider anticompetitive aspects of a security issue to which § 204 of the Federal Power Act applies.

Administrative Law > Judicial Review > Standards of Review > General Overview

HN4 Whether or not an abuse of discretion is present must ultimately depend upon the transaction approved, its possible consequences, and any justifications for the deferral or summary treatment.

Administrative Law > Judicial Review > Standards of Review > General Overview

HN5 The court may not supply an alternative, unstated ground to support an agency's decision if that ground is one that the agency alone is authorized to make.

Lawyers' Edition Display

Summary

On a public utility's application to the Federal Power Commission for authority to issue $ 30 million first mortgage 30-year bonds to refund part of the utility's outstanding commercial paper and short-term notes, two Louisiana cities filed a protest and petition to intervene, and requested a formal hearing, on the ground that the bonds would finance or refinance the utility's activities violative of the antitrust laws, the Federal Power Act, and the Public Utility Holding Company Act. The Commission granted the cities permission to intervene, but it denied their request for a hearing and it authorized the issuance and sale of the bonds (*44 FPC 1524*). The United States Court of Appeals for the District of Columbia Circuit remanded the case to the Commission for consideration of the cities' claims (*147 App DC 98, 454 F2d 941*).

On certiorari, the United States Supreme Court affirmed. In an opinion by *Blackmun, J.*, expressing the views of six members of the court, it was held that (1) when a public utility applies to the Commission for authority to issue a security, the Commission must consider the issue's anticompetitive effect in passing upon the application, and (2) the case was properly remanded because the Commission's summary action was unexplained.

Powell, J., joined by Stewart and Rehnquist, JJ., dissented on the ground that the Commission need not consider possible anticompetitive effect in ruling on a utility's application for authority to issue a security.

Headnotes

COMMISSIONS §31 > REGULATION §11 > issue -- approval -- > Headnote:

[1]

The provision of 204(a) of the Federal Power Act (*16 USCS 824c (a)*), which empowers the Federal Power Commission to authorize a public utility's issuance of a security only if it finds that the issue "is for some lawful object, within the corporate purposes of the applicant and compatible with the public interest," requires the Commission to inquire into and to be satisfied with the purposes of the issue and its lawfulness, and also to find that the "object" is compatible with the public interest.

COMMISSIONS §31 > agency proceedings -- anticompetitive acts -- > Headnote:

LEdHN[2A] [2A]***LEdHN[2B]*** [2B]

Allegations of anticompetitive conduct may be made in Federal Power Act proceedings related to interconnections under 202 of Act (*16 USCS 824a*), dispositions and mergers under 203 (*16 USCS 824b*), rates and rate-making practices under 205 and 206 (*16 USCS 824d* and *824e*), and adequacy of service under 207 (*16 USCS 824f*).

UTILITIES §4 > federal regulations -- > Headnote:

LEdHN[3] [3]

The Public Utility Act of 1935 (*15 USCS 79 et seq.*, *16 USCS 791a et seq.*) had two primary and related purposes:

(1) to curb abusive practices of public utility companies by bringing them under effective control, and (2) to provide effective regulation of the expanding business of transmitting and selling electric power in interstate commerce.

COMMISSIONS §31 > antitrust policy -- > Headnote:

LEdHN[4] [4]

The Federal Power Act (*16 USCS 791a et seq.*) does not render antitrust policy irrelevant to the Federal Power Commission's regulation of the electric power industry; indeed, within the confines of a basic natural monopoly structure, limited competition of the sort protected by the antitrust laws seems to have been anticipated.

COMMISSIONS §31 > REGULATION §11 > issue -- approval -- > Headnote:

LEdHN[5] [5]

Under 204 of the Federal Power Act (*16 USCS 824c*), dealing with Federal Power Commission approval of a public utility's application for authority to issue a security, the Commission must consider, in ruling on the application, matters relating to both the broad purposes of the Act and fundamental national economic policy expressed in the antitrust laws.

COMMISSIONS §31 > REGULATION §11 > utility security issue -- > Headnote:

LEdHN[6] [6]

In a proceeding under 204 of the Federal Power Act (*16 USCS 824c*), which requires Federal Power Commission approval of a public utility's security issuance, the Commission need not hold a hearing on objections in every case or fully investigate every allegation regardless of facial merit, and the Commission may, in appropriate circumstances, defer consideration of allegations or forthwith authorize the major portion of a securities issue while withholding the remainder for further study; but where the Commission summarily disposes of proffered objections, or exercises its discretion to approve an issue without considering its anticompetitive consequences, the reviewing court must closely scrutinize its action in light of the statutory obligations to protect the public interest and to enforce the antitrust laws; and whether or not an abuse of discretion is present must ultimately depend upon the transaction approved, its possible consequences, and any justifications for the deferral or summary judgment.

COMMISSIONS §36 > REGULATION §13 > judicial review -- > Headnote:

LEdHN[7] [7]

The Federal Power Commission's summary rejection of objections to a public utility's proposed security issuance is properly remanded to the Commission where the Commission's summary action is unexplained and the court is provided with no reason for the Commission's possible conclusion that the objections lacked merit.

LAW §288 > judicial review -- > Headnote:

LEdHN[8] [8]

A court may not supply an alternative, unstated ground to support an agency's decision if that ground is one which the agency alone is authorized to make.

Syllabus

Following petitioner's application under § 204 of the Federal Power Act to respondent Federal Power Commission (FPC) for authorization of a bond issue, two intervening cities opposed the authorization on the ground that the proceeds of the bond issue would be used to finance or refinance certain anticompetitive activities in violation of the antitrust laws, the Federal Power Act, and the Public Utility Holding Company Act of 1935. Section 204 (a) empowers the FPC to authorize a security issue only if the issue is found to be for some lawful purpose and compatible with the public interest. The FPC granted the cities' petition to intervene, denied their request for a hearing, and authorized the bond issue, holding that the cities' allegations were irrelevant to a requested authorization of securities under § 204. The Court of Appeals remanded the case for consideration of the cities' claim, holding that, in line with the reasoning in *Denver & R. G. W. R. Co. v. United States, 387 U.S. 485*, the FPC should have considered the alleged competitive consequences of the bond issue in the § 204 proceeding. *Held*:

1. The FPC, as a general rule, must consider the anticompetitive consequences of a security issue under § 204. Pp. 756-762.

(a) The Federal Power Act did not render antitrust policy irrelevant to the FPC's regulation of the electric power industry. Pp. 757-759.

(b) The fact that the FPC has broad authority under other provisions of the Act to determine whether a public utility's

conduct is in the public interest does not mean that the same standard is not equally germane under § 204. P. 759.

(c) Consideration of antitrust policies in the context of § 204 provides a first line of defense against anticompetitive practices that might later become the subject of an antitrust proceeding. P. 760.

(d) The FPC, like the Interstate Commerce Commission, has broad regulatory authority, which includes responsibility for considering antitrust policy in discharging its statutory obligations. Cf. *Denver & R. G. W. R. Co. v. United States, supra.* Pp. 760-762.

2. Though the FPC is not necessarily required to hold a hearing or make a full investigation in all cases, its summary disposition of proffered objections to the security issue requires strict scrutiny by a reviewing court in light of the Commission's obligations to protect the public interest and enforce the antitrust laws. Pp. 762-763.

3. Unexplained summary administrative action is incompatible with the requirements of § 204 and precludes appropriate judicial review. Pp. 763-764.

Counsel: Benny Harry Hughes argued the cause for petitioner. With him on the briefs was Benjamin D. Orgain.

Leo E. Forquer argued the cause for respondent Federal Power Commission in support of petitioner. With him on the brief was George W. McHenry, Jr.

Robert C. McDiarmid argued the cause for respondent cities of Lafayette and Plaquemine, Louisiana. With him on the brief was George Spiegel.

Howard E. Shapiro argued the cause for the United States as amicus curiae urging affirmance. With him on the brief were Solicitor General Griswold, Assistant Attorney General Kauper, Samuel Huntington, and Robert B. Nicholson. *

Judges: Blackmun, J., delivered the opinion of the Court, in which Burger, C. J., and Douglas, Brennan, White, and Marshall, JJ., joined. Powell, J., filed a dissenting opinion, in which Stewart and Rehnquist, JJ., joined, post, p. 764.

Opinion by: BLACKMUN

Opinion

[*749] [***638] [**1873] MR. JUSTICE BLACKMUN delivered the opinion of the Court.

This case presents the question whether, when a public utility applies to the Federal Power Commission for authority to issue a security, as the utility is required to do under § 204 of the Federal Power Act, 49 Stat. 850, *16 U. S. C. § 824c*, [1] the Commission, in passing upon the application, must consider [***639] the issue's anticompetitive effect in determining whether it is "compatible with the public interest," as that phrase is employed in § 204 (a).

[*750] I

In October 1970, Gulf States Utilities Company applied to the Federal Power Commission for authority to issue for cash, on competitive bidding, $ 30,000,000 first mortgage

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* Howard E. Wahrenbrock filed briefs for Public Service Company of Indiana, Inc., as amicus curiae urging reversal.

Briefs of amici curiae urging affirmance were filed by Northcutt Ely for the American Public Power Assn., and by Charles J. McCarthy for Dow Chemical Co.

[1] "§ 824c. Issuance of securities; assumption of liabilities; filing duplicate reports with Securities and Exchange Commission.

HN1 "(a) No public utility shall issue any security . . . unless and until, and then only to the extent that, upon application by the public utility, the Commission by order authorizes such issue . . . The Commission shall make such order only if it finds that such issue . . . (a) is for some lawful object, within the corporate purposes of the applicant and compatible with the public interest, which is necessary or appropriate for or consistent with the proper performance by the applicant of service as a public utility and which will not impair its ability to perform that service, and (b) is reasonably necessary or appropriate for such purposes. . . .

"(b) The Commission, after opportunity for hearing, may grant any application under this section in whole or in part, and with such modifications and upon such terms and conditions as it may find necessary or appropriate, and may from time to time, after opportunity for hearing and for good cause shown, make such supplemental orders in the premises as it may find necessary or appropriate, and may by any such supplemental order modify the provisions of any previous order as to the particular purposes, uses, and extent to which, or the conditions under which, any security so theretofore authorized or the proceeds thereof may be applied, subject always to the requirements of subsection (a) of this section.

"(c) No public utility shall, without the consent of the Commission, apply any security or any proceeds thereof to any purpose not specified in the Commission's order, or supplemental order, or to any purpose in excess of the amount allowed for such purpose in such order, or otherwise in contravention of such order."

30-year bonds for the purpose of refunding part of Gulf's then-outstanding commercial paper and short-term notes. [2]

Gulf, a Texas corporation qualified to do business in Louisiana, is a public utility within the meaning of § 201 (e) of the Federal Power Act, 16 U. S. C. § 824 (e). It is engaged principally in the business of generating, distributing, and selling electric energy in southeastern [**1874] Texas and south central Louisiana in an area of approximately 28,000 square miles with a population of about 1,225,000. Gulf sells electric energy at retail in numerous communities in that market and, at the time of the application, was providing electric energy for resale to nine municipal systems, 11 rural electric cooperatives (one serving four municipal systems), and one other utility.

The Commission filed notice of Gulf's application. 35 Fed. Reg. 16649 (1970). Thereupon the cities of Lafayette and Plaquemine, Louisiana (Cities) filed a protest and petition to intervene in the proceedings before the Commission and requested a formal hearing on Gulf's application. [*751] The Cities alleged that Gulf, in concert with two other investor-owned utilities, Louisiana Power and Light Company (LP&L) and Central Louisiana Electric Company (CLECO), had engaged in activities "apparently violative of the anti-trust laws," as well as of § 10 (h) of the Federal Power Act, 16 U. S. C. § 803 (h), [3] and of the Public Utility Holding Company Act of 1935, 49 Stat. 838, 15 U. S. C. § 79 et seq.; that these activities, in effect, would be "financed or refinanced by the bonds here proposed"; and that the utilities' activities were incompatible with the public interest. The Cities opposed the requested authorization "unless and until Gulf States purges itself of these past violations, or unless the Commission conditions its authorization."

The Cities' claim centered on and stressed a 1968 interconnection and pooling agreement between the Cities, Dow Chemical Company, and Louisiana Electric Cooperative, Inc. (LEC). Dow has a plant near the Cities; the plant has generating capacity that could be used by the other members of the pool as emergency stabilizing capacity. LEC is a generation and transmission electric cooperative financed by the Rural Electrification Administration [***640] (REA); it is a super-cooperative composed of 12 electric distribution cooperatives, all located in the area served by the three utilities.

In 1964, the REA was considering loans to LEC for the construction of a generation station and transmission lines through which LEC would be able to serve eight of its 12 member organizations. These members were then purchasing their power from the three utilities. The Cities claimed that the three utilities had attempted to [*752] destroy LEC, and pointed to a history of "extraordinary litigation" instituted by the utilities between 1964 and 1970 to prevent the construction of the station and the lines, and in fact delaying that construction for five years. The arrangement proposed by the 1968 agreement would assure a market for the parties' surplus capacity and would coordinate, at substantial savings, the construction of new generators by the parties. The three utilities, correspondingly, would lose substantial business if the 1968 arrangement were carried out. Accordingly, Cities alleged, the three utilities engaged in frivolous and repetitive litigation and launched a public relations and lobbying drive against LEC in order to block the loan and prevent fulfillment of the agreement. Cf. California Transport v. Trucking Unlimited, 404 U.S. 508 (1972).

The REA loan was effected, however, in 1969. But by that time the loan was sufficient only for the generating facilities exclusive of the lines. Cities, Dow, and LEC, then were forced to negotiate with the three utilities for the use of the utilities' lines to transmit their power. Cities contended that the three utilities continued, through the course of the negotiations, to block or limit the pool by agreeing only to provide transmission services to some of the pool members; by refusing to supply transmission [**1875] facilities between pool members unless the 1968 pooling agreement were canceled; and by demanding that LEC limit its power capacity to the wattage already planned, thus giving the three utilities the exclusive right to supply all further power needs of LEC's 12 cooperatives and precluding further expansion by LEC.

Cities, by their proposed intervention, would bring these allegations before the Federal Power Commission in the §

[2] Gulf, in its Securities and Exchange Commission registration statement for the bonds, stated that the proceeds received from the notes to be refinanced had been used "in connection with the Company's construction program and for other corporate purposes." App. 162. The notes themselves had been issued upon the authority of an uncontested order in FPC Docket E-7509. The Commission in that proceeding authorized a total of $ 80,000,000 in short-term debt. Only $ 55,000,000 of this was outstanding at the time of Gulf's bond authorization proceeding. Thus, apart from the bond issue, Gulf could have borrowed another $ 25,000,000 in short-term credit without further Commission authorization.

[3] "Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, maintain, or increase prices for electrical energy or service are hereby prohibited."

204 proceeding. They claimed that such anticompetitive conduct was properly the subject of a § 204 proceeding and that, under § 204 (b), 16 U. S. C. § 824c (b), the Commission may condition its approval of the [*753] bond issue accordingly and place restrictions on Gulf's use of the proceeds.

By its answer, Gulf denied any violation of the antitrust laws, of the Federal Power Act, or of the Public Utility Holding Company Act of 1935. It alleged that the purpose of § 204 of the Federal Power Act was "to prevent unsound financing which might impair the financial integrity of public utilities," and that even if the allegations of the Cities were accepted as true by the Commission, those matters were "irrelevant to this application."

By order issued December 3, 1970, 44 F. P. C. 1524, the Commission granted the Cities permission to intervene. It denied their request for a hearing, however, and it authorized the issuance and sale of the bonds. The order recited:

[***641] "The requested approval of the issuance of the Bonds allow [sic] the Company only to change the form of a portion of its outstanding indebtedness, it does not call for the initiation of any construction or other program by the Company which *might effect [sic]* the interest of the Petitioners. The alleged violations which petitioners attempt to raise in this proceeding are irrelevant to a requested authorization of securities. There is no relief that the Commission can order in authorizing the issuance of the Bonds for refinancing purposes that would have any effect on the interest of the Petitioners, or solve any of the problems outlined by them." Id., at 1525.

The Commission specifically found:

"The matters asserted and activities alleged in the filed protest and petition to intervene by the Cities of Lafayette and Plaquemine, Louisiana, are irrelevant to the purpose of issuing bonds to refund short-term [*754] indebtedness heretofore authorized by this Commission." Id., at 1526.

The petition for rehearing required by § 313 (a) of the Act, 16 U. S. C. § 825l (a), see Department of Fish & Game v. FPC, 359 F.2d 165, 168-169 (CA9), cert. denied, 385 U.S. 932 (1966), was filed by the Cities, and was denied.

Review was sought pursuant to § 313 (b) of the Act, 16 U. S. C. § 825l (b), in the United States Court of Appeals for the District of Columbia Circuit. A unanimous panel of that court disagreed with the Commission and remanded the case to it for consideration of the claims raised by the Cities, *sub nom.* City of Lafayette v. SEC, 147 U. S. App. D. C. 98, 454 F.2d 941 (1971). The court recognized that the Commission's contention that Gulf's operations "could have no meaningful relation to an application that only sought to replace short-term notes with long term bonds" was "not without appeal, and also not without problems." Id., at 109, 454 F.2d, at 952. The court concluded, however, that the "cryptic statement of the FPC does not permit us to conclude with reasonable confidence that this was the position taken by the FPC." *Ibid.* It observed that the Commission may have rejected the Cities' allegations out of hand upon the authority of its earlier decision in Pacific Power & Light Co., 27 F. P. C. 623 (1962), a position the Court of Appeals viewed as untenable under this Court's subsequent decision in Denver & R. G. W. R. Co. v. United [**1876] States, 387 U.S. 485 (1967). [4]

[*755] Inasmuch [***642] as the decision of the Court of Appeals raised issues of potential and recurring importance with respect to the authorization of securities by the Federal Power Commission, we granted certiorari. 406 U.S. 956 (1972). The Commission took the position that the [*756]

[4] Cities also opposed an application of LP&L for approval by the Securities and Exchange Commission of bond and stock issues, the proceeds of which were to be used to repay short-term obligations and for other corporate purposes. Cities contended that the proceeds of these issues would be used for the construction of facilities that would further the unlawful objectives of LP&L, Gulf, and CLEC, and asked that approval by the SEC be conditioned on cessation of the illegal activities and the establishment of a program to remedy the damage already done.

The jurisdiction of the SEC in this instance was based on §§ 6 and 7 of the Public Utility Holding Company Act of 1935, 15 U. S. C. §§ 79f and 79g, which are part of Tit. I of the Public Utility Act of 1935, 49 Stat. 803, 814-817. Sections 6 and 7 contain a number of requirements that must be met for SEC approval of a security issue. The most relevant of these is in § 7 (d), which requires that the SEC "shall permit a declaration . . . to become effective unless the Commission finds that -- . . . (6) the terms and conditions of the issue or sale of the security are detrimental to the public interest or the interest of investors or consumers."

The SEC refused to entertain the Cities' protest, concluding that its authority under § 7 (d)(6) related solely to the terms and conditions of the security to be issued, and did not extend to collateral and unrelated controversies in which LP&L might be engaged. The Cities petitioned the United States Court of Appeals for the District of Columbia Circuit for review of the SEC orders, and the matter was consolidated with the present case. The Court of Appeals affirmed the SEC orders, but remanded Gulf's case to the FPC. It explained this diverse treatment as follows:

Court of Appeals was in error, but nevertheless opposed the grant.

II

[1] [1]*HN2* The mandate that § 204 of the Federal Power Act, *16 U. S. C. § 824c*, imposes upon the Commission is a broad and impressive one. Section 204 (a) empowers the Commission to authorize the issue of a security by a public utility *only* "if it finds that such issue . . . is for some lawful object, within the corporate purposes of the applicant and compatible with the public interest." This requires the Commission to inquire into and to be satisfied with the purposes of the issue and its lawfulness. And even if its "object" is lawful, the necessary inquiry is not ended, for, in addition, the object must be "compatible with the public interest."

In making its determination under § 204 (a), the Commission is given broad powers of inquiry and enforcement. By § 204 (b) it may hold hearings on the application, may grant the application "in whole or in part," may modify it, and may impose such terms or conditions "as it may find necessary or appropriate." After opportunity for hearing, and for good cause shown, it also may supplement, modify, or condition any previous order "as it may find necessary or appropriate." *Ibid.* Section 204 (c) grants the Commission authority to [**1877] specify the purpose to which the proceeds of the security may be applied and the amount allowed for that purpose. While, as Gulf observes, §§ 204 (e) and (f) exempt from § 204 (a) certain transactions that concern short-term obligations as well as public [***643] utilities that are "organized and operating in a State under the laws of which its security issues are regulated by a State commission," these exemptions [5] do not significantly detract from the sweeping [*757] powers and responsibilities of the Commission with respect to public utility security issues generally.

We are asked to hold that the Commission's responsibilities under § 204 do not extend to consideration on its part of possible anticompetitive consequences flowing from the issuance of a security. Gulf and the Commission both argue that administrative inquiry under § 204 is to be narrowly confined to the prevention of the issuance of a security that might impair the utility's financial integrity or its ability to perform its public utility service and responsibilities. Exactly this interpretation was placed on § 204 by the Commission in 1962 in *Pacific Power & Light Co., 27 F. P. C., at 626*. [6] Gulf and the Commission contend that antitrust considerations of the kind asserted by the Cities do not fall within the limited scope of § 204 as thus defined, and consideration by the Commission of such broad-ranging issues would be incompatible with the need for relatively fast action by the Commission when it passes upon a proposed security issue. It is said that allegations of anticompetitive conduct properly may be raised and fully considered in other proceedings related to interconnections under § 202 of the Act, *16 U. S. C. § 824a*, to dispositions and mergers under § 203, *16 U. S. C. § 824b*, to rates and rate-making practices under §§ 205 and 206, *16 U. S. C. §§ 824d* and *824e*, and to adequacy of service under § 207, *16 U. S. C. § 824f*.

LEdHN[2A] [2A] *LEdHN[3]* [3]Although allegations similar to those raised here may, indeed, be made in such other proceedings under the Federal Power Act, we do not regard that fact as determinative of the scope of Commission inquiry under § 204. Instead, the Commission's broad authority to consider anticompetitive and other conduct touching the "public interest" under the other sections of the Act emphasizes [*758] the breadth of its authority under the public interest standard generally and as embodied in § 204. This statute was enacted as part of Tit. II of the Public Utility Act of 1935, 49 Stat. 803, 850. The Act had two primary and related purposes: to curb abusive practices of public utility companies by bringing them under effective control, and to provide effective federal regulation of the expanding business of transmitting and selling electric power in interstate commerce. 49 Stat. 803-804, 847-848; S. Rep. No. 621, 74th Cong., 1st Sess., 1-4, 17-20; H. R. Rep. No. 1318, 74th Cong., 1st Sess., 3, 7-8; *Jersey Central Co.*

"Where an agency has some regulatory jurisdiction over operations, it must consider whether there is a reasonable nexus between the matters subject to its surveillance and those under attack on anticompetitive grounds. But the general doctrine requiring an agency to take account of antitrust considerations does not extend to a case like the one before us where the antitrust problem arises out of operations of the regulated company (past and projected) and the agency, here the SEC, has not been given any regulatory jurisdiction over operations of the company. The SEC has no jurisdiction over operations and stands in a different posture from the FPC which, as we have already noted, has regulatory jurisdiction over operations in view of its authority, *inter alia*, to direct utilities to interconnect on reasonable terms, or to prohibit a utility *from* discriminating in rates and facilities against its municipal customers" 147 U. S. App. D. C. 98, 112-113, 454 F.2d 941, 955-956 (emphasis in original).

[5] These exemption provisions have no application to Gulf's security issue challenged by the Cities here.

[6] Cf., however, *Black Hills Power & Light Co., 28 F. P. C. 1121 (1962)*, and ***31 F. P. C. 1605 (1964)***.

v. FPC, 319 U.S. 61, 67-68 (1943); see North American Co. v. SEC, 327 U.S. 686 (1946). The Act was passed in the context of, and in response to, great concentrations of economic and even political power vested in power trusts, and the absence of antitrust enforcement to restrain the growth and practices of public utility holding companies. See S. Rep. No. 621, supra, at 11-12; Utility Corporations -- Summary [***644] Report, 70th Cong., 1st Sess., S. Doc. No. 92, Part 73-A, pp. 47-54; 79 Cong. Rec. 8392 (1935).

LEdHN[2B] [2B] *LEdHN[4]* [4]In order to achieve federal regulation of these and other perceived problems on the operational level of the interstate public utility business, Tit. II was enacted. S. Rep. No. 621, supra, at 17; H. R. Rep. No. 1318, supra, at 7. Part II of Tit. II was denominated the [**1878] Federal Power Act, 49 Stat. 863. Title II certainly did not preclude the operation of the antitrust laws, and it vested the Federal Power Commission with important and broad regulatory power in the areas described above. See Otter Tail Power Co. v. United States, 410 U.S. 366 (1973); Meeks, Concentration in the Electric Power Industry: The Impact of Antitrust Policy, 72 Col. L. Rev. 64 (1972). This power clearly carries with it the responsibility to consider, in appropriate circumstances, the anticompetitive effects of regulated aspects of interstate [*759] utility operations pursuant to §§ 202 and 203, and under like directives contained in §§ 205, 206, and 207. The Act did not render antitrust policy irrelevant to the Commission's regulation of the electric power industry. Indeed, within the confines of a basic natural monopoly structure, limited competition of the sort protected by the antitrust laws seems to have been anticipated. See Otter Tail Power Co. v. United States, supra, at 373-374; California v. FPC, 369 U.S. 482 (1962); S. Rep. No. 621, supra, at 12; Hearings before the House Committee on Interstate and Foreign Commerce on H. R. 5423, 74th Cong., 1st Sess., 157-159 (1935); Summary Report, *supra*, at 52; Meeks, *supra*.

LEdHN[5] [5]Nothing in the Act suggests that the "public interest" standard of § 204 contains any less broad directive than that contained in the other similarly worded and adjacent sections. Under the express language of § 204 the public interest is stressed as a governing factor. There is nothing that indicates that the meaning of that term is to be restricted to financial considerations, with every other aspect of the public interest ignored. Further, there is the section's requirement that the object of the issue be lawful. The Commission is directed to inquire into and to evaluate the purpose of the issue and the use to which its proceeds will be put. Without a more definite indication of contrary legislative purpose, we shall not read out of § 204 the requirement that the Commission consider matters relating to both the broad purposes of the Act and the fundamental national economic policy expressed in the antitrust laws. See FMC v. Svenska Amerika Linien, 390 U.S. 238, 244 (1968); California v. FPC, 369 U.S., at 484-485; FCC v. RCA Communications, Inc., 346 U.S. 86, 94 (1953); McLean Trucking Co. v. United States, 321 U.S. 67, 80 (1944). Cf. Report of National Power Policy Committee on Public-Utility Holding Companies, in S. Rep. No. 621, *supra*, at 55, 59 [*760] (App.). Consideration of antitrust and anticompetitive issues by the Commission, moreover, serves the important function of establishing a first line of defense against those competitive practices that might later be the subject of antitrust proceedings. This is particularly significant in the context of a security issue under § 204, for appropriate consideration at a pre-issue [***645] stage may avoid the need later to unravel complex transactions in granting relief under the antitrust laws or other sections of the Federal Power Act.

Our conclusion is reinforced by the decision in Denver & R. G. W. R. Co. v. United States, 387 U.S. 485 (1967). In that case the Court concluded that the Interstate Commerce Commission, in performing its duty under § 20a (2) of the Interstate Commerce Act, 49 U. S. C. § 20a (2), to determine whether the issuance of a particular security is "for some lawful object . . . and compatible with the public interest," is required, as a general rule, to consider the anticompetitive consequences of the issue. Section 204 of the Federal Power Act was modeled upon § 20a of the Interstate Commerce Act. The initial draft of § 204 was without any broad reference to the public interest. Instead, it identified four specific purposes for which a utility could issue a [**1879] security (property acquisition; expansion or improvement of facilities or service; discharge or lawful refunding of obligations; and reimbursement of other expenditures for such purposes). H. R. 5423, § 206, 74th Cong., 1st Sess., 108-109; S. 1725, § 206, 74th Cong., 1st Sess., 109-110. [7] This [*761] provision intentionally was replaced with the broader language now contained in § 204 in order "to attain

[7] "Sec. 206 (a). No public utility shall issue any security, or assume any obligation or liability as guarantor, indorser, surety, or otherwise in respect of any security of another person, unless and until, and then only to the extent that, upon application by the public utility, the Commission by order authorizes such issue or assumption of liability. The Commission shall make such order only if it finds that such issue or assumption of liability is for one or more of the following purposes and no others, and is reasonably necessary or appropriate for such purpose or purposes; the acquisition of property; the construction, completion, extension or improvement of the facilities or service of the public utility; the discharge or lawful refunding of its obligations; and the reimbursement of moneys actually

greater flexibility and workability than would have been possible under the original section. The language defining the purposes for which securities may be issued has been taken substantially from section 20a of the Interstate Commerce Act, which has proved its usefulness." S. Rep. No. 621, supra, at 20. There was, thus, a departure from the specific, and a selection of the general. We perceive no reason to view the responsibility placed on the FPC under § 204 differently from the ICC's responsibility under § 20a of the Interstate Commerce Act. Each agency possesses broad regulatory authority. Each is charged with responsibility for considering antitrust policy under its statute. And § 204 and § 20a are virtually identical in language. [8] The fact that the ICC has a specific obligation under § 11 (a) of the Clayton Act, 15 U. S. C. § 21 (a), to enforce § 7 of that Act, as well as a responsibility to advance the National Transportation Policy, did not control the decision in the *Denver* case, see 387 U.S., at 492-493, [***646] and the absence of a parallel reference in § 11 of the Clayton Act with respect to the FPC is not to be [*762] deemed controlling. Cf. California v. FPC, 369 U.S. 482 (1962).

III

Our conclusion that ***HN3*** the FPC must consider anticompetitive aspects of a security issue to which § 204 applies does not end the inquiry, for two subordinate questions remain: whether the agency abused its authority in refusing to hold a hearing on the Cities' objections, and whether, on the facts of this case, the Commission improperly rejected the Cities' allegations out of hand on the ground that they were irrelevant to the security issue for which Gulf sought approval.

LEdHN[6] [6]Gulf asserts that even if the Commission is required to investigate and to consider the Cities' objections under § 204, its refusal to do so here was not error, for the Commission may summarily dispose of objections of this kind without a hearing and extended investigation. Our conclusion that, as a general rule, the Commission must consider anticompetitive consequences of a security issue under § 204 does not mean that the Commission must hold a hearing on objections in every case. Neither does it mean that every allegation must be fully investigated regardless of its facial merit, or that consideration of the allegations may not, in appropriate circumstances, [**1880] be deferred, or that the major portion of a securities issue may not forthwith be authorized and only the remainder withheld for further study. [9] So strict a rule would unduly limit the discretion the Commission must have in order to mold its procedures to the exigencies of the particular case, and would be unrealistic in the light of the nature of a proceeding under § 204. The need for flexibility, planning, and rapid coordinated action is particularly [*763] acute with respect to the sale of a security on the market. But where the Commission summarily disposes of proffered objections, or where it exercises its discretion to approve an issue without considering its anticompetitive consequences, "the reviewing court must closely scrutinize its action in light of the . . . statutory obligations to protect the public interest and to enforce the antitrust laws. ***HN4*** Whether or not an abuse of discretion is present must ultimately depend upon the transaction approved, its possible consequences, and any justifications for the deferral" or summary treatment. Denver, 387 U.S., at 498. *Denver*, as we have noted, concerned the ICC, but the foregoing quotation from that opinion has equally forceful application in the FPC context.

LEdHN[7] [7] ***LEdHN[8]*** [8]Gulf also strenuously urges that the Commission in fact did consider Cities' allegations, although summarily, and properly rejected them on their merits as having no relation to the security issue or to any possible future anticompetitive conduct in which Gulf might engage. We have noted above that the Court of Appeals observed, 147 U. S. App. D. C., at 109, 454 F.2d, at 952, that certain aspects of this argument are not without substantial appeal. On the basis of the record before us, we cannot say that, upon [***647] consideration of the objections raised by the Cities, the Commission would not be justified in rejecting them summarily. But such summary action may not go unexplained in the face of the statutory obligation placed on the Commission under § 204. The decision the Commission thus far has made provides us with an inadequate explanation of its reasons for disposing of the Cities' objections on their merits, if that in fact is what occurred. We are provided with no explanation of why summary action was warranted, and we are provided with no reason for the Commission's possible conclusion that the

expended from sources other than the issue of securities for any of the aforesaid purposes in cases where the applicant shall have kept its accounts and vouchers for such expenditures in such manner as to enable the Commission to ascertain the amount of moneys so expended and the purpose for which such expenditure was made."

The foregoing was the Senate version. Except for one spelling and two punctuational differences, the House version was identical.

[8] The FPC has so recognized. Pacific Power & Light Co., 27 F. P. C. 623, 627 (1962).

[9] The Court of Appeals meticulously outlined various options available to the Commission. 147 U. S. App. D. C., at 110-111, 454 F.2d, at 953-954.

objections were meritless. [*764] Without more, we are unable "closely [to] scrutinize" the Commission's action. *HN5* Nor may we supply an alternative, unstated ground to support an agency's decision if that ground is one that "the agency alone is authorized to make." *SEC v. Chenery Corp., 318 U.S. 80, 88 (1943).*

The decision of the Court of Appeals in remanding the case to the Federal Power Commission is

Affirmed.

Dissent by: POWELL

Dissent

MR. JUSTICE POWELL, with whom MR. JUSTICE STEWART and MR. JUSTICE REHNQUIST join, dissenting.

This case raises the question whether the Federal Power Commission (the Commission) must consider the possible anticompetitive effect of a public utility's application under § 204 of the Federal Power Act, *16 U. S. C. § 824c*, for authority to issue a security. Section 204 provides in relevant part that the Commission shall authorize the issuance of a security

"only if it finds that such issue or assumption (a) is for some *lawful object*, within the corporate purposes of the applicant and compatible with the *public interest*, which is necessary or appropriate for or consistent with the proper performance by the applicant of service as a public utility and which will not impair its ability to perform that service, and (b) is reasonably [**1881] necessary or appropriate for such purposes." *16 U. S. C. § 824c (a)* (emphasis supplied).

Rejecting the Commission's own structuring of its responsibilities and repudiating its uniform administrative interpretation for more than a third of a century, the Court today finds implicit in § 204's use of the phrase "the public interest" a duty on the part of the Commission, when acting upon a financing application, to consider any possible anticompetitive effect that may be [*765] alleged. As I am persuaded neither by the majority's analysis of the statutory language nor by its discussion of the regulatory context, I remain of the view that the Commission's position is consistent with the statute and I would accord it the deference to which it is entitled. [1] [***648] Moreover, for the reasons stated below, I believe that the Court's decision is incompatible with the interest of the public in assuring that utilities are enabled to meet their necessary requirements for capital upon the most favorable terms. Accordingly, I dissent.

I

The present proceedings were initiated on October 12, 1970, when Gulf States Utilities Co. (Gulf States) filed an application under § 204 seeking authority to sell $ 30 million of first mortgage bonds at competitive bidding. The stated purpose for the issuance was to pay off part of its commercial paper and short-term notes, whose issuance previously had been approved by the Commission.

The cities of Lafayette and Plaquemine, Louisiana (the Cities), filed a motion to intervene on November 2, alleging a continuing conspiracy among Gulf States, Louisiana Power & Light Co., and Central Louisiana Electric Co. to block the implementation of an Interconnection and Pooling Agreement which would link the Cities, Dow Chemical Co., and Louisiana Electric [*766] Cooperative, Inc. (the Cooperative). The Cooperative had applied in 1964 to the Rural Electrification Administration for a loan to build a generating facility and transmission lines. The Cities contended that Gulf States and its coconspirators had used a number of techniques, including frivolous litigation, to delay approval of the loan until 1969, with the result that the amount of the loan no longer sufficed to build transmission lines as well as a generating plant. The Cooperative was thus forced to rely for transmission services on Gulf States, which, allegedly, would agree to sell them only if the Cooperative would restrict the scope of its operations. The Cities asserted, finally, that the proceeds from the present

[1] The interpretation is entitled to great deference:

"When faced with a problem of statutory construction, this Court shows great deference to the interpretation given the statute by the officers or agency charged with its administration. 'To sustain the Commission's application of this statutory term, we need not find that its construction is the only reasonable one, or even that it is the result we would have reached had the question arisen in the first instance in judicial proceedings.' *Unemployment Comm'n v. Aragon, 329 U.S. 143, 153.*" *Udall v. Tallman, 380 U.S. 1, 16 (1965).*

bond issue would in some way support Gulf State's anticompetitive actions. [2]

On December 3, the Commission granted the Cities' motion to intervene, but declined to hold a hearing on their allegations. The Commission's order explained more fully:

"The requested approval of the issuance of the Bonds allow[s] the Company [**1882] only to change the form of a portion of its outstanding indebtedness, it does not call for the initiation of any construction or other program by the Company which might effect [sic] the interest of the Petitioners. The alleged violations which petitioners attempt to raise in this proceeding are irrelevant to a requested authorization of securities. There is no relief that the Commission can order in authorizing the issuance of the Bonds for refinancing purposes that would have any [*767] effect on the interest of the Petitioners, or solve any of the problems outlined by them." *44 F. P. C. 1524, 1525*.

In the same order, the Commission authorized the issuance and sale of the bonds. It subsequently modified [***649] the order in respects not relevant here and denied a petition for rehearing.

Reviewing the Commission's order at the behest of the Cities, the Court of Appeals held that in a § 204 application proceeding the Commission must consider claims of anticompetitive conduct when urged by intervenors. *147 U. S. App. D. C. 98, 454 F.2d 941 (1971)*. While the court's ruling was flexible in terms, allowing the Commission to reject without a hearing claims which are "insubstantial or barren" or lack a "reasonable nexus" with the purpose of the securities issuance, it required an explanation "supported in the record," presumably something in addition to that offered by the Commission in this case. *147 U. S. App. D. C., at 110, 454 F.2d, at 953*. [3]

II

It is common ground that the Commission has a responsibility to deal with anticompetitive practices in the power industry. Section 10 of the Act, *16 U. S. C. § 803*, provides that the Commission may issue licenses to public utilities "on the following conditions," one of which is that:

"(h) Combinations, agreements, arrangements, or understandings, express or implied, to limit the output of electrical energy, to restrain trade, or to fix, [*768] maintain, or increase prices for electrical energy or service are hereby prohibited." *16 U. S. C. § 803 (h)*.

The question before the Court, then, is not whether the Commission has responsibility, but how and when it shall exercise it.

Stated abstractly, the Commission's position is that the most sensible method of regulating anticompetitive conduct is to focus on the conduct itself rather than on the means by which it may possibly be financed. The Commission acknowledges a duty to scrutinize allegedly anticompetitive behavior in proceedings: to order an interconnection, § 202 of the Act, *16 U. S. C. § 824a*; to approve an acquisition or merger, § 203 of the Act, *16 U. S. C. § 824b*; to review rates, §§ 205 and 206 of the Act, *16 U. S. C. §§ 824d* and *824e*; and to review a charge of unduly discriminatory rates or practices, § 205 of the Act, *16 U. S. C. § 824d*, or of inadequate service, § 207 of the Act, *16 U. S. C. § 824f*. Additionally, the Commission may investigate unlawful conduct upon a complaint by "any person, State, municipality, or State commission," § 306 of the Act, *16 U. S. C. § 825e*, or on its own motion, § 307 of the Act, *16 U. S. C. § 825f*. Indeed, upon the complaint of the respondent Cities, the Commission is presently investigating the conduct at issue here. *The Cities of Lafayette and Plaquemine, Louisiana* v. *Gulf States Utilities Co.*, F. P. C. Doc. No. E-7676. [4]

[**1883] Given [***650] its broad direct authority and its undertaking to investigate allegations of anticompetitive behavior in exercising that authority, the Commission does not think it necessary or appropriate to convert § 204 into an

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[2] It was stated in petitioner's brief, and was not challenged, that the Commission records fail to show any other like petition to intervene in a financing application under § 204 since its enactment in 1935. The remedy which intervenors are seeking to establish is a new one not heretofore deemed necessary or appropriate by anyone. Brief for Petitioner 26.

[3] One would have thought that by its use of the phrase "irrelevant to a requested authorization of securities," 44 F. P. C. 1524, 1525, the Commission had already found -- to use the language of the court -- that the claims lacked a "reasonable nexus" with the purpose of the securities issuance.

[4] Nor does the Commission have exclusive jurisdiction over antitrust violations by utilities. Antitrust suits may be brought by private parties or by the Antitrust Division of the Justice Department and afford other means of relief.

all-purpose [*769] sword. [5] As the Court of Appeals recognized, there may be no nexus or only a very weak one between the issuance of a security and alleged anticompetitive conduct and, in any event, the charges may be unfounded. It is no answer, in the Commission's view, to say that nexus and merit must be determined on the facts of each case because the process of investigating the allegations will delay the financing and often frustrate the utilities' efforts to obtain a favorable price for their securities.

The Commission is properly sensitive to the complexities and subtleties of raising vast sums of money in the financial markets. [6] Utility financing normally is accomplished through competitive bidding participated in by a relatively small number of national investment firms which specialize in the purchase from issuers and the wholesaling of utility securities. The market is highly competitive and is particularly sensitive to uncertainties. The maintenance of an orderly market, with dependable marketing timetables, is essential to the financing process and to favorable decisions by the investment bankers as to rates and other terms. It is settled [*770] practice to "bring an issue to market" pursuant to a carefully structured time schedule. When favorable market conditions are observed or anticipated, this time schedule is compressed usually within a period from 45 to 90 days. The longer the lead time is extended and uncertainties injected into the process, the greater the risk of market change or re-evaluation with a resulting adverse effect on the cost of capital and, in the end, on the cost of service to the public. Indeed, the public has a double interest in this process. Apart from the ultimate impact on rates which may be occasioned by disruption of the financing process, the utilities may simply be unable to keep pace with the burgeoning public demand for electric energy. [7]

[**1884] Both [***651] the delicacy of financing and the availability of alternative means for regulating anticompetitive conduct, then, strongly support the Commission's interpretation of the Act. Nor does anything in the legislative history [*771] of § 204 require a contrary conclusion. [8] The Senate Report states straightforwardly:

"Control over the capitalization of operating utilities is plainly an essential means of safeguarding the public against the *unsound financial practices* which make impossible the proper and most economical performance of public-utility functions." S. Rep. No. 621, 74th Cong., 1st Sess., 50 (1935) (emphasis supplied).

And in companion legislation entrusting to the Securities and Exchange Commission (SEC) the responsibility to regulate the issuance of securities by public utility holding companies, Congress declined to require the SEC to investigate anticompetitive conduct, at least in the ordinary

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[5] In *Pacific Power & Light Co.*, 27 F. P. C. 623 (1962), the Commission took the same position under analogous circumstances. There, the Commission approved a proposed issuance of securities to fund construction of a politically controversial transmission line, stating:

"The plain purpose of Section 204 is to prevent the issuance of securities which might impair the company's financial integrity or its ability to perform its public utility responsibilities." *Id.*, at 626.

[6] The Commission has recognized the importance of expedition and adherence to time schedules in the administration of § 204 of the Act:

"It should also be observed that procedures for considering security issues must be expeditious if, in view of changing marketing conditions, utilities are to be able to raise the money needed to carry out their responsibilities. . . ." *Id.*, at 629.

[7] Prof. Priest has commented on the urgency of new capital for the electric industry:

"Since World War II, the problem of new capital has been, and will continue to be, compellingly urgent for public utility managements." A. Priest, 1 Principles of Public Utility Regulation 451 (1969).

After describing the "spectacular" growth of the electric utility industry, Prof. Priest compared the urgency of access to the capital markets of utilities with industrial enterprises:

"The new capital requirements of the utility industry in the next ten years will call for extraordinary effort. The obvious reasons are (1) that regulated public utilities literally cannot produce as much cash through retained earnings as unregulated industrial enterprises and (2) that the utilities, in any event, need a much larger investment per dollar of annual revenue than the characteristic industrial." *Id.*, at 452.

It is stated in petitioner's brief, and not questioned, that in 1971, 43 applications were filed with the Commission covering the issuance of nearly $ 1.8 billion of securities. Brief for Petitioner 24.

[8] Section 204 was enacted as part of Tit. II of the Public Utility Act of 1935. Title II amended the Federal Water Power Act and redesignated it the Federal Power Act.

case. [9] Even apart from its relevance to congressional purpose, the absence of a requirement for such an investigation when a public utility holding company seeks authorization to issue a security supports the Commission's [*772] prudent judgment to accord like treatment to applications from operating utilities.

The securities of public utility holding companies compete in the financial markets with the securities of public utility operating companies. It makes little sense, especially in construing companion legislation applicable to the same industry, to construe the term "public interest" when applied to the operating companies to mean something different, and to impose a more burdensome procedure, than when applied to utilities which are within a holding company system. [10] Yet, this will be the bizarre result of today's decision by this Court.

III

[***652] The Court rests its decision in part on *Denver & R. G. W. R. Co. v. United States, 387 U.S. 485 (1967)*, a case involving the issuance of a controlling stock interest in a carrier regulated by the Interstate Commerce Commission (ICC). In my view, that case falls far short of being a persuasive precedent. The transaction under consideration there was a proposed issuance of common stock by the Railway Express Agency (REA). Approximately 2,000,000 shares of REA stock were held exclusively by railroads, each of which was obligated to offer its shares to the others before selling them to outsiders. REA also was authorized [**1885] to issue 500,000 shares to whomever it wished, and it entered into an agreement to sell such shares to Greyhound on the condition that [*773] Greyhound would offer to purchase an additional 1,000,000 shares from present stockholders, the offer to remain open for 60 days.

As required by *§ 20a* of the Interstate Commerce Act, *49 U. S. C. § 20a*, REA applied to the ICC for authorization to issue the 500,000 shares. Under the terms of that section, the ICC may grant authorization "only if it finds that such issue . . . is for some lawful object within [the applicant's] corporate purposes, and compatible with the public interest . . . ." *49 U. S. C. § 20a (2)*. The ICC authorized the issue without granting a hearing on an intervenor's claim that issuance to Greyhound would give it "control" over REA, or, at a minimum, would lead to a lessening of competition in the freight transportation market. On review in this Court, the ICC argued that its responsibility under *§ 20a* was limited to protecting against financial manipulation, but that even if it did have an obligation to consider "control" and "anticompetitive" effects of the issuance, it could properly defer such consideration until the expiration of Greyhound's offer to purchase a large additional portion of REA's outstanding stock. *387 U.S., at 491-492*.

In addressing the ICC's first contention, the Court gave scant attention to the legislative history of *§ 20a*. After noting that an earlier version of what was to become the Interstate Commerce Act "led to a study which condemned as a 'public evil' intercorporate holdings of railroad stock," *id., at 492 n. 4*, the opinion shifted focus:

"Even if Congress' primary concern was to prevent [fiscal] manipulation, the broad terms 'public interest' and 'lawful object' negate the existence of a mandate to the ICC to close its eyes to facts indicating that the transaction may exceed limitations imposed by other relevant laws." *Id., at 492*.

One of the ICC's responsibilities, the Court found, was to consider possible control and anticompetitive consequences, [*774] a responsibility deriving specifically from *§ 5* of the Interstate Commerce Act, *49 U. S. C. § 5*, and from § 11 of the Clayton Act, *15 U. S. C. § 21*. Under *§ 5*, any conjoining of two or more carriers, either by merger or by transfer of a controlling interest of stock, must be submitted for approval to the ICC, whose approval confers antitrust immunity.

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[9] The Public Utility Holding Company Act was enacted as Tit. I of the Public Utility Act of 1935. See n. 8, *supra*. Under § 7 (d)(6) of the Public Utility Holding Company Act, the SEC is directed to disapprove an issue of securities if its terms and conditions are "detrimental to the public interest or the interest of investors or consumers." 15 U. S. C. § 79g (d)(6). The SEC has interpreted this language as not requiring it to investigate alleged anticompetitive conduct, and applied this interpretation in an aspect of this litigation involving a substantially identical challenge by these same Cities to a proposed issuance of securities by Louisiana Power & Light Co., a public utility holding company which allegedly conspired with Gulf States. See *ante*, at 754-755, n. 4. The SEC rejected the Cities' protests as pertaining to "collateral and unrelated controversies," 147 U. S. App. D. C., at 103, 454 F.2d, at 946, and was upheld by the Court of Appeals. *Id.*, at 112, 454 F.2d, at 955.

[10] Further evidence of congressional intent can be gleaned from the fact that Congress exempted from scrutiny under § 204 securities of "a public utility organized and operating in a State under the laws of which its security issues are regulated by a State commission." § 204 (f) of the Act, 16 U. S. C. § 824c (f). At the time of the Act, 32 States regulated the issuance of utility company securities. 79 Cong. Rec. 10378 (1935). Had Congress intended to subject securities issues to antitrust screening, it would not, presumably, have established this exception.

Section 11 of the Clayton Act grants to the ICC authority to enforce compliance with [***653] the antitrust provisions of § 7 of the same Act, 15 U. S. C. § 18, which prohibit the acquisition by one corporation of the stock or the assets of another where "the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly." On the facts before it, the Court saw no abuse of discretion in the ICC's decision to postpone consideration of possible control of REA by Greyhound until the expiration of Greyhound's 60-day offer, but held it an abuse of discretion to defer consideration of a possible § 7 violation.

Section 20a of the Interstate Commerce Act, interpreted in *Denver*, was, as the majority points out, the model for § 204 of the Federal Power Act. [11] But this tie by no means requires that the two sections be given identical constructions. [12] The *Denver* case involved [**1886] a different [*775] statute and regulatory framework, with a different administrative history. [13] Moreover, the transaction involved in *Denver*, Greyhound's purchase of stock in a regulated carrier, was arguably a *per se* violation of the antitrust laws: the effect of the acquisition might have been "substantially to lessen competition, or to tend to create a monopoly" in violation of § 7 of the Clayton Act. As indicated above, the legislative history of the Interstate Commerce Act showed particular concern with "intercorporate holdings of railroad stock." The immediacy of the antitrust issue and the obligation imposed by § 5 on the ICC with respect to Clayton Act violations justified the Court in overriding the ICC's decision not to address the issue.

In sum, *Denver* has little precedential weight in a case under the Federal Power Act, especially where the transaction does not involve on its face an arguable violation of the antitrust laws.

IV

I return now to the facts in this case. The relationship between Gulf States' proposal to sell bonds for cash on the open market and the anticompetitive activities alleged by [***654] the Cities is, at best, an attenuated one. Indeed, the Cities do not claim that the issuance itself will have an [*776] anticompetitive effect. Nor do they claim that the simple refunding of obligations will have such an effect. Their assertion of a relationship barely goes beyond a bald insistence that the anticompetitive conduct alleged will be "financed or refinanced by the bonds here proposed." Brief for Respondent Cities 9. Their focus consistently has been not so much on the uses to which the proceeds from the bonds will be put as on the conditions which the Commission might impose on their issuance. Indeed, the Commission believes that the lack of a substantial relationship between the Cities' allegations and petitioner's bond issue is characteristic of the lack of nexus between § 204 financing proposals generally and anticompetitive conduct by utilities. [14]

This, then, is a particularly unlikely case in which to force the Commission to investigate allegations of anticompetitive conduct. The Court apparently considers that the Cities' claim of anticompetitive conduct is at least colorably

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[11] The Senate Report indicated that § 204

"follows section 20a of the Interstate Commerce Act in defining the conditions under which such authorization is to be given, the Commission's power to issue orders and the duty of the public utilities to comply with such orders." S. Rep. No. 621, 74th Cong., 1st Sess., 50 (1935).

[12] One can hardly suppose that Congress in 1935 specifically intended to borrow the words of § 20a as they would be construed by this Court in 1967. Congress borrowed the language as it was then understood, because it had "proved its usefulness." *Id.*, at 20.

Moreover, Congress departed from the Interstate Commerce Act model when it established an exception for state-regulated securities, see n. 10, *supra*, an exception which is not found in the Interstate Commerce Act.

[13] No less important are the practical differences between utility and railroad financing. Because for several decades the railroads have contracted rather than expanded facilities and services, they have for the most part been able to meet their capital needs from retained earnings and equipment trust financing without resorting to the national markets for additional capital:

"Railroads may not enlarge their trackage significantly and may continue to rely largely on internal resources and the ubiquitous equipment trust to finance additional and more efficient rolling stock. But the electric, natural gas, communications, and water industries, as well as the airlines, must go to the investment fraternity for staggering amounts." Priest, *supra*, n. 7, at 451.

[14] It is worthy of note that a transaction between two public utilities resembling the transaction proposed in *Denver & R. G. W. R. Co.* would be submitted to the Commission, not under § 204, but under § 203, which provides in pertinent part that:

"(a) No public utility shall . . . purchase, acquire, or take any security of any other public utility, without first having secured an order of the Commission authorizing it to do so." 16 U. S. C. § 824b.

relevant to the proposed refinancing. If so, it is unlikely that any claim can be found wholly irrelevant. On the basis of today's precedent, the only justification [**1887] reasonably open to the Commission for refusing to consider allegations of anticompetitive conduct will be that the allegations themselves are patently false.

If the field of inquiry is, as the Cities insist, all of a utility's proposed actions and all of its past actions as [*777] they reflect on its proposed actions, it should be no difficult task for an intervenor to force a hearing and findings of fact. As the present case amply demonstrates, the questions of fact may be complicated ones unsuited to summary adjudication. If the Commission finds no anticompetitive conduct, the intervenor will remain free to seek judicial review of the Commission's findings, and thereby cause further delay.

In converting a special-purpose proceeding into a general-purpose one, the Court renounces an administrative interpretation of § 204 founded on the practicalities of utility financing and regulation. [15] Although other established means are available for policing anticompetitive conduct, [16] the Court imposes fresh and ill-defined obstacles to the necessary raising of capital by an industry that needs an expeditious and dependable regulatory process. And, finally, in the name of the "public interest," it ignores the critical fact that mandating a prolonged factfinding process will preclude the [***655] Commission from vindicating those aspects of the public interest peculiarly implicated by financing proposals.

I would uphold the Commission and would reverse the decision of the Court of Appeals.

References

64 Am Jur 2d, Public Utilities 256US L Ed Digest, Public Service Commissions 31; Securities Regulation 11ALR Digests, Public Service Commissions 21; Securities Regulation 13L Ed Index to Anno, Federal Power Commission; Public Utilities; Securities RegulationALR Quick Index, Public Utilities; Securities RegulationFederal Quick Index, Federal Power Commission; Public Utilities; Securities Regulation

In passing on an application under § 203, the Commission would investigate charges of anticompetitive practices. See *supra*, at 768. Thus the specific problem addressed by the Court in *Denver* would not arise under § 204.

[15] I would not foreclose the possibility that the Commission should consider in the context of a § 204 application an allegation that the issuance of the security was itself an antitrust violation. But see n. 14, *supra*. The present case is not remotely of this type.

[16] See n. 4, *supra*.

Cited
As of: January 5, 2015 1:10 PM EST

Bellsouth Bse v. Tenn. Regulatory Auth.

Court of Appeals of Tennessee, at Nashville

February 18, 2003, Filed

No. M2000-00868-COA-R12-CV

Reporter
2003 Tenn. App. LEXIS 123; 2003 WL 354466

BELLSOUTH BSE, INC. v. TENNESSEE REGULATORY AUTHORITY

Prior History: [*1] Tenn. R. App. P. 12 Appeal as of Right; Judgment of the Tennessee Regulatory Authority Vacated and Remanded. Tennessee Regulatory Authority. No. 98-00879.

Disposition: Judgment of the Tennessee Regulatory Authority vacated and remanded.

Core Terms

affiliate, services, requirements, incumbent, provider, certification, floor, Telecommunications, telecommunications service, competitive, regulation, safeguards, anticompetitive, intervenors, interLATA, practices, carriers, entities, network, local service, statewide, operating company, rates, local telephone, provisions, public interest, operations, costs, nondiscriminatory, interconnection

Case Summary

Procedural Posture

Appellant telephone company applied for certification as a competing local exchange company (CLEC) on a Statewide basis. The Tennessee Regulatory Authority (TRA) granted the telephone company's authority to provide local services in those territories where its affiliate was not the incumbent provider of local services, but denied its application in those areas where its affiliate was providing local service. The telephone company appealed.

Overview

Because the TRA denied the petition on the basis that the certification would be inconsistent with the goal of fostering competition and could be potentially adverse to competition, as opposed to establishing conditions or requirements designed to ensure that anticompetitive practices did not occur, the appellate court vacated the order as beyond the agency's statutory authority. The appellate court found that the telephone company met the requirements for certification as a competing provider under *Tenn. Code Ann. § 65-4-201(c)* by demonstrating: (1) that it would adhere to all applicable TRA policies, rules, and orders; and (2) that it possessed managerial, financial, and technical abilities to provide the services. The appellate court agreed with the TRA that it had the authority under *Tenn. Code Ann. § 65-4-201(a)* to consider the effect on competition of an application for statewide certification as a CLEC. TRA also had specific authority to adopt rules or issue orders to prohibit anticompetitive practices under Tenn. Code Ann. § 65-5-208(c). However, the appellate court found that the statute prohibited anticompetitive conduct, not affiliation relationships.

Outcome

The judgment of the TRA was vacated and remanded.

LexisNexis® Headnotes

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN1 The adoption of the Tennessee Telecommunication Act, 1995 Tenn. Pub. Acts 408 (effective 6 June 1995), abolished monopolistic control of local telephone service and opened that market to competition. It also changed the way in which providers of such services, and the rates they charge, were regulated.

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN2 As part of the implementation of local service competition, a company which was providing basic local exchange telephone service, as defined by statute, prior to 6 June 1995, is designated as the "incumbent local exchange telephone company," or ILEC. *Tenn. Code Ann. § 65-4-101(d)*. New entrants into the market after 6 June 1995, are known as "competing telecommunications service providers" or CLECs. *Tenn. Code Ann. § 65-4-101(e)*. To become a CLEC, a provider is required to be certificated pursuant to *Tenn. Code Ann. § 65-4-201*.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN3 See *Tenn. Code Ann. § 65-4-201(c)*.

Antitrust & Trade Law > Regulated Industries > Communications > Telecommunications Act

Communications Law > Federal Acts > General Overview

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN4 By enactment of the Telecommunications Act of 1996, Congress made fundamental changes in local telephone markets by, among other things, prohibiting states from enforcing laws that impede competition. In order to facilitate the transition from regulated monopolies to true competition, the Act imposes upon the incumbent local exchange telephone company provider or ILEC, who formerly enjoyed the monopoly, a number of duties intended to facilitate entry into the market by other, formerly excluded, providers.

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

Antitrust & Trade Law > Regulated Industries > Communications > Telecommunications Act

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > Federal Acts > Telecommunications Act > Federal Preemption

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Communications Law > ... > Regulated Practices > Introducing Competition > Duties of Incumbent Carriers & Resellers

Communications Law > ... > Orders & Hearings > Complaints & Charges > Rates

Contracts Law > Types of Contracts > Lease Agreements > General Overview

HN5 The 1996 Act brought sweeping changes. It ended the monopolies that incumbent LECs held over local telephone service by preempting state laws that had protected the LECs from competition. See *47 U.S.C. § 253*. Congress recognized, however, that removing the legal barriers to entry would not be enough, given current technology, to make local telephone markets competitive. In other words, it is economically impractical to duplicate the incumbent LEC 's local network infrastructure. To get around this problem, the Act allows potential competitors, called competing local exchange carriers (CLECs), to enter the local telephone market by using the incumbent LEC 's network or services in three ways. First, a CLEC may build its own network and "interconnect" with the network of an incumbent. See id. *§ 251(c)(2)*. Second, a CLEC may lease elements (loops, switches, etc.) of an incumbent LEC 's network "on an unbundled basis." See id. *§ 251(c)(3)*. Third, a CLEC may buy an incumbent LEC 's retail services "at wholesale rates" and then resell those services to customers under its (the CLEC's) brand. See id. *§ 251(c)(4)*.

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Communications Law > ... > Regulated Practices > Introducing Competition > Duties of Incumbent Carriers & Resellers

Communications Law > ... > Regulated Practices > Introducing Competition > Interconnection Agreements

HN6 This access is accomplished through an interconnection agreement between the ILEC and a CLEC. In addition, an ILEC is required to provide access to its network elements and various services and to provide dialing parity to competing providers on a nondiscriminatory basis. *47 U.S.C.S. §§ 251(c)(3)* & *251(b)(3)*. The FCC has promulgated rules and policies implementing those provisions "to require incumbent LECs to provide competition with access to the incumbent LECs' networks sufficient to create a competitively neutral playing field for new entrants.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN7 Under state law, all providers are required to provide non-discriminatory interconnection to their public networks under reasonable terms and conditions, and all are to be provided "desired features, functions and services promptly,

and on an unbundled and non-discriminatory basis from all other telecommunications providers." Tenn. Code Ann. § 65-4-124(a).

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN8 At the state level, incumbent providers are also governed by specific provisions, again designed to facilitate entry into the local telephone service market by competitors. For example, rates to be charged by incumbent providers opting to be under a price regulation plan are subject to a requirement that such rates be just and reasonable, defined as "affordable", as determined by the TRA. Tenn. Code Ann. § 65-5-209(a). These rates are subject to limitations, including safeguards to ensure universal service and nondiscrimination among customers. Tenn. Code Ann. § 65-5-209(b).

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Communications Law > ... > Orders & Hearings > Complaints & Charges > Rates

HN9 After the initial qualification of a price regulation plan, an ILEC's ability to increase rates is subject to limitations. Essentially, a price regulated ILEC can adjust rates for specific services subject to an overall maximum annual adjustment to aggregate revenues for such services. Tenn. Code Ann. § 65-5-209(e). However, rates for basic services cannot be increased for four (4) years after implementation of the plan, and annual increases for basic services are thereafter limited to annual rates of inflation. Tenn. Code Ann. § 65-5-209(f).

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Communications Law > ... > Orders & Hearings > Complaints & Charges > Rates

HN10 ILECs not under a price regulation plan are subject to traditional rate regulation. ILECs have unique, carrier-of-last-resort obligations and universal service obligations. Tenn. Code Ann. § 65-5-207(c)(2) & (8). ILECs, upon request, are required to provide interconnection services to CLECs. Tenn. Code Ann. § 65-5-209(d). None of these burdens apply to CLECs.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN11 See Tenn. Code Ann. § 65-5-208(c).

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN12 Tenn. Code Ann. § 65-5-207 authorizes the TRA to establish policies, rules, and orders requiring all telecommunications service providers to contribute to the support of universal service, which consists of residential basic local exchange telephone service at affordable rates and carrier-of-last-resort obligations.

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN13 47 U.S.C.S. § 272 (a) provides that a Bell Operating Company or BOC (including any affiliate) that is a local exchange carrier (LEC) subject to the requirements of 47 U.S.C.S. § 251(c) may provide certain services only through a separate affiliate. Under 47 U.S.C.S. § 272 , BOCs (or BOC affiliates) may engage in the following activities only through one or more affiliates that are separate from the incumbent LEC entity: (A) manufacturing activities; (B) interLATA telecommunications services that originate in-region; and (C) interLATA information services.

Administrative Law > Judicial Review > Standards of Review > General Overview

Administrative Law > Judicial Review > Standards of Review > Arbitrary & Capricious Standard of Review

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Energy & Utilities Law > Utility Companies > General Overview

HN14 The Tennessee Regulatory Authority cannot apply legal requirements arbitrarily or capriciously and must have a factual basis for its actions. Tenn. Code Ann. § 4-5-322(h).

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN15 47 U.S.C.S. § 272 does not prohibit a 47 U.S.C.S. § 272 affiliate from providing local exchange services in addition to interLATA services, nor can such a prohibition be read into this section.

Administrative Law > Judicial Review > Standards of Review > Arbitrary & Capricious Standard of Review

Administrative Law > Judicial Review > Standards of Review > Substantial Evidence

HN16 See *Tenn. Code Ann. § 4-5-322(h)*.

Administrative Law > Judicial Review > Standards of Review > Substantial Evidence

HN17 In determining the substantiality of evidence, an appellate court shall take into account whatever in the record fairly detracts from its weight, but the court shall not substitute its judgment for that of the agency as to the weight of the evidence on questions of fact.

Administrative Law > Separation of Powers > Jurisdiction

Administrative Law > Separation of Powers > Legislative Controls > General Overview

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

HN18 The Tennessee Regulatory Authority (TRA) may exercise only that authority given it expressly by statute or arising by necessary implication from an express grant. The General Assembly has given the TRA practically plenary authority over the utilities within its jurisdiction. The TRA has "general supervisory and regulatory power, jurisdiction, and control over all public utilities." *Tenn. Code Ann. § 65-4-104*. The General Assembly has given the TRA, in addition to other jurisdiction conferred, the authority to "investigate, hear and enter appropriate orders to resolve all contested issues of fact or law arising as a result of the application of Acts 1995, ch. 408 (the Tennessee Telecommunications Act)." Tenn. Code Ann. § 65-5-210(a).

Antitrust & Trade Law > Regulated Industries > Communications

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

HN19 See *Tenn. Code Ann. § 65-4-123*.

Antitrust & Trade Law > Regulated Industries > Communications

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

Communications Law > Federal Acts > General Overview

Communications Law > Federal Acts > Telecommunications Act > General Overview

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

HN20 In the preamble to the Tennessee Telecommunications Act, the General Assembly stated a policy that "Competition among providers should be made fair by requiring that all regulation be applied impartially and without discrimination to each." 1995 Tenn. Pub. Acts ch. 408.

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Antitrust & Trade Law > Regulated Industries > Communications > Telecommunications Act

Communications Law > Federal Acts > Telecommunications Act > General Overview

HN21 Federal law places a duty on the Tennessee Regulatory Authority to promote or insure competition in the provision of telecommunication services.

Communications Law > Federal Acts > Telecommunications Act > General Overview

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Transportation Law > Intrastate Commerce

HN22 See *47 U.S.C.S. § 253*.

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Antitrust & Trade Law > Regulated Industries > Communications > Telecommunications Act

Communications Law > Federal Acts > Telecommunications Act > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN23 The 1996 Telecommunications Act has special provisions relating to a Regional Bell Operating Company (RBOC). Because RBOCs had gained control of the local telephone services markets through a monopoly, such measures were considered necessary if true competition were to develop as a practical matter.

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN24 The Federal Communications Commission recognizes the authority of State regulatory agencies to treat certain Bell operating companies (BOC) related entities differently because of the potential impact on competition in the telecommunications industry.

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN25 As a matter of policy, regulations prohibiting Bell operating companies (BOC) affiliates from offering local telephone exchange service do not serve the public interest.

Antitrust & Trade Law > Regulated Industries > Communications > General Overview

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN26 While Tenn. Code Ann. § 65-5-208(c) authorizes the Tennessee Regulatory Authority (TRA) to implement safeguards to prohibit anticompetitive conduct between an incumbent local exchange telephone company (ILEC) and its affiliated competing telecommunications service providers or CLECs, there is nothing in the statute to authorize the TRA to deny certification of a related entity simply because, by its nature, the affiliate relationship may provide the opportunity for anticompetitive practices. The legislature has prohibited anticompetitive conduct, not affiliation relationships. The TRA's responsibility in that situation is to put in place standards or requirements to prohibit and prevent the anticompetitive possibilities from becoming realities and/or to make violations easier to discover so that regulation is effective.

Counsel: Guilford F. Thornton, Jr., Nashville, Tennessee, for the appellant, Bellsouth BSE, Inc.

Henry Walker, Nashville, Tennessee, for the appellees, MCI WorldCom, Southeastern Competitive Carriers Association, Time Warner Communications of the South, L.P. and US LEC of Tennessee, Inc.

J. Richard Collier, Jonathan N. Wike, Nashville, Tennessee, for the appellee, Tennessee Regulatory Authority.

Judges: PATRICIA J. COTTRELL, J., delivered the opinion of the court, in which BEN H. CANTRELL, P.J., M.S., and WILLIAM C. KOCH, JR., joined.

Opinion by: PATRICIA J. COTTRELL

Opinion

BellSouth BSE, Inc. appeals from an order of the Tennessee Regulatory Authority denying BSE's application for certification as a competing local exchange company in those areas where BSE's affiliate, BellSouth Telecommunications, is the incumbent provider of local services. Because the TRA denied the petition on the basis that such certification may be inconsistent with the goal of fostering competition [*2] and could be potentially adverse to competition, as opposed to establishing conditions or requirements designed to ensure that anticompetitive practices did not occur, we vacate the order as beyond the agency's statutory authority.

Before the state legislature made significant changes in the law governing telecommunications services in 1995, local telephone service was provided to consumers in a locality by one company under a regulated monopoly system. ***HN1*** The adoption of the Tennessee Telecommunication Act, 1995 Tenn. Pub. Acts 408 (effective June 6, 1995), abolished monopolistic control of local telephone service and opened that market to competition. It also changed the way in which providers of such services, and the rates they charge, were regulated.

HN2 As part of the implementation of local service competition, a company which was providing basic local exchange telephone service, as defined by statute, prior to June 6, 1995, was designated as the "incumbent local exchange telephone company," or ILEC. *Tenn. Code Ann. § 65-4-101(d)*. New entrants into the market after June 6, 1995, were known as "competing telecommunications service providers" or CLECs. [*3] *Tenn. Code Ann. § 65-4-101(e)*. To become a CLEC, a provider is required to be certificated pursuant to *Tenn. Code Ann. § 65-4-201*, which provides in pertinent part:

HN3 After notice to the incumbent local exchange telephone company and other interested parties and following a hearing, the authority shall grant a certificate of convenience and necessity to a competing telecommunications service provider if after examining the evidence presented, the authority finds:

(1) The applicant has demonstrated that it will adhere to all applicable authority policies, rules and orders; and

(2) The applicant possesses sufficient managerial, financial and technical abilities to provide the applied for services.

Tenn. Code Ann. § 65-4-201(c).

BellSouth BSE, Inc. applied for a certificate as a CLEC (First Application) to provide local telephone services on a statewide basis. BellSouth BSE, Inc. is a wholly owned subsidiary of BellSouth BSE Corporation which, in turn, is a wholly owned subsidiary of BellSouth Corporation. BellSouth Telecommunications ("BST"), another wholly-owned subsidiary of BellSouth Corporation, [*4] is the incumbent local exchange provider for portions of Tennessee. The Tennessee Regulatory Authority ("TRA") granted BellSouth BSE, Inc. ("BSE") authority to provide local services only in those territories where its affiliate, BST, was not the ILEC. The TRA concluded that the potential for anticompetitive harm outweighed the benefits to consumers if BSE were permitted to operate as a CLEC in those areas where its affiliate was providing local service as the ILEC.

BSE, however, was invited to re-open the issue if at any time in the future it believed it could "carry the public interest burden herein raised and alleviate the Agency's concerns with regard to Tenn. Code Ann. § 65-5-208(c). . . ." BellSouth BSE, Inc. did just that and sought expanded authority to operate as a CLEC (Second Application). Competitors were allowed to intervene, [1] and a hearing was held. The TRA denied the petition. It is that denial which is the subject of this appeal.

[*5] BSE did not propose to offer any services that could not be offered by BST. BSE intended to provide "any and all services that are or may be provided by a local exchange carrier."

I. The TRA's Concerns

In denying BSE's application for a certificate of convenience and necessity to provide expanded intrastate telecommunications services, the TRA recounted that the Second Application proceedings were held to provide BSE the opportunity to alleviate the concerns which led to the TRA's order on the First Application. Those concerns are related to the potential for anticompetitive behavior and the potential for BST to avoid controls imposed upon it because of its status as an ILEC, as well as its status under federal law as a "Bell operating company," through the use of an affiliate. The TRA expressed several specific areas of concern, which can only be examined in the context of the regulatory framework, both state and federal, for telecommunication services providers.

