

**Before the**

**TENNESSEE REGULATORY AUTHORITY**

**IN RE: PETITION OF ATMOS ENERGY CORPORATION FOR APPROVAL OF A  
GENERAL RATE INCREASE**

**DOCKET NO. 07-00105**

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**DIRECT TESTIMONY  
OF  
STEVE BROWN  
ON DECUOPLING ISSUES**

\*\*\*\*\*

**August 21, 2007**

Before the

**TENNESSEE REGULATORY AUTHORITY**

**IN RE: PETITION OF ATMOS ENERGY CORPORATION FOR APPROVAL OF A  
GENERAL RATE INCREASE**

**DOCKET NO. 07-00105**

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**AFFIDAVIT**

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I, Steve Brown, Economist, for the Consumer Advocate Division of the Attorney General's Office, hereby certify that the attached Direct Testimony represents my opinion in the above-referenced case and the opinion of the Consumer Advocate Division.

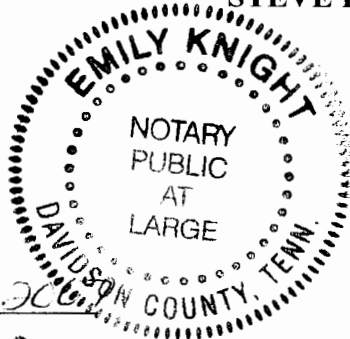
  
STEVE BROWN

Sworn to and subscribed before me  
this 21<sup>st</sup> day of August, 2007.

  
NOTARY PUBLIC

My commission expires: Sept. 22, 2007

107229

  
My Commission Expires SEPT. 22, 2007

***I. Introduction: Decoupling Testimony***

**Q\_1. Please state your name.**

**A\_1. Steve Brown.**

**Q\_2. Where do you work and what is your job title?**

**A\_2. I am an Economist in the Consumer Advocate and Protection Division, Office of the Attorney General. A statement of my credentials appears in my testimony on capital structure and the cost of capital.**

**Q\_3. What were you asked to do with respect to this portion of the case?**

**A\_3. In addition to my testimony on capital structure and rate of return, I was also asked to form opinions on Atmos's decoupling proposal and Dr. Murry's testimony supporting decoupling. I am filing this testimony separately to facilitate review of these different issues by the TRA and the parties. Dr. Murry testifies that "declining sales threaten margins...sales have fallen because of rising gas costs" [Murry Direct P.22 L.4-9]. This appears to be a justification for Mr. Smith's suggestion that the company "break the link between, the Company's revenue and the quantity of gas consumed by its customers...and decouple the collection of non-gas revenues from the volumes of gas consumed" through a Customer Utilization Adjustment [CUA]." [Smith Direct P.6 L.20-21, P.8 L.11-16].**

**II. Summary Of Issues Regarding  
Declining Sales and The Need For  
"Decoupling."**

Before the Tennessee Regulatory Authority accepts Atmos's decoupling proposal and the company's underlying justification that declining sales revenue creates a need for decoupling, the Authority needs far more data and investigation.

A recent order by the North Carolina Utilities Commission suggests that Piedmont Natural Gas Company, which also makes sales in Tennessee, was unable in North Carolina to match its energy sales to its customers to the actual gas volumes the company received from the pipeline.

On August 1, 2007 the North Carolina Utilities Commission issued an order which bears in part on the matters I testify to in this section of my testimony. In Docket No. G-9, SUB 528, "Order On Annual Review Of Gas Costs," at page 14 the Commission stated:

*"[Staff] Witness Hoard testified that the Company has not been performing a proper reconciliation of the volumes delivered to the Piedmont system... with the volumes delivered to its customers."*

While preparing for the current rate case, I found a similar problem that bears directly on this rate case. I discovered that Atmos's energy deliveries from the East Tennessee Pipeline do not reconcile to Atmos's sales in its tariff areas 2 and 4, for the fiscal years 2004, 2005, and 2006.

1  
2 I found that the annual total energy sales in  
3 those two areas is 40% less than the energy  
4 delivered from East Tennessee Pipeline to Atmos  
5 Energy Corporation in the same two areas. For  
6 each fiscal year energy deliveries exceed sales  
7 by 5.6 million dekatherms to 7.2 million  
8 dekatherms.  
9

10 To assess whether this was a substantive  
11 difference, I chose the Knoxville Utilities  
12 Board as a benchmark to compare to Atmos. For  
13 the KUB's fiscal years 2004, 2005 and 2006, I  
14 found a near perfect match between the energy  
15 delivered to KUB from the East Tennessee  
16 Pipeline and KUB's annual energy sales. This is  
17 strong evidence that energy deliveries from  
18 East Tennessee pipeline in a fiscal year should  
19 have a close correspondence to a natural gas  
20 distribution company's sales to the end users  
21 in the same fiscal year. This suggests that  
22 Atmos's energy sales might be mistakenly  
23 underreported.  
24

25 There are potential explanations for the  
26 mismatch between the pipeline's energy  
27 deliveries to Atmos and Atmos's energy sales.  
28 One explanation is that the energy deliveries  
29 in Tennessee include gas bound for Atmos's  
30 customers in Virginia. Another explanation is  
31 that East Tennessee's records are susceptible  
32 to misinterpretation where energy deliveries  
33 might be mistakenly double-counted or  
34 mistakenly attributed to Atmos when they should  
35 be attributed to an energy marketer.  
36

1           There are potential explanations for the  
2           mismatch between the pipeline's energy  
3           deliveries to Atmos and Atmos's energy sales.  
4           One explanation is that the energy deliveries  
5           in Tennessee include gas bound for Atmos's  
6           customers in Virginia. Another explanation is  
7           that East Tennessee's records are susceptible  
8           to misinterpretation where energy deliveries  
9           might be mistakenly double-counted or  
10          mistakenly attributed to Atmos when they should  
11          be attributed to an energy marketer.  
12

13          I evaluated these possibilities and concluded  
14          that they do not account for enough volumes to  
15          explain the huge difference between energy  
16          deliveries to Atmos in its tariff areas 2 and 4  
17          and energy sales to end users. In light of this  
18          issue regarding the difficulty in attaining a  
19          high degree of confidence in tracking sales  
20          volumes, my opinion is that the Authority  
21          should not approve Atmos's decoupling proposal.  
22          It is my understanding that Mike Chrysler of  
23          the CAPD is testifying about other reasons to  
24          deny the decoupling proposal.  
25

***III. A. Description Of Procedures  
Which Established The Potential  
For An Underreporting of Sales.***

East Tennessee Pipeline delivers gas to Atmos for its sale in service areas 2 and 4, which are displayed on page 11 of this testimony.

East Tennessee Pipeline posts on its website a master list of natural gas delivery points on the pipeline. The list names the delivery point operator and identifies each point by its name, state, and county. The master list appears in my Schedule 1.

Although the pipeline identifies many delivery point operators, including Atmos Energy Marketing, to avoid asset-manager issues I focused only on those points which the pipeline identified Atmos Energy Corporation as being the delivery point operator. However, I also focused on delivery points where the Knoxville Utilities Board was identified as the delivery point operator. I cross-referenced those delivery points to customer-data which is in the public record, and which is filed by the pipeline and made available at FERC's website. This data allowed me to determine that Atmos Energy Corporation was the only shipper to its delivery points.

I found in my research that one delivery point may have more than one shipper to it. For example, Piedmont Natural Gas serves much of Nashville from the Tennessee Gas Pipeline via a delivery point known as "Nashville 2" just west of Nashville. I reviewed the information filed by the pipeline with FERC and found the following instance of two shippers, Ford and Piedmont, using the "Nashville Tennessee 2" point.

Pipeline	Ferc Pipeline #	Quarter Filed With FERC	Shipper	Pipeline Tariff	Maximum Daily Delivery	Delivery Point
TENNESSEE GAS	9	200704	FORD MOTOR CO	FT-A	5800	NASHVILLE TENNESSEE 2
TENNESSEE GAS	9	200704	PIEDMONT NATURAL GAS	FT-A	74100	NASHVILLE TENNESSEE 2

I also found on Piedmont's web site, "piedmont.com/commercial/resourcesSection/glossary," a helpful definition that ties together the ideas of gas transportation, the shipper, and the pipeline:

*"Transportation: Act of moving gas from a designated receipt point to a designated delivery point based on the terms of a contract between the transporter and the shipper. Generally it is the shipper's gas that is being moved."*

I reviewed East Tennessee's filings with FERC and found no evidence that any shipper other than Atmos Energy Corporation shipped gas to the delivery points identified by East Tennessee Pipeline as being points operated by Atmos Energy Corporation. This also allowed me to compare the behavior of Atmos and the KUB on a fiscal year basis. The KUB is a municipal utility having approximately the same size as Atmos, and Knoxville is the largest city in East Tennessee.