HN4 By enactment of the Telecommunications Act of 1996, Congress made fundamental changes in local telephone markets by, among other things, prohibiting states from enforcing laws that impede competition. In order to [*6] facilitate the transition from regulated monopolies to true competition, the Act imposes upon the incumbent provider or ILEC, who formerly enjoyed the monopoly, a number of duties intended to facilitate entry into the market by other, formerly excluded, providers. *AT & T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 371-72, 119 S. Ct. 721, 726-27, 142 L. Ed. 2d 834 (1999).* As more specifically explained:

Until the passage of the 1996 Act, state utility commissions continued to regulate local telephone service as a natural monopoly. Commissions typically granted a single company, called a local exchange carrier (LEC), an exclusive franchise to provide telephone service in a designated area. Under this protection the LEC built a local network - made up of elements such as loops (wires), switches, and transmission facilities - that connects telephones in the local calling area to each other and to long distance carriers.

HN5 The 1996 Act brought sweeping changes. It ended the monopolies that incumbent LECs held over local telephone service by preempting state laws that had protected the LECs from competition. *See 47 U.S.C. § 253.* Congress recognized, [*7] however, that removing the legal barriers to entry would not be enough, given current technology, to make local telephone markets competitive. In other words, it is economically impractical to duplicate the incumbent LEC's local network infrastructure. To get around this problem, the Act allows potential competitors, called competing local exchange carriers (CLECs), to enter the local telephone market by using the incumbent LEC's network or services in three ways. First, a CLEC may build its own network and "interconnect" with the network of an

[1] The intervenors who are also appellees in this appeal are MCI WorldCom, Inc., Southeastern Competitive Carriers Association, Time Warner Telecom of the Mid-South, L.P., and US LEC of Tennessee, Inc.

incumbent. *See id.* § 251(c)(2). Second, a CLEC may lease elements (loops, switches, etc.) of an incumbent LEC's network "on an unbundled basis." *See id.* § 251(c)(3). Third, a CLEC may buy an incumbent LEC's retail services "at wholesale rates" and then resell those services to customers under its (the CLEC's) brand. *See id.* § 251(c)(4).

GTE South, Inc. v. Morrison, 199 F.3d 733, 737 (4th Cir. 1999).

HN6 This access is accomplished through an interconnection agreement between the ILEC and a CLEC. In addition, an ILEC is required to provide access to its network elements and various services and to provide dialing [*8] parity to competing providers on a nondiscriminatory basis. *47 U.S.C. §§ 251(c)(3)* & *251(b)(3)*. The FCC has promulgated rules and policies implementing those provisions "to require incumbent LECs to provide competition with access to the incumbent LECs' networks sufficient to create a competitively neutral playing field for new entrants. . . ." *In Re Implementation of the Telecommunications Act of 1996, Third Report and Order* in CC Docket No. 96-115, *Second Order on Reconsideration of the Second Report and Order* in CC Docket No. 96-98, and *Notice of Proposed Rulemaking* in CC Docket No. 99-273, at P 6 (rel. Sept. 9, 1999).

HN7 Under state law, all providers are required to provide non-discriminatory interconnection to their public networks under reasonable terms and conditions, and all are to be provided "desired features, functions and services promptly, and on an unbundled and non-discriminatory basis from all other telecommunications providers." *Tenn. Code Ann. § 65-4-124(a)*.

HN8 At the state level, incumbent providers are also governed by specific provisions, again designed to facilitate entry into the local telephone service [*9] market by competitors. For example, rates to be charged by incumbent providers opting to be under a price regulation plan are subject to a requirement that such rates be just and reasonable, defined as "affordable", as determined by the TRA. Tenn Code Ann. § 65-5-209(a). These rates are subject to limitations, including safeguards to ensure universal service and nondiscrimination among customers. Tenn. Code Ann. § 65-5-209(b).

HN9 After the initial qualification of a price regulation plan, an ILEC's ability to increase rates is subject to limitations. Essentially, a price regulated ILEC can adjust rates for specific services subject to an overall maximum annual adjustment to aggregate revenues for such services. Tenn. Code Ann. § 65-5-209(e). However, rates for basic services cannot be increased for four (4) years after implementation of the plan, and annual increases for basic services are thereafter limited to annual rates of inflation. Tenn. Code Ann. § 65-5-209(f).

HN10 ILECs not under a price regulation plan are subject to traditional rate regulation. ILECs have unique, carrier-of-last-resort [*10] obligations and universal service obligations. Tenn. Code Ann. § 65-5-207(c)(2) & (8). ILECs, upon request, are required to provide interconnection services to CLECs. Tenn. Code Ann. § 65-5-209(d). None of these burdens apply to CLECs.

Another requirement for ILECs which was the subject of argument herein and part of the TRA's reasoning is that found in Tenn. Code Ann. § 65-5-208(c), which provides:

HN11 Effective January 1, 1996, an incumbent local exchange telephone company shall adhere to a price floor for its competitive services subject to such determination as the authority shall make pursuant to § 65-5-207. [2] The price floor shall equal the incumbent local exchange telephone company's tariffed rates for essential elements utilized by competing telecommunications service providers plus the total long-run incremental cost of the competitive elements of the service. When shown to be in the public interest, the authority shall exempt a service or group of services provided by an incumbent local exchange telephone company from the requirement of the price floor. **The authority shall, as appropriate,** [*11] **also adopt other rules or issue orders to prohibit cross-subsidization, preferences to competitive services or affiliated entities, predatory pricing, price squeezing, price discrimination, tying arrangements or other anti-competitive practices.**

(emphasis added).

It is the highlighted language which provides the primary basis for the TRA's denial of BSE's application for CLEC status in those areas where its affiliate is the incumbent provider. The TRA expressed concerns that the relationship between BSE and BST fostered the potential for the enumerated, or other, anticompetitive activities, as well as the opportunity for BST to avoid the limitations placed on [*12] it as an ILEC. The six concerns, or issues for resolution, expressed by the TRA were:

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[2] ***HN12*** Tenn. Code Ann. § 65-5-207 authorizes the TRA to establish policies, rules, and orders requiring all telecommunications service providers to contribute to the support of universal service, which consists of residential basic local exchange telephone service at affordable rates and carrier-of-last-resort obligations.

1. Whether there exists the potential for discriminatory treatment of other CLECs or for preferential treatment of BSE by BellSouth when there are no safeguards being offered to monitor affiliate transactions or performance;

2. Whether BellSouth seeks to avoid its ILEC obligations through BSE's ability to select BellSouth's best customers and offer special deals that BellSouth cannot offer due to statutory prohibitions;

3. Whether there exists the potential for the prohibited acts of price squeezing and cross-subsidization;

4. Whether in the solicitation of BellSouth business customers by BSE, those customers will continue to be offered the same services under the same utility's name, with the same personnel over the same local network as employed by BellSouth;

5. Whether BSE presented substantial and material evidence that it would provide services to consumers that could not be offered by BellSouth; and

6. Whether it is in the public interest for a Regional Bell Operating Company ("RBOC") such as BellSouth, to have an affiliated CLEC operating within its territory.

The last issue involves [*13] BellSouth's status as a RBOC, and that issue again requires some background explanation. In 1974, the U.S. Department of Justice brought an antitrust action against AT&T for monopolization of telecommunications services and equipment. *United States v. American Tel. and Tel. Co.*, 552 F. Supp. 131 (D.D.C. 1982), *aff'd sub nom. Maryland v. United States, 460 U.S. 1001, 103 S. Ct. 1240, 75 L. Ed. 2d 472 (1983)*. That long and complex litigation resulted in a settlement reflected in a consent decree. This consent decree required AT&T to divest itself of the twenty or so Bell operating companies ("BOCs") that provided local telephone service as monopolies. Under the court-approved plan, these BOCs were spun off from AT&T and grouped into seven regional holding companies, or RBOCs, who continued to provide local service as regulated monopolies until the 1996 Telecommunications Act and/or similar legislation in various states. *See AT&T Corp. v. Federal Communications Comm'n, 343 U.S. App. D.C. 23, 220 F.3d 607, 611 (D.C. Cir. 2000)*. Bell South is a RBOC. *Id.*; *see also* 47 U.S.C. § 153(4) (defining "Bell operating company" by listing [*14] twenty companies by name, including South Central Bell Telephone Company, the predecessor of BST). Although the Bell operating companies were allowed to retain their state-regulated monopolies on local service, they were prohibited by the consent decree from entering other parts of the telecommunications business, including long distance, equipment sales, and specified other services. *United States v. American Tel. and Tel. Co.*, 552 F. Supp. at 224.

The Telecommunications Act of 1996 rescinded the consent decree. While a number of key provisions apply to all incumbent local exchange carriers, such as the requirement that they offer nondiscriminatory access and interconnection to local competitors, *47 U.S.C. § 251*, the Act also includes "Special Provisions Concerning Bell Operating Companies," *47 U.S.C. §§ 271* to -276, which apply only to the BOCs and their affiliates. Some of these provisions allow BOCs to enter into formerly prohibited areas of the telecommunications market, but only under specifically enumerated conditions. Of primary importance, *§ 271* establishes requirements that a BOC or its affiliate must meet before [*15] it can provide long distance, or InterLATA, services. Those requirements relate primarily to interconnection and include a competitive checklist insuring, among other things, nondiscriminatory access to network elements and other facilities and services. *47 U.S.C. § 271(c)*. [3]

BOCs and their affiliates are barred from manufacturing and selling equipment until they have received authorization to provide interLATA services, which, of course, requires demonstrated compliance with the nondiscriminatory [*16] access requirements and the competitive checklist. *47 U.S.C. § 273*. That section includes additional strictures on such manufacturing activities. Section 276 includes nondiscrimination safeguards for provision of payphone services by a BOC and a requirement that a BOC may not subsidize its payphone services directly or indirectly from its telephone exchange service operations. In addition, BOCs may provide electronic publishing only through a separate affiliate or through a joint venture operated

[3] The Act further provides that the FCC cannot approve a BOC or BOC affiliate application to provide interLATA services unless it finds that the applicant has met the requirements with respect to access and interconnection, has fully implemented the competitive checklist, "the requested authorization will be carried out in accordance with the requirements of section 272," and the approval is consistent with the public interest, convenience and necessity. 47 U.S.C. § 271(d)(3).

according to specific requirements, including structural separation. 47 U.S.C. § 274. [4]

Most relevant to our analysis of the issues herein, because of the parties' references to and arguments about [*17] "Section 272 affiliates" is the requirement of 47 U.S.C. § 272, which the FCC has described as follows:

HN13 Section 272(a) provides that a BOC (including any affiliate) that is a LEC subject to the requirements of section 251(c) may provide certain services only through a separate affiliate. Under section 272, BOCs (or BOC affiliates) may engage in the following activities only through one or more affiliates that are separate from the incumbent LEC entity: (A) manufacturing activities; (B) interLATA telecommunications services that originate in-region; and (C) interLATA information services.

In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, As Amended, CC Docket No. 96-149, First Report and Order, at P 50 (rel. Dec. 24, 1996) (footnotes omitted).

The statute establishes "structural and transactional requirements" for § 272 separate affiliates, including independent operation, maintenance of separate books and records, totally separate officers, directors and employees, and no credit arrangement whereby recourse may be had against the assets of the BOC. 47 U.S.C. § 272 [*18] (b)(1) - (4). In addition, the affiliate is required "to conduct all transactions with the Bell operating company of which it is an affiliate on an arm's length basis with any such transactions reduced to writing and available for public inspection." 47 U.S.C. § 272(b)(5). Nondiscrimination safeguards also exist. 47 U.S.C. § 272(c).

It is this structural and operational separation between the BOC and its affiliate which has been determined on the federal level to provide protection against anticompetitive practices. It allows a BOC affiliate to provide some services that the BOC itself would be prohibited from providing. This separation is a critical element in understanding the TRA's position herein.

II. ILEC Affiliation

The TRA has previously granted certificates to over thirty competing local exchange carriers to provide local services on a statewide basis. In addition, the TRA has granted certificates as CLECs to two affiliates of ILECs, namely Citizens Telecommunications Company of Tennessee and United Telephones-Southeast, Inc. [5] BSE asserts that these prior approvals establish precedent which the TRA must follow and require [*19] that BSE's statewide application be granted because the TRA is required by federal and state law to certificate CLECs on a competitively neutral basis.

[*20] The TRA responds that its prior decisions, involving other companies in other situations, do not bind it in this situation. It also asserts, and found, that BellSouth and its affiliate BST or BellSouth are different from other CLECs and their affiliates and present unique issues. The TRA found:

In Tennessee, Citizens, Sprint, and their affiliated companies are not similarly situated to BellSouth and BSE. Neither Citizens nor Sprint are RBOCs, and neither possesses the historical market dominance so closely associated with RBOCs such as BellSouth. Unlike Citizens and Sprint, BellSouth maintains approximately eighty percent (80%) of the access lines in Tennessee. Therefore, since BSE is the affiliate of the dominant local exchange carrier in Tennessee, the actions which BSE seeks to take must be evaluated by assessing whether such actions will truly foster competition in Tennessee. The authority finds that Citizens and Sprint are not similarly situated to BSE and BellSouth.

(footnotes omitted).

If the TRA had determined that BSE was ineligible to be certified statewide as a CLEC on the basis that an affiliate was disqualified from certification in the same market where its affiliate [*21] was the incumbent provider, the two

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[4] This required structural separation, or line-of-business restriction, has been upheld in a bill of attainder and first amendment challenge. *BellSouth Corp. v. F.C.C.*, 330 U.S. App. D.C. 109, 144 F.3d 58, 61 (D.C. Cir. 1998), *cert. denied*, Apr. 26, 1999.

[5] At BSE's request, at the hearing involved herein the TRA took judicial notice of its grant of these certificates, and the records from those proceedings have been included in the record herein. Those records reflect that the TRA granted to Sprint Communications Company, L.P. a certificate to provide intrastate service based upon an application to provide a full array of telecommunications services normally provided by an incumbent local exchange telephone company throughout the State of Tennessee in all geographic locations permitted under Tenn. Code Ann. § 65-4-201. Similarly, Citizens Telecommunications Company filed an application for certification as a CLEC seeking authority to operate statewide to provide a full array of telecommunications services as would normally be provided by an incumbent local exchange telephone company. The TRA granted the application.

prior approvals would pose serious problems to affirming the TRA's order herein. However, the TRA did not find that such a *per se* disqualification existed, and we can find none in the statute. The prior approvals indicate that the TRA interpreted the Telecommunications Act as authorizing affiliates of ILECs to be certified as CLECs statewide, including in those markets where the affiliate was the incumbent.

The prior approvals also serve to rebut an argument made herein by the intervenors. Those intervenors argue that it is illegal under Tennessee law for BellSouth to operate as both an ILEC and a CLEC in the same service territory. They assert that because the Telecommunications Act defines a CLEC as a carrier providing service before June 6, 1995, and defines an ILEC as a provider of services certified after June 6, 1995, an ILEC cannot be a CLEC. We do not disagree that the statute envisions an ILEC and a CLEC as being different entities.

However, the intervenors argue that because BST cannot be a CLEC, BellSouth should not be allowed to accomplish the same illegal result through use of an affiliate; i.e., BST cannot do indirectly what it [*22] is prohibited from doing directly. While much of the intervenors' argument is addressed to BellSouth's market dominance and position, their argument is also based upon the statutory distinctions between ILECs and CLECs. To that extent, the intervenors' assertions that BellSouth cannot operate both an ILEC and a CLEC would apply equally to any other affiliate relationship. Obviously, the TRA has rejected that interpretation of the statute by certifying as CLECs at least two other entities affiliated with ILECs. We find no basis for rejecting the TRA's interpretation. In fact, the legislature apparently foresaw the possibility of an ILEC providing services to an "affiliated entity." *See* Tenn. Code Ann. § 65-5-208(c).

As the TRA's order makes clear, its denial of BSE's request for a certificate for statewide CLEC status was not based upon BSE's status as an affiliate of an ILEC *per se*. Instead, it was related to the unique position enjoyed by BellSouth as the dominant provider of local exchange services and as a Bell operating company.

We agree with the TRA that each application must be considered on its own merits and upon the facts of each individual [*23] situation. In the instant situation, the facts raise issues as to the effect of certification on competition which may differ from those raised by other incumbent affiliate applications. However, ***HN14*** the TRA cannot apply legal requirements arbitrarily or capriciously and must have a factual basis for its actions. *Tenn. Code Ann. § 4-5-322(h)*.

III. BOC Status

As set out earlier, BellSouth, BST and BSE (as an affiliate of a BOC) are subject to specific provisions of the Telecommunications Act of 1996 not applicable to other CLECs. The question is whether that status justifies a differing approach or standard for BSE's qualification as a CLEC than that applied to affiliates of other ILECs who are not also BOCs.

BSE argues that the FCC has recognized or authorized affiliates of ILECs and BOCs. The TRA has acknowledged and referred to the FCC's rulings on specific arrangements, but has distinguished the situation covered by those rulings from the situation presented by BSE's application herein.

The FCC has considered the question of the provision of local exchange and exchange access by *Section 272* BOC affiliates and reached the following conclusion:

Based [*24] on our analysis of the record and the applicable statutory provisions, ***HN15*** we conclude that *section 272* does not prohibit a *section 272* affiliate from providing local exchange services **in addition to** interLATA services, nor can such a prohibition be read into this section. Specifically, *section 272(a)(1)* states that - -

A Bell operating company (including any affiliate) which is a local exchange carrier that is subject to the requirements of *section 251(c)* may not provide any service described in *[section 272(a)(2)]* unless it provides that service through one or more affiliates that . . . are separate from any operating company entity that is subject to the requirements from *section 251(c)* . . .

We find that the statutory language is clear on its face - - a BOC *section 272* affiliate is not precluded under *section 272* from providing local exchange service, **provided that the affiliate does not qualify as an incumbent LEC subject to the requirements of** *section 251(c)*.

In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271 and *272* of the Communications Act of 1934, As Amended, CC Docket No. 96-149, First Report and Order, at P 312 (rel. Dec. 24, 1996) [*25] (emphasis added).

It is clear that the FCC's comments are addressed to those BOC affiliates which are *Section 272* affiliates and are operated independently from an ILEC affiliate. They apply

where the BOC incumbent has been authorized to provide long distance services. This means that the BOC incumbent has demonstrated to the FCC's satisfaction that it has complied with the various competition requirements set out in *47 U.S.C. § 271*.

We agree with the TRA that the FCC rulings relied upon by BSE do not directly apply to an application by an affiliate of a BOC which is not a *Section 272* affiliate to provide local service in an area where the BOC is the incumbent. While BSE is not incorrect in asserting that these FCC rulings do not prohibit the grant of its application, they also do not require it. The FCC, based on federal statutory law, has found that BOC affiliates may provide certain kinds of services when circumstances not present in the case before us exist.

BSE is not a *Section 272* affiliate, and does not claim to be. *Section 272* affiliate status only applies to affiliates of a BOC which have received *Section 271* approval. The TRA determined that BSE [*26] "remains a type of affiliate not contemplated under § 272." In addition, the TRA explained:

It is appropriate that BSE has not requested in its Application to provide non-incidental services, because BSE cannot satisfy the requirements for a *Section 272* affiliate, for those services, until interLATA permission is granted pursuant to *Section 271*. The Authority concludes that BSE cannot, at this time, as a matter of law, provide *Section 272(a)(2)* non-incidental services, does not intend to provide *Section 272(a)(2)* incidental services, and is, therefore, not a *Section 272* affiliate. Having concluded as such it is difficult to embrace the position that the safeguards established under *Section 272* are applicable to BSE. It is equally difficult to accept that an entity such as BSE is of the type contemplated by the FCC's pronouncement that *Section 272* does not prohibit a *Section 272* affiliate from providing local exchange services in addition to interLATA services.

(footnotes omitted).

The TRA asserts that BSE's lack of *Section 272* status is important is considering the competitive goals of both federal and state legislation. The Authority contends that *Section 271* approval indicates [*27] satisfaction of the requirements for entry into the long distance market, including compliance with the competitive checklist. As of the date of the proceedings herein, BellSouth did not have *Section 271* approval, and the TRA states that BellSouth has been denied that approval several times by the FCC and in other states. [6] Consequently, the TRA found that BSE had not been required to show that it has adequate operations support systems with performance measurements in place which would "provide assurance that the public welfare is protected by ensuring that competing carriers have a means to compete and are treated in a competitively neutral manner by the ILEC [BST]." The TRA also found that not only does the denial of such approval indicate that the required proof of compliance with competitive safeguards was not provided in those proceedings, the TRA found that BSE did not demonstrate such compliance in the hearing herein.

[*28] The TRA did not deny the application for statewide CLEC certification because of BSE's status as a BOC or BOC affiliate. It did, however, consider that status as a factor in its consideration of the competitive effect of allowing BSE to compete with its affiliate where the competition protections assured by *Section 272* affiliate status are not present. We conclude that neither BSE's status as an ILEC affiliate nor its status as a BOC affiliate was the basis for the TRA's denial. That status did, however, influence the standards applied by the TRA to BSE in its consideration of the competitive effect of granting BSE's application.

IV. The Issues Presented and The Standard of Review

As the list of TRA concerns set out earlier in this opinion demonstrates, the TRA focused its decision on the potential

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[6] For example:

In the Matter of Application of BellSouth Corporation, et al., Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in *South Carolina*, 13 FCC Rcd 539, 547 P 14 (1997) (failure to (1) provide nondiscriminatory access to operations support systems, (2) provide unbundled network elements in a manner that permits competing carriers to combine them through collocation, and (3) offer certain retail services at discounted rates), *aff'd*, *BellSouth Corp. v. FCC*, 333 U.S. App. D.C. 253, 162 F.3d 678 (D.C. Cir. 1998); *In the Matter of Application by BellSouth Corporation, et al., Pursuant to Section 271 of the Communications Act of 1934, as amended, to Provide In-Region, InterLATA Services in Louisiana*, 13 FCC Rcd 6245, 6246-47 P 1 (1998) (failure to provide nondiscriminatory access to operations support system and to make telecommunications services available for resale); *In the Matter of Application of BellSouth Corporation, BellSouth Telecommunications, Inc., and BellSouth Long Distance, Inc., for Provision of In-Region, InterLATA Services in Louisiana*, 13 FCC Rcd 20599, 20605 P 10 (1998) (failure to provide nondiscriminatory access to operations support system and unbundled network elements).

AT&T Corp. v. FCC, 220 F.3d at 613.

for anticompetitive activities and conduct if an affiliate of the Regional Bell Operating Company and ILEC were certified as a CLEC, especially in the absence of the protections provided by federal law to Section 272 affiliates. In the order now under appeal, the TRA noted that in its previous denial "one critical area of concern was that the affiliate relationship between BST [*29] and BSE could be potentially and irreversibly adverse to competition." The TRA found without Section 271 approval of BellSouth, there was still no evidence that BellSouth had the necessary safeguards in place to ensure fair treatment among all CLECs and further stated:

Exacerbating our concern is that no other performance measurements have been established, which arguably help to serve as support to the existence of competitive neutrality in the relationship between BellSouth, BSE and other CLECs. Without these safeguards and measurements the Authority would have difficulty determining whether BellSouth in fact afforded preferential treatment to its affiliate CLEC in Tennessee.

It was on the basis of these concerns that the TRA determined that approval of BSE's application was not in the public interest and "may, in fact" be inconsistent with the goal of competition. The TRA concluded that BSE offered little convincing evidence or testimony to diminish its concerns regarding potentially abusive collusive behavior.

On appeal, our review of the TRA's order is governed by Tenn. Code Ann. § 4-5-322(h), which provides:

HN16 The court may affirm the decision of [*30] the agency or remand the case for further proceedings. The court may reverse or modify the decision if the rights of the petitioner have been prejudiced because the administrative findings, inferences, conclusions or decisions are:

(1) In violation of constitutional or statutory provisions;

(2) In excess of the statutory authority of the agency;

(3) Made upon unlawful procedure;

(4) Arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or

(5) Unsupported by evidence which is both substantial and material in the light of the entire record.

HN17 In determining the substantiality of evidence, the court shall take into account whatever in the record fairly detracts from its weight, but the court shall not substitute its judgment for that of the agency as to the weight of the evidence on questions of fact.

HN18 The TRA may exercise only that authority given it expressly by statute or arising by necessary implication from an express grant. BellSouth Adver. & Publ'g Corp. v. Tennessee Regulatory Auth., 79 S.W.3d 506, 512 (Tenn. 2002); *Tennessee* Pub. Serv. Comm'n v. Southern Ry. Co., 554 S.W.2d 612, 613 (Tenn. 1977). [*31] The General Assembly has given the TRA "practically plenary authority over the utilities within its jurisdiction." BellSouth Adver. & Publ'g Corp., 79 S.W.3d at 512 (quoting *Tennessee* Cable Television Ass'n v. Tennessee Pub. Serv. Comm'n, 844 S.W.2d 151, 159 (Tenn. Ct. App. 1992)). The TRA has "general supervisory and regulatory power, jurisdiction, and control over all public utilities." Tenn. Code Ann. § 65-4-104. The General Assembly has given the TRA, in addition to other jurisdiction conferred, the authority to "investigate, hear and enter appropriate orders to resolve all contested issues of fact or law arising as a result of the application of Acts 1995, ch. 408 [the Tennessee Telecommunications Act]." Tenn. Code Ann. § 65-5-210(a).

BSE asserts, however, that the TRA's order was contrary to governing statutory provisions. In reviewing BSE's request, the TRA was required to apply Tenn. Code Ann. § 65-4-201(c), quoted earlier, which establishes the requirements for certification as a competing provider. BSE asserts that it met the two requirements by demonstrating: [*32] (1) that it will adhere to all applicable TRA policies, rules and orders; and (2) that it possesses managerial, financial and technical abilities to provide the services. BSE cites the TRA's approval of it as a CLEC in some territories in Tennessee as proof the TRA has found that BSE meets these statutory qualifications. Accordingly, BSE argues, the TRA was required to grant its application for statewide certification because of the mandatory language of the statute.

There is no dispute that BSE met the two requirements of Tenn. Code Ann. § 65-4-201(c). The TRA, however, determined that its other statutorily assigned responsibilities required it to examine the application in light of its effect on competition, including its responsibility under Tenn. Code Ann. § 65-4-201(a) to consider the present and future public interest in determining whether to grant a certificate of convenience and necessity. In the case herein, however, the TRA defined that public interest in terms of the impact of BSE's application on competition. It is clear from the order that the TRA's reason for denying BSE certification as a CLEC in those areas [*33] where its affiliate was the ILEC was its determination that such certification could adversely

impact the development of competition in the provision of local telephone service.

The TRA maintains that it was required to consider the effect on competition. The TRA relied upon its obligations set out in Tenn. Code Ann. § 65-5-208(c), also quoted above, to prohibit anticompetitive practices in dealings between the incumbent and competitors. The TRA was also mindful of the General Assembly's policy of fostering competition, as set out in the Tennessee Telecommunications Act of 1995:

HN19 The general assembly declares that the policy of this state is to foster the development of an efficient, technologically advanced, statewide system of telecommunications services by permitting competition in all telecommunications services markets, and by permitting alternative forms of regulation for telecommunications services and telecommunications services providers. To that end, the regulation of telecommunications services and telecommunications services providers shall protect the interests of consumers without unreasonable prejudice or disadvantage to any telecommunications [*34] services provider; universal service shall be maintained; and rates charged to residential customers for essential telecommunications services shall remain affordable.

Tenn. Code Ann. § 65-4-123. ***HN20*** In the preamble to the Tennessee Telecommunications Act, the General Assembly stated a policy that "Competition among providers should be made fair by requiring that all regulation be applied impartially and without discrimination to each." 1995 Tenn. Pub. Acts ch. 408.

In addition, ***HN21*** federal law places a duty on the TRA to promote or insure competition in the provision of telecommunication services. In particular, the Telecommunications Act of 1996 requires removal of barriers to entry into that business and states:

HN22 (a) In general. No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

(b) State regulatory authority. Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with Section 254 of this title, requirements necessary [*35] to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers.

47 U.S.C. § 253.

We agree with the TRA that it has the authority to consider the effect on competition of an application for statewide certification as a CLEC. In addition to its general almost plenary authority to regulate public utilities and the authority granted by the statutes quoted herein, it also has specific authority to adopt rules or issue orders to prohibit anticompetitive practices. Tenn. Code Ann. § 65-5-208(c). Thus, we conclude the TRA did not act in excess or in contravention of relevant statutory authority in considering the effect on competition.

However, the authority to consider the effect on competition does not remove the requirements that the agency base its decisions on substantial and material evidence and that those decisions not be arbitrary or capricious. The determinative issues in this appeal are framed by BSE's arguments that the TRA's decision was arbitrary because it differentiated among ILEC affiliates and that [*36] the decision was based upon speculation and not upon the evidence and, therefore, is not supported by substantial and material evidence. In addition, BSE asserts that the TRA's order is actually anticompetitive and prevents BSE's entry into the market as a competing local exchange service provider by establishing more stringent requirements for it than those applied to other ILEC affiliates. The intervenors assert that BST is already dominant in the local services market, making removal of barriers to entry irrelevant. The TRA asserts its order was designed to further the competition envisioned by both federal and state law.

The TRA did, in fact, treat BSE's application differently from applications for statewide CLEC certification other affiliates of ILECs. They based this differing treatment on BSE's relationship to BellSouth, which has undisputed market dominance in the state and which is a BOC. Regional Bell Operating Companies have been subject to strictures and limitations not applicable to other companies since the consent order was entered in *United States v. American Tel. and Tel. Co.* ***HN23*** The 1996 Telecommunications Act has special provisions relating to RBOCs. Because RBOCs [*37] had gained control of the local services markets through a monopoly, such measures were considered necessary if true competition were to develop as a practical matter.

HN24 The FCC has recognized the authority of state regulatory agencies to treat certain BOC related entities differently because of the potential impact on competition.

State regulation. As mentioned above, several BOCs have already submitted applications to state regulatory

commissions seeking authority to provide both local exchange services and interLATA services from the same affiliate. Although we conclude that the 1996 Act permits section 272 affiliates to offer local exchange service in addition to interLATA service, we recognize that individual states may regulate such integrated affiliates differently than other carriers. [7]

[*38] *In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271* and *272* of the Communications Act of 1934, As Amended, CC Docket No. 96-149, First Report and Order, at P 317 (rel. Dec. 24, 1996) (footnotes omitted).

Although state statues do not make reference to RBOCs, we conclude that the TRA had the authority to consider BellSouth's market dominance in the state and its status as a BOC in analyzing the competitive effects of its affiliate's application. We also conclude that Tenn. Code Ann. § 65-5-208(c) gave the TRA the authority to issue orders which would prohibit the specific anticompetitive practices listed in the statute, as well as others. Because the relationship between BST, BSE, and BellSouth provides a situation where such practices can develop, the TRA was authorized to examine this situation differently from other applications and to adopt rules or to establish by order standards or requirements to fulfill its responsibility to further competition.

However, that is not what the TRA did. Instead of "regulating" a BOC affiliate differently, the TRA denied the certification. BSE describes the TRA's decision as "Rather [*39] than engage with BSE in a reasonable framework of regulation for its services in the market, the TRA has chosen to simply deny BSE a place at the table." The question is whether the TRA could deny certification under the facts presented.

V.

The TRA had previously expressed its concerns about the potential for anticompetitive conduct between BSE and its affiliates. The second hearing was held to allow BSE to address those concerns. In the hearing, BSE offered to submit itself to various requirements to alleviate the concerns of the TRA. In specific, BSE offered:

(1) To operate independently from BST;

(2) To maintain its books, records, and accounts separate from the books, records, and accounts maintained by BST;

(3) To have separate officers, directors, and employees from BST;

(4) Not to obtain credit under any arrangement that would permit a creditor, upon default, to have recourse to the assets of BST;

(5) To conduct all transactions with BST on an arms' length basis with any such transactions reduced to writing and available for public inspection; [8]

(6) Not to engage in cross-subsidization, granting preferences to competitive services or affiliated entities, predatory [*40] pricing, price squeezing, price discrimination, tying arrangements, or other anticompetitive practices as prohibited by Tenn. Code Ann. § 65-5-208(c);

(7) To set its price floor equal to the wholesale price it pays to BST;

(8) To file and resell its Contract Service Agreements;

(9) To be bound by the non-discrimination requirements of *47 U.S.C. §§ 251* and *252*;

(10) To file tariffs;

(11) To consent to regular audits of its operations by the TRA;

(12) To provide cost allocation data of its operations;

(13) To accept advertising restrictions assuring that any advertising would properly identify "BellSouth BSE";

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[7] BSE's application does not include a proposal to provide interLATA (long distance) services. As discussed earlier, the FCC's pronouncements have involved Section 272 affiliates who propose to provide both local and long distance services. Thus, in our earlier discussion of BOC status, we have agreed with the TRA that the FCC's recognition of BOC and ILEC affiliates is not dispositive of the question of whether an affiliate which is not a Section 272 affiliate may qualify as a CLEC where its affiliate is the ILEC. However, while the finding that state regulatory agencies may regulate integrated affiliates differently from other entities is not directly applicable to a non-272 affiliate becoming a CLEC, we think the principles involved are similar enough to warrant reliance on the FCC's recognition of state agencies' authority to regulate BOC affiliates differently.

[8] Items 1-5 replicate the structural separation requirements set out in 47 U.S.C. § 272(b).

(14) To submit to any other applicable ILEC Rules in the event BSE undertakes the activities of its ILEC affiliate BST; and

(15) To abide by any and all of the applicable TRA policies, rules and orders.

The TRA found these promises [*41] insufficient, primarily for three reasons. It determined that BSE's failure to file a cost allocation manual prevented the Authority from determining whether appropriate safeguards were in place to prevent cross-subsidies between regulated and non-regulated services. [9] Similarly, BSE did not file a business plan, and the TRA stated it routinely examined such plans when considering CLEC applications. The TRA found that "The lack of a business plan and cost allocation manual prevents the Authority from determining the extent to which BSE intends to operate, and whether such operation and the provisioning of telecommunications services on an expanded level is compatible with the public interest."

[*42] Although BSE did not file a business plan, an Intervenor introduced into evidence a report prepared for BellSouth by a consultant regarding the benefits to BellSouth of sending a CLEC affiliate into various markets. BSE disavowed the report, stating that it did not serve as BSE's business plan. In its brief, the TRA argues the report is "significant, not as a representation of BSE's current or future business practices, but for its indication of the most obvious opportunities that a CLEC affiliate would provide for BellSouth and for the fact that BellSouth was studying these opportunities in great detail." The brief continues:

The report is replete with statements that BellSouth viewed its "CLEC" as an extension of BellSouth, which would benefit from maximum identification with BellSouth, that the CLEC would be operated as part of a comprehensive business strategy that would pertain to all BellSouth companies, and that the CLEC would offer many ways of circumventing regulatory restraints on BellSouth's incumbent LEC operations. . . . Elsewhere, the report states that the rationale for establishing a CLEC is that "BellSouth needs alternatives to gain pricing and packaging freedoms. [*43] "

We do not disagree with the TRA's description of the report. Although BSE denied the report was ever its business plan, the TRA argues that "The existence of this report submitted by the Intervenors and the absence of a business plan from BSE creates a reasonable presumption that BST intended to let loose its affiliate 'CLEC' upon the market not as a truly independent competitor and in order to circumvent regulatory requirements."

The final, and apparently most significant, reason given by the TRA is its interpretation of BSE's offer to be bound by a price floor equal to the resale price it pays to BST for the purchase of its telecommunications services. As discussed above, Tenn. Code Ann. § 65-5-208(c) requires an ILEC to adhere to a price floor for its competitive services which must equal the ILEC's rates for essential services used by CLECs plus the total long-run incremental cost of the competitive elements of the service.

One of the major concerns of the intervenors was the price floor issue. On appeal, they argue that Tennessee has established a "price floor" for certain ILEC services and prohibited the ILEC from charging customers less than that [*44] amount for the purpose of preventing ILECs from engaging in predatory pricing, *i.e.*, pricing services below cost. The intervenors' expert testified that the price floor statute prevents an incumbent provider with market power from pricing services at less than cost and thereby discouraging potential competitors from building their own networks. Essentially, the intervenors argue that since an ILEC is restricted by law to a price floor, the same public policy requires that an affiliate of an ILEC be subject to the same restriction because the ILEC should not be allowed to avoid the statutory price floor by operating through an affiliate. [10]

[*45] The TRA was also unconvinced that BSE's offer regarding the price floor was sufficient to alleviate its concerns about anticompetitive conduct and found:

In an effort to lessen the anti-competitive effect of its expanded certification, BSE agreed to be bound by a price floor equal to the resale price paid to BellSouth for the

[9] There is proof in the record that with regard to BSE's operation in the Tampa, Florida area, cost allocations between BSE and BellSouth's cellular phone company were not very strict, even though the companies shared some costs. For example, the cellular provider paid all advertising costs, and BSE did not pay a portion of that.

[10] The intervenors' position is explained in their brief as follows:

Based on the testimony at the second hearing, here is how BSE's scheme would work: Under federal law, BellSouth is required to make all services available for resale at a discounted, wholesale rate. In Tennessee, state regulators have determined that BellSouth's wholesale rate should be 16% less than the carrier's retail rate. Thus, if BellSouth's retail rate for local service were $ 12.15, a CLEC may purchase that service for a discounted price of $ 10.31.

purchase of its telecommunications services. However, BSE failed to demonstrate whether the resale price it will pay to BellSouth will or will not include operator service costs, administrative costs, or marketing and advertising costs. Absent an evidentiary demonstration of all costs to be included in the resale price paid to BST, the "price floor" promised by BSE may not be comparable to that set for incumbents under Tenn. Code Ann. § 65-5-208(c). Furthermore, the Authority is of the opinion that if a price floor is to act as a deterrent against price squeezing, the floor must be set in a manner that will ensure that all of the costs of providing the services are included therein. Thus, a meaningful promise to be bound to a price floor will not only include the rate paid to BellSouth by BSE, but will also include additional costs [*46] incurred by BSE in providing such services. Under BSE's proposal to set the price floor at the resale rate paid to BellSouth, BSE would still be free to sell a service below the total cost that BSE must incur to provide that service.

On appeal, the TRA contends that the danger of a price squeeze is presented by the possibility that BSE would lower its resale price, "as long as the cost components of that price are undisclosed or are subject to manipulation," to a level that competitors of BSE and BST would be unable to match. The TRA found BSE's promise to set its price floor at the resale rate it pays BST would still allow BSE to resell a service below the overall cost to BSE of providing the service. The TRA contends this situation results in an "obvious opportunity" for a price squeeze. *See Town of Norwood v. New England Power Co., 202 F.3d 408, 418 (1st Cir. 2000)* (explaining the "traditional price squeeze").

The TRA points out that BSE has never agreed to apply the price floor as described by the TRA. BSE argues that its price floor agreement must be considered in conjunction with the other safeguards it promised to comply with, which will "ensure that all [*47] of the costs of providing its services are included in its pricing."

The price floor statute only applies to incumbent providers and does not by its terms apply to CLECs. In fact, in situations where an affiliate relationship with the incumbent is not present, the issue would simply not arise. Consequently, the TRA must rely upon its authority to promote competition and prevent anticompetitive practices as authority for its decision. There is no evidence in the record that in the other situations where the TRA has approved an affiliate of the incumbent provider as a CLEC that any such price floor requirement has been imposed.

It is the relationship between BSE and BellSouth and BellSouth's market dominance and status as a RBOC that created the "concerns" that led the TRA to determine that anticompetitive practices might occur. It is actually the potential for BellSouth to use a subsidiary to circumvent restrictions placed on its operation by federal and state law and regulation, to the detriment of competition, which is at the core of the TRA's action. The fact that it is the affiliate relationship that is the problem is exemplified in the TRA's finding that, "Counterbalancing [*48] these proposals [BSE's agreement to the listed restrictions] in the record before the TRA are BSE's numerous demonstrations of its close ties to BST. Further, as BSE's witness admitted, BSE and BST will remain affiliates. BSE will be nominally independent of BST, but neither will be truly independent of BellSouth Corporation." [11] Although the TRA did not decide that no affiliate of BellSouth or BST could be certified as a CLEC in those areas where BST is the incumbent provider, it did not by rule or order establish minimum requirements to insure the type of independent operation it felt necessary to prevent "possibilities" for anticompetitive conduct.

[*49] The FCC has addressed concerns similar to those raised by the TRA in the context of a *Section 272* affiliate (an affiliate of a BOC which meets the structural separation requirements of *47 U.S.C. § 272*) in its report entitled *In the Matter of Implementation of the Non-Accounting Safeguards of Sections 271* and *272* of the Communications Act of

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During cross-examination, [BSE] was asked to assume, for the sake of argument, that BellSouth's $ 12.15 rate was also the price floor for that service, as calculated in accordance with section 208(c). Under those circumstances he repeatedly maintained that BSE could legally purchase BellSouth's service at the wholesale rate and resell it for $ 10.31 or $ 10.81, substantially less than BellSouth's price floor. In an effort to persuade the TRA to approve BSE's proposal, [BSE] said BSE would agree to price its services at no less than $ 10.31 - the wholesale price it paid to BellSouth - but would not agree to abide by BellSouth's price floor of $ 12.15.

[11] The Intervenors assert that this case is simply about whether BellSouth can be both an ILEC and a CLEC at the same time and in the same service territory. "Since BSE does not propose to offer any services to Tennessee customers that BellSouth itself cannot also offer, the only apparent reason for BSE's creation is to allow BellSouth to do indirectly, through an affiliate, what it cannot do directly, i.e., to engage in otherwise prohibited pricing and marketing strategies." The intervenors assert that the BellSouth companies are attempting to avoid the effect of those statutes which prohibit BellSouth itself from obtaining a CLEC certificate and which regulate BellSouth as the incumbent provider. This argument presupposes, among other things, that there is no structural and operational separation between the affiliates.

1934, As Amended, CC Docket No. 96-149, First Report and Order (rel. Dec. 24, 1996), wherein it made the following findings:

We also conclude ***HN25*** as a matter of policy that regulations prohibiting BOC *section 272* affiliates from offering local exchange service do not serve the public interest. The goal of the 1996 Act is to encourage competition and innovation in the telecommunications market. We agree with the BOCs that the increased flexibility resulting from the ability to provide both interLATA and local services from the same entity serves the public interest, because such flexibility will encourage *section 272* affiliates to provide innovative new services. To the extent that there are concerns that the BOCs will unlawfully subsidize their affiliates or accord them preferential treatment, we reiterate that improper [*50] cost allocation and discrimination are prohibited by existing Commission rules and *sections 251*, *252*, and *272* of the 1996 Act, and that predatory pricing is prohibited by the antitrust laws. Our affiliate transaction rules, as modified by our companion Accounting Safeguards Order, address the BOCs' ability to engage in improper cost allocation. The rules in this Order and our rules, in our First Interconnection Order and our Second Interconnection Order ensure that BOCs may not favor their affiliates. In sum, we find no basis in the record for concluding that competition in the local market would be harmed if a *section 272* affiliate offers local exchange service to the public that is similar to local exchange service offered by the BOC.

Id. at P 315 (footnotes omitted).

Of course, BSE is not a *Section 272* affiliate, and the structural separation requirements established in that provision are not automatically imposed upon BSE. There is no impediment, however, to the TRA imposing the same safeguards as a condition to certification, by virtue of its authority under Tenn. Code Ann. § 65-5-208(c). [12] In fact, BSE and BellSouth agreed to be bound [*51] by those structural separation requirements. The TRA could have included other requirements directly related to preventing anticompetitive practices between BSE and BellSouth. Again, BSE and BellSouth agreed to additional safeguards, including the filing of various documents, accepting advertising restrictions which ensure the proper identification of the affiliate, providing cost allocation data, and setting its price floor equal to the wholesale price it pays to BST.

[*52] The TRA determined these offers were not sufficient. However, it did not, by order or rule, establish the minimum requirements or safeguards it thought necessary. Instead, it determined that BSE did not sufficiently allay concerns that anticompetitive practices might occur. The TRA found that approval of BSE's application "may" be inconsistent with the goal of fostering competition, that potentially abusive, collusive behavior "might" occur, and that the relationship "could be potentially" adverse to competition.

Additionally, the TRA is not bound by the FCC's judgment that competition in local markets would not be harmed, considering the safeguards provided elsewhere, if *Section 272* affiliates were to offer local service. The TRA is authorized to make its own determination about the effect of competition in this state. However, the TRA did not make a determination that competition would be adversely affected by certification of BSE statewide. It merely found that certification "may" be contrary to promotion of competition. Apparently, any harm to competition would come only if the affiliated entities acted collusively, in an anticompetitive manner, and in violation of existing prohibitions.

[*53] ***HN26*** While Tenn. Code Ann. § 65-5-208(c) authorizes the TRA to implement safeguards to prohibit anticompetitive conduct between an ILEC and its affiliated CLEC, we can find nothing in the statute to authorize the TRA to deny certification of a related entity simply because, by its nature, the affiliate relationship may provide the opportunity for anticompetitive practices. The legislature has prohibited anticompetitive conduct, not affiliation relationships. The TRA's responsibility in that situation is to put in place standards or requirements to prohibit and prevent the anticompetitive possibilities from becoming realities and/or to make violations easier to discover so that regulation is effective.

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[12] The Georgia Public Service Commission, in ruling on a similar application by BSE in Georgia, stated that:

The critical issue that is raised in this proceeding stems from the affiliate relationship the Applicant has with the predominant incumbent local exchange carrier in Georgia, BellSouth Telecommunications, Inc. Testimony presented by the intervenors raises questions as to whether the service expected to be provided by the Applicant will indeed be in competition with BST. Or, will the entry of the Applicant into the local exchange market simply garner for the parent corporation an even larger share of the market in Georgia and thereby thwart the movement toward telecommunications competition in the state.

After finding that there was not sufficient cause to deny the application, the Commission found that certain conditions would be imposed. Those included use of the same operating system support as other CLECs, a prohibition of favoring treatment to BSE by the incumbent, and certain reporting requirements.

We conclude that the TRA's decision herein must be vacated because it is in excess of the statutory authority of the agency. We remand to the TRA for consideration of BSE's application in light of the principles set out in this opinion. Because the order which is the subject of this appeal

does not establish standards, requirements, or conditions, for the certification, we do not rule upon the validity of any such requirement. [13] Costs of this appeal are [*54] taxed to the Tennessee Regulatory Authority.

PATRICIA J. COTTRELL, JUDGE

[13] For example, we decline to address the issue of whether the TRA may impose a minimum charge or price floor on BSE which insures it recoups all its costs.

Caution
As of: December 10, 2014 11:35 AM EST

Federal Power Comm'n v. Sierra Pac. Power Co.

Supreme Court of the United States

Argued November 8, 1955 ; February 27, 1956

NO. 51

Reporter
350 U.S. 348; 76 S. Ct. 368; 100 L. Ed. 388; 1956 U.S. LEXIS 1651; 5 Oil & Gas Rep. 803

FEDERAL POWER COMMISSION *v.* SIERRA PACIFIC POWER CO.

Prior History: CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT *

Core Terms

public utility, classification, contract rate, proposed rate, regulation, new rate, changes, rates, discriminatory, unduly

Case Summary

Procedural Posture

Appellant Federal Power Commission challenged a decision of the United States Court of Appeals for the District of Columbia Circuit, which set aside the Commission's order that approved, under § 205(d) of the Federal Power Act, *16 U.S.C.S. § 824 et seq.*, a public utility's filing, pursuant to § 205(d) of the Federal Power Act, of increased rates charged to appellee electricity distributor.

Overview

The Commission denied appellee's motion to reject the utility's filing on grounds that the utility could not have unilaterally changed the contract rate between appellee and the utility, and accepted the new rates as reasonable. The Court held that the Federal Power Act did not allow a unilateral contract change through a § 205(d) filing, and the new rates could not have been approved by a finding of reasonableness under § 205(e). The Court held that the Commission had power to prescribe a new rate under § 206(a) of the Federal Power Act if it determined the old rate to have been unlawful. Although the Commission did state in its order that the contract rate were unreasonably low and therefore unlawful, the Court held that the Commission applied an incorrect standard. The Court held that a public utility could itself contract to a rate affording less than a fair return, that unprofitability itself did not render the rates unlawful, and that the Commission's sole concern should have been whether the rates were so low as to have adversely affected the public interest, such as by having been unduly discriminatory, excessively burdensome to consumers, or a threat to continued service.

Outcome

The Court affirmed the decision of the lower court but ordered the case remanded to the Commission for a determination of whether the contract rates were unlawful because they adversely affected the public interest.

LexisNexis® Headnotes

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

Business & Corporate Compliance > ... > Electric Power Industry > Federal Power Act > Federal Rate Regulation

HN1 See *16 U.S.C.S. § 824d*.

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

Business & Corporate Compliance > ... > Electric Power Industry > Federal Power Act > Federal Rate Regulation

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN2 See *16 U.S.C.S. § 824e*.

Contracts Law > Types of Contracts > Unilateral Contracts > General Overview

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

* Together with No. 53, *Pacific Gas & Electric Co.* v. *Sierra Pacific Power Co.*, also on certiorari to the same court.

Valeria Gomez

Energy & Utilities Law > Natural Gas Industry > Natural Gas Act > General Overview

HN3 The Natural Gas Act does not authorize unilateral contract changes, and that interpretation is equally applicable to the Federal Power Act, *16 U.S.C.S. § 824 et seq.*

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

HN4 The Federal Power Commission has undoubted power under § 206(a) of the Federal Power Act, *16 U.S.C.S. § 824 et seq.*, to prescribe a change in contract rates whenever it determines such rates to be unlawful. While this power is limited to prescribing the rate to be thereafter observed and thus can effect no change prior to the date of the order, the Commission's order, if based on the necessary findings, is effective to prescribe the rate to be in effect prospectively from the date of the order.

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

HN5 The condition precedent to the Federal Power Commission's exercise of its power under § 206(a) of the Federal Power Act, *16 U.S.C.S. § 824 et seq.*, is a finding that an existing rate is unjust, unreasonable, unduly discriminatory or preferential.

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN6 While it may be that the Federal Power Commission may not normally impose upon a public utility a rate that would produce less than a fair return, it does not follow that the public utility may not itself agree by contract to a rate affording less than a fair return or that, if it does so, it is entitled to be relieved of its improvident bargain.

Energy & Utilities Law > Electric Power Industry > Federal Power Act > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN7 Where a public utility has itself agreed to a contract rate affording less than a fair return, the sole concern of the Federal Power Commission would seem to be whether the rate is so low as to adversely affect the public interest -- as where it might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory. A contract may not be said to be either unjust or unreasonable, for purposes of § 206(a) of the Federal Power Act, *16 U.S.C.S. § 824 et seq.*, simply because it is unprofitable to the public utility.

Lawyers' Edition Display

Summary

A public utility, having entered into a private contract to furnish power to a distributing company at a specified price, sought, without the consent of the distributing company, to increase the rate; the utility filed the new rate schedule with the Federal Power Commission, and, after investigation, the Commission found that the new rate was not unreasonable. On the distributing company's petition for review, the Court of Appeals, holding that the contract rate could be changed only by a Commission finding that it was unreasonable, set aside the Commission's order and remanded the case with instructions to dismiss without prejudice to the institution of new proceedings to determine the reasonableness of the contract rate.

Harlan, J., speaking for a unanimous court, affirmed the Court of Appeals ruling. A finding of the Federal Power Commission that a change in rates specified in a private contract was not unreasonable was held to be ineffective to change the contract as between the utility and the other contracting party. In addition, it was said, a rate specified in a private contract could not be held unreasonable by the Commission merely because it yielded the utility less than a fair return on its invested capital.

Headnotes

PUBLIC SERVICE COMMISSIONS §27 > PUBLIC UTILITIES §12 > increase of contract rates. -- > Headnote:

[1]

Neither a public utility's filing, under 205(d) of the Federal Power Act (*16 USC 824d(d)*), of a schedule purporting to increase the rate specified in a private contract between the utility and a distributing company, nor the Commission's finding, after conducting an investigation, pursuant to 205(e) of the act (*16 USC 824d(e)*), that the new rate is not unjust, unreasonable, unduly discriminatory, or preferential, is effective to change the contract between the utility and the distributing company where the distributing company has not consented to the increase in rate.

PUBLIC UTILITIES §14 > contract rates -- fair return. -- > Headnote:

LEdHN[2] [2]

Although the Federal Power Commission may not, under the terms of the Federal Power Act (*16 USC 824 et seq.*) impose upon a public utility a rate which would produce less than a fair return, the public utility itself may agree by contract to a rate affording less than a fair return and, if it does so, it is not entitled to be relieved of its improvident bargain.

PUBLIC SERVICE COMMISSIONS §27 > power -- contract rates -- unreasonableness. -- > Headnote:

LEdHN[3] [3]

The power of the Federal Power Commission, under 206(a) of the Federal Power Act (*16 USC 824e(a)*), to determine the reasonableness of rates charged by public utilities, and, on finding a rate to be unreasonable, to establish a different rate, is exercisable in the protection of the public interest, as distinguished from the private interests of the utilities; the Commission may not find a rate specified in a private contract to be either unjust or unreasonable simply because it is unprofitable to the public utility.

Syllabus

A supplier of electric power which is a "public utility" subject to regulation under Part II of the Federal Power Act entered into a contract, duly filed with the Federal Power Commission, to supply electric power to a distributor at a special low rate for 15 years. Before expiration of the contract and without the consent of the distributor, the supplier filed with the Commission under § 205 (d) of the Act a schedule purporting to increase its rate to the distributor. Acting under § 205 (e), the Commission conducted proceedings to determine the reasonableness of the new rate, denied the distributor's motion to reject the filing on the ground that the supplier could not thus unilaterally change the contract, and held the new rate not to be "unjust, unreasonable, unduly discriminatory, or preferential." *Held:*

1. These proceedings were not effective to supersede the supplier's contract with the distributor. *United Gas Pipe Line Co.* v. *Mobile Gas Service Corp., ante,* p. 332. Pp. 352-353.

2. The requirements of § 206 (a), which provides that, if the Commission finds an existing rate to be "unjust, unreasonable, unduly discriminatory or preferential," it may determine a "just and reasonable rate" and fix the same by order, were not satisfied by the Commission's statement that, "if a finding on the lawfulness of the [existing] contract rate were necessary or appropriate, on the record before us that finding would have to be that the [existing] rate is unreasonably low and therefore unlawful. For none of the evidence in this record warrants a finding that any rate would be reasonable that would produce a return of substantially less than the 4.75% resulting from the proposed rate, which is the minimum [the supplier] is willing to accept." Pp. 353-355.

(a) Under § 206 (a), the Commission has undoubted power to prescribe a change in contract rates whenever it determines them to be unlawful; but its power is limited to prescribing the rate "to be thereafter observed," and it can effect no change prior to the date of the order. P. 353.

(b) If the proceedings here satisfied in substance the requirements of § 206 (a), it would seem immaterial that the investigation was begun as one into the reasonableness of the proposed rate rather than the existing contract rate. P. 353.

(c) The purpose of the power given the Commission under § 206 (a) is the protection of the public interest, as distinguished from the private interest of the utilities, and a contract may not be said to be either "unjust" or "unreasonable" simply because it is unprofitable to the public utility. Pp. 354-355.

3. The order of the Court of Appeals setting aside the Commission's approval of the new rate and remanding the case to the Commission is affirmed with instructions to remand the case to the Commission for such further proceedings, not inconsistent with this opinion, as the Commission may deem desirable. P. 355.

96 U.S. App. D.C. 140, 223 F. 2d 605, affirmed.

Counsel: *Howard E. Wahrenbrock* argued the cause for petitioner in No. 51. With him on the brief were *Solicitor General Sobeloff, Assistant Attorney General Burger, Melvin Richter, Lionel Kestenbaum, Willard W. Gatchell, William J. Grove* and *Drexel D. Journey.*

F. T. Searls argued the cause for petitioner in No. 53. With him on the brief were *Robert H. Gerdes, Robert E. May* and *John C. Morrissey.*

William C. Chanler argued the cause and filed a brief for respondent.

Judges: Warren, Black, Reed, Frankfurter, Douglas, Burton, Clark, Minton, Harlan

Opinion by: HARLAN

Opinion

[*349] [**369] [***392] MR. JUSTICE HARLAN delivered the opinion of the Court.

This case presents questions under Title II of the Federal Power Act, 49 Stat. 847, *16 U.S.C. § 824 et seq.*, which are in part similar to those we have decided today under the Natural Gas Act in *United Gas Pipe Line Co.* v. *Mobile Gas Service Corp., ante*, p. 332. [*350] The pertinent provisions of the Federal Power Act, [**370] set forth in the margin, [1] are §§ 205 (c), (d), and (e), and 206 [***393] (a), which are substantially identical to §§ 4 (c), [*351] (d), and (e), and 5 (a), respectively, of the Natural Gas Act. [2]

Respondent Sierra Pacific Power Company (Sierra) distributes electricity to consumers in northern Nevada and eastern California. For many years, it has purchased the major part of its electric power from petitioner Pacific Gas and [**371] Electric Company (PG&E), a "public utility" subject to regulation under Part II of the Federal Power Act. In 1947 Sierra, faced with increased postwar demands and consumer agitation for cheaper power, began [*352] negotiating for power from other sources, including the Federal Bureau of Reclamation, which at the time had unused capacity at Shasta Dam. To forestall the potential competition, PG&E offered Sierra a 15-year contract for

[1] *HN1* "SEC. 205. . . . (c) Under such rules and regulations as the Commission may prescribe, every public utility shall file with the Commission, within such time and in such form as the Commission may designate, and shall keep open in convenient form and place for public inspection schedules showing all rates and charges for any transmission or sale subject to the jurisdiction of the Commission, and the classifications, practices, and regulations affecting such rates and charges, together with all contracts which in any manner affect or relate to such rates, charges, classifications, and services.

"(d) Unless the Commission otherwise orders, no change shall be made by any public utility in any such rate, charge, classification, or service, or in any rule, regulation, or contract relating thereto, except after thirty days' notice to the Commission and to the public. Such notice shall be given by filing with the Commission and keeping open for public inspection new schedules stating plainly the change or changes to be made in the schedule or schedules then in force and the time when the change or changes will go into effect. The Commission, for good cause shown, may allow changes to take effect without requiring the thirty days' notice herein provided for by an order specifying the changes so to be made and the time when they shall take effect and the manner in which they shall be filed and published.

"(e) Whenever any such new schedule is filed the Commission shall have authority, either upon complaint or upon its own initiative without complaint, at once, and, if it so orders, without answer or formal pleading by the public utility, but upon reasonable notice, to enter upon a hearing concerning the lawfulness of such rate, charge, classification, or service; and, pending such hearing and the decision thereon, the Commission, upon filing with such schedules and delivering to the public utility affected thereby a statement in writing of its reasons for such suspension, may suspend the operation of such schedule and defer the use of such rate, charge, classification, or service, but not for a longer period than five months beyond the time when it would otherwise go into effect; and after full hearings, either completed before or after the rate, charge, classification, or service goes into effect, the Commission may make such orders with reference thereto as would be proper in a proceeding initiated after it had become effective. If the proceeding has not been concluded and an order made at the expiration of such five months, the proposed change of rate, charge, classification, or service shall go into effect at the end of such period, but in case of a proposed increased rate or charge, the Commission may by order require the interested public utility or public utilities to keep accurate account in detail of all amounts received by reason of such increase, specifying by whom and in whose behalf such amounts are paid, and upon completion of the hearing and decision may by further order require such public utility or public utilities to refund, with interest, to the persons in whose behalf such amounts were paid, such portion of such increased rates or charges as by its decision shall be found not justified. At any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the public utility, and the Commission shall give to the hearing and decision of such questions preference over other questions pending before it and decide the same as speedily as possible." 49 Stat. 851-852, *HN2* 16 U.S.C. § 824d.

"SEC. 206. (a) Whenever the Commission, after a hearing had upon its own motion or upon complaint, shall find that any rate, charge, or classification, demanded, observed, charged, or collected by any public utility for any transmission or sale subject to the jurisdiction of the Commission, or that any rule, regulation, practice, or contract affecting such rate, charge, or classification is unjust, unreasonable, unduly discriminatory or preferential, the Commission shall determine the just and reasonable rate, charge, classification, rule, regulation, practice, or contract to be thereafter observed and in force, and shall fix the same by order." 49 Stat. 852, 16 U.S.C. § 824e.

[2] Set forth as footnote 1 to the opinion in the *Mobile* case, *ante*, p. 334.

power at a special low rate, which offer Sierra finally accepted in June 1948. The contract was duly filed with the Federal Power Commission.

Early in 1953, when power from Shasta Dam was no longer available to Sierra, PG&E, without the consent of Sierra, filed with the Commission under § 205 (d) of the Federal Power Act a schedule purporting to increase its rate to Sierra by approximately 28%. The Commission, acting under § 205 (e), suspended the effective date of the new rate until September 6, 1953, and initiated a proceeding to determine its reasonableness. Sierra was permitted to intervene in the proceeding but its motion to reject the filing on the ground that PG&E could not thus unilaterally change the contract was denied. After completion of the hearings, the Commission, by order dated June 17, 1954, reaffirmed its refusal to reject the filing and held the new rate not to be "unjust, unreasonable, unduly discriminatory, or preferential." 7 P.U.R. 3d 256. On Sierra's petition for review, the Court of Appeals for the District of Columbia, holding that the contract rate could be changed only upon a finding by the Commission that it was unreasonable, set aside the Commission's order and remanded the case with instructions to the Commission to dismiss the § 205 (e) proceeding, but without prejudice to its instituting a new proceeding under § 206 (a) to determine the reasonableness of the contract rate. 96 U.S. App. D.C. 140, [***394] 223 F. 2d 605. We brought the case here because of the importance of the questions involved in the administration of the *Federal Power Act, 349 U.S. 937*.

[1] [1]The first question before us is whether PG&E's unilateral filing of the new rate under § 205 (d), and the [*353] approval of the new rate by the Commission under § 205 (e), were effective to supersede PG&E's contract with Sierra. We think not. As the parties concede, the provisions of the Federal Power Act relevant to this question are in all material respects substantially identical to the equivalent provisions of the Natural Gas Act. In *United Gas Pipe Line Co.* v. *Mobile Gas Service Corp., supra,* decided today, we construed ***HN3*** the Natural Gas Act as not authorizing unilateral contract changes, and that interpretation is equally applicable to the Federal Power Act. Accordingly, for the reasons there given, we conclude that neither PG&E's filing of the new rate nor the Commission's finding that the new rate was not unlawful was effective to change PG&E's contract with Sierra.

This case, however, raises a further question not present in the Mobile case. ***HN4*** The Commission has undoubted power under § 206 (a) to prescribe a change in contract rates whenever it determines such rates to be unlawful. While this power is limited to prescribing the rate "to be thereafter observed" and thus can effect no change prior to the date of the order, the Commission's order here, if based on the necessary findings, could have been effective to prescribe the proposed rate as the rate to be in effect prospectively from the date of the order, June 17, 1954. If the proceedings here satisfied in substance the requirements of § 206 (a), it would seem immaterial that the investigation was begun as one into the reasonableness of the proposed rate rather than the existing contract rate.***HN5***

[**372] The condition precedent to the Commission's exercise of its power under § 206 (a) is a finding that the existing rate is "unjust, unreasonable, unduly discriminatory or preferential." Petitioners contend that the Commission did in fact make such a finding. It was stipulated in the proceedings before the Commission that 5.5% was normally a reasonable rate of return for PG&E's operations, [*354] that the contract rate would produce a 2.6% rate of return, and that the proposed rate would produce a 4.75% rate of return. The Commission concluded that the proposed rate was not unreasonably high because it provided no more than a fair return and was not unreasonably low because the 0.75% deficiency of its yield from the stipulated reasonable rate of return was not being made up on other sales and was justified in order to retain business the loss of which by PG&E would result in idle facilities. It also concluded that the proposed rate was not unduly discriminatory or preferential, despite substantial differences between it and the rates being charged other customers. While no further findings were necessary in view of the Commission's interpretation of the Act as permitting unilateral contract changes, the Commission went on to say:

"However, we may point out that if a finding on the lawfulness of the 1948 contract rate were necessary or appropriate, on the record before us that finding would have to be that the 1948 rate is unreasonably low and therefore unlawful. For none of the evidence in this record warrants a finding that any rate would be reasonable that would produce a return of substantially less than the 4.75% resulting from the proposed rate, which is the minimum PG&E is willing to accept."

It is contended that by this statement the Commission in substance found that the existing contract rate was "unreasonable" and fixed the [***395] proposed rate as "the just and reasonable rate," thereby satisfying the requirements of § 206 (a).

LEdHN[2] [2]*LEdHN[3]* [3]But even accepting this statement as a finding of unreasonableness of the contract

rate, the Commission's conclusion appears on its face to be based on an erroneous standard. In short, the Commission holds that the [*355] contract rate is unreasonable solely because it yields less than a fair return on the net invested capital. But, ***HN6*** while it may be that the Commission may not normally *impose* upon a public utility a rate which would produce less than a fair return, it does not follow that the public utility may not itself agree by contract to a rate affording less than a fair return or that, if it does so, it is entitled to be relieved of its improvident bargain. Cf. *Arkansas Natural Gas Co. v. Railroad Comm'n, 261 U.S. 379*. ***HN7*** In such circumstances the sole concern of the Commission would seem to be whether the rate is so low as to adversely affect the public interest -- as where it might impair the financial ability of the public utility to continue its service, cast upon other consumers an excessive burden, or be unduly discriminatory. That the purpose of the power given the Commission by § 206 (a) is the protection of the public interest, as distinguished from the private interests of the utilities, is evidenced by the recital in § 201 of the Act that the scheme of regulation imposed "is necessary in the public interest." When § 206 (a) is read in the light of this purpose, it is clear that a contract may not be said to be either "unjust" or "unreasonable" simply because it is unprofitable to the public utility.

Whether under the facts of this case the contract rate is so low as to have an adverse effect on the public interest is of course a question to be determined in the first instance by the Commission. We shall therefore affirm the order of the Court of Appeals, with instructions to remand the case to the [**373] Federal Power Commission for such further proceedings, not inconsistent with this opinion, as the Commission may deem desirable.

It is so ordered.

Caution
As of: January 5, 2015 1:12 PM EST

BellSouth Telcoms. v. Greer

Court of Appeals of Tennessee, Middle Section, at Nashville

October 1, 1997, Filed

Appeal Nos. 01A01-9601-BC-00008, 01A01-9602-BC-00066, 01A01-9601-CH-00016

Reporter
972 S.W.2d 663; 1997 Tenn. App. LEXIS 668

BELLSOUTH TELECOMMUNICATIONS, INC. d/b/a SOUTH CENTRAL BELL TELEPHONE COMPANY, Petitioner/Appellant, VS. H. LYNN GREER, Chairman, SARA KYLE, Director, and MELVIN J. MALONE, Director, Constituting the Tennessee Regulatory Authority, Respondents/Appellees. BELLSOUTH TELECOMMUNICATIONS, INC., Petitioner VS. TENNESSEE PUBLIC SERVICE COMMISSION, Respondent. STATE OF TENNESSEE, on relations of BELLSOUTH TELECOMMUNICATIONS, INC., Petitioner/Appellant VS. KEITH BISSELL, STEVE HEWLETT, and SARA KYLE, in their capacity as Commissioners of the Tennessee Public Service Commission, Respondents/Appellees.

Subsequent History: [**1] Rehearing Denied November 19, 1997, Reported at: *1997 Tenn. App. LEXIS 816*.

Prior History: APPEAL FROM THE TENNESSEE PUBLIC SERVICE COMMISSION, NASHVILLE, TENNESSEE. Nos. 95-03383, 95-02614. Chancery Court. Davidson County. No. 95-2965-II.

Disposition: VACATED AND REMANDED.

Core Terms

audit, rate of return, company's, rates, Telecommunications, Commission's, staff, adjustments, price regulation, earnings, statutes, legislative history, preemption, state law, regulations, telephone, courts, applicant's, recommended, Consumer, contested case, accurately, incumbent, requires, verify, local telephone companies, rate-making, provisions, corrected, interconnection

Case Summary

Procedural Posture

Appellant telephone company challenged an order of respondent Tennessee Public Service Commission (commission) formally determining that the telephone company's rate of return should have been higher and, therefore, that the telephone company was earning millions in excess revenues, after auditing the telephone company's revenue report in its application for a price regulation plan under Tenn. Code Ann. § 65-5-209 (1995).

Overview

Pursuant § 65-5-209, the telephone company filed its application for a price regulation plan with the commission, attaching the required form, Form PSC-3.01, reporting its revenue rate. Section 65-5-209 required the commission to base its decision on a audit of the form. The commission interpreted the term "audit" to allow it to make significant adjustments in the reported operating results. As a result of the adjustments, the commission determined that the telephone company's earned rate of return exceeded its authorized rate and that it was receiving millions in excess revenues. The commission directed the telephone company to reduce its rates and set the initial rates in the company's price regulation plan accordingly. On appeal, the court vacated the commission's order, holding that the term "audit" did not give the commission authority to adjust the telephone company's reported operating results. The audit's sole purpose was to verify the accuracy of the form. The rate of return only have been adjusted if the rate of return reported on the form exceeded the telephone company's authorized rate of return, which it did not.

Outcome

The court vacated the commission's order and remanded the case to the Tennessee Regulatory Authority with directions to approve the telephone company's application for a price regulation plan.

LexisNexis® Headnotes

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN1 Tenn. Code Ann. §§ 65-4-101, -123 & -124, -201, -203, -207 (1995) and Tenn. Code Ann. §§ 65-5-208 to -213 (1995) mandates the universal availability of basic telephone service at affordable rates and freezes basic and non-basic telephone rates for four years. Second, it requires incumbent local telephone companies to make available non-discriminatory interconnection to their public networks to other providers. Third, it eases the traditional limitations on the ability of new providers to enter the market. Fourth, it provides a transition procedure to enable existing local telephone companies to take advantage of the newly relaxed regulatory environment. Fifth, it establishes a five-year, $ 10 million loan guarantee program to induce small and minority businesses to enter the telecommunications market.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Energy & Utilities Law > ... > Public Utility Commissions > Authorities & Powers > Environmental Oversight

Energy & Utilities Law > Utility Companies > General Overview

HN2 The transition procedure for existing local telephone companies requires the existing local telephone company desiring to take advantage of the regulatory environment to file an application for a price regulation plan and envisions that the Tennessee Public Service Commission (commission) will act on the application within 90 days. Tenn. Code Ann. § 65-5-209(c) (1995). The commission must base its decision whether to grant the application on an audit of the applicant's most recent Form PSC-3.01 report. Tenn. Code Ann. § 65-5-209(c), -209(j) (1995).

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > Authorities & Powers

Energy & Utilities Law > Utility Companies > General Overview

Energy & Utilities Law > ... > Rates > Ratemaking Factors > Rate of Return

HN3 Tenn. Code Ann. § 65-5-209(c) (1995) states that a local telephone company's rates existing on June 6, 1995 are the initial rates under its price regulation plan if the company's earned rate of return on its most recent Form PSC-3.01 report is less than its current authorized fair rate of return existing when the application for a price regulation plan is filed. The statute also empowers the Tennessee Public Service Commission or Authority to initiate a contested rate-making proceeding if the audit of the Form PSC-3.01 report reveals that the company's earned rate of return is greater than its current authorized fair rate of return. Conversely, the statute permits the company to request a contested rate-making hearing if the audit reveals that its earned rate of return is less than its current authorized fair rate of return.

Constitutional Law > Supremacy Clause > General Overview

Constitutional Law > Supremacy Clause > Federal Preemption

HN4 The states possess sovereignty within their particular spheres concurrent with the federal government subject only to the limitations imposed by the Supremacy Clause, U.S. Const. art. VI, cl. 2. The Supremacy Clause provides Congress with the power to preempt state law.

Constitutional Law > Supremacy Clause > General Overview

Governments > Federal Government > Claims By & Against

HN5 Preemption may result from action by Congress itself or by action of a federal agency acting within the scope of its authority.

Constitutional Law > Supremacy Clause > General Overview

HN6 Preemption occurs when there is an outright or actual conflict between federal and state law. It can also occur by implication when compliance with both federal and state law is impossible or when state law obstructs the accomplishment of Congress's objectives. Preemption may also arise when Congress's legislation is so pervasive that it leaves no room for state legislative action.

Constitutional Law > Supremacy Clause > General Overview

Governments > Legislation > Interpretation

HN7 Preemption is basically a question of Congressional intent. This intent must be reflected in the text and structure of the federal statute. The best evidence of preemptive intent is an express preemption clause. However, in the absence of explicit preemption language, the courts must also examine the structure and purpose of the federal statute for implicit preemptory intent.

Civil Procedure > Preliminary Considerations > Federal & State Interrelationships > Erie Doctrine

Constitutional Law > Supremacy Clause > General Overview

HN8 In determining whether a federal statute is preemptory, the district courts begin their inquiry with the presumption that Congress did not intend to preempt state law. The proper approach is to reconcile the federal and state laws, rather than to seek out conflict where none clearly exists. State law should be displaced by federal law only to the extent there is a conflict.

Communications Law > Federal Acts > Telecommunications Act > Federal Preemption

Constitutional Law > Supremacy Clause > General Overview

HN9 The mere existence of a federal regulatory program does not imply preemption of similar state laws.

Antitrust & Trade Law > Regulated Industries > Communications > State Regulation

Antitrust & Trade Law > Regulated Industries > Communications > Telecommunications Act

Communications Law > Federal Acts > Telecommunications Act > General Overview

HN10 The Telecommunications Act of 1996 (Act) states that it should not be construed to prohibit state commissions from enforcing or promulgating regulations or from imposing additional requirements that are necessary to further competition in the provision of telephone exchange service or exchange access as long as they are not inconsistent with the Act. *47 U.S.C.S. § 261(b), (c)*.

Communications Law > Federal Acts > General Overview

Communications Law > Federal Acts > Telecommunications Act > General Overview

Business & Corporate Compliance > ... > Federal Versus State Law > Intrastate Communications > State Regulation of Intrastate Communications

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Communications Law > Public Enforcement > Orders & Hearings > Judicial Review

HN11 *47 U.S.C.S. § 251(d)(3)* directs the Federal Communications Commission not to promulgate regulations that prevent state commissions from enforcing local regulations, orders, or policies (1) that establish local telephone companies' access and interconnection obligations, (2) that are "consistent" with *47 U.S.C.S. § 251*, and *(3)* that do not substantially prevent the implementation of the requirements of *47 U.S.C.S. § 251* or the Telecommunications Act of 1996.

Governments > Legislation > Interpretation

HN12 The search for the meaning of statutory language is a judicial function. Courts must ascertain and give the fullest possible effect to the statute without unduly restricting it or expanding it beyond its intended scope. At the same time, courts must avoid inquiring into the reasonableness of the statute or substituting their own policy judgments for those of the legislature. When approaching statutory text, courts must also presume that the legislature says in a statute what it means and means in a statute what it says there. Accordingly, the courts must construe statutes as they are written, and the meaning of statutory language must always begin with the statute itself.

Governments > Legislation > Interpretation

HN13 Statutory terms draw their meaning from the context of the entire statute, and from the statute's general purpose. The court must give the words their natural and ordinary meaning, unless the legislature used them in a specialized, technical sense.

Governments > Legislation > Interpretation

HN14 When the words of a statute are ambiguous or when it is just not clear what the legislature had in mind, courts may look beyond a statute's text for reliable guides to the statute's meaning and consider the statute's historical background, the conditions giving rise to the statute, and the circumstances contemporaneous with the statute's enactment. The court may also resort to legislative history.

Governments > Legislation > Interpretation

HN15 Courts have no authority to adopt interpretations of statutes gleaned solely from legislative history that have no statutory reference points. Accordingly, when a statute's text and legislative history disagree, the text controls.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Energy & Utilities Law > Utility Companies > General Overview

HN16 Tennessee's 1995 telecommunications reform legislation requires the Tennessee Public Service Commission to set the initial rates of any incumbent local telephone company that applies for a price regulation plan. Tenn. Code Ann. § 65-5-209(c) (1995) requires that these initial rates must be the same as the applicant's existing

rates if the rate of return on the company's most recent Form PSC-3.01 report is equal to or less than the company's currently authorized rate of return. The comparison of the company's existing rate of return with its currently authorized rate of return must be preceded by a staff audit of the company's most recent Form PSC-3.01 report conducted in accordance with Tenn. Code Ann. § 65-5-209(j) (1995). Section 65-5-209(j) states that the purpose of the audit is to assure that the Tennessee Regulatory Authority 3.01 report accurately reflects the incumbent local exchange telephone company's achieved results. The audit must verify that the company reported its achieved results in accordance with generally accepted accounting principles as adopted in Part 32 of the Uniform System of Accounts. It must also verify that the company's reported achieved results reflect the ratemaking adjustments to operating revenues, expenses and rate base used in the authority's most recent order applicable to the incumbent local exchange telephone company.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > Authorities & Powers

Energy & Utilities Law > Utility Companies > General Overview

HN17 Tenn. Code Ann. § 65-5-209 (1995) is the sole source of the Tennessee Public Service Commission's authority to adopt a price regulation plan.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

HN18 Tenn. Code Ann. § 65-5-209 (1995) contains a three-phase proceeding. The first phase is to verify the accuracy of the information contained in a local exchange telephone company's most recent Form PSC-3.01 report. § 65-5-209(j). The second phase is to compare the company's reported rate of return with its currently authorized rate of return. § 65-5-209(c). No further proceedings are required if the company's rate of return based on its audited achieved results in its most recent Form PSC-3.01 report is equal to or less than its currently authorized rate of return. § 65-5-209(c). However, a third phase is required of the company's rate of return exceeds its currently authorized rate of return. The purpose of the third phase is to set the company's initial rates in a traditional, rate-setting proceeding.

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > Authorities & Powers

Energy & Utilities Law > Utility Companies > General Overview

Energy & Utilities Law > ... > Rates > Ratemaking Factors > Rate of Return

HN19 The Tennessee Public Service Commission's powers under Tenn. Code Ann. § 65-5-209 (1995) are more limited than its powers in the context of a traditional earnings investigation, as long as the company's rate of return on its Form PSC-3.01 report is less than its currently authorized rate of return.

Administrative Law > Separation of Powers > Legislative Controls > General Overview

Communications Law > ... > Telephone Services > Local Exchange Carriers > General Overview

Governments > Legislation > Interpretation

HN20 The Tennessee Public Service Commission (commission), like any other administrative agency, must conform its actions to its enabling legislation. It has no authority or power except that found in the statutes. While its statutes are remedial and should be interpreted liberally, they should not be construed so broadly as to permit the commission to exercise authority not specifically granted by law.

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For Tennessee Consumers: Charles W. Burson, Attorney General & Reporter. Michael E. Moore, Solicitor General. L. Vincent Williams, Consumer Advocate, Nashville, Tennessee.

Judges: WILLIAM C. KOCH, JR., JUDGE, CONCUR: SAMUEL L. LEWIS, JUDGE, BEN H. CANTRELL, JUDGE.

Opinion by: WILLIAM C. KOCH, JR.

Opinion

[*665] WILLIAM C. KOCH, JR., JUDGE

OPINION

This consolidated appeal of three separate proceedings involves the efforts of BellSouth Telecommunications, Inc. to take advantage of the 1995 legislation easing the traditional regulatory [**2] burdens on telecommunications service providers. After making significant adjustments in BellSouth's reported operating results, the Tennessee Public Service Commission determined that BellSouth's current earned rate of return exceeded its authorized rate of return and that BellSouth was receiving $ 56.285 million in excess revenues. The Commission directed BellSouth to reduce its rates by $ 56.285 million and set the initial rates in the company's price regulation plan accordingly. On this appeal, BellSouth and another intervening party take issue with the procedures employed by the Commission to consider and act upon BellSouth's application for a price regulation plan. We have determined that these proceedings were not preempted by the federal Telecommunications Act of 1996. We have also determined that the General Assembly did not give the Commission authority to adjust BellSouth's reported operating results [*666] and that the Commission should have convened a contested case hearing when BellSouth took issue with the Commission's decision to adjust its reported operating results. Accordingly, we vacate the Commission's January 23, 1996 order and all earlier related orders.

I.

Almost [**3] ten years ago, the Tennessee Public Service Commission began its efforts to modernize Tennessee's telecommunications network and to explore less cumbersome ways to regulate the telephone companies under its jurisdiction. [1] The Commission's work culminated in its first regulatory reform rule that took effect on January 10, 1993. [2] One day later, BellSouth Telecommunications, Inc. filed its conditional election to operate under this rule.

On August 20, 1993, the Commission entered an order governing BellSouth's rates from 1993 through 1995. See *In re Earnings Investigation of South Central Bell Telephone Co., 1993-1995,* Docket No. 92-13527. Based on the results of an earnings investigation that had been commenced in 1992, the Commission [**4] concluded that a range of return on BellSouth's rate base of 10.65% to 11.85% would be just and reasonable. The Commission adopted BellSouth's recommendation that future rate adjustments and deferred revenue account contributions should be based on the company's actual first-year results, as opposed to projections. [3] It also determined that there would be no rate adjustment for 1993 because BellSouth's forecasted rate of return for 1993 fell within the approved range. This court approved the Commission's order in all respects. *American Assoc. of Retired Persons v. Tennessee Pub. Serv. Comm'n, 896 S.W.2d 127 (Tenn. Ct. App. 1994)*.

[**5] In December 1994, the Consumer Advocate [4] requested the Commission to resolve what he considered to be inappropriate expense allocations in BellSouth's Form PSC-3.01 reports. [5] When the Commission did not respond, the Consumer Advocate filed a petition on January 23, 1995 requesting the Commission to commence an investigation into BellSouth's earnings. In March 1995, the Commission announced that it was commencing another earnings investigation with regard to BellSouth.

In the meantime, two competing telecommunications [**6] bills were introduced in the first session of the Ninety-Ninth General Assembly that had convened in January 1995. The avowed purpose of both bills was to ease the traditional regulatory constraints on local telephone companies and to permit greater competition for local telecommunications

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[1] The details of these early efforts are recounted in *Tennessee Cable Television Assoc. v. Tennessee Pub. Serv. Comm'n,* 844 S.W.2d 151, 155-58 (Tenn. Ct. App. 1992).

[2] Tenn. Comp. R. & Regs. r. 1220-4-2-.55 (1993). This rule was revised again in June 1995.

[3] The Commission specifically declined to follow its staff recommendation favoring forecasts because the company's actual earnings had been below the forecasted earnings. The Commission noted that "continuation of a policy similar to that which we started in 1990 could, if forecasts continue to be missed, result in rate decreases for companies that need rate increases, and rate increases for companies that are overearning." *In re Earnings Investigation of South Central Bell Telephone Co.,* 1993-1995, Docket No. 92-13527, at 7.

[4] The Consumer Advocate Division in the Office of the Attorney General and Reporter was created in 1994 for the purpose of representing the interests of Tennessee's consumers before the Commission. Tenn. Code Ann. § 65-4-118(c) (Supp. 1996).

[5] The Form PSC-3.01 report is a monthly report containing a telephone company's intrastate operating results in accordance with rules and forms established by the Commission. *See* Tenn. Comp. R. & Regs. r. 1220-4-1-.10(2)(a)(1), - .10(3)(a) (1988).

services. Filed concurrently with these bills was a bill to replace the Commission with a new regulatory entity. On May 26, 1995, the Governor signed a bill replacing the Commission with the Tennessee Regulatory Authority effective July 1, 1996. [6] Two weeks later, the Governor signed another bill dramatically altering the regulation of local telephone [*667] companies and opening up the local telecommunications market to unprecedented opportunities for competition. [7]

The expressed goal of the [**7] new regulatory structure was

> to foster the development of an efficient, technologically advanced, statewide system of telecommunications services by permitting competition in all telecommunications services markets, and by permitting alternative forms of regulation for telecommunications services and telecommunications services providers.

See Tenn. Code Ann. § 65-4-123 (Supp. 1996). In broad terms, the 1995 legislation set out to accomplish this goal in five ways. ***HN1*** First, it mandated the universal availability of basic telephone service at affordable rates and froze basic and non-basic telephone rates for four years. [8] Second, it required incumbent local telephone companies to make available non-discriminatory interconnection to their public networks to other providers. [9] Third, it eased the traditional limitations on the ability of new providers to enter the market. [10] Fourth, it provided a transition procedure to enable existing local telephone companies to take advantage of the newly relaxed regulatory environment. [11] Fifth, it established a five-year, $ 10 million loan guarantee program to induce small and minority businesses to enter the telecommunications [**8] market. [12]

[**9] The transition procedure for existing local telephone companies was designed to be simple and expeditious. ***HN2*** It requires an existing local telephone company desiring to take advantage of the new regulatory environment to file an application for a price regulation plan and envisions that the Commission will act on the application within ninety days. *See* Tenn. Code Ann. § 65-5-209(c). It requires the Commission to base its decision whether to grant the application on an audit of the applicant's most recent Form PSC-3.01 report. *See* Tenn. Code Ann. § 65-5-209(c), -209(j).

HN3 Tenn. Code Ann. § 65-5-209(c) states that the company's rates existing on June 6, 1995 will be the initial rates under its price regulation plan if the company's earned rate of return on its most recent Form PSC-3.01 report is less than its current authorized fair rate of return existing when the application was filed. The statute also empowers the Commission or Authority to initiate a contested rate-making proceeding if the audit of the Form PSC-3.01 report reveals that the company's earned rate of return is greater than its current authorized fair rate of return. Conversely, the statute permits the company [**10] to request a contested rate-making hearing if the audit reveals that its earned rate of return is less than its current authorized fair rate of return.

The Commission's revised regulatory reform rules took effect one week after the Governor signed the telecommunications reform legislation. [13] On June 20, 1995, BellSouth filed its application for a price regulation plan. On July 24, 1995, the Commission permitted AT&T

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[6] Act of May 24, 1995, ch. 305, 1995 Tenn. Pub. Acts 450.

[7] Act of May 25, 1995, ch. 408, 1995 Tenn. Pub. Acts 703, codified at Tenn. Code Ann. §§ 65-4-101, -123 & -124, 65-4-201, -203, -207, and 65-5-208 to -213 (Supp. 1996).

[8] Tenn. Code Ann. §§ 65-5-207, -208, -209(f), (h) (Supp. 1996).

[9] Tenn. Code Ann. § 65-4-124(a).

[10] Prior to 1995, the Commission could not permit new competitors to enter a market already served by another provider unless it found that the current service was "inadequate to meet the reasonable needs of the public." Tenn. Code Ann. § 65-4-203(a) (Supp. 1996). The 1995 legislation exempts telecommunications service providers from this requirement. Tenn. Code Ann. § 65-4-203(c). The 1995 legislation also permits new competitors to enter a market if they demonstrate that they will adhere to the applicable legal requirements and that they possess sufficient managerial, financial, and technical abilities to provide the service. Tenn. Code Ann. § 65-4-201(c).

[11] Tenn. Code Ann. § 65-5-209.

[12] Tenn. Code Ann. § 65-5-212, -213. For the purposes of this program, a "small business" is one with annual gross revenues of less than $ 4,000,000. Tenn. Code Ann. § 65-5-212.

[13] Tenn. Comp. R. & Regs. r. 1220-4-2-.55 (1995).

Communications of the South Central States, Inc. to intervene in the proceeding. Approximately two weeks later, [*668] the Commission directed its staff to conduct the audit of BellSouth's most recent Form PSC-3.01 report in accordance with Tenn. Code Ann. § 65-5-209(c), (j).

On August 17, 1995, the Commission's staff issued the results of its audit of BellSouth's Form PSC-3.01 report for the twelve-month period ending on December 31, 1994. At the outset, the staff determined that, except for four minor discrepancies, BellSouth's December 1994 report [**11] accurately reflected the company's books and records, that it reflected the Commission's previously ordered rate-making adjustments, and that it complied with the generally accepted accounting principles as adopted in Part 32 of the Uniform System of Accounts. Accordingly, the staff concluded that BellSouth's corrected rate of return for 1994, as taken from its books, was 10.21%.

Even though BellSouth's corrected rate of return for 1994 was less than its authorized rate of return in the Commission's August 20, 1993 order, the Commission's staff decided that BellSouth's audited rate of return should be adjusted to reflect "out-of-period and non-recurring items" and "known charges" occurring during the audit period. Accordingly, the staff concluded that BellSouth's adjusted rate of return for 1994 was 12.29% and that this adjusted rate of return "more accurately reflects the earnings potential of the rates in effect at the end of the audit period." Since this adjusted rate of return exceeded BellSouth's currently authorized rate of return, the staff recommended that the Commission initiate a contested rate-making proceeding under Tenn. Code Ann. § 65-5-209(c) to establish the initial [**12] rates for BellSouth's price regulation plan.

The staff's August 17, 1995 report and recommendations provoked a swift and strong reaction from BellSouth. On September 12, 1995, the company filed a petition for a declaratory order pursuant to *Tenn. Code Ann. § 4-5-223(a)* (1991) questioning the staff's authority to recommend adjustments to its corrected Form PSC-3.01 report. In the meantime, the Commission rejected the August 17, 1995 report because it was based on an incorrect Form PSC-3.01 report [14] and directed its staff to audit the proper Form PSC-3.01 report.

[**13] On September 15, 1995, the Commission's staff issued its second audit report - this time covering BellSouth's Form PSC-3.01 report for the twelve months ending on March 31, 1995. This report employed the same audit methodology used in the August 17, 1995 report. The staff made three corrections to BellSouth's Form PSC-3.01 report and then concluded that the corrected report accurately reflected the company's books and records and the Commission's previously ordered rate-making adjustments and that it complied with the generally accepted accounting principles as adopted in Part 32 of the Uniform System of Accounts. As a result of its corrections, the staff concluded that BellSouth's corrected rate of return for the twelve months ending on March 31, 1995 was 10.30%. [15]

The staff again recommended making "adjustments" to the [**14] results in BellSouth's Form PSC-3.01 report. It recommended fifteen "out-of-period" adjustments to remove items recorded on BellSouth's books during the twelve months ending on March 31, 1995 that applied to months prior to April 1994 and for items recorded outside the audit period that applied to the audit period. It recommended nine additional adjustments for abnormal or unusual expenses that were not expected to occur. Finally, it recommended twelve adjustments for "known changes" reflecting the annualized cost of rate changes or volume changes occurring during the period covered by the Form PSC-3.01 report. As a result of these adjustments, the Commission's staff [*669] concluded that BellSouth's adjusted rate of return was 12.74%. Since this adjusted rate of return exceeded BellSouth's currently authorized rate of return, the staff again recommended that the Commission initiate a contested rate-making proceeding to establish BellSouth's initial rates.

On September 20, 1995, the Commission accepted its staff's September 15, 1995 report and convened a contested case proceeding to set BellSouth's initial rates. Approximately one month later, it also convened a contested case proceeding [**15] to consider BellSouth's petition for a declaratory order concerning the staff's audit methodology and directed that the proceeding be consolidated with the pending contested rate-making proceeding. The consolidated proceeding commenced on November 1, 1995. After denying BellSouth's request for a declaratory order without permitting BellSouth to introduce proof substantiating its

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[14] Tenn. Code Ann. § 65-5-209(c) required an audit of the existing telephone company's most recent Form PSC-3.01 report available when the company filed its application for a price regulation plan. When BellSouth filed its application for a price regulation plan, it had already filed a Form PSC-3.01 report for the twelve months ending on March 31, 1995. This report, as opposed to the report for the twelve months ending on December 31, 1994, was BellSouth's most recent report.

[15] BellSouth had reported a 10.20% earned rate of return on its Form PSC-3.01 report and contested the corrections made by the Commission's staff. We need not resolve this dispute here.

challenge to the staff's audit methodology and conclusions, [16] the Commission proceeded with the proof establishing a fair rate of return for BellSouth. On November 7, 1995, the Commission determined that BellSouth's rate of return should be 10.35% and, based on the adjustments in its staff's September 15, 1995 report, directed BellSouth to reduce its rates by $ 56.285 million.

[**16] On November 20, 1995, the Commission resumed its hearing to consider recommendations from BellSouth, the Consumer Advocate, and AT&T concerning the most appropriate way to reduce BellSouth's rates by $ 56.285 million. On January 23, 1996, the Commission entered an order formally determining that BellSouth's rate of return should be 10.35% and, therefore, that BellSouth was earning $ 56.285 million in excess revenues. The Commission prescribed changes in BellSouth's rate design to eliminate these excess revenues [17] and determined that BellSouth's rates would be affordable for the purpose of Tenn. Code Ann. § 65-5-209(c) once these reductions were in place.

[**17] On February 14, 1996, BellSouth filed a Tenn. R. App. P. 12 petition to review the Commission's January 23, 1996 order. *BellSouth Telecommunications, Inc. v. Tennessee Pub. Serv. Comm'n, 1997 Tenn. App. LEXIS 668*, App. No. 01A01-9602-BC-00066. On February 27, 1996, this court stayed the Commission's January 23, 1996 order and, in orders filed on February 27, 1996 and March 30, 1996, consolidated this appeal with two other related appeals by BellSouth. [18] On April 3, 1996, we clarified our earlier stay order by stating that it applied to both the rate reductions ordered by the Commission as well as the implementation of BellSouth's price regulation plan. On this appeal, both BellSouth and AT&T take issue with numerous aspects of the procedure and reasoning employed by the Commission to dispose of BellSouth's application for a price regulation plan under Tenn. Code Ann. § 65-5-209.

[**18] II.

PREEMPTION BY THE TELECOMMUNICATIONS ACT OF 1996

As a threshold matter, we take up AT&T's assertion that this appeal should be remanded [*670] to enable the Authority to determine whether the federal Telecommunications Act of 1996 preempts state law authorizing BellSouth to begin operating under a price regulation plan. [19] AT&T claims that the preemption issue should be addressed before the approval of BellSouth's price regulation plan because the interconnection provisions in state law differ from those in the Telecommunications Act of 1996 and because state law contains no provision for modifying a price regulation plan once it has been approved. We have determined that the possibility of preemption is not so pressing that it requires a remand to the Authority for further proceedings.

[**19] A.

Our federal system of government recognizes the dual sovereignty of the federal government and the various state

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[16] The Commission entered an order on November 9, 1995 formally denying BellSouth's petition for a declaratory order. BellSouth filed a Tenn. R. App. P. 12 petition in this court on January 5, 1996, seeking appellate review of this order. *BellSouth Telecommunications, Inc. v. Greer*, 1997 Tenn. App. LEXIS 668, App. No. 01A01-9601-BC-00008.

[17] The Commission allocated $ 21.5 million to reduce IntraLATA long distance message toll rates, $ 27.4 million to eliminate the $ 1.50 residential touchtone rates, and $ 7.4 million to eliminate the $ 1.00 zone charge. The Commission also directed BellSouth to waive the service connection charges for computer lines at schools and libraries and to provide a flat-rate option to customers who have expressed a desire to be included in Metro Area Calling.

[18] BellSouth had already appealed from an October 16, 1995 order entered by the Chancery Court of Davidson County dismissing its petition for a writ of mandamus to compel the Commission to implement its price regulation plan. *State ex rel. BellSouth Telecommunications, Inc. v. Bissell*, 1997 Tenn. App. LEXIS 668, App. No. 01A01-9601-CH-00016. This appeal and the appeal from the Commission's denial of BellSouth's petition for a declaratory order, *BellSouth Telecommunications, Inc. v. Greer*, 1997 Tenn. App. LEXIS 668, App. No. 01A01-9601-BC-00008, were consolidated with the appeal from the Commission's January 23, 1996 order. Later, on BellSouth's motion, we dismissed the appeal in the mandamus case on the grounds of mootness but reserved taxing costs pending the resolution of this appeal. *State ex rel. BellSouth Telecommunications, Inc. v. Bissell*, App. No. 01A01-9601-CH-00016 (Tenn. Ct. App. May 3, 1996).

[19] The Commission ceased to exist on June 30, 1996. While the General Assembly provided transition provisions with regard to the Commission's rules, employees and property, *see* Tenn. Code Ann. § 65-1-301 to -306 (Supp. 1996), it did not address the status of regulatory proceedings pending before the Commission or of pending judicial proceedings involving actions of the Commission. The members of the Authority did not succeed to the offices of the members of the Commission. However, the Authority has assumed the regulatory power formerly possessed by the Commission with regard to the matters at issue on this appeal. Accordingly, on July 16, 1996, we substituted the members of the Authority in place of the members of the Commission.

governments. *Printz v. United States, 138 L. Ed. 2d 914, U.S. , 117 S. Ct. 2365, 2376 (1997)*; *Gregory v. Ashcroft, 501 U.S. 452, 457, 111 S. Ct. 2395, 2399, 115 L. Ed. 2d 410 (1991)*. ***HN4*** The states possess sovereignty within their particular spheres concurrent with the federal government subject only to the limitations imposed by the Supremacy Clause, U.S. Const. art. VI, cl. 2. *Tafflin v. Levitt, 493 U.S. 455, 458, 110 S. Ct. 792, 795, 107 L. Ed. 2d 887 (1990)*.

The Supremacy Clause provides Congress with the power to preempt state law. [20] The courts are, however, reluctant to presume that preemption of state law has occurred. *Building & Constr. Trades Council v. Associated Builders & Contractors of Massachusetts/Rhode Island, Inc., 507 U.S. 218, 224, 113 S. Ct. 1190, 1194, 122 L. Ed. 2d 565 (1993)*; *Exxon Corp. v. Governor of Maryland, 437 U.S. 117, 132, 98 S. Ct. 2207, 2217, 57 L. Ed. 2d 91 (1978)*. Thus, the courts work from the assumption that the historic powers of the states are not displaced by a federal statute unless that [**20] was the clear and manifest intent of Congress. *California Div. of Labor Standards Enforcement v. Dillingham Contr., NA., 136 L. Ed. 2d 791, U.S. , , 117 S. Ct. 832, 838 (1997)*; *BFP v. Resolution Trust Corp., 511 U.S. 531, 544, 114 S. Ct. 1757, 1765, 128 L. Ed. 2d 556 (1994)*; Louisiana Pub. Serv. Comm'n v. F.C.C., 476 U.S. 355 at 368, 106 S. Ct. 1890 at 1898.

HN6

Preemption occurs when there is an outright or actual conflict between federal [**21] and state law. *Freightliner Corp. v. Myrick, 514 U.S. 280, 287, 115 S. Ct. 1483, 1487, 131 L. Ed. 2d 385 (1995)*; Louisiana Pub. Serv. Comm'n v. F.C.C., 476 U.S. at 368, 106 S. Ct. at 1898. It can also occur by implication when compliance with both federal and state law is impossible or when state law obstructs the accomplishment of Congress's objectives. *Boggs v. Boggs,* __U.S. __, __, *117 S. Ct. 1754, 1760-61 (1997)*; *CSX Transp. Inc. v. Easterwood, 507 U.S. 658, 663, 113 S. Ct. 1732, 1737, 123 L. Ed. 2d 387 (1993)*; *California Fed. Sav. & Loan Ass'n v. Guerra, 479 U.S. 272, 281, 107 S. Ct. 683, 689, 93 L. Ed. 2d 613 (1987)*. Preemption may also arise when Congress's legislation is so pervasive that it leaves no room for state legislative action. *Cipollone v. Liggett Group, Inc., 505 U.S. 504, 516, 112 S. Ct. 2608, 2617, 120 L. Ed. 2d 407 (1992)*; Louisiana Pub. Serv. Comm'n v. F.C.C., 476 U.S. at 368, 106 S. Ct. at 1898.

[*671] ***HN7*** Preemption is basically a question of Congressional intent. *Barnett Bank of Marion County, N.A. v. Nelson,* __U.S. __, __, *116 S. Ct. 1103, 1107, 134 L. Ed. 237 (1996)*; *Hawaiian Airlines,* [**22] *Inc. v. Norris, 512 U.S. 246, 252, 114 S. Ct. 2239, 2243, 129 L. Ed. 2d 203 (1994)*; *R.J. Reynolds Tobacco Co. v. Durham County, 479 U.S. 130, 140, 107 S. Ct. 499, 506, 93 L. Ed. 2d 449 (1986)*. This intent must be reflected in the text and structure of the federal statute. *Ingersoll-Rand Co. v. McClendon, 498 U.S. 133, 138, 111 S. Ct. 478, 482, 112 L. Ed. 2d 474 (1990)*; *Shaw v. Delta Air Lines, Inc., 463 U.S. 85, 95, 103 S. Ct. 2890, 2899, 77 L. Ed. 2d 490 (1983)*. The best evidence of preemptive intent is an express preemption clause. *CSX Transp., Inc. v. Easterwood, 507 U.S. at 664, 113 S. Ct. at 1737*. However, in the absence of explicit preemption language, the courts must also examine the structure and purpose of the federal statute for implicit preemptory intent. *De Buono v. NYSA-ILA Medical & Clinical Servs. Fund,* __U.S. __, __, *117 S. Ct. 1747, 1751 (1997)*; *Barnett Bank of Marion County, N.A. v. Nelson,* __U.S. __at __, 116 S. Ct. at 1108; *FMC Corp. v. Holliday, 498 U.S. 52, 56-57, 111 S. Ct. 403, 407, 112 L. Ed. 2d 356 (1990)*.

HN8 The courts begin their inquiry with the presumption that Congress did [**23] not intend to preempt state law. *Building & Constr. Trades Council v. Associated Builders & Contractors of Massachusetts/Rhode Island, Inc., 507 U.S. at 224, 113 S. Ct. at 1194*. The proper approach is to reconcile the federal and state laws, *Merrill Lynch, Pierce, Fenner & Smith, Inc. v. Ware, 414 U.S. 117, 127, 94 S. Ct. 383, 389-90, 38 L. Ed. 2d 348 (1973)*, rather than to seek out conflict where none clearly exists. *Exxon Corp. v. Governor of Maryland, 437 U.S. at 130, 98 S. Ct. at 2216*. State law should be displaced by federal law only to the extent there is a conflict. *Dalton v. Little Rock Family Planning Servs., 134 L. Ed. 2d 115, U.S. , , 116 S. Ct. 1063, 1064 (1996)*.

B.

AT&T asserts that the case should be remanded to the Authority to consider whether the Telecommunications Act of 1996 preempts state law because the federal Act's interconnection provisions differ from their state law counterparts. However, ***HN9*** the mere existence of a federal regulatory program does not imply preemption of similar state laws. *English v. General Electric Co., 496 U.S. 72, 87, 110 S. Ct. 2270, 2279, 110 L. Ed. 2d 65 (1990)*. Thus, AT&T

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[20] ***HN5*** Preemption may result from action by Congress itself or by action of a federal agency acting within the scope of its authority. *City of New York v. F.C.C., 486 U.S. 57, 63-64, 108 S. Ct. 1637, 1642, 100 L. Ed. 2d 48 (1988)*; Louisiana Pub. Serv. Comm'n v. F.C.C., 476 U.S. 355, 369, 106 S. Ct. 1890, 1898-99, 90 L. Ed. 2d 369 (1986). Federal agencies must declare their intent to preempt state law with some specificity. *Schneidewind v. ANR Pipeline Co., 485 U.S. 293, 309 n.12, 108 S. Ct. 1145, 1155 n.12, 99 L. Ed. 2d 316 (1988)*.

must demonstrate [**24] something more if its preemption argument is to succeed.

The goals of the federal Telecommunications Act of 1996 and Tennessee's 1995 telecommunications legislation are similar. [21] Neither the federal Act nor the regulations promulgated by the Federal Communications Commission pursuant to the Act contain explicit preemption provisions. In fact, the Act specifically states that "this Act and the amendments made by this Act shall not be construed to modify, impair, or supersede Federal, State, or local law unless expressly provided in such Act or amendments." Telecommunications Act of 1996, § 601(c)(1), *47 U.S.C.A. § 152* note (West Supp. 1997). Congress included this provision to prevent "affected parties from asserting that the bill impliedly pre-empts other laws." House Conference Report No. 104-458, 104th Cong., 2d Sess., 201, *reprinted in* 1996 U.S.C.C.A.N. 124, 215. With specific reference to the interconnection issue, ***HN10*** the Act also states that it should not be construed to prohibit state commissions from enforcing or promulgating regulations or from imposing additional requirements [*672] that "are necessary to further competition in the provision of telephone exchange service [**25] or exchange access" as long as they are "not inconsistent" with the Act. *See 47 U.S.C.A. § 261(b), (c) (West Supp. 1997).* [22]

[**26] The Telecommunications Act of 1996 contains no explicit preemption language and does not contain provisions that are in outright or actual conflict with state law. Accordingly, AT&T's preemption argument can succeed only if it can demonstrate that Congress's regulatory statutes have completely occupied the field, that it is impossible to comply with the requirements of both the federal and state law, or that the state law somehow obstructs the accomplishment of the objectives of the Telecommunications Act of 1996. AT&T has failed on all counts. Nothing in the text or structure of the Act supports its unfocused preemption claims.

Congress plainly did not desire to displace local telecommunications regulation when it enacted the Telecommunications Act of 1996. The Act itself makes it clear that state commissions play a pivotal role in implementing telecommunications policy. They provide a forum for resolving disputes between existing local telephone companies and their competitors seeking access to an existing telephone network. *See 47 U.S.C.A. § 252*. By the same token, the text of the Act and Tennessee's telecommunications statutes do not suggest that telephone companies will [**27] be unable to comply with the requirements of both or that compliance with the state statutes will somehow obstruct the objectives of the Telecommunications Act of 1996.

AT&T has already invoked the remedies before the Authority made available by *47 U.S.C.A. § 252*. In March 1996, it initiated interconnection negotiations with BellSouth. One month later, it requested BellSouth to provide information concerning BellSouth's costs for providing certain telecommunications services. After BellSouth declined to provide the information on the ground that it was not relevant to the interconnection negotiations, AT&T filed a petition in May 1996 requesting the Authority to resolve the dispute over the issue of access to the requested information. As far as this record shows, this proceeding remains before the Authority. This type of proceeding, and others like it, provide the parties with an appropriate forum to air out and resolve more clearly defined issues concerning the possible preemptive effect of specific provisions of the Telecommunications Act of 1996 or of the Federal Communications Commission's regulations.

III.

PRICE REGULATION PLANS UNDER TENN. CODE ANN. § 65-5-209

The determinative [**28] issues on this appeal involve the Commission's process for considering BellSouth's application for a price regulation plan. BellSouth essentially asserts that the Commission and its staff exceeded the plain

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[21] The Telecommunications Act of 1996 "promotes competition and reduces regulation in order to secure lower prices and higher quality services for American telecommunications consumers and to encourage the rapid development of new telecommunications technologies." House Rpt. No 104-204, 104th Cong., 2d Sess. 47, *reprinted in* 1996 U.S.C.C.A.N. 10, 11. One of the principal ways it accomplishes its goal is to impose a general duty of interconnection on all telecommunications carriers thereby requiring local telephone companies to offer competitors access to part of their networks. 47 U.S.C.A. § 251 (West Supp. 1997); House Rpt. No. 104-204, 104th Cong., 2d Sess. 48, *reprinted in* 1996 U.S.C.C.A.N. 10, 11. Tenn. Code Ann. § 65-4-123 states a similar purpose, and Tenn. Code Ann. § 65-4-124(a) (Supp. 1996) imposes a similar duty of interconnection on local telephone companies.

[22] *See also* ***HN11*** 47 U.S.C.A. § 251(d)(3) (West Supp. 1997) which directs the Federal Communications Commission not to promulgate regulations that prevent state commissions from enforcing local regulations, orders, or policies (1) that establish local telephone companies' access and interconnection obligations, (2) that are "consistent" with the 47 U.S.C.A. § 251, and (3) that do not substantially prevent the implementation of the requirements of 47 U.S.C.A. § 251 or the Telecommunications Act of 1996.

mandate of Tenn. Code Ann. § 65-5-209. For its part, AT&T argues that the Commission did not go far enough in fashioning the details of BellSouth's price regulation plan. The resolution of these issues requires us to construe Tenn. Code Ann. § 65-5-209 and other related statutes enacted by the General Assembly in 1995 to foster the development of an efficient, technologically advanced, statewide system of telecommunications in Tennessee.

A.

HN12 The search for the meaning of statutory language is a judicial function. *Roseman v. Roseman, 890 S.W.2d 27, 29 (Tenn. 1994)*; *State ex rel. Weldon v. Thomason, 142 Tenn. 527, 540, 221 S.W. 491, 495 (1920)*. Courts must ascertain and give the fullest possible effect to the statute without unduly restricting it or expanding it beyond its intended scope. *Perry v. Sentry Ins. Co.*, [*673] 938 S.W.2d 404, 406 (Tenn. 1996); *Kultura, Inc. v. Southern Leasing Corp., 923 S.W.2d 536, 539 (Tenn. 1996)*. At the same time courts must avoid inquiring [**29] into the reasonableness of the statute or substituting their own policy judgments for those of the legislature. *State v. Grosvenor, 149 Tenn. 158, 167, 258 S.W. 140, 142 (1924)*; *State v. Henley, 98 Tenn. 665, 679-81, 41 S.W. 352, 354-55 (1897)*; *Hamblen County Educ. Ass'n v. Hamblen County Bd. of Educ., 892 S.W.2d 428, 432 (Tenn. Ct. App. 1994)*.

When approaching statutory text, courts must also presume that the legislature says in a statute what it means and means in a statute what it says there. *Connecticut Nat'l Bank v. Germain, 503 U.S. 249, 253-54, 112 S. Ct. 1146, 1149, 117 L. Ed. 2d 391 (1992)*; *Worley v. Weigel's, Inc., 919 S.W.2d 589, 593 (Tenn. 1996)*. Accordingly, we must construe statutes as they are written, *Jackson v. Jackson, 186 Tenn. 337, 342, 210 S.W.2d 332, 334 (1948)*, and our search for the meaning of statutory language must always begin with the statute itself. *Neff v. Cherokee Ins. Co., 704 S.W.2d 1, 3 (Tenn. 1986)*; *Pless v. Franks, 202 Tenn. 630, 635, 308 S.W.2d 402, 404 (1957)*; *City of Nashville v. Kizer, 194 Tenn. 357, 364, 250 S.W.2d 562, 564-65 (1952)*.

HN13 Statutory terms draw their meaning from the context of the entire statute, [**30] *Lyons v. Rasar, 872 S.W.2d 895, 897 (Tenn. 1994)*; *Knox County ex rel. Kessel v. Lenoir City, 837 S.W.2d 382, 387 (Tenn. 1992)*, and from the statute's general purpose. *City of Lenoir City v. State ex rel. City of Loudon, 571 S.W.2d 297, 299 (Tenn. 1978)*; *Loftin v. Langsdon, 813 S.W.2d 475, 478 (Tenn. Ct. App. 1991)*. We give these words their natural and ordinary meaning, *State ex rel. Metropolitan Gov't v. Spicewood Creek Watershed Dist., 848 S.W.2d 60, 62 (Tenn. 1993)*, unless the legislature used them in a specialized, technical sense. *Cordis Corp. v. Taylor, 762 S.W.2d 138, 139-40 (Tenn. 1988)*.

The legislative process does not always produce precisely drawn laws. ***HN14*** When the words of a statute are ambiguous or when it is just not clear what the legislature had in mind, courts may look beyond a statute's text for reliable guides to the statute's meaning. We consider the statute's historical background, the conditions giving rise to the statute, and the circumstances contemporaneous with the statute's enactment. *Still v. First Tenn. Bank, N.A., 900 S.W.2d 282, 284 (Tenn. 1995)*; *Mascari v. Raines, 220 Tenn. 234, 239, 415 S.W.2d 874, 876 (1967)*; *Davis* [**31] *v. Aluminum Co. of Am., 204 Tenn. 135, 143, 316 S.W.2d 24, 27 (1958)*. We also resort to legislative history. *Storey v. Bradford Furniture Co. (In re Storey), 910 S.W.2d 857, 859 (Tenn. 1995)*; *University Computing Co. v. Olsen, 677 S.W.2d 445, 447 (Tenn. 1984)*; *Chapman v. Sullivan County, 608 S.W.2d 580, 582 (Tenn. 1980)*. [23]

Courts consult legislative history not to delve into the personal, subjective motives of individual legislators, but rather to ascertain the meaning of the words in the statute. The subjective beliefs of legislators can never substitute for what was, in fact, enacted. There is a distinction between what the legislature intended to say in the law and what various legislators, as individuals, expected or hoped the consequences [**32] of the law would be. The answer to the former question is what courts pursue when they consult legislative history; the latter question is not within the courts' domain.

Relying on legislative history is a step to be taken cautiously. *Piper v. Chris-Craft Indus., Inc., 430 U.S. 1, 26, 97 S. Ct. 926, 941, 51 L. Ed. 2d 124 (1977)*; *North & South Rivers Watershed Ass'n, Inc. v. Town of Scituate*, 949 F.2d 552, 556 n.6 (1st Cir. 1991). Legislative records are not always distinguished for their candor and accuracy, *Schwegmann Bros. v. Calvert Distillers Corp., 341 U.S. 384, 396, 71 S. Ct. 745, 751, 95 L. Ed. 1035 (1951)* (Jackson, J., concurring), and the more that courts have come to rely on legislative history, the less reliable it has become. Rather than reflecting the issues [*674] actually debated by the legislature, legislative history frequently consists of self-serving statements favorable to particular interest groups prepared and included in the legislative record solely to influence the

[23] Some courts have even cited a statute's legislative history to buttress their interpretation when a statute is not ambiguous. *See, e.g., Worley v. Weigel's, Inc.*, 919 S.W.2d at 593; *VanArsdall v. State*, 919 S.W.2d 626, 632 (Tenn. Crim. App. 1995).

courts' interpretation of the statute. *National Small Shipments Traffic Conf., Inc. v. Civil Aeronautics Bd., 199 U.S. App. D.C. 335, 618 F.2d 819, 828 (D.C. Cir. 1980)*; ANTONIN SCALIA, [**33] A MATTER OF INTERPRETATION: FEDERAL COURTS AND THE LAW 34 (1997); W. David Slawson, *Legislative History and the Need to Bring Statutory Interpretation Under the Rule of Law, 44 Stan. L. Rev. 383, 397-98 (1992)*; Kenneth W. Starr, *Observations About the Use of Legislative History, 1987 Duke L. J. 371, 377*; Note, *Why Learned Hand Would Never Consult Legislative History Today, 105 Harv. L. Rev. 1005, 1018-19 (1992)*.

Even the statements of sponsors during legislative debate should be evaluated cautiously. 2A Norman J. Singer, *Statutes and Statutory Construction* § 48:15 (rev. 5th ed. 1992). These comments cannot alter the plain meaning of a statute., *D. Canale & Co. v. Celauro*, 765 S.W.2d 736, 738 (Tenn. 1989); *Elliott Crane Serv., Inc. v. H.G. Hill Stores, Inc., 840 S.W.2d 376, 379 (Tenn. Ct. App. 1992)*, because to do so would be to open the door to the inadvertent, or perhaps planned, undermining of statutory language. *Regan v. Wald, 468 U.S. 222, 237, 104 S. Ct. 3026, 3035, 82 L. Ed. 2d 171 (1984)*. ***HN15*** Courts have no authority to adopt interpretations of statutes gleaned solely from legislative history that have no statutory reference points. *Shannon v. United* [**34] *States, 512 U.S. 573, 583, 114 S. Ct. 2419, 2426, 129 L. Ed. 2d 459 (1994)*. Accordingly, when a statute's text and legislative history disagree, the text controls. *Stromberg Metal Works, Inc. v. Press Mechanical, 77 F.3d 928, 931 (7th Cir. 1996)*.

B.

THE SCOPE OF A TENN. CODE ANN. § 65-5-209 AUDIT

The pivotal dispute between BellSouth and the Commission involves the scope and purpose of the audit required by Tenn. Code Ann. § 65-5-209. BellSouth, citing the statute, asserts that the audit's sole purpose is to verify the accuracy of its most recent Form PSC-3.01 report. The Commission, citing a portion of the statute's legislative history, responds that the audit is more akin to a traditional earnings investigation and that its audit power under Tenn. Code Ann. § 65-5-209 includes the power to reduce a company's rate of return and to order the company to reduce its rates. We turn first to the statute itself for an answer to this dispute.

1.

HN16 The 1995 telecommunications reform legislation requires the Commission to set the initial rates of any incumbent local telephone company that applies for a price regulation plan. Tenn. Code Ann. § 65-5-209(c) requires that these [**35] initial rates must be the same as the applicant's existing rates if the rate of return on the company's most recent Form PSC-3.01 report is equal to or less than the company's currently authorized rate of return. The comparison of the company's existing rate of return with its currently authorized rate of return must be preceded by a staff audit of the company's most recent Form PSC-3.01 report conducted in accordance with Tenn. Code Ann. § 65-5-209(j).

Tenn. Code Ann. § 65-5-209(j) states that the purpose of the audit is "to assure that the Tennessee Regulatory Authority 3.01 report accurately reflects . . . the incumbent local exchange telephone company's achieved results." The audit must verify that the company reported its achieved results "in accordance with generally accepted accounting principles as adopted in Part 32 of the Uniform System of Accounts." It must also verify that the company's reported achieved results reflect "the ratemaking adjustments to operating revenues, expenses and rate base used in the authority's most recent order applicable to the incumbent local exchange telephone company."

Since Tenn. Code Ann. § 65-5-209(a) directs the Commission to set an [**36] incumbent local telephone company's initial rates "using the procedures established in this section," the statute ***HN17*** is the sole source of the Commission's authority to adopt a price regulation [*675] plan. It envisions an expeditious, [24] ***HN18*** three-phase proceeding. The purpose of the first phase is to verify the accuracy of the information contained in the company's most recent Form PSC-3.01 report. *See Tenn. Code Ann. § 65-5-209(j).* The purpose of the second phase is to compare the company's reported rate of return with its currently authorized rate of return. *See* Tenn. Code Ann. § 65-5-209(c). No further proceedings are required if the company's rate of return based on its audited achieved results in its most recent Form PSC-3.01 report is equal to or less than its currently authorized rate of return. *See* Tenn. Code Ann. § 65-5-209(c). However, a third phase *is* required of the company's rate of return exceeds its currently authorized rate of return. The purpose of the third phase is to set the company's initial rates in a traditional, rate-setting proceeding.

[**37] Tenn. Code Ann. § 65-5-209 contains no specific language suggesting that the first or second phases of the

[24] Tenn. Code Ann. § 65-5-209(c) envisions that the process will be completed within ninety days after the company files its application for a price regulation plan.

proceeding have any of the attributes of a traditional rate-setting proceeding. The audit is conducted by the Commission's staff, and the staff has no specific statutory authority to make or recommend reductions in a company's rate of return. The term "audit" does not appear in any other statute or rule in conjunction with the Commission's rate-setting authority. [25]

The textual analysis of Tenn. Code Ann. § 65-5-209 suggests that neither the Commission nor its staff has the power to adjust any of the figures contained in the applicant's Form PSC-3.01 report as long as these reports are correct, based on required auditing principles, and consistent with [**38] the Commission's previously ordered rate-making adjustments. The Commission, however, argues that the term "audit" can mean more than simply a "methodical examination of records with intent to verify their accuracy." *See National Health Corp. v. Snodgrass, 555 S.W.2d 403, 405 (Tenn. 1977)*. It asserts that an audit under Tenn. Code Ann. § 65-5-209 includes investigating, deciding whether reported achieved results are accurate, and determining the weight to be given these reported results. Citing a staff memorandum that was read into the legislative record, the Commission insists that its Tenn. Code Ann. § 65-5-209 authority to audit includes the authority to determine whether the amounts reported on the Form PSC-3.01 "do not include unusual or abnormal financial occurrences," including "known charges." [26]

[**39] Tenn. Code Ann. § 65-5-209 does not specifically authorize adjustments for "unusual or abnormal financial occurrences." Nonetheless, because the General Assembly may have meant something different when it used the term "audit," we have reviewed the legislative history of Tenn. Code Ann. § 65-5-209 to determine whether the General Assembly used the term "audit" in its common, ordinary meaning.

[*676] 2.

The original substance of the telecommunications reform legislation was far different from the substance of the legislation that eventually became law. The original legislation contained no procedure for re-examining an incumbent local telephone company's rates. Instead, it simply provided that the company's "rates, terms and conditions for the services provided on February 1, 1995" were just and reasonable and that these rates would be the company's initial rates. [27] This provision encountered immediate opposition from the Consumer Advocate and other consumer groups because they believed that it would enable BellSouth to earn between $ 350 and $ 800 million in excess revenues.

[**40] The concern about excess revenues was the focus of the debate on April 11, 1995, when the Senate State and Local Government Committee considered the bill and a proposed amendment containing what would later become

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[25] The term "audit" appears only twice in Title 65 of the Tennessee Code Annotated. Other than Tenn. Code Ann. § 65-5-209, it appear in Tenn. Code Ann. § 65-15-201 (Supp. 1996) which relates to "safety management audits" for motor carriers.

[26] The staff audit report dated September 15, 1995 explains that

> the Staff has followed the statements of the sponsors of the Bills that became the new law by auditing the Company's financial records for the twelve months ended March 31, 1995, to determine if the amounts on the TPSC 3.01 Report:
>
> * are accurately taken from the company's books and records;
>
> * accurately reflect any Commission ordered rate making adjustments;
>
> * do not include unusual or abnormal financial occurrences;
>
> * were calculated following proper accounting rules and procedures for separating the company's interstate and intrastate operations, as well as, its regulated and nonregulated operations;
>
> * accurately reflect allowable charges from affiliated companies.
>
> These points were taken from a memo by Dr. Chris Klein, Director of the Utility Rate Division, and Mike Gaines, Manager of the Telecommunications Section, to PSC Chairman Keith Bissell in response to a letter from Senator Rochelle. This memo, and the transcripts of the "legislative intent" statements read by Senator Rochelle and Representative Purcell on the Senate and House floors, are attached as Appendices B, C, and D to this Report.

[27] Senate Bill No. 891/House Bill No. 695, Section 6.

Tenn. Code Ann. § 65-5-209. Several committee members expressed concern about using BellSouth's existing rates because the Commission had not reviewed the company's rate of return since 1992. The Consumer Advocate pointed out that the proposed amendment substituted an "audit of . . . [the Form PSC-3.01 report] . . . for an earnings review." Whitfield Burcham, the former director of the Commission's Utility Rate Division who appeared on behalf of the American Association of Retired Persons, echoed the Consumer Advocate's concern about the efficacy of an audit of the Form PSC-3.01 report. He stated that "we believe that if you have an evidentiary hearing, there's a high probability that the evidence will show that the telephone company's prices need to be adjusted." These statements prompted Senator Cohen, the chair of the committee, and Senator Gilbert to suggest that there should be a full rate review before BellSouth's initial rates should be set. A BellSouth representative [**41] responded to this suggestion by stating that "we don't feel that a rate hearing is necessary because we are earning within the authorized range."

The Senate State and Local Government Committee convened on April 18, 1995 to continue its consideration of the bill. The hearing again focused on the advisability of conducting a "full-blown rate hearing" before approaching BellSouth's initial rates. The Commission's General Utility Counsel described an audit of the Form PSC-3.01 report as follows:

> in order to audit the 3.01 statement . . . it's not just a matter of adding up math on a single sheet of paper. It's knowing that they [the company] have accurately reported those figures to us. So that we will send our auditors on site, they'll look at all the items as reported on the company's books and correlate that with the statement. And that's what we mean by a full audit . . . When the staff concludes their audit, and they may find some discrepancies or some items that need to be corrected, that'll be re-presented to the Commission for approval in a contested case format . . .

The current Director of the Utility Rate Division also informed the Committee that the Commission's [**42] staff had already commenced an audit of BellSouth and that they intended to proceed with the audit no matter which telecommunications bill passed. He explained that an audit of a Form PSC-3.01 report was an "historical audit" of the company's earnings for the preceding twelve months and that the staff planned to complete its work in September 1995.

Commissioner Steve Hewlett also pointed out to the Committee that "looking at the backup on a 3.01 is significantly different than a full blown audit." Mr. Burcham repeated that the Form PSC-3.01 report, which he designed, "wouldn't give you a representative picture of the future." In addition, he pointed out that he had objected to similar language in the Commission's proposed rule and that he had attempted "to get the Commission to change that language, and we were unsuccessful in doing that; and we think this language here is so restrictive that, really, you're not going to get an earnings investigation." The Consumer Advocate agreed with Mr. Burcham. He pointed out [*677] again that the Form PSC 3.01 report "doesn't accurately state what prices should be in the future" and that "the rate review only goes forward if you meet certain tests, [**43] and the test is whether or not the PSC 3.01 is within the range. If it's within the range, the different ranges, then there's no earnings review."

When the Senate State and Local Government Committee considered the bill again on April 25, 1995, Chairman Cohen offered an amendment requiring the continuation of rate hearings for basic telephone services through 1996. Senator Rochelle, the bill's sponsor, opposed this amendment on the ground that "rate of return regulation . . . encourages everybody to be fat; it encourages monopolistic practices, it encourages lack of innovation." After tabling Chairman Cohen's amendment, the Committee approved the bill as amended for passage by a 6 to 3 vote.

The debate over the need for a full-blown rate hearing before permitting incumbent local telephone companies to operate under a price regulation plan continued on the Senate floor on May 11, 1995 when the bill came up for third and final reading. Senator Rochelle offered an amendment to the bill containing what would later become Tenn. Code Ann. § 65-5-209(j) [28] and explained that "there was a concern that they [the incumbent local telephone companies] could cook the books, and what this [**44] does is expressly state that the Commission shall conduct an audit of the audit to verify that the figures are correct." After the Senate tabled Senator Cohen's motion to invite Mr. Burcham to address them concerning Senator Rochelle's amendment, Senator Rochelle reiterated that the purpose of his amendment was to "[set] out very exactly that the Public Service Commission has the . . . power to do a full blown

[28] *See* Amendment No. 2 to Amendment No. 2, Senate Journal of the Ninety-Ninth General Assembly of the State of Tennessee, First Session, 1157-58 (1995) ("Senate Journal").

audit of that audit [the Form PSC-3.01 report] to make sure they've been given correct figures." He also stated categorically that this amendment "doesn't address rate setting. This addresses auditing of an audit."

Upon hearing Senator Rochelle's explanation of his proposed amendment, other senators, including Senators Cohen, Cooper, and Gilbert pointed out that the amendment would permit the Commission to make sure that the [**45] numbers are correct but not to go behind the numbers. These senators asserted that the Commission should conduct a traditional earnings investigation before approving an incumbent local telephone company's initial rates. Senator Rochelle opposed these suggestions on the ground that the rate hearings demanded by these senators would be a "three-year ordeal." The Senate finally adopted Senator Rochelle's amendment on a voice vote. [29]

The adoption of Senator Rochelle's amendment did not end the matter. The Senate considered and defeated three other amendments that would have replaced the audit of the Form PSC-3.01 report with a more traditional rate proceeding. One amendment would have authorized the Commission to conduct a contested case proceeding "to determine the justness and reasonableness of the existing rates" and to "make appropriate adjustments to arrive at just and reasonable rates." [30] Another amendment was to the same effect. [31] The third amendment would have required [**46] the Commission to "make public the anticipated revenues and profits each provider will make under such plan." [32]

Senator Rochelle opposed each of these amendments on the ground that they were motivated by the "greed" of BellSouth's competitors who desired to delay the company's ability to compete in a less regulated market. He disagreed with Senator Gilbert's observation that it would make "better sense to have a full evidentiary hearing before we turn [*678] those market forces loose." When asked by Senator Gilbert to point out the language in his amendment that permitted the Commission to adjust the rate "if there is a problem with the audit or that things have not been stated as they should have been stated," Senator [**47] Rochelle responded:

> We're using the existing rules that have already been adopted by the PSC and that gives them the ability to set the rates. It wouldn't be in the bill. We're using existing practices, rules, and statutes.

In response to Senator Rochelle's explanation, Senator Gilbert then pointed out to his colleagues that

> We're passing a statutory scheme that may be interpreted to override every one of those existing rules. Let me tell you why he can't point to any language in subsection (c) that tells you that the PSC will change . . . the rates if they find out through their audit that something's wrong, because there isn't any language in that section that allows them to do that.

Senator Rochelle ended the colloquy by pointing out that the Commission could adjust the rates if it determined that BellSouth's earnings were above the company's authorized rate of return. The Senate thereafter approved the amended version of Senate Bill No. 891 by 24 to 8 to 1 vote and sent the bill to the House of Representatives. [33]

[**48] The House leadership was not satisfied with the Senate's version of the bill. Accordingly, when Senate Bill 891 came on for third and final reading on May 24, 1995, Representative Purcell, one of the bill's House sponsors, convinced his colleagues to adopt an amendment that added several new provisions to the Senate's version of the bill. This amendment contained the restated version of the telecommunications policy that now appears in *Tenn. Code Ann. § 65-4-123*, [34] the provision requiring the General Assembly to review the implementation of the Act every two years that now appears in Tenn. Code Ann. § 65-5-211 (Supp. 1996), [35] and the provisions creating a $ 10 million small and minority telecommunications business assistance

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[29] Senate Journal, at 1159.

[30] Amendment No. 8 was tabled by a vote of 18 to 15. *See* Senate Journal, at 1160.

[31] Amendment No. 9 failed by a vote of 13 to 16. *See* Senate Journal, at 1164-65.

[32] Amendment No. 18 failed under Senate Rule 39(3) by a vote of 11 to 19 to 1. *See* Senate Journal, at 1167.

[33] Senate Journal, at 1168.

[34] Amendment No. 17, § 1, 2 House Journal of the Ninety-Ninth General Assembly of the State of Tennessee, First Session, 1847 (1995) ("House Journal").

[35] Amendment No. 17, § 15, House Journal, at 1858.

program that now appear in Tenn. Code Ann. §§ 65-5-212, 213. [36]

[**49] The House amendment did not alter the portions of the Senate amendment containing Tenn. Code Ann. § 65-5-209(c) and adding the language that was to become Tenn. Code Ann. § 65-5-209(j). In fact, the differences between an earnings investigation and an audit of a Form PSC-3.01 report that had preoccupied the Senate were never mentioned during the House discussion of the bill. In his closing remarks after the House cut off further debate on the bill, Representative Purcell told his colleagues:

> I need to, at this point, with your indulgence, read three brief statements into the record for legislative intent purposes as this bill leaves this House and goes to the Senate. The first was requested by the AARP. The audit provisions in this bill were requested by the AARP, and it was their hope that we would, as a matter of legislative intent, make it clear what we mean. And so, let me say on the subject of Section 13, legislative intent is that this bill establishes a process by which consumers are assured affordable rates. To achieve this, the bill provides that the rates of incumbent local exchange companies will be based on an audit of the company's actual achieved results [**50] and not on a speculative forecast.
>
> An audit consistent with the provisions of this bill is currently being performed by the TPSC staff by their compliance unit of SCB's TPC 3.01 form. As stated by Dr. Chris Klein, Director of the PSC's Utility Rate Division, in a letter sent earlier this year, [37] the TPSC 3.01 form is a monthly [*679] report showing monthly, year-to-date, and twelve month-to-date financial information including rate of return, adjusted to reflect the Commission's prior rate-making decision. The compliance audit verifies that the amounts shown on the TPSC 3.01, (1) are actually taken from the company's books and records; (2) accurately reflect any Commission order of rate making adjustments; (3) do not include unusual or abnormal financial occurrences; (4) were calculated following proper accounting rules and procedures for separating the company's interstate and intrastate operations, as well as its regulated and non-regulated operations; and finally, accurately reflect allowable charges from affiliated companies.
>
> Section 13 makes clear that this TPSC 3.01 compliance audit of actual achieved results and without speculative forecasts will be completed, and affordable rates [**51] will be set pursuant to Section 10 (c) and (j) of this bill. [38]

See House Journal, at 1865. The House then passed Senate Bill No. 891 by an 89 to 8 vote. [39]

[**52] The bill containing the House amendments was returned to the Senate and was called up for consideration on May 25, 1995. On this occasion, Senator Rochelle read the same statement that Representative Purcell had read the previous day. When asked to explain how the amended bill would assure affordable telephone service, Senator Rochelle replied

> we have read . . . for legislative intent purposes, the language requested that helped everybody understand that the authority of the Consumer Advocate and the authority of the PSC and such as that remains in place and is there to . . . help insure that all reports, audits and such as that are based on actual figures, not speculative forecasts and such as that. So I would refer you to the statement of legislative intent, and to the language that's previously been in the bill, plus the language in Amendment No. 2 to 2.

When asked how the House's version of the bill differed from the Senate's version, Senator Rochelle explained that

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[36] Amendment No. 17, § 17, House Journal, at 1859-60.

[37] Representative Purcell is referring to an April 13, 1995 memorandum from Chris Klein and Mike Gaines to Chairman Keith Bissell. The memorandum describes the intended scope of the compliance audit that had already been initiated by the Commission in March 1995. The Commission's staff later cited this memorandum as authority for the scope of the audit of BellSouth's most recent Form PSC-3.01 report on which its September 15, 1995 report was based.

[38] Representative Purcell's description of the scope of the compliance audit was drawn completely from the April memorandum written by Messrs. Klein and Gaines. The version of his remarks appearing in the House Journal contains minor, nonsubstantive differences with his actual remarks on the House floor. *See* House Journal, at 1865.

[39] *See* House Journal, at 1864. The House Journal infers that Representative Purcell's remarks followed the final vote on the bill; however, the tapes of the legislative debates show to the contrary.

the principal change was the creation of the fund for small and minority businesses and that "there are language changes, of course, but they were changes that were worked out with the AARP, they were [**53] after consultation with the AARP, Mr. Burcham, and these other folks." The Senate proceeded to concur in the House amendments by a 23 to 10 vote. [40] Both Senator Rochelle and Senator Gilbert, who had voted against the bill and the House amendments, requested that Senator Rochelle's statements concerning the scope of the audit of the Form PSC-3.01 report be included verbatim in the Senate Journal. [41]

3.

The legislative history of Tenn. Code Ann. § 65-5-209 reveals several significant milestones in the formulation of this statute. The original version of the bill contained no procedure of any sort for reviewing incumbent local telephone companies' rates. The bill's critics objected to this omission because they believed that it would enable the telephone companies to earn excessive profits and argued that the Commission should hold one last "full blown" traditional earnings investigation before the competitive market forces [**54] were turned loose. The bill's proponents opposed this suggestion and proposed instead that the Commission audit the telephone [*680] companies' most recent Form PSC-3.01 report. Their adversaries asserted that this proposal did not go far enough because auditing the Form PSC-3.01 report would not provide a representative picture of the companies' future earnings. The only concession that the bill's proponents were willing to make was to specifically empower the Commission to satisfy itself that the information on the Form PSC-3.01 report was accurate. The opponents tried repeatedly to convince their legislative colleagues to require one last traditional rate-setting proceeding. When they were rebuffed three times, they abandoned their efforts to amend the bill and resorted to the tactic of including a statement in the legislative record containing an interpretation of the legislation similar to the position that their colleagues had repeatedly declined to adopt.

The statements concerning the scope of the audit read into the record by Senator Rochelle and Representative Purcell are inconsistent with the language of Tenn. Code Ann. § 65-5-209. By its own terms, this statute, not the Commission's [**55] other statutes and regulations, governs the manner in which the Commission must consider and act upon applications for price regulation plans. ***HN19*** The Commission's powers under Tenn. Code Ann. § 65-5-209 are more limited than its powers in the context of a traditional earnings investigation, as long as the company's rate of return on its Form PSC-3.01 report is less than its currently authorized rate of return.

HN20 The Commission, like any other administrative agency, must conform its actions to its enabling legislation. *Tennessee Pub. Serv. Comm'n v. Southern Ry., 554 S.W.2d 612, 613 (Tenn. 1977)*; *Pharr v. Nashville, C. & St. L. Ry., 186 Tenn. 154, 161, 208 S.W.2d 1013, 1016 (1948)*. It has no authority or power except that found in the statutes. *Tennessee- Carolina Transp., Inc. v. Pentecost, 206 Tenn. 551, 556, 334 S.W.2d 950, 953 (1960)*. While its statutes are remedial and should be interpreted liberally, *see Tenn. Code Ann. § 65-4-106* (Supp. 1996), they should not be construed so broadly as to permit the Commission to exercise authority not specifically granted by law. *Pharr v. Nashville, C. & St. L. Ry., 186 Tenn. at 161, 208 S.W.2d at 1016*.

Both the language [**56] of Tenn. Code Ann. § 65-5-209 and its legislative history confirm that the General Assembly established a three-phase process for considering applications for a price regulation plan. The first and second phases involve verifying the accuracy of the information in the applicant's Form PSC-3.01 report and comparing the applicant's reported rate of return with its currently authorized rate of return. During these phases, the Commission and its staff are empowered to audit the applicant's most recent Form PSC-3.01 report for three purposes: (1) to verify that the information on the report accurately reflects the information in the applicant's books and records, (2) to verify that the report was prepared consistently with generally accepted accounting principles, and (3) to verify that the applicant's calculations reflected the Commission's previously issued orders. The Commission's authority to adjust the figures on the Form PSC-3.01 report is limited to correcting errors with regard to these three categories. The Commission may only adjust an applicant's rate of return after it determines that the rate of return reported on the applicant's most recent Form PSC-3.01 report exceeds the [**57] applicant's currently authorized rate of return.

The Commission exceeded its authority under Tenn. Code Ann. § 65-5-209(c) & (j) by adjusting the figures in BellSouth's Form PSC-3.01 report to compensate for out of period items, abnormal or unusual expenses, and known

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[40] *See Senate* Journal, at 1631.

[41] *See* Senate Journal, at 1631-32.

charges. It had already concurred with its staff's conclusion that the rate of return on BellSouth's corrected Form PSC-3.01 report was 10.30%. Since this rate of return did not exceed BellSouth's currently authorized rate of return of between 10.65 and 11.85%, the Commission should have found that BellSouth's existing rates were affordable under Tenn. Code Ann. § 65-5-209(a) and should have approved BellSouth's application for a price regulation plan based on BellSouth's rates existing on June 6, 1995 as required by Tenn. Code Ann. § 65-5-209(c).

[*681] C.

BELLSOUTH'S RIGHT TO A CONTESTED CASE HEARING

BellSouth also asserts that the Commission should have granted its request for a contested case hearing to challenge the legal and factual basis for the adjustments to BellSouth's Form PSC-3.01 report. The Commission responds that BellSouth is not entitled to a contested case hearing because the first two phases of a [**58] Tenn. Code Ann. § 65-5-209 proceeding are essentially an audit, and an audit is not a contested case. The Commission overlooks two significant points. First, BellSouth desired to challenge the Commission's interpretation and use of its staffs audit. Second, the Commission's use of the audit affected BellSouth's legal rights and privileges.

The Commission relies on *National Health Corp. v. Snodgrass, 555 S.W.2d 403 (Tenn. 1977)* to support its argument; however, this case is significantly different from the one before us. In *National Health Corp.*, the state comptroller audited several related intermediate care facilities to determine whether their charges were consistent with federal and state law. After the auditors concluded that the company had overcharged the State, the Department of Public Health informed National Health Corp. that it intended to withhold a portion of its next regularly scheduled payment to offset the overcharge. Instead of proceeding against the Department of Public Health, National Health Corp. sought judicial review of the comptroller's audit under the Uniform Administrative Procedures Act.

The Chancery Court for Davidson County dismissed National [**59] Health Corp.'s petition for review under *Tenn. Code Ann. § 4-5-322* (Supp. 1996) based on its conclusion that the comptroller's audit reports were not contested cases, and the Tennessee Supreme Court affirmed the decision. The court concluded that the audit was not a contested case because an audit

> in and of itself, does not determine any legal rights, duties or privileges of any party to the audit. It is merely a report of factual material, with recommendations of the auditor. If some action is taken or decision is made by a state official based on the audit report, the decision made or action taken may constitute a "contested case," but not the audit or the report based on the audit, which at most would be only "evidence" to support the decision or action taken.

National Health Corp. v. Snodgrass, 555 S.W.2d at 405-06.

BellSouth has the right to have its application for a price regulation plan considered in accordance with Tenn. Code Ann. § 65-5-209. It also has the right to base its initial rates on its existing rates if its earned rate of return does not exceed its currently authorized rate of return. The Commission's decision to trigger a rate-setting proceeding [**60] by adjusting the figures on BellSouth's Form PSC-3.01 report affected BellSouth's rights. While the Commission permitted BellSouth to present legal arguments concerning its authority to adjust its Form PSC-3.01 report, it did not provide BellSouth with an opportunity to prove that the staff's findings or conclusions with regard to the "out-of-period adjustments," "abnormal or unusual expenses," and "known charges" were factually incorrect. Given the interests at stake, the Commission should have permitted BellSouth to prove that the suggested adjustments were incorrect or not supported by the facts.

IV.

REVIEW OF ALL BELLSOUTH'S RATES AND TARIFFS

AT&T also argues that the Commission did not complete its task because it failed to review each of BellSouth's rates and tariffs to determine whether they were affordable and non-discriminatory. [42] We need not address [*682] this issue in light of our holding that the Commission should have approved BellSouth's application for a price regulation plan based on the rates in existence on June 6, 1995. Since

[42] AT&T made a similar argument with regard to the Commission's approval of the price regulation plan for United Telephone Southeast, Inc. This court did not reach the substance of this argument because a majority of the panel that heard the case concluded that the court lacked jurisdiction over the appeal. *AT&T Communications of the South Central States, Inc. v. Greer,* App. No. 01 A01-9512-BC-00556, 1996 WL 697945, at 7 (Tenn. Ct. App. Dec. 6, 1996) (No Tenn. R. App. P. 11 application filed).

the Commission had already determined that these rates and tariffs were just and reasonable and nondiscriminatory, it is not required to make [**61] this determination again absent some specific reason to do so.

V.

In summary, we vacate the Commission's January 23, 1996 order and all related earlier orders with regard to BellSouth's application for a price regulation plan. Since the Commission has adopted its staff's conclusion that BellSouth's rate of return reported on its Form PSC-3.01 report for the twelve months ending March 31, 1995 is less than its current authorized rate of return, we remand the case to the Tennessee Regulatory Authority with directions [**62] to approve BellSouth's application for a price regulation plan. In light of our conclusion that the Commission did not have the authority to adjust the actual results on BellSouth's Form PSC-3.01 report, we need not consider the remaining issues raised by BellSouth and AT&T. These issues and all other issues raised by the parties are accordingly pretermitted.

We tax the costs of this appeal which includes *BellSouth Telecommunications, Inc. v. Greer;* App. No. 01A01-9601-BC-00008 *and BellSouth Telecommunications Inc. v. Tennessee Pub. Serv. Comm'n, 1997 Tenn. App. LEXIS 668*, App. No. 01A01-9602-BC-00066 to the Tennessee Regulatory Authority. We tax the costs of the appeal in *State ex rel. BellSouth Telecommunications, Inc. v. Bissell, 1997 Tenn. App. LEXIS 668*, App. No. 01A01-9601-CH-00016 to BellSouth Telecommunications, Inc. and its surety for which execution, if necessary, may issue.

WILLIAM C. KOCH, JR., JUDGE

CONCUR:

SAMUEL L. LEWIS, JUDGE

BEN H. CANTRELL, JUDGE

Positive
As of: January 5, 2015 1:13 PM EST

CF Industries v. Tennessee Public Service Com.

Supreme Court of Tennessee, at Nashville

May 19, 1980

No Number in Original

Reporter
599 S.W.2d 536; 1980 Tenn. LEXIS 455

CF INDUSTRIES APPELLEE v. TENNESSEE PUBLIC SERVICE COMMISSION, ET AL., APPELLANTS

Prior History: [**1] APPEAL FROM THE COURT OF APPEALS

TENNESSEE PUBLIC SERVICE COMMISSION

Disposition: REVERSED.