1  
2 These two utilities have the same pattern of  
3 energy deliveries from the pipeline. This  
4 information is also public record because the  
5 Federal Energy Regulatory Commission requires  
6 "informational postings" by pipelines.  
7

8 I found an exact correspondence between the  
9 counties identified by the pipeline and the  
10 counties listed in Atmos's tariff. Page 12 of  
11 this testimony displays a computer-screen copy  
12 of the pipeline's website with the master list  
13 displayed as a spreadsheet that can be opened  
14 directly on the web site. A time-stamp appears  
15 to show the time the screen was recorded  
16

17 At the top of the screen there are 9 columns.  
18 At the bottom of the screen there is a row of  
19 data that displays the following information  
20 from left to right: 59002, 20584, UCG Bristol,  
21 TN, Sullivan, ETN, ATMOS ENERGY CORPORATION, and  
22 DELIVERY. Therefore, Atmos Energy Corporation  
23 is the operator of UCG Bristol delivery point  
24 in Sullivan County, Tennessee.  
25

1           The pipeline also posts a daily record of  
2           energy delivered to all delivery points on the  
3           pipeline. Page 13 of this testimony displays a  
4           computer-screen copy of the website's page  
5           where daily records can be found. Page 14 of  
6           this testimony displays a computer-screen copy  
7           of the website's daily record for the 24-hour  
8           period from 9:00AM July 17, 2007 to 8:59AM July  
9           18, 2007. The record was posted at 9:56AM July  
10          18. I highlighted the data for the UCG Bristol  
11          TN delivery point, which shows 3,729 dekatherms  
12          as a "Scheduled Quantity" for delivery to Atmos  
13          Energy Corporation by the pipeline. These daily  
14          records reach back to June 2003.

15  
16          Because the same data is available for the KUB,  
17          I used that data as a benchmark comparison for  
18          Atmos. I tallied the daily records by each  
19          delivery point in Tennessee where Atmos Energy  
20          Corporation is the delivery point operator and  
21          where the KUB is the delivery point operator. I  
22          summed the data by month from July 2003 through  
23          June 2007 for Atmos and KUB. The results appear  
24          on page 15 of this testimony and show that  
25          Atmos and KUB have nearly identical patterns of  
26          energy delivery.

1 I also combined monthly totals of sales  
2 reported in for Atmos's service areas 2 and 4  
3 into a single monthly figure and compared that  
4 amount to the monthly total of Atmos's energy  
5 deliveries to Atmos. I did this for each month of  
6 the fiscal years 2004, 2005, and 2006 and  
7 charted the results. Page 16 of this testimony  
8 displays the chart and shows that Atmos's  
9 reported-monthly-sales are about 40% less than  
10 energy deliveries to Atmos. I performed a  
11 similar analysis for the KUB, but I could not  
12 find a public-record source where the KUB's  
13 sales are recorded monthly. However, the city's  
14 annual gas sales, which appear at page 17 of  
15 this testimony, provide sales data for its  
16 fiscal years 2004, 2005, and 2006.

17  
18 Therefore, I summed the daily energy deliveries  
19 for each fiscal year to arrive at just one  
20 number for deliveries for KUB and Atmos. I then  
21 compared the annual deliveries to the annual  
22 sales and charted the results for each fiscal  
23 year. The charted results for Atmos and KUB  
24 appear on page 18 of this testimony. Here are  
25 the totals that the KUB reported for its FY  
26 2006:

- 27  
28 • Dekatherms purchased: 11.324 million
- 29  
30 • Dekatherms sold: 11.089 million
- 31  
32 • Dekatherms delivered: 11.286 million

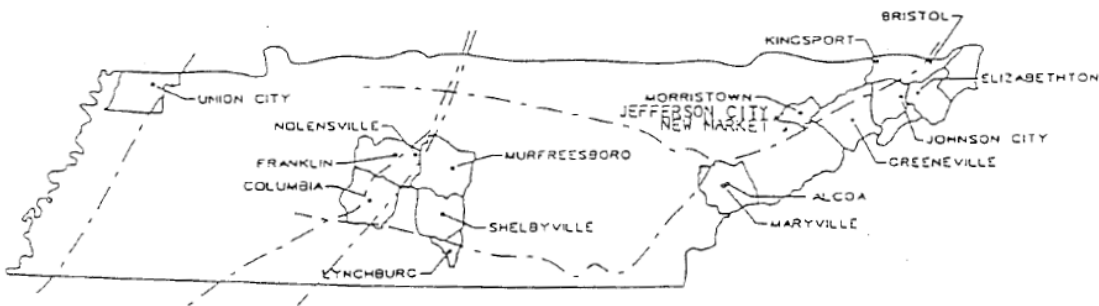
33  
34 Pages 19 and 20 of this testimony display the  
35 procedure for summing daily energy deliveries  
36 into totals for a fiscal year for KUB and  
37 Atmos.

1  
2 There is a near-perfect match between energy  
3 delivered from the pipeline to KUB, energy  
4 purchased by KUB from the pipeline, and energy  
5 sold to end users. The difference between  
6 Atmos's situation and the KUB's for three  
7 fiscal years in a row persuades me that Atmos  
8 may have mistakenly underreported or mistakenly  
9 excluded from the data in this rate case the  
10 energy delivered to Atmos's delivery points in  
11 Tennessee.

12  
13 Page 21 of this testimony displays fiscal year  
14 data for 2004 to 2006 for KUB and Atmos.[The  
15 text of this testimony continues at page 22.]  
16

### Areas Served

The Company serves several communities in Tennessee with natural gas purchased from various natural gas pipelines in accordance with separate and individual tariffs approved by the Federal Energy Regulatory Commission. The areas served by the Company and the natural gas pipeline supplier for such areas are as follows:



- Area 1 - Union City and adjacent areas supplied with gas purchased by the Company from Texas Gas Transmission Corporation in Obion County.
- Area 2 - Columbia, Shelbyville, Lynchburg, Maryville-Alcoa, and adjacent areas supplied with gas purchased by the Company from East Tennessee Natural Gas Company under its Zone 1 Rate Schedule in Maury, Bedford, Moore and Blount Counties.
- Area 3 - Franklin, Murfreesboro, Nolensville, and adjacent areas supplied with gas purchased by the Company from Texas Eastern Transmission Corporation in Rutherford and Williamson Counties.
- Area 4 - Johnson City, Elizabethton, Greeneville, Kingsport, Morristown, Bristol and adjacent areas supplied with gas purchased by The Company from East Tennessee Natural Gas Company under Zone 2 & 3 Rate Schedules in Hamblen, Sullivan, Carter, Washington, and Greene Counties.

sued by: Patricia J. Childers, VP Rates and Regulatory Affairs  
 Date Issued: September 4, 2002

Effective Date: October 4, 2002



LinkSystem

Informational Postings

Infopost Home

Select Business Unit

East Tennessee

East Tennessee

Capacity

Operationally Available

Unsubscribed

Requests

Peak Day Design

Current System

Imbalances

Energy Affiliate Info

Gas Quality

Index Of Customers

Non-discrimination Rqts

Notices

Organizational Charts

Posted Imbalances

Tariff

Transactional Reporting

Gas Quality Collaborative

DBA Points

Rate And Fuel Summary

Recent Tariff Filings

Other

Downloads

Search

Customer Activities

Site Map

LinkSystem

Customer Interface

Spectra

Energy.

Computer-Screen Copy Of The East Tenn. Pipeline's Website With Informational Posting Data As Required By The Federal Energy Regulatory Commission. Data Shown For July 18, 2007.


Tutorials | Contact Us

EAST TENNESSEE NATURAL GAS, LLC

Operationally Available Meter Capacity

Selected Date:


2007-07-18



Other dates are available for selection by clicking the calendar icon.