Core Terms

rates, industrial, cost of services, users, customers, Commission's, discriminatory, Appeals, conclusions, intrinsic value, rate increase, residential, consumers, fact finding, agency's, residential customer, gross profit, rate making, courts, issues

Case Summary

Procedural Posture

Appellant Tennessee Public Service Commission sought review of the decision Tennessee Court of Appeals, which reversed the decision of the trial court approving a natural gas rate increase by the Commission. The increase was protested by appellee industrial natural gas customer.

Overview

The Commission considered and approved a natural gas rate increase requested by a natural gas supplier. The industrial natural gas customer, which was the largest natural gas customer of the supplier, filed a petition for judicial review and the trial court affirmed the Commission's approval of the rate increase. The intermediate appellate court reversed the trial court's decision. On appeal, the court reversed the intermediate court of appeals decision and sustained the trial court and commission's decision. The court held that: (1) the Commission's decision of raising the rate for industrial users and increasing the industrial gas customer's rate to the level of other industrial customers was supported by substantial evidence; (2) the Commission's findings of fact were sufficient; (3) the Commission did not exceed its regulatory judgment and discretion in acting without a cost of service study in a rate design case because there was no requirement that cost of service data be considered; and (4) there was no evidence that the exclusion of residential customers from the increase was discriminatory and the court did not have authority for consideration of the issue.

Outcome

The court reversed the intermediate appellate court's decision and sustained the trial court's decision, which affirmed the Commission's approval of a rate increase requested by a natural gas supplier and was contested by the industrial gas customer.

LexisNexis® Headnotes

Administrative Law > Judicial Review > General Overview

Administrative Law > Judicial Review > Standards of Review > General Overview

Administrative Law > Judicial Review > Standards of Review > De Novo Standard of Review

Administrative Law > Judicial Review > Standards of Review > Substantial Evidence

HN1 Tenn. Code Ann. § 4-5-117, covers judicial review under the Uniform Administrative Procedures Act. Tenn. Code Ann. § 4-5-117(g) provides that review shall be confined to the record. Tenn. Code Ann. § 4-5-117(h) restricts reversal or modification of the agency's decision to those cases where the decision violates constitutional or statutory provisions, or is in excess of the statutory authority of the agency, or is made upon unlawful procedure, and to those instances where the decision is arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or unsupported by evidence which is

both substantial and material in the light of the entire record. Further narrowing and restricting the review in the Chancery Court is the statutory command: In determining the substantiality of evidence, the court shall take into account whatever in the record fairly detracts from its weight, but the court shall not substitute its judgment for that of the agency as to the weight of the evidence on questions of fact. Tenn. Code Ann. § 4-5-117(h) (5).

Administrative Law > Judicial Review > Standards of Review > General Overview

HN2 The Supreme Court of Tennessee cannot afford any broader or more comprehensive review to cases arising under the Uniform Administrative Procedures Act than is afforded to them by the trial court in the first instance.

Administrative Law > Judicial Review > Reviewability > Factual Determinations

HN3 A concurrent finding between an agency and the trial court on any issue of fact is conclusive upon the Supreme Court of Tennessee .

Civil Procedure > Appeals > Appellate Jurisdiction > State Court Review

Energy & Utilities Law > Administrative Proceedings > Judicial Review > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

HN4 Unless there is a plain abuse of discretion by the Tennessee Public Service Commission, its orders will not be disturbed on appeal. And, where a chancellor has considered the record on the common-law writ of certiorari and affirmed the order of the Commission, this concurrent finding is conclusive of the issue.

Administrative Law > Judicial Review > Reviewability > Factual Determinations

Communications Law > Regulators > US Federal Communications Commission > Jurisdiction

Energy & Utilities Law > Administrative Proceedings > Judicial Review > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

HN5 The functions of the Tennessee Public Service Commission are solely administrative or legislative, as distinguished from judicial, and review is for the very limited purpose of determining whether the Commission has acted arbitrarily, or in excess of jurisdiction, or otherwise unlawfully. This requires that the Commission's decision be supported by substantial and material evidence.

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN6 Under Tenn. Code Ann. § 65-520, the power to determine whether rates are "just and reasonable" is reposed in the Tennessee Public Service Commission. There is a presumption that the rates so established are correct and any party who attacks the Commission's findings has the burden of proving that they are illegal or unjust and unreasonable.

Administrative Law > Agency Adjudication > Decisions > Contents

Administrative Law > Agency Adjudication > Hearings > General Overview

HN7 The Uniform Administrative Procedures Act provides that: A final decision shall include findings of fact, conclusions of law, and reasons for the ultimate decision. Findings of fact, if set forth in statutory language, shall be accompanied by a concise and explicit statement of the underlying facts supporting the findings. Tenn. Code Ann. § 4-5-113.This is a statutory imperative; it is not a mere technicality but is an absolute necessity.

Administrative Law > Agency Adjudication > Hearings > General Overview

Administrative Law > Agency Rulemaking > Rule Application & Interpretation > General Overview

HN8 The sufficiency of an agency's findings of fact must be measured against the nature of the controversy and the intensity of the factual dispute. Where there is no disputed issue of fact and the sole question before the agency is the proper conclusion to be drawn from the undisputed facts and the application of the correct legal rules, the record need not be burdened with detailed findings of fact. In such a case the facts need only be recited. In those cases wherein the issues of fact are sharply contested and the proof is conflicting. There, a detailed finding of fact dovetailed to the record is a practical and legal imperative. Thus, the nature of the finding necessarily varies from case to case.

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

Energy & Utilities Law > Utility Companies > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN9 The polestar of public utility rate establishment and regulation is the "just and reasonable" requirement of Tenn. Code Ann. § 65-518. There is no statutory nor decisional law that specifies any particular approach that must be followed by the Tennessee Public Service Commission. Fundamentally, the establishment of just and reasonable rates is a value judgment to be made by the Commission in the exercise of its sound regulatory judgment and discretion.

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

Energy & Utilities Law > ... > Rates > Ratemaking Factors > Rate of Return

HN10 There is no requirement in any rate case that the Tennessee Public Service Commission receive and consider cost of service data, or that such data, if in the record, are to be accorded exclusivity.

Energy & Utilities Law > Administrative Proceedings > Judicial Review > General Overview

Energy & Utilities Law > ... > Public Utility Commissions > Hearings & Orders > Judicial Review

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN11 Rate making is not a judicial function and the appellate courts accord the Tennessee Public Service Commission great deference in reviewing its decisions.

Energy & Utilities Law > Regulators > Public Utility Commissions > General Overview

Energy & Utilities Law > Regulators > Public Utility Commissions > Authorities & Powers

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN12 Tenn. Code Ann. § 65-518 gives the Tennessee Public Service Commission the express power to adjust rates that are unjust, unreasonable, excessive, insufficient or unjustly discriminatory or preferential.

Counsel: For Appellee: Public Service Commission: Eugene W. Ward, General Counsel.

Mack H. Cherry, Assistant General Counsel.

City of Chattanooga: Eugene N. Collins, City Attorney.

Gary D. Lander, Special Counsel.

Chattanooga Gas Company: Jack M. Irion, Bomar, Shofner, Bomar & Irion, Shelbyville.

W. D. Spears, W. L. Taylor, Jr., Spears, Moore, Rebman & Williams, Chattanooga.

For Appellee: James Clarence Evans, Nashville.

Anthony E. Cascino, Jr., Longrove, Illinois.

Judges: Henry, J., wrote the opinion. Concur: Brock, C.J., Fones, J., Harbison, J., Blackburn, S.J.

Opinion by: HENRY

Opinion

[*537] This is a utility rate case.

I.

A. *Pleadings and Proceedings before the Public Service Commission*

On May 31, 1977, Chattanooga Gas Company, a division of Jupiter Industries, filed its application before the Tennessee Public Service Commission seeking to place into effect a revised natural gas tariff and to amend a special contract with CF Industries, Inc. Chattanooga Gas is a natural gas distribution company serving franchises in Chattanooga, Cleveland and environs in Hamilton and Bradley County. [**2] CFI is its largest consumer, using approximately 30% of the petitioner's total gas supply.

The proposed rate increase applied to large industrial and commercial customers but did not affect small commercial users nor residential customers. The basic [*538] premise of the application is that a declining gas supply has prohibited the pursuit of practices designed to increase sales volumes to offset heavy increases in operational costs, resulting in an inadequate rate of return. Thus, Chattanooga Gas urges upon the Commission a need to redesign its rates.

It is the theory and philosophy of Chattanooga Gas that there has been a regulatory shift from the traditionally accepted criteria for valuing utility service from "cost of service" to an "intrinsic value" rationale and that this

operates to protect residential consumers from absorbing more than their fair share of rates. Chattanooga Gas insists that volume discounts resulting in price advantages to industrial users tend to encourage over-consumption at a time when conservation is a national priority.

CF Industries protested the petition, taking the position that it is the largest customer of Chattanooga Gas, using the gas [**3] as a raw product ingredient in the production of fertilizer, and that this unique use justifies a separate rate classification and a continuation of its contract with Chattanooga Gas. [1] Its unique use can best be summarized by noting that it is the only customer of Chattanooga Gas which utilizes gas as a raw material; all others use it only as a fuel. CFI can use no other fuel because of the design of its nitrogen complex. It is CFI's further position that its proposed share of the rate increase is disproportionate and discriminatory. CFI insists on the cost of service *vis-a-vis* the intrinsic value approach.

The Town of Lookout Mountain, Tennessee, intervened in opposition to the increase. The City of Chattanooga intervened for the purpose of preserving its contracts with Chattanooga Gas and [**4] protecting the interests of its citizens and rate payers.

To put the entire controversy into focus, we point out that essentially the contending parties are the Chattanooga Gas Company and CF Industries. Under the scheme proposed by Chattanooga Gas the Commission was asked to approve a two-step approach. First, the special rate to CFI would be eliminated and the Gas Company's industrial rate schedule would be made applicable to CFI. Secondly, a general rate increase would be applied to all industrial users, including CFI. The first step would increase CFI's rates by approximately $562,867 annually; the general rate increase would add approximately $157,133. The result would be a total increase of approximately $720,000, with CFI assuming the same proportionate burden as all other industrial consumers.

B. *Findings and Order of the Commission*

On November 30, 1977, the Public Service Commission entered its findings and order. The Commission approved the increase in net operating income in the amount of $910,226. It ordered that CFI be charged at its "existing I-1 rate tariff," with the result that approximately $394,866 or 43.4% of the total increase was assessed against [**5] CFI with approximately 56.6% being assessed against the remaining 742 industrial consumers. The 25,000 residential users were not affected. The result was that other industrial users were raised and CFI continued to pay at a lower rate. After discussing the testimony relating to the cost of service versus intrinsic value approach, the Commission noted that "CFI is receiving gas at bargain prices under the special contract at a time when natural gas is a scarce commodity."

The Commission treated "cost of service" as "one of many approaches" but held that it was "not bound to a strict cost of service approach in designing rate schedules." The Commission summarized its holding:

> Rate-making is an extremely complex process which involves much more than inputting cost figures into a computer and waiting for the results of the machine's mathematical functions. We [*539] must consider all aspects surrounding the determination of just and reasonable rates. In our opinion, a strict cost of service approach is not at this time of decreasing energy supplies the best approach to setting rates. . . . We, therefore, order the company to change the existing rates charged to CF Industries [**6] for firm gas to the existing I-1 rate tariff.

The Commission pointed out that "CFI will still be able to purchase gas at a lower effective rate than other industrial customers due to its high load factor." Further the Commission specificized this finding by noting that "on average the industrial customers other than CF Industries are paying $1.46 per McF under existing rates, while CFI will pay $1.35 per McF under the same rate schedule."

It should be noted that while under the Commission's holding CFI's rate was increased to that being paid by other industrial users at the time the petition was filed, it was not subjected to the general rate increase with the result that it continues to pay at a lower rate than all others in the same class.

C. *Action of the Chancery Court*

Pursuant to a petition for judicial review, the Chancery Court of Davidson County affirmed the Public Service Commission. Citing *Allied Chemical Corp. v. Georgia Power Co., 236 Ga. 548, 224 S.E.2d 396 (1976)*, the Court held that the failure of the Commission to follow a cost of

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[1] CF Industries relies heavily on the terms of a contract entered into July 6, 1966, between Chattanooga Gas and its predecessor, Farmer's Chemical Association. This contract was assigned to CFI on May 20, 1976.

service approach "does not make its decision unjust and discriminatory." Further citing the requirement of Section 65-518, [**7] T.C.A., that the Commission modify any rates found to be "unjust, unreasonable, excessive, insufficient, or unjustly discriminatory or preferential," the Chancellor noted that CFI "had been obtaining gas at special contract rates lower than other industrial users." The Court held that the Commission's findings were supported by substantial and material evidence.

D. *Action of the Court of Appeals*

The Court of Appeals for the Middle Section reversed, disagreeing with the Commission and the Chancellor in every material particular. The Court held that (1) the Commission violated Section 4-519, T.C.A., by failing to make findings of fact; (2) that the Commission failed to require and consider cost of service data; (3) that with a general cost of service study there is a reasonable probability that the result would have been different; and (4) that there was no substantial evidence to support the action of the Commission and its action was "discriminatory" and "patently arbitrary."

The thrust of the opinion of the Court of Appeals is that the Commission increased rates to large commercial and industrial users to the exclusion of smaller commercial and residential users "without [**8] any evidence to justify the discrimination." The matter was remanded to the Public Service Commission for a "redetermination of rates of the customers of Chattanooga Gas Company," to include small commercial and residential users.

We sustain the Public Service Commission and the Chancellor and reverse the Court of Appeals.

II.

Standard of Review

HN1 Section 4-5-117, T.C.A., covers judicial review under the Uniform Administrative Procedures Act. Sub-section (g) provides that review shall be "confined to the record." Sub-section (h) restricts reversal or modification of the agency's decision to those cases where the decision violates constitutional or statutory provisions, or is in excess of the statutory authority of the agency, or is made upon unlawful procedure, and to those instances where the decision is

> arbitrary or capricious or characterized by abuse of discretion or clearly unwarranted exercise of discretion; or
>
> unsupported by evidence which is both substantial and material in the light of the entire record.

[*540] Further narrowing and restricting the review in the Chancery Court is the statutory command:

> In determining the substantiality of [**9] evidence, the court shall take into account whatever in the record fairly detracts from its weight, but the court *shall not substitute its judgment for that of the agency* as to the weight of the evidence on questions of fact. (Emphasis supplied). Section 4-5-117(h)(5), T.C.A.

Thus the UAPA requires that the trial court review factual issues upon a standard of substantial and material evidence. But this is not a broad, *de novo* review. It is restricted to the record and the agency finding may not be reversed or modified unless arbitrary or capricious or characterized by an abuse, or clearly unwarranted exercise, of discretion and must stand if supported by substantial and material evidence.

The same standard of review prevails on the appellate level. ***HN2*** We cannot, as a general rule, "afford any broader or more comprehensive review to cases arising under the Act than is afforded to them by the trial court in the first instance . . . ." *Humana of Tenn. v. Tenn. Health Facilities Com'n., 551 S.W.2d 664, 668 (Tenn. 1977)*. Further ***HN3*** a concurrent finding between the agency and the trial court on any issue of fact is conclusive upon this Court. This Court so held in *Blue* [**10] *Ridge Transportation Co. v. Hammer, 203 Tenn. 398, 313 S.W.2d 433 (1958)*:

> ***HN4*** Unless there is a plain abuse of discretion by the Commission, its orders will not be disturbed on appeal. And more especially where the Chancellor has considered the record on the common-law writ of certiorari and affirmed the order of the Commission, we feel that this *concurrent finding is conclusive of the issue*. (Emphasis supplied). *203 Tenn. at 404*

The Uniform Administrative Procedures Act, to the extent of the standard of review, did not make significant changes in prior decisions and statutory law. In view of the fact that ***HN5*** the functions of the Commission are solely administrative or legislative as distinguished from judicial, this Court has consistently held that the review is for the "very limited purpose of determining whether the Commission has acted arbitrarily, or in excess of jurisdiction, or otherwise unlawfully." *City of Whitwell v. Fowler, 208*

Tenn. 80, 83, 343 S.W.2d 897, 899 (1961). [2] This, of course, would require that it be supported by substantial and material evidence.

[**11] Moreover, ***HN6*** under Section 65-520, T.C.A., the power to determine whether rates are "just and reasonable" is reposed in the Commission. There is a presumption that the rates so established are correct and any party who attacks the Commission's findings has the burden of proving that they are illegal or unjust and unreasonable. *Southern Bell T. & T. Co. v. Tenn. Pub. Serv. Com'n., 202 Tenn. 465, 304 S.W.2d 640 (1957)*.

Consideration must also be given to the statutory recognition of the "agency's experience, technical competence, and specialized knowledge." *Section 4-5-109(7), T.C.A. See also, Blue Ridge Transportation Co. v. Hammer, supra*; Section 65-209, T.C.A.

When the evidence is considered "in light of the entire record," Section 4-5-117(h) (5), T.C.A., and in accordance with the established statutory and decisional law, we find and hold that the Commission's action was supported by ample material and substantial evidence. We have neither the disposition nor the power to substitute our judgment for that of the Commission as to the weight of the evidence on any factual issue. This leaves only questions of law for our determination.

III.

The Sufficiency of the Commission's [**12] *Finding of Fact*

HN7 The UAPA provides that:

> [*541] A final decision shall include findings of fact, conclusions of law, and reasons for the ultimate decision. Findings of fact, if set forth in statutory language, shall be accompanied by a concise and explicit statement of the underlying facts supporting the findings. Section 4-5-113, T.C.A.

This is a statutory imperative; it "is not a mere technicality but is an absolute necessity without which judicial review would be impossible." *Levy v. State Bd. of Examiners, Etc., 553 S.W.2d 909, 911 (Tenn.1977)*.

Able counsel representing CFI earnestly urges that the Commission's order was fatally defective. The Court of Appeals held that the Commission's order "fails to disclose any finding of fact supporting the apparent discrimination against the appellant." The Chancellor, on the other hand, correctly noted that "[the] purpose of findings and conclusions is to aid the court in determining the reasons behind the agency decision, and whether the agency's conclusion is based on sufficient evidence," and held that "the order . . . reflects findings of fact and conclusions of law which are sufficient to enable this court [**13] to review the decision."

HN8 The sufficiency of an agency's findings of fact must be measured against the nature of the controversy and the intensity of the factual dispute. It is obvious that where there is no disputed issue of fact and the sole question before the agency is the proper conclusion to be drawn from the undisputed facts and the application of the correct legal rules, the record need not be burdened with detailed findings of fact. In such a case the facts need only be recited.

At the other end of the spectrum are those cases wherein the issues of fact are sharply contested and the proof is conflicting. There a detailed finding of fact dovetailed to the record is a practical and legal imperative. Thus, the nature of the finding necessarily varies from case to case.

The Commission had before it in this case other significant issues which normally carry through to the chancery and appellate review, but which are no longer at issue. Among these was the basic rate increase, an issue separate and apart from rate design. In reaching a decision on this threshold question the Commission was required to consider the rate base, revenues and expenses of the utility, and the [**14] significant matter of a fair rate of return based on the petitioner's long term, debt, common equity, and other underlying considerations. These are issues that normally provoke controversy and prompt appeals, and on them the Commission made detailed findings of fact.

We have examined CFI's 15-point proposed finding of fact filed with the Commission. The first two suggest that the Commission find that CFI is the largest customer of Chattanooga Gas using approximately 30% of the total gas supply. There was no dispute as to this and its inclusion in the finding would have served no useful purpose.

The third proposal related to the uniqueness of the use CFI makes of the gas, a fact that we find to have no material bearing on any issue. Number 4 sets out that the rate

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[2] *See also, Hoover Motor Exp. Co. v. Railroad & Public Util. Com'n.*, 195 Tenn. 593, 261 S.W.2d 233 (1953), for complete discussion of the legislative character of the Public Service Commission.

originally approved by the Commission was based on a cost of service presentation and was fair and reasonable. Number 5 relates to the original gross profit increases and would have the Commission hold that in the absence of a cost of service study, it cannot ascertain gross profits or the trend thereof in relation to other classes of customers. The original rate has no controlling significance and cost of service [**15] is not an exclusive method of determining rate design.

The proposed sixth finding sets forth the reasons Chattanooga Gas has not found it necessary to request a rate increase since 1959. This is argumentative and not of controlling significance. The proposed seventh finding merely relates to an amendment to the pleadings.

The eighth proposal basically relates to an item not allowed by the Commission. The ninth, tenth and eleventh proposals deal with the results of the requested increase. [*542] Some of the figures are admittedly incorrect. These three proposals relate basically to discriminatory aspects of the rate design and are argumentative in nature. All concerned knew the end results; there was no basic dispute and its inclusion in the finding would have served no useful purpose.

The twelfth proposal was that Chattanooga Gas had used the intrinsic value approach and the thirteenth asserted a general practice to include a cost of service approach. This is the crux of this controversy and the Commission made full conclusions in this regard. The fourteenth proposal merely argues CFI's insistence that a full cost of service study would substantially decrease its share [**16] of any increase. The last proposal urges hardship on farmers and on CFI and is not sufficiently documented to form a basis for a finding.

In summary, the proposed findings incorporate agreed facts, background information, results and argument. Pertinent and essential to this issue are only those relating to cost of service data *vis-a-vis* intrinsic value. These call for conclusions of law and, as to them, the findings and conclusions contain full discussion.

The primary difficulty in proposing and making findings of fact in this case is that there were no disputed facts pertinent to the issue. Essentially, this controversy raises a single issue, a question of law, *viz.*: May the Public Service Commission adopt a rate design without having before it for consideration a cost of service study? [3] A secondary issue relates to a charge of discrimination against CFI.

[**17] We hold, in the context of this case, that the Commission's finding was adequate and proceed to discuss the controlling questions of law.

IV.

Cost of Service versus Intrinsic Value

HN9 The polestar of public utility rate establishment and regulation is the "just and reasonable" requirement of Section 65-518, T.C.A. There is no statutory nor decisional law that specifies any particular approach that must be followed by the Commission. Fundamentally, the establishment of just and reasonable rates is a value judgment to be made by the Commission in the exercise of its sound regulatory judgment and discretion.

Specifically, ***HN10*** there is no requirement in any rate case that the Commission receive and consider cost of service data, or that such data, if in the record, are to be accorded exclusivity. It is self-evident that cost of service is of great significance in the establishment of rates but is of lesser value in arriving at rate design. A fair rate of return to the regulated utility is one thing; the establishment of rates among various customer classes is quite another.

Moreover, the intrinsic value of the service rendered, while not controlling, is a proper element of consideration [**18] and is, perhaps, of more value in establishing rates among customers than in determining a fair rate of return to the utility itself.

The criteria by which the Commission should be guided have received only generalized comments in our reported decisions. This is proper because the courts are playing a limited role in reviewing actions which essentially are legislative in character. ***HN11*** Rate making is not a judicial function and we accord the Commission great deference in reviewing its decisions. On fixing rates in general the Court has spoken in terms of what is just and reasonable "under the proven circumstances," of "regard to all relevant facts" and to a rate "in the zone of reasonableness." *Southern Bell Telephone & Telegraph Co. v. Tennessee Public Service Com'n., 202 Tenn. 465, 304 S.W.2d 640 (1957).*

The Uniform Administrative Procedures Act authorizes the agency to take notice of "generally recognized technical and scientific [*543] facts within the agency's specialized knowledge," and in the evaluation of evidence the agency is

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[3] Counsel for CFI made it clear in beginning colloquy that the controversy was "basically in the area of allocation of cost of service to different customers, and the rate structure as to *who is going to bear the burden.*"

specifically authorized to utilize its "experience, technical competence, and specialized knowledge." Section 4-5-1097, T.C.A.

Thus, the [**19] Public Service Commission in rate making and design cases is not solely governed by the proof although, of course, there must be an adequate evidentiary predicate. The Commission, however, is not hamstrung by the naked record. It may consider all relevant circumstances shown by the record, all recognized technical and scientific facts pertinent to the issue under consideration and may superimpose upon the entire transaction its own expertise, technical competence and specialized knowledge. Thus focusing upon the issues, the Commission decides that which is just and reasonable. This is the litmus test -- nothing more, nothing less.

In *United Inter-Mountain Telephone Co. v. Public Service Com'n.*, 555 S.W.2d 389 (Tenn.1977), this Court noted that "[the] impact of the Administrative Procedures Act on the review of the decisions made by state boards, commissions and agencies, including the Public Service Commission, is *massive*" (emphasis supplied), and pointed out that "[it] casts upon the Commission the heavy burden of a sound, reasoned, and judicious approach in the exercise of its jurisdiction." *555 S.W.2d at 392*.

We reiterate that neither the legislature nor the courts [**20] have established any precise formula or yardstick to guide the Commission. As pointed out by the Georgia Supreme Court in *Allied Chemical Corp. v. Georgia Power Co., 236 Ga. 548, 224 S.E. 2d 396 (Ga. 1976)*:

> The process of setting rates is not required to follow any particular course, so long as the end result does not violate the "just and reasonable requirement" requirement . . . . *224 S.E.2d at 399*.

The Oklahoma Supreme Court, in *Application of Arkansas Louisiana Gas Co.*, 558 P.2d 376 (Okla. 1976), pointed out:

> Commission is not bound by a single formula or a combination of formulas in fixing rates and none is exclusive or more favored than the others. (citation omitted) There is no precise statutory or court announced basis for determining the justness or reasonableness of class rate level structures or relationships, the Court generally holding that rate making is the responsibility of a regulatory commission effectively exercising its discretion upon sufficient evidence before it. *558 P.2d at 379*.

Finally, we adopt the concise and correct conclusions of the Minnesota Supreme Court in *St. Paul Area Chamber of Commerce v. Minnesota Public Service* [**21] *Com'n., 312 Minn. 250, 251 N.W.2d 350 (1977)*:

> [We] must presume that the members of the commission itself, with their supporting staff, have in their grasp practical knowledge in the field of utilities regulation not possessed by either the courts or laymen in general.
>
> * * *
>
> The commission, in order to carry out its mandate from the legislature to establish "just and reasonable" rates, must be able to draw on its own internal sources of knowledge and experience. As with the legislature itself, we assume that it does so in each instance and that we ought not to interfere unless it should clearly exceed its statutory powers. *251 N.W.2d at 354*.

We cannot say on this record that the Commission exceeded its regulatory judgment and discretion in acting without a cost of service study in a rate design case. The imposition of this requirement would be an unwarranted intrusion into the rate making process.

The record shows that the Commission reached a result that was just and reasonable and equitable.

V.

Discriminatory Rate Structure

CFI contends that the Commission acted discriminatorily and without any rational basis in imposing a rate increase on "743 [*544] [**22] large users to the exclusion of the 25,000 smaller users" without any evidence to justify the discrimination." The Court of Appeals so held.

We should point out at the onset that 742 of the 743 large users have voiced no complaint.

The following tabulation is significant:

	Net Increase	% Increase	Consumption	Generated Gross Profit
CFI	$394,866	43.4	34.1%	15.7%
742 others	515,360	56.6	56.6	65.2
25,000 residential	0	0	9.3	19.1

Thus, it will be seen that while CFI buys approximately one-third of the total output of Chattanooga Gas, it accounts for only 15.7% of the profit. It uses almost four times as much as the 25,000 residential customers but contributes less to gross profit. The 742 other industrial users consume 22.5% more gas than CFI, but contribute 49.5% more to the gross profit.

Additionally, as found by the Commission, CFI pays $1.35 per McF, while the 742 other industrial users pay $1.46, and is "receiving gas at bargain rates."

But this is not the discrimination that CFI has in mind. Its insistence and that of the Court of Appeals was that exempting the 25,000 residential customers from the increases was discriminatory. [**23] It was apparently the view of the Court of Appeals that when the rates charged one class of customers are raised, all others must also be raised. This does not necessarily follow.

There was no pleading or procedural predicate in this case which would have justified a revision of residential rates. Remanding this case to the Commission to adjust the rates of residential customers is beyond the purview of judicial review. The sole concern of the courts, at each stage of appellate review, is to determine whether the Commission's action on the matters raised by the application meets the requirements of the law. Rate making is not a judicial function and the courts are powerless to remand for the determination of a new cause of action.

If the Commission's action was invalid in that the rate design approved was discriminatory and without rational basis, the only appellate remedy is to strike the increase, in whole or in part, or remand for reconsideration of the respective rights of the contending parties.

The fact that residential consumers pay at a lesser rate is of no patent significance. Utilities traditionally have charged differing rates among classes of customers. Many factors [**24] enter into the determination of rates among classes of consumers. This record is silent in this regard and we will not assume from a silent record that there is no material basis for the differing rates.

HN12 Section 65-518, T.C.A., gives the Public Service Commission the express power to adjust rates that are "unjust, unreasonable, excessive, insufficient or unjustly discriminatory or preferential." Again, we are not willing to assume from an incomplete record that the Commission deviated from its sworn duty; to the contrary, we presume its compliance. We are unwilling to hold, in the posture of this case, that the Commission established unjustly discriminatory or preferential rates.

While we hold, without hesitation or equivocation, that a public utility may impose differing rates among customer classes, we do not deem it necessary or proper to explore or delineate the criteria that must be met.

We are content to rest our holding on the lack of pleading and procedural predicate for a consideration of the issue involving the residential customers. The discrimination involving the remaining industrial users may be more apparent than real. In any event, their situation is not presented [**25] for review.

The judgment of the Court of Appeals is reversed; the Trial Court and the Public Service Commission are affirmed.

CONCURRING: BROCK, C.J., FONES, J., HARBISON, J., BLACKBURN, S.J.

This document is current through October 2014

1220-4-1-.07 SPECIAL CONTRACTS

Special contracts between public utilities and certain customers prescribing and providing rates, services and practices not covered by or permitted in the general tariffs, schedules or rules filed by such utilities are subject to super-vision, regulation and control by the Authority. A copy of such special agreements shall be filed, subject to review and approval.

Statutory Authority

T.C.A. § 65-202.

History

ADMINISTRATIVE HISTORY FOR THIS REGULATION:
Original Rule certified May 9, 1974. Editorial changes made by the Secretary of State pursuant to Public Chapter 305 of 1995; "Commission" and references to the "Commission" were changed to "Authority" and references to the "Authority"; effective March 28, 2003.

RULES AND REGULATIONS OF THE STATE OF TENNESSEE

State of Tennessee

PUBLIC CHAPTER NO. 245

HOUSE BILL NO. 191

By Representative McCormick

Substituted for: Senate Bill No. 197

By Senator Norris

AN ACT to amend Tennessee Code Annotated, Section 8-27-201; Title 65, Chapter 2; Section 65-4-303; Section 65-5-101; Section 65-5-103 and Section 65-1-102, relative to the Tennessee Regulatory Authority and the regulation of public utilities and carriers.

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. Tennessee Code Annotated, Section 8-27-201(g), is amended by deleting the subsection and substituting instead the following:

(g)

(1) "State employee":

(A) Means

(i) Any person who is a state official, including members of the general assembly and legislative officials elected by the general assembly;

(ii) Any person who is employed in the service of, and whose compensation is payable by, the state;

(iii) Any person who is employed by the state whose compensation is paid, in whole or in part, from federal or other funds; or

(iv) Any director of the Tennessee regulatory authority; and

(B) Does not include any person performing services on a contractual or percentage basis.

(2) The committee shall, subject to the availability of funds as certified by the commissioner of finance and administration, have the authority to establish additional criteria that must be met by a state employee to be eligible for participation in any insurance plan offered by the committee; provided, that persons currently participating in any plan offered by the committee who are not state employees as defined in this subsection (g) shall remain eligible to participate until such time as coverage is provided by an alternative state administered plan offered by the committee.

SECTION 2. Tennessee Code Annotated, Section 65-1-102(b), is amended by deleting the subsection and substituting instead the following:

(b) No person who owns, in an individual capacity or jointly with another person, any bonds, stocks, equity interest or other property in any business or entity regulated by the Tennessee regulatory authority, or who is an agent or employee in any way of any such business or entity, shall be eligible to serve as a director of the Tennessee regulatory authority.

SECTION 3. Tennessee Code Annotated, Section Title 65, Chapter 2, is amended by adding the following language as a new section:

65-2-122

(a) The authority may establish optional services that may be purchased by regulated entities or other unregulated service providers, which are related to the exercise, administration or enforcement of jurisdiction delegated to the authority by state or federal law.

(b) The establishment of charges for services described in subsection (a) shall be cost-based.

(c) No charge for services as established in this section shall be applied to any party that does not expressly elect to use such services, and no party shall be required to elect to use such optional services as a condition of initiating any case before the authority.

SECTION 4. Tennessee Code Annotated, Section 65-4-303, is amended by deleting the section and substituting instead the following:

(a) The amount of the fee provided for in this section shall be measured by the amount of the gross receipts from intrastate operations of each public utility in excess of five thousand dollars ($5,000).

(b)

(1) Except as provided in subdivision (b)(2), "gross receipts from intrastate operations":

(A) Means total revenues, before any deductions, which are recognized by the authority as utility revenue for the purpose of setting intrastate rates under chapter 5 of this title; and

(B) Does not include any revenues from directory operations; provided, the exclusion of these revenues from directory operations shall not affect the power of the authority to include or exclude these revenues in setting intrastate rates.

(2) For companies that elect market regulation pursuant to § 65-5-109(m), "gross receipts from intrastate operations" means the total revenue derived from the provision of intrastate services to non-affiliated telecommunications carriers, including specifically revenue from interconnection, collocation, billing and collection, inter-carrier compensation, services sold for resale and carrier access; provided, revenue derived from the provision of retail services and products to consumers that are not telecommunications carriers is excluded.

(c)

(1) The fee fixed and assessed against and to be paid by each public utility shall be due and payable on or before April 1, 2014, and each April 1 thereafter, and shall be based on the previous calendar year's gross receipts from intrastate operations. The fee shall be four dollars and twenty-five cents ($4.25) per one thousand dollars ($1,000) of such gross receipts over five thousand dollars ($5,000), except as set forth in subdivision (c)(2) for companies that provide telecommunications services.

(2)

(i) Notwithstanding the calculations in subdivision (c)(1), the minimum inspection fee for companies that elect market regulation pursuant to § 65-5-109(m) shall be forty-nine percent (49%) of the inspection fee that was due by such company on April 1, 2012. Such

companies shall file with their fee payments a calculation of both the fee as calculated under subdivision (c)(1) and the alternative minimum calculation established in this subdivision (c)(2)(i).

(ii) Notwithstanding the calculation in subdivision (c)(1), the maximum inspection fee for a company providing telecommunications services that does not elect to enter market regulation shall be the inspection fee that was due by such company on April 1, 2012.

(iii) In no event, however, shall the minimum inspection fee for any telecommunications service company be less than one hundred dollars ($100).

(d) The fee shall be due and payable on or before April 1, 2014, and each April 1 thereafter.

(e) The fee provided for in this section may be recovered by a public utility operating under rate of return regulation through either a rate case proceeding pursuant to § 65-5-103 or through a separate recovery mechanism to be determined by the authority. Nothing in this section shall alter the manner in which public utilities that operate under price regulation or market regulation, pursuant to § 65-5-109, may set rates. Nothing in this section shall alter the limitations on the jurisdiction of the authority over market-regulated companies in § 65-5-109. A public utility may recoup its inspection fees by including a line item on its subscribers' bills.

SECTION 5. Tennessee Code Annotated, Section 65-5-103, is amended by adding the following language as a new subsection:

(d) The authority is authorized to implement alternative regulatory methods to allow for public utility rate reviews and cost recovery in lieu of a general rate case proceeding before the authority.

(1)

(A) For all alternative regulatory methods, the authority is authorized to develop minimum filing requirements and procedural schedules; provided, however, a final determination of the authority pursuant to any alternative regulatory method be made by the authority no later than one hundred twenty (120) days from the initial filing by the public utility.

(B) If the authority denies an alternative regulatory method filed by a public utility, the authority shall set forth with specificity the reasons for its denial and the public utility shall have the right to re-file, without prejudice, an amended plan or amendment within sixty (60) days of the issuance of a final order. The authority shall thereafter have sixty (60) days to approve or deny the amended plan or amendment.

(2)

(A) A public utility may request and the authority may authorize a mechanism to recover the operational expenses, capital costs or both, if such expenses or costs are found by the authority to be in the public interest, related to any one (1) of the following:

(i) Safety requirements imposed by the state or federal government;

(ii) Insuring the reliability of the public utility plant in service; or

(iii) Weather-related natural disasters.

(B) The authority shall grant recovery and shall authorize a separate recovery mechanism or adjust rates to recover operational expenses, capital costs or both associated with the investment in such safety and reliability facilities, including the return on safety and reliability investments at the rate of return approved by the authority at the public utility's most recent general rate case pursuant to §§ 65-5-101 and 65-5-103(a), upon a finding that such mechanism or adjustment is in the public interest.

(3)

(A) A public utility may request and the authority may authorize a mechanism to recover the operational expenses, capital costs or both related to the expansion of infrastructure for the purpose of economic development, if such expenses or costs are found by the authority to be in the public interest. Expansion of economic development infrastructure may include, but is not limited to, the following:

(i) Infrastructure and equipment associated with alternative motor vehicle transportation fuel;

(ii) Infrastructure and equipment associated with combined heat and power installations in industrial or commercial sites; and

(iii) Infrastructure that will provide opportunities for economic development benefits in the area to be directly served by the infrastructure.

(B) The authority shall grant recovery and shall authorize a separate recovery mechanism or adjust rates to recover operational expenses, capital costs or both associated with the investment in such economic development facilities, including the return on such economic development investments at the rate of return approved by the authority at the public utility's most recent general rate case pursuant to §§ 65-5-101 and 65-5-103(a), upon a finding that such mechanism or adjustment is in the public interest.

(4)

(A) A public utility may request and the authority may authorize a mechanism to recover expenses associated with efforts to promote economic development in its service territory, if such expenses are found by the authority to be in the public interest.

(i) Efforts to promote economic development may include, but are not limited to, foregone revenues associated with economic development riders and rates.

(ii) Expenses described in subdivision (d)(4)(A)(i) may be reflected in cost of service and be subject to recovery through the annual review process in subdivision (d)(6).

(B) Upon a finding that expenses to promote economic development have been incurred, the authority shall authorize a separate recovery mechanism or adjust rates to recover such expenses or grant recovery through the annual review process set forth in subdivision (d)(6), upon a finding that such mechanism or adjustment is in the public interest.

(5)

(A) A public utility may request and the authority may authorize a mechanism to recover the operational expenses, capital costs or both related to other programs that are in the public interest.

(B) A utility may request and the authority may authorize a mechanism to allow for and permit a more timely adjustment of rates resulting from changes in essential, non-discretionary expenses, such as fuel and power and chemical expenses.

(C) Upon a finding that such programs are in the public interest, the authority shall grant recovery and shall authorize a separate recovery mechanism or adjust rates to recover operational expenses, capital costs or both associated with the investment in other programs, including the rate of return approved by the authority at the public utility's most recent general rate case pursuant to §§ 65-5-101 and 65-5-103(a).

(6)

(A) A public utility may opt to file for an annual review of its rates based upon the methodology adopted in its most recent rate case pursuant to §§ 65-5-101 and 65-5-103(a), if applicable.

(B) In order for a public utility to be eligible to make an election to opt into an annual rate review, the public utility must have engaged in a general rate case pursuant to §§ 65-5-101 and 65-5-103(a) within the last five (5) years; provided, however, the authority may waive such requirement or increase the eligibility period upon a finding that doing such would be in the public interest.

(C) Pursuant to the procedures set forth in subdivision (d)(1), the authority shall review the annual filing by the public utility within one hundred twenty (120) days of receipt and order the public utility to make the adjustments to its tariff rates to provide that the public utility earns the authorized return on equity established in the public utility's most recent general rate case pursuant to §§ 65-5-101 and 65-5-103(a).

(D)

(i) A public utility may terminate an approved annual review plan only by filing a general rate case pursuant to §§ 65-5-101 and 65-5-103(a).

(ii) The authority may terminate an approved annual review plan only after citing the public utility to appear and show cause why the authority should not take such action pursuant to the procedures in § 65-2-106.

(iii) The authority or the public utility may propose a modification to the approved annual review plan for consideration by the authority. The authority shall determine whether any proposed modification is in the public interest and should be approved within the time frame set forth in subdivision (d)(6)(C). If the authority denies a modification to the approved annual review plan, the authority shall set forth with specificity the reasons for its denial.

(7) In addition to the alternative regulatory methods described in this subsection (d), a public utility may opt to file for other alternative regulatory methods. Upon a filing by a public utility for an alternative method not prescribed, the authority is empowered to adopt policies or procedures, that would permit a more timely review and revisions of the rates, tolls, fares, charges, schedules, classifications or rate structures of public utilities, and that would further streamline the regulatory process and reduce the cost and time associated with the ratemaking processes in §§ 65-5-101 and 65-5-103(a).

(e) For purposes of this section, the term "public utility" does not include a telecommunications carrier that elects market regulation pursuant to § 65-5-109.

SECTION 6. This act shall take effect upon becoming law, the public welfare requiring it.

HOUSE BILL NO. 191

PASSED: APRIL 8, 2013

BETH HARWELL, SPEAKER
HOUSE OF REPRESENTATIVES

RON RAMSEY
SPEAKER OF THE SENATE

APPROVED this 19th day of April 2013

BILL HASLAM, GOVERNOR

PUBLIC CHAPTER NO. 423

PUBLIC CHAPTER NO. 423

SENATE BILL NO. 852

By Ketron, Bell, Tracy

Substituted for: House Bill No. 1272

By Matheny, Sargent, Harrison, Haynes, Swann, Hawk, Dean, Eldridge, Littleton, Jernigan, Shepard, Kevin Brooks, Watson, Forgety, Sparks, Moody, Faison, Weaver, Womick

AN ACT to amend Tennessee Code Annotated, Title 4; Title 67 and Title 68, relative to alternative fuel vehicles and fueling infrastructure.

WHEREAS, the United States consumed nearly eighteen million eight hundred thousand (18,800,000) barrels of oil in 2011; and

WHEREAS, forty-five percent (45%) of the oil consumed was imported from other countries; and

WHEREAS, the petroleum market is a global market, and the price of oil is greatly affected by world events; and

WHEREAS, eighty-five percent (85%) of the natural gas consumed in the United States is produced domestically; and

WHEREAS, U.S. natural gas resources are estimated at one trillion seven hundred billion (1,700,000,000) cubic feet, enough to last one hundred (100) years or more; and

WHEREAS, the newly discovered, domestic natural gas reserves have led to low natural gas prices and price stability. Natural gas prices are unaffected by turmoil in the Middle East; and

WHEREAS, the United States leads the world in natural gas production, but lags in the usage of natural gas vehicles; and

WHEREAS, the price of compressed natural gas is nearly half the price of gasoline or diesel; and

WHEREAS, natural gas powers more than one hundred thousand (100,000) vehicles in the United States and roughly eleven million two hundred thousand (11,200,000) vehicles worldwide and is a good power choice for high-mileage fleets, such as buses and taxis, that are centrally fueled or operate within a limited area; and

WHEREAS, the advantages of natural gas as an alternative fuel include its domestic availability, widespread distribution infrastructure, low cost when compared with gasoline and diesel fuels, and clean-burning qualities; and

WHEREAS, the U.S. Department of Energy found that there are two (2) forms of natural gas which may be used in vehicles and are considered alternative fuels under the Energy Policy Act of 1992: compressed natural gases or liquefied natural gases; and

WHEREAS, the Tennessee general assembly finds that energy independence is a worthy public policy goal; now, therefore,

BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF TENNESSEE:

SECTION 1. This act shall be known and may be cited as the "Energy Independence Act of 2013."

4-3-1109

SECTION 2. Tennessee Code Annotated, Section 4-3-1109, is amended by deleting the section in its entirety and substituting the following:

4-3-1109.

(a) The commissioner shall encourage the acquisition of energy-efficient and alternative fuel motor vehicles in the fleet of state vehicles. Each year, every effort should be made to achieve a target goal that one hundred percent (100%) of newly purchased passenger motor vehicles be energy-efficient or alternative fuel motor

vehicles. The department shall ensure that at least twenty-five percent (25%) of newly purchased passenger motor vehicles procured for use in areas designated by the United States environmental protection agency (EPA) as nonattainment areas shall be hybrid-electric vehicles or vehicles powered by natural gas; provided, that such vehicles and fueling infrastructure are available at the time of procurement and such vehicles are purchased at competitive prices. In the event that such vehicles or fueling infrastructure is not available at the time of procurement, the department may instead meet this mandate by procuring compact fuel-efficient vehicles. In areas not designated by the EPA as nonattainment areas, the department shall ensure that at least twenty-five percent (25%) of newly purchased passenger motor vehicles are hybrid-electric vehicles, vehicles powered by natural gas, or compact fuel-efficient vehicles; provided, that such vehicles are purchased at competitive prices.

(b)(1) Commencing June 30, 2013, the commissioner shall compile and maintain information on the nature of passenger motor vehicles that are owned and leased by the state, including, but not limited to:

(A) The number of passenger motor vehicles purchased during the fiscal year categorized by energy-efficiency; and

(B) The number of passenger motor vehicles owned as of June 30 of each year categorized by energy-efficiency.

(2) The commissioner shall file an annual report with the governor and the general assembly concerning such passenger motor vehicles. The report shall include at a minimum:

(A) Problems or concerns the state may have experienced in meeting the target goal set pursuant to subsection (a) relative to obtaining such energy-efficient motor vehicles;

(B) Any savings or increased expenditures to the state in the purchase of, as well as the operation and maintenance cost of, such motor vehicles;

(C) Plans for integrating energy-efficient motor vehicles identified in subdivisions (c)(1)(E) and (G) into the state passenger motor vehicle fleet;

(D) The volume of gasoline or diesel displaced by the usage of energy-efficient or alternative fuel vehicles; and

(E) The emissions reduction achieved by the usage of energy-efficient or alternative fuel vehicles.

(3) The information compiled and maintained pursuant to subdivisions (b)(1) and (2) shall be made accessible to the public on the department's website through a prominent link provided on the home page. In addition, the department shall submit an annual report containing the information compiled and maintained pursuant to subdivisions (b)(1) and (2) to the speaker of the senate and the speaker of the house of representatives and to the chairs of the committees concerning government operations and to the chair of the energy, agriculture and natural resources committee of the senate and the chair of the agriculture and natural resources committee of the house of representatives.

(c) For purposes of this section unless the context otherwise requires:

(1) "Energy-efficient motor vehicle" means a passenger motor vehicle that is:

(A) An alternative fuel vehicle as defined by the Energy Policy Act of 1992 (P.L. 102-486);

(B) A flexible fuel vehicle (FFV) utilizing ethanol, biodiesel, or any other commercially available alternative fuel approved by the United States department of energy;

(C) A hybrid-electric vehicle (HEV);

(D) A compact fuel-efficient vehicle, defined as a vehicle powered by unleaded gasoline that has a United States EPA estimated highway gasoline mileage rating of at least twenty-five miles per gallon (25 mpg) or greater for the model year purchased;

(E) An electric vehicle (EV);

(F) A vehicle powered by natural gas; or

(G) A vehicle powered by ultra low sulfur diesel fuel that meets Bin 5, Tier II emission standards mandated by the EPA and that has an EPA-estimated highway mileage rating of at least thirty miles per gallon (30 mpg) or greater for the model year purchased; and

(2) "Passenger motor vehicle" means a motor vehicle designed for carrying six (6) or fewer adult passengers and used for the transportation of persons; provided, that vans, including cargo vans, trucks, sport utility vehicles, and police pursuit vehicles shall not be considered passenger motor vehicles.

(d) For purchases of vehicles that are not passenger motor vehicles, including cargo vans, trucks, and sport utility vehicles, the department is encouraged to make reasonable efforts to achieve a target goal that at least five percent (5%) of newly purchased vehicles are vehicles powered by natural gas, provided that such vehicles and fueling infrastructure are available at the time of procurement and such vehicles are purchased at competitive prices.

(e) In order to facilitate the development of natural gas fueling infrastructure, the department is authorized to participate in such pilot projects as may be necessary to insure the availability of natural gas fueling infrastructure throughout the interstate highway corridors in Tennessee.

4-22-101 SECTION 3. Tennessee Code Annotated, Section 4-22-101(b), is amended by inserting the following language after "hybrid electric vehicles": ", natural gas vehicles".

67-5-601 SECTION 4. Tennessee Code Annotated, Section 67-5-601, is amended by adding the following as a new, appropriately designated subsection:

(f) The general assembly finds that any public utility property or commercial and industrial property that is used to engage in the fueling of natural gas vehicles and that is a certified alternative fueling site as described in the definition of "certified green energy production facility" in § 67-4-2004, is generally capable of fueling fewer types of vehicles due to limited availability from original equipment manufacturers, that use of such alternative, domestically produced transportation fuels should be encouraged to improve air quality and to enhance our nation's energy security, and immediate economic value for all purposes under this chapter should not initially exceed thirty percent (30%) of its total installed costs. The general assembly further finds that, unless the findings are considered in the determination of the sound, intrinsic, and immediate economic value of such property for all purposes under this chapter, investment in property for fueling alternative fuel vehicles will be unreasonably discouraged, denying the citizens of this state the environmental benefits and domestic energy security associated with the use of natural gas as a transportation fuel. The assessor of property, in assessing any such commercial and industrial property, or the comptroller, in assessing any such public utility property, that engages in the fueling of motor vehicles with natural gas, shall take these findings by the general assembly into account in determining the sound, intrinsic, and immediate economic value of such property, when the property is initially appraised and each time the property is reappraised. A copy of the facility certification issued by the department of environment and conservation shall be required in order to qualify for such valuation. The valuation of personal property under this section shall also apply to machinery and equipment utilized in a natural gas vehicle fueling station. Such equipment shall include, but not be limited to: storage vessels, compressors, dryers, dispensers, piping, compressed or liquefied gas appliances, or any other item that is installed by a natural gas provider.

67-4-2004 SECTION 5. Tennessee Code Annotated, Section 67-4-2004(9), is amended by deleting the subsection in its entirety and replacing with the following language:

(9) "Certified green energy production facility" means:

(A) A facility certified by the department of environment and conservation as producing electricity for use and consumption off the premises using clean energy

technology. For the purposes of this subdivision (9)(A), clean energy technology means technology used to generate energy from geothermal, hydrogen, solar, and wind sources;

(B) A facility certified by the department of environment and conservation as an alternative motor vehicle fueling station that utilizes natural gas in compressed or liquid form for the purpose of fueling motor vehicles and that is projected to displace more than six thousand (6,000) gallons of petroleum annually; or

(C) A facility which utilizes natural gas in a combined heat and power configuration (CHP) for production of heat and electricity for consumption onsite.

4-22-101 SECTION 6. Tennessee Code Annotated, Section 4-22-101, is amended by deleting the term "fuel-efficient" wherever it appears in the section and substituting the term "energy-efficient motor vehicle", and by deleting subsection (d) and substituting the following:

(d) For purposes of this section:

(1) "Motor vehicle" means a self-propelled vehicle licensed for highway use; and

(2) "Energy-efficient motor vehicle" means a passenger motor vehicle that is:

(A) An alternative fuel vehicle as defined by the Energy Policy Act of 1992 (P.L. 102-486);

(B) A flexible fuel vehicle (FFV) utilizing ethanol, biodiesel, or any other commercially available alternative fuel approved by the United States department of energy;

(C) A hybrid-electric vehicle (HEV);

(D) A compact fuel-efficient vehicle, defined as a vehicle powered by unleaded gasoline that has a United States EPA estimated highway gasoline mileage rating of at least twenty-five miles per gallon (25 mpg) or greater for the model year purchased;

(E) An electric vehicle (EV);

(F) A vehicle powered by natural gas; or

(G) A vehicle powered by ultra low sulfur diesel fuel that meets Bin 5, Tier II emission standards mandated by the EPA and that has an EPA-estimated highway mileage rating of at least thirty miles per gallon (30 mpg) or greater for the model year purchased.

SECTION 7. If any provision of this act or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of the act which can be given effect without the invalid provision or application, and to that end the provisions of this act are declared to be severable.

Effective date 5/16/2013 SECTION 8. This act shall take effect upon becoming a law, the public welfare requiring it.

The ORGANIZATION of INDUSTRY

Winner of the Nobel Prize in Economics in 1982

GEORGE J. STIGLER

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Chapter 6

BARRIERS TO ENTRY, ECONOMIES OF SCALE, AND FIRM SIZE

Let us begin with definitions of the three concepts whose interrelations are the subject of this chapter:

1. Barriers to entry. A barrier to entry may be defined as a cost of producing (at some or every rate of output) which must be borne by a firm which seeks to enter an industry but is not borne by firms already in the industry.
2. Economies of scale. The economies of scale constitute the relationship between the size of a firm (or plant) and its costs of production in the broadest sense. The relationship may be symbolized by a long-run average cost curve representing the least possible cost of every output.
3. Firm size. Firm size can be measured by output. Multiple products are irrelevant to the subject of this note, so we shall assume that each firm has the identical product. Nevertheless, there may be product "differentiation" due to location, advertising, etc. Output is long-run equilibrium output.

Our problem is simply: on what does firm size depend—economies of scale, barriers to entry, or something else?

Two simple cases will suffice to demonstrate that the language of economists has been lax. The first case is a monopoly whose existence arises simply because only one firm can exist with the given industry demand (*Fig. 6–1*). Some economists will say that the economies of scale are a barrier to entry, meaning that such economies explain why no additional firms enter. It would be equally possible to say that inadequate demand is a barrier to entry. If we define a barrier as a differentially higher cost of new firms, there is no barrier and the firm size is governed by economies of scale and demand conditions.

Next, consider an industry with many independent firms but an absolute barrier to the entry of new firms. The New York City taxi business, with its limited license medallions, is an example. Let there also be diseconomies of scale beyond a given output (Fig. 6–2). With licensing,

FIGURE 6-1

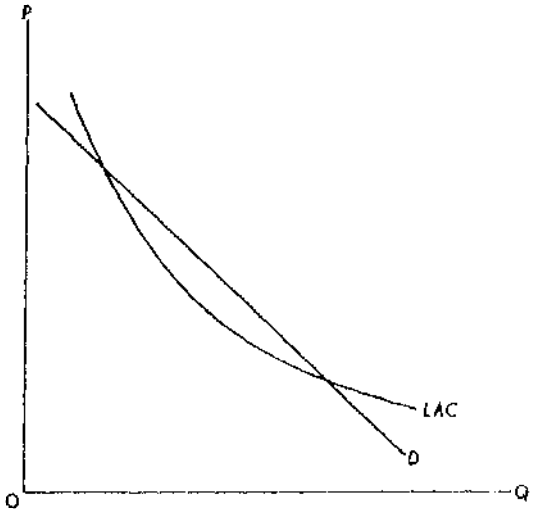
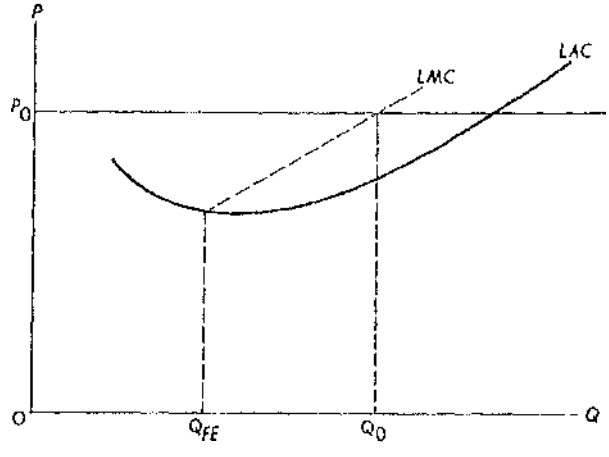


FIGURE 6-2



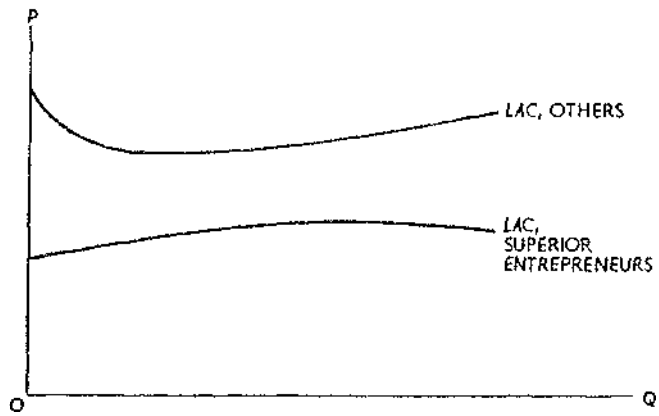
each firm operates at output Q_0, given the demand which yields a price P_0. With free entry, each firm would operate at output Q_{FE}.[1] The license-governed output of Q_0 is set by (dis)economies of scale *and* demand conditions *and* barriers to entry. In our unceasing search for more elegant formulations, however, we can get rid of barriers by stating that the firm

[1] If there are external economies or diseconomies (different costs for industry-wide output changes), the cost curve will shift, and its minimum at the simultaneously determined industry output will fix firm size.

size will be governed by economies of scale and the demand conditions *of the firm* (as well as of the industry)—which are influenced by barriers as well as by incomes, prices of other goods, etc.[2]

These examples suggest that we say that demand and cost (economies of scale) *conditions govern the sizes of firms.* The barriers to entry would then be restricted to differentially higher costs of new firms, which act as one force—others are location and advertising and product characteristics—which affects the demands of individual firms. This choice of language is consistent within itself, does no violence to our general understanding of these concepts, and begs no substantive issues.

FIGURE 6–3



Several implications of this terminology may be commented upon briefly:

1. Entrepreneurs differ in abilities, so "the" long-run cost curve may differ among men. A superior entrepreneur operating with diseconomies of scale may monopolize an industry because his costs are below those of all potential rivals (Fig. 6–3). This offers no problems to our terminology because firm size is still governed by economies of scale (height and slope of cost curves) and demand, but it emphasizes the fact that the conventional language is directed to a situation in which curves depend only on factors (such as size) common to all firms. Of course, if the superior entrepreneur is also equally superior elsewhere, his alternative costs will be as high as those of other firms.

[2] If in this license case there were no diseconomies of scale, there might be only one firm (economies of scale) or an indeterminate number (constant returns to scale).

2. Capital requirements are often listed as a barrier to entry. Since existing firms also have to meet these requirements, they are not a barrier in our terminology. They are a determinant (if they are relevant at all) of the economies of scale—the shape of the long-run average cost curve.

3. Suppose, in an industry without economies of scale, a merger of firms lends to temporary monopoly profits. We would say that the (short-run) demand curve facing individual firms has been changed.

4. A firm sells its product at a higher price than rivals obtain. Again we say the size of the firm is governed by economies of scale and its demand curve. However, suppose that a given size of firm systematically gets higher prices because (for example) its product is more attractive to buyers. A small shoe manufacturer adapts to new fashions more quickly, or a large manufacturer of engines has a superior network of repair facilities. If the demand conditions of the firm vary with a characteristic associated with firm size, our language permits us to say that the characteristic is an element of demand or of economies of scale. In keeping with the general tradition of keeping out of demand as much of producer-controlled factors as one can, we would call these selling advantages economies of scale but no important principle is at stake.

5. "Free" entry, in our language, is entry by firms suffering no cost differentials relative to existing firms. Free entry is compatible with huge capital requirements (which are a source, perhaps, of economies of scale).

6. Product differentiation is often treated as a barrier to entry.[3] This is correct usage, on our approach, only if the costs of differentiation (design, advertising, etc.) are higher for a new firm than an existing firm. Otherwise differentiation is a (possible) source of economies of scale.

[3] See J. S. Bain, *Barriers to Entry* (Harvard University Press, 1956), chap. iv.

Kahn, Alfred E., The Economics of Regulation, 1988, Vol. I, p. 11.

competition,[32] an argument that reinforced the movement, increasingly popular among businessmen, for "rationalization" of industry by industry-wide cooperation and cartelization.[33] Not surprisingly, it was in the middle of the Great Depression that these views ultimately prevailed—in the *Nebbia* decision, which involved *minimum* price fixing for milk, and more generally in the National Recovery Program, which, in quest of general economic recovery, introduced industry-wide 'codes of fair competition."[34] That these codes were used to involve much more self-regulation of industry and cartelization than effective governmental controls does not alter the fact that the National Recovery Administration represented during its short lifetime a further blurring of the distinction between the competitive and public utility sectors; and many of its policies continue to be applied today.

And yet there is such a thing as a public utility. The line between these and other types of industries is a shadowy area; and it shifts over time. But there remains a core of industries, privately owned and operated in this country, in which, at least in principle, the primary guarantor of acceptable performance is *conceived* to be (whatever it is in truth) not competition or self-restraint but direct government controls—over entry (and in many instances exit), *and* price, *and* conditions of service—exercised by administrative commissions constituted for this specific purpose.[35] In this respect, the public utilities remain a fairly distinct group, comprising the same industries that 60 to 80 years ago would have been given essentially the same designation and regulatory treatment—the generation, transmission, and distribution of electric power; the manufacture and distribution of gas; telephone, telegraph, and cable communications, common-carrier transportation, urban and interurban, passenger and freight; local water and sewerage supply (to the extent at least that these continue to be provided by privately-owned companies); and, in a sense at the periphery, banking. The list could well embrace, also, warehouses, docks, wharves, stockyards, taxi, ticket brokers, employment exchanges, ice plants, steam heating companies, cotton gins, grist mills, irrigation companies, stock exchanges, and expres

[32] See, for example, the analysis and proposals by Walton H. Hamilton and Helen R. Wright, *The Case of Bituminous Coal* (New York: The Macmillan Co., 1925), and Walton H. Hamilton, *A Way of Order for Bituminous Coal* (New York: The Macmillan Co., 1928); and A. R. Burns, *loc. cit.*

[33] See, for example, Robert A. Brady, *Business as a System of Power* (New York: Columbia University Press, 1943), Chapters 7 and 8; George W. Stocking and Myron W. Watkins, *Cartels or Competition?* (New York: Twentieth Century Fund, 1948), Chapter 2; and *Monopoly and Free Enterprise* (New York: Twentieth Century Fund, 1951), Chapter 8.

[34] See A. R. Burns, *op. cit.*, Chapter 10, and Clair Wilcox, *op. cit.*, 677-687.

[35] Every state, including the District of Columbia, Puerto Rico, and the Virgin Islands, has such a commission, although the powers vested in them vary. For example, the Minnesota and Nebraska state commissions do not regulate either the retail or the wholesale rates, and those of Texas and South Dakota control only the wholesale rates charged by private electric companies. But the Nebraska exception is easily explained: there are no private electric utilities in that state. In all four states the municipalities have jurisdiction over the retail rates. All the other state commissions regulate at least the retail rates. No less than nine states have not given their commissions authority to require certificates of convenience and necessity before companies may begin service in a new area or to control abandonments; but in most, if not all of them, the municipalities do have these powers. The situation in natural gas distribution is similar. All states except [illegible] regulate telephone rates. For a survey, see Senate, Committee on Government Operations, Subcommittee on Intergovernmental Relations, 90th Cong. 1st Sess., *State Utility Commissions: Summary and Tabulation of Information Submitted by the Commissions*, Washington, 1967. See also Federal Power Commission, *Federal-State Commission Jurisdiction and Regulation: Electric, Gas, and Telephone Utilities*, Washington, [illegible]

companies.[37] There have been some new entrants that would have been recognized barely or not at all in, for example, 1900—the production and field sale of natural gas, common carrier pipeline transmission of hydrocarbons, commercial aviation and trucking. But the principles underlying the extension of direct regulation to most of them were the traditional ones: they were new common carriers, or required franchises or certifications carrying with them the right of eminent domain, or were conceived of as so intimately affecting the prices or service of the traditional utilities as to require regulation themselves (as in the case of trucking and the field sales of natural gas).

THE ECONOMIC RATIONALE

It would be tidy to include in this introduction an exposition of the economic logic of the institution of regulated monopoly. The list of economic justifications would have to involve the following:

1. The importance of these industries, as measured not merely by their own sizeable share in total national output, but also by their very great influence, as suppliers of essential inputs to other industries, on the size and growth of the entire economy. These industries constitute a large part of the "infrastructure" uniquely prerequisite to economic development. On the one hand they condition the possibilities of growth (as Adam Smith recognized, the division of labor is limited by the extent of the market, and the latter depends in turn on the availability and price of transportation).[38] On the other hand, because many of these industries are characterized by great economies of scale, their own costs and prices depend in turn on the rate at which the economy and its demand for their services grows. As general economic growth proceeds, the contribution of these industries to further expansion is thus enhanced by their own progressive realization of those economies of scale, in a cumulative and self-reinforcing process.
2. That many of them are "natural monopolies"—their costs will be lower if they consist of a single supplier. This creates the efficiency case for monopolistic organization and, along with the importance of the service and the consequent inelasticity of demand, the need for regulation to protect the consuming public.
3. That for one or another of many possible reasons, competition simply does not work well.

But this would be a terribly superficial statement. And it will take many chapters to make it less so. The reason is that every part of the rationalization involves an issue or series of issues instead of a settled conclusion. For instance, the public utilities are important; but do they make a greater contribution to national product or economic growth than the provision of food, medical

[36] Paul J. Garfield and Wallace [illegible], *Public Utility Economics* (Englewood [illegible], 1956), Chapters 1, 3, 13, [illegible] passim; Martin G. [illegible] in American Capitalism [illegible] Macmillan Co., 1957); [illegible] entry into banking is [illegible] of charters, and the [illegible] banks are subjected to complicated restrictions and detailed inspection and supervision, and certain restrictions are placed on their pricing—notably limitations on the interest charges they may pay to depositors—the rates banks actually pay and charge and the profits they may earn are not explicitly set by the regulatory authorities.

[38] Adam Smith, *op. cit.*, I: 19-22.

Cited
As of: December 8, 2014 7:53 PM EST

US LEC of Tenn., Inc. v. Tenn. Regulatory Auth.

Court of Appeals of Tennessee, at Nashville

May 4, 2005, Session ; April 17, 2006, Filed

No. M2004-01417-COA-R12-CV

Reporter
2006 Tenn. App. LEXIS 243; 2006 WL 1005134

US LEC OF TENNESSEE, INC. v. TENNESSEE REGULATORY AUTHORITY

Prior History: [*1] *Tenn. R. App. P. 12* Petition for Review; Judgment of the Tennessee Regulatory Authority Affirmed. Appeal from the Tennessee Regulatory Authority. No. 02-00562. Sara Kyle, Chairman.

Disposition: Judgment of the Tennessee Regulatory Authority Affirmed.

Core Terms

telecommunications service, services, telecommunications, statute's, provider, electric, courts, electric utility, cross-subsidy, certificate, customers, subsidy, convenience and necessity, cross-subsidization, unregulated, regulated, costs, hearing officer, conditions, activities, marketing, DICTIONARY, insisted, initial order, uncompensated, competitors, municipal, construe, words

Case Summary

Procedural Posture

Appellant privately owned telecommunications provider filed a complaint with the Tennessee Regulatory Authority asserting appellee competing provider owned by a municipal electric utility was receiving an illegal cross-subsidy in violation of *Tenn. Code Ann. § 7-52-402* (2005) because the utility was permitting the provider to use its name without compensation. A hearing officer held that there was no cross-subsidy. The private provider appealed.

Overview

The outcome of the appeal hinged on the scope of *§ 7-52-402*'s prohibition against a municipal electric system providing subsidies to its telecommunications services division. The authority and the competing provider claimed that the subsidies prohibited by *§ 7-52-402* were confined to the use of revenues from the sale of electricity to pay for costs of providing telecommunications services. The appellate court held that use of the electric utility's name was not a cross-subsidy prohibited by *§ 7-52-402*. The purpose of *§ 7-52-402* was to prevent municipal electric utilities who decided to provide telecommunications services from shifting the costs of providing telecommunications services to their electricity customers. The utility established its reputation long before its telecommunication's company began providing telecommunications services. When that company began operating, it was required to establish its own identity in the local telecommunications services market, and the record contained no evidence that the utility's electricity customers paid for any of those promotional costs. The record showed that the company actually used its own revenues to pay those costs.

Outcome

The judgment of the trial court was affirmed. The case was remanded. The costs of the appeal were taxed to the privately owned telecommunications provider.

LexisNexis® Headnotes

Civil Procedure > Appeals > Standards of Review > De Novo Review

Governments > Legislation > Interpretation

HN1 The search of the meaning of statutory language is a judicial function. While the courts must carefully consider an administrative agency's interpretation of the statutes it is charged to enforce, issues involving the construction of statutes involve questions of law. Accordingly, the courts must make their own independent determination regarding a statute's meaning without presuming that the agency's interpretation of the statute is correct.

Governments > Legislation > Interpretation

HN2 When the courts are called upon to construe a state statute, their primary responsibility is to ascertain and give effect to the intent and purpose of the Tennessee General Assembly. The courts must avoid constructions that unduly restrict or expand the statute's application. The goal is to construe a statute in a way that avoids conflict and facilitates the harmonious operation of the law.

Governments > Legislation > Interpretation

HN3 The search for a statute's purpose must begin with the words of the statute itself. The courts must construe statutes as they find them. The courts must also presume that the general assembly chose its words purposefully and deliberately, and that the words chosen by the general assembly convey the meaning that the general assembly intended them to convey.

Governments > Legislation > Interpretation

HN4 The courts must construe a statute's words using their natural and ordinary meaning unless the context in which the words are used requires otherwise. Because words are known by the company they keep, the courts should construe statutory language in the context of the entire statute and it light of the statute's general purpose. When the meaning of statutory language is clear, the courts must interpret the statute as written, rather than using the rules of construction to give the statute another meaning.

Governments > Legislation > Interpretation

HN5 Statutes, however, are not always free from ambiguity. When the courts encounter ambiguous statutory language, language that can reasonably have more than one meaning, they must look to the entire statute, the statutory scheme of which the statute is a part, and elsewhere to ascertain the general assembly's intent and purpose. The courts frequently find interpretive guidance in a statute's legislative history. The courts must, however, be cautious when they consult a statute's legislative history. A statute's meaning must be grounded in its text. Thus, comments made during the general assembly's debates cannot justify a construction of a statute that has no reference points in the text of the statute itself. When a statute's text and the comments made by legislators during the debates on the statute diverge, the text controls.

Governments > Legislation > Interpretation

HN6 While consulting a dictionary may be a helpful place to identify the possible meanings of a word or phrase, it is only the beginning of the search for legislative intent, not the end. Statutes should not be construed as if they are simply a series of definitions strung together. Once the possible meanings of a word or phrase have been identified, the courts should then narrow the possibilities by considering the context in which the word or phrase is used, the underlying facts, the legislative history, and prior decisions.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Energy & Utilities Law > Utility Companies > General Overview

HN7 In its most general sense, the word "subsidy" refers to a grant or gift of money or other property made by way of financial aid. It is also commonly understood as a grant usually made by the government, to any enterprise whose promotion is considered to be in the public interest. In the context of regulated industries, a "subsidy" is a payment by the government or other entity to a producer in order to induce the producer to provide services otherwise thought to be unprofitable.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Energy & Utilities Law > Utility Companies > General Overview

HN8 With regard to the regulated services, a subsidy involves an external flow of cash from an outside source. The internal flow of cash from one division of an enterprise to another is referred to as a "cross-subsidy." A cross-subsidy occurs when an enterprise uses the revenues from the sale of one service to offset its cost to produce and sell another service.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN9 Cross-subsidies are not commonplace in unregulated markets. They are not profit maximizing, and thus enterprises providing unregulated services have little incentive to cross-subsidize. However, incentives to cross-subsidize arise when an enterprise provides services in both regulated and unregulated markets. In that circumstance, the enterprise may seek to lower the price of the service in the unregulated market by allocating a portion of its costs of providing the service to its costs of providing the regulated service.