Selected Cycle:

HOURLY\_2007-07-19\_0900



[Viewable and Printable Format](#)

[Downloadable Format](#)

[Operational Capacity Maps](#)

[Operation Capacity Map](#)

[Storage](#)

[Storage Capacity Posting](#)

1

CAPD Witness Brown - Direct: Docket 07-00105 – Decoupling Testimony





East Tennessee Natural Gas ( 007921323 ) HOURLY\_2007-07-19\_0900

07-18-2007

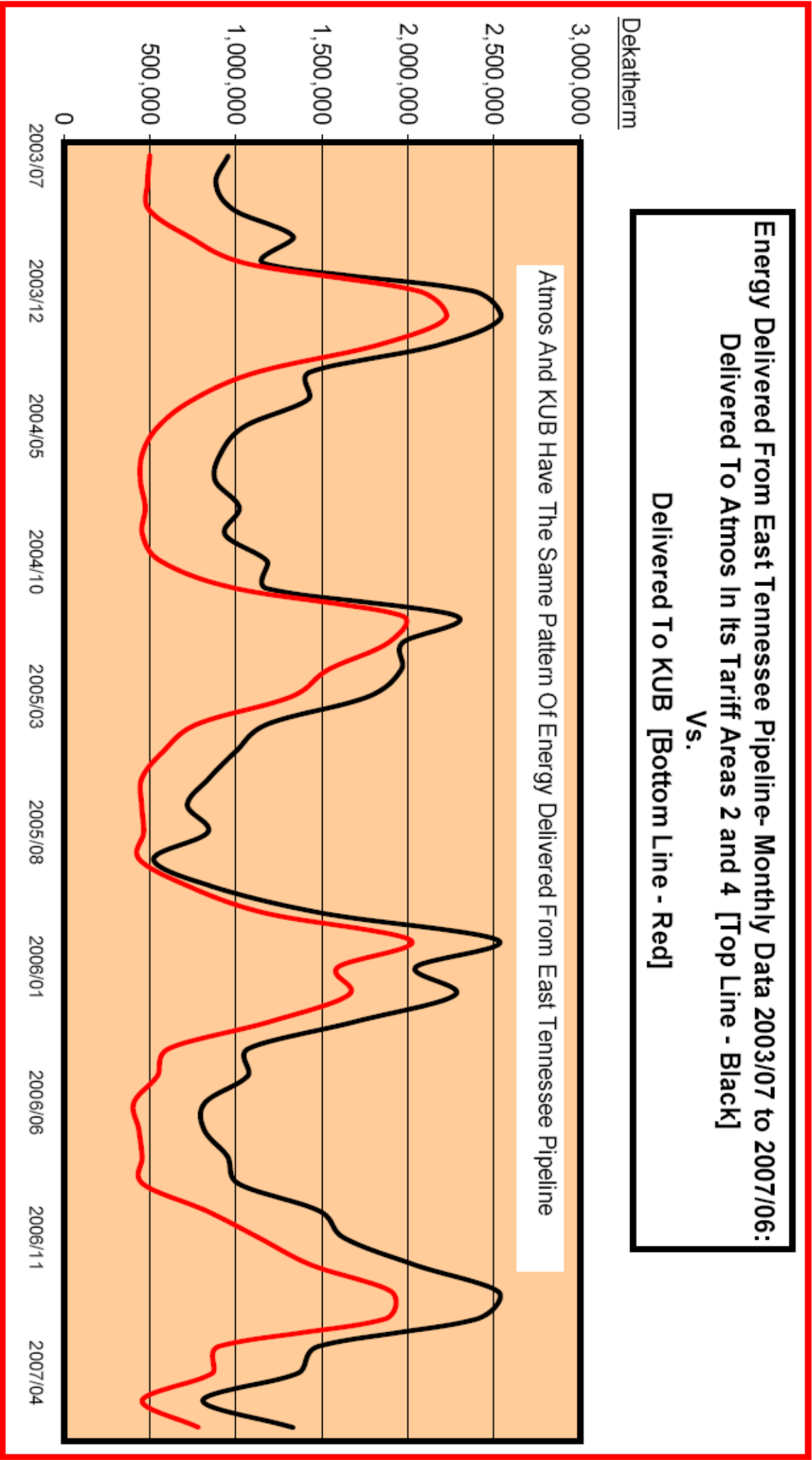
Operational capacity is based on historical conditions. Availability of meter capacity does not guarantee available mainline capacity.

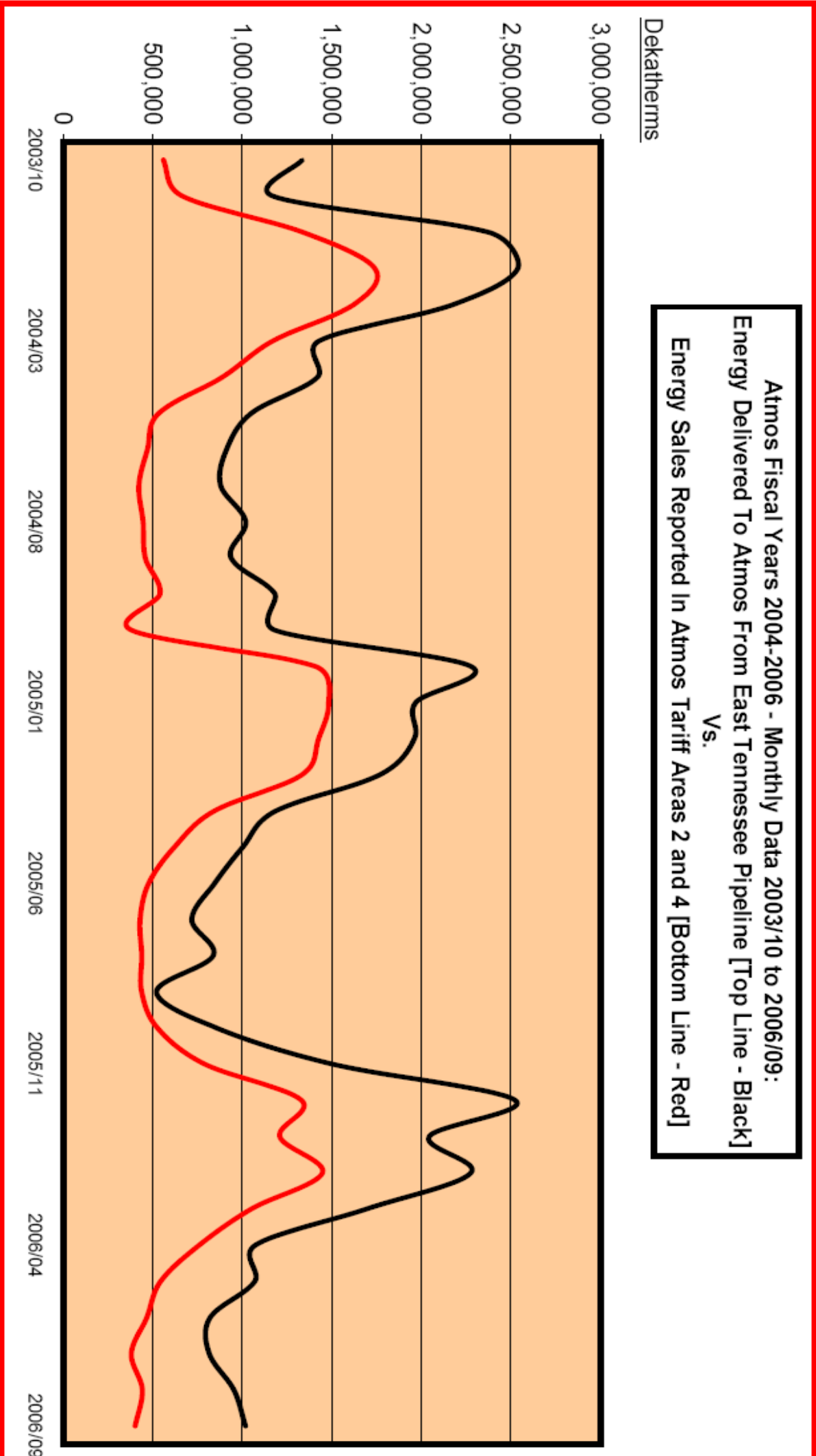
Avail Cap Eff Date/Time	Avail Cap End Date/Time	Loc Prop	Loc Name	Loc Purpose	Loc/Qty Type	Meas Basis	IT	Operational Capacity	Sched Qty	Avail Qty	Posting Date/Time
07-18-2007 09:00	07-19-2007 08:59	20490	53101 EL PASO - RIDGETOP RECEIVING	Rec Loc	Rec Pt Qty	Dth	-	357,410	104,404	253,006	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20418	53201 EL PASO - LOBELVILLE RECEIVING	Rec Loc	Rec Pt Qty	Dth	-	251,230	35,732	215,498	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20174	59000 KUB EAST	Del Loc	Del Pt Qty	Dth	-	74,590	3,000	71,590	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19955	59001 CHAT EAST	Del Loc	Del Pt Qty	Dth	-	98,230	6,781	91,449	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20584	59002 UCG BRISTOL	Del Loc	Del Pt Qty	Dth	-	30,970	3,729	27,241	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	27975	59003 ROANOKE SALEM	Del Loc	Del Pt Qty	Dth	-	30,970	281	30,689	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	27980	59004 ROANOKE CLEARBROOK	Del Loc	Del Pt Qty	Dth	-	30,970	6,534	24,436	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20147	59005 KUB WEST	Del Loc	Del Pt Qty	Dth	-	121,240	10,779	110,461	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19869	59006 ERUPD ESTILL SPRINGS	Del Loc	Del Pt Qty	Dth	-	14,590	1,000	13,590	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19949	59007 CHAT NORTH	Del Loc	Del Pt Qty	Dth	-	30,970	0	30,970	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	40250	59008 BOWATERS	Del Loc	Del Pt Qty	Dth	-	27,510	0	27,510	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	16026	59009 EARLY GROVE REC/MWD (BLD 59147)	Rec Loc	Rec Pt Qty	Dth	-	33,870	0	33,870	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	27925	59010 UCG BLACKSBURG	Del Loc	Del Pt Qty	Dth	-	14,590	1,373	13,217	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19950	59011 MTUD RED BANK	Del Loc	Del Pt Qty	Dth	-	14,590	0	14,590	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	16702	59012 MORGAN COUNTY 1 (BI 59163)	Rec Loc	Rec Pt Qty	Dth	-	45,990	7,500	38,490	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	27963	59013 UCG PULASKI	Del Loc	Del Pt Qty	Dth	-	14,590	0	14,590	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	40246	59014 ATLANTA	Del Loc	Del Pt Qty	Dth	-	130,840	3,477	127,363	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20549	59015 MTUD CARTHAGE	Del Loc	Del Pt Qty	Dth	-	13,860	3,500	10,360	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19963	59016 CHATTANOOGA OOLTEWAH	Del Loc	Del Pt Qty	Dth	-	9,120	0	9,120	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19945	59017 CHATTANOOGA SIGNAL MOUNTAIN	Del Loc	Del Pt Qty	Dth	-	6,700	0	6,700	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20272	59019 SOUTH PITTSBURG	Del Loc	Del Pt Qty	Dth	-	10,500	0	10,500	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	32513	59020 ORUD	Del Loc	Del Pt Qty	Dth	-	14,590	1,448	13,142	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	40251	59021 DOE C STATION	Del Loc	Del Pt Qty	Dth	-	14,590	350	14,240	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	31780	59022 UCG RADFORD	Del Loc	Del Pt Qty	Dth	-	14,590	100	14,490	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20025	59023 TENNESSEE EASTMAN 1	Del Loc	Del Pt Qty	Dth	-	26,120	0	26,120	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19767	59024 CHATTANOOGA CLEVELAND	Del Loc	Del Pt Qty	Dth	-	29,450	12,486	16,964	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	46150	59025 GALLATIN WEST	Del Loc	Del Pt Qty	Dth	-	3,660	0	3,660	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20304	59026 UCG COLUMBIA WEST	Del Loc	Del Pt Qty	Dth	-	23,580	0	23,580	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19939	59027 UCG MORRISTOWN	Del Loc	Del Pt Qty	Dth	-	7,750	7,082	668	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	31985	59028 UCG JOHNSON CITY EAST	Del Loc	Del Pt Qty	Dth	-	11,630	0	11,630	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20433	59029 COOKEVILLE	Del Loc	Del Pt Qty	Dth	-	23,580	7,955	15,625	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19813	59031 MTUD MONTEREY	Del Loc	Del Pt Qty	Dth	-	19,030	5,512	13,518	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20441	59032 HARRIMAN	Del Loc	Del Pt Qty	Dth	-	15,740	138	15,602	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	20381	59033 ROCKWOOD	Del Loc	Del Pt Qty	Dth	-	11,640	1,549	10,091	07-19-2007 09:56
07-18-2007 09:00	07-19-2007 08:59	19889	59034 ERUPD TULLAHOMA	Del Loc	Del Pt Qty	Dth	-	10,500	476	10,024	07-19-2007 09:56

Page 4

Computer-Screen Copy Of The East Tenn. Pipeline's Website With the daily record for the 24-hour period from 9:00AM July 17, 2007 to 8:59AM July 18, 2007. The record was posted at 9:56AM July 18. 3,729 Dekatherms Were Delivered To Atmos Energy Corporation At the Delivery Point, UCG Bristol In Sullivan County.







KUB’s Annual Report:

Gas Division					
Fiscal year ended June 30	2006	2005	2004	2003	2002
Operating revenues (000's)					
Residential	\$ 74,137	\$ 60,342	\$ 58,165	\$ 53,544	\$ 43,366
Commercial	54,576	43,537	42,041	36,950	30,711
Industrial	11,817	10,176	10,750	8,968	12,754
Other	1,123	1,507	397	1,076	157
Total	\$ 141,653	\$ 115,562	\$ 111,353	\$ 100,538	\$ 86,988
Operating expenses (000's)					
Natural gas	\$ 109,326	\$ 82,025	\$ 77,172	\$ 65,978	\$ 61,675
Other operating expenses	13,545	12,429	12,013	11,074	11,417
Total operating expenses	\$ 122,871	\$ 94,454	\$ 89,185	\$ 77,052	73,092
Taxes and tax equivalents	5,710	5,459	5,127	5,070	4,918
Provision for depreciation and amortization	7,087	6,369	6,042	5,035	4,662
Total	\$ 135,668	\$ 106,282	\$ 100,354	\$ 87,157	\$ 82,672
Gas usage (therms)					
Residential	46,387,493	48,220,851	51,283,962	51,264,647	44,669,820
Commercial	40,421,521	41,433,144	44,731,774	43,446,683	39,615,837
Industrial	10,034,726	11,826,072	14,398,169	14,845,696	19,716,356
Off-system/transportation	14,051,537	13,314,719	12,949,198	12,319,130	4,426,671
Total	110,895,277	114,794,786	123,363,103	121,876,156	108,428,684
Number of customers					
Residential	82,347	79,904	77,674	74,476	72,318
Commercial	8,804	8,659	8,563	8,420	8,263
Industrial	102	101	104	111	120
Total	91,253	88,664	86,341	83,007	80,701

Number of Customers ..... 91,253  
Service Area ..... 262 square miles  
Service Mains ..... 2,190 miles  
Peak Day Demand ..... 116,077 dkt (1/03)  
Peak Demand Capacity ..... 157,381 dkt  
Total Purchased Gas ..... 11,324,423 dkt  
Purchased Gas Cost ..... \$109.3 million  
Natural Gas Cost as a Percentage of Sales ..... 77%