Antitrust & Trade Law > Regulated Practices > Price Fixing & Restraints of Trade > General Overview

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Energy & Utilities Law > Utility Companies > Rates > General Overview

HN10 The use of revenues from the sale of services in a regulated market to subsidize the cost of providing the services in the unregulated market is a cross-subsidy. The practice is anti-competitive and produces two negative effects. First, it results in the enterprise's customers in the regulated market being overcharged for their services because they are paying the cost of the subsidy of the unregulated service. Second, the enterprise engaging in cross-subsidization gains an unfair competitive advantage in the unregulated market because the cross-subsidy enables the enterprise to provide the unregulated service below its actual cost.

Communications Law > ... > Regulated Entities > Telephone Services > General Overview

Energy & Utilities Law > Utility Companies > General Overview

Governments > Local Governments > Duties & Powers

HN11 The purpose of *Tenn. Code Ann. § 7-52-402* is to prevent municipal electric utilities who decide to provide telecommunications services from shifting the costs of providing telecommunications services to their electricity customers.

Counsel: Henry M. Walker and Kristy R. Godsey, Nashville, Tennessee, for the appellant, US LEC of Tennessee, Inc.

Carlos C. Smith and Mark W. Smith, Chattanooga, Tennessee, for the appellee, Electric Power Board of Chattanooga.

J. Richard Collier, Carolyn E. Reed, and Randall Gilliam, Nashville, Tennessee, for the appellee, Tennessee Regulatory Authority.

Judges: WILLIAM C. KOCH, JR., P.J., M.S., delivered the opinion of the court, in which PATRICIA J. COTTRELL and FRANK G. CLEMENT, JR., JJ., joined.

Opinion by: WILLIAM C. KOCH, JR.

Opinion

This appeal involves a dispute between two telecommunications services providers in the Chattanooga market. A privately owned provider filed a complaint with the Tennessee Regulatory Authority asserting that a competing provider owned by a municipal electric utility was receiving an illegal cross-subsidy because the electric utility was permitting the provider to use its name without compensation. One of the Authority's [*2] hearing officers conducted a hearing and then filed an initial order concluding that the provider owned by the electric utility was not receiving a cross-subsidy in violation of *Tenn. Code Ann. § 7-52-402* (2005). After the initial order became final, the private provider filed a *Tenn. R. App. P. 12* petition for review with this court. We have concluded that the provider's uncompensated use of the electric utility's name is not a cross-subsidy prohibited by *Tenn. Code Ann. § 7-52-402*.

OPINION

I.

The Electric Power Board of Chattanooga (EPB) was created by private act in 1935. [1] It provides electric power to both business and residential customers in the City of Chattanooga, most of Hamilton County, and parts of eight other Tennessee counties and North Georgia. In October 1997, after the Tennessee General Assembly, following Congress's lead, authorized municipal electric utilities to begin offering telecommunications services, [2] EPB applied to the Tennessee Regulatory Authority (Authority) for a certificate of convenience and necessity to enable it to begin providing telecommunications services through a telecommunications [*3] division that would be separate from EPB's electric utility system.

Because EPB's application was the first of its kind in Tennessee, the Authority convened a contested case proceeding to consider its application for a certificate of convenience and necessity. Eight entities intervened in the proceeding, including the Consumer Advocate Division of the Office of the Attorney General and Reporter, BellSouth Telecommunications, Inc., AT&T Communications of the Southern States, Inc., and the Tennessee Cable Telecommunications Association (TCTA). US LEC of Tennessee, Inc. (US LEC), a North Carolina telecommunications services provider doing business in the

[1] Act of Apr. 15, 1935, ch. 455, 1935 Tenn. Priv. Acts 1125.

[2] Act of May 27, 1997, ch. 531, 1997 Tenn. Pub. Acts 963 (codified at Tenn. Code Ann. §§ 7-52-401, -407 (2005)).

Chattanooga market, did not intervene. From the outset, EPB made it clear that it intended to operate its telecommunications division under its own name, and [*4] the intervenors likewise made it clear that they were equally insistent that EPB's electric utility system should not cross-subsidize its telecommunications division.

The TCTA led the opposition to EPB's application for a certificate of convenience and necessity. One of TCTA's experts recognized that, unlike other new entrants into the local telecommunications services market, EPB had a "substantial amount of goodwill and name recognition developed with those electric ratepayers." To address TCTA's concerns about the cross-subsidization prohibited by *Tenn. Code Ann. § 7-52-402*, the TCTA and EPB negotiated and filed with the Authority a detailed set of conditions on EPB's certificate that were intended to ensure compliance with *Tenn. Code Ann. § 7-52-402*. [3]

By their own terms, these conditions [*5] formed "the essential methods that EPB should adopt to properly separate telecommunications from electric power accounting data, [to] provide assurance that cross-subsidization does not occur, and to properly allocate cost." The conditions recognized that EPB would provide telecommunications services through a discrete telecommunications services division, that the revenues and expenses of the telecommunications services division would be segregated from those of the electric utility system, and that the two entities would acquire services from each other at the rates charged other customers. They also provided a "general allocator" for expenses that could not be directly allocated. With specific regard to joint marketing, the conditions included a Code of Conduct providing that:

> The electric system and the telecommunications division of the Electric Power Board of Chattanooga may jointly offer their respective products and services to customers provided that the customer is informed (a) of the separate identities of each and (b) that the products and services of the electric utility system are distinct and separately priced from the offerings of the telephone division and [*6] the customer may select one without the other.

On May 10, 1999, the Authority granted EPB a certificate of convenience and necessity, and "EPB Telecom" began providing telecommunications services to local businesses in April 2000.

On May 15, 2002, US LEC filed a complaint with the Authority alleging that EPB was engaging in discriminatory and anti-competitive business practices. It complained that EPB was allowing EPB Telecom to use EPB's name, that EPB was granting EPB Telecom access to buildings that it was not granting to other telecommunications providers, and that EPB had failed to file its annual audits with the Authority. BellSouth Telecommunications, Inc. intervened in the proceeding, and in June 2002, the Authority referred the matter to a hearing officer for disposition. Three months later, US LEC filed an amendment to its complaint containing a fourth allegation - that EPB Telecom had refused to allow US LEC to interconnect with EPB Telecom's network or to provide certain unbundled services.

The hearing officer later concluded that US LEC did not have standing to take issue with EPB Telecom's failure to file its annual audits, and the parties informally resolved [*7] US LEC's building access and network interconnection and unbundled services claims. Thus, the only remaining issue involved US LEC's claim that EPB's marketing and advertising activities violated the anti-subsidization provisions in *Tenn. Code Ann. § 7-52-402* or the Code of Conduct agreed upon by EPB and the TCTA.

The hearing officer conducted hearings on February 25 and March 16, 2004. During these hearings, US LEC presented evidence that EPB's name was instantly recognizable and that it had value because of the company's reputation for quality and goodwill with its customers. It also presented evidence purporting to demonstrate that EPB was intentionally blurring the lines between its electric utility system and EPB Telecom. US LEC cited various sales tactics, joint marketing activities, press releases, and the EPB website as evidence of the manner in which EPB had allowed EPB Telecom to leverage EPB's name and insisted that these activities violated the Code of Conduct and *Tenn. Code Ann. § 7-52-402*. For its part, EPB insisted that its conduct was consistent with both the Code of Conduct and *Tenn. Code Ann. § 7-52-402* [*8] .

In its post-hearing brief, US LEC insisted that joint marketing provisions in the Code of Conduct should be clarified and strengthened. It argued that EPB Telecom should be required either to pay EPB for the use of its name or to operate using a name that did not indicate a relationship with EPB. Because of the difficulties in quantifying the benefit that

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[3] The Authority had requested the TCTA and EPB to confer about the issues raised regarding EPB's compliance with Tenn. Code Ann. § 7-52-402.

EPB Telecom derives from its use of the EPB name, US LEC argued that requiring EPB Telecom to change its name would be more appropriate and that changing EPB Telecom's name would not pose an undue hardship on EPB Telecom because name changes are common in the telecommunications industry.

The hearing officer filed an initial order on May 6, 2004. Despite her conclusion that US LEC lacked standing to challenge EPB's advertising and marketing activities, [4] the hearing officer invoked the Authority's general supervisory and regulatory power under *Tenn. Code Ann. § 65-4-104* (2004) as authority to address US LEC's complaints about EPB's and EPB Telecom's conduct. The hearing officer then concluded that EPB Telecom's uncompensated use of the EPB name was not a subsidy prohibited by *Tenn. Code Ann. § 7-52-402* [*9] and that neither EPB nor EPB Telecom had violated the Code of Conduct. US LEC did not request the Authority to review the initial order, and so the initial order became the Authority's final order by operation of law on May 21, 2004. US LEC thereafter filed a *Tenn. R. App. P. 12* petition for review on June 8, 2004.

II.

EPB'S ALLEGED VIOLATION OF TENN. CODE ANN. § 7-52-402

The outcome of this appeal hinges on the scope of *Tenn. Code Ann. § 7-52-402*'s prohibition against a municipal electric system providing subsidies to its telecommunications services division. US LEC insists that EPB Telecom's uncompensated use of EPB's name is a subsidy prohibited by *Tenn. Code Ann. § 7-52-402*. The Authority [*10] and EPB respond that the subsidies prohibited by *Tenn. Code Ann. § 7-52-402* are confined to the use of revenues from the sale of electricity to pay for costs of providing telecommunications services. These arguments require the court to focus first on the meaning of the word "subsidies" as it is used in *Tenn. Code Ann. § 7-52-402*.

A.

HN1 The search of the meaning of statutory language is a judicial function. *Roseman v. Roseman, 890 S.W.2d 27, 29 (Tenn. 1994)*; *BellSouth Telecomms., Inc. v. Greer, 972 S.W.2d 663, 672 (Tenn. Ct. App. 1997)*. While the courts must carefully consider an administrative agency's interpretation of the statutes it is charged to enforce, *State ex rel. Pope v. U.S. Fire Ins. Co., 145 S.W.3d 529, 536 (Tenn. 2004)*; *Exxon Corp. v. Metropolitan Gov't, 72 S.W.3d 638, 641 (Tenn. 2002)*, issues involving the construction of statutes involve questions of law. *Sallee v. Barrett, 171 S.W.3d 822, 825 (Tenn. 2005)*; *Memphis Publ'g Co. v. Cherokee Children and Family Servs., Inc., 87 S.W.3d 67, 74 (Tenn. 2002)*. Accordingly, [*11] the courts must make their own independent determination regarding a statute's meaning without presuming that the agency's interpretation of the statute is correct. *Bostic v. Dalton, 158 S.W.3d 347, 350 (Tenn. 2005)*; *Patterson v. Tenn. Dep't of Labor & Workforce Dev., 60 S.W.3d 60, 62 (Tenn. 2001)*.

HN2 When the courts are called upon to construe a state statute, their primary responsibility is to ascertain and give effect to the intent and purpose of the Tennessee General Assembly. *Freeman Indus., LLC v. Eastman Chem. Co., 172 S.W.3d 512, 522 (Tenn. 2005)*; *Sullivan ex rel. Hightower v. Edwards Oil Co., 141 S.W.3d 544, 547 (Tenn. 2004)*. The courts must avoid constructions that unduly restrict or expand the statute's application. *Sallee v. Barrett, 171 S.W.3d at 828*; *Watt v. Lumbermens Mut. Cas. Ins. Co., 62 S.W.3d 123, 127-28 (Tenn. 2001)*. The goal is to construe a statute in a way that avoids conflict and facilitates the harmonious operation of the law. *In re C.K.G., 173 S.W.3d 714, 729 (Tenn. 2005)*; *Frye v. Blue Ridge Neuroscience Ctr., P.C., 70 S.W.3d 710, 716 (Tenn. 2002)*. [*12]

HN3 The search for a statute's purpose must begin with the words of the statute itself. *Calaway ex rel. Calaway v. Schucker, S.W.3d , , 2006 Tenn. LEXIS 179, 2005 WL 3338655, at *5 (Tenn. 2006)*; *Biscan v. Brown, 160 S.W.3d 462, 470 (Tenn. 2005)*. The courts must construe statutes as they find them. *Jackson v. Jackson, 186 Tenn. 337, 342, 210 S.W.2d 332, 334 (1948)*; *Pac. Eastern Corp. v. Gulf Life Holding Co., 902 S.W.2d 946, 954 (Tenn. Ct. App. 1995)*. The courts must also presume that the General Assembly chose its words purposefully and deliberately, *Eastman Chem. Co. v. Johnson, 151 S.W.3d 503, 507 (Tenn. 2004)*; *Merrimack Mut. Fire Ins. Co. v. Batts, 59 S.W.3d 142, 151 (Tenn. Ct. App. 2001)*, and that the words chosen by the General Assembly convey the meaning that the General Assembly intended them to convey. *Biscan v. Brown, 160 S.W.3d at 473*; *Jones v. Garrett, 92 S.W.3d 835, 839 (Tenn. 2002)*.

HN4 The courts must construe a statute's words using their natural and ordinary meaning unless the context in which the words [*13] are used requires otherwise. *Tenn. Waste Movers, Inc. v. Loudon, 160 S.W.3d 517, 519 (Tenn. 2005)*;

[4] The hearing officer concluded that US LEC lacked standing because it had failed to present any evidence that US LEC or any other telecommunications services provider had been adversely affected by EPB's or EPB Telecom's conduct.

Frazier v. East Tennessee Baptist Hosp., Inc., 55 S.W.3d 925, 928 (Tenn. 2001). Because words are known by the company they keep, *In re Audrey S., 182 S.W.3d 838, 870 (Tenn. Ct. App. 2005)*, the courts should construe statutory language in the context of the entire statute and it light of the statute's general purpose. *Honsa v. Tombigbee Transp. Corp., 141 S.W.3d 540, 542 (Tenn. 2004)*; *Osborn v. Marr, 127 S.W.3d 737, 740 (Tenn. 2004)*. When the meaning of statutory language is clear, the courts must interpret the statute as written, *Kradel v. Piper Indus., Inc., 60 S.W.3d 744, 749 (Tenn. 2001)*, rather than using the rules of construction to give the statute another meaning. *Wausau Ins. Co. v. Dorsett, 172 S.W.3d 538, 543 (Tenn. 2005)*; *Poper ex rel. Poper v. Rollins, 90 S.W.3d 682, 684 (Tenn. 2002)*; *Limbaugh v. Coffee Med. Ctr., 59 S.W.3d 73, 83 (Tenn. 2001)*.

HN5 Statutes, however, are not always free from ambiguity. When the courts encounter [*14] ambiguous statutory language - language that can reasonably have more than one meaning [5] - they must look to the entire statute, the statutory scheme of which the statute is a part, and elsewhere to ascertain the General Assembly's intent and purpose. *Sallee v. Barrett, 171 S.W.3d at 828*; *Eastman Chem. Co. v. Johnson, 151 S.W.3d at 507*; *Perrin v. Gaylord Entm't Co., 120 S.W.3d 823, 826 (Tenn. 2003)*. The courts frequently find interpretive guidance in a statute's legislative history. *State ex rel. Pope v. U.S. Fire Ins. Co., 145 S.W.3d at 535*; *Galloway v. Liberty Mut. Ins. Co., 137 S.W.3d 568, 570 (Tenn. 2004)*. The courts must, however, be cautious when they consult a statute's legislative history. *BellSouth Telecomms., Inc. v. Greer*, 972 S.W.2d at 673. A statute's meaning must be grounded in its text. Thus, comments made during the General Assembly's debates cannot justify a construction of a statute that has no reference points in the text of the statute itself. *D. Canale & Co. v. Celauro*, 765 S.W.2d 736, 738 (Tenn. 1989); *Townes v. Sunbeam Oster Co., 50 S.W.3d 446, 453 n.6 (Tenn. Ct. App. 2001)*. [*15] When a statute's text and the comments made by legislators during the debates on the statute diverge, the text controls. *BellSouth Telecomms., Inc. v. Greer*, 972 S.W.2d at 674.

B.

Our task in this case is not limited to picking the most appropriate dictionary definition of the word "subsidies." Rather, it is to ascertain the General Assembly's purpose for enacting *Tenn. Code Ann. § 7-52-402*. ***HN6*** While consulting a dictionary may be a helpful place to identify the possible meanings of a word or phrase, it is only the beginning of the search for legislative intent, not the end. Statutes should not be construed as if they are simply a series of Webster's definitions strung together. *See* LIEF H. CARTER & THOMAS F. BURKE, REASON IN LAW (6th ed. 2002). Once the possible meanings of a word or phrase [*16] have been identified, the courts should then narrow the possibilities by considering the context in which the word or phrase is used, the underlying facts, the legislative history, and prior decisions. REED DICKERSON, THE INTERPRETATION AND APPLICATION OF STATUTES 103 & n.2, 105 (1975); Samuel A. Thumma & Jeffrey L. Kirchmeier, *The Lexicon Has Become a Fortress: The United States Supreme Court's Use of Dictionaries*, *47 Buff. L. Rev. 227, 296 (1999)*.

HN7 In its most general sense, the word "subsidy" refers to "a grant or gift of money or other property made by way of financial aid." [6] [*17] It is also commonly understood as a "grant usually made by the government, to any enterprise whose promotion is considered to be in the public interest." [7] In the context of regulated industries, a "subsidy" is a payment by the government or other entity to a producer in order to induce the producer to provide services otherwise thought to be unprofitable. Gerald R. Faulhaber, *Cross-Subsidy Analysis With More Than Two Services*, 1 J. Competition L. & Econ. 441, 442 (2005) ("Faulhaber").

HN8 With regard to the regulated services, a subsidy involves an external flow of cash from an outside source. Faulhaber, 1 J. Competition L. & Econ., at 442. The internal flow of cash from one division of an enterprise to another is referred to as a "cross-subsidy." Faulhaber, 1 J. Competition L. & Econ., at 442. A cross-subsidy occurs when an enterprise uses the revenues from the sale of one service to offset its cost to produce and sell another service. *See Alliant Energy Corp. v. Bie, 330 F.3d 904, 917 (7th Cir. 2003)*; *see also In re Implementation of the Telecommunications Act of 1996: Accounting Safeguards Under the Telecommunications Act of 1996, 11 F.C.C.R. 17539, 17542 n.4 (1996)*.

HN9 Cross-subsidies are not commonplace in unregulated markets. They are not profit maximizing, and thus enterprises

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[5] *LeTellier v. LeTellier*, 40 S.W.3d 490, 498 (Tenn. 2001); *Bryant v. HCA Health Servs. of N. Tenn., Inc.*, 15 S.W.3d 804, 809 (Tenn. 2000).

[6] WEBSTER'S THIRD NEW INTERNATIONAL DICTIONARY 2279 (1971).

[7] BLACK'S LAW DICTIONARY 1469 (8th ed. 2004); *see also* XVII THE OXFORD ENGLISH DICTIONARY 60 (1989).

providing unregulated services have little incentive to cross-subsidize. [8] However, incentives to cross-subsidize arise when an enterprise provides services in [*18] both regulated and unregulated markets. In that circumstance, the enterprise may seek to lower the price of the service in the unregulated market by allocating a portion of its costs of providing the service to its costs of providing the regulated service. *GTE Midwest, Inc. v. F.C.C., 233 F.3d 341, 344 n.1 (6th Cir. 2000)* (defining cross-subsidization as "the misattribution of costs incurred in providing unregulated services to the provision of regulated services"); *California v. F.C.C., 39 F.3d 919, 926 (9th Cir. 1994)*; *Ameritech Corp. v. United States, 867 F. Supp. 721, 726 (N.D. Ill. 1994)*; *Florida Cable Television Ass'n v. Deason, 635 So. 2d 14, 15 n.2 (Fla. 1994)*.

[*19] ***HN10*** The use of revenues from the sale of services in a regulated market to subsidize the cost of providing the services in the unregulated market is a cross-subsidy. The practice is anti-competitive and produces two negative effects. First, it results in the enterprise's customers in the regulated market being overcharged for their services because they are paying the cost of the subsidy of the unregulated service. Second, the enterprise engaging in cross-subsidization gains an unfair competitive advantage in the unregulated market because the cross-subsidy enables the enterprise to provide the unregulated service below its actual cost. *In re Complaint of MCTA, 241 Mich. App. 344, 615 N.W.2d 255, 266 (Mich. Ct. App. 2000)*.

The legislators' discussions both in committee and during floor debate regarding *Tenn. Code Ann. § 7-52-402* reveal that cross-subsidization was their chief concern with regard to permitting municipal electric utilities to begin providing local telecommunications services in competition with privately owned providers. The bill's supporters emphasized that competition in the local telecommunications market was important and that electric utilities [*20] providing telecommunications services would not be permitted to use "rate dollars" to subsidize their telecommunications business. Accordingly, we have concluded that ***HN11*** the purpose of *Tenn. Code Ann. § 7-52-402* is to prevent municipal electric utilities who decide to provide telecommunications services from shifting the costs of providing telecommunications services to their electricity customers.

This record contains no evidence to support a conclusion that the uncompensated use of EPB's name is a subsidy prohibited by *Tenn. Code Ann. § 7-52-402*. EPB established its reputation long before EPB Telecom began providing telecommunications services. When EPB Telecom began operating, it was required to establish its own identity in the local telecommunications services market, and the record contains no evidence that EPB's electricity customers have paid for any of these promotional costs. To the contrary, the record contains substantial and material evidence supporting the hearing officer's conclusion that EPB Telecom has used its own revenues to pay these costs. Accordingly, we concur with the hearing officer's conclusion that US [*21] LEC failed to prove that EPB Telecom's use of EPB's name violates *Tenn. Code Ann. § 7-52-402*.

III.

EPB'S ALLEGED VIOLATION OF THE CODE OF CONDUCT

US LEC also insists that EPB's and EPB Telecom's joint marketing activities go beyond the scope of activities permitted by the Code of Conduct that was part of EPB's 1999 certificate of convenience and necessity. It also asserts that the Code of Conduct did not go far enough in protecting EPB Telecom's competitors against marketing practices that would give EPB Telecom an unfair advantage in the telecommunications services marketplace. We find no basis for these claims.

When EPB applied for a certificate of convenience and necessity to provide telecommunications services, its future competitors were well aware of the dangers of cross-subsidization. Accordingly, the Authority directed EPB and the other providers of telecommunications services in the Chattanooga market to negotiate a set of conditions that would ensure compliance with *Tenn. Code Ann. § 7-52-402*. These conditions contained specific accounting requirements

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[8] As Professor Faulhaber explains:

> Under competitive conditions, the issue of cross-subsidy simply does not arise. Firms with constant returns to scale technology compete in markets so that price is driven to marginal cost which covers total cost. Every product pays its own way; if it did not, there would be profitable opportunities for entry and repricing. Customers of any product or service who faced prices that forced them to pay too much . . . would soon find competitors willing to offer equivalent service at lower prices. The competitive market would police cross-subsidy, without need of a regulator.

Faulhaber, 1 J. Competition L. & Econ., at 442.

that would enable the Authority and EPB's competitors [*22] to track EPB Telecom's revenues and costs, as well as specific requirements for the relationship between EPB and EPB Telecom. They permitted joint marketing of regulated and unregulated services as along as EPB and EPB Telecom maintained their separate identities and refrained from bundling their services.

US LEC presented a substantial amount of evidence regarding the joint marketing activities of EPB and EPB Telecom. This evidence included sales brochures, press releases, the EPB website, and a booth at a Chattanooga business fair. All this evidence reveals that EPB and EPB Telecom continue to maintain their separate identities and are refraining from bundling their services. There is likewise no evidence that EPB Telecom has not paid its share of the costs of these activities or that EPB's electricity customers are paying for any of the costs that are properly attributable to EPB Telecom. Thus, we agree with the hearing officer's conclusion that US LEC failed to prove that EPB has violated the conditions of its certificate of convenience and necessity designed to prevent cross-subsidization.

As a final matter, US LEC insists that the conditions on EPB's certificate of convenience [*23] and necessity do not go far enough to protect EPB Telecom's competitors from unfair or anti-competitive practices. It argues that the only feasible way to protect competition in the Chattanooga telecommunications services market is to require EPB Telecom to discontinue using EPB's name. We have determined that the hearing officer correctly concluded that this proposed remedy was far more drastic than the attenuated competitive impact of EPB Telecom's use of EPB's name may have on the telecommunications services market in Chattanooga.

EPB was the only entity permitted to apply for the certificate of convenience and necessity under *Tenn. Code Ann. § 7-52-401*. From the outset, it was clear that EPB intended to provide telecommunications services through a separate but wholly-owned division. The Authority granted the certificate of convenience and necessity to provide telecommunications services to EPB. Thus, EPB's decision to name its telecommunications division "EPB Telecom" is entirely truthful and reflects the reality that EPB Telecom is part of EPB. US LEC failed to produce any evidence that the use of the name "EPB Telecom" has had any measurable anti-competitive [*24] effect in the marketplace for telecommunications services in the Chattanooga area. Without this evidence, and because of the potential adverse effect of depriving consumers of truthful information regarding EPB Telecom's affiliation, [9] we conclude that the record lacks any factual basis that would have required the Authority to order EPB Telecom to discontinue the use of EPB's name.

IV.

We affirm the Authority's order concluding [*25] that EPB Telecom's uncompensated use of EPB's name does not violate *Tenn. Code Ann. § 7-52-402* and denying all of US LEC's requests for relief. The case is remanded to the Tennessee Regulatory Authority for whatever further proceedings may be required, and the costs of this appeal are taxed to US LEC of Tennessee, Inc. for which execution, if necessary, may issue.

WILLIAM C. KOCH, JR., P.J., M.S.

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[9] EPB introduced two articles concluding that name and logo restrictions such as the one suggested by US LEC in this case could harm consumers by depriving them of truthful information regarding with whom they are dealing. Charles J. Ogletree, Jr., et al., *Utility Affiliates: Why Restrict Use of Names and Logos?*, Pub. Util. Fort., July 15, 1999, at 34; Kenneth Gordon & Charles Augustine, *Fostering Efficient Competition in the Retail Electric Industry: How Can Regulators Help Solve Vertical Market Power Concerns? First, Do No Harm* 20-23 (Edison Elec. Inst. Aug. 1998).

Principles of Public Utility Rates

by JAMES C. BONBRIGHT



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Moreover, they are not precisely the same as the forces that have imposed somewhat similar regulation, say, upon the interstate railroads.

Nevertheless, two attributes of a public utility business have received emphasis in the textbooks, and they will be discussed in turn. The first is the special public importance or necessity of the types of service supplied by utility enterprises; the second is the possession by utility plants of technical characteristics leading almost inevitably to monopoly or at least to ineffective forms of competition. As Clemens neatly puts it: "Necessity and monopoly are almost prerequisites of public utility status." [7]

As to the character of public utility services considered as a group, few persons would deny that they are essentials of modern living rather than mere luxuries or conveniences. A well-functioning transportation system, for example, is a matter of life-and-death importance to the nation. Especially in a large city, even a temporary stoppage of electric power service is serious, and a prolonged cessation would be disastrous. This recognized public importance of adequate utility service, available without delay at reasonable rates and without unjust discrimination, certainly helped to account for the public demand for regulation even in a period of American history which was notably unfriendly toward "government interference with business."

But what the recognized importance of public utility service fails to account for is the restriction of regulation to services which, however essential they may be to the life of a community or the whole nation, are no more so than are the supplies of many commodities and services produced and distributed by unregulated business. Granted that electric power and telephone service are necessities of modern living rather than mere luxuries,

[7] Eli W. Clemens, *Economics and Public Utilities* (New York, 1950), p. 25. Earlier writers sometimes stressed the special privileges usually accorded to public utilities as justifying special regulations—privileges including the power to take private property under the law of eminent domain and the right to use the public streets. But current writers, while conceding a relationship between possession of privilege and subjection to special duties, no longer view this relationship as one of cause and effect. Indeed, even in early years, the courts did not limit their list of "businesses affected with a public interest" to those businesses enjoying legal privileges denied to ordinary businessmen. See, e.g., Chief Justice Taft's opinion for the Court in Wolff Packing Co. v. Court of Industrial Relations of Kansas, 262 U.S. 522 (1923), distinguishing three classes of business "clothed with a public interest" justifying some public regulation.

HARRISON INSTITUTE FOR PUBLIC LAW
GEORGETOWN LAW

SERVING THE "PUBLIC INTEREST" – TRADITIONAL VS EXPANSIVE UTILITY REGULATION

Prepared for the
National Regulatory Research Institute

Eric Filipink[1]
December 30, 2009 – v12

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TABLE OF CONTENTS

Introduction 3

Figure 1: Expansion of Goals, Roles, and Criteria 7

Figure 2: Path to Stronger Accontability 9

Figure 3: Patterns of Litigation 17

I. Traditional Utility Regulation 10
- A. Rationale for regulation 10
- B. Delegating powers to regulatory commissions 11
- C. Traditional goals of utility regulation 12

II. Expansive Goals, Roles, and Criteria 14
- A. Defining goals, roles and criteria 14
- B. Patterns of litigation 15

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[1] Policy analyst, Harrison Institute for Public Law, Georgetown University Law Center. The Harrison Institute prepared this paper under contract from the National Regulatory Research Institute (NRRI), a nonprofit organization founded and funded by state utility commissions. This paper reflects the views of the author and not NRRI or Georgetown University. ***Please send comments to*** – Prof. Robert Stumberg, Harrison Institute for Public Law, <stumberg@law.georgetown.edu>. ***Acknowledgements*** – The Harrison Institute and NRRI are grateful to commentators whose observations improved the paper: D. David Slaton, Chief Administrative Law Judge & Chief of Commissioners' Staff, Arkansas Public Service Commission; Steven Weissman, Lecturer in Residence & Associate Director, Center for Law, Energy & the Environment, Berkley Law; John Betkowski III, Vice Chairman, Connecticut Department of Public Utility Control; Betty Ann Kane, Chairman, District of Columbia Public Service Commission; Illona Jeffcoat-Sacco, General Counsel, North Dakota Public Service Commission; Bohdan R. Pankiw, Chief Counsel, Pennsylvania Public Utility Commission; George Young, Policy Director, Vermont Public Service Board; William Chambliss, General Counsel, Virginia State Corporation Commission; Richard E. Hitt, General Counsel, Public Service Commission of West Virginia; Lauren Azar, Commissioner, Wisconsin Public Service Commission.

C. Policy goals 18
1. *Litigated cases* 19
2. *Observations* 21
D. Commission roles 23
1. *Litigated cases* 23
2. *Observations* 25
E. Decision-making criteria 29
1. *Litigated cases* 30
a. *Challenging the choice of criteria* 30
b. *Challenging the balancing tests* 33
2. *Observations* 36
F. Summary 39

III. Guidance for Regulators and Legislators 40
A. Step One 40
1. *Problem: Indefinite authority* 40
2. *Solution: Clarify* 40
B. Step Two 43
1. *Problem: Multiple elements of authority* 43
2. *Solution: Explain* 44
C. Step Three 45
1. *Problem: Limited resources* 45
2. *Solution: Deploy resources efficiently* 46
3. *Policy Options* 48

IV. Conclusion 49

Appendix: Examples of decision-making criteria 51

Publisher's Note: This document, commissioned by NRRI, is likely to be among the most important ever published by this institute. I have designated it, for now, as a "working paper." This designation means that NRRI invites comments from the community of regulators and legislators, whose practices and processes this paper assesses and seeks to improve. This paper thus serves NRRI's mission—to help regulation achieve the highest possible quality. Your comments on this paper will help achieve that mission. Please send comments to me at shempling@nrri.org. We also will set up a section of our upcoming Knowledge Communities web site to host detailed dialogue. After a period of a few months, we will publish the paper in final form.

Scott Hempling, Esq.
NRRI Executive Director

This paper can be accessed online at
http://www.nrri.org/pubs/multiutility/NRRI_filipink_public_interest_jan10-02.pdf.

INTRODUCTION

Consider the arguments for and against a new power plant. It will increase the supply of power to the state's customers and lower their energy bills through competition. It will retain businesses and jobs that are on the verge of leaving the state due to high power costs. At the same time, the plant will increase pollution and greenhouse gas emissions. How does this plant fit within the state's new campaign to expand alternative energy production and create sustainable "green" jobs? Should regulators evaluate the environmental impact locally or on the cumulative impact of all existing and proposed power plants in the state or region? Does the proposed plant conform to the state's long-term energy plan? Regulators must answer these questions as they work to determine: Where does the public interest lie?

Statutes command utility regulators to protect the "public interest,"[2] which is indefinite and constantly changing. Originally, it meant restraining the monopoly power of utility companies.[3] Regulators focused their activities on setting rates and establishing standards of service.[4] Today, environmental and economic needs expand the public interest.

Regulators like the flexibility of public interest regulation. It enables them to respond to changing conditions such as climate change, rising energy costs, new technologies, diversity in products and providers, and new business models. Yet when regulators expand public interest regulation, it unsettles utilities. They are prone to challenge the boundaries of regulators' authority in court or to limit it through legislation.

Courts usually interpret the limits on public interest regulation by analyzing the elements of legislatively delegated authority. Courts look for delegation of: (1) *roles* such as setting rates or siting power plants;[5] (2) *criteria* for making decisions;[6] and (3) *policy goals* that guide regulators and help courts interpret the roles and criteria.[7] The risk of litigation increases whenever the legislative delegation omits one of these elements, whenever delegation is implicit rather than explicit, and whenever an explicit delegation is indefinite, all of which are frequent.

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[2] *See, e.g.*, WASH. REV. CODE § 80.01.040(3) ("[The Washington Utilities and Transport Commission shall] regulate in the public interest, as provided by the public service laws, the rates, services, facilities, and practices of all persons engaging within this state in the business of supplying any utility service or commodity to the public for compensation.").

[3] *See generally* Robert L. Swartwout, *Current Utility Regulatory Practice from a Historical Perspective*, 32 NAT. RESOURCES J. 289, 295–314 (1992).

[4] *Id.*

[5] *See, e.g.*, Process Gas Consumers Group v. Pa. Pub. Util. Comm'n, 511 A.2d 1315 (Pa. 1986) (looking into whether the commission had the role to oversee energy conservation programs).

[6] *See, e.g.*, New Bedford v. Energy Facilities Siting Council, 597 N.E.2d 1032 (Mass. 1992) (assessing whether economic development was a valid decision-making criterion); Alaska Fed'n for Cmty. Self-Reliance v. Alaska Pub. Utils. Comm'n, 879 P.2d 1015 (Alaska 1994) (assessing whether environmental impact was a valid decision-making criterion).

[7] *See, e.g.*, Ark. Gas Consumers, Inc. v. Ark. Pub. Serv. Comm'n, 118 S.W.3d 109 (Ark. 2003) (evaluating the extent of the state's goal to assist low-income customers); Energy Ass'n of N.Y. v. Pub. Serv. Comm'n of N.Y., 169 Misc.2d 924 (N.Y. 1996) (reinforcing the state's goal of instituting long-term planning).

Cost of Service Regulation In the Investor-Owned Electric Utility Industry

A History of Adaptation

Prepared by:
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June 2012

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Table of Contents

Acknowledgements v

Executive Summary vii

I: Introduction: Regulation as an Ongoing Equilibrium Process 1

II. The Structure of Cost of Service Regulation 3

A. The Origin of the End Results Doctrine 3

B. The Utility as a Public Service Firm 4

C. The Regulatory Compact 5

D. Total Revenue Requirement 8

E. Implementation of the Bargain via the Rate Case 12

F. Operationalizing the Bargain: A Framework for Analysis 15

III: The Evolution of Regulatory Policy 17

A. The Golden Age: Build and Grow, 1940 through 1970 17

B. 1970s: The Rise of Inflation and the Crash in Growth 18

C. 1980s: Issues of Nuclear Prudence and Plant Cancellation 24

D. Market Restructuring in the 1990s 31

E. Post Markets: Restoring Customer and Investor Confidence 36

IV. Conclusions 41

References 43

Articles, Books, and Reports 43

Laws, Tariffs, Legal and Regulatory Cases 46

Justice Bradley, in another context, claimed that chartered by the state means "for the purpose of performing a duty which belongs to the state itself" (dissenting opinion in *Citizens, Milwaukee & St. Paul RR* [88]). Justices Brandies and Holmes argued that "[T]he investor agrees ... that [the utility's] charges to the public shall be reasonable ... [and the utility] is a substitute for the state in the performance of the public service; becoming a public servant." (*Southwest Bell* [114] at 547). Finally, Justice Sanford, in writing for the Court, summed up the issue up neatly:

> Whether the use of the railroad is a public or private one depends in no measure upon the question of who constructed it or owns it. No matter who is the agent, the function performed is that of the state. Through the ownership is private, the use is public. (*Millheim v. Moffat Tunnel Improvement* [103])

For the Court the public utility concept represented an instrumentality—a tool—designed to adjust economic and social relations; its purpose to impose new balance where a maladjusted (i.e., natural monopoly) economic structure existed. That the *Munn* Court had already come to this conclusion many years before is attested to by Glaeser:

> ... the doctrine of public interest referred to in the *Munn* case ... [is the] recognition that the notion of a common necessity for civilized life underlies [it]. ... The concept of a public utility thus becomes a legal instrumentality to achieve an improvement of the standard of life. (Glaeser [22]:179)

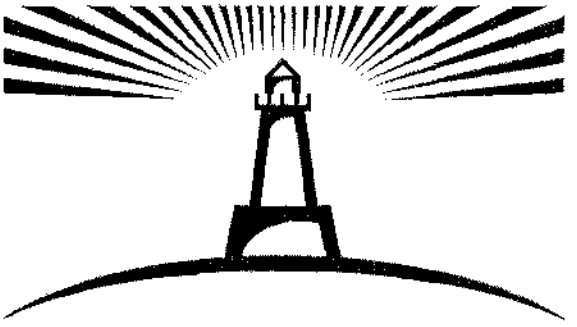
As a result, the institution of regulation creates a special relationship between the owners of the private property and the regulator (i.e., the agent of the state) where the lines between conventional notions of managerial prerogative are altered under the regulatory certificate. The public service aspect of the utility cannot be separated from the objectives of society. Indeed, to ensure that these objectives are met, society established the process of regulation where regulators have oversight over this special purpose entity. It is also necessary to examine the mechanism through which society and the special purpose entity codified their relationship.

C. The Regulatory Compact

In order to facilitate this relationship between society and the special purpose entity or utility, the concept of a regulatory contract, compact, or bargain has been employed to characterize the set of mutual rights, obligations, and benefits that exist between the utility and society. In order to induce a utility to commit private capital in the service of society we should expect that it would seek to clarify the terms and conditions under which service is rendered. As under any normal contractual relationship where both parties make tradeoffs in establishing their rights and responsibilities, the purpose of a contract is to establish terms and conditions to allocate risks.

That this relationship is a contract can be gleaned from the evolution of regulation from the 19th century. First, most strong regulation began with an explicit franchise contract that identified the specific terms of the deal, including price, duration, quality of service, and other conditions of service.[3] These franchise contracts later evolved into commission-based regulation in the early 20th century as a result of the inflexibly of the arrangement (Jones [30]). Second, the bargain between society and the utility is best captured by the Court's opinion in *The Binghamton Bridge Case* in 1865 where the Court noted:

[3] "Strong Regulation" refers to the commission-based regulation. Prior to the early 20th century, other forms of "weaker" regulation were attempted, but ultimately abandoned. See, e.g., McDermott [45].



National Regulatory
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Briefing Paper

Natural Gas Vehicles: What State Public Utility Commissions Should Know and Ask

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The National Regulatory Research Institute

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Executive Summary

New technologies for drilling shale gas, heightened recognition of natural gas's smaller carbon footprint compared to gasoline and diesel oil, the motivation of gas utilities to increase profits through demand growth, and advances in transportation-oriented gas technology have all produced a renewed interest in natural gas vehicles (NGVs). This interest leads to the inevitable question of what role state public utility commissions and utilities should play, if any, in growing or reacting to the NGV market.

The premise of this paper is that state commissions should foster the NGV market—meaning, allow natural gas utilities or their affiliates to charge ratepayers for investing in and operating infrastructure necessary for NGVs—if and when they determine that this action would coincide with the public interest. This determination might require state commissions to examine whether such an action advances important regulatory objectives while not impeding others. These objectives can include environmental and other positive social gains that do not directly benefit NGV users.

If state commissions deem NGVs to be in the public interest, they should then determine: (a) whether existing rules and regulations hinder the development of NGVs; (b) the most effective actions to take in removing uneconomical barriers; (c) whether, to what extent, and how utilities should pursue the development of NGVs; (d) whether gas utilities should provide NGV-related services as a core function or through an unregulated affiliate—or not at all, leaving these activities to non-utility players; and (e) the effect of utilities' NGV activities on customers and other regulatory objectives (e.g., cost-of-service rates, fair competition).

This paper has two major purposes. The first is to educate commissions on the status of, and prospects for, NGVs. Compared to vehicles using other forms of energy, NGVs have both favorable and unfavorable features. The appendix highlights the assessments of outside experts on the outlook for NGVs. The consensus is that NGVs and electric vehicles can coexist to displace a portion of the market for conventional vehicles in urban fleets. The most promising markets for NGVs, based on the latest evidence, are commercial and government fleets. Specifically, NGVs' best bet is high-mileage urban (light and heavy) fleets with central refueling.

The second purpose of this paper is to (a) describe the possible roles that state commissions and local gas utilities might play in NGV development, and (b) identify issues that state commissions should address and questions they should ask.

Gas utilities can assume different roles in the NGV market. At one pole they can confine their activities to the provision, under existing regulatory rules, of local gas transportation service: (1) public and private refueling stations and (2) homes with a refueling appliance. In this minimalist role, utilities provide no marketing or promotion of NGVs. They merely provide a natural-monopoly service (e.g., local transportation) at a regulated price. They might also provide city-gate service—for example, the interstate delivery of natural gas to the utility's distribution system. Overall, gas utilities would simply react to the demand for NGVs and not try to affect the NGV market itself.

In a more active role, gas utilities would engage in marketing and promoting NGVs. They might attempt to educate customers on the benefits of NGVs and purchase NGVs for their own fleets. Education and outreach are particularly critical for technologies like NGVs that are largely unknown to the general public. This role might also include advocating for governmental financial incentives at the federal, state, and local levels.

Gas utilities might also provide ratepayer-funded financial incentives for the purchase of home fueling appliances, offer price discounts to customers who have NGVs, and provide financial support for the development of central refueling stations. All of these activities attempt to bolster or "jump-start" the market for NGVs. This paper discusses the fundamental question of whether, and under what conditions, the utility should "charge" all customers for a service that would directly benefit only a distinct minority. One essential condition for such a role is that the gap between the social benefits of NGVs and the private benefits to vehicle owners be large enough to justify a general ratepayer-funded subsidy.

State commissions can influence the development of NGVs. Through their policies, commissions can affect the scope of a utility's NGV-related services, in addition to the utility's incentive to provide those services. In determining cost recovery and the speed of optimal market penetration, commissions should evaluate the merits of new and underdeveloped technologies like NGVs on the basis of their effects on consumers. They will need to:

1. Measure the risks to consumers and utility shareholders,

2. Determine how different cost-recovery mechanisms would affect the utility's financial condition and the risks to consumers,

3. Identify and measure the benefits and costs of new and underdeveloped technologies,

4. Determine the proper market structure for deploying the technology, and

5. Determine the effects of consumer education on the market penetration of new demand-side technologies, such as NGVs.

Table of Contents

I. Utility Involvement in the NGV Market 3

A. Utilities can assume a wide range of roles 3

B. Specific utility functions 4

C. Market structures for different NGV-related functions 6

II. Essential Information for Commissions 8

III. Using the Information to Reach Commission Decisions 10

A. Four questions for commissions to ask 10

B. Areas of commission inquiry 13

C. Ratemaking criteria 14

D. Specific questions on cost recovery and NGV development 15

Appendix: The Current Status of NGVs and Their Outlook 19

Natural Gas Vehicles: What State Public Utility Commissions Should Know and Ask

The optimistic outlook for natural gas in the United States has heightened interest in growing the use of this source of energy in various sectors including transportation.[1] Concerns over our dependency on oil imports and greenhouse gas have elevated the urgency of finding alternatives to petroleum-based vehicles. These alternatives, referred to as alternate fuel vehicles (AFVs), include natural gas vehicles (NGVs), biodiesel vehicles, and electric vehicles.[2] They offer our country hope for increased energy independence and a cleaner environment.[3]

The extent to which AFVs will penetrate the transportation market and the contributions of each type hinge on economic, technical, environmental, political, and regulatory factors. A major factor is consumer acceptance of non-petroleum vehicles over petroleum vehicles, which have long dominated the U.S. transportation market.

This paper focuses on NGVs.[4] Fueling sources for NGVs can include compressed natural gas (CNG), liquid natural gas (LNG), or biomethane. CNG allows gas to be stored in a safe and secure cylinder within the vehicle. LNG has the advantage of requiring only 30 percent of the space that CNG needs to store the same amount of energy. The lower space requirement is especially beneficial for heavy-duty trucks traveling long distances. Recoverable from landfills, wastewater, and dairy farms, biomethane emits less pollution than other sources of gas.

This paper has two major purposes. The first is to educate state public utility commissions ("state commissions" or "PUCs") on the status of, and prospects for, NGVs. Compared to vehicles using other forms of energy, NGVs have both favorable and unfavorable features. The appendix highlights the assessments of outside experts on the outlook for NGVs.

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[1] *See*, for example, U.S. Department of Energy and National Energy Technology Laboratory, *Modern Gas Shale Development in the United States: A Primer*, April 2009; and U.S. Energy Information Administration, *Annual Energy Outlook 2010*, May 2010.

[2] For comprehensive information on AFVs, including state/federal financial incentives and detailed information on each type of AFV, *see* DOE AFV Data.

[3] Natural gas is the cleanest of the fossil fuels and a source of energy that is about 98 percent produced domestically (excluding Canadian imports). NGVs emit about 25 percent less carbon dioxide than comparable gasoline- or diesel-fuel vehicles and produce about 80 percent fewer ozone-forming emissions.

[4] NRRI conducted a comprehensive study on NGVs back in 1992. *See* Daniel J. Duann and Youssef Hegazy, *Natural Gas Vehicles and the Role of State Public Service Commissions*, NRRI 92-8 (Columbus, OH: National Regulatory Research Institute, 1992).

The second purpose of this paper is to (1) describe the possible roles that state commissions and local gas utilities might play in NGV development; and (2) identify issues commissions should address and questions they should ask.

I. Utility Involvement in the NGV Market

A. Utilities can assume a wide range of roles

The development of NGVs offers gas utilities an opportunity to increase their profits. At the least, NGVs would increase throughput on the distribution system, which is the major source of profits for gas utilities.[5] In contrast, increases in natural gas demands by the electric power producers would benefit gas utilities less because many, if not most, gas-fired generating facilities bypass the local gas utility system.[6]

Gas utilities can assume different roles in the NGV market. At one pole they can confine their activities to the provision of distribution service under existing regulatory rules to (1) public and private refueling stations and (2) homes with a refueling appliance.[7] In this minimalist role, utilities provide no marketing or promotion of NGVs. They merely provide a natural-monopoly service (e.g., local transportation) at a regulated price.[8] They might also provide city-gate service—for example, the interstate delivery of natural gas to the utility's distribution system.[9] Overall, gas utilities would simply react to the demand for NGVs and not try to affect the NGV market itself.

In a more active role, gas utilities would engage in marketing and promoting NGVs. They might attempt to educate customers on the benefits of NGVs and purchase NGVs for their own fleets. Education and outreach are particularly critical for technologies that, like NGVs, are largely unknown to the general public.[10] This role might also include advocating for governmental financial incentives at the federal, state, and local levels.

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[5] This new throughput might require new investments that utilities can include in rate base and make a return. In a revenue-decoupling world, utilities' profits could increase less or not at all in the short term.

[6] Bypass occurs when a new or existing consumer takes natural gas off the interstate or intrastate pipeline system. These consumers, therefore, require no or minimal services from the local utility.

[7] Distribution service includes transportation from the city gate to the customer's premises as well as backup, storage, and load balancing provided to transportation customers.

[8] One issue is the price they should charge. The utility might justify lower rates to homes with a refueling appliance on the basis that these customers would have a higher load factor than other residential customers.

[9] This situation would occur when the customer has to buy the natural gas itself from the local gas utility. As an example, a residential customer who refuels her NGV at home might not have the right to purchase natural gas from sellers other than the local utility.

[10] Evidence has shown that consumers tend to be myopic in not accounting for the life-cycle benefits of durable goods like motor vehicles. Such shortsightedness, caused by such

Gas utilities might also provide ratepayer-funded financial incentives for the purchase of home fueling appliances, offer price discounts to customers who have NGVs, and provide financial support for the development of central refueling stations. All of these activities attempt to bolster or "jump-start" the market for NGVs. Part III.A of this paper discusses the fundamental question of whether, and under what conditions, a utility should "charge" all customers for a service that would directly benefit only a distinct minority. One essential condition is that the gap between the social benefits and the private benefits of NGVs is large enough to justify a subsidy.

In sum, gas utilities can assume different roles. They range from a minimalist role to a more active role in which utilities attempt to act as a catalyst for market activities. The latter function might include managing and funding an upgraded infrastructure (e.g., refueling stations) that would simulate the market for NGVs. It might also involve promotional activities that subsidize consumers for NGV-related services that utilities provide.[11] An important question is: If utilities, with approval from their commission, engage in active promotion of NGVs with financial assistance from ratepayers, how long should they be able to carry out this activity? If "jump-starting" the NGV market is the rationale for promotion (e.g., giving financial assistance to NGV owners), good commission policy would limit both the money spent and the duration of such activities.

B. Specific utility functions

Possible utility functions are as follows:

1. *Selling of distribution service:* The utility would deliver natural gas owned by a third party from the city gate to the party's refueling station at low pressure; the station would then compress the gas and dispense it at high pressure into NGVs.

2. *Selling of bundled sales service:* The utility would sell the commodity natural gas, and interstate and local transportation to third-party refueling stations.

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factors as uncertainty about the future and imperfect information, might warrant government or utility intervention. It might include better consumer education and financial incentives. Incidentally, benefits-myopic consumers are a major rationale for utility activities promoting energy efficiency.

[11] Questar in Utah has taken a more active role than other gas distributors in the development of NGVs. It has, among other things, (1) assisted fleet operators and others in the building and operation of refueling stations, (2) worked with state and local governments to promote NGVs, and (3) helped to assure adequate utility system requirements to accommodate growing demand for NGVs. Questar's service territory has more than one hundred refueling stations, some of them owned and operated by the utility. Utah has seen a large number of used NGVs imported from other areas of the country. See *American Gas*, "Full Speed Ahead," April 2010: 22-26, at Full Speed Ahead.

3. *Selling of bundled sales service plus "fueling" service:*[12] Besides providing delivery and commodity gas, the utility would own refueling stations in which it would compress the gas and dispense it for vehicle use.

4. *Selling or leasing of home refueling appliances:* The utility would own these appliances and rate base them or lease them to customers who own NGVs.[13]

5. *Dissemination of information on NGVs:* The utility would educate customers on the benefits of NGVs and the availability of government financial incentives.

6. *Marketing of NGVs through promotional and other practices:* The utility would offer discounted rates for NGV-related services and provide financial and other assistance to refueling stations or other entities involved with NGVs.[14]

7. *Research and development (R&D) activities and funding:* The utility would perform the R&D itself or, more likely, contribute funds to other organizations for R&D activities that, among other things, would improve the economics and consumer acceptability of NGVs.[15]

8. *Expansion of infrastructure to accommodate NGVs:* The utility might have to expand its facilities to accommodate NGVs.[16] One possible expansion would be an increase in the number of distribution lines to refueling stations. A utility might also partner with other entities to develop the necessary infrastructure.[17]

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[12] Although gas utilities might have the capability to provide services, such as vehicle repair and maintenance, conversion of vehicles to NGVs, and equipment sales, the author assumes that they are unlikely to do so.

[13] By leasing home refueling appliances, the household would not have to make substantial investments in purchasing, installing, and maintaining the appliances. Third-party financing might help to alleviate this problem.

[14] Discounted rates reflect value-of-service rates that account for the demand characteristics of customers. These rates are discriminatory in that the utility charges different rates to customers in the same class (as long as they fall within the zone of allowable rates). Discounted rates raise the issue of who should bear the cost of discounts (i.e., revenue shortfalls from fully allocated cost revenues)—utility customers, utility shareholders, or both groups sharing the costs.

[15] A major issue revolves around who should fund R&D activities—utility customers, utility shareholders, or both groups sharing the costs.

[16] As with the previous two roles, a major policy issue is who should bear the costs—utility customers, utility shareholders, or both groups.

[17] On September 7, 2010 Atlanta Gas Light (AGL) filed a proposal with the Georgia Public Service Commission to build refueling stations for the purpose of encouraging public and

C. Market structures for different NGV-related functions

"Market structure" refers to the number and concentration of sellers and buyers that consummate trades for specific goods or services and entry conditions affecting those sellers and buyers. The three broad descriptions of market structure are competitive, oligopolistic, and monopolistic. When a market has several actual or potential buyers and sellers, with minimal entry and exit barriers, analysts consider it competitive. In competitive markets, individual firms have no effect on market prices. Oligopolistic markets have few sellers, with each firm having some influence over price. Monopolistic markets have one seller and severe entry barriers. As a rule, if a market is effectively competitive[18] or even oligopolistic,[19] the best results happen with no price regulation. Some markets in their nascent stage lack competitive features, but at a later time acquire them through technological changes, fewer entry barriers, and better-informed consumers.

The previous discussion on possible functions that utilities can perform in the NGV market leads to the policy question of whether non-utility entities can perform them feasibly and economically. If transactions for a specific service, for example, can consummate in a competitive market, the commission should then eliminate any entry barriers that might stifle competition. In this instance, the utility should not have a monopoly in that market and participate as a regulated entity; the commission might also decide not to allow the utility's unregulated affiliate to participate in that market as well.[20] At the other end of the spectrum, if

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private fleets to purchase NGVs. As expressed in its filing, AGL hopes to "seed the market." The utility sees the lack of refueling stations as the primary barrier to the development of NGVs. The utility proposes to work with fleet operators and local governments to construct central refueling stations. It also proposes to work with fleet operators and CNG retailers to encourage market participation. (*See* Docket 32499.)

[18] An effectively competitive market would have a number of features, including (a) consumers have real choices for goods and services, (b) consumers receive proper price signals, (c) individual suppliers are unable to control prices, and (d) no individual firm has an unfair advantage over other firms.

[19] Analysis of oligopoly markets lacks a unifying theory in producing precise, useful results relating market structure to conduct and performance. Oligopoly theory, for example, does not offer any definite price predictions analogous to the predictions of perfectly competitive and monopoly markets. Most theories that are applied predict that prices in oligopoly markets are greater than marginal cost but less than the price of a pure monopolist. Various oligopoly models predict different outcomes because of their varying assumptions about how firms behave, the number of firms in a relevant market, the characteristics of a market and the products sold, and the degree of interaction between firms. *See*, for example, Luis M.B. Cabral, *Introduction to Industrial Organization* (Cambridge, MA: The MIT Press, 2000), 99-126.

[20] Several sources can account for problems arising from a utility-affiliate relationship: the pricing of utility-affiliate transactions, cost shifting, cross-subsidization, discriminatory regulated service from "essential facilities," mandatory tying of "essential facilities" service and

the most efficient market structure for a service (e.g., gas distribution) is a natural monopoly, then having the local gas utility as the sole provider makes economic sense. [21]

Table 1 on page 11 lists the different NGV-market functions and the possible entities that can perform those functions. Although the local gas utility can perform all of the functions listed, other parties can perform most of them as well. The table suggests that third parties can assume several functions in the NGV market, with the utility role limited to providing only the natural-monopoly service, local distribution. The burden, therefore, lies with the utility to show that it should perform a number of functions that other entities presumably can perform. Whether third parties would perform these functions in a competitive environment is a legitimate question that commissions would need to ask. Especially in an underdeveloped market such as that for NGVs, competition might be difficult to achieve initially.

As one illustration, refueling stations do not have the characteristics of a natural monopoly. A market should be able economically to sustain several refueling stations; but this premise assumes a developed market with a large number of NGVs. At the initial stages, however, the number of NGVs might be too small to sustain more than a few refueling stations. Without a regulated utility-owned refueling station, these few stations can exercise market price by charging excessive prices (assuming that they are not subject to price regulation). Thus, a regulated utility-owned refueling station can constrain the price charged by other stations. On the other hand, utility presence in the refueling station can discourage the entry of third-party stations. The utility might have cost advantages because of economies of scale or scope or other advantages that could act as a barrier to the entry of third-party entities. A policy question then becomes: How can a state commission create a "level playing field" between utility-owned and third-party refueling stations?

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unregulated service, and discriminatory release of information from a utility to unregulated entities.

[21] According to one definition of a natural monopoly, if total production costs rise when two or more firms produce instead of one, the single firm in a market is called a "natural monopoly."

II. Essential Information for Commissions

In making good decisions about the utility's proper role in the NGV market, commissions should have certain information, which includes:

Barriers to NGV development

1. Regulatory barriers to the development of NGVs
2. Market barriers to the development of NGVs
3. Market barriers that represent market failures or distortions that might justify government or utility intervention (e.g., financial incentives)[22]
4. Different regulatory, utility, and other actions that address individual regulatory and market barriers and their associated costs

Economics of NGVs

1. The conditions (e.g., technological advancements, low natural gas prices) required for the economic attractiveness of NGVs compared to other AFVs and petroleum vehicles[23]
2. Reasons for the current low penetration rate of NGVs in the U.S.[24]
3. The effect of government financial incentives to "jump-start" the NGV market
4. The proper market structure for refueling and other NGV-related services,[25] with the follow-up question of what role utilities can play in providing those services

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[22] Market failures are those barriers to NGV development that prevent vehicle consumers from making rational and socially desirable decisions. They might stem from third-party environmental and national security benefits, as well as the lack of unbiased information on the economics of NGVs compared to other kinds of vehicles.

[23] What, for example, would trigger the public to purchase NGVs over petroleum vehicles and other AFVs?

[24] The low penetration of NGVs might be a rational response of the market to the unattractive economics and other negative features of NGVs compared to other kinds of vehicles. It might reflect, however, a serious market problem in which vehicles drivers are underestimating the private benefits of NGVs or overestimating the costs.

[25] Are refueling stations, for example, natural monopolies or can they operate in a competitive environment? It is reasonable to conclude that refueling stations could operate in a competitive environment assuming a developed NGV market, similarly to retail gasoline

Social benefits of NGVs

1. The environmental and other social benefits of NGVs[26]

2. The social desirability and competitiveness of NGVs compared to electric vehicles

3. The social desirability of a higher penetration of NGVs, along with the most efficient and effective ways to achieve a higher level if found justified

State experiences with NGVs

1. Examples of successes in states that have promoted NGVs

2. Examples of failures in states that have promoted NGVs

Utility role in providing NGV-related services

1. Possible utility roles and the rationale underlying each one

2. Requisite conditions for utility provision of NGV-related services

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stations, in the absence of evidence showing significant economies of scale or scope to justify a regulated monopoly. Refueling stations can be either limited-access or public. Limited-access stations would offer service only to specific fleets (e.g., city buses, an airport shuttle company). Fleet owners would build and operate their own refueling stations to ensure that their vehicles receive fuel when needed. The utility or a third party alone can own and operate them, or they can form a partnership, say, with an oil company.

[26] If these social benefits are substantial, as a policy matter NGV development then should become the purview of the government's energy and environment policies, rather than just a gas utility and commission matter.

III. Using the Information to Reach Commission Decisions

A. Four questions for commissions to ask

State commissions can influence the development of NGVs. Through their policies, commissions can affect the scope of a utility's NGV-related services, in addition to the utility's incentive to provide those services.

In determining cost recovery and the scope of utility involvement, commissions should evaluate the merits of new and underdeveloped technologies like NGVs on the basis of their effects on consumers.[27] They will need to: (a) measure the risks to consumers and utility shareholders, (b) determine how different cost-recovery mechanisms would affect the utility's financial condition and the risks to consumers, (c) conceptualize and measure the benefits and costs of new and underdeveloped technologies, (d) determine the proper market structure for deploying the technology,[28] and (e) determine the effects of consumer education on the market penetration of new demand-side technologies, such as NGVs.

When social benefits from a technology extend beyond those received directly by direct beneficiaries (i.e., social benefits exceed private benefits), commissions might find it appropriate to spread the costs to all customers. Assume that the benefits from NGVs include a cleaner environment for everyone and less dependency on foreign oil. Commissions might approve the recovery from all utility customers of costs associated with promoting NGVs and investing in additional infrastructure. On the other hand, if the utility and NGV customers alone stand to benefit from NGVs, the risks of utility actions should not fall on the general ratepayer.[29] In this instance, a policy of balancing the risks and benefits would require the shareholders and NGV customers to shoulder the entirety of the risks.[30]

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[27] New technologies or underdeveloped technologies like NGVs frequently have potentially high but uncertain benefits to consumers and society.

[28] Would, for example, some NGV-related services be more efficiently provided in an unregulated market or in regulated markets with natural-monopoly features?

[29] Sometimes, in other contexts, analysts refer to this outcome as "socializing the risks, but privatizing the benefits."

[30] A utility, for example, might invest in new distribution mains in anticipation of demand growth in NGVs. Compared to other situations, this expectation involves a demand-side technology with a high degree of uncertainty as to its market penetration. Funding this investment from all ratepayers would, therefore, impose an excessive risk upon them.

Table 1: Possible Entities Performing NGV-Market Functions

NGV-Market Function	Possible Providers
Selling of distribution service	▪ Local gas utility
Selling of bundled sales service	▪ Local gas utility ▪ Third-party marketers (interstate transportation and commodity natural gas)
Selling of bundled sales service plus "fueling" service	▪ Local gas utility ▪ Third-party marketers (interstate transportation and commodity natural gas) ▪ Third parties (refueling stations)
Selling or leasing of home refueling appliances	▪ Local gas utility ▪ Third parties (manufacturers, wholesale and retail outlets)
Dissemination of information on NGVs	▪ Local gas utility ▪ Third parties (auto manufacturers, state or federal agencies, natural gas organizations)
Marketing of NGVs through promotional and other practices	▪ Local gas utility ▪ Third parties (auto manufacturers, refueling stations, gas marketers)
R&D activities and funding	▪ Local gas utility ▪ Third parties (auto manufacturers, natural gas organizations)
Expansion of infrastructure to accommodate NGVs	▪ Local gas utility (distribution, storage, refueling stations) ▪ Third parties (refueling stations)

The public interest might coincide with a commission policy of encouraging those AFVs that are most economical and socially beneficial, which might not include NGVs. The commission's goal should be to approve those AFV-related expenses and investments that maximize net social benefits, encompassing both fewer air pollutants and improved national security. Greater interest so far lies with electric vehicles than with NGVs. It is unclear at this time whether electric vehicles will turn out to be more economical and socially beneficial than NGVs.[31] Both of these vehicles have promise, but each must overcome major barriers to

[31] One study has shown that the life-cycle cost (i.e., the sum of ownership and operating costs) of a Chevy Volt, which is an electric plug-in vehicle introduced to the U.S. market in late

succeed. Electric vehicles, for example, are expensive relative to petroleum vehicles and NGVs, all-electric cars have less range than other vehicles, customer acceptance is uncertain, and home-based charging stations are costly.

Second, commissions need to ask themselves what is the most appropriate role for utilities in the development of NGVs. Part I.B discusses several roles that utilities can play. Commissions might find preferable utilities' acting only as distributors of natural gas to refueling stations. They might conclude that gas utilities' core function is distribution and that they lack any special business acumen in other functions of the NGV market. In other words, the commission, in addition to determining that distribution has the features of a natural monopoly, might view other NGV-related services as competitive in nature.

Third, commissions should comprehend consumer behavior when it comes to selecting vehicles that have different energy sources. They should, for example, understand the major factors (e.g., utility promotion, government financial incentives, life-cycle costs, initial vehicle cost) and their relative importance in increasing the penetration of NGVs. With access to this information, commissions can better evaluate the efficacy of a utility's proposal to promote NGVs. As an illustration, if a utility wants ratepayers to fund additional refueling stations and new distribution lines, the commission should know the extent to which these investments will actually increase the number of NGVs. Investments might add little to develop the NGV market if other factors, like the high initial cost of an NGV or the cost of conversions, substantially explain the low use of NGVs.[32] The reader should know that the optimistic outlook for NGVs expressed in the 1990s never transpired. The Energy Policy Act of 1992 (EPAct of 1992) lifted regulatory impediments to NGVs' development and also provided financial incentives.[33]

2010, is almost 40 percent higher than the cost of a comparable NGV (Civic GX). Although the Chevy Volt has a lower operating cost, its purchase price is much higher.

The study concluded that:

> Because the incremental cost of owning an EV [electric vehicle] exceeds that of owning an NGV, NGVs are in fact under many scenarios presently more cost-effective at reducing greenhouse gases compared to EVs, even though EVs may produce fewer emissions overall. This advantage becomes larger in regions with intensive coal generation or significantly lower natural gas prices. Our analysis shows that unless the purchase price of EVs can be reduced significantly in the short to medium term, *it is likely that NGVs will remain a more cost-effective choice in reducing greenhouse gas emissions.* (Emphasis added) (*See* London Economics Study, at 1.)

[32] Another factor might be the low number of available NGVs for prospective drivers. The high cost of modifying petroleum vehicles to use natural gas might continue to be a problem in limiting the availability of NGVs.

[33] *See* Kenneth W. Costello et al., *A Synopsis of the Energy Policy Act of 1992: New Tasks for State Public Utility Commissions* (Columbus, OH: National Regulatory Research

Notwithstanding this favorable legislation, in addition to low natural gas prices throughout most of the 1990s, the promising future for NGVs never came to fruition. Commissions should ask themselves: Will history repeat itself?

The fourth question relates to commission policy on ratemaking and the appropriate role of gas utilities in promoting NGVs. Under what conditions should commissions care about a utility's actions in promoting NGVs? Should commissions allow a utility to own and operate refueling stations?

B. Areas of commission inquiry

If commissions deem NGVs to be in the public interest, they should then determine:

1. Whether existing rules and regulations hinder the development of NGVs,
2. The most effective actions to take in removing uneconomical barriers,
3. Whether, to what extent, and how utilities should pursue the development of NGVs,
4. Whether gas utilities should provide NGV-related services as a core function or through an unregulated affiliate, and
5. The effect of utilities' NGV activities on customers and other regulatory objectives (e.g., cost-of-service rates, fair competition).

Concerning uneconomical barriers, appropriate responses might range from doing nothing and providing consumer education to compensating for the barriers by offering prospective NGV drivers financial incentives. Doing nothing is justified when the barriers do not produce large enough inefficiencies to offset the cost of intervention. An analogous situation exists when the government tries to intervene in markets with minor problems. Government policies frequently cause counterproductive results or mitigate a problem at a higher cost than necessary.[34] As an illustration, a commission might want to bolster the NGV market by allowing a utility to offer below-cost leasing rates for home refueling appliances. The aggregate cost of the subsidized rates to customers as a whole might exceed any benefits that arise out of this rate policy. On the other hand, doing nothing might produce inferior market performance when

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Institute, June 1993), at 59-62. The legislation recognized several impediments to NGV development, including state price regulation of refueling stations and other forms of regulation, lack of public information on NGVs, the high cost of NGVs, and the deficiency of refueling stations. One reason for the disappointing outcome was that the federal government decided not to mandate the purchase of AFVs by local governments and private fleets.

[34] *See*, for example, Clifford Winston, *Government Failure versus Market Failure: Microeconomics Policy Research and Government Performance* (Washington, D.C.: AEI-Brookings Joint Center for Regulatory Studies, 2006); and Charles Wolf, Jr., "A Theory of Nonmarket Failure: Framework for Implementation Analysis," *Journal of Law and Economics*, Vol. 22, no.1 (April 1979): 107-39.

serious market problems exist. If, for example, there is little information on the benefits of NGVs over petroleum vehicles, car buyers could make uneconomical decisions.

State commissions must recognize the important role that they can play in developing the market for NGVs. The extent to which NGVs penetrate the market will depend mostly on economic factors, [35] federal and state environmental and energy policies, technological advancements, and the success of other AFVs. At the least, state commissions should attempt to remove those barriers that would impede the socially desirable development of NGVs. They need to walk a tightrope, however, between encouraging promotion that is excessively costly and risky to ratepayers and standing in the way of justifiable NGV development.

C. Ratemaking criteria

A major task of commissions is to ensure "just and reasonable" rates for services that they have determined the utility should perform. In the context of NGVs, such rates should have the following features:

1. *They reflect the costs of an efficient or prudent utility.* Assume that NGVs require the utility to expand its infrastructure to accommodate NGVs or spend money on educating customers. Commissions should determine that these costs are not excessive before allowing utility recovery. Excessive costs are more likely when the ratepayers, rather than the utility's shareholders, bear the risks of bad investments and other imprudent utility activities.

2. *They reflect the cost of serving different customer classes and of providing different services.* Deviations from this principle of ratemaking require that commissions articulate the advancement of a specific public-policy or ratemaking objective. Assume, for example, that a commission believes that NGVs should be an integral part of a state energy policy and have observable environmental and national security benefits. It can then justify approving below-cost rates or subsidies that would "jump-start" the market for NGVs. In this instance, price discrimination advances some articulated social objective that the commission decided would offset the inefficiencies from subsidies or non-cost rates. If utilities want to use ratepayer

[35] Economic factors affect the life-cycle cost of vehicles. The relevant cost is the annual cost of owning, operating, and maintaining vehicles. Cost depends, therefore, on the purchase price of a vehicle, the miles traveled, fuel cost and efficiency, and maintenance cost. Compared to petroleum vehicles, NGVs are more expensive to purchase but cheaper to operate and maintain. In purchasing an NGV, consumers must trade off the higher initial cost for cost savings over time. The same tradeoff exists when prospective consumers are contemplating whether to purchase an electric vehicle or NGV. Electric cars have a higher purchase price than comparable NGVs but lower operating costs. Similarly to energy efficiency in the home, consumers might undervalue energy-cost savings and focus on the initial cost, resulting in uneconomical decisions and overestimation of the payback period. Uncertainty over the operating performance of NGVs and the availability of refueling stations might also discourage the purchase of NGVs.

money to promote NGVs, they should have the burden of proof to demonstrate public benefits or future benefits to funding ratepayers.[36] But even if utilities can show public benefits, an equity problem arises from non-ratepayers' receiving a portion of these benefits without contributing any funds (i.e., being "free riders").

3. *They allow the efficient or prudent utility a reasonable opportunity to earn a rate of return commensurate with its cost of capital.* "Just and reasonable" rates entail commissions' allowing a utility a reasonable opportunity to earn its authorized rate of return when it acts prudently and efficiently. Assume that a utility makes capital investments to expand its distribution system or storage facilities to accommodate NGVs. If the commission previously approved these investments and determined that the utility managed them prudently, it should then allow the utility to earn an adequate rate of return on those investments.

4. *They should reflect fair treatment of the utility's customers and shareholders.* The term "fair" has different meanings. It refers to the treatment of different customers and classes of customers, as well as the utility's shareholders. One interpretation is that a commission's decision determining rates for NGV-related services should not be "arbitrary or capricious." Another is that funding for the development of the utility's infrastructure to accommodate NGVs or spending money in promoting NGVs should balance the risks and benefits. Risk allocation pertains to both the risks among different customers and the risk to customers as a group and the utility's shareholders. Assume that the shareholders and owners of NGVs are the sole beneficiaries of promotional activities. Good regulatory policy dictates that the general ratepayer is held harmless from utility activities to invest and spend other money on accommodating and promoting NGVs.

D. Specific questions on cost recovery and NGV development

Development and promotion

1. Should commissions develop a policy toward NGVs? If they do, what elements should a policy include (e.g., a specified cost-benefit test, the role of utility affiliates, criteria for cost recovery and pricing)?

2. When are NGVs in the public interest? How can utilities demonstrate this condition to commissions (e.g., that the social benefits of NGVs exceed the social costs)?