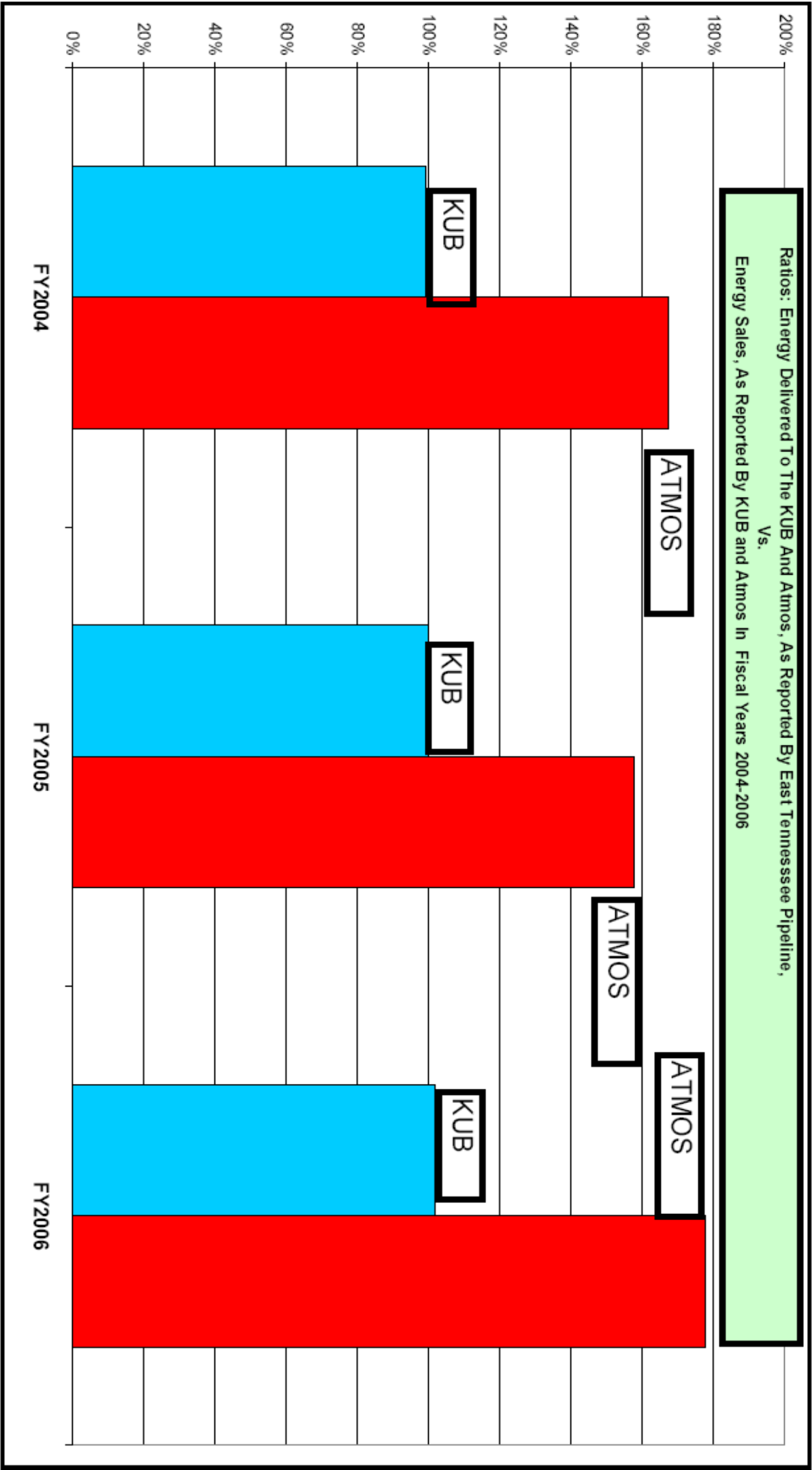
KUB's Typical Residential Gas Customer

Annual Usage (therms) ..... 614  
Monthly Bill ..... \$78.67  
Cost per Therm ..... \$1.54  
Conversion Factor ..... 12.8

A therm will dry six loads of clothes in a gas dryer.

Gas Service Area

KUB 2006 Annual Report • 17



Atmos Energy Corporation: Daily Energy Deliveries To Points In Tennessee, In Dekatherms, From ETP Per East Tennessee Pipeline "Informational Postings", Summed From Daily Amounts To FY Amounts									
								Some Columns Are Not Shown Because The Page Is Too Small To Display All Data	
YYYYMMDD	# 59002 UCG BRISTOL SULLIVAN County, TN	# 59026 UCG COLUMBIA WEST MAURY County, TN	# 59027 UCG MORRISTOW N HAMBLEN County, TN	# 59028 UCG JOHNSON CITY EAST WASHINGTON N County, TN	# 59046 UCG MARYVILLE BLOUNT County, TN	# 59048 UCG MARYVILLE EAST BLOUNT County, TN	# 59049 UCG GREENVILLE GREENE County, TN	Daily Total	Cumulative Total
20030601	6,847	0	9,607	2,283	0	0	10,648	39,446	
20030925	5,584	0	9,024	2,625	0	0	2,561	30,855	
20030926	5,584	0	8,973	2,625	0	0	2,561	30,804	
20030927	5,733	0	9,527	2,625	0	0	925	35,354	
20030928	5,733	0	9,527	2,625	0	0	925	35,354	
20030929	5,733	0	8,316	2,625	0	0	1,794	35,012	
20030930	5,733	0	8,884	2,625	0	0	7,683	43,600	
20031001	6,230	0	10,843	2,484	0	0	3,664	46,839	46,839
20031002	6,230	0	10,843	2,484	0	0	8,564	44,896	91,735
20031003	6,230	0	10,843	2,484	0	0	8,564	44,896	136,631
20031004	6,230	0	11,625	2,484	0	0	8,564	45,678	182,309
20031005	6,230	0	11,625	2,484	0	0	8,564	45,678	227,987
20031006	5,597	0	10,843	2,484	0	0	8,564	44,263	272,250
20031007	5,597	0	10,869	2,484	0	0	8,564	44,289	316,539
20040925	5,351	0	2,272	23,214	408	0	1,323	35,139	17,086,663
20040926	5,351	0	2,272	23,214	408	0	1,323	35,139	17,121,802
20040927	5,351	0	2,272	23,214	408	0	1,323	35,139	17,156,941
20040928	8,125	0	2,469	32,674	408	0	1,323	47,570	17,204,511
20040929	7,821	0	2,469	17,667	408	0	1,323	32,259	17,236,770
20040930	7,198	0	2,469	7,511	408	0	1,323	21,488	17,258,258
20041001	8,913	0	2,535	17,277	524	0	1,475	41,616	41,616
20041002	3,879	0	2,535	11,845	524	0	1,475	24,577	66,193
20041003	3,879	0	2,535	11,845	524	0	1,475	25,010	91,203
20041004	3,879	0	2,535	22,403	524	0	1,475	40,432	131,635
20041005	6,727	0	3,326	17,760	524	0	1,475	38,587	170,222
20041006	6,727	0	3,330	18,389	524	0	1,475	39,256	209,478
20041007	6,727	0	3,330	18,705	524	0	1,475	39,512	248,990
20050925	991	0	2,524	2,571	2,279	0	1,284	10,549	15,391,673
20050926	1,646	0	2,524	2,571	2,413	0	1,284	11,338	15,403,011
20050927	3,052	0	2,524	2,571	2,303	0	1,284	13,950	15,416,961
20050928	3,052	0	2,524	2,571	5,275	0	6,943	22,596	15,439,557
20050929	3,052	0	2,524	2,571	5,275	0	1,284	16,937	15,456,494
20050930	3,052	0	2,524	2,571	5,275	0	2,090	17,479	15,473,973
20051001	10,999	0	2,623	0	495	0	1,475	17,571	17,571
20051002	10,999	0	2,623	0	4,927	0	1,475	21,741	39,312
20051003	10,999	0	2,623	2,136	5,945	0	1,475	25,173	64,485
20051004	10,999	0	2,793	2,609	5,351	0	1,475	25,691	90,176
20051005	10,999	0	2,623	2,609	2,961	0	1,475	23,056	113,232
20051006	10,959	0	2,586	2,609	6,674	0	5,131	30,423	143,655
20051007	6,667	0	2,442	2,609	1,206	0	1,467	16,855	160,510
20060925	5,010	0	13,283	11,642	11,901	0	30	42,748	16,444,621
20060926	4,267	0	5,540	9,656	1,385	0	30	21,760	16,466,381
20060927	4,267	0	7,277	9,656	4,051	0	4,030	30,163	16,496,544
20060928	2,969	0	7,142	17,495	22,262	0	4,644	55,394	16,551,938
20060929	3,093	0	7,142	16,711	10,820	0	5,958	44,606	16,596,544
20060930	3,093	0	3,367	9,656	10,820	0	5,093	32,911	16,629,455
20061001	4,514	0	17,226	6,211	15,256	0	30	44,122	44,122
20061002	4,514	0	19,045	6,211	16,278	0	30	46,965	91,087
20061003	4,514	0	9,365	6,211	12,911	0	30	33,918	125,005
20061004	495	0	9,360	2,767	18,750	0	30	32,289	157,294
20061005	1,502	0	16,456	2,767	20,725	0	30	42,367	199,661
20061006	1,502	0	12,875	2,767	21,762	0	4,707	44,500	244,161
20061007	1,502	0	3,046	1,194	15,336	0	30	21,995	266,156
20070707	4,766	0	1,938	2,191	3,456	0	4,944	20,167	15,226,758
20070708	4,766	0	3,900	2,191	3,456	0	4,944	25,082	15,251,840
20070709	4,017	0	2,749	0	4,440	0	533	17,761	15,269,601
20070710	4,017	0	5,036	3,642	2,963	0	5,673	29,153	15,298,754
20070711	4,017	0	5,357	909	2,963	0	6,073	24,887	15,323,641
20070712	4,016	0	2,183	4,832	5,388	0	4,771	25,250	15,348,891
20070713	4,393	0	1,366	4,143	5,388	0	4,771	24,115	15,373,006