[36] Third-party or external benefits exist when the pricing mechanism fails to include the social costs from imported oil. These costs include threats to national security and the higher pollutant levels emitted from petroleum vehicles.

3. What role should commissions play in overseeing and approving a utility's plan or strategy for NGVs? Should utilities consider NGVs as part of the integrated resource planning (IRP) process?[37]

4. What role should utilities play in promoting NGVs (e.g., marketing, rate incentives, education,[38] shareholder-funded investments in refueling stations; working and partnering with potential fleet customers, manufacturers of NGVs, and fueling equipment providers)? What are the criteria for utilities to assume a specific role?

5. What role should utilities play in the installation of home refueling appliances?

6. Are refueling stations public utilities with natural-monopoly characteristics? How can commissions know when the refueling business is "workably competitive"?

7. How can a commission create a "level playing field" between utility-owned and third-party refueling stations?[39]

8. What role should gas utilities play in the refueling function (e.g., deliver gas to a refueling station owned by a third party or to a self-owned refueling station; utility partnership with gasoline service-station owners)? When should utilities leave the NGV refueling business?[40] Would the NGV market develop more quickly and

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[37] If commissions do, they might ask: How can utilities justify the development of NGVs when their plan includes energy-efficiency initiatives and pricing that encourage less natural gas consumption? One answer is that residential and other existing customers might be consuming natural gas beyond the level that is socially optimal (e.g., they underestimate the present value benefits from energy efficiency), while gas consumption for NGVs is below the optimal level (e.g., existing drivers of gasoline vehicles should switch to AFVs such as NGVs because they do not account for the higher environmental and "national security" costs of gasoline vehicles).

[38] Whether the gas utility should disseminate information on the merits of NGVs depends on its incentive to distribute unbiased information. Instead, it might be preferable to have the regulator or the state energy office, if they deem the growth of NGVs to be in the public interest, disseminate this information. On the other hand, if commissions found it appropriate for utilities to promote NGVs, disseminating information might be an integral part of that activity.

[39] This question presumes that, especially in a nascent NGV market, the preferred policy is to allow the coexistence of utility-owned and third-party refueling stations. An "uneven playing field" in favor of the utility can discourage entry by third parties and forestall the time that refueling stations could compete with each other.

[40] A legal question is: Does state law grant a commission authority over the resale of natural gas (e.g., by a third-party operator of a refueling station)? If so, then the follow-up question is whether federal law preempts state law. Some commissions have ruled that the EPAct of 1992 preempts state law in the sale of natural gas for use as a vehicle fuel unless a contrary state provision was in place. Specifically, EPAct of 1992 stipulates that the transportation or sale of natural gas for use in NGVs by any entity not otherwise a public utility

competitively without gas utilities' owning refueling stations?[41]

9. Under what conditions should commissions allow a utility affiliate to provide refueling and other NGV-related services? What general policy should commissions have toward diversification by the utility's parent company or the utility itself into the NGV market?[42]

Cost recovery and ratemaking

1. What is the appropriate ratemaking method for NGV-related services provided by a utility (e.g., cost of service, promotional rates, separate rates for customers with home refueling appliances)?[43]

2. Who should pay for initial infrastructure development? If ratepayers fund this development, how should utilities recover the expenditures? Should commissions limit recovery to "start-up" activities that would help bolster the NGV market?

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shall not be considered a transportation or sale of natural gas within the meaning of any state law and regulation in effect before January 1, 1989. (*See* Kenneth W. Costello et al., *A Synopsis of the Energy Policy Act of 1992: New Tasks for State Public Utility Commissions* (Columbus, OH: National Regulatory Research Institute, June 1993), at 59.

In Idaho, the Public Utilities Commission ruled that the term "public utility" includes those persons or entities who "in turn deliver or resell a utility commodity (e.g., natural gas) to the public or some portion thereof for compensation." The commission, however, ruled that EPAct of 1992 gave the federal government supremacy over state law with regard to the resale of natural gas for vehicles. (*See* Idaho Decision.) The California Public Utilities Commission, as another example, has ruled that persons operating service stations that resell compressed natural gas for vehicular use, other than public utilities, are not subject to rate regulation by the commission.

[41] If the utility-owned station receives ratepayer funding and other regulatory-approved advantages, other entities might decide not to compete. The outcome would likely be a smaller number of refueling stations in the long term.

[42] One related question is: If a commission allows a gas utility or its parent to own and operate a refueling station, should the station operate as a separate unregulated affiliate or as part of the regulated utility?

[43] Home refueling appliances allow NGV owners to refuel their vehicles overnight in their homes, from their existing natural gas line. Residential customers with a home refueling appliance would tend to have higher annual load factors (i.e., a higher ratio of average usage to peak demand) than other residential customers. Utilities can, consequently, serve those customers at a lower average cost, and thereby economically justify charging them a lower rate than other residential customers.

3. Who should pay for any NGV promotional or development costs (e.g., R&D expenditures, marketing, customer education)?

4. How should commissions treat the costs associated with home refueling appliances (e.g., rate-basing, lease agreement between the utility and the customer)?

5. How should commissions treat the costs associated with central refueling stations owned by the gas utility?

6. How should commissions review those utility costs paid to an affiliate for the provision of services associated with NGVs?

Appendix: The Current Status of NGVs and Their Outlook

Where Do NGVs Stand Today?

NGVs currently have a minor presence in the U.S. transportation market. NGVs account for only about 110,000 of the 250 million motor vehicles in this country.[44] They originate either from new vehicles produced by an original equipment manufacturer (OEM) or the conversion of existing gasoline or diesel vehicles to NGVs.[45]

The majority of NGVs are either heavy-duty vehicles that travel limited distances (e.g., transit buses, school buses) or other fleet vehicles, such as refuse haulers, taxis, utility vehicles, and delivery trucks. Compared to petroleum vehicles, NGVs have (1) limited refueling availability, (2) higher vehicle costs, (3) shorter driving ranges, and (4) heavier fuel tanks. The combination of these factors largely explains the limited acceptability and use of NGVs in the U.S.

Most of the attention paid to AFVs so far has centered on electric plug-in and hybrid vehicles. Perhaps surprisingly to some readers, electric vehicles have higher life-cycle costs than NGVs.[46] Although electric vehicles do not directly consume fossil fuels that emit pollution, the incremental production of electricity might involve the burning of fossil fuels, such as coal. If state commissions encourage the promotion of electric vehicles, should they not have the same policy toward NGVs? Like electric vehicles, NGVs will reduce our dependency on foreign oil as well as contribute to a cleaner environment.

With regard to the economic factors affecting NGVs, an MIT study explained that:

> The economic attractiveness of CNG [compressed natural gas] vehicles is determined by vehicle incremental cost, mileage driven per year and gasoline-CNG fuel price spread... Previous studies have shown that payback times of three years or less are needed for substantial market penetration. For recent fuel price spreads, low vehicle incremental cost (e.g., $3,000) and high mileage are

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[44] *See* RFF Study. In the same year, natural gas accounted for just 0.2 percent of the fuel used by all highway vehicles.

[45] Conversion of a gasoline or diesel fuel vehicle to an NGV requires changes in the fuel storage tank, the fueling receptacle or nozzle, and the engine. EPA regulations, according to some observers, have made conversions uneconomical. Vehicle owners consider conversion costs as upfront costs that they compare with the discounted fuel-cost savings and other benefits from conversion.

[46] *See* study cited in footnote 33.

necessary to meet this requirement. Also, the rate of penetration of CNG vehicles, even if economic, will depend on the provision of refueling infrastructure.[47]

A big challenge for NGVs is expanding the refueling infrastructure to include more stations and other sources of refueling.[48] Another challenge is narrowing the price difference between a conventional vehicle and an NGV. Overcoming the first challenge will demand a much higher number of NGVs to economically justify the building of more refueling stations. But achieving that would first require the building of more refueling stations—a classic chicken-and-egg problem that might justify some form of governmental or utility assistance. The second challenge might require government incentives to lower the purchase price of an NGV and stimulate the building of new refueling stations.[49]

In its *Annual Energy Outlook 2010*, the U.S. Energy Information Administration (EIA) highlighted obstacles that NGVs face in the heavy-duty market:

> Despite the price advantage that natural gas has had over diesel fuel in recent years (an advantage that is projected to increase over time in the Reference case), other factors—including higher vehicle costs, lower operating range, and limited fueling infrastructure—have severely limited market acceptance and penetration of natural gas vehicles...In addition to concerns about driving range and refueling, the residual value of HDNGVs [heavy-duty natural gas vehicles] in the secondary market is likely to be an important consideration for buyers. Also, purchase decisions can be influenced by other factors, such as weight limits on highways and bridges, which can make the considerable additional weight of CNG or LNG tanks a significant drawback in some market segments...The importance of range and refueling infrastructure barriers suggests that the best near-term market penetration opportunity for HDNGVs, some of whose incremental costs are already covered by tax credits, could be in *the market for centrally fueled fleets that operate primarily within a limited distance from their base.*[50] [Emphasis added]

The market barriers identified earlier, however, do not necessarily represent market failures or problems that justify subsidies or other forms of governmental or utility assistance. In

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[47] See The Future of Natural Gas, at 51.

[48] An adequate infrastructure would also include maintenance and repair shops for NGVs.

[49] Tax incentives and other financial inducements have greatly assisted in the nascent development of alternative fuel vehicles (AFVs). Bipartisan support for NGVs and other AFVs will likely extend and expand governmental assistance in the future. But the current political environment might erase some if not all assistance, for budgetary reasons if for no other reason. Incentives under debate in the U.S. Congress at the time of this writing encompass fuel, infrastructure, and vehicle tax incentives. The fuel tax incentive expired at the end of 2009, and the other two tax incentives will expire at the end of 2010.

[50] *See* EIA Analysis, at 33.

different contexts, market dynamics through technological improvements and better consumer information are often sufficient for mitigating, if not eliminating, these barriers.

The Outlook for NGVs

Electric plug-in and hybrid vehicles so far have received the most attention, but the situation could change in the future if NGVs and biofuels overcome certain obstacles and become more economical and acceptable to future vehicle owners.

The consensus among experts is that NGVs and electric vehicles can coexist to displace a portion of the market for conventional vehicles in urban fleets. The most promising markets for NGVs, based on the latest evidence, are commercial and government fleets. Specifically, NGVs' best bet is high-mileage urban (light and heavy) fleets with central refueling. The economic attractiveness of NGVs, compared to conventional vehicles, depends significantly on the life-cycle fuel savings. Fuel savings, in turn, hinge on the price spread between natural gas and gasoline or diesel fuel in addition to the number of miles driven.

The niche market for electric vehicles is the light-duty market.[51] NGVs and electric vehicles, therefore, have complementary features that together can reduce our dependency on foreign oil and improve our environment. Few analysts foresee NGVs as the predominant vehicle in any of the transportation markets. Almost all predict that petroleum vehicles will continue to dominate the motor vehicle market in the U.S. for the foreseeable future.[52]

Some analysts point to the likelihood that electric vehicles will increase the demand for natural gas more than NGVs will, to the extent that the additional electricity production will come from gas-fired generating facilities. The energy consulting firm IHS CERA expressed this view in a recent report:

> The infrastructure needs and higher costs will likely limit significant growth in natural gas vehicles...Very significant policy support would be needed, which would compete with policy support for higher efficiency, biofuels, and electric vehicles. The most likely growth market for natural gas in transportation would be through the electric power sector.[53]

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[51] According to most experts, NGVs as passenger cars are unlikely to develop as much as electric vehicles. Semi-trailer trucks are also unlikely candidates for natural gas. In one sense natural gas can produce large benefits because these trucks have high mileage and low fuel economy—features that would account for high fuel-cost savings from using natural gas. Because of their limited range, however, gas-fueled trucks would have to make more fill-ups, which truckers traveling long distances might find unacceptable.

[52] One exception is if the U.S. adopts stringent greenhouse gas legislation, which seems remote at the time of this writing. Such legislation could dramatically drive up the cost of gasoline and diesel fuel, at least relative to natural gas and other sources of energy that emit less carbon dioxide.

[53] *See* IHS CERA Study, at ES-7.

A report by Resources for the Future (RFF) identifies several challenges that NGVs face:

> Yet even proponents of natural gas concede that these vehicles [NGVs] face significant obstacles to capturing a major share of the market. Irrespective of the vehicle type, there are concerns regarding economics—the equivalent gasoline or diesel vehicle is cheaper, although fuel costs are likely to be higher—as well as concerns about safety and availability of refueling stations. The latter is the "chicken and egg" problem: Vehicle users will not buy NGVs until they believe there are enough refueling stations, but there is little motivation to build an NGV refueling infrastructure until a sufficient number of vehicle owners demand the fuel. There are other concerns as well. The cruising range and cabin space of light-duty vehicles may be insufficient. Heavy-duty trucks may also have inadequate range unless they are fueled by liquefied natural gas (LNG). Intermediate weight trucks, buses, and refuse trucks already use natural gas in significant numbers, but represent a relatively small market.[54]

Economic assessments have shown that all AFVs will continue to require financial and other forms of subsidies for an indefinite period to have a discernible presence in the transportation market.[55] The NGV market, for example, will need assistance to reduce the price of NGVs and stimulate the development of fueling stations. The hope is that new technological advancements will ultimately make NGVs competitive with petroleum vehicles.[56] These advancements can lower the weight of the vehicle tank, as well as the cost of conversion kits and refueling stations. Another hope is that the cost of NGVs will substantially decline as the scale of production increases.

Increased penetration of NGVs should occur simultaneously with the availability of additional refueling stations.[57] Increased vehicle production should lead to higher demand for NGVs, as economies of scale would drive down vehicle prices.

A factor in favor of NGVs over petroleum vehicles is the expectation of a growing gap between natural gas and oil prices in the future. Most forecasts call for the ratio of oil to natural

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[54] See RFF Study, at 2.

[55] One exception to the need for continued subsidies is if the price of gasoline and diesel fuel soars to extremely high levels. Another exception is if the country enacts a stringent carbon policy that would drive up petroleum prices relative to natural gas prices.

[56] NGVs are a mature technology that has gained wide support in several countries. The technological improvements referred to here are mostly incremental in nature with the effect of making NGVs more economical.

[57] A higher number of refueling station can overcome what some refer to as the "range anxiety." This condition, which constitutes a major barrier to NGV development, exists because of drivers' concern over finding stations to refuel when necessary. NGVs have a shorter range than comparable gasoline or diesel-fuel vehicle because of increased vehicle weight and the lower energy density of natural gas. A larger fuel tank can increase the driving range of an NGV, but at the loss of fuel efficiency, cargo space, and payload.

gas prices to rise between 2010 and 2030.[58] This increase should enhance the economic attractiveness of NGVs.

NGVs will also become more competitive if Congress passes legislation on carbon dioxide restrictions. AFVs as a whole would benefit from driving up the cost of operating petroleum vehicles relative to electric vehicles and NGVs. A business-as-usual world, according to most analysts, would not result in rapid growth of NGVs in the U.S. transportation market. A MIT study, for example, projected that:

> Development of the U.S. vehicular transportation market using compressed natural gas (CNG) powered vehicles offers opportunities for expansion for natural gas use and reduction of CO_2 emissions, but it is unlikely in the near term that this will develop into a major new market for gas or make a substantial impact in U.S. oil dependence. However, significant penetration of the private vehicle market before mid-century emerges in our carbon-constrained scenario. Liquefied natural gas (LNG) does not currently appear to be economically attractive as a fuel for long-haul trucks because of cost and operational issues related to storage at -162 degrees Centigrade.[59]

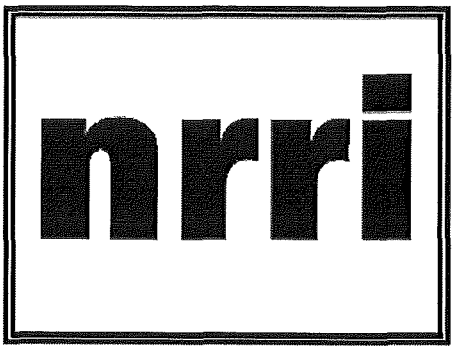
Finally, a big challenge for NGVs is convincing the general public that NGVs are "green," similarly to the way in which many people perceive hybrid vehicles. Hybrid cars have become popular even though to many owners they are not economical. One important reason is that people want to show their neighbors, friends, and others that they are contributing to a cleaner environment. In other words, many people purchase hybrid cars for non-economic reasons. Would they buy NGVs for the same reasons? At this point, the jury is still out. Consumers might shift toward NGVs in moderate numbers if the economics change in favor of NGVs over other AFVs and petroleum vehicles.[60]

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[58] *See*, for example, U.S. Energy Information Administration, *Annual Energy Outlook 2010*, May 2010.

[59] *See* The Future of Natural Gas, at xiv.

[60] Even if the economics are favorable, consumers might still not shift to NGVs. They might, for example, have less-than-adequate information on the economic benefits of NGVs. Inertia can also inhibit them from switching to a non-petroleum vehicle even when it would be in their self-interest. Finally, consumers might focus on the initial higher cost for NGVs, paying inadequate attention to the life-cycle cost. Responding to these market problems might justify governmental and utility intervention.



Alternative Rate Mechanisms and Their Compatibility with State Utility Commission Objectives

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Executive Summary

Ratemaking is a major regulatory function that touches all aspects of utility operations. It also has wide-ranging ramifications for the different objectives that state utility regulators try to achieve. In pursuing these objectives, regulators attempt to promote the public interest. As this paper contends, good ratemaking is difficult, requiring both good analytics and sound judgment on the part of regulators.

Rate of return (ROR) ratemaking, or what this paper also refers to as "traditional ratemaking," has been a mainstay of state public utility regulation since its inception. It has allowed utilities to be financially healthy and invest in needed new capital, while at the same time protecting customers from the natural-monopoly power of utilities. The rationale for regulation is the need to assure adequate, reliable electric service at rates that are just and reasonable. Thus, regulation recognizes that financially healthy utilities are necessary for the long-term economic welfare of customers. At the same time, customer protection against the exercise of utility monopoly power is a core principle of ratemaking.

Over several decades, state utility commissions have modified ROR ratemaking to accommodate new technologies—as well as economic, operating, and market conditions, in addition to new policy mandates—for the purpose of preserving the implicit regulatory bargain. During that time, pressures from different quarters have raised fundamental questions on the necessary conditions for effective ROR ratemaking, including stable market conditions and well-informed regulators. Utilities generally have initiated calls for alternative ratemaking approaches, but other stakeholders have done so as well. For example, conservationists and environmentalists have pushed for revenue decoupling and net energy metering rates to advance the development of energy efficiency and renewable energy. In the coming years, revenue decoupling in particular may become increasingly attractive to electric utilities as their sales growth flattens and distributed generation proliferates. State utility commissions have begun to reconsider the merits of existing net metering rates, as adverse effects have become more transparent.

As another example of non-utility stakeholders pushing for alternative rate mechanisms, since the 1980s large customers have pushed for special contracts, economic development, and flexible rates in general, which are discriminatory in nature although under certain conditions in the public interest. These rates arguably are a response to the legacy of utility ratemaking favoring small utility customers relative to large customers.

These pressures from different stakeholders have provoked state legislatures and public utility commissions to modify utility ratemaking, sometimes fundamentally. Whether these changes, or what some observers call "reforms," have improved utility performance and long-term customer welfare awaits empirical analysis. There is also the question of whether state legislatures, given their lack of expertise in technical and often complex utility matters, should have any role in reforming ratemaking practices. We observe, in particular, alarmingly more intrusive state legislation in ratemaking matters that regularly promotes the interests of a single

stakeholder while damaging the interests of others. These actions, in other words, often violate the "balancing act" principle that lies at the heart of state public utility regulation.

This paper takes on the more modest task of identifying and reviewing alternative rate mechanisms that have come to the forefront in state utility regulation over the past several years. It focuses on how each mechanism affects different regulatory objectives, including core and secondary objectives. After all, rate mechanisms are desirable only if they are compatible with the objectives set out by regulators, assuming they satisfy statutory and other legal requirements. The reader can skip to Part V to get the gist of this paper.

This paper excludes endorsing specific rate mechanisms, since it argues that their efficacy is case-specific and depends essentially on the weights commissioners place on the different objectives ascribed to ratemaking. The challenge for commissions, then, is to weigh these objectives and measure (if possible) the effect of a rate mechanism on each one, as well as on the overall public interest. Assigning weights requires judgment by commissions, while examining the effect demands data and other unbiased information derived from sound analytical methods. This paper addresses the latter task. If a commission assigns a top priority to economic efficiency, for example, it would tend to favor mechanisms that set prices compatible with marginal-cost principles and provide utilities with strong incentives for technological advances and productivity.

All rate mechanisms have mixed effects on the public interest. The presumption is that when a rate mechanism impedes some regulatory objective it sets back the public interest, while improving the public interest when it advances an objective. One example is cost trackers or riders in which the tradeoff exists between timely utility recovery of costs and robust incentives: Trackers and riders allow utilities to recover their costs more quickly and with more certainty, but they also can create incentive problems when (1) regulators fail to adequately scrutinize those costs and (2) cost recovery methods differ across different utility functional areas.

Before reviewing alternative rate mechanisms, this paper outlines a theoretical framework for decision making by commissions. This framework, in addition to identifying the cardinal objectives and core principles of utility ratemaking, describes conceptually how a commission can (1) take the available information and (2) process it using its subjective values for decision making that intends to advance the public interest. These values can include relevant regulatory objectives and the relative weights of each in affecting the public interest. The public interest, as argued in this paper, relates closely to the aggregation of objectives that regulatory actions try to achieve.

This paper concentrates on alternative rate mechanisms that affect regulatory objectives both positively and negatively. Good ratemaking decisions involve three distinct considerations. As expressed in a previous NRRI paper,

> In reviewing different ratemaking proposals, state commissions should have access to unbiased information for helping them better understand and evaluate the consequences of a decision. To make an assessment of ratemaking proposals,

commissions should follow three steps. First, commissions need to define the public interest by identifying the multiple objectives that comprise the public interest, assigning weights to those objectives and resolving the tradeoffs among them. Second, commissions need to understand each ratemaking proposal fully in terms of how it advances or impedes the multiple objectives that comprise the public interest. Third, commissions need to use a logical, transparent decision-making process that selects or modifies ratemaking proposals that come closest to achieving the public interest, as defined by a commission.[1]

Ratemaking requires attention to statutes and legal rules, economic principles, precedent, public acceptability, and the tradeoffs among different regulatory objectives, among other things. An essential part of the regulator's job is to exercise judgment on (1) what objectives ratemaking should achieve, (2) the relative significance of each objective, and (3) the willingness to impede certain objectives to advance others (e.g., rates that diminish economic efficiency but make electricity more affordable to low-income households).

This paper addresses several questions:

1. **What do we mean by traditional and alternative ratemaking?**
   This paper defines ROR (traditional) ratemaking to include a general rate case supplemented by trackers or riders under exceptional circumstances. Historical examples of these trackers are fuel adjustment and purchased gas adjustment mechanisms. Traditional ratemaking allows a utility to earn abnormally high or low earnings temporarily (i.e., between rate cases). Its contrast with ratemaking approaches—such as British-style price-cap regulation—is, therefore, not as distinct as it first appears. In one sense, traditional ratemaking represents a hybrid that shares features of different rate mechanisms that have evolved over time.

2. **Why is NRRI doing this study now?**
   All state utility commissions have had, and will continue to have, to evaluate a wide array of alternative rate mechanisms across the electricity, natural gas, and water utility industries. The widespread proposals for alternative ratemaking stem from common market and utility-operation developments across utilities and states, in addition to similar legal structures, constituents, and regulatory objectives. Commissions have had to grapple with sorting out the information provided by various stakeholders. Stakeholders, which extend beyond utilities, neglect to "tell the whole story," as they deliberately omit some of the effects of an alternative rate mechanism that would be contrary to their interests if they become transparent to the commission. Commissions readily know that advancing some vested interests may not be in the public interest. Allowing lower rates to certain customers because they

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[1] Ken Costello, "Decision-Making Strategies for Assessing Ratemaking Methods: The Case of Natural Gas," NRRI 07-10, September 2007, iii.

petition for it, for example, may not be fair to other customers and, overall, not in the public interest.

3. **How can state commissions define "the public interest"?**
"The public interest" is a nebulous term devoid of any definite metric. Generically, it refers to the "common well-being" or "general welfare." It is central to policy debates, politics, democracy, and the purpose of government itself. One definition of "the public interest" is the composite indicator of the public well-being that combines the individual effects of an action on stakeholders and other societal interests. Another definition relates the public interest to the stakeholders' collective acceptance of a regulatory action. While nearly everyone would agree that advancing the common good or general welfare is an admirable goal, there is little consensus on what exactly constitutes the public interest. Some state utility commissions might associate the public interest with meeting minimum fairness requirements—for example, (a) fair treatment of utility investors and (b) protection of core customers. Even though "fairness" is a subjective term, commissions must establish bounds and rules to distinguish between fair and unfair actions.

4. **Why is it important to address the topic of this paper objectively and comprehensively?**
Commissions listen to the positions of different stakeholders, whose views often diverge and reflect opposing positions on individual rate mechanisms; besides, to be blunt, stakeholders have their own agenda to pursue. Commissions are in the unique position of trying to do what is best from the public's perspective, which is a most difficult task. After all, special interests do not represent the broad public interest. Because the public interest is diffused and not well-organized, it is crucial that commissions act as its proxy in regulatory matters.

5. **How should state commissions evaluate different rate mechanisms?**
By statute, state utility commissions must take a broad societal perspective, whether for ratemaking, planning, or other matters, in decision making. Regulators should, therefore, look at the totality or aggregative effects rather than just the outcome on the utility's financial condition, consumer short-term economic welfare, energy efficiency, social goals, or fairness to one party. Although advancing energy efficiency is a desirable goal, for example, it involves a cost that regulators must balance with the benefits. Excessive energy efficiency (e.g., energy efficiency that fails to pass a cost-effective test) can jeopardize economic efficiency and "fairness." In their duties, commissions must acknowledge the interests of individual groups by avoiding actions that would have a devastating effect on any one group. Since commissions assign objectives to ratemaking, logically they should evaluate mechanisms on how they advance certain objectives while not seriously impeding others that are at the core of ratemaking.

6. **What are the major alternative rate mechanisms currently under discussion?**
   They include those mechanisms presented before state commissions over the past several years by different interest groups, most prominently utilities. Alternative rate mechanisms vary considerably as to their objectives and outcomes; their support derives from different stakeholders with different agendas. All of these rate mechanisms, not surprisingly, have their good and bad features, which makes it difficult for regulators to evaluate them in terms of advancing the public interest. This paper identifies those mechanisms and enumerates their positive and negative features in the confines of regulatory objectives.

7. **What are the expected outcomes of alternative rate mechanisms in terms of advancing and impeding different regulatory objectives?**
   The analysis done for this study relies on economic theory and empirical evidence from real-world mechanisms. Uncertainty inevitably exists over some of the outcomes, especially about their magnitudes; the analyst is, in effect, making a prediction of the outcomes with a margin of error. This paper evaluates alternative rate mechanisms in terms of their effects on regulatory objectives.

8. **How can state commissions use the information in this study for decision making?**
   Ratemaking must take into account several factors, including what regulatory objectives to consider, the tradeoffs among objectives, and the weights that commissions place on each objective. It is understandable, then, why the ideal state of ratemaking (however defined) remains elusive and always will. Although regulators assign varied objectives to ratemaking and weigh them differently, they all should agree that achieving a particular objective at the lowest cost is in the public interest. One of the alleged legacies of public utility regulation is its spotty performance in achieving specific objectives at least cost. In striving for utility-service affordability to low-income households, for example, some rate mechanisms produce more benefits per dollar funded by general ratepayers than other mechanisms. Frequently, we observe non-optimal mechanisms that are excessive in costs relative to the gains to low-income households. Good ratemaking would attempt to control these wastes.

One major concern discussed in this paper is identifying the socially preferred outcome—that is, maximizing the public interest—when deviations from this state involve making tradeoffs amid conflicting objectives. Who, for example, decides on making these tradeoffs (within the context of this paper, the regulators do) and on how decision makers measure their consequences? Furthermore, what objectives should be included in ratemaking? Should they encompass the number of jobs created, the accelerated penetration of renewable energy, a cleaner environment, faster growth in energy efficiency, and the affordability of utility service to low-income households?

Adding to the complexity in decision making, much of the information, especially relating to risks and the relative importance of individual ratemaking objectives, is non-

quantifiable. This information gap demands that regulators assess subjectively the outcomes from different choices. In short, the judgment of regulators becomes final when choosing among different ratemaking approaches. That is the tough part of their job. For this reason, this paper makes no recommendations as to the "goodness" or "badness" of individual rate mechanisms. It hopes, instead, to aid regulators by identifying the inevitable tradeoffs that they must make with all rate mechanisms to advance the public interest.

Table of Contents

I. The Legacy of Public Utility Regulation: The "Balancing Act" 2

II. Features of Traditional Ratemaking 6

A. Six attributes 7

B. Major regulatory principles for cost recovery 11

III. Reasons for Consideration of Alternative Rate Mechanisms 12

A. Displeasure with traditional ratemaking 12

B. Three reasons for interest in alternative rate mechanisms 14

C. Objectives of alternative rate mechanisms 17

IV. A Framework for Commission Decision Making: Factors to Consider in Evaluating Alternative Rate Mechanisms 18

A. Support for a proactive commission 18

B. Utility performance is the key criterion 19

C. Meaning of "the public interest" 20

D. Conflicting objectives and the public interest 20

E. The "public interest" curve 21

F. A process for effective ratemaking 27

V. A Review of Alternative Rate Mechanisms 31

A. Grouping alternative rate mechanisms by objective 31

B. How each rate mechanism affects regulatory objectives 49

C. Two illustrations of challenges posed by multi-objectives 59

VI. Experiences with Seven Alternative Rate Mechanisms 65

A. Alabama's rate stabilization plan 65

B. Central Maine Power's Alternative Rate Plan 67

C. Atlanta Gas Light's STRIDE program 70

D. Wisconsin's future test year 72

E. Utah's (Questar's) Conservation Enabling Tariff 74

F. Ohio gas utilities' straight fixed-variable (SFV) rates 77

G. California's inverted rates 79

VII. Final Thoughts 82

Appendix: Examples of Alternative Rate Mechanisms 84

A. Incremental changes to traditional ROR regulation 84

B. Multiyear plans 84

C. A comparison of a revenue decoupling (RD) rider with a straight fixed-variable (SFV) rate 85

D. Alternative rate designs departing from average-cost pricing and the standard two-part tariff 87

References 88

Alternative Rate Mechanisms and Their Compatibility with State Utility Commission Objectives

Utilities and other parties have continuously proposed alternative rate mechanisms over the past several decades. These mechanisms reflect a direction away from traditional ratemaking practices. As some readers may recall, similar attacks on traditional ratemaking occurred about 20 years ago. Before then, one can go as far back as the late 1960s and early 1970s to see that utilities, as well as some environmental groups,[2] also pushed for alternative rate mechanisms because of technological developments, as well as a changing market and operating environment.[3] This time, the alternative ratemaking mechanisms have encompassed a wider umbrella. Electric, natural gas, and water utilities in recent years, for example, have expanded their interest in nontraditional rate mechanisms to include different cost trackers for an increasing number of utility activities, time-of-use rates, performance incentives for energy efficiency, revenue decoupling, formula rates, and surcharges for new investments.

Commissions have always been open to non-traditional ratemaking mechanisms[4] but the recent onslaught is unprecedented in terms of intensity and the variety of such rate mechanisms. To no surprise, their primary motivation is to promote the self-interest of those proposing them. As this paper emphasizes, alternative rate mechanisms inevitably involve a cost in terms of impeding one or more regulatory objectives. In other words, commissions must make decisions that balance the different objectives. These decisions then implicitly represent commissions' relative preferences for achieving different objectives. Commissions tend to make policy, for example, that favors those regulatory objectives to which they assign a high weight.

Each stakeholder group expectedly takes positions and makes arguments that it regards as economically beneficial to itself; the regulator's job is to sift these arguments in identifying those that arise only from self-interest, and in discovering those arguments

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[2] Some environmentalist groups pushed hard for marginal cost pricing as a way to reduce peak demand and defer new electricity generating capacity.

[3] Prior to that time, electric utilities were earning high rates of return because of regulatory lag that allowed then to retain, for several years, the benefits of high sales growth and stable or even declining costs. There was little public or commission opposition since prices did not rise. The problem was that these high profits probably should have benefited utility customers earlier in time by adjusting prices downward. On the other hand, high profits gave utilities more incentive to innovate and adopt new technologies that would benefit their customers in the longer term.

[4] Recently commissions have especially been responsive to alternative rate mechanisms that mitigate utility revenue erosion and the frequency of rate cases, reduce utility risks from large and unexpected costs, and promote energy efficiency and renewable energy.

that arise from self-interest but promote the public interest.[5] Any commission assessment on rate mechanisms is complex, requiring a combination of analytics, unbiased information, and judgment by commissioners to make decisions that are best for the public interest.

Historically, rate design in the utility sector has evolved to accommodate market and other changes—for example, phase-out of declining block rates, the shift from fixed bills, and the shift from one-part tariffs to two-part tariffs. We have seen this evolution not only in the public utility industries but in non-regulated industries as well. Good examples are Internet service and long-distance telephone service. Rate methodology changes take longer in the regulated sector, partially because of inertia and required due-process procedures. For example, entrenched bureaucratic inertia may resist change, especially when it triggers opposition by some stakeholders. Inertia can afflict regulators, utilities, and consumer advocates alike to the extent that they are risk averse toward change. This adversity can stem from uncertainty over the outcomes of change—for example, the effect of real-time pricing on residential customers who don't shift load between periods—in addition to the more obvious effects that would fall on certain stakeholders.[6] State utility commissions tend to undertake major reforms, including ratemaking ones, only when continuation of the *status quo* would bring disastrous results that disrupt the political equilibrium. These results can include: (1) utilities losing customers to competitors and suffering serious financial problems and (2) the suppression of a social objective (e.g., advancing energy efficiency) to which a commission gives high priority.

I. The Legacy of Public Utility Regulation: The "Balancing Act"

State utility commissions have consistently subscribed, over the years, to what regulatory observers call the "balancing act" of regulation. Table 1 outlines features of the balancing act and how commissions have applied it.

State utility regulators balance the rights of utilities and their customers by considering three major factors: (1) *legal constraints*—for example, utilities have a right to be given a reasonable opportunity to be financially viable, and customers have a right to just and reasonable prices; (2) *the regulator's perception of fairness*; and (3) *compatibility with a broader interest.* Regulators attempt to balance the interests of the different stakeholders with the overall objective of promoting the general good; at least,

[5] The last condition might include a utility proposing a modification of rate design that would help it to avoid serious financial problems. The regulator can conclude that even though the proposal would directly benefit the utility and its shareholders, it would prevent the utility from having a higher cost of capital or difficulty in attracting funds for new investments that would benefit its customers in the long run.

[6] This adversity by regulators may stem from the expected effects of a change on politically powerful stakeholders (e.g., industrial customers) rather than on the public interest, however they define it.

that is the premise behind the public-interest theory of regulation. This paper assumes that good regulation requires commissions to make decisions that are in the public interest. It performs no analysis on whether commissions actually attempt to pursue this objective. The economic literature is replete with theoretical and empirical studies showing that state utility commissions tend to more fully serve politically powerful interest groups than the general public. The author leaves it up to reader to judge the validity of these studies. Terms like "fairness" and "just and reasonable prices" have subjective connotations that challenge regulators, for example, to balance the dual objectives of fairness and economic efficiency and other objectives.

Legal precedent dictates that commissions must set reasonable rates that allow a prudent utility to operate successfully, maintain its financial integrity, attract capital, and compensate its investors in line with actual risks.[7] "Fair and reasonable" rates: (1) provide affordable service to the vast majority of customers, (2) include only the prudent costs of a utility, (3) reflect the utility's cost of serving different classes of customers and of providing different services, (4) allow the utility to receive sufficient revenues to attract new capital and satisfy minimum financial standards,[8] (5) prohibit undue discrimination against any customer class or service (e.g., rates should never fall below short-run marginal cost), and (6) in competitive markets, are any price that is voluntarily transacted between a buyer and a seller.[9]

Commission actions, in accordance with the balancing act, attempt to ensure that customers receive safe and reliable service at just and reasonable rates. In today's environment, balancing involves the recognition of (1) utility competitors wanting a "level playing field," (2) customers wanting lower prices and reliable service, (3) utilities wanting rates that allow them to be financially healthy, and (4) environmentalists wanting clean energy and energy efficiency. Trying to accommodate these varied and somewhat conflicting objectives poses a tough task for commissions. Historically, commissions have tended to emphasize the longer-term consequences of their actions, rather than trying to appease the immediate demands of stakeholders. As this paper stresses, commissions are uniquely responsible for looking out for the long-term interest of the general public.

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[7] The U.S. Supreme Court outlined these conditions in its 1944 order for *FPC v. Hope Natural Gas Co.*, 320 U.S. 591, 605 (1944). The Court recognized that regulators should have discretion to choose among various ratemaking methods to preserve (a) "just and reasonable" rates and (b) the right balance between different stakeholders under changed market and utility operational conditions. The decision, for example, allows regulators to modify ratemaking methods when conditions change.

[8] Rather than maximizing profits, utilities focus more on attaining targets for a set of financial variables that reflect their overall financial health.

[9] In workably competitive markets, removing any pricing constraints on the utility would allow it to better compete on a level playing field with unregulated providers.

One illustration of the "balancing act" is achieving fairness[10] without severely violating other, especially core, regulatory objectives. (Often regulators will consider secondary objectives, such as when they allow discriminatory pricing to promote economic development or discourage uneconomic bypass.) It is consistent with what analysts call "conjunctive decision making." The rule underlying this decision process requires that for any single option to receive approval it must meet a minimum threshold for each criterion.[11] A regulator might reject outright a declining-block rate structure just because it violates a primary objective, such as the encouragement of price-driven energy efficiency. A seasonal rate structure might also fail a threshold test because of higher utility bills during peak periods.

Regulators also seem guided by what analysts call *bounded rationality*; they may decide that a specific rate mechanism is acceptable, if not optimal. Regulators may use the rule of thumb that a rate mechanism warrants serious consideration when it meets or surpasses a threshold for the most important regulatory objectives. Assume that regulators deemed equity and revenue sufficiency as the only critical objectives. As long as a rate mechanism does not seriously violate "fairness" standards and allows the utility a reasonable opportunity to earn its authorized rate of return, regulators can find the option acceptable, if not the superior choice. Another test for acceptability is whether any major stakeholder vigorously opposes a rate mechanism; if none does, regulation is said to be in equilibrium, or a state of minimum conflict (i.e., a balanced outcome) that elicits minimal complaints.

Commissions also recognize that part of their ratemaking duties includes allowing utilities a good opportunity to recover their prudent costs, including a fair return on their investment, so that they are financially viable to provide customers with adequate service. Overall, balancing of investor and the consumer interests is a key element of commission decisions. Often it requires commissions to balance the allocation of risks and benefits primarily between utility investors and customers.[12]

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[10] The term "fairness" and its derivative, "fair," appear commonly in the regulatory arena. We often hear of a "fair rate of return," "fair and reasonable rates," "fair value," and a "fair process." Because fairness is elusive and enters the realm of philosophy, it becomes difficult to know what is fair and to say that one policy is fairer than another is. Stakeholders' perceptions of fairness differ; therefore, regulators must balance them to decide what is in the public interest. [*See* Doug N. Jones and Patrick C. Mann, "The Fairness Criterion in Public Utility Regulation: Does Fairness Still Matter?" *Journal of Economic Issues*, *35*(1) (March 2001): 153-72.]

[11] The conjunctive decision rule recognizes that when a particular stakeholder's interest becomes seriously violated, regulation departs from an equilibrium condition in which no one group places intense political and other pressures on regulators to change their practices or policies.

[12] Risk-allocation questions on cost recovery also arise between customer classes. When a new technology benefits only a portion of a utility's customers, for example, the regulator may have to consider the cost-recovery responsibility of separate customer classes. Should all

Table 1: Elements of the Balancing Act

1. **Symmetry of utility customer and investor interests**
   - Customers want fair and reasonable prices
   - Investors want an opportunity to earn a return commensurate with risk
2. **Balancing can involve regulatory objectives rather than stakeholder interests, although both tend to overlap**
3. **For example, commissions identify the objectives of ratemaking, weigh those objectives, and make the inevitable tradeoffs**
4. **Fairness to different stakeholders achieved by expert, disinterested regulatory bodies acting solely in the "public interest"**
   - Commissions balance the interests of different stakeholders, given their legal mandates and the political environment, so as to advance the public interest
5. **Commissions reject those positions and arguments of stakeholders deemed not to be in the public interest**
6. **The public interest reflects the composite indicator of the public well-being combining the individual effects of an action**
7. **The challenge for commissions is to identify the public interest amid the chorus of self-seeking arguments**
   - Are the positions taken by special interest (a) representative of the general public interest and (b) intellectually and analytically well founded?

Most state utility commissions operate under rather imprecise statutes that establish only boundary conditions for ratemaking.[13] For example, they may express the mandate that commissions set "just and reasonable" rates and provide universal service, without specifying how utilities should achieve those goals.[14] Constitutional law prohibits confiscation of utility investors' property. Some statutes prohibit excessive or undue price discrimination. Other than these broad conditions, commissions have wide discretion in selecting ratemaking methods and applications.

New regulatory objectives and expanded regulatory agendas have made ratemaking more complicated, especially in satisfying the core objectives underlying "just and reasonable" rates. Commissions must make additional tradeoffs, as new objectives often conflict with the core objectives.

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customers bear the risk of a new technology that benefits only residential customers? Should all residential customers pay the same costs for the technology even though some benefit more than others?

[13] Besides state statutes, the U.S. Constitution also places bounds on regulatory actions with regard to confiscation of utility investors' property.

[14] One interpretation of this mandate is that a utility charges customers no more than necessary to give it a reasonable opportunity to recover efficiently incurred costs, including a fair rate of return on its investments.

Many of the alternative rate mechanisms tend to lower risk to utility investors. Although they have the intent of making utilities more financially healthy, their benefits to customers are less obvious. In fact, regulators frequently struggle to discern how some rate mechanisms actually benefit utility customers.[15] While financially healthy utilities are desirable, state utility commissions have a duty to take a broader and more balanced perspective by considering whether an alternative rate mechanism would serve the public interest. What best serves utility interests, or any stakeholder interests for that matter, might violate the public interest. A challenge for commissions in reviewing rate mechanisms is to determine whether customers will benefit enough to offset the potential negative effects that might burden them.[16]

Changed economic, market, operating, and policy conditions justify regulators revisiting the "public interest" effects of existing ratemaking practices. Although these practices might have succeeded in balancing interests throughout the years, they may fail to do so in the future. Staying with the status quo, in short, can diminish utility performance and thus jeopardize the public interest.[17]

II. Features of Traditional Ratemaking

Traditional ratemaking is the default method that state utility regulators use for setting utility rates. It is also the benchmark used by regulators to assess other ratemaking practices. Even though some industry observers have written off traditional ratemaking as an anachronism, it still retains the status of the core ratemaking paradigm in state utility regulation, notwithstanding the onslaught of alternative rate mechanisms proposed by diverse interest groups throughout the history of state public utility regulation. Typically, the onus is on utilities and other stakeholders to demonstrate the

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[15] Several commissions have addressed the question of whether customers should benefit from lower utility risk by reducing a utility's authorized rate of return. Such an action could better balance the gains between utility investors and customers. Utilities have rejoined by contending that a more financially healthy utility by itself would make it more attractive to investors and in the process drive down its cost of capital. Thus, commissions should not "artificially" adjust the utility's authorized rate of return to compensate customers for lower utility risk.

[16] Some rate mechanisms diminish the incentive of utilities to control their costs, which eventually translates into higher rates for customers over time. The risk to customers derives from increasing the probability that they will have to shoulder excessive or imprudent utility costs because of the diminished incentive of the utility to control costs.

[17] Alternative ratemaking practices can not only rebalance stakeholder interests in a satisfactorily manner, they could also minimize what economists call "deadweight losses." These losses represent a decline in aggregate economic welfare. Rigid pricing, for example, could result in uneconomic bypass under competitive conditions that could shift output to firms that have higher costs (but lower prices) than the local utility.

superiority of an alternate approach over traditional ratemaking. A proactive regulator would initiate, or at least consider, alternative rate mechanisms on its own when conditions change to cast doubt on the efficacy of existing ratemaking methods.[18]

Four factors explain the popularity of traditional ratemaking over time: (1) its perceived fairness to all parties under most market and business conditions; (2) its ease of understanding; (3) the public's general acceptance of average-cost pricing that relates prices to costs, even if not the correct costs from an economic perspective; and (4) its attempt to achieve a balanced outcome that avoids, in most circumstances, extreme discontent by individual stakeholders.

A. Six attributes

1. Opportunity for utilities to earn a reasonable return

Traditional ratemaking has several features, some of which are subject to severe criticism, forming the basis for alternative rate mechanisms. The first feature is the objective of allowing utilities the opportunity to earn a reasonable return on prudent costs. As a general practice, regulators set rates so that utilities have the opportunity to recover prudently incurred costs plus a reasonable (or "fair") return on equity. At the conclusion of a rate case, for example, the regulator considers the utility's new rates to be "just and reasonable" on a forward-going basis. The regulator determines the new rates to be sufficient for allowing a utility to attract capital necessary so that it can finance its operations in order to provide the services consumers demand, while at the same time charging consumers a fair price for the services purchased.[19]

According to most state statutes, regulators must assure the public that utility rates are "just and reasonable" and not unduly discriminatory. These requirements mean that customers are charged no more than necessary to give a utility a reasonable opportunity to recover efficiently incurred costs, including a fair return of and on their investments. Regulators often refer to "just and reasonable" rates in their decisions, but rarely do they say what criteria (e.g., the acceptable degree of price discrimination, the proper allocation of business risk between shareholders and consumers) would support such rates. "Just and reasonable" thus becomes a mantra, or a *post-hoc* justification, rather than a continuous workable criterion for regulatory decision making.

The predominant venue for rates setting is a general rate case, which addresses the three major parts of ratemaking: the revenue requirement, cost allocation, and rate

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[18] The regulator might rightly believe that a utility would not propose an action, such as an alternative rate mechanism that would be in the public interest but not in its interest.

[19] If a utility constantly earns below its authorized rate of return (i.e., its cost of capital), it could discourage utility investments that jeopardizes the quality of utility service or, in the worst case, cause severe financial problems that could lead to bankruptcy. The fact that the history of state utility regulation has seem few bankruptcies shows that one of its long-term objectives is to avoid utilities from experiencing severe financial problems.

design. A general rate case also typically covers a multimonth review period in which several parties participate. It almost always initiates at the utility's request, involves large sums of dollars, encompasses all rates, and includes a scrutiny of a utility's costs and revenues by different parties. In a general rate case, the regulator determines what rates a utility could charge its customers for a future period. It uses a test year that matches revenues with costs, at least over the first year of new rates. The approved rates reflect what a commission deems to be prudent utility management in controlling costs and other functions. That determination is based on a "test year" estimate of utility expenses, sales, and investment, as well as the cost of debt (interest on loans) and the cost of equity (the cost of attracting shareholders), with debt and equity being the sources that fund the capital projects necessary to fulfill the utility's service obligation.

2. Fixed rates between rate cases

A second feature of traditional ratemaking is that utility rates remain constant between rate cases, except for riders and trackers, surcharges, and indexing. The trend in recent years is to allow more rate changes between rate cases to account for unexpected costs or revenue changes that are difficult to predict in a general rate case or that fall outside the test period. Cost recovery for new capital projects outside of a general rate case is an example of this trend.[20]

3. Actual returns can deviate from the authorized return

A third feature is that commissions do not guarantee that utilities will earn their authorized rate of return. Almost always, a utility will not earn exactly its authorized rate of return. It can expect actual sales and costs to deviate from test-year levels. The gap depends on the accuracy of test-year parameters in representing sales and costs over the period of new rates.[21] The regulatory obligation is only to provide the utility with a reasonable opportunity to earn the authorized level.

4. Strong utility incentive to manage costs between rate cases

A fourth feature is that a utility has a strong incentive to control costs between rate cases. This motivation derives from the mechanics of traditional ratemaking in setting the price, not the actual earnings of a utility. To the extent that the utility is better

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[20] Since traditional ratemaking requires a general rate case for utilities to recover their capital costs for new projects, utilities may have to wait several years before they can recover those costs. Such regulatory lag can cause financial problems for utilities, at least that is what some utilities and Wall Street investors have argued.

[21] Assume that a utility's actual costs are 3 percent below test-year costs and that its profits or margins are 20 percent of costs. The utility's margins or ROR would increase by 15 percent. If the authorized ROR on equity is 10 percent, the actual ROR would then increase to 11.5 percent.

able to hold down costs, its earnings and rate of return increase.[22] If a utility, for example, enjoyed an unexpected growth in productivity resulting in lower costs between rate cases, it benefits for a time.[23] In this instance, regulatory lag works in favor of the utility—a utility's rates remain constant while its actual average cost falls below the test-year estimate. Customers do not see the benefits of lower utility costs until regulators reflect them in new rates. This outcome is known in regulatory circles as the "ratchet effect," which says, in effect, that utilities eventually would have to turn over any past cost savings to customers.[24] Analysts sometimes refer to this turnover, especially when rate cases occur frequently (i.e., with a shortened regulatory lag), as the antecedent of the cost-plus nature of traditional ratemaking.

5. The balancing of interests

As a fifth feature, as discussed earlier in this section, traditional ratemaking attempts to balance the interests of different stakeholders. Regulators face the challenge of translating individual groups' interests into a broader public or general interest. Utility regulation exhibits a "balancing act" approach.[25]

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[22] Because utilities initiate rate cases under traditional ratemaking, they can file for new rates, for example, when their costs rise because of lax management. This ability to control the timing of rate cases would somewhat weaken utilities' incentive to control costs. *See*, for example, Ellen M. Pint, "Price-Cap versus Rate-of-Return Regulation in a Stochastic-Cost Model," *RAND Journal of Economics*, Vol. 23, No. 4 (Winter 1992): 564-578.

[23] It is assumed that expected growth in productivity is built into existing rates.

[24] The "ratchet effect" may derive from the commission's adjustment of future forecasts based on past forecasting errors. The commission observes the utility's past actual costs to reset a future price. The "ratchet effect" reflects dynamic strategic behavior that could motivate a utility to intentionally inflate its costs so as to increase the price that a commission will allow in a future rate case. See Ken Costello, "Future Test Years: Challenges Posed for State Utility Commissions," NRRI 13-08, July 2013.

[25] Balancing interests may satisfy the regulator's own interests (e.g., achieving political equilibrium), rather than the public interest. Achieving this goal may result in regulatory approval of a ratemaking mechanism that share features of different mechanisms. One article expressed this view:

> Models of public utility regulation are often framed, alternatively, as rate-of-return or price-cap regulation. In practice, however, regulators have increasingly adopted a variety of hybrid regulatory constraints that embody elements of both these, and other, regulatory forms. In this paper, we draw upon elements of both the positive economic theory of regulation and standard efficiency-based economic analysis of regulation to develop a model that endogenously yields hybrid regulatory constraints as a regulatory optimum. In this context, the paper further demonstrates that a commonly observed side payment–profit sharing–enhances regulator welfare. The results provide a plausible basis for understanding the pattern of modern regulatory constraints.

6. Mixed outcomes from regulatory lag

A sixth feature is that regulatory lag can either benefit or harm utilities, depending on whether average cost is decreasing or increasing (relative to average revenue). Over the history of state utility regulation, regulatory lag has benefited utilities during some periods while hurting them in other periods. For example, utilities generally benefit when prices remain fixed over several years while their average cost is declining.[26]

Much discussion in the regulatory arena has focused on regulatory lag as it relates to the timing of cost recovery. On the plus side, a lag between cost incurrence by a utility and its recovery of those costs can provide additional incentives for efficient management and cost control.[27] Commissions rely on regulatory lag as an important tool in motivating utilities to act efficiently and prudently, as it can have a positive effect on utility performance. Regulatory lag can also encourage innovation.[28] In periods before the late 1960s, for example, when electric utilities had declining costs, infrequent rate cases allowed utilities to retain the benefits of new technologies over several years.[29] Retrospective reviews of utility activities were also rare during this time. Not

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[Larry Blank and John W. Mayo, "Endogenous Regulatory Constraints and the Emergence of Hybrid Regulation," *Review of Industrial Organization*, Vol. 35, Issue 3 (November 2009), 233.]

[26] Historical experiences have shown that state utility commissions have less concern with utilities earning above their authorized rate of return when rates remain fixed than when they increase. *See,* for example, Paul L. Joskow, "Inflation and Environmental Concern: Structural Changes in the Process of Public Utility Regulation," *Journal of Law and Economics*, Vol. 17 (1974): 291-327; and Larry Blank and John W. Mayo, "Endogenous Regulatory Constraints and the Emergence of Hybrid Regulation."

[27] As economist and regulator Alfred Kahn once remarked:

> Freezing rates for the period of the lag imposes penalties for inefficiency, excessive conservatism, and wrong guesses, and offers rewards for their opposites; companies can for a time keep the higher profits they reap from a superior performance and have to suffer the losses from a poor one.

[Alfred E. Kahn, *Economics of Regulation, Vol. 2* (New York: John Wiley & Sons, 1971), 48.]

[28] *See*, for example, Paul Joskow, "Productivity Growth and Technical Change in the Generation of Electricity," *The Energy Journal*, vol. 8, (1987): 17-38. Some analysts believe that there was actually too much investment in new technologies because of excessive expected returns relative to risk.

[29] *See* Ken Costello, "New Technologies: Challenges for State Utility Regulators and What They Should Ask," NRRI 12-01, January 2012.

surprisingly, during this period the electric industry actively engaged in new technologies and other innovative activities.[30]

On the negative side, regulatory lag can cause severe cash-flow problems for a utility. If the costs are substantial and utility recovery of those costs occurs several years after incurrence, they can weaken a utility's financial condition to increase its cost of capital or make it more difficult to attract capital.

B. Major regulatory principles for cost recovery

Two overriding principles determine cost recovery. The first is that costs should reflect efficient and prudent utility management. The second is that a utility should have a reasonable opportunity to recover its prudent costs and to earn its market-required return on capital expenditures.

Determination of cost recovery usually occurs within the confines of a rate case. Special conditions can warrant recovery of costs outside a rate case; cost trackers are an exception to the general rule of rate-case cost recovery. Until the last several years, a commission would require three "special" conditions for cost recovery outside of a general rate case. They are: (1) large cost component, (2) costs over which a utility's management has little control, and (3) unpredictable and highly volatile costs. Disagreements exist to this day over the interpretation of "special conditions" and when they exist. State commissions have exhibited acceptance, in recent years, of cost trackers for more utility functions.

What follows is a summary of the major principles for cost recovery applied by state utility commissions over the years:

1. *Cost recovery should reflect, in a reasonable way, the prudent costs of a utility, either incurred in the past or projected for the future.*

2. *Cost recovery should avoid dramatic price volatility to utility customers.* Customers prefer some price stability so that they can better budget their expenditures that include utility bills.

3. *Cost recovery should avoid jeopardizing a prudent utility's financial condition.* A commission may want, in special circumstances, to mitigate cash flow problems by allowing a utility quicker cost recovery.

4. *Cost recovery should avoid placing onerous burdens on either utility customers or shareholders.* This balance may require a tradeoff between immediate cost recovery and delay of cost recovery until after the next rate case.

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[30] Ibid., 13-15.

5. *Where a utility has much discretion over costs, regulation would tend to (a) provide the utility with either robust incentives to control them or (b) establish performance standards.* Allowing for "automatic" cost recovery or recovery with minimal scrutiny weakens utility accountability to manage costs, leading to excessive risk for utility customers.

How regulators frame cost recovery is critical in examining (1) what costs they should allow utilities to recover, (2) how utilities should recover them, and (3) when they should recover them. Utilities sometimes convey the false assertion that they have a right to recover any costs they incurred, even before the regulator has assessed their reasonableness. Their position seems to be that "we expend money to satisfy mandates or serve our customers, so regulators should allow us recovery of this money in rates with little scrutiny." It presumes that regulators should trust that utilities will always act in the public interest. Good regulation would question the prudence and legitimacy of any costs; it owes that much to utility customers. As in other situations, regulators should not expect utility interests to coexist with the public interest.

III. Reasons for Consideration of Alternative Rate Mechanisms

A. Displeasure with traditional ratemaking

1. The need to periodically revisit ratemaking practices

This section identifies the major factors that have triggered the recent unprecedented interest in alternative rate mechanisms. A revisiting of the merits of existing ratemaking practices and their underlying premises has occurred periodically throughout the 100-plus years of public utility regulation. One lesson learned over this time is that commissions should consider the merits of alternative rate mechanisms when market, economic, operating, technological, and other conditions change.[31] If in fact the underlying assumptions of traditional ratemaking no longer hold, it becomes less likely that regulation will serve the public interest. One outcome might be the utility failing to recover its prudent costs. Another outcome might be the utility earning excessive profits and customers paying for imprudent costs. Regulators should then consider ratemaking alternatives to the status quo by either (1) revamping traditional ratemaking or (2) supplementing it with alternative rate mechanisms, in order to maintain the implicit "regulatory bargain."[32]

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[31] *See,* for example, Paul L. Joskow, "Inflation and Environmental Concern: Structural Changes in the Process of Public Utility Regulation"; Karl McDermott, *Cost of Service Regulation in the Investor-Owned Electric Utility Industry: A History of Adaptation* (Washington D.C.: Edison Electric Institute, June 2102); and Kenneth W. Costello and Douglas N. Jones, "Lessons Learned in State Electric Utility Regulation," in *Reinventing Electric Utility Regulation*, eds. Gregory B. Enholm and J. Robert Malko (Vienna,VA: Public Utilities Report, 1995): 69-92.

[32] This bargain is two-sided: (a) prudent utilities have a reasonable opportunity to recover operations and capital costs and (b) utility customers pay no more than required to

2. Criticisms from different sources

Sources of discontent with traditional ratemaking through the years have come from different quarters: economic theory, real-world experiences, recent market and other developments triggering a revisit of "old" ratemaking practices. Some critics consider traditional ratemaking as old-fashion and out of touch with today's environment.

Some stakeholders have expressed frustration with the rigid features of traditional ratemaking. As an example, ROR ratemaking can provide utilities with inadequate incentives to invest in new technologies that are cost-beneficial (e.g., provide customers with new services, address new environmental regulations at least cost). Specifically, it may remove many of the profit opportunities that induce unregulated firms to make technological improvements.[33] On the other hand, ROR ratemaking also limits utility risk for unsuccessful new technologies, which at least partially, if not perfectly, compensates for the absence of potentially high profit. Overall, ROR ratemaking tends to socialize both the benefits and the risks of new technologies.[34]

3. New conditions may warrant alternative ratemaking practices

According to some industry observers, traditional ratemaking works best in an era of high sales growth and declining average costs from increasing economies of scale and

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recover those costs. The traditional regulatory bargain equates "just and reasonable" rates with cost-based rates.

[33] Regulatory policies can discourage or stimulate utility investments in innovations, thereby affecting the amount that utilities spend on innovation, the speed at which they innovate, and the nature of the innovations. The regulatory tools that affect innovation are ratemaking, mandates, and performance standards. By placing bounds on utility profits and risk, regulation can either constrain or stimulate innovation. Regulated utilities face more severe profit constraints than their unregulated counterparts, which by itself diminishes their willingness to innovate. Analysts have criticized traditional ROR ratemaking for providing utilities with weak incentives to innovate. *See*, for example, GE Digital Energy and Analysis Group, "Results-Based Regulation: A Modern Approach to Modernize the Grid," White Paper, October 2013.

Yet, regulatory policies can also encourage innovation, sometimes with poor results. Electric utilities, for example, historically invested aggressively in new technologies when their economic incentives were strong (i.e., the expected return was high relative to the risk). In the past, some of those new technologies have performed poorly, burdening utility customers with recovery of excessive costs. *See*, for example, H. Stuart Burness, W. David Montgomery, and James Quirk, "Capital Contracting and the Regulated Firm," *American Economic Review*, Vol. 70 (June 1980): 342-54. During the 1960s to the mid-1970s, for example, utilities found nuclear power attractive because of the potential to earn high rates of return and the low risks involved during this period of rare retrospective review. *See also* Paul Joskow, "Productivity Growth and Technical Change in the Generation of Electricity."

[34] *See* Ken Costello, "New Technologies: Challenges for State Utility Regulators and What They Should Ask."

productivity growth.[35] It is also more appropriate when regulatory objectives are more narrowly focused and confined to the setting of "just and reasonable" rates in conjunction with reliable and safe utility service. The expansion of regulatory objectives has pulled ratemaking in various directions, complicating the tradeoffs that regulators must make in their decisions.

Because conditions have changed, as argued by critics, traditional ratemaking fails to serve the public interest when compared with alternate rate mechanisms. This paper views this assertion as a hypothesis rather than as fact, since the public interest is a subjective concept that lacks a precise definition allowing for an objective conclusion comparing two states of affairs: a world with traditional ratemaking and a world with alternative rate mechanisms.[36] Typically, one state does not dominate by having superior outcomes for all of the regulatory objectives. For example, while an alternative rate mechanism may improve a utility's financial condition, it may shift risk to customers and diminish the incentive of the utility to manage its costs between rate cases.

B. Three reasons for interest in alternative rate mechanisms

1. New regulatory objectives

Three reasons explain the recent interest in alternative rate mechanisms. First, traditional ratemaking gives inadequate attention to new regulatory objectives. Promoting socially desirable renewable energy or energy efficiency, for example, may require a departure from cost-of-service rates, which is a feature of traditional ratemaking.[37] It may call for special incentives or subsidies funded by general ratepayers or surcharges that induce utilities to incur expenditures between rate cases.

2. Declining sales growth

Second, declining sales growth and declining sales per customer have caused revenue erosion.[38] The standard two-part tariff has contributed to this problem.[39]

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[35] If cost changes over time are manageable, as the traditional ratemaking model assumes, utilities that operate under normal conditions will, on average, have the opportunity to recover their allowed costs.

[36] Critics are often special interests that seek to increase their economic gains from alternative rate mechanisms. As such, they have little credibility in asserting that traditional ratemaking has failed to serve the public interest.

[37] The smart grid and the emergence of distributed resources change the services that electricity customers demand, requiring utilities to offer them new unbundled services at "just and reasonable" rates.

[38] For the electric sector, five factors account for lower growth in sales: (a) a weak economy, (b) demand-side management programs, (c) building and appliance codes and standards, (d) distributed generation and (e) fuel switching. Many analysts now see a drop in annual sales growth to less than one percent as a long-term phenomenon. *See* Ahmad Faruqui,

The following expression represents the standard two-part tariff for base rates set by utilities:

$$B_i = C + p \cdot q_i$$

The base rate for customer i, B_i, equals the sum of the customer charge (C)[40] applicable to all customers, and the volumetric charge (p) times the quantity of utility service consumed by customer i (q_i).[41] It excludes purchased gas, fuel, and other costs recovered by a utility through a tracker or other rate mechanism outside of a general rate case.

The base rate recovers those costs related to investment in, and operation of, a utility system. The customer charge typically includes the direct cost of serving a customer, including the cost for meters, meter reading, billing and collection, servicing an account, call centers, and other costs independent of usage.[42] The volumetric recovers

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"The Future of Demand Growth: How Five Forces Are Creating a New Normal," presentation at the Goldman Sachs 11th Annual Power and Utility Conference, August 14, 2012.

Falling sales per customer has triggered interest in revenue decoupling, straight fixed-variable rates, formula rates, multiyear rate plans and lost revenue adjustment mechanisms. As discussed later, which of these is preferable from a public interest perspective requires a judgment call by regulators.

[39] Non-linear pricing (with two-part tariff) has been used in the pricing of utility services since early in the 20th century. Early proponents such as Samuel Insull viewed this pricing method as a way to expand demand and lower average costs while satisfying a break-even constraint. Prior to that time, an unmetered rate was the earliest type of rate used by utilities: a customer is billed a fixed sum for service during a specified period regardless of usage; this billing practice was used prior to the introduction of meters; this rate structure was simple and easy to administer, but was both highly uneconomical and inequitable, since two customers with different levels of gas consumption would have the same monthly bill. Flat rates (i.e., one-part volumetric tariff) were the next rate structure, where the utility bills a customer based on a constant price per gas consumed and registered by a meter; this is simplest of all metered rate methods; it posed serious problems as well, including revenue instability, poor price signals, and subsidization of low-usage customers by high-usage ones.

[40] Some utilities label this rate element the monthly service charge or some other name that represents the minimum charge to customers when they consume no utility service.

[41] The formula above assumes a uniform volumetric distribution charge. Many utilities have block pricing where the volumetric distribution charge varies between blocks of consumption. These rate designs include increasing and declining block structures.

[42] The monthly customer charge equals the allocated annual customer costs divided by the number of customer months.

the remaining costs of a utility. It includes both operating costs and capital costs not recovered in the customer charge.[43]

Using a numerical example, assume that the monthly customer charge is $10, the volumetric charge is $1.50 per thousand cubic feet (Mcf), and monthly usage is 10 Mcf. Under this tariff structure, the customer's bill (excluding purchased gas cost) would be $10 + ($1.50·10), or $25. If the customer did not consume any gas during the month, she would be charged $10. The marginal price to the customer (i.e., the cost to the customer of consuming one additional Mcf of local distribution service) would be $1.50. Under typical rate structures, the marginal price exceeds the marginal cost to the utility, since the marginal price includes fixed costs. When sales increase, for example, the utility's revenues grow by more than its costs, resulting in higher earnings. Obversely, with lower sales, the utility loses more revenues than it saves in costs, resulting in decreased earnings.

A secondary outcome is that the average price of gas to the customer (i.e., the customer's bill divided by monthly usage) decreases as the customer consumes more gas. In our example, the average price to a customer using 10 Mcf would be $2.50 per Mcf, while the average price at a usage level of 15 Mcf would be $2.17 per Mcf. This decline in average price reflects the decrease in a utility's average costs as monthly consumption increases, because the fixed costs of the system (to the extent that the utility recovers them through the non-varying customer charge[44]) are divided by more units of sale.

The utility's ability to recover its authorized rate of return depends on the level of sales. The utility would, therefore, have an incentive to promote sales, as additional sales would increase earnings as long as additional revenues exceed incremental costs.[45] This has negative ramifications for a policy objective that encourages utilities to promote energy efficiency.

3. Non-revenue-producing investments

Large capital expenditures, some of which are non-revenue producing (e.g., natural gas pipe replacement), are a third reason for interest in alternative rate mechanisms. Many utilities, as well as an increasing number of commissions, feel that

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[43] The volumetric charge equals the total costs (minus the costs recovered in the customer charge) divided by the annual sales as determined at the last rate case.

[44] As discussed later, over the past several years commissions have tended to move more of the fixed costs out of the volumetric charge and into the fixed monthly charge. The problems created by the prevailing rate structure have also led to alternative rate mechanisms, such as revenue decoupling and straight fixed-variable rates. These mechanisms in part intend to overcome the utility's resistance to energy efficiency caused by the standard two-part tariff.

[45] Another outcome, when the utility recovers fixed costs recovered through a volumetric charge, is customers receiving inefficient price signals. Specifically, including non-variable costs in the marginal price would motivate customers to under-consume.

waiting for the utility to recover these costs until the completion of a new project or the next rate case could lead to serious cash-flow problems and, ultimately, "rate shock." As one consulting report for the electric industry has expressed:

> Under traditional regulation, we have seen that [intensifying cost pressures and general business turbulence] can lead to rate shock, frequent rate cases, and investment risk that is not commensurate with the rate of return.[46]

C. Objectives of alternative rate mechanisms

Although utilities are the most frequent proposers of alternative rate mechanisms, other stakeholders have also advocated them to advance their agenda. The intent behind these mechanisms varies. They include:

1. Reducing risk to utilities and improve their financial condition by mitigating regulatory lag and offering them more certainty in cost recovery (e.g., future test years, regulatory preapproval of large capital projects)

2. Promoting certain social goals (e.g., infrastructure surcharges for gas pipeline replacement, discount rates to low-income households[47])

3. Facilitating new investments, especially those that do not generate additional utility revenues

4. Fostering new technologies (e.g., net metering of rooftop solar PV systems, regulatory preapproval of smart meters)

5. Encouraging utility energy efficiency (e.g., revenue decoupling, straight fixed-variable rates[48])

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[46] Mark Lowry Newton et al., *Forward Test Years for U.S. Electric Utilities*, prepared for the Edison Electric Institute, August 2010, 39.

[47] One example is targeted subsidized rates, where the utility offers a price discount to advance some social objective such as universal service and service affordability to low-income households. The rate offered to achieve these objectives might fall below short-run marginal cost, resulting in a burden on either utility shareholders or non-targeted customers, or sharing by both. A preferential rate directed at low-income households, for example, can include (a) a straight rate discount (e.g., a 20 percent discount from the cost-of-service rate), (b) a percentage-of-income payment plan (PIPP) where a utility bills an eligible customer based on a specified percentage of the household's income, or (c) crediting their bills by a specified lump-sum amount. As discussed later, alternative rate mechanisms should not only advance some regulatory objective, they should also do so most cost-effectively and with minimal waste.

[48] These rate mechanisms can also remove the disincentive of electric utilities to promote distributive generation, such as combined heat and power (CHP) and rooftop solar PV systems.

6. Increasing public benefits from utility investments and other activities (e.g., rolled-in pricing[49] for gas line extensions)

7. Reducing the frequency of rate cases (e.g., multiyear rate plans)[50]

8. Mitigating regulatory lag[51] (e.g., future test year, cost trackers)

IV. A Framework for Commission Decision Making: Factors to Consider in Evaluating Alternative Rate Mechanisms

A. Support for a proactive commission

As a rule, commissions make ratemaking decisions by responding to the positions of stakeholders, who present conflicting information, in the absence of pre-existing commission statements enunciating ratemaking principles,[52] which can include the weights assigned to the various regulatory objectives. Assuming a defensive stance makes commissions more vulnerable to political pressures from individual special interests. Excessively assuaging individual stakeholders would ostensibly, more times than not, fail to advance the public interest.

In taking a proactive stance, a commission might want to consider taking the initiative by laying out ratemaking principles and by identifying the objectives and

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[49] Under rolled-in pricing, the utility adds the costs of new investments to existing costs with prices to all customers based on this sum. New and existing customers face the same price. Analysts often refer to rolled-in prices as average or embedded cost prices. Under an alternate pricing method, namely, incremental pricing, the utility's price for sales to new customers differs from the price for sales to existing customers. It relates closely to the economist's notion of marginal cost. Rolled-in pricing is synonymous with the term "socializing the costs" whereby all customers pay for a utility investment or other activity even if a relatively few customers receive a disproportional share of the benefits.

[50] The downside to fewer rate cases is conditions might warrant regulators to frequently revise cost allocations, rate design and the utility's cost of capital.

[51] This outcome could, as mentioned earlier, weaken utility incentives for cost management, justifying at least consideration of conditioning a mechanism on predetermined performance benchmarks for different functional areas. There are at least three perspectives on regulatory lag, each with a positive or negative connotation: (a) it can create cash flow problems for a utility, (b) it can strengthen a utility's incentives to control costs, and (c) it can cause a utility to receive windfalls or losses for factors beyond its control, inferring a "fairness" problem.

[52] Regulatory decisions should hinge on principles rather than stakeholder and political pressures. This advice is not always easy to implement, but it is a requirement for good regulation directed at serving the public interest.

features that a ratemaking proposal should follow. Often, utilities and other stakeholders make proposals that are not in the public interest. Less evident, they may also *fail* to make proposals that would be in the public interest but contrary to their interests.[53]

The core principles of ratemaking tend to be immutable over time, as they represent a general guide to good ratemaking under a wide array of market, economic, technological, and political conditions. Less primary objectives, on the other hand, can vary as markets evolve and the economic and political landscape changes. New ratemaking objectives can surface, with some old ones discarded or relegated to a lower status. The regulatory weighing of these objectives can vary over time and between utilities, as conditions change and differ across utilities. In other words, regulators might find some rate mechanisms non-robust as market, technological, and operating conditions change.