KUB: Daily Energy Deliveries In Dekatherms From ETP Per East Tennessee Pipeline "Informational Postings", Summed From Daily Amounts To FY Amounts

YYYYMMDD	# 59000 KUB EAST, KNOX County, TN	# 59005 KUB WEST, KNOX County, TN	# 59131 KUB SOUTH, KNOX County, TN	Daily Total	Cumulative Total
20030601	4,200	12,974	0	17,174	
20030625	4,800	14,053	0	18,853	
20030626	4,800	13,353	0	18,153	
20030627	4,200	11,953	0	16,153	
20030628	3,600	11,553	0	15,153	
20030629	3,600	11,553	0	15,153	
20030630	4,950	14,824	0	19,774	
20030701	4,650	12,647	0	17,297	17,297
20030702	4,650	12,647	0	17,297	34,594
20030703	4,200	11,547	0	15,747	50,341
20030704	2,730	9,270	0	12,000	62,341
20030705	2,362	8,409	0	10,771	73,112
20030706	2,730	9,270	0	12,000	85,112
20030707	4,650	13,797	0	18,447	103,559
20040625	3,075	10,759	0	13,834	12,189,005
20040626	3,075	10,759	0	13,834	12,202,839
20040627	3,075	10,759	0	13,834	12,216,673
20040628	3,075	10,759	0	13,834	12,230,507
20040629	3,075	10,759	0	13,834	12,244,341
20040630	3,075	13,600	0	16,675	12,261,016
20040701	3,075	10,453	0	13,528	13,528
20040702	3,075	10,453	0	13,528	27,056
20040703	3,075	10,453	0	13,528	40,584
20040704	3,075	10,453	0	13,528	54,112
20040705	3,075	10,453	0	13,528	67,640
20040706	3,075	10,453	0	13,528	81,168
20040707	3,075	10,453	0	13,528	94,696
20050625	3,150	11,070	0	14,220	11,398,500
20050626	3,150	11,070	0	14,220	11,412,720
20050627	3,150	11,070	0	14,220	11,426,940
20050628	3,150	11,070	0	14,220	11,441,160
20050629	3,150	11,070	0	14,220	11,455,380
20050630	3,425	12,061	0	15,486	11,470,866
20050701	2,550	9,251	0	11,801	11,801
20050702	2,550	9,251	0	11,801	23,602
20050703	2,550	9,251	0	11,801	35,403
20050704	2,550	9,251	0	11,801	47,204
20050705	2,550	9,251	0	11,801	59,005
20050706	2,550	9,251	0	11,801	70,806
20050707	2,550	9,251	0	11,801	82,607
20060625	3,276	11,366	0	14,642	11,216,712
20060626	3,276	11,366	0	14,642	11,231,354
20060627	3,276	11,366	0	14,642	11,245,996
20060628	3,276	10,042	0	13,318	11,259,314
20060629	3,276	10,150	0	13,426	11,272,740
20060630	4,476	9,184	0	13,660	11,286,400
20060701	3,213	11,168	0	14,381	14,381
20060702	3,213	11,175	0	14,388	28,769
20060703	3,213	11,175	0	14,388	43,157
20060704	3,213	11,175	0	14,388	57,545
20060705	3,213	10,991	0	14,204	71,749
20060706	3,213	10,991	0	14,204	85,953
20060707	2,476	9,438	0	11,914	97,867
20070625	3,355	11,337	0	14,692	11,466,896
20070626	3,355	11,337	0	14,692	11,481,588
20070627	3,355	11,361	0	14,716	11,496,304
20070628	3,355	10,341	0	13,696	11,510,000
20070629	3,355	10,296	0	13,651	11,523,651
20070630	3,355	10,553	0	13,908	11,537,559
20070701	2,940	10,496	0	13,436	13,436
20070702	2,940	10,494	0	13,434	26,870
20070703	2,940	10,494	0	13,434	40,304
20070704	1,950	8,184	0	10,134	50,438
20070705	1,950	8,184	0	10,134	60,572
20070709	1,950	8,184	0	10,134	101,108
20070710	1,950	8,184	0	10,134	111,242
20070711	3,000	10,634	0	13,634	124,876
20070712	3,000	10,634	0	13,634	138,510
20070713	3,000	10,505	0	13,505	152,015

# Knoxville Utilities Board

<b>FY Ending</b>	<b>Deliveries (DekaTherms) *</b>	<b>Sales (DekaTherms) **</b>	<b>Ratio: Deliveries/Sales</b>
(1)	(2)	(3)	(4)
2004/06/30	12,261,016	12,336,310	99%
2005/06/30	11,470,866	11,479,479	100%
2006/06/30	11,286,400	11,089,528	102%

Sources:

\* East Tennessee Pipeline - Available Operating Capacity Daily Reports: 030601 - 070715

\*\* Knoxville Utilities Board 2006 Annual Report

KUB Reports Consumption In Therms. It is Divided By 10 To Get DekaTherms

# Atmos Energy Corporation: Tariff Areas 2 And 4

<b>FY Ending</b>	<b>Deliveries (DekaTherms) ***</b>	<b>Sales (DekaTherms) ****</b>	<b>Ratio: Deliveries/Sales</b>
(5)	(6)	(7)	(8)
2004/09/30	17,258,258	10,327,177	167%
2005/09/30	15,473,973	9,824,316	158%
2006/09/30	16,629,455	9,359,692	178%

Sources:

\*\*\* East Tennessee Pipeline - Available Operating Capacity Daily Reports: 030601 - 070715

\*\*\*\* Atmos Response To CAPD DR 125 On July 6, 2007

Atmos Consumption Reported In CCF. It is Multiplied by 1.024, Then Divided By 10 To Get DekaTherms

1    **Q\_4**           **In your opinion could the energy sales which**  
2                   **appear to be underreported represent Atmos's**  
3                   **sales in Virginia?**  
4

5  
6    **A\_4.**           In my opinion that situation is not impossible,  
7                   but it seems unlikely because of two factors:  
8

- 9                   •           East Tennessee Pipeline delivers an  
10                   additional 3.2 million to 4.5 dekatherms  
11                   of energy to Atmos Energy Corporation's  
12                   delivery points in Virginia, raising the  
13                   pipeline's total deliveries to Atmos to  
14                   about 20 million dekatherms annually. The  
15                   data on energy deliveries to Virginia is  
16                   displayed on page 27 of this testimony.  
17                   The data on energy deliveries to Virginia  
18                   and Tennessee is summarized and displayed  
19                   on page 28 of this testimony.  
20
- 21                   •           According to data from the U.S.  
22                   Department of Transportation, Pipeline and  
23                   Hazardous Materials Safety Administration,  
24                   Atmos appears to have 22,000 customers in  
25                   Virginia, not enough to absorb the 3-4  
26                   million dekatherms delivered to Virginia  
27                   plus the 6-7 million dekatherms which seem  
28                   to be underreported in Tennessee.  
29



1  
2 Said another way, from FY2004 to FY2006 Atmos  
3 sold about 9.5 million dekatherms annually to  
4 about 45,000 customers in Atmos's tariff areas  
5 2 and 4 in Tennessee, but East Tennessee  
6 Pipeline's records show it delivering about 20  
7 million dekatherms annually to Atmos Energy  
8 Corporation in Tennessee and Virginia. That  
9 leaves about 10-11 million dekatherms that  
10 might be interpreted as sales to 22,000  
11 customers in Virginia. However, this is not a  
12 reasonable explanation in the sense that it  
13 suggests that each Virginia customer uses much  
14 more natural gas than a Tennessee customer.  
15  
16  
17

18 **Q\_5. In your opinion could the sales volumes which**  
19 **seem to be underreported represent energy**  
20 **delivered to users behind the city-gate but who**  
21 **are not customers of Atmos?**  
22

23 **A\_5. In my opinion that situation is possible, but**  
24 **in this situation the volume would be accounted**  
25 **for as a transportation sale by the natural gas**  
26 **utility and should have some revenue associated**  
27 **with it. Atmos is the only shipper to these**  
28 **points. The figure below suggests that the**  
29 **pipeline would recognize revenue at the**  
30 **delivery point, so the shipper would too,**  
31 **regardless of whether the third party is**  
32 **affiliated with the shipper:**  
33

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1  
2 **Q\_6. In your opinion could the term "Scheduled**  
3 **Quantity" which is displayed at page 14 of this**  
4 **presentation represent something other than an**  
5 **energy delivery to the delivery point?**  
6

7 **A\_6.** No. A scheduled quantity represents the  
8 pipeline's agreement that it has accepted the  
9 shippers request to ship a specific amount of  
10 energy. For example, the North American Energy  
11 Standards Board makes available at its website  
12 a presentation named "Gas Nomination Timeline  
13 Impact Upon LDC Operations." It is attached to  
14 this testimony as my Schedule 2. I have copied  
15 portions of it. Page 13 of that presentation is  
16 shown below. I have emphasized the language  
17 showing that scheduled gas is nominated gas  
18 which the pipeline has agreed to transport.  
19

1

## Gas Nomination Timeline Impact Upon LDC Operations

### Gas Supply Planning/Nomination Timeline (continued):

By 4:30 P.M. CCT, the LDC learns whether gas (including third party gas)  
nominated at the timely cycle was scheduled.

- Nominated gas is not scheduled (at any cycle) for a variety of reasons including insufficient transportation priority, loss of supply and confirmation errors.

Additional nominations to accommodate changed forecasts and to replace timely nominations that were not scheduled are placed by 6:00 P.M. CCT the day before gas flows (Evening Cycle) by the LDC and in some cases, third parties.

Note: The gas nominated at the Evening Cycle does not begin to flow for another 15 hours.

Jan. 29-30, 2004

NAESB Gas Electric Coordination  
Task Force - LDC Presentation

9

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This concludes my testimony on Atmos's  
decoupling and Atmos's sales, at this time.

**Atmos Energy Corporation: Daily Energy Deliveries To Points In Virginia, In Dekatherms,  
From ETP Per East Tennessee Pipeline "Informational Postings", Summed From Daily  
Amounts To FY Amounts**

YYYYMMDD	# 59010 UCG BLACKSBURG MONTGOMERY County, VA	# 59013 UCG PULASKI PULASKI County, VA	# 59022 UCG RADFORD MONTGOMERY County, VA	# 59069 UCG WYTHEVILLE WYTHE County, VA	# 59075 UCG MARION SMYTH County, VA	# 59076 UCG ABINGDON WEST WASHINGTON County, VA	# 59077 UCG DUBLIN PULASKI County, VA	Daily Total	Cumulative
20030601	0	0	775	0	885	0	0	1,660	
20030625	0	0	785	0	520	0	0	1,305	
20030626	0	0	785	0	520	0	0	1,305	
20030627	0	0	785	0	520	0	0	1,305	
20030628	0	0	785	0	520	0	0	1,305	
20030629	0	0	785	0	520	0	0	1,305	
20030630	0	0	785	0	520	0	0	1,305	
20031001	0	0	140	0	695	0	0	835	835
20031002	0	0	140	0	695	0	0	835	1,670
20031003	0	0	140	0	695	0	0	835	2,505
20031004	0	0	140	0	695	0	0	835	3,340
20031005	0	0	140	0	695	0	0	835	4,175
20031006	0	0	140	0	695	0	0	835	5,010
20031007	0	0	140	0	695	0	0	835	5,845
20040925	0	500	150	0	667	0	800	2,194	3,537,975
20040926	0	500	150	0	667	0	800	2,194	3,540,169
20040927	0	500	150	0	667	0	800	2,194	3,542,363
20040928	0	500	150	0	667	0	800	2,194	3,544,557
20040929	0	500	150	0	667	0	800	2,194	3,546,751
20040930	0	500	150	0	667	0	800	2,194	3,548,945
20041001	0	581	275	0	767	0	1,100	2,797	2,797
20041002	0	581	275	0	767	0	1,100	2,797	5,594
20041003	0	581	275	0	767	0	1,100	2,797	8,391
20041004	0	581	275	0	767	0	1,100	2,797	11,188
20041005	0	581	275	0	767	0	1,100	2,797	13,985
20041006	0	581	275	0	767	0	1,100	2,797	16,782
20041007	0	581	275	0	767	0	1,100	2,797	19,579
20050925	21,184	0	0	5,567	0	0	900	27,651	4,439,556
20050926	21,184	0	0	19,684	0	0	900	41,768	4,481,324
20050927	1,350	367	150	6,966	1,725	0	900	11,601	4,492,925
20050928	1,350	367	4,067	4,943	1,329	0	1,101	13,320	4,506,245
20050929	1,350	367	4,067	0	500	0	900	7,347	4,513,592
20050930	1,350	367	4,067	4,837	2,946	0	900	14,630	4,528,222
20051001	3,256	290	275	7,613	7,613	0	3,176	22,352	22,352
20051002	3,277	290	275	7,696	7,696	0	3,211	22,674	44,926
20051003	3,497	290	275	8,573	8,991	0	4,422	26,177	71,103
20051004	2,190	290	275	0	2,675	0	4,179	9,738	80,841
20051005	1,469	290	275	0	1,484	0	1,072	4,719	85,560
20051006	0	290	275	0	511	0	1,032	2,237	87,797
20051007	0	290	275	0	511	0	1,032	2,237	90,034
20060925	1,750	0	0	0	60	0	0	1,810	3,124,298
20060926	1,750	0	0	0	60	0	0	1,810	3,126,108
20060927	1,750	0	0	0	60	0	0	1,810	3,127,918
20060928	1,750	0	0	0	60	0	0	1,810	3,129,728
20060929	1,600	0	0	0	210	0	0	1,810	3,131,538
20060930	1,600	0	0	0	210	0	0	1,810	3,133,348
20061001	559	0	0	0	80	0	0	639	639
20061002	559	0	0	0	80	0	0	639	1,278
20061003	559	0	0	0	80	0	0	639	1,917
20061004	559	0	0	0	80	0	0	639	2,556
20061005	559	0	0	0	80	0	0	639	3,195
20061006	559	0	0	0	80	0	0	639	3,834
20061007	559	0	0	0	80	0	0	639	4,473
20070707	4,628	871	2,032	0	1,264	0	1,476	10,345	1,988,726
20070708	4,628	871	2,032	0	1,264	0	1,476	10,345	1,979,071
20070709	3,163	871	2,032	0	984	0	0	7,124	1,986,195
20070710	2,120	2,760	2,032	0	1,771	0	0	8,757	1,994,952
20070711	2,669	0	2,032	0	1,711	0	0	6,498	2,001,438
20070712	5,622	2,461	2,032	0	4,194	0	3,158	17,541	2,018,979
20070713	3,643	2,438	2,032	0	4,186	0	3,158	15,531	2,034,510

Some Columns Are Not  
Shown Because The Page Is  
Too Small To Display All Data

**East Tennessee Pipeline:  
Energy Deliveries  
To Atmos Energy Corporation Delivery Points  
TN and VA By Fiscal Year**