B. Utility performance is the key criterion

Utility performance is the litmus test for evaluating different rate mechanisms. After all, a main goal of public utility regulation is to improve the performance of utilities from their unregulated levels. Specifically, regulation is all about steering utility actions toward the public interest.

A relevant question in today's environment is then: Should regulators condition cost trackers, rate-stabilization plans, infrastructure surcharges, and other mechanisms that shift risks to customers on predetermined benchmarks or performance targets?[54] These mechanisms make cost recovery more timely, certain, and predictable for utilities.

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[53] A commission should almost always expect stakeholders to promote their self-interest and only propose an action that is in the public interest when it is in their interest as well.

[54] A dubious practice is to hold a utility to a predetermined benchmark or hard target, based on a peer group of utilities or even on the utility's previous performance. It is presumptuous to conclude that anytime a utility fails to achieve its target, it has acted imprudently. For many functional areas, penalizing or rewarding a utility based solely on this comparison would be inappropriate and unfair to the utility or customers; it is infeasible, for example, to control for all the factors that affect the performance of a particular functional area and explain the differences across utilities. The analyst would find it challenging to identify the factors, let alone try to measure their effects with reasonable precision. On the other hand, commissions should assume that utilities have some control over its performance. A perception to the contrary inevitably leads to an open-ended invitation for the utility to pass through all costs to customers with minimal regulatory oversight. Both of these extreme policies – a hard target and a *laissez faire* approach – make false assumptions that can lead to inefficient and inequitable outcomes. Some readers may disagree by asserting that hard targets can best motivate utilities to satisfy a commission's standard, no matter how less-than-perfect it is. A commission, for example, can reward a utility for reaching a target, instead of penalizing it for falling short.

Performance targets would help to compensate for the tendency of these mechanisms to create a "moral hazard" problem that could lead to less efficient utilities over time.[55]

C. Meaning of "the public interest"

The term "social welfare" or "the public interest" is multidimensional in nature. A regulatory review of alternative rate mechanisms, therefore, requires consideration of fairness, economic, utility, financial, and other outcomes.

A narrow definition of "the public interest," more in line with traditional regulation, is the long-term interests of utility customers. After all, the original rationale for public utility regulation was to protect customers from the monopoly power of utilities. The "long-term" aspect means that holding rates down in a pending rate case may jeopardize the ability of the utility to fund new investments benefiting customers.

Long-term customer welfare, arguably, is one of the least represented interests in the regulatory and political arena. Utilities look out for their financial interests,[56] and consumer advocates tend to take a short-term view. A gap in adequate representation for the long-term interests of customers becomes evident. The job of regulators is to fill that void, notwithstanding the intense pressure they face to appease individual stakeholders with the most clout.

D. Conflicting objectives and the public interest

Some of the elements of social welfare may be conflicting—for example, discounted rates to low-income households may diminish economic efficiency[57] and fairness from the perspective of the general ratepayers. A second example of conflicting outcomes relates to seasonal pricing. Under this pricing, a gas utility would charge

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[55] A "moral hazard" problem occurs when a party faces little accountability for its actions, thus tending to act indifferently to the outcome.

[56] Utility management could have different interest than the shareholders. Management might place greater emphasis, for example, on immediate or short-term financial performance whereas shareholders might have a longer-term horizon (e.g., the average rate of return over a ten-year period).

[57] Economic efficiency takes into account: (1) the cost to society from satisfying the demands of utility consumers (i.e., productive efficiency) and (2) the value that consumers place on utility service (i.e., allocative efficiency). Key actions for achieving economic efficiency are to (a) set rates based on marginal cost principles and (b) give utilities strong incentives to operate efficiently. Economic efficiency helps to avoid the waste of resources from both consumption and production. Economic efficiency involves maximizing total net economic value, while equity or fairness involves the distribution of net value among producers and consumers. Another way to look at the two concepts is that what matters to economic efficiency is maximizing the size of the pie, while equity or fairness cares about the slicing of the pie. Ratemaking involves treating these two concepts interdependently as maximizing the size of the pie requires efficient pricing to consumers, which encompasses slicing the pie at the same time.

higher rates during the winter months, when demand and marginal cost are the highest. For an electric utility, rates would typically be the highest during winter and summer peak periods. Seasonal pricing gives utility customers better price signals, results in a more efficient use of a distribution system's facilities, promotes customer energy conservation during the highest-cost periods for utilities, and requires no special meters. Yet some stakeholders have vigorously opposed, and some state commissions have rejected, seasonal pricing, because it would cause rates to be higher during periods of peak consumption. In a few jurisdictions, the higher utility bill during peak periods has met with public scorn and negative media coverage. That is, seasonal pricing has sometimes failed the "public acceptability" test for ratemaking.

Another illustration of a particular pricing mechanism with conflicting objectives is special contracts to a large industrial customer. These contracts, which are in response to competition, can mitigate uneconomic bypass. It is uneconomic because a customer turns to a non-utility provider for one or more services when the alternative provider (e.g., retail marketer) has higher total costs but lower prices. Society incurs higher costs in meeting the demands of a customer. One major cause of uneconomic bypass is the inability of the utility to lower its rates below fully allocated embedded costs, which under certain circumstances (e.g., a utility has a high level of surplus capacity) could far exceed its marginal cost. Another cause of uneconomic bypass is faulty rate design, specifically an excessive usage charge, where certain customers within a group (e.g., high-usage customers within the industrial class) pay more than the utility's cost of serving them, and perhaps at a higher rate than the price of competitive providers. Special contracts or discounted tariffs, which can head off uneconomic bypass, are discriminatory, however: They can result in other customers "funding" them through higher rates, as the utility recovers less of its fixed costs from targeted customers than the amount the last rate case assigned to them.

Other examples abound in which a particular rate mechanism advances some regulatory objectives while hindering others. They include real-time pricing in which the tradeoff is between economic efficiency and price stability; and price caps in which the regulator must weigh the benefits of pricing flexibility and increased incentives for productive efficiency against profit variability, which could lead to "excessive" utility profits. This paper contends that these conflicts require regulators to make value judgments on the desirability of a rate mechanism.

E. The "public interest" curve

1. Graphical analysis of regulatory trade-offs and the public interest

The "public interest" curve (PIC) in the context of utility ratemaking represents the combination of regulatory-objective levels that result in the same public interest, as judged by regulators. In simple terms, it says that advancing (impeding) regulatory objectives has a positive (negative) effect on the public interest. For example, a higher level of economic efficiency and affordability of utility service, other things remaining the same, promote the public interest. Theoretically, regulators can achieve the same

public interest by impeding one or more regulatory objectives, so long as it advances others. As another example, regulators can offset the negative effect of passing risks to utility customers by making the utility more financially healthy. The desirability of this tradeoff inevitably requires judgment by regulators. Overall, regulators can select among different mixes of objectives to arrive at what they deem to be the "same" public interest. They essentially place an implicit value on achieving different objectives and must then consider tradeoffs in arriving at their preferred decision. For this reason, regulatory ratemaking involves a combination of the evidence and judgment.

Figure 1 shows the "bliss point" and inferior outcomes that depend on both (1) the willingness of regulators to tradeoff some objectives to advance others and (2) the capability of society to achieve different levels of objectives. One interpretation of the "bliss point" is that it represents the optimum state, or the highest level of social welfare that regulators can achieve given society's resource constraints and their relative preferences for different objectives.

The figure depicts this capability as the "objective" or empirically based possibility XY frontier and the regulatory preference curve as the public interest curve "PIC."[58] All points on the XY frontier are Pareto efficient in the sense that it is impossible to effect a change that makes anyone better off without making someone worse off.[59] This concept of efficiency is an absolute one and assumes no additional societal gains from resource reallocation.[60] A variation of Pareto efficiency expressed in relative terms, and more useful for evaluating public policies, is whether a policy change (e.g., regulatory action) would increase or reduce efficiency. In Figure 1, Point D would be Pareto inefficient, since moving toward the XY frontier could promote both objectives simultaneously, or at least one objective without compromising any other objective. We can then assume an improvement in the public interest when society moves closer to the XY frontier.

One observation is the independence of the XY frontier and the PIC. The former curve represents society's capability to achieve different levels of "public interest"; the

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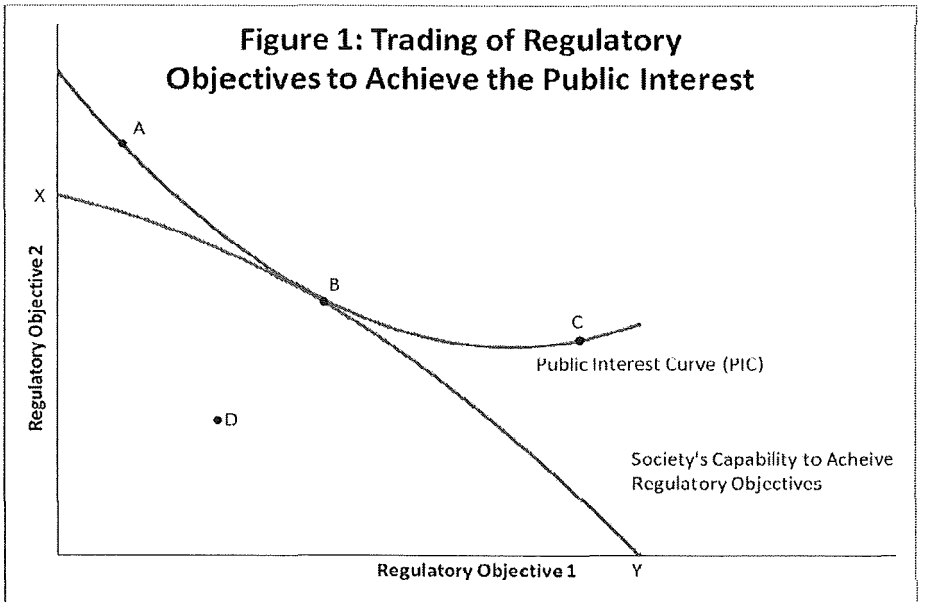
[58] In a different context, PIC would be analogous to what economists call the social welfare curve or social indifference curve. Figure 1 represents a simple two-dimensional construct assuming a regulator has only two objectives. In reality, regulators have several objectives that would make the diagram multidimensional and the regulatory tradeoffs more complex.

[59] One implication is that a reallocation of society's limited resources cannot increase efficiency. The assumptions underlying this condition include perfect competition, full information, no externalities, and no transaction costs. Pursuit of self-interest by market participants would, therefore, yield maximum aggregate economic welfare. Under the previous (admittedly stringent) assumptions, society cannot improve upon this outcome without making at least one person worse off. Thus, it represents a Pareto-efficient condition.

[60] *See* Lee S. Friedman, *The Microeconomics of Public Policy Analysis* (Princeton, NJ: Princeton University Press, 2002), 54-7.

latter curve reflects the preferences of the decision maker for different objectives. Just as an individual's ability to purchase goods and services depends on her income, her mix of actual purchases relies on her willingness to trade off one good or service for another. Those households who express the highest preference for education, for example, would spend a larger portion of their income on schooling their children, in the process forging the purchase of a larger house and other goods and services. In the same way, a regulator who emphasizes energy efficiency and renewable energy would tend to support subsidies for these "resources," even if it results in lower economic efficiency and higher rates.[61]

The concavity of the "XY" frontier shows the limitations of society when it comes to achieving different combinations of "objective" levels. Assume, for example, that *objective 1* is the inverse of the rate level and *objective 2* is the reliability level of utility service. As we achieve higher reliability (i.e., move upward on the XY curve), regulators would need to increase rates to pay for the additional cost. The concavity of the curve assumes that the incremental cost of reliability increases at higher reliability levels.[62] More generally, it says that as regulators pursue a particular objective to an "extreme" level, they may have to sacrifice other objectives at a substantial cost.



[61] Another analogous feature is the need for households to spend on essentials items, such as food, housing and energy, while regulators need to satisfy core principles dictated by the U.S. Constitution, and state statutes and rules. Both have discretion beyond these minimum requirements: households can purchase nonessential items just as regulators can pursue non-mandatory policy and other objectives.

[62] The assumption is that the utility would sequence its spending on reliability in descending order of cost effectiveness. That is, it will initially undertake those actions that improve reliability the most per dollar expended.

The convexity of PIC means that regulators are less willing to trade off one objective when less of it exists. In Figure 1, using our previous example and comparing point A with point B, at the margin regulators would be willing to accept a smaller decrease in rates (objective 1) to compensate for less reliability at point A than at point B. One explanation is that any decrease in reliability would have greater consequences at lower levels of reliability.

An upward shift in PIC means that public interest has improved but would be beyond the realm of possibility since the position of the XY frontier prohibits society from attaining that level. It is similar to saying that households would find their "utility" increasing as they consume more goods and services. Yet their incomes may fall short of allowing them to purchase additional levels.

The "bliss point" or point of maximum attainable public interest is at point B; that is at the point where the XY frontier and PIC are tangent. While points A and C would achieve the same public interest (since by definition they are alternate points on the PIC), they are unattainable since they lie above the XY frontier. As an illustration, attaining the combination of reliability and rate levels at point A is infeasible. It would require lower rates than are possible to achieve at the given level of reliability. Productivity improvements that would shift the XY frontier to the right can make point A feasible.[63] The attainment of point C would also require an improvement in productivity.

The balancing act of regulation, with the goal of trading off stakeholder interests or objectives, would tend to avoid a "corner solution" wherein regulators neglect certain objectives. In our example, a regulatory decision near point Y would reflect a low level of reliability that could jeopardize the public interest.[64] At the other extreme, achieving high levels of reliability may result in excessive rates that fail the tests of public acceptability and economic efficiency.

2. Insights from the public interest curve

The following observations depict the challenges commissions face in deciding on various rate mechanisms, applying the previous analysis. Although the "PIC-XY frontier" framework is conceptual, devoid of quantifiable evidence, it can provide several insights to regulators:

1. **The public interest (PI) relates the aggregate effect of a ratemaking decision to individual regulatory objectives.** For example, we can express "the public interest" as:

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[63] Productivity here refers to the ratio of reliability levels to costs. An improvement would allow a utility to achieve different levels of reliability at lower cost.

[64] Although points near Y could result in low rates, most regulators would disfavor this outcome if the reliability is intolerably low.

PI = f(economic efficiency, service reliability, utility-service affordability, financial health of the utility),

with $\Delta PI / \Delta O_i > 0$ and the objectives acting as parameters; PI is multidimensional. The shape of the PIC (as defined earlier) depends on the tradeoffs among the different specified objectives. Making inter-objective comparisons requires regulators to impute dollar values or some common metric on the different objectives. Since regulators are unable to do that, they need to exercise judgment in placing a value on different objectives and trading-off objectives. Although ratemaking is both an art and a science—some compare it to sausage making—it should start with a strong foundation (specified objectives, compatible with economic principles, such as cost causation).[65] The PIC helps to demonstrate conceptually the optimal balancing of competing objectives. The shape of the curve describes the tradeoff among objectives, or the preferences placed on different objectives by regulators, who act as agents to society's interests. Two regulators having the same information and objectives for ratemaking, for example, can easily arrive at different decisions because of the different weights they assign to the objectives.[66]

2. **The major constraints for regulators are twofold. First, individual objectives, as well as their contribution to the overall public interest, are difficult or impossible to quantify. Second, there exists no consensus on the specification of the "proper" PIC—what parameters to include, as well as its shape (i.e., the tradeoffs).** How much does a more financially healthy utility promote the public interest? Does lowering the financial risk of a utility, for example, increase risks to ratepayers, thereby creating a "fairness" and "moral hazard" problem? Other than core objectives, what other objectives should regulators consider in ratemaking?

3. **There are inevitable tradeoffs and difficulties in combining different "objectives" mixes into a PIC.** Public utility regulation has always involved compromising different objectives. For example, to improve economic efficiency, how much higher would rates become for certain customers? Are these two outcomes, taken together, fair to all customers and in the public interest? How much would economic efficiency have to increase to

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[65] In terms of Figure 1, analysis of available quantifiable information can help to map out the XY curve.

[66] Another possible reason for dissimilar decisions is the regulators' different interpretations of the information that is equally available to both. This is probably not an uncommon occurrence, since much of the information presented in a rate case is adversarial in nature. Information may also be speculative and subject to other uncertainties, so a regulator must judge its veracity for decision making.

compensate for the higher rates?[67] As shown later, no single rate mechanism is superior to other mechanisms in advancing all of the regulatory objectives. Thus, regulators need to prioritize the objectives and implicitly assign weights to them in reaching ratemaking decisions.

4. **Regulators can improve the public interest by adopting policies that manage utility waste and inefficiency.** As shown in Figure 1, more efficient utility behavior would increase the opportunities for regulators to advance their objectives. Moving from point D toward the XY frontier means that regulators could advance one objective without compromising others. For regulators and society, the outcome is a non-zero-sum game in which everyone can benefit. This outcome speaks to the importance of regulation placing a high priority on managing the waste and inefficiencies of utility operations.[68]

5. **Traditional ratemaking places primary emphasis on reasonable rates, along with reliable and safe service.** These outcomes are core objectives of public utility regulation, so regulators are less willing to trade off these objectives to advance others.[69] These objectives, in other words, represent thresholds that regulators are unwilling to trade off.

6. **Non-core objectives have grown over time or moved up in importance, implying that regulators might be willing to trade off some core objectives.** For example, advancing energy efficiency or renewable energy may lead to subsidies, higher rates, or worsening of a utility's financial position. Net energy metering is a prime example: Some regulators are beginning to question whether fostering the development of rooftop solar PV systems is worth the price of higher rates to general ratepayers and worsening utility financial health.

7. **While analytics can help regulators to make informed decisions, their preferences for specific objectives, as well as tolerances for setting back other objectives, are key factors in their decisions.** Ratemaking requires more than just having good information on the outcomes of a rate mechanism, including their effects on individual stakeholders; it must also involve the regulator placing an implicit value on those outcomes to the general public.

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[67] As another example, how much would rates have to increase to general ratepayers to make utility service more affordable to low-income households? Would the increased rates more than offset the benefits of lower-priced utility service to needy households?

[68] Eliminating waste, while seemingly an admirable goal, may not be a good policy as the costs in achieving it may exceed the benefits.

[69] Regulators may also be legally bound to not trade off core objectives.

8. **A major obstacle in regulatory decisions is making the various objectives comparable (e.g., measuring in dollars) and scaling up individual objectives to arrive at a "public interest" metric.** As an example, assume two states: one in which electricity is affordable to all customers but requires subsidies funded by some customers to assist low-income customers; a second in which all customers pay for electricity based on the utility's cost of service. If the regulator is unable to impute a dollar value to affordability or economic efficiency, how can she conclude that one state is more in the public interest than the other state, unless she makes a value judgment?

9. **Another major problem is more conceptual: the absence of an agreement or consensus on the proper PIC, as each regulator may have her own view.** There can be many possible curve mappings of how society would trade off different objectives (e.g., economic efficiency and affordability). The shape of the PIC depends on the relative values regulators place on different objectives—for example, giving up some economic efficiency to achieve more affordability to low-income households. As noted earlier, the PIC by definition is an indifference curve mapping out various combinations of objective "levels" for which the public interest is the same.

F. A process for effective ratemaking

1. Three essential steps

A rational process for ratemaking decisions involves regulators ordering and interpreting the information they have available to best advance the public interest. This approach requires that regulators: (1) define the public interest in terms of the objectives they assign to ratemaking, (2) understand the effect of each ratemaking proposal on advancing and impeding the different objectives, and (3) process all the information logically and systematically. An idealized vision of regulation is as a social institution that makes reasoned (i.e., rational and systematic) decisions based on expert and objective assessment of all the relevant information, and driven to advancing the public interest. Still, as emphasized in the last section, regulators inevitably need to exercise judgment by processing the information for decision making.

Suboptimal decision making leads to outcomes that fall short of maximizing the public interest. For example, in Figure 1, points on the XY frontier other than at B would be suboptimal: At these points, the public interest suffers relative to the public interest at B. Suboptimal decisions could also lead to utilities operating inside the XY frontier (e.g., at point D). Poor decisions can come from (1) lack of objective information, (2) regulators' goals incompatible with the public interest, and (3) the regulators' inability to process the available information.

One requisite for good decision making is for the regulator to have some notion of the public interest: What are the underlying regulatory objectives and what is the relative

importance of each? Regulators should have access to unbiased information[70] for making informed decisions; otherwise, they will react to biased information by making incorrect decisions (i.e., decisions not in the public interest) even when they are fair-minded. Regulators also should be open to considering alternative ratemaking concepts and methods when they have the capability to improve matters in a changing world. What worked best in the past may not work well in the future. In the context of Figure 1, staying with existing ratemaking practices can cause utilities to operate inside the XY frontier.

Regulators also need to process the information logically, as well as interpret the information correctly, to arrive at a good decision. For example, they have to account for the inevitable tradeoffs in addition to assessing the public-interest effect of individual rate mechanisms. A regulator's decision is akin to purchasing a car, where a person must balance power, safety, fuel economy, appearance, maintenance costs, purchase price, reliability, and other features to reach a decision that is most satisfactory.

Similarly, the regulator needs to make decisions that account for multiple objectives, some of which are conflicting and non-quantifiable.[71] This task is admittedly difficult, requiring the combination of unbiased information and good judgment to make good decisions.

One prime example relates to marginal cost pricing.[72] (Marginal cost pricing sets prices equal to the cost to the utility of the last unit of service.) This pricing rule promotes economic efficiency by providing consumers with proper price signals while, as some stakeholders have argued, clashing with the objectives of equity and gradualism.[73] New regulatory objectives or expanded regulatory agenda have made ratemaking more complicated, especially in satisfying the core objectives underlying "just and reasonable" rates.

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[70] This information can come from advisory staff or staff testifying on behalf of the public interest, rather than from a narrow interest.

[71] A regulator's decision is more difficult than that of the prospective car owner in the sense that the latter has more precise quantifiable information that is less conjectural.

[72] Although not an elusive concept, marginal cost is difficult to measure and subject to much controversy. When this paper refers to marginal-cost pricing, it generally means the practice of setting rates relying more on forward-looking costs rather than embedded costs. As an example, discount pricing to industrial customers for a utility with surplus capacity would tend to lower rates below embedded cost that includes a utility's past capital expenditures and closer to the utility's marginal cost. A regulator may approve a discount rate to a specific customer, however, to avoid the utility from losing the load, rather than to improve economic efficiency.

Most often, utilities apply marginal cost principles to allocate costs. Once a utility determines the relative marginal costs of serving various customer classes, for example, marginal costs are then scaled to the utility's total revenue requirements. Thus, the actual marginal cost

To summarize, evaluating different rate mechanisms is complex, but it is one of the state utility commission's most important duties. First, rate mechanisms have differing effects on regulatory objectives, with most advancing some objectives while impeding others. Objectives can include a financially healthy utility and "moderate" shifting of business risk to customers. As public utility regulation branches out to address a larger number of social problems, conflicting objectives for individual rate mechanisms become more likely. Second, quantifying or evaluating the tradeoff in terms of the public interest is difficult. As an example, is price discrimination that makes utility service more affordable to low-income households in the public interest? Even after quantifying the expected outcomes for each rate mechanism, commissions will still have to process this information for determining what is in the public interest.

2. Attributes of acceptable rates

a. The core principles of "just and reasonable" rates

"Just and reasonable" rates reflect a balancing of different objectives. The core objectives applied by state utility commissions over several decades include:

1. Rates reflect the costs of an efficient and prudent utility.

2. Rates reflect the cost of serving different customers and providing different services and different levels of service.

3. Rates are not unduly discriminatory.

4. Rates must be fair among customer classes and between utility shareholders and customers as a group; fairness also relates to risk bearing.[74]

5. Rates allow a prudent utility a reasonable opportunity to receive sufficient revenues to attract new capital and not encounter serious financial difficulties.

Other, less universal, regulatory objectives can include: (1) public acceptability (e.g., no severe political backlash), (2) rate stability and gradualism (e.g., no rate shock), (3) affordable utility service (e.g., low-income households spending less than 15 percent

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would only equal the utility's cost of service by accident and would not constitute the determining factor in establishing the class revenue requirements used to set rates.

[73] For example, moving from embedded-cost to marginal-cost pricing could lead to much higher prices to some customers or much higher prices for all customers over specific periods (e.g., summer peak periods for electricity service). For other problems with marginal cost pricing, *see* R. H. Coase, " The Marginal Cost Controversy," *Economica*, Vol. 13 (August 1946): 169-82.

[74] For example, if utility shareholders bear the burden of subpar performance, what rewards do they receive when the utility performs exceptionally well? Symmetry seems imperative in achieving "fair" risk bearing.

of their incomes on gas service), (4) efficient consumption (e.g., prices based on marginal-cost principles), (5) efficient competition (e.g., creation of a level playing field), (6) moderate regulatory burden (e.g., streamlining of rate cases), and (7) promotion of specified social goals (e.g., subsidization of renewable energy). These objectives coincide with Bonbright's classic criteria for good ratemaking that most state utility commissions have relied on over the years. Bonbright identified the four primary functions of public utility rates as capital attraction, efficiency, demand rationing, and income distribution.[75]

(1) Economic efficiency as only one goal

Economists sometimes forget that the main goal of regulation is not merely to promote *economic efficiency*: regulation originated and developed prior to the ideas of economic efficiency and the principles of welfare economics. Most enabling legislation mandates just, reasonable, and fair rates, not efficient rates per se. Throughout the history of state utility regulation, for example, "fairness" is a major consideration in ratemaking. Reasons for why regulators would not maximize economic welfare (i.e., take the most efficient actions to correct market failures), which, incidentally, some analysts associate with the public interest, include: (1) individuals have, besides economic objectives, non-economic objectives (e.g., due process) that are affected by regulation but not accounted for by welfare economics; and (2) political institutions and administrative processes influence regulatory actions. These two reasons can explain why a rational regulator would be unlikely to seek to maximize conventional measures of economic welfare (i.e., the sum of consumer and producer surplus).[76]

(2) Mixed outcomes from discriminatory pricing

Discriminatory pricing occurs when price differences for the same service do not correspond to cost differences. It takes into account customers' willingness to pay, which depends on the ability of customers to find alternative suppliers or to engage in self-supply. A utility may establish a special rate, for example, based on the opportunities of an industrial customer to switch to another fuel. Specifically, it may have to offer a rate below fully allocated costs to customers facing competitive pressures. Discriminatory pricing may help a utility to improve its utilization of existing capacity by offering a lower rate to customers who would consequently increase their usage. It almost always

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[75] See James C. Bonbright et al., *Principles of Public Utility Rates*, 2nd Edition, Public Utilities Reports, Inc., 1988; the first edition, authored solely by Bonbright, was published in 1961.

[76] Societal institutions that govern economic transactions often arise and survive even though they are not economically efficient. They may, instead, focus on political and other noneconomic problems, just as state utility commissions do. *See*, for example, Sheilagh Ogilvie, "Whatever Is, Is Right"? Economic Institutions in Pre-Industrial Europe," *Economic History Review*, Vol. 60, Issue 4 (2007): 649-84.

raises a question of fairness, especially when a favorable rate falls outside a zone of reasonableness. When a rate falls short of a utility's short-run marginal cost or lies above the price that an unregulated monopolist would charge, for example, a commission would likely find the rate impermissible—that is, consider it "undue." There is also the question of who should bear the burden of a revenue shortfall from offering a lower than embedded-cost rate to certain customers.

(3) The consequences of risk bearing

Risk bearing refers to absorbing the consequences of an unexpected adverse outcome. Most commissions would probably consider undue discriminatory rates, and rates that shift all risks to customers (e.g., preapproval of all costs for a new project)[77] when the utility can better shoulder those risks and have some control over them, to violate a fairness standard. Utility cost recovery in the absence of regulatory oversight would ostensibly (1) be unfair to customers and (2) create a "moral hazard" problem from diminished utility incentives to manage costs.

V. A Review of Alternative Rate Mechanisms

A. Grouping alternative rate mechanisms by objective

Alternative rate mechanisms have objectives that supporters usually articulate. Our review turns up ten different objectives. We identify these objectives, along with the rate mechanisms that attempt to address them.[78]

1. Reduce regulatory lag and utility financial risk for operational and investment activities: cost trackers, infrastructure surcharges, future test years, CWIP in rate base, multiyear rate plans, formula rates

Supporters of less regulatory lag contend that it has eroded utilities' rates of return on equity below their authorized returns. Some proponents have argued, for example, that a gap of a 100 basis point or more presents a serious financial problem for a utility. A counterargument is that the subpar rate of return may stem more from less-than-optimal management practices or other factors than from regulatory lag per se. To the extent that a utility's costs rise above test-year levels, a rate-of-return gap can occur.

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[77] As noted earlier, the risk to customers derives from an increase in the probability that they will bear the burden of excessive costs because of the weakened incentive of a utility to control its costs.

[78] *Appendix A* outlines samples of alternative rate mechanisms, highlighting a comparison between the competing revenue decoupling and straight fixed-variable mechanisms.

a. Cost trackers

Cost trackers allow a utility to recover specific costs from customers outside of a general rate case. These costs deviate either from some baseline (e.g., the level of bad debt incorporated into existing base rates) or are zero-based. Utilities recover these costs contingent on some formula or predefined rule.[79]

Utilities have greatly expanded their use of cost trackers in recent years. The list of cost trackers is long.[80] Even though they have not supplanted traditional ROR ratemaking, over the last several years cost trackers have assumed a larger presence in utility ratemaking.

The "extraordinary circumstances" justifying most of the cost trackers that commissions have historically approved encompass costs that are: (a) largely outside the control of a utility, (b) unpredictable and volatile (e.g., unable to estimate the cost within a tolerance level in a general rate case), and (c) substantial and recurring (e.g., the difference between test-year cost and actual cost can materially affect a utility's rate of return). Until the last several years, commissions required that all three conditions exist if a utility hoped to have costs recovered through a tracker. Commissions, consequently, limited the use of cost trackers: The perception was that they created bad ("cost plus") incentives, shifted risk to customers, and were rarely consequential in improving a utility's financial health.

Many of the new cost trackers fail the "extraordinary circumstances" test.[81] Whether these so-called "marginal" cost trackers are in the public interest is hard to say when evaluated against the sphere of regulatory objectives. One concern is that, although they unequivocally benefit utilities and their shareholders, it is less clear how they benefit utility customers.[82] Cost trackers can improve a utility's cash-flow situation and reduce the number of rate cases, but they also can diminish a utility's incentive to efficiently manage its costs.[83]

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[79] Examples of cost trackers are fuel adjustment clauses, purchased gas adjustment clauses, riders for recovery of energy efficiency and environmental abatement costs, property taxes and bad debt.

[80] Some utilities, for example, have more than 20 cost trackers.

[81] *See*, for example, Ken Costello, "How Should Regulators View Cost Trackers?" NRRI 09-13, September 2009.

[82] Some industry analysts would argue that cost trackers are necessary to enable utilities to financially invest in new infrastructure that can substantially benefit customers. Another possible benefit to customers is the preservation of credit ratings that can allow utilities to access capital under the most favorable terms.

[83] Cost trackers can, in various ways, result in higher utility costs. First, they undercut the positive effects of regulatory lag on a utility's costs. Economic theory predicts that the longer

b. Infrastructure surcharges

Infrastructure surcharges[84] allow for cost recovery for large capital projects prior to completion and spread over time, based often on the utility reaching specified milestones.[85] Surcharges can help to avoid drastic one-time rate increases from large projects and mitigate cash flow for utilities by reducing the accumulation of financing costs and regulatory lag.[86] Finally, they allow for more timely cost recovery during construction without a general rate case. On the downside, infrastructure surcharges have the potential for less-than-satisfactory cost performance by utility management when the commission exercises inadequate oversight. They also inherently shift risk to utility customers by requiring them to pay for new projects before completion and operation.

To elaborate, an important incentive for utility cost efficiency is the threat of cost disallowance from retrospective reviews. To the extent that infrastructure surcharges reduce the effectiveness of these reviews, they further erode incentives for cost management. That is, with less regulatory oversight and auditing, which often accompany rate cases, a rational utility might pay less attention to cost management.[87]

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the regulatory lag, the more incentive a utility has to control its costs. Second, when a utility is able to pass through (with little or no regulatory scrutiny) higher costs to customers with minimal financial consequences, it would tend to exert less-than-optimal effort toward controlling costs. An important incentive for cost control by utilities is the threat of cost disallowance from retrospective reviews. To the extent that cost trackers dilute the frequency and quality of these reviews, incentives for cost control further erode. Third, when cost trackers cover some functional areas and exclude others, perverse incentives can arise that would motivate the utility not to pursue cost-minimization of its overall operation.

[84] Infrastructure surcharges come under different labels, including distribution-system improvement charges and capital expenditures riders.

[85] Unlike new power plants or other facilities that have zero value to customers until fully completed, other projects such as gas pipeline replacement programs can benefit customers and public safety prior to full completion. These programs add increments of new pipes continuously over some specified time horizon. Even if it takes, say, the utility five years to finish the program, any new pipes laid prior to that time would have positive safety consequences and result in less lost gas. The "used and useful" standard would, therefore, have less relevance for new pipes replacing old pipes than for a new power plant or other projects that produce no benefits until fully completed.

[86] *See*, for example, Mark Newton Lowry, *Alternative Regulation for Infrastructure Cost Recovery*, prepared for the Edison Electric Institute, January 9, 2007; and the Brattle Group, *Alternative Regulation and Ratemaking Approaches for Water Companies: Supporting the Capital Investment Needs of 21st Century*, prepared for the National Association of Water Companies, September 23, 2013. The latter study showed that infrastructure surcharges, under the labels Distribution System Improvement Charges (DSIC) and Capital Expenditure (Capex) Riders, are almost as common for water utilities as they are for natural gas and electric utilities.

[87] Some infrastructure surcharges try to avoid these problems. The Pennsylvania DSIC Program, for example, places a annual cap (e.g., 5 percent of a utility's distribution revenue) on

Regulators have long recognized the importance of retrospective reviews as a management incentive. Many regulatory experts view retrospective reviews as dissuading a utility from poor decision making with the threat of a penalty—making the utility more diligent and careful in its planning and operations, for instance.

c. Future test years

Future test years (FTYs) are not really new but in a sense are nontraditional, since only a minority of states use them for setting rates. Under a future test year, the utility calculates the required rate increase based on projections for costs and revenues.[88] Rising average cost gives more support for the use of an FTY for ratemaking, although it does not constitute a *sufficient* condition. An FTY mitigates regulatory lag when compared with an historical test year, as the new rates would account for conditions when the new rates go into effect. An FTY, in its purest form, forecasts all the costs and sales elements for the first 12 months of new rates. It would therefore begin after a rate case and normally at the time when new rates would go into effect.

Utility forecasts are, however, susceptible to bias and error.[89] Information asymmetry,[90] which is an acute problem in public utility regulation, complicates the

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the amount recovered, allows a commission audit of costs and construction progress, and requires a utility to submit a five-to-ten year infrastructure improvement plan that the commission must review at least once every five years.

As another example, the Washington Utilities and Transportation Commission approved an infrastructure surcharge for natural gas pipe replacement to address the concern that traditional cost recovery would act as a barrier to a utility's aggressive pipe replacement program. The Commission emphasized that utilities enjoying a surcharge must "meaningfully expedite and improve company performance in their pipe replacement programs." If a utility, for example, fails to meet construction milestones or other targets, it could lose its right to recover costs through the surcharge. *See* Washington Utilities and Transportation Commission, *Commission Policy on Accelerated Replacement of Pipeline Facilities with Elevated Risk, In the Matter of the Policy of the Washington Utilities and Transportation Commission Related to Replacing Pipeline Facilities with an Elevated Risk of Failure*, Docket UG-120715, December 31, 2012.

[88] *See* Mark Lowry Newton et al., *Forward Test Years for U.S. Electric Utilities*.

[89] An observer may ask why a commission should rely on anything other than an FTY, since good ratemaking requires that new rates reflect the utility's costs and sales, at least over the first several months that they are in effect. Ratemaking, after all, is prospective, and an FTY matches the test year with the effective period of new rates. Although in theory this argument seems hard to dispute, it ignores the reality that forecasts are susceptible to error and some costs and sales elements are inherently difficult to predict. Another factor is that utilities would have incentives to present biased forecasts that are not always easy for commission staff and interveners to uncover. A commission would, therefore, be presumptuous to assume that forecasted costs and sales are more accurate than historical test-year data accounting for "known and measurable" changes.

commission task of evaluating a utility's forecasts in terms of their accuracy and objectivity.[91] Without an adequate evaluation, a commission is hard pressed to know whether a utility's proposed rates are "just and reasonable."

d. Construction work in progress

Construction Work in Progress (CWIP) in rate base allows a utility to recover its costs for large capital projects prior to in-service. Specifically, it permits capitalization of the financing cost of CWIP, or Allowance for Funds Used During Construction (AFUDC). Otherwise, AFUDC does not create cash-flow dollars for the utility. Opponents of a CWIP policy point to an intergenerational problem in which current and future ratepayers are not necessarily the same group.[92] Another concern is that ratepayers may not benefit: Even though the total dollar amount collected from ratepayers would decline in the long term, the fact that ratepayers are paying sooner may not reduce their financial obligations when expressed in present value terms.

e. Multiyear rate plans

A consultant's report contains the following definition of *multiyear rate plans*:

> Multiyear rate plans ("MYRPs") are designed to compensate a utility for changing business conditions without frequent, full true-ups to its actual cost of service. Rate cases are held infrequently, most often at three to five year intervals. Any rate escalations that are made between rate cases are based in whole or in part on automatic attrition relief mechanisms ("ARMs"). The rate adjustments provided by ARMs are largely "external" in the sense that they give a utility an *allowance* for cost growth rather than reimbursement for its *actual* growth. The "externalization" of ratemaking that these two features of MYRPs achieve can strengthen utility performance incentives despite a reduction in regulatory cost. Benefits of better performance can be shared between the utility and its

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[90] Commissions are at a distinct disadvantage relative to the utility in interpreting and evaluating the utility's performance. Commissions generally lack the knowledge, for example, to detect when the utility is efficient or inefficient, and the opportunities for utilities to minimize their costs. As part of their duties, commissions need to evaluate whether the utility's projected costs reflect competent utility management, or imprudent management.

[91] *See* Ken Costello, "Future Test Years: Challenges Posed for State Utility Commissions."

[92] Current ratepayers who are paying for the plant may move or for some reason will not enjoy the benefits from the project when completed.

customers. Lower regulatory cost has special appeal in jurisdictions where numerous utilities must be regulated. [93]

Supporters of multiyear rate plans point to five benefits: (1) more predictable revenues for utilities, bolstering their financial condition,[94] (2) spreading rate increases over a longer period,[95] (3) more predictable rates for customers, (4) timely recovery of costs for new capital projects, and (5) fewer general rate cases over time. These benefits, although perhaps deemed by some readers to be minimal from the perspective of utility customers, may dominate any downsides, making multiyear rate plans worthwhile to consider.[96]

A potentially serious problem with multiyear rate plans is trying to derive reasonably accurate forecasts over a three- or five-year period. Poor forecasts can lead to extreme utility earnings, either on the high side or low side. These plans also require more time on the part of commission staff and other parties to evaluate them, in addition to increasing the complexity of rate cases.

Multiyear rate plans provide utilities with differing performance incentives, depending on whether allowed rate adjustments derive from forecasted costs for a utility or on indexes that are exogenous to an individual utility's actual costs.[97] The latter approach provides a utility with stronger performance incentives.[98] Most of the real-world plans have "stay out" provisions that provide an additional utility incentive for cost management.

Some plans specify the actual dollar amount of allowed revenue changes for each year, while others depend on a formula or indices to determine allowable annual

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[93] Pacific Economics Group Research, *Alternative Regulation for Evolving Utility Challenges: An Updated Survey*, prepared for the Edison Electric Institute, January 2013, 35.

[94] Supporters also contend that an MYRP prevents "earnings" attrition in that it prevent the erosion of a utility's rate of return that could occur under an historical test year with the past relationship between revenues, expenses and rate base changing in the future.

[95] A plan may call for levelizing rates over (say) the next three years to avoid raising rate drastically over a one-year period or rate shock. Because some of the utility revenues are deferred to a later year, a commission may allow the utility to impute a carrying charge on those revenues.

[96] Some proponents of multiyear rate plans contend that they ease the financial burden on utilities when they invest in new infrastructure that has potential large benefits to customers.

[97] One possible index would apply to O&M costs.

[98] Plans can also include performance standards for customer service, reliability and other functional areas. If a utility falls short of these standards, the commission can penalize it.

changes.[99] Multiyear plans may lessen the need for cost trackers and surcharges, given their automatic (usually annual) base-rate adjustments that mitigate the adverse effect of regulatory lag on a utility's earnings.

To avoid wide financial swings, multiyear rate plans can include an earnings-sharing component that confines the utility's actual rate of return within a narrower range.[100] This feature may diminish a utility's incentive for cost management, but it allows utility customers to reap the benefits of unexpected efficiency gains prior to the next general rate case.[101] It also tempers the extreme effects that could result from large forecasting errors (e.g., exorbitantly high or excessively low utility profits).

f. Formula rate plans

A previous NRRI paper defines *formula rate plans (FRPs)* as:

> A ratemaking method in which the utility adjusts its base rates outside of a general rate case, usually annually, based on an actual or projected rate of

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[99] A third group includes hybrid plans that combine features of the other two groups. *See*, for example, ScottMadden, Inc., "Innovative Ratemaking – Multiyear Rate Plans," White Paper, February 2014, 5.

[100] As an example, in 2013 the Washington Utilities and Transportation Commission approved an multiyear rate plan for Puget Sound Energy (PSE), reasoning that the plan will:

> ...allow modest annual increases in PSE's rates while requiring that the Company not file a general rate increase before March 2016 at the earliest. This holds the promise of customers paying rates that are lower than might be the case under traditional approaches to ratemaking. The rate plan is designed to give an incentive to PSE to become more efficient and to implement cost-cutting measures that will promote its ability to earn its authorized overall rate of return. The rate plan includes important protections for customers, including an earnings test that requires PSE to share with customers on an equal basis any earnings that exceed its authorized return during the term of the plan. Annual rate increases also are capped at 3.0 percent.

(Washington Utilities and Transportation Commission, *In the Matter of the Petition of Puget Sound Energy, Inc, and Northwest Energy Coalition for an Order Authorizing PSE to Implement Electric and Natural Gas Decoupling Mechanisms and to Record Accounting Entities associated with the Mechanisms, Final Order Authorizing Rates*, Dockets UE-130137 and UG-130138, June 25, 2013, ii.)

[101] This feature exemplifies formula rate plans, which this paper discusses next. Both types of plans are comprehensive regulatory mechanisms allowing a utility to change its base rates outside of a general rate case.

return (ROR) on rate base or equity that falls outside some commission-defined band.[102]

FRPs have some advantages over traditional ratemaking, but these advantages rely on the details of design and execution.[103] For customers, they can offer benefits by reducing a utility's business risk, thereby reducing its cost of capital.[104] They can also allow the utility to share with customers prior to the next general rate case a portion of the benefits from cost efficiencies and favorable circumstances. High sales growth and productivity, for example, can produce unexpectedly high profits to a utility. Under traditional ratemaking, the utility would retain these profits until the next rate case. FRPs can distribute some of these profits to customers sooner. They can also moderate rate changes: Instead of a utility filing a rate case proposing a double-digit increase in rates, for example, an FRP could achieve the same increase more gradually over time. The adjustment of rates more frequently and at more moderate levels, however, might not necessarily benefit customers if a utility is able to pass through costs with less review by the regulator.

FRPs contain several features that affect a utility's performance: (1) setting of the initial base rate, (2) the band around the authorized rate of return, (3) sharing of the actual rate of return that lies outside the band, (4) performance standards,[105] (5) monitoring and other reporting requirements, (6) method of cost review (e.g., auditing of costs, determination of prudent costs), and (7) caps on rate adjustments (e.g., 2 percent annually).

One important requisite for FRPs to be compatible with "just and reasonable" rates is that the utility must demonstrate high performance in cost efficiency and non-cost areas of operation integral to consumer well-being. A badly structured plan can produce poor incentives for a utility.[106] For example, a plan should preclude a guaranteed earnings level to a utility, and the "dead band" should be broad enough to motivate a

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[102] Ken Costello, "Formula Rate Plans: Do They Promote the Public Interest?" NRRI 10-11, August 2010, ii.

[103] Examples of FRPs are the plans under different labels for utilities in Alabama, Louisiana, Mississippi, Oklahoma and South Carolina. The American Gas Association refers to these mechanisms as Rate Stabilization Plans.

[104] "Business risk" refers to the uncertainty associated with the operating cash flows of a business; it encompasses sales, cost, and operating risks.

[105] Regulators can establish performance standards for reliability, customer service, and other functional areas whose outcomes depend upon the actions of utility management. Standards address the concern that FRPS might cause a utility to become more lax in its performance.

[106] One concern is that a formula rate plan could increase the chances of a utility passing through imprudent cost to customers.

utility to perform optimally.[107] Critics of formula rates also have argued that they shift risks to customers.

2. Reduce the frequency of rate cases: formula rates, multiyear rate plans, future test years

Having fewer rate cases can save both utilities and the commission time and money. Spreading rate cases over too many years (e.g., one rate case every five years), on the other hand, may ignore the reality of changed conditions that warrant a revisit of existing cost allocations, the authorized rate of return and rate designs. Besides, if regulators specify no profit bounds, utilities' earnings could turn out abnormally high.

3. Eliminate disincentive for energy efficiency: revenue decoupling riders, declining block rates, straight fixed-variable rates

a. Revenue-decoupling riders

Under a *revenue-decoupling rider*, the utility adjusts its rates between rate cases for sales deviating from some baseline level; for example, periodic adjustment of rates for a gap between actual sales and test-year sales per customer. If a utility's actual sales per customer over a specific period fall below the level embedded in existing rates, the utility could increase its rates to compensate for the revenue shortfall.[108] This mechanism helps to stabilize a utility's revenues and earnings, making it more indifferent to the level of actual sales and thus removing any financial harm from energy efficiency.

Three conditions would support revenue decoupling: (a) the utility's limited ability to add new customers in growing sales; (b) the commission's reluctance to recognize declining consumption per customer in setting base rates because of statutory or commission restrictions on *pro forma* adjustments to include only "known and measurable changes" to a historical test year;[109] and (c) a commission's requirement for a utility to promote energy efficiency.

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[107] The band should be wide enough so that the utility can retain a higher ROR that could come from improved cost performance, or absorb a lower ROR that could come from lower cost performance. A wider band provides a utility with better incentives for cost performance. The incentives for a utility operating within the band are comparable to those incentives a utility faces between rate cases under traditional ROR ratemaking.

[108] Symmetrically, revenue decoupling could cause rates to declines when sales exceed the test-year level.

[109] In other words, the sales used in the test-year calculation may lack accuracy, other things held constant, resulting in the utility under-recovering or over-recovering its fixed costs that the commission previously deemed prudent.

Although revenue decoupling is not without controversy, it is arguably in line with the "balancing act" of regulation by not seriously violating any core regulatory objective: They do not create the incentive problems of cost trackers or the price discrimination of some other rate mechanisms. They also do not cause a utility to earn excessive returns or to pass along imprudent costs to customers. In fact, they reduce the possibility of the former outcome. Revenue decoupling also reduces the need to accurately calculate test-year sales in a general rate case. The major concern with revenue decoupling is that, while ostensibly beneficial to a utility, the gains to customers are less transparent.[110]

We should expect to see more proposals for revenue decoupling in the years ahead, especially by electric utilities. Two reasons are declining sales growth and even negative growth, and the expansion of distributed generation.

b. Declining block rates

Declining block rates have been disfavored by most commissions and stakeholders for a number of years, mainly because they encourage more consumption. They can, however, overcome some of the problems with existing rate structures, avoiding the need for alternative rate mechanisms such as revenue decoupling.[111] For example, with shrinking consumption per customer, they can cause customers to shift to a higher rate block that would offset at least a portion of a utility's revenue losses.

When first introduced early last century, declining rate structures allowed utilities to recover their fixed costs in the initial blocks; the effective rates for later blocks closely correspond to commodity costs (i.e., short-run marginal cost). This rate structure allowed a utility to become more competitive with other energy sources and to promote its sales by giving larger users a lower marginal price. It is the last effect that has met with opposition by those who favor energy efficiency. Yet, because of the abundance of shale gas, reverting to a rate structure that encourages consumption, such as declining block rates, may have some merit for the natural gas sector.

c. Straight fixed-variable rates

Under *straight fixed-variable (SFV) rates*, the utility recovers all of its fixed costs, both customer and demand related, through a fixed monthly charge that is independent of customer usage. The utility recovers all of its variable costs (i.e., costs that vary with the quantity of service) through a volumetric charge. In contrast, under the standard or

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[110] This is probably one reason why many consumer advocates have opposed revenue decoupling, sometimes with great vigor, in rate cases.

[111] *See*, for example, Stephen J. Brown and David S. Sibley, *The Theory of Public Utility Pricing* (Cambridge, UK: Cambridge University Press, 1986), 93-6.

typical two-part tariff, utilities recover a portion of their fixed costs in the volumetric charge.[112]

Similar to a revenue-decoupling rider, this rate design separates a utility's earnings from its actual sales. It provides customers with efficient price signals.[113] It also removes any utility disincentive to promote energy efficiency, since any revenue declines would equal avoided costs.[114]

Compared to the standard two-part tariff, this rate structure would increase the utility bills of low usage customers and decrease the bills of high usage customers; it would also tend to reduce winter gas bills and increase summer gas bills.[115] Finally, compared to the standard two-part tariff, this rate structure reduces the benefits to consumers from using less electricity or gas.

In sum, SFV rates have two image problems, which explain their rare use in real-world state-commission utility pricing. First, the perception is that they would disproportionally hurt low-income households.[116] The presumption is that low-income households are below-average users of energy, which empirical evidence does not unequivocally support.[117] Second, in some quarters, SFV rates are anti-conservation. The argument is that customers will see lower rates on the margin, discouraging some customer-initiated energy efficiency that would otherwise occur.[118] The counterargument is that the SFV rates give customers better price signals to make decisions on how much to invest in energy efficiency.

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[112] *See* the earlier discussion in Part III.B.2.

[113] The Federal Energy Regulatory Commission (FERC) has adopted SFV rates for gas pipelines for three reasons. They (a) induce maximum throughput, (b) allow pipelines and natural gas in general to better compete with alternate fuels, and (c) reduce peak demand and the need to expand pipeline capacity over time.

[114] For a variant of SFV rates that has sparked debate, *see* David Magnus Boonin, "A Rate Design to Increase Efficiency and Reduce Revenue Requirements," *The Electricity Journal*, Vol. 22 (May 2009): 68-78.

[115] This outcome would help to better balance monthly gas bills over the course of a year.

[116] Even if low-income customers consume below-average levels of utility service, a utility could offer them a discount on the fixed monthly charge to buffer any bill changes that would otherwise exit when switching to a SFV rate.

[117] Consumer advocates generally oppose SFV rates because they believe that small users would see higher utility bills.

[118] For this reason, conversationalists and environmentalists have publicly come out in opposition to SFV rates; they tend to favor revenue-decoupling riders as the preferred alternative to remove utility disincentive for promoting energy efficiency.

4. Make utility service affordable to low-income customers: inverted rates, rate discounts, percentage-of-income plans

a. Inverted rates

Inverted rates have two major objectives: (1) promote energy conservation by increasing rates for high usage, and (2) provide for affordable level of utility service to meet basic human needs, often referred to as lifeline rates. As shown later, they have dubious features that have hampered their acceptance by utilities and regulators. California is a case study in how inverted rates can have adverse consequences.[119] Few states have adopted inverted rates, for good reason.[120]

b. Rate discounts

An example of a *rate discount* is the utility giving eligible low-income households a discount of 30 percent off the rates the utility charges other residential customers. If other customers pay a price of 10 cents for each additional kWh consumed, for example, low-income households would pay 7 cents. One form of rate discounts might involve larger discounts for smaller energy use. A household could receive a discount of 40 percent if it consumes fewer than 500 kWhs per month, while its discount falls to 30 percent when it consumes higher amounts. One real-world example is California's Alternate Rates for Energy program (CARE). This program provides eligible low-income customers with a 20 percent rate discount on their electric and natural gas bills. All other utility customers fund the CARE program through a rate surcharge.

c. Percentage-of-income plans

Percentage-of-income plans limit the utility bills of eligible low-income households to a predetermined percentage of their income. The premise is that affordability inversely relates to how much households pay for energy relative to their incomes. Such a plan, for example, may require that eligible households pay no more than 15 percent of their income toward natural-gas service during the winter heating season. The benefits to customers would depend upon both their income and their unsubsidized utility bill. Both lower-income customers and customers with higher utility bills, in other words, benefit the most.[121]

5. Promote renewable energy: net metering rates

Some utilities are calling for a revisiting of the traditional utility rate model along with *net metering rates*, because of the penetration of rooftop solar PV systems as a form

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[119] A later section of this paper describes these consequences.

[120] For a more thorough critique of inverted rates, *see* Part VI.G.

[121] *See* Ken Costello, "How to Determine the Effectiveness of Energy Assistance, and Why It's Important," NRRI 09-17, December 2009.

of distributed generation, for the following reasons[122]: (a) Many solar customers are paying higher than cost-based rates for utility electricity service—California is a prime example with its inverted rate structure; (b) most jurisdictions lack revenue decoupling or a straight-fixed variable rate design to break the link between sales and profits; (c) most jurisdictions lack a standby rate to pay for transmission and distribution costs for backup service; (d) no jurisdiction allows accelerated depreciation whereby a utility can more quickly recover stranded assets; (e) the net metering rate, in most instances, does not relate to a utility's actual avoided costs; and (f) lower-income customers tend to subsidize solar customers, who generally have higher incomes.

Net metering rates are a clear example of where regulators need to weigh the benefits of accelerating the development of PV solar systems against the costs of impeding other regulatory objectives. Some of these objectives lie at the core of utility ratemaking, including equity and utility financial stability.

6. Prevent uneconomic bypass and ease the ability of the utility to compete in certain markets: flexible rates, special contracts

a. Flexible rates

Flexible rates allow a utility to charge a price to certain customers within a specified range. A commission would designate a price ceiling and floor within which a ratemaking practice often follows competitive market conditions, compelling a utility to offer some customers a special rate that falls below the standard or fully allocated cost rate.[123]

A flexible rate can help deter uneconomic bypass where a customer switches to a competing fuel or retail marketer when the economic cost of the alternate provider is greater than the cost of local utility service. Flexible rates are similar to the long-standing value-of-service rates in taking into account the demand characteristics of customers.

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[122] Net metering rates can also apply to other technologies, such as gas-fired distributed generation.

[123] Assume that a utility provides service to two customers and its total cost is

$$TC = v_1q_1 + v_2q_2 + f_1 + f_2 + F$$

Where v = variable cost (i.e., short-run marginal cost), q = sales, f = assignable fixed costs (e.g., dedicated substation), 1 and 2 denote the two services offered by the utility, and F = common costs (e.g., distribution system).

The price for each service (p_1 and p_2) is set such that the revenue collected is $p_1q_1 + p_2q_2 = TC$, $p_1q_1 = v_1q_1 + f_1 + \alpha_1 F$, and $p_2q_2 = v_2q_2 + f_2 + \alpha_2 F$. The utility recovers its cost and the regulator fully allocates the common costs to each service, using some demand factor (e.g., coincident peak demand), measured by the shares α_1 and α_2. In offering a lower rate (say) to service 1, service 2 is responsible for recovering more of the common cost; that is, the actual share for service 2 is greater than α_2 and the actual share for service 1 is less than α_1.

One issue relates to eligibility for a discount rate: Establishing a broad set of customers who can qualify could lead to a "free rider" problem, in which some customers would receive a windfall gain from a lower rate for doing nothing differently than what they would otherwise have done. To avoid this problem, a utility should target discount rates to only those large customers who have demonstrated the need for rate relief to continue operating at the same site or, for example, to not self-generate their electricity.

Flexible rates are undoubtedly discriminatory in that the utility charges different rates to customers in the same class (within the zone of allowable rates). Flexible rates raise the question of who should bear the cost of discounts (i.e., revenue shortfalls relative to fully allocated cost revenues)—utility customers, utility shareholders, or both groups sharing the costs?[124]

b. Special contracts

Under a *special contract*, the utility negotiates with a large business or industrial customer for a favorable rate and other terms and conditions. Usually the customer has service alternatives and faces unique circumstances that may compel a utility to offer the customer a special deal (e.g., favorable non-price terms and conditions). The customer might otherwise leave the utility service area, not expand its business, or close its business. Special treatment to an individual customer represents a discriminatory action, but one that regulators can justify under certain conditions.

7. Optimize energy usage over different times or reduce a peaking problem: time-of-use pricing, critical peak pricing, real-time pricing, seasonal pricing

a. Time-of-use pricing

Time-of-use pricing differentiates prices by time periods, but the prices are predetermined and fixed between general rate cases. Prices are typically higher during peak periods and lower at off-peak periods. Although they can create capacity benefits, time-of-use prices largely focus on reducing a utility's energy cost. They can also promote certain technologies, such as distributed energy storage, plug-in electric vehicles, and rooftop solar PV systems.[125]

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[124] Utilities tend to support utility customers paying for shortfalls, arguing in part that the rate discount allows utilities to retain customers or at least to increase their sales over what they would otherwise. As long as utilities are recovering some of their fixed costs from these customers, other customers are better off. This argument presumes no "free riders"; that is, the rate discount actually avoids customers departing or lost sales from customers who stay on the utility system (e.g., a factory that added a shift because of a lower electricity rate).

[125] For example, a cost-based off-peak rate could improve the competitiveness of electric vehicles, inducing more consumers to switch from gasoline vehicles or not to switch to natural gas vehicles.

b. Critical peak pricing

Under *critical peak pricing* (CPP), the utility substantially raises its prices during "critical peak periods," or certain hours during event days.[126] The goal is to reduce load during those few hours within which the utility has exceptionally high generating or power-purchasing costs.[127] The benefit to customers is that they receive lower prices during non-critical periods relative to the standard tariff. The utility usually notifies customers in advance of a critical peak event and caps the number of events per year. CPP is simple to implement, and customers pay high prices in only a small number of hours. It biggest drawback lies with resistance to the utility setting extremely high prices during "stress" periods, which can seriously burden some customers.

c. Real-time pricing

Real-time pricing (RTP) sets rates at fine intervals (e.g., hour-to-hour) in line with a utility's marginal costs during those times.[128] It is the economist's ideal form of utility pricing. A major factor is the hourly change in wholesale cost.[129] Customers receive price signals from the utility in advance.[130] Many analysts consider RTP to be crucial in linking wholesale prices to the retail price of electricity, thus giving utility customers proper price signals. The consequence is an efficient level of total demand and efficient allocation of electric power across hourly periods. A utility benefits from a lowering of its energy and capacity costs. RTP can also help integrate renewable energy into an electric grid by creating load flexibility during all hours of the day.

Notwithstanding the strong theoretical appeal for RTP along with the generally positive empirical evidence, we have seen relatively little use of this pricing method at the state level.[131] Even in states that have open retail markets, there has been a resistance to RTP by state regulators, consumers, and even utilities.

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[126] For some CPP programs, prices during critical periods might be as much as five times higher than the average peak price.

[127] A major benefit to the utility is capacity deferral and the reduced probability of shortfalls.

[128] Real-time pricing is sometimes referred to as dynamic pricing.

[129] Controversy arises over the correct definition and measurement of marginal cost. Marginal cost can include the value of lost consumption from inadequate capacity during extreme conditions.

[130] Unlike early vintage time-of-use prices, which the regulator approves in a previous rate case, real-time prices better reflect a utility's actual costs across different periods.

[131] Pilot programs for RTP have shown that customers do respond to price and that the benefits exceed metering and other incremental costs associated with RTP. For example, RTP

One possible barrier to RTP is the wide acceptance of average-cost pricing in public utility regulation. A hallmark of state regulation is the setting of prices based on embedded historical cost. This pricing methodology precludes customers from having to pay fluctuating prices—for example, higher prices during peak periods and other periods of tight supplies. [132] Regulators have also expressed concern that some consumers would not shift load to lower-priced periods and thereby drive up the average price of electricity they pay and their utility bill. Even if consumers do shift their load, regulators may conclude that the benefits would still fall short of metering and other costs.

d. Seasonal pricing

Under *seasonal pricing*, a gas utility would charge higher rates during the winter months when demand and marginal cost are at their maximum. For an electric utility, rates would typically be higher during the summer months. This pricing (1) gives consumers better price signals (relative to uniform rates), (2) results in a more efficient use of a utility system's facilities, and (3) requires no special meters. Yet some stakeholders have opposed, and some state commissions have rejected, seasonal pricing because of rates being at their maximum during periods of peak consumption. Higher utility bills during peak periods have met with public scorn and negative media coverage.

8. Lessen the price rigidity of regulation and promote cost efficiency: price caps

Price caps establish allowable price changes, usually annually, based on the change in some specified price index (e.g., consumer price index) minus the change in expected or targeted productivity. [133] They permit utilities to price below the cap when

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requires electricity smart meters that can send and receive information about electricity costs and give consumers more timely information about their own usage.

[132] Depending on the specific design, such pricing can result in highly volatile prices that a commission may believe would lead to widespread public opposition. *See*, for example, Ken Costello, "An Observation on Real-Time Pricing: Why Practice Lags Theory," *The Electricity Journal*, Vol. 17, No.1 (January-February 2004): 21-25.

[133] A generic price-cap formula subtracts from a specified price index (PI) a productivity measure (X) or offset:

$$\%\Delta P = \%\Delta \text{ PI} - \%\Delta \text{ X}$$

The allowed percentage increase in price (%Δ P) equals the percentage increase in some specified price index (%Δ PI) minus the percentage increase in productivity (%Δ X). Productivity growth, for example, could reflect the average historical gains for a peer group of utilities. Alternatively, it could measure technological improvements for an industry or for the economy as a whole. The price index could encompass a broad range of commodities that are either regional or national in scope. One candidate is the Consumer Price Index. For a discussion of price caps, *see* Janice A. Hauge and David E. M. Sappington, "Pricing in Network Industries," In *The Oxford Handbook of Regulation*, ed. Robert Baldwin, Martin Cave, and Martin Lodge, 462-499 (Oxford, UK: Oxford University Press, 2010).

warranted by market conditions (e.g., retaining a large customer with a lower rate who would otherwise self-generate or switch to another provider).[134]

Compared with traditional ratemaking, a utility would have a stronger incentive for cost efficiency since (1) price changes do not depend on the actual costs of a utility and (2) rate reviews take place at predetermined multiyear intervals prescribed by regulators.[135] The focus shifts from "inputs" to "output," which should improve the utility's incentive to be more efficient.[136]

In its pure form, price caps regulate a utility's prices but not its profits. They represent a fundamental break from traditional ROR regulation.[137] In practice, however, many price-cap plans include an earnings-sharing component. One reason is that regulators are reluctant to make a full commitment to allow unconstrained profits between general rate reviews.[138]

Because price caps give utilities robust incentives to manage costs, in many real-world plans the regulator sets reliability/customer-service standards. One common approach taken by regulators is to penalize a utility for falling short of the pre-specified standards, but not to reward it for superior performance. The presumption is that a utility should not earn a reward for fulfilling a primary obligation, namely, providing high service quality.

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[134] One criticism of ROR regulation is its price rigidity, which may prevent a utility from responding in a timely manner to changing market conditions, thereby losing customers or sales.

[135] In effect, prices caps involves commission-determined regulatory lag; for example, once the commission sets the initial rate, the utility cannot file another rate case for five years. Under ROR regulation, utilities control the timing of rate cases.

[136] For a general discussion of price caps, *see* Wayne P. Olson and Kenneth W. Costello, "Electricity Matters: New Incentives in a Changing Electric Services Industry," *The Electricity Journal*, Vol. 8 (January-February 1995): 28-40; and Mark Newton Lowry and Lawrence Kaufmann, *Price Cap Regulation of Power Distribution*, report prepared for the Edison Electric Institute, June 1998.

[137] As a rule, the "ratchet effect" would affect utility behavior under price caps any time the utility expects the current benefits from increased efficiency to be "taken away" in the form of lower future prices. If so, utility incentives to control costs would closely resemble those under rate-of-return regulation.

[138] *See*, for example, Larry Blank and John W. Mayo, "Endogenous Regulatory Constraints and the Emergence of Hybrid Regulation." The authors argue that, partially because of political and stakeholder pressures, utility regulators will lean toward hybrid forms of regulation that combine elements of price caps and ROR regulation.

9. Avoid rate shock: infrastructure surcharges, CWIP, phase-in

Phase-in plans involve a gradual or delayed inclusion of capital costs in rate base, relative to cost recovery under traditional ratemaking. Although they provide high certainty that a utility will eventually recover all of its allowable costs and return on investment, phase-in plans require deferral of those costs to future periods. Thus, they pose something of a risk for utility shareholders, especially if the magnitude of costs is large.[139] On the positive side for utilities, deferring certain costs as a regulatory asset avoids the utility's having to write-off these costs in the current period, which would harm investors.

10. Promote specific activities: focused performance-based ratemaking, special pricing

a. Focused performance-based ratemaking

Focused performance-based ratemaking (or "incentive mechanisms") aims to provide utilities with strong incentives, properly aligned with customers' interests, to perform exceptionally well a particular function. One desirable outcome is less need for detailed regulatory review of utility decisions. A well-structured incentive mechanism awards and penalizes a utility appropriately for consequences that reflect superior or subpar performance.

Incentive mechanisms have three basic components: (1) the target or standard, (2) the sizes of the rewards and penalties (e.g., the share of "gains" and "losses" allocated to utility shareholders and customers), and (3) the maximum rewards and penalties to the utility. Incentive mechanisms sometimes include a "dead band." A "dead band" recognizes the inherent uncertainty over identifying a correct benchmark. Incentive mechanisms can also include waivers or exceptions for certain events beyond the control of a utility.[140]

A poorly structured incentive mechanism can lead to unintended consequences. Specifically, strategic behavior or gaming by a utility can result in a zero-sum outcome or, worse, distortive utility behavior. The former outcome allocates all the benefits to the utility while producing no real gains for its customers. Distortive utility behavior reduces efficiency as the utility devotes excessive resources to the targeted area, which decreases the overall performance of the utility. An incentive mechanism can also unfairly harm the utility when the benchmark is set at a value that makes it highly difficult for the utility to surpass or even achieve.[141]

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[139] This is a reason why Wall Street has always expressed trepidation toward phase-in plans.

[140] Such exceptions can weaken the incentives underpinning a mechanism.

[141] *See* Ken Costello and James F. Wilson, "A Hard Look at Incentive Mechanisms for Natural Gas Procurement," NRRI 06-15, November 2006.

b. Special pricing

Special pricing involves deviating from normal ratemaking practices to bolster a particular activity or regulatory objective. One recent example is rolled-in pricing to encourage the expansion of natural gas service to unserved areas. Traditional regulatory policy requires that new customers pay for the uneconomical costs associated with gas-line expansions, not only to protect existing customers but also to prevent the utility from suffering any financial harm.[142] This policy coincides with the principle of incremental cost pricing that allocates additional costs to those customers who directly benefit. The general perception is that since new customers are the major beneficiaries of gas-line extensions, they should pay the bulk of the costs.[143] With the abundance of shale gas, however, some commissions and other policymakers are contemplating whether rolled-in pricing[144] is justifiable, since energy consumers' switching to natural gas could have potentially large public benefits (e.g., economic development, cleaner environment).[145]

B. How each rate mechanism affects regulatory objectives

The evidence on the effects of individual rate mechanisms can derive from various sources, namely, economic theory, real-world experiences, and other empirical evidence. Some effects are more transparent and obvious than others. Many of the more recent alternative rate mechanisms have difficulties in quantifying, or even conceptualizing, the benefits to utility customers. Some mechanisms definitely improve the financial health of utilities, and others benefit specific customers and advance, for example, energy efficiency and renewable energy. Commissions often know the

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[142] This policy passes what economists call the "no burden test" to protect existing customers. That is why, for example, most utility tariffs require new customer contributions and specific economic tests for assessing proposals to extend gas lines. As a rule, when a utility receives revenues from new customers greater than the incremental cost, existing customers are better off. The revenues from new customers can filter through rates and a separate surcharge.

[143] State utility commissions generally approve rolled-in pricing when a new investment benefits all customers or when demand by all customers creates the need for a new investment. When the utility expands its system dedicated to serving new customers, on the other hand, rolled-in pricing becomes less defensible and incremental pricing more valid. The addition of new customers, at least in theory, can benefit existing customers. A concept called "economies of scope" says that by providing another service—for example, service to new customers—a firm might more efficiently use its internal resources. As an illustration, with added customers, a utility might lower its average cost for information technology activities, general personnel, billing, and metering. The result is a lowering of the utility's average cost, which benefits all customers, both new and existing. For new gas distribution lines, these broad benefits are probably small.

[144] For a definition of rolled-in pricing, *see* footnote 45.

[145] *See* Kenneth W. Costello, "Exploiting the Abundance of U.S. Shale Gas: Overcoming Obstacles to Fuel Switching and Expanding the Gas Distribution System," *Energy Law Journal*, Vol. 34, No. 2 (2013): 541-87.

positives and negatives of different rate mechanisms, in general if not precise terms, as they relate to individual ratemaking objectives, but they grapple with knowing which ones are preferable from a public-interest perspective.

Four basic questions confront state utility commissions in their ratemaking duties:

- *What are the objectives of ratemaking and their relative importance?* Objectives are desirable outcomes, such as strong utility incentives for cost control, high probability of utility receiving sufficient revenues, and prices based on marginal-cost principles.

- *What rate mechanism or group of mechanisms would be most effective in achieving those objectives?* Good regulation requires that rate mechanisms achieve specific objectives with minimum impediments to other objectives. For example, cost trackers should minimize the risk to customers from paying for imprudent utility costs.

- *Perhaps most fundamental, what rate mechanism would be both fair to the utility and most beneficial to customers?* How can a formula rate plan or a cost tracker, for example, produce a non-zero-sum outcome (i.e., result in benefits to both the utility and its customers)? As its primary objective, a rate mechanism should promote the long-term interests of utility customers.

- *What are the expected outcomes from individual rate mechanisms, especially in terms of economic efficiency?*[146] Improvements in economic efficiency are important because potentially all stakeholders can benefit.

Table 2 lists different rate mechanisms, along with their positive and negative features in advancing different regulatory objectives. The right-hand column contains general comments that summarize each rate mechanism. Table 3 identifies those rate mechanisms that seem to best advance and impede individual regulatory objectives.

The two tables reflect the author's perception of the disparate effects of individual rate mechanisms on regulatory objectives. The reader may take issue with some of the author's statements, and that is valid, as many of them are inconclusive and subject to a degree of conjecture. Equally knowledgeable people can have different views on individual rate mechanisms, just as regulators do. It is for this reason that ratemaking is as much art as science. Whether ratemaking changes, or what some observers call "reforms," have improved overall utility performance and long-term customer welfare

[146] Utility rate structures are inefficient perhaps not so much as a result of the low weight that regulators place on economic efficiency relative to other objectives, but because of failure of regulators to understand what is inefficient and socially harmful about existing rate structures. It seems plausible that regulators fail to understand well the negative consequences of inefficient pricing, or if they do, they do not consider them that important, at least relative to other regulatory objectives, such as utility financial security, fairness, and risk allocation between the utility and its customers.

lies outside the scope of this paper. There is presently a high ratio of hypothesis to empirical evidence on the effects of different rate mechanisms.

This paper excludes the advocacy of individual rate mechanisms. It, instead, assumes the less ambitious task of identifying and examining alternative rate mechanisms that have surfaced in state utility-regulation proceedings over the past several years. It focuses on how each mechanism affects the various regulatory objectives, including core and secondary objectives. This paper takes the position that rate mechanisms are desirable only if they satisfy the objectives set out by regulators.

As Table 2 shows, all rate mechanisms have mixed effects on the public interest. We presume that when a rate mechanism impedes a particular regulatory objective, it sets back the public interest, while advancing an objective improves the public interest. One example is cost trackers or riders in which the tradeoff exists between timely utility cost recovery and tolerable customer risk: Trackers and riders allow utilities to recover their costs more quickly and with more certainty (i.e., to become more financially healthy), but as mentioned earlier in this paper, they also can create incentive problems that could drive up the cost of utility service. Since this document is not advocacy-oriented in nature, the author takes no position on whether cost trackers or other rate mechanisms are in the public interest. It highlights the fact that regulators must make trade-offs when deciding on rate mechanisms such as cost trackers.

Table 2: Different Effects of Rate Mechanisms on Regulatory Objectives

Rate Mechanism	Positive	Negative	General Comments
Traditional ROR ratemaking	Emphasis on due process Focus on utility prudence Simple for public to understand Perception of fairness Avoidance of undue price discrimination Strong utility incentive for cost management between rate cases Long-standing core ratemaking paradigm	Pricing rigidity Disincentives for promoting certain social goals, such as utility-initiated energy efficiency Excessive regulatory lag under high inflation and stagnant sales growth Inefficient average-cost pricing Weak long-term utility incentives for cost management Weak utility incentive for innovations (assuming rigid profit controls)	Strongest justification under stable market and utility operating conditions Many "negatives" have minimal consequences under stable conditions Problems arise in a dynamic environment Throughout its history, traditional ROR ratemaking has endured attacks from different stakeholders Although modified over time, traditional ROR ratemaking still dominates state utility ratemaking Most other countries reject U.S.-style traditional ROR

Rate Mechanism	Positive	Negative	General Comments
		Frequent rate cases in a dynamic environment Incentive for excessive capital investments High regulatory costs	ratemaking
Future test year	Representative of costs and sales in a rate year Mitigation of utility financial problems under dynamic conditions Efficient price signals Less frequent rate cases Fairness to utilities in a dynamic market environment Mitigation of rate shock from annual levelized revenue increases	Forecasts susceptible to error and some costs and sales elements inherently difficult to predict Burden for parties to validate the accuracy and reasonableness of utility forecasts Utility exploitation of information asymmetry problem, resulting in biased forecasts Reduced regulatory lag for incenting utility cost efficiency	Justification increases in the absence of other regulatory-lag mitigating ratemaking mechanisms (e.g., CWIP in rate base, revenue decoupling, trackers) The appropriate test year requires an assessment of the unique risks associated with each one (Type I and II errors) The majority of states do not use a future test year, but more states have allowed it in recent years There remains deep opposition to future test years by some commissions and consumer advocates Information asymmetry is a serious problem
Infrastructure surcharge	Avoidance of rate shock or large one-time rate increases Mitigation of cash flow and other utility financial problems More timely cost recovery without a rate case Well-suited for non revenue-creating investments	Potential for imprudent utility performance and risk shifting to utility customers	Surcharges have proliferated in recent years Increasingly, state legislatures have allowed or mandated commissions to use surcharges They are more appropriate for new projects, such as gas pipeline replacement programs, that do not create additional utility revenues Commissions generally, and rightly so, require audits, the meeting of milestones and other benchmarks for early cost recovery
Cost tracker	Reduced utility financial risk Reduced frequency of rate	Potential for imprudent utility performance and risk shifting to utility	Trackers have proliferated over the past several years, even for

Rate Mechanism	Positive	Negative	General Comments
	cases	customers Perverse utility incentives for cost management	minor cost items Commissions have approved them, for example, even if they fail to meet the traditional three-pronged test Commissions staff and other parties may find it difficult to evaluate costs when given a short time for review
Formula rate plan	Reduced utility financial risk Sharing of abnormal profits between rate cases Less frequent general rate cases Avoidance of single-issue ratemaking and perverse incentive problems with cost trackers More moderate rate changes compared with traditional ROR ratemaking	Questionable incentives for utility cost management because of (a) reduced regulatory lag and (b) less scrutiny of utility costs Downsides of less frequent general rate cases Additional reporting and monitoring requirements	Formula rates are concentrated in the Southeast for setting rates for both electric and gas utilities Existing plans have generally met with satisfaction from stakeholders as well as the commissions It is somewhat surprising that we don't observe more formula rate plans to replace the large number of cost trackers that many utilities have Some economists favor price caps and multiyear rate plans (with indexing) over formula rates, largely because of the incentive effect
Multiyear rate plan	Reduced frequency of rate cases More predictable rates Strong performance incentives with industry or economy-wide indexes to adjust annual rates Utility recovery of capital costs for new projects without filing a separate rate case	Potentially wide profit variability Reliance on multiyear forecasts of costs and sales	Some new interest in a few states The performance incentives depend on whether annual rate changes relate to actual utility costs or to an "exogenous" index Earnings-sharing component can reduce profit variability caused by erroneous forecasts
Price cap	Robust incentives for utility cost management Increased pricing flexibility Regularized commission-determined general rate cases Decline in real prices,	Potentially wide profit variability Skeptical public Potential for excessive price discrimination Incentive to cut costs	Since the 1990s, price caps have received little interest Much more popular in other countries, which have found them preferable to U.S.-style ROR regulation Maine has, by most accounts,

Rate Mechanism	Positive	Negative	General Comments
	assuming productivity growth	jeopardizing utility service quality	successfully applied price caps for electricity regulation since the mid 1990s Price caps typically include service quality standards and often a earnings-sharing component The "ratchet effect" reduces the incentives for cost efficiency under price caps resembling those for ROR regulation
Revenue decoupling rider	Enhanced utility earnings stability Reduced frequency of general rate cases Mitigation of utility disincentive for energy efficiency initiatives Fairness to utility in recovering prudent fixed costs Lessened importance of sales calculations in a general rate case	Skeptical public Second best approach to addressing utility disincentives for energy efficiency Weakened incentive for sales growth when warranted by market and utility operating conditions	Most popular in the natural gas sector but increasing in number for electric utilities Most commissions prefer revenue decoupling riders over its closest rivals, straight fixed-variable rate design and lost revenue adjustment mechanisms Revenue decoupling seems to not seriously violate any core regulatory principles and is compatible with the "balancing act" aspect of public utility regulation Empirical evidence have shown typically small annual rate adjustments, with many decoupling plans adjusting rates downward as well as upward
Performance incentive for energy efficiency	Level playing field for utility energy-efficiency initiatives compared with supply side alternatives Increased utility motivation for promoting energy efficiency	Potential for perverse incentives Motivation for non-cost effective utility energy-efficiency initiatives Difficult to construct an appropriate benchmark	Incentives for energy efficiency have increased in recent years As energy efficiency grows and becomes a core function, utilities will likely propose incentives in addition to revenue decoupling and cost trackers Some evidence that utilities with performance incentives tend to be more proactive in promoting energy efficiency
Flexible rate	Avoidance of uneconomic	Potential "free rider" problem allowing	Several utilities have special contracts or rates to

Rate Mechanism	Positive	Negative	General Comments
	bypass Increased utility competitiveness in non-captive markets Potentially higher total utility profits in the absence of "free riders"	recipient "windfall" Price discrimination that allocates more of the utility's fixed costs to small customers Poor substitute for more efficient rate design	accommodate the needs of industrial customers Commissions usually specify conditions for utilities to offer flexible rates that include (1) rates must not fall below short-run marginal cost and (2) the customer financially needs a special rate to not relocate or close down
Inverted rate	Promotion of energy efficiency Assistance to low-usage, low income households Promotion of economic efficiency assuming cost-based tiers	Increased revenue risk for the utility Uneconomically inefficient with non cost-based tiers Problematic to charge two customers different rates at any one time when the utility incurs the same marginal cost in serving both	Inverted rates are not widespread in the U.S.; they have been most popular in California They have led to unintended consequences in California with net metering rates designed to benefit solar PV systems
Discounted service to low-income households	Affordability of utility service to more customers Improvement of utility arrearage/bad debt problem Reduced utility costs for disconnections Increased reconnections	Higher rates for general ratepayers Excessive consumption by targeted customers Price discrimination based on the ability-to-pay principle	Several states have special rates for eligible low-income households They vary considerably across states, with some having percentage-of-income plans while others have a fixed discounts off the normal tariff Some rate structures are more effective in managing waste or producing higher benefits per dollar funded by general ratepayers

Rate Mechanism	Positive	Negative	General Comments
Time-of-use rate	Economically efficient Need for less utility capacity additions over time Avoidance of subsidies to high peak-use utility customers Promotion of demand-side actions to allocate utility costs	Aggravation of high utility bills during peak periods Skeptical public Potentially large adverse effect on utility non price-responsive customers Revenue instability for utilities	Strong economic rationale for them but uncommonly applied, especially for residential customers Several obstacles to time-of-use rates from three perspectives: (1) regulatory, (2) utilities, and (3) consumers Regulatory concern about some consumers being worse off – e.g., losers would include consumers not shifting their load to lower-cost periods A hallmark of public utility regulation is average cost pricing and resistance to unstable prices
CWIP in rate base	Improved utility cash flow More timely cost recovery Avoidance of rate shock	Risk shifting to utility customers assuming inadequate regulatory cost review Potential intergenerational-equity problem	Infrastructure surcharges have tended to replace CWIP in rate base as a cost-recovery mechanism to mitigate utility cash flow problems CWIP/phase in mechanisms became popular in the 1970s and 1980s when utilities were building large new capital projects
Straight fixed-variable rate	Efficient rate structure that gives utility customers good price signals Enhanced utility-earnings stability More levelized utility bills across seasons Positive hedging effect on utility customers during extreme weather conditions Removal of utility disincentives for energy efficiency Removal of inequities caused by intra-class subsidies Consistent with the pricing of many other goods and	Adverse effect on low-usage customers, some of whom may be low-income households Reduced incentive for price-induced energy efficiency Widening of gap between marginal price for customers and full marginal social cost Skeptical public	SFV is less popular than revenue decoupling in removing utility disincentives for energy efficiency SFV has a definite image problem Generally, SFV faces intense opposition by consumer groups, environmentalists and commission staff Instead of accepting a pure SFV rate design, over the past several years many commissions have allowed utilities to reallocate more of their fixed costs to the customer or service charge SFV can have an "rate shock" problem in that it could cause

Rate Mechanism	Positive	Negative	General Comments
	services		some customers to see dramatically higher bills Although SFV has a number of favorite traits, the negative traits have dominated the debate in regulatory proceedings
Net metering rate	Improved economics of solar PV technologies Improved competition between utilities and non-utility suppliers Avoidance of certain utility costs	Utility revenue erosion Potential for stranded utility assets Higher rates to general ratepayers Potential subsidy to solar users	Commissions have begun to revisit existing net metering rates Success of rooftop solar PV systems has worried electric utilities enough to begin questioning net metering rates and advocate their elimination or redesign
Focused performance-based ratemaking	Enhanced performance in focused area of utility operation Potential win-win outcome for both utility shareholders and customers Potential for reduced regulatory costs from fewer prudence reviews	Potential for distorted incentives Gaming by stakeholders in setting benchmarks	Special incentives for electricity reliability have grown in popularity Commissions seem more receptive to partial incentive mechanisms than to more comprehensive measures, such as price caps and formula rates
Standard two-part tariff	Public acceptability Protection of low-usage utility customers Utility incentive for managing costs to increase sales Strong price-driven incentives for energy efficiency	No guarantee of utilities recovering their prudent fixed costs Disincentive for utilities to advance energy efficiency Cross-subsidy of low-usage customers by high-usage customers Economically inefficient Lessened utility competitiveness in certain markets because of higher marginal price Negative hedging effect on utility customers	Utilities and conservationists alike have questioned (for different reasons) the merits of the standard two-part tariff The reason for interest in modifying the rate structure is that it conflicts with other regulatory objectives Some headway in recent years in gradually shifting more of the fixed costs out of the volumetric charge Much resistance to make a wholesale shifting of fixed costs to a customer or service charge A few cases where gas and electric utilities have gone to SFV rates

Rate Mechanism	Positive	Negative	General Comments
Declining block rate	Utility earnings stability Economically efficient with cost-based tiers Improved utility system utilization Promotion of sales in a period of abundant utility supply	Contrary to energy-efficiency goals Price discrimination with non cost-based tiers	Commissions have phased-out declining block rates over the years, largely because of energy efficiency goals It is unlikely that they will make a comeback, although they can achieve the same objectives as revenue decoupling and SFV rates

Table 3: Aligning Regulatory Objectives with Individual Rate Mechanisms

Regulatory Objective	Rate Mechanisms with Tendency toward Positive Effect	Rate Mechanisms with Tendency toward Negative Effect
Revenue sufficiency	Revenue decoupling, straight fixed-variable rates, formula rates, future test year, declining-block rates	Inverted rate, standard two-part rates, subsidized rates, historical test year
Profit stability	Revenue decoupling, straight fixed-variable rates, formula rates, declining-block rates	Inverted rates, standard two-part rates
Public acceptability	Standard two-part rates, subsidized rates	Revenue decoupling, straight fixed-variable rates, discriminatory rates, time-of-use rates
Proper price signals	Marginal-cost rates, straight fixed-variable rates	Standard two-part rates, subsidized rates
Fair sharing of fixed costs	Embedded-cost rates	Special contracts, discriminatory prices
Fair sharing of risk	Standard two-part rates, formula rates	Cost trackers, infrastructure surcharges, CWIP in rate base
Promotion of utility innovations	Targeted incentives, preapproval of project and costs, regulatory lag (for utility retention of cost savings), upfront regulatory commitment, accelerated depreciation, infrastructure surcharges, prompt and certain cost recovery	Traditional ratemaking, cost-based rates, regulatory lag (for utility recovery of investment costs), retrospective reviews, book depreciation, entry restrictions for new firms
Encouragement of new investments	CWIP in rate base, future test year, infrastructure surcharges, formula rates, multiyear rate plans, subsidies, preapproval of project and costs, accelerated depreciation	"Used and useful" standard, 20-20 hindsight reviews, cost recovery only in general rate cases

Regulatory Objective	Rate Mechanisms with Tendency toward Positive Effect	Rate Mechanisms with Tendency toward Negative Effect
Efficient competition ("level playing field")	Flexible rates special contracts, value of service rates, unbundled pricing	Rigid embedded-cost rates, non-cost based rates
Efficient consumption	Marginal-cost rates, time-of-use rates	Rate subsidies, standard two-part rates, average-cost rates
Promotion of energy efficiency	Inverted rates, revenue decoupling, straight fixed-variable rates (utility initiated), performance incentives	Standard two-part rates, straight fixed-variable rates (customer-initiated), declining-block rates (customer initiated)
Affordability	Inverted rates, rate discounts, percentage-of-income plans, low-income weatherization programs	Strictly cost-based rates, high customer charge, straight fixed-variable rates
Promotion of social objectives (e.g., electric generation diversity)	Infrastructure surcharges or system benefits charges, above-cost rates to some customers	Strictly cost-based prices, no rate subsidies

C. Two illustrations of challenges posed by multi-objectives

1. Rate mechanisms to promote energy efficiency

Good ratemaking harmonizes a utility's financial interests with cost-effective, energy-efficiency initiatives. This principle relates to what analysts call the "principal/agent problem"; namely, how to motivate a utility to achieve the objectives set out by the regulator.[147] Assume that a regulator wants a utility to commit itself to promoting energy efficiency. At the minimum, the utility hopes to avoid any negative financial consequences; this outcome might require a future test year, a revenue-decoupling rider, a lost revenue adjustment mechanism, or a rate design that protects the utility against unexpected sales declines (e.g., straight fixed-variable rates). The regulator could further incent utilities by allowing them to profit from cost-effective initiatives comparable to profits earned from supply side alternatives.[148] Profits can

[147] The assumption is that the objectives align with promoting only cost-effective energy efficiency or energy efficiency that passes some other well-grounded benefit-cost test. Energy efficiency is a physical concept, devoid of economics. Since it also has a cost, society can overspend on energy efficiency when its costs exceed the benefits.

[148] The regulator may view energy-efficiency activities as a core function that warrants a utility to earn a profit, rather than simply recovering lost revenues and expenses dollar-for-dollar. A current issue before some state utility commissions is whether utilities should have the opportunity to profit (e.g., earn a rate of return) from their energy-efficiency activities.

derive from shared savings, performance target incentives, and a rate-of-return adder. Without financial inducements, the regulator would need to more closely monitor the utility to ensure compliance with the predetermined energy-efficiency goals.

a. Grouping of rate mechanisms

Many state utility commissions have applied at least one of four distinct kinds of rate mechanisms to stimulate energy efficiency. Each of them affects differently a utility's earnings and financial risk from promoting energy efficiency. The four classes of rate mechanisms and specific examples are:

1. *Timely cost recovery for the utility outside of a general rate case* (cost-recovery rider or tracker, system benefits charge[149])

2. *Proper pricing signals to consumers* (inverted and non-declining rate structure, real-time or dynamic pricing, critical peak pricing, long-run marginal cost pricing)

3. *Earnings stabilization for the utility* (revenue decoupling rider, lost revenue adjustment mechanism, straight fixed-variable rate, formula rate plan[150])

4. *Performance incentive for the utility* that aligns the utility interests with the public interest (shared savings incentive, performance target incentive, rate-of-return adder[151])

Some state utility commissions have recently become more proactive in approving alternative rate mechanisms that foster energy-efficiency initiatives. They have gone beyond cost riders and lost revenue mechanisms (e.g., revenue decoupling) to performance incentives.[152] Over time, commissions have become increasingly cognizant of the conflicts between utility profits and energy efficiency. These rate mechanisms

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[149] The system benefits charge is a surcharge added to customer bills in support of energy efficiency. Utilities have imposed surcharges to fund other activities, such as low-income programs and the procurement of renewable energy.

[150] The rationale for these mechanisms is the disincentive for promoting energy efficiency by utilities under the standard two-part tariffs that is prevalent in the utility sectors (*see* the earlier discussion in Part III.B.2).

[151] Performance incentives can involve the utility receiving a predetermined share of the benefits from energy-efficiency initiatives (e.g., the utility's avoided cost), or the utility placing some of its expenditures in rate base or earning a bonus on its rate of return for surpassing a commission energy-savings target.

[152] As energy efficiency has become a more prominent utility activity, revenue stabilization and performance incentive mechanisms have received greater support from state commissions.

attempt to address past problems of low motivation by utilities to aggressively pursue energy efficiency.

b. Discordant objectives

Relevant to this paper, conflicts exist between promoting energy efficiency and other regulatory objectives. Energy efficiency can impede, for example: (1) utility financial stability when lost revenues exceed avoided costs,[153] (2) minimum short-term rates,[154] (3) strong incentives for holding down costs,[155] (4) moderate risk to customers,[156] and (5) minimum customer-funded subsidies.[157] In taking a balanced position, a commission would consider the tradeoffs involved in promoting energy efficiency. Energy efficiency, although seemingly desirable in many circumstances, is not immune from clashes with other regulatory objectives. That is why, for example, commissions hesitate to give utilities a blank check in expanding their energy-efficiency activities. Like almost everything else, society can overspend on energy efficiency.

In sum, the $64,000 question for regulators is how to select a portfolio of ratemaking mechanisms that best advances simultaneously the goals of energy efficiency and the public interest. The differing adverse effect of each mechanism on other regulatory objectives makes their task difficult.

2. Energy assistance programs

a. "Affordability" as a regulatory objective

One hallmark of public utility regulation is its commitment to the universal availability of utility service. While economic efficiency focuses on the aggregated effect of utility activities, fairness or equity factors are a chief concern of public

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[153] The outcome is typically given that most energy utilities recover a substantial portion of their fixed costs in the volumetric component of rates.

[154] When energy-efficiency initiatives fail what some analysts call the "no loser" test, a utility's rates would tend to be higher than in the absence of these initiatives. The reason is that revenue losses are greater than the decline in revenue requirements.

[155] Trackers, for example, can cause a utility to overspend on energy efficiency if the commission inadequately scrutinizes the costs in terms of their prudence by allowing "automatic" pass-through.

[156] Shifting too much risk to customers might violate the regulator's sense of fairness and create a "moral hazard" problem in which the utility lacks adequate incentive to behave prudently. Achieving the proper allocation of risk between utilities and ratepayers is a difficult but critical task for regulators.

[157] To the extent that energy-efficiency initiatives expand, the net benefits of marginal actions could decline, requiring general customers to absorb a higher dollar amount per unit of energy saved.

policy.[158] "Affordability" goes beyond whether a physical service is available; it includes whether households are able to pay for their utility services without jeopardizing their ability to purchase other essential goods and services, such as food, medicine and housing.

To say differently, access to utility service includes the economic ability of customers to buy utility services. One generally acceptable "affordability" metric is the ratio of utility bills to income.

Several states have special rates for low-income consumers, as well as special tariffs for particular groups of customers, reflecting income distribution and political economy considerations. We refer to them here as "energy assistance" programs.

Some utilities believe that requiring general ratepayers and even shareholders to fund energy assistance programs is preferable to struggling with the problem of low-income households continuously falling behind in their utility bills and being vulnerable to service disconnections. Utilities are able to reduce their costs when they have a lower number of delinquent customers, some with severe payment problems that inevitably will lead to service disconnections.[159]

In advancing the public interest, regulators would want to achieve the "affordability" goal with minimal impediment to other objectives such as economic efficiency and utility financial health. A regretful regulatory legacy is the achievement of specific regulatory objectives at higher than least cost. One goal of energy assistance, in addition to making utility service more affordable to low-income households, should be to achieve a target at the lowest cost to the utility and the other customers.

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[158] Many analysts have identified inadequate income as the real culprit of unaffordable utility service. They contend that state and federal legislatures, or other governmental entities, are best able to address poverty by (a) supplementing the income of poor households (e.g., via cash subsidies with no strings attached), (b) in-kind assistance funded through general revenues (e.g., "energy stamps") or (c) offering them financial support for energy-efficiency improvements. Specifically, they argue that these actions are more effective and efficient than subsidized utility rates. Political pressures and legislative mandates, however, have led to energy utilities' offering of programs to insulate low-income households from unaffordable utility bills. These initiatives, described by some analysts as "taxation by regulation," require higher rates to the majority of customers to pay for energy subsidies targeted at a smaller group of customers. The "tariff effect" that makes funding customers minimally worse off in return for making low-income recipients better off has political appeal.

[159] Assistance should result in reduced utility collection costs, service disconnections, arrearages, and debt write-offs. These cost reductions can more than offset the lost revenues from rate discounting and thereby increase the utility's net revenues. Such an outcome explains why some public utilities support energy assistance to low-income households. These utilities might find it easier to receive regulatory approval for recovering revenue shortfalls when they support energy assistance programs.

b. Managing waste from energy assistance

Waste is a byproduct that has afflicted energy assistance, energy efficiency, reliability-improvement activities and renewable energy programs. Good regulation not only involves achieving different goals but to pursue them at least cost. Otherwise, society faces less potential gains from utility activities that turn into lost opportunities. Efficiency losses from energy assistance can stem from: (1) recipients over-consuming energy when the subsidized price lies below the utility's marginal cost, and (2) an excessive gap between the actual benefits to targeted participants and the subsidy cost funded by the utility or general ratepayers (e.g., utility customers pay $15 million to subsidize low-income households who benefit by only $10 million). If eligible customers receive a certain dollar of benefits from energy assistance, as good public policy the dollars funded by other customers should be at the lowest possible level. Equivalently, for a fixed number of dollars funded by general ratepayers, the benefits to low-income customers should be at the highest possible level.

Wasteful actions in providing energy assistance reduce benefits to targeted utility customers. One source of waste is non-poor households benefiting from energy assistance, thereby deducting the assistance given to the most financially needy households. A non-targeted lifeline rate or a discounted rate with broad eligibility rules that include non-needy customers can lead to such a distortive outcome.

Although compromising some regulatory goals (e.g., cost-based prices), the fostering of energy affordability to a greater number of households can advance other regulatory goals. No-cost weatherization to low-income households, for example, not only makes energy more affordable but it also promotes energy efficiency. It can, in addition, reduce collection costs, service disconnections, debt write-offs ("uncollectibles"), and arrearages ("past due bills"). Other energy assistance actions can also mitigate collection problems that financially affect utilities and their non-poor customers. Overall, weatherization to poor households has a number of appealing features that warrant serious consideration by policymakers, including state utility commissions.[160]

c. Balancing regulatory objectives

Regulators need to consider various regulatory goals in determining the preferred level of affordable utility service to low-income households. The conflicting nature of some objectives requires a value judgment when it comes to weighing the tradeoffs. As an illustration, regulators should consider the compromising effects that advancing affordability has on economic efficiency and discriminatory-free rates.[161] To what extent

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[160] *See*, for example, Ken Costello, "How to Determine the Effectiveness of Energy Assistance, and Why It's Important".

[161] Energy assistance funded by general ratepayers is a form of subsidy for which one group of customers (namely, general ratepayers) subsidizes service to another group of customers (namely, low-income households) by paying more than the cost to serve them while the other group pays less.

do regulators want to diminish economic efficiency or require general ratepayers to subsidize a group of low-income households? How much discriminatory pricing will they tolerate?

What primary objectives should energy assistance have? One objective is to keep existing low-income households on the utility system and reconnect service for others. Affordability means that low-income households are able to enjoy the comforts of space heating and other energy services without fear of disconnection by the utility.

d. Differing outcomes from alternate rate mechanisms

Specific energy assistance options include a change in rate design, a rate discount, a bill cap based on income, a lump-sum payment, a cost waiver, and no-cost weatherization and other forms of energy efficiency. These options have unique effects on low-income households, other customers, and the utility. Which of these initiatives would provide "most bang for the buck"? What should be the dollar amount of assistance? Regulators should review whether a utility's energy-assistance actions are achieving the regulatory goal of utility-service affordability (1) most effectively and (2) with minimal adverse effects on other regulatory objectives. For example, many economists consider inverted ("lifeline") rates an inefficient and wasteful approach for assisting poor households.

A major problem with energy assistance is that they can cause rates charged to low-income households to fall below cost and rates charged to other customers to increase above cost. Economic efficiency diminishes, and low-income households would tend to consume more energy.[162] The latter effect by itself runs counter to reducing the energy burden of low-income households, as well as advancing energy efficiency.

Energy assistance is a form of discriminatory pricing that some regulators might consider undesirable. Its rationale is that customers with a low ability to pay for utility services should receive favorable rate treatment. Discriminatory pricing almost always raises a question of fairness, especially when a favorable rate falls outside a "zone of reasonableness." When a rate falls short of a utility's short-run marginal cost or lies above the price that an unregulated monopolist would charge, a regulator would likely find the rate impermissible. We see examples in unregulated sectors in which a firm offers discounts, say, to seniors and students because of their low incomes. Firms do not favor these groups for altruistic reason. Instead, they offer discounts to increase their profits by attracting more customers and sales from price-sensitive customers. As long as the price lies above variable costs, firms can grow their profits from additional sales.

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[162] If these households face below-cost rates, they would tend to consume more energy. Some observers would contend that even if they do, that is desirable since presumably they were under-consuming energy previously when utility service was less affordable.

VI. Experiences with Seven Alternative Rate Mechanisms

The real test of any rate mechanism is how it performs in practice over several years. After all, *ex ante* predictions based on economic theory or "blackboard' analysis, although useful in reviewing the potential merits of a rate mechanism, are not good substitutes for empirical evidence. An assessment of whether a mechanism has achieved its objectives, surpassed them, or fallen short is an important but difficult task: The analyst must predict outcomes in the absence of the alternative mechanism and compare them with what actually occurred.[163] Important "outcome" metrics include price, cost, the utility's financial condition, and fairness. In effect, the test reduces to the effectiveness of a rate mechanism to achieve "just and reasonable" rates, as defined by a commission.

Summaries of seven rate mechanisms lying outside the mainstream follow. All of them have been operating for several years. The evidence derives from different sources, including commission staff responses to eight questions sent by the author of this paper,[164] discussions with stakeholders, and third-party documents. For the majority of mechanisms, the rate mechanisms have performed positively in line with expectations. Some of them, however, needed modifications, and questions still remain over whether on net they have advanced the public interest. One mechanism, inverted rates, was the exception in which events have caused it to have negative consequences triggering strong opposition from various stakeholders.

A. Alabama's rate stabilization plan

Since 1982, Alabama's electric and gas utilities have relied on a formula-ratemaking mechanism called the Rate Stabilization and Equalization (RSE) mechanism to make quarterly rate adjustments outside of a general rate case.[165] Other states, especially in the Southeast, also use formula rates to regulate utilities.

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[163] Economists and statisticians call this "counterfactual analysis."

[164] The author sent out the questions at the beginning of December 2013. The eight questions are: (a) when was the mechanism first instituted, (b) who first proposed it, (c) What was the rationale for it, (d) which parties supported and opposed it, (e) what modifications have utilities made to it since its inception, (f) has the mechanism encountered any problems and if so what were they and did the commission reconcile them, (g) has your commission done a retrospective review of the mechanism highlighting, for example, the benefits achieved and whether the mechanism has performed as expected, and (h) what has been your commission's overall experience with the mechanism? Most commissions responded fully to the questions.

[165] Alabama Power Company has operated under the RSE since 1982. Alabama Gas Co.'s current rate stabilization plan, which has undergone modification over time, is similar to the plan for Mobile Gas Service and was originally implemented in 1983. Mobile Gas Service's plan initiated in 2002.

Under RSE, the Alabama Public Service Commission annually compares a utility's expected ROE with the authorized range to determine any needed base rate adjustments to move the ROE toward a prespecified dead band. Starting in 2005, gas utilities could use forecasted costs and sales data based upon budget data.[166] Along with this change, the Commission allowed customers to receive refunds when the actual ROE rises above the "dead band" range but did not permit utilities to recoup ROE shortfalls.

Supporters of RSE point to three favorable features:

1. *More thorough cost reviews:* the Commission oversees a utility's cost on both an annual and ongoing basis.

2. *Rate smoothing:* traditional ratemaking is susceptible to rate shock under inflationary and slow sales-growth conditions. Because RSE adjusts rates more often, it mitigates against large step increases.

3. *Lessening of regulatory lag:* Because RSE uses forecasted data and involves annual reviews, it reduces the negative effects of regulatory lag on a utility's financial health.

RSE for Alabama Power Company (APCO) has had positive outcomes, at least as reported by the Edison Electric Institute:

> The constructive regulatory environment that has developed in Alabama brings benefits to customers in a number of ways...[E]lectric rates in Alabama have consistently been below the national average. In addition, the smoothing effects of RSE have been attractive to all customers, particularly large industrial customers. As a result, Alabama has enjoyed a period of strong economic development, which contributed to a growth of employment in the 1990's and 2000's (and which shielded the state from some of the more severe consequences attributable to the recession). RSE also has allowed APCO to restore its credit rating to the high level that it maintains today, thus leading to lower interest costs that put downward pressure on rates. In Alabama's experience, the formula rate methodology under RSE has been a winning approach for the commission, the consumers, and the utilities alike.[167]

Since RSE was adopted in November 1982, Alabama Power has had 12 upward rate adjustments, 3 downward rate adjustments, and no rate adjustments in 15 of the years.

The Edison Electric Institute also concluded that:

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[166] Previously, there were erratic movements of utility rates and earnings; setting rates based on future data helped to stabilize these parameters.

[167] Edison Electric Institute, "Case Study of Alabama Stabilization and Equalization Mechanism," EEI paper, June 2011, 7.

> The story of RSE is a story of successful regulatory innovation. RSE has changed the regulatory environment in Alabama, from one of distrust and confrontation, to one of communication and cooperation. This constructive relationship has produced substantial benefits for customers and shareholders alike. RSE has enabled Alabama, a comparatively small state, to become a leader in economic development. Companies such as ThyssenKrupp, EADS, Hyundai, Honda, Toyota and Mercedes have moved to Alabama in recent years. When asked why they chose to locate in Alabama, they consistently rank low cost, reliable energy, and a stable regulatory climate, as among the top reasons.[168]

Since these glowing comments came from an industry trade association, the reader might interpret then with some skepticism.[169] Different parties in Alabama have, however, indicated to the author the positive outcomes that have derived from the RSE. A 2013 NRRI survey of Commission staff indicated that the RSE has worked well and staff is confident in its review of utilities' costs, earnings and other parameters in determining the reasonableness of any rate adjustments.[170] One less positive response was that staff said that the burden is generally on the staff or the Attorney General to demonstrate that the utility's budget numbers are unreasonable. One interpretation is that a utility can present its budget numbers without defending them, which places the onus on other parties to show that they are inappropriate.

B. Central Maine Power's Alternative Rate Plan

Since 1995, Maine electric utilities have operated under an Alternative Rate Plan (ARP). The Public Utilities Commission encouraged this ratemaking mechanism, and it was agreed to by all the parties to the case, including the utility, Central Maine Power Company (CMP).[171] The Commission considered an ARP as an improvement over cost-of-service ratemaking, for setting prices. Before the ARP, price changes would require several months of litigation, with the number, amount and timing of resulting price changes difficult to predict. Stakeholders consider this uncertainty untenable, demanding at least Commission consideration of a new ratemaking paradigm.

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[168] Edison Electric Institute, "Case Study of Alabama Stabilization and Equalization Mechanism," 1.

[169] Inferring that the RSE was a major contributor to Alabama's economic development may be a stretch. A sound analysis would have to control for other factors of economic development (e.g., favorable taxes, low cost of living) to isolate the effect of the RSE.

[170] Ken Costello, "Future Test Years: Evidence from State Utility Commissions," Report No. 13-10, October 2013.

[171] The Commission first articulated the objectives and benefits of an ARP in Docket No. 1992-345.

Other states have adopted indexed price-cap plans like the ARP to regulate telephone-utility prices.[172] Maine was the first state to apply such a plan to electric utilities.

The ARP replaced traditional ROR regulation with a multiyear price cap approach. Under price caps, changes in a utility's rates rely on a formula that allows for automatic rate adjustments based largely on the difference between the inflation and a productivity offset.[173] Price caps are usually set for a predetermined number of years (e.g., five years), with no rate cases filed in the interim.

The plan limits the utility's rate increases, while allowing it to retain cost savings attained from improved cost efficiencies.[174] It shifts risk from customers to utility shareholders. The plan also gives CMP pricing flexibility: For example, it is able to offer reduced or re-designed rates to customers who would otherwise fuel switch or leave the utility's service area. The rationale for pricing flexibility is that it allows the utility to recover its fixed costs that it would otherwise lose, thereby avoiding a reallocation of those costs to remaining customers.[175] Other positive features of an ARP include rate predictability and stability, reduced regulatory costs, and stronger incentives for utilities to minimize their costs. Regularized regulatory lag (e.g., five years), for example, would increase the expected time that a utility would reap the benefits from improvement in cost efficiency.

Since 1995, CMP has operated under a five-year ARP.[176] The Commission has made several modifications to the plan over time.[177] One change is the adoption of flow-through treatment of certain costs, most notably storm-related expenses.

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[172] The Central Maine Power plan represents a hybrid plan with price caps as the primary component supplemented by earnings-sharing and service-quality factors. A decline in service quality, which is measured as an index combining customer service and reliability, results in a penalty based on a predetermined formula.

[173] The plan also allows for pass-through of mandated costs and net capital gains or losses. For example, the K factor allows a utility to receive additional revenues for projected capital spending. The K factor substitutes for other mechanisms, such as a capital cost tracker that recovers expenditures for large non-revenue producing projects. One criticism of the K factor is that it diminishes incentives for cost efficiency.

[174] It would hold price changes below the rate of inflation, assuming positive productivity growth. In its latest proposal, however, CMP includes a productivity offset of negative 1.46 percent in its ARP formula. This translates into an annual proposed rate increase of 1.46 percent higher then the rate of inflation.

[175] The presumption is that rigid rates could induce certain customers, especially industrial firms, to close down their facilities, self-generate or relocate.

[176] In 2013, another utility (Northern Utilities) proposed an ARP that would allow it to adjust its distribution rates without a general rate case until 2017.

The Commission sets annual targets for service quality, responsiveness and outage duration, among other things. The reason for these targets is to ensure that the strong utility incentive to manage costs under the plan does not sacrifice reliability or service quality in general. CMP receives a penalty when it performs poorly.[178]

The large revenue increase proposed by CMP in its latest filing raised questions on whether the ARP has performed well.[179] Staff asked whether an ARP is appropriate given projections of substantial capital expenditures.[180] Previously, the Commission expressed concern that CMP had underinvested during the ARP regime.[181] In fact, in the latest CMP filing the staff recommended suspending the ARP and replacing it with traditional cost-of-service regulation:

> Given the issues/concerns with CMP's performance under prior ARPs, as well as the concern that a new ARP cannot adequately address CMP's projected capital plans in a way that meaningfully protects ratepayers, the Staff's recommendation at this time would be that the Commission take an ARP 'hiatus' for CMP and allow CMP to operate under cost of service ratemaking for a period of time. This would allow CMP to address its system and spending needs consistent with the interests of both shareholders and ratepayers. In the future, an ARP form of regulation can be revisited and, as appropriate, adopted in a way that meets the Commission's objectives and concerns.[182]

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[177] Change also derived from the Commission's mandate for CMP to divest its generating facilities by 2000. CMP thus went from a vertically integrated utility to a distribution-only utility

[178] A Service Quality Index (SQI) measures CMP's service quality composed of seven parts. The SQI has a total potential annual penalty of $5 million.

[179] Unlike previous ARPs, CMP's index formula calculates allowed revenue increases, rather than allowed rate increases. The utility also proposed a revenue decoupling mechanism in conjunction with the ARP.

[180] Maine Public Utilities Commission, *Central Maine Power Company Request for New Alternative Rate Plan ("ARP 2014"), Bench Analysis*, Docket No. 2013-00168, December 12, 2013 at https://mpuc-cms.maine.gov/CQM.Public.WebUI/Common/ViewDoc.aspx?DocRefId={168485BE-732A-4E4F-A4DD-ACD068CE9F7B}&DocExt=pdf.

[181] Specifically, staff's concern is the following:

> A question certainly exists as to whether the ARP has provided the correct incentives for capital spending or, alternatively, whether sequential ARPs have promoted a pattern of spending driven by the cycle of ARP terminations and rate resettings.

[182] Maine Public Utilities Commission, *Bench Analysis*, 20.

Commission staff contended that a reversal to cost-of-service regulation would not necessarily increase regulatory burdens, lead to continuous rate filings, or diminish the utility's incentive to control costs. Staff alluded to the recent positive experiences of two other in-state electric utilities, Bangor Hydro-Electric Company and Maine Public Service Company. The first utility operated under an ARP until 2008 and the latter utility never operated under an ARP. As stated in the *Bench Analysis*:

> ...the normal "regulatory lag" between rates [under cost-of-cost regulation] was sufficient to promote the Commission's objectives of management efficiency, cost containment and rate stability (at 21).

Based on the views of different parties, the overall results from the ARP are mixed but, on net, positive. First, price increases under an ARP generally have been modest with no reporting of service-quality problems. In the initial years, CMP's earnings were held down by the unexpected closing of a nuclear power plant,[183] but the utility has improved its earnings since then by reducing its costs and becoming more efficient. Second, soon after the plan was in place, CMP increased the number of special, discounted rates offered to customers, partly because of the streamlined process. These discounts have helped some large industrial firms to remain competitive. Third, the plan has reduced the number of contentious hearings over time, allowing both the commission and utility personnel to devote more time to other activities.

C. Atlanta Gas Light's STRIDE program

In 1998, The Georgia Public Service Commission approved a surcharge for Atlanta Gas Light (AGL) that allowed the utility to recover prudently incurred costs under a 13-year pipe replacement program (PRP) that would replace more than 2,600 miles of bare steel and cast iron distribution pipes. The Commission Order for Docket 8516 adopted a Stipulation allowing AGL to replace its corroded pipes in 10 years and establish a surcharge[184] to recover its costs. The genesis of the program was a "show cause" Order. Previously Commission staff found the utility in probable violation of Part 192 of the Minimum Federal Safety Standards and Georgia State Law. The utility extended the PRP to 2013 as part of a settlement.[185]

In 2010, AGL received Commission approval to rename the program the Strategic Infrastructure Development and Enhancement (STRIDE) Program so that it could include as part of the surcharge costs the Integrated System Reinforcement Program (i-SRP), which expanded the distribution system, and the Integrated Customer Growth Program (i-CGP). AGL estimates that improvements under i-SRP will cost $400 million over ten

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[183] Because the utility had no fuel adjustment clause, it was unable to pass along to consumers the cost of replacement power.

[184] The utility recovers the surcharge from all firm customers in its service area.

[185] The residential surcharge increased from $1.29 per month in years 7-9 to $1.95 in years 10-13.

years, including an upgrade of the backbone of the utility's distribution system to improve reliability and branch out the distribution system to meet future growth. In 2010, AGL further expanded the program to include i-CGP for the purpose of extending its pipeline facilities to serve customers without pipeline access. Most recently under the i-VPR, AGL plans to charge customers a fixed monthly fee for replacing 756 miles of the oldest plastic pipes that are susceptible to cracking.[186]

As recently as December 2013, the Commission approved two agreements: (1) the 2013-2017 Integrated System Reinforcement Program (i-SRP 2.0) Plan and (2) the 2013-2017 Integrated Customer Growth Program (i-CGP 2.0) Plan. These programs will involve a $261-million investment in distribution improvements over the following four years. The agreements, among other things, give the Commission final authority over all projects, require AGL to file quarterly, semi-annual and annual reports with the Commission on expenditures and the progress of all projects. The agreements also allow Commission staff to conduct prudence audits of the projects.[187] One of the Commissioners commented that:

> This Commission realizes that extending and improving the natural gas distribution system is vital to Georgia's economic development...[Our] decision will allow Atlanta Gas Light Company to extend service to unserved and underserved customers and will promote economic development across our state.[188]

AGL must file, every three years, its plan before the Commission for the following three years. Some parties have questioned the merits of AGL's aggressive pipeline replacement program. AGL has contended that a large-scale replacement program lowers the chances of a major pipeline failure and allows it to acquire piping and labor at a lower cost.

In the early years of the program the Commission annually reviewed the utility's eligible costs from the previous year before approving a new surcharge amount. Later, the Commission set a fixed dollar amount that AGL could recover annually under the program. According to AGL, it has expended more than $2 billion on replacement and new pipes since 1998. The average residential bill has increased by $4.38 to fund these investments.

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[186] AGL has over 3,300 miles of vintage plastic pipe, which is about 10 percent of the total pipe mileage of its distribution system. AGL plans to replace all of these plastic pipes over the next 10-15 years.

[187] The Commission staff can file interrogatories, conduct quarterly prudence audits for all the programs and issue annual reports. Any staff complaints get resolved either through discussion with the utility or by the Commission.

[188] National Association of Regulatory Utility Commissioners, "State News: Georgia Approves AGL Improvement Program," *The Bulletin*, Issue 1 (January 6, 2014).

Overall, the Commission favors the use of surcharges for AGL to recover its costs under the STRIDE program. According to the Commission, the program has achieved its purpose of replacing and expanding pipes partly because AGL is able to recover its costs in a timely manner outside of a general rate case. AGL probably would have had to file several additional rate cases over the timeframe of the program in the absence of the STRIDE program. The Commission also supports the program because it is project specific and allows AGL to recover only those costs that it approves. The Commission has the discretion to modify the surcharge mechanism if deemed appropriate.

Infrastructure charges for gas pipeline replacement have soared in popularity across the country over the past few years.[189] Some commissions have rationalized them as an incentive for utilities to retire old pipes that pose a safety threat. Since pipe replacements do not lead to increased utility revenues, many commissions have recognized the potential adverse financial effect on utilities if they have to wait to recover their costs until the following general rate case. Pressure has come from Wall Street, environmentalists, the Federal Safety Agency, and the utilities themselves for state utility commissions to encourage pipe replacement and expedited cost recovery via infrastructure surcharges. This "iron quadrangle" has made it difficult for commissions to oppose both accelerated pipe replacement and not allowing utilities prompt recovery of their costs, even if the evidence on their merits is inconclusive.

Some commissions have tied cost recovery for pipe replacement to utility performance in terms of cost and construction milestones. They have also required a utility to have a comprehensive strategy for replacing pipes, as well as a short-term action plan. Some commissions also conduct a retrospective review to assure, for example, that the previous year's costs are consistent with the utility's replacement plan and prudent construction practices.[190] Some commissions also cap the amount that the utility can recover through the surcharge. Finally, it is common for utilities to convert cost recovery from the "surcharge" account to base rates in the next general rate case.

D. Wisconsin's future test year

The Public Service Commission has used a future test years for ratemaking over the past 35 years. It mandates a future test year for large utilities. These utilities file a rate case every year unless they are under a rate freeze.

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[189] *See*, for example, U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration, *White Paper on State Pipeline Infrastructure Replacement Programs*, December 2011.

[190] The intent is to assure that the surcharge charge passed through to customers equals only the prudent portion of the costs incurred by the utility.

The Commission has a large staff to audit a utility's filing and has refined its procedures over the years. It has developed a filing format for utilities that requires extensive documentation of their forecasts.[191]

In a 2013 NRRI survey on future test years,[192] the Commission responded to several questions as follows:

1. The greatest difficulty with FTYs lies with the inherent differences of opinion between staff, utilities and intervenors as to forecasted revenues and expenses.

2. The Commission has many years of experience with FTYs and is comfortable with them. The Commission has an overall positive experience with FTYs.

3. Independent forecasts are often used for sales. Commission staff normally adjusts the utility's forecasts for O&M expenses, net investment rate base, capital structure, working capital, and taxes.

4. The burden is on the utility to support its rate-filing application. Intervenors and staff provide additional information to build a complete record for the Commission.

5. The Commission requires the filing of historical information for sales, O&M expenses, rate base (e.g., expenditures, timing of additions), and working capital balances. This information acts as a benchmark for evaluating forecasts.

6. The utilities are subject to external audits of their financial statements.

7. Some utilities have a propensity to forecast their costs and revenues conservatively in order to increase the chances of meeting or exceeding its authorized ROE. Staff has seen differing tendencies among the state's utilities. For example, there is some evidence that some utilities have consistently under-forecasted sales.

8. The Commission has made adjustments to subsequent cost forecasts reflecting past forecasting errors, usually in the form of budget-to-actual adjustments.

9. The Commission compares actual weather-normalized sales to the utility's filed forecast over several years (i.e., it retrospectively compares the utility's forecasted sales allowed in rates with actual sales).

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[191] *See* Wisconsin Public Service Commission, "Investor Owned Utility Rate Cases Data Submittal Requirements Request for Change in Rates," Commission staff correspondence, April 6, 1995.

[192] Ken Costello, "Future Test Years: Evidence from State Utility Commissions."

10. The Commission authorizes a true-up or post-adjustment to rates only when it orders a utility to defer costs or revenues associated with a specified activity. Without such an order, such adjustments would be considered retroactive ratemaking, which is illegal in Wisconsin.

11. The Commission can always bring a utility in for a rate review if earnings are too high or low with the option, when earnings appear too high, to make rates subject to refund from that time on, pending review of financial information. Conversely, a utility has the ability to file a rate review at any time.

The Commission has strict filing requirements for an FTY.[193] It identified four key factors in assuring the public that rates based on an FTY are "just and reasonable":

- Commission staff audits a utility's rate applications.
- Commission staff compares estimates to historical experience.
- Commission staff compares the ongoing actual return on equity over time with the authorized return.
- Good, professional communication between Commission staff, the utilities, and intervenors greatly enhances the process.

As mentioned earlier, the Commission has a large number of staff members, which allows it to thoroughly audit utilities' FTY filing. Other commissions with much fewer staff resources might find it difficult to expend the same effort on auditing and overseeing the utility's costs and sales filings as the Commission does.

One general finding from the NRRI survey[194] was that most commissions using an FTY have had an overall positive experience, with no thought to discard an FTY in later rate cases. Although in some instances commissions underwent initial difficulties—including the broad one of evaluating the reasonableness of a utility's forecasts—they were able to eventually overcome them. A few commissions reported continuing challenges with (1) evaluating utility forecasts and (2) addressing utility incentives for biasing their forecasts to favor a larger rate increase. A number of commissions emphasized the importance of auditing, detailed reviews, and reliance on evidence presented during a rate case as crucial to determining the appropriate test-year costs.

E. Utah's (Questar's) Conservation Enabling Tariff

In October 2006 the Public Service Commission approved the proposed Questar Gas Conservation Enabling Tariff (CET) as a three-year pilot program. The Commission

[193] Wisconsin Public Service Commission, "Investor Owned Utility Rate Cases Data Submittal Requirements Request for Change in Rates."

[194] Ken Costello, "Future Test Years: Evidence from State Utility Commissions."

made CET permanent in June 2010.[195] The rationale for the tariff was to: (1) address the downward trend of gas usage per customer and (2) remove the disincentive for Questar to promote energy efficiency.[196] The former phenomenon made it difficult for Questar to recover its authorized rate of return. The tariff intended to align the utility's interests with customer interests in expanding energy efficiency.

This revenue-decoupling tariff received wide support, including from the Utah Division of Public Utilities, after initial opposition by consumer advocates.[197] A Division witness testified that the CET would "protect Questar's revenues from shortfalls due to price shocks and economic downturns."[198] Questar Gas estimated that, adjusting for weather, its typical residential customer decreased gas usage by around 35 percent during 1980-2005.[199] Parties agreed that the CET would remove a major obstacle to Questar's energy-efficiency efforts.[200]

In getting Commission approval for the tariff, Questar agreed to institute (1) customer energy efficiency programs, (2) demand-side management programs, and (3) a low-income assistance program. The tariff applies to only general service customers.

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[195] The Commission has reviewed the CET on several occasions. Its initial review led to the Commission approval of the initial pilot for the last two years. A later review resulted in the CET becoming permanent. The Commission monitors the program monthly and less frequently for the performance of Questar's energy efficiency programs. The Commission also reviews the utility's actual rate of return semi-annually and annually.

Unlike some other states, incidentally, the Utah Commission does not adjust the utility's authorized rate of return downward for the risk-shifting aspect of revenue decoupling. For example, the Oregon Public Utilities Commission and the Vermont Public Service Board reduce the utility's ROE because of risk shifting. The rationale for a lower ROE is that customers should receive some form of compensation for lower utility risk.

[196] Commissions in other states have typically given these same reasons for approving revenue decoupling.

[197] One concern was that Questar would be protected from any decline in revenue, regardless of whether it resulted from energy conservation, higher natural gas prices, or a recession. Opponents and skeptics of revenue decoupling have leveled this criticism in other jurisdictions as well.

[198] *See* the testimony of Dr. George R. Compton, Docket No. 05-057-T01, January 23, 2006, at 11.

[199] Two identified sources of the decline are more energy efficient appliances and homes, and higher natural gas prices. Gas usage per residential customers has declined nationally and in most states, in parallel with Questar's experience.

[200] Parties in Utah indicated to the author that the CET has motivated Questar to be proactive in supporting energy efficiency.

The tariff specifies a weather-adjusted margin per customer for each month[201] with differences to be deferred and recovered from customers or refunded to customers through periodic rate adjustments.[202] In other words, the utility recovers "margin" shortfalls from customers and refunds "margin" surpluses to customers in future rate changes. The Commission caps accruals to the balancing account at 5 percent of gross revenues and amortizations at 2.5 percent. The CET has had small annual percent changes in the base rate, either upward or downward.

The decoupling experience in Utah parallels that in other states. One national study[203] makes two major conclusions, which apply to revenue-decoupling mechanisms such as the CET. First, revenue-decoupling rate adjustments are mostly small—within plus or minus 2 percent of retail rates. Specifically, the study said that:

> Across the total of all utilities and rate adjustment frequencies, 64% of all adjustments are within plus or minus 2% of the retail rate. This amounts to about $2.30 per month for the average electric customer and about $1.40 per month for the average natural gas customer.[204]

For the CET, annual rate increases adjustments have never exceeded 0.54 percent.

Second, the study shows that revenue decoupling mechanism has involved both refunds and surcharges: The study found that across all electric and gas utilities and all adjustment frequencies, 63 percent were surcharges and 37 percent were refunds. Since its inception, the CET has triggered nine upward rate adjustments and five downward rate adjustments, close to the national average of rate increases being less than twice the frequency of rate decreases.

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[201] Measurement of the base revenue per customers has changed from a historical level, a three-year average, to a proposed (as of this writing) forecasted level.

[202] The CET divorces Questar's non-gas revenues from the temperature-adjusted sales per customer. The utility has a weather-normalization adjustment that offsets the revenue effect of temperature variations.

[203] Pamela Morgan, "A Decade of Decoupling for U.S. Energy Utilities: Rate Impacts, Designs, and Observations," Revised February 2013 at http://switchboard.nrdc.org/blogs/rcavanagh/Decoupling%20report%20Final%20Feb%202013%20-%20pdf%20(2).pdf.

[204] Ibid., 3.

F. Ohio gas utilities' straight fixed-variable (SFV) rates

Under SFV rates, the utility recovers all distribution costs (base rates) in the fixed component.[205] In describing SFV rates, Ohio Supreme Court remarked that:

> Under traditional natural-gas rate design, a small portion of the utility's fixed delivery costs is recovered through a low fixed monthly customer charge with the remaining fixed distribution costs recovered through a rate that varies with gas usage. The SFV rate design separates or "decouples" the utility's recovery of its costs of delivering gas (which are predominantly fixed) from the amount of gas that customers actually use (which varies from month to month). Under the modified SFV rate structure approved in the Duke and Dominion cases, most fixed costs of delivering gas are collected through a higher flat customer charge, with the remaining fixed costs recovered through a correspondingly lower variable gas-usage component.[206]

SFV rates recognize that a gas utility's non-gas costs are independent of throughput; thus, all residential customers pay the same amount for distribution service, no matter how much gas they consume. The rates would eliminate subsidies from high-usage customers to low-use customers.

Three Ohio gas utilities during 2007–2008 proposed revenue decoupling with true-ups in the form of surcharges for delivery cost recovery. In all instances, instead, the Public Utilities Commission of Ohio ruled in favor of SFV rates. Commission staff was a major driver in supporting SFV rates. In its Order for the Duke Energy docket, the Commission stated that:

> Staff maintains that the evidence of record clearly indicates that Duke's revenue erosion problem is real and that the levelized rate design is the better way to balance the utility's desire for recovery of its authorized return with promotion of energy efficiency as a customer and societal benefit through control of energy bills…Staff asserts that, as long as the bulk of a utility's distribution costs are recovered through the volumetric component of base rates, this decline in per-customer usage threatens the utility's recovery of its fixed costs of providing service. Staff contends that the levelized rate design best addresses this issue while

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[205] A modified SFV rate would allocate most, but not all, of the fixed costs of delivering gas to a flat monthly charge. For Duke Energy, the change to a modified SFV rate increased the flat charge for residential customers from $6 to around $20-$25, offset by a lower volumetric charge to recover the remaining fixed distribution costs.

[206] *Ohio Consumers' Counsel v. Pub. Util. Comm.*, 127 Ohio St.3d 524, 2010-Ohio-6239, Ohio Supreme Court, Decision, December 23, 2010, 1-2.

simultaneously removing the disincentives to utility-sponsored energy efficiency programs that exist with the traditional rate design.[207]

In its decision for the Duke Energy case, the Commission ruled in favor of SFV rates over a revenue-decoupling rider:

> On balance, the Commission finds the levelized rate design advocated by Duke and Staff to be preferable to a decoupling rider. Both methods would address revenue and earnings stability issues in that the fixed costs of delivering gas to the home will be recovered regardless of consumption. Each would also remove any disincentive by the company to promote conservation and energy efficiency. The levelized rate design...has the added benefit of producing more stable customer bills throughout all seasons because fixed costs will be recovered evenly throughout the year. In contrast, with a decoupling rider, as favored by [the Office of the Ohio Consumers' Counsel], customers would still pay a higher portion of their fixed costs during the heating season when their bills are already the highest, and the rates would be less predictable since they could be adjusted each year to make up for lower-than-expected sales... A levelized rate design also has the advantage of being easier for customers to understand. Customers will transparently see most of the costs that do not vary with usage recovered through a flat monthly fee. Customers are accustomed to fixed monthly bills for numerous other services, such as telephone, water, trash, internet, and cable services. A decoupling rider, on the other hand, is much more complicated and harder to explain to customers.[208]

One utility gradually transformed its rate design to SFV over the course of two rate cases. Making the transition smoother helps to avoid a large bill impact for some customers. The lesson here is that any radical change in rate design or rates in general requires politically that they gradually, over a multiyear period, affect those who become worse off. Imposing an immediate and large burden on the losers would likely meet with

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[207] The Public Utilities Commission of Ohio, *In the Matter of the Application of Duke Energy Ohio, Inc. for an Increase in Rates et al., Opinion and Order*, Case No. 07-589-GA-AIR et al., May 28, 2008, 13.

[208] Ibid., 18.

strong opposition, undermining ratemaking reforms.[209] In other words, it would fail the critical public-acceptability criterion.[210]

Commission staff found that, on average, low-income customers are not low-usage customers. This evidence helped to dispose of the general perception that moving to a SFV rate would disproportionally harm poor households. In fact, it suggests that poor households would (1) see lower winter gas bills under a SFV rate and (2) no longer subsidize higher-income customers.

In the Duke and Dominion rate cases, the Office of the Ohio Consumers' Counsel and the Ohio Partners for Affordable Energy opposed the SFV rate.[211] They favored a revenue decoupling rider in conjunction with the traditional rate design that recovers a portion of the utility's fixed costs in the volumetric charge. They have two major concerns with SFV rates: (1) They discourage customers to conserve, since at the margin they would see lower prices; and (2) they would harm low-usage customers, including poor households. Groups have also raised these concerns in other states where utilities have proposed SFV rates.

Staff indicated to the author that education was crucial in gaining customer acceptance of SFV rates. Although the Commission initially had to answer questions from many customers about the new rate design, they have subsided over time with apparent little opposition to SFV rates, at least by the vast majority of customers. SFV rates so far have taken a back seat to revenue decoupling across the country as a mechanism to protect utilities from revenue erosion. Utilities have, however, become more aggressive in proposing SFV rates to their state commissions.[212]

G. California's inverted rates

California statutes require the Public Utilities Commission to set inverted rates. Legislation passed in 2001 initiated a five-tier inverted rate structure in addition to

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[209] Staff indicated to the author that the distribution charge constitutes only about 20 percent of an average customer's total gas bill. Thus, even if the distribution charge increased substantially for some customers, namely, low-usage customers, the percent change in their total bill would be one-fifth of the percent change in the distribution charge.

[210] As one analyst has put it, changes of any kind must strive to cushion the effect on the losers or "the train will never leave the station."

[211] Other parties in these cases did not take a position on SFV rates.

[212] In early January, for example, PacifiCorp proposed a hike in fixed charges for its Utah residential customers, including $4.25 per month for net-metered solar customers. In its rate case, PacifiCorp contended that it needs to recover more revenue from the fixed portion of residential bills in view of declining electricity use per customer. Without higher fixed fees, the utility argued that it would have a disincentive to promote energy efficiency. Customers with renewable generation would pay an additional $4.25 net metering facilities charge.

freezing rate changes for the first two tiers.[213] Since that time, higher tiers have had to shoulder utility cost increases, which have led to higher-tier rates deviating farther from cost. Legislation in 2009 allowed for modest increases in tier one and two rates.

The passage of new legislation in October 2013 reflected the intent of the lawmakers in California to have the Commission modify existing rate design, including revamping or eliminating inverted rates.[214] One reason for this recent skepticism toward inverted rates is the strong incentive they have given high-usage electricity customers to install solar PV systems and avail themselves of the generous net energy-metering rates in the state. The legislation allows the Commission to redesign rates to become more equitable and reflective of cost of service. It also gives the Commission authority to increase the monthly fixed charge (at a cap of $10, except for distributed-generation customers).[215]

California has the steepest inverted rate design in the country, with marginal consumption on higher tiers costing three times or more the level of baseline consumption. Compared to most inverted rates, California has more tiers and, according to some analysts, the most distorted prices. Currently, the state's three largest utilities have either three, four, or five tiers.

Some policymakers favor inverted rates because they encourage energy efficiency. They can also promote economic efficiency when the utility's marginal cost is greater at higher tiers. Higher-tier rates above marginal costs like in California, however, would tend to lead to deficient usage of electricity.[216] Net metering in conjunction with technologies such as rooftop solar PV systems has excessively stimulated customers who pay above-cost top tier electricity prices to invest in distributed generation.[217] This outcome is evident in California, where the Public Utilities Commission is investigating the future of inverted rates. One alternative for mitigating this problem is to (1) impose a fixed customer charge on customers who install a rooftop solar system and (2) increase the customer charge for other customers. The utility can then lower the rates in the higher tiers closer to marginal cost. Evidence for California

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[213] The first two tiers included usage not exceeding 130 percent of the baseline. Thus, customers with higher usage (in tiers 3-5) had to bear the full brunt of any utility rate increases.

[214] At the time of this writing, the Commission is considering new electric rate structures in Rulemaking R.12-06-013.

[215] Other rate topics to be addressed by the Commission are: (a) real-time and critical peak pricing, (b) demand charges, (c) low-income subsidies, and (d) net energy metering tariffs.

[216] This condition can easily occur. The marginal cost for a utility at any particular time depends on coincident demand. High-demand periods for the utility system as a whole may not coincide with high-demand periods for individual customers. Thus, the high-tier rates are unlikely to correlate well with the system marginal cost.

[217] Much larger increases in rates for the highest tiers compared to the lower tiers over the past several years have caused this problem.

has shown that top-tier utility-electricity customers are subsidizing lower tier customers.[218]

Another argument against inverted rates is that many low-income customers consume above-average amounts of electricity and natural gas.[219] Many wealthy households also consume a relatively small amount of energy. Using inverted rates to assist the poor may, therefore, be counterproductive in assisting poor households. Non-targeted inverted rates (i.e., eligibility for inverted rates does not depend on a household's income) inadvertently can benefit high-income, low-energy-use customers.

To elaborate, if the policy objective is to subsidize low-income customers, more cost-effective ways exist.[220] Giving a lump-sum credit or rate discounts to eligible households could achieve the same goals at lower cost than "subsidizing" utility customers. Some non-poor customers inevitably benefit when inverted rates do not require that customers paying the first-tier rate have low incomes. Under this rate, benefits could accrue randomly across households with wide-ranging incomes. Energy usage varies widely across households, not necessarily because of income differences but because of other factors such as household size and consumer preferences. Some higher-income households might consume smaller amounts of energy because of their financial ability to make investments in energy efficiency.[221]

Regulators approving inverted rates argue that they encourage energy efficiency and provide customers with lower marginal prices for "essential" electricity and gas use. A simple example of inverted rates is when a customer pays 8 cents per kilowatt-hour (kWh) for the first 500 kWhs consumed in a month, and 12 cents for all additional kWhs.

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[218] Analysts have shown three sources of intra-class subsidies in California: (a) inverted rates, (b) the absence of time-of-use rates and (c) low-income energy assistance.

[219] One reason is that poor households are less able to afford energy efficiency, especially those initiatives that require large investments (i.e., high upfront costs).

[220] *See* the previous discussion in Part V.C.2, and Severin Borenstein, "Regional and Income Distribution Effects of Alternative Retail Electricity Tariffs," Working Paper EI@Haas WP 225, October 2011.

[221] On the other hand, one could argue that income and energy consumption have a fairly strong correlation, e.g., wealthier households tend to own larger homes and have more discretionary energy-consuming appliances. The correlation also might substantially differ between electricity and natural gas. Since the early 1980s, national statistics show that the difference in energy consumption between households eligible for federal assistance and other households slightly declined. *See*, for example, U.S. Energy Information Administration, *Residential Energy Consumption Survey*, various issues, at http://www.eia.doe.gov/emeu/consumption/index.htm.

These rates provide benefits to low-income households only when they consume low amounts of energy relative to other customers.[222]

In sum, when inverted rates fail to reflect marginal cost, they are discriminatory against the largest users and economically inefficient.[223] They also make a utility's revenues and earnings more volatile and less predictable.[224] Perhaps most damaging, they can harm those customers, namely low-income households, that they are supposed to help. The real lesson here is that using rate design to advance a social agenda—namely, assisting low-income households while at the same time promoting energy efficiency—can create new problems and conflict with core regulatory objectives. To say it differently, the experience of inverted rates in California is a good example of unintended consequences with apparent adverse effects on the public interest.

VII. Final Thoughts

After all is said and done, three major questions face regulators in deciding on the merits of different rate mechanisms: (1) What are the objectives of ratemaking? (2) What rate mechanisms are most effective in achieving those objectives? (3) What rate mechanisms would benefit both utilities and their customers?

The last question is compatible with the "balancing act" wherein any regulatory action, including ratemaking, should produce a non-zero-sum game, with both utility investors and customers benefiting. Some of the alternative rate mechanisms violate this condition by leaving out utility customers as beneficiaries. They either shift risk to customers or allocate no direct benefits to them. Many of the alternative rate mechanisms are more transparent in benefiting individual stakeholders (notably, utility shareholders and environmentalists) and not the public interest.

Commissions should consider, for decision making, grouping their objectives into core and non-core. Frequently, interest groups pressure commissions to promote new objectives at the expense of core principles. Although core principles differ by jurisdiction, they all call for a financially healthy utility that provides reliable and safe service at a cost reflecting prudent utility management.

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[222] As some studies have shown, however, many low-income households are above-average usage customers.

[223] There is the real problem, for example, of charging two customers different rates at any one time when they impose the same marginal cost on a utility. The only logical conclusion is that the customer being charged the higher rate (e.g., the customer on the higher-rate tier) is being discriminated against.

[224] Inverted rates, like volumetric rates that include fixed costs, increase the risk that a utility will under-recover its fixed cost, because it disproportionately collects those costs through the higher rate tiers where the greatest amount of usage volatility occurs. This is one reason why utilities tend to oppose inverted rates.

One message conveyed by this paper is that ratemaking is as much an art as a science, requiring regulators to impute their subjective values and judgment in decision making. Analysts can play an important role, however, by providing regulators with vital information on the inevitable tradeoffs among the various objectives that they assign to ratemaking.

Some alternative rate mechanisms might result in all stakeholders being better off. At least in theory, if they result in a net efficiency gain, all parties can benefit, although in practice, politically and administratively, it may be difficult to prevent losers.

As part of their duties, commissions take into consideration the positions of different stakeholders, whose views often diverge and reflect opposing positions on individual rate mechanisms. To be blunt, stakeholders have their own agenda to pursue; commissions are in the unique position of doing what is best from the public's perspective, which is a most challenging task. After all, special interests do not represent the broad public interest. The public interest is diffused and not well-organized, so commissions should act as its advocate in the regulatory arena.

In conclusion, pressures from different stakeholders for ratemaking changes have provoked state legislatures and public utility commissions to modify utility ratemaking, sometimes fundamentally. Whether these changes, or what some observers call "reforms," have improved utility performance and long-term customer welfare awaits empirical analysis. There is also the question of whether state legislatures, given their lack of expertise in technical and often complex utility matters, should have any role in reforming ratemaking practices. We observe, in particular, alarmingly more intrusive state legislation in ratemaking matters that regularly promote the interests of a single stakeholder while damaging the interests of others. These actions, in other words, often violate the "balancing act" principle that lies at the heart of state public utility regulation.

Appendix: Examples of Alternative Rate Mechanisms

A. Incremental changes to traditional ROR regulation

1. CWIP in rate base
2. Phase-in plan
3. Future test year
4. Accelerated depreciation[225]
5. Interim rate relief

B. Multiyear plans

1. UK-style price caps (e.g., Central Maine Power)
   - **a.** Has strong incentives for cost efficiency as allowed price changes depend on exogenous factors (e.g., industry cost index)
   - **b.** Has potential for high profit volatility
   - **c.** Avoids frequent (e.g., annual) general rate cases
   - **d.** Often combined with performance standards for service quality and an earnings sharing mechanism
2. Multiyear test period (e.g., New York and California utilities, Xcel)
   - **a.** Uses forecasted revenue and cost parameters, e.g. over the next three years

[225] *Accelerated depreciation* allows the utility to improve its cash flow in the early years of an asset's life, which can help to finance a new technology. It increases, however, the burden on customers by increasing their rates in the near term. Book depreciation, in comparison, can delay retirements of obsolete plant. To retire an asset not yet fully depreciated can result in the old capital asset becoming "stranded," leaving the utility with the potential to lose future cost recovery from the asset. The utility may then decide not to invest in a new technology or other innovation until the old asset has fully depreciated. Most state utility commissions use book depreciation, which relates annual depreciation to three factors: (1) the original cost of property plus the cost of removal less estimated salvage value; (2) the estimated service life over which the utility writes off the asset property; and (3) the method used to distribute value over this life, usually straight-line depreciation.

b. Uses cost forecasts for an individual utility or an exogenous index (which provides stronger incentives for cost efficiency)

c. Specifies annual dollar amounts of revenue increases or uses a formula

d. Sometimes applies earnings sharing mechanism when ROE falls outside a predefined band

e. Avoids frequent (e.g., annual) general rate cases

f. Frequency has a "stay out" provision

C. A comparison of a revenue decoupling (RD) rider with a straight fixed-variable (SFV) rate

1. Definition of RD

a. Outside of rate-case price adjustments based on the difference between actual revenues and some specified revenue baseline—e.g., the revenues per customer a utility expects to receive at the time of the last rate case

b. "True-up" mechanism that adjusts base rates between rate cases based upon differences between actual revenues and baseline revenues

c. Revenue shortfalls or surpluses placed in an account balance for later recovery by the utility or reimbursement to customers; recovery or reimbursement done monthly, quarterly, or at some other regular interval

d. Recovery of fixed costs based on baseline revenues, not actual sales, hence the term "decoupling"

e. A (hard or soft) revenue cap, on either a per-customer basis or total customer-class basis

2. The rationales for RD

a. It eliminates the disincentive for utilities to promote energy efficiency.

b. Standard rate design places the utility at risk for recovering its fixed costs, with the risk increasing in recent years because of declining usage per customer.

c. RD is superior to alternative rate designs in achieving revenue stability and promoting energy efficiency.

d. RD represents an incremental change in ratemaking practices that would advance some regulatory objectives at little cost to other objectives.

e. It would result in small annual rate adjustments, either upward or downward.

3. Analysis of RD compared with SFV rates

a. Arguments in support of RD

(1) It avoids the poor and sometimes distorted incentives of cost trackers.[226]

(2) It does not diminish the incentive, like SFV, for price-driven energy efficiency.

(3) It does not cause a utility to earn excessive returns.

(4) It avoids the problem of determining test-year sales.

(5) It would seem to coincide better with the "gradualism" and "public acceptability" objectives of regulation than (say) SFV rates

b. On the other hand, SFV has attractive features:

(1) It is compatible with sound economic (e.g., marginal cost) principles

(2) It increases the competitiveness of the utility for high-usage customers from a lower volumetric charge.

(3) It eliminates intra-class subsidies favoring low-usage customers.

(4) It is simple to implement and for customers to understand.

(5) It is a common pricing method for capital-intensive services.

[226] This is not really an argument for RD but an explanation for why not to lump RD with cost trackers, which some stakeholders have done.

(6) It involves no periodic true-up or price changes between rate cases, resulting in longer regulatory lag.

(7) It results in more stable utility bills during the peak months; thus, it is a better bill hedge than the typical rate design (e.g., it allocates more of the fixed costs from high-usage periods to low-usage periods).

D. Alternative rate designs departing from average-cost pricing and the standard two-part tariff

1. Straight fixed-variable rate

2. Real-time pricing

3. Time-of-use pricing

4. Critical peak pricing

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CERTIFICATE OF SERVICE

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