	<b>Deliveries (DekaTherms) ***</b>		
<b>FY Ending (1)</b>	<b>TN (2)</b>	<b>VA (3)</b>	<b>Total Deliveries (4)</b>
2004/09/30	17,258,258	3,548,945	20,807,203
2005/09/30	15,473,973	4,528,222	20,002,195
2006/09/30	16,629,455	3,133,348	19,762,803
Sources: *** East Tennessee Pipeline - Available Operating Capacity Daily Reports: 030601 - 070715			

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**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105\_\_\_\_  
Exhibit CAPD-SB\_\_\_\_  
Direct: Decoupling Testimony\_\_\_\_  
Schedule 1\_\_\_\_  
Page 1 of 7\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
59203	482179	Dalton Gas-Cartersville - Whitfield, GA	GA	WHITFIELD	ETN		DALTON UTILITIES	DELIVERY
59199	322325	Murray Power Plant - Murray Co., GA	GA	MURRAY	ETN		KGEN MURRAY I AND II,LLC.	DELIVERY
59211		Sonat - Murray Lat. Emergency DEL. - Whitfield Co., Ga	GA	WHITFIELD	ETN		SOUTHERN NATURAL GAS COMPANY	DELIVERY
59200	322326	SONAT MURRAY LATERAL - WHITFIELD CO., GA	GA	WHITFIELD	ETN		SOUTHERN NATURAL GAS COMPANY	RECEIPT
59204	379019	Transco - Cascade Creek (delivery)	NC	ROCKINGHAM	ETN		TRANSCONTINENTAL GAS PIPE LINE CORPORATION	DELIVERY
59304	443343	Transco - Cascade Creek (receipt)	NC	ROCKINGHAM	ETN		TRANSCONTINENTAL GAS PIPE LINE CORPORATION	RECEIPT
59331	467524	Coastal Hydrocarbons-Overton County #1	TN	OVERTON	ETN		ABS ENERGY, LLC	RECEIPT
59047	19757	ALCOA NORTH	TN	BLOUNT	ETN		ALCOA INC.	DELIVERY
59045	19753	ALCOA South	TN	BLOUNT	ETN		ALCOA INC.	DELIVERY
59337		Ariana Energy Morgan Co. 9	TN	MORGAN	ETN		ARIANA ENERGY, LLC	RECEIPT
59333	482189	MORGAN COUNTY #8	TN	MORGAN			ARIANA ENERGY, LLC	RECEIPT
59024	19767	CHATTANOOGA CLEVELAND	TN	BRADLEY	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59151	153810	ETN CHATTANOOGA CHARLESTON	TN	BRADLEY	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59014	40246	ATLANTA	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59001	19955	CHAT EAST	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59142	31471	CHAT EAST BRAINERD	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59106	31480	CHAT HUNTER RD	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59007	19949	CHAT NORTH	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59108	19962	CHAT VOLUNTEER ORDINANCE	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59016	19963	CHATTANOOGA OOLTEWAH	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY
59017	19945	CHATTANOOGA SIGNAL MOUNTAIN	TN	HAMILTON	ETN		ATLANTA GAS LIGHT CO	DELIVERY

**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105  
Exhibit CAPD-SB  
Direct: Decoupling Testimony  
Schedule 1  
Page 2 of 7

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
59096	40291	TANG	TN	BLOUNT	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59090	19765	OLIN	TN	BRADLEY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59084	19852	JAMESTOWN	TN	FENTRESS	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59079	40288	PULASKI	TN	GILES	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59190	322347	MD RECYCLING TECHNOLOGIES - GREENE CO., TN	TN	GREENE	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59102	19935	MONTEAGLE	TN	GRUNDY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59092	20076	GAINESBORO	TN	JACKSON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59191	322349	GAINESBORO EAST - JACKSON CO., TN	TN	JACKSON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59183	322357	Fayetteville Gas System	TN	LINCOLN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59907	153756	ELM HILL MEATS	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59082	20223	LENOIR CITY	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59039	20238	LOUDON	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59159	216193	LOUDON East	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59143	45346	LOUDON NORTH	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59166	222208	LOUDON SOUTH	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59181	322358	MORGANTON CEMETERY ROAD	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59094	20239	PYRON METAL POWDER CO	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59906	153754	VALUE LINE	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59908	153757	WAMPLERS	TN	LOUDON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59114	20314	MADISONVILLE	TN	MADISON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59161	198232	DUNLAP NATURAL GAS	TN	MARION	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59038	20277	LEWISBURG	TN	MARSHALL	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59189	322359	Lewisburg Gas - Industrial Park	TN	MARSHALL	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
50019	482183	LEWISBURG LATERAL - MAINLINE - MARSHALL CO., TN	TN	MARSHALL			ATM05 ENERGY MARKETING, LLC.	DELIVERY
59081	20308	Cytec Industries, Inc.	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59062	20305	MT PLEASANT CITY	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59091	32548	MT PLEASANT EAST	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59080	20307	OCCIDENTAL	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59916	153764	TENNESSEE ALUMINUM 2	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59952	222209	TENNESSEE ALUMINUM TAP 1	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59953	322361	TUSCARORA - MT. PLEASANT	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59042	20309	UNION CARBIDE	TN	MAURY	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59041	20230	ATHENS	TN	MC MINN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59141	31521	ATHENS RICEVILLE	TN	MC MINN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59008	40250	BOWATERS	TN	MC MINN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59099	20242	ENGLEWOOD	TN	MC MINN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59186	322362	ETOWAH METER STATION - MCMINN CO., TN	TN	MC MINN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59113	34429	LOUDON VONORE	TN	MONROE	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59085	20315	SWEETWATER	TN	MONROE	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59086	20371	CGU WARTBURG	TN	MORGAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59163	216189	MORGAN COUNTY 1 (BI 59012)	TN	MORGAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59029	20433	COOKEVILLE	TN	PUTNAM	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59167	222211	COOKEVILLE EAST	TN	PUTNAM	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59087	153800	LIVINGSTON	TN	PUTNAM	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59188	322365	LENOIR CITY NORTH - ROANE CO., TN	TN	ROANE	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59905	153752	ROANE HOSIERY	TN	ROANE	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59100	39088	GENERAL SHALE	TN	SULLIVAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59066	38404	MEAD	TN	SULLIVAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59184	322370	ROYAL ORDNANCE-HOLSTON ARMY AMMUNITION PL	TN	SULLIVAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59206		TENNESSEE EASTMAN CHEMICAL CORP	TN	SULLIVAN	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59058	20594	GALLATIN	TN	SUMNER	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59025	46150	GALLATIN WEST	TN	SUMNER	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59165	222213	SUGAR HOLLOW SALES	TN	UNICOI	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59053	20612	UNICOI ERWIN	TN	UNICOI	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
59107	40332	TENNESSEE EASTMAN 2	TN	WASHINGTON	ETN		ATM05 ENERGY MARKETING, LLC.	DELIVERY
50020	482184	LEWISBURG LATERAL - MARSHAL CO., TN	TN	MARSHALL			ATM05 ENERGY MARKETING, LLC.	RECEIPT
59012	16702	MORGAN COUNTY 1 (BI 59163)	TN	MORGAN	ETN		ATM05 ENERGY MARKETING, LLC.	RECEIPT
59312	222218	MORGAN COUNTY 4	TN	MORGAN	ETN		ATM05 ENERGY MARKETING, LLC.	RECEIPT



**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105\_\_\_\_\_  
Exhibit CAPD-SB\_\_\_\_\_  
Direct: Decoupling Testimony\_\_\_\_\_  
Schedule 1\_\_\_\_\_  
Page 3 of 7\_\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NUMBER	OPERATOR NAME	LOC PURP DESC
59061	19749	UCG SHELBYVILLE	TN	BEDFORD	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59059	19758	ROCKFORD	TN	BLOUNT	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59046	19751	UCG MARYVILLE	TN	BLOUNT	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59048	19756	UCG MARYVILLE EAST	TN	BLOUNT	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59145	32329	UCG MARYVILLE WEST	TN	BLOUNT	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59070	19769	UCG ELIZABETHTON	TN	CARTER	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59169	222207	MOHAWK	TN	GREENE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59049	19914	UCG GREENVILLE	TN	GREENE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59115	19942	UCG LOWLAND	TN	HAMBLEN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59083	20317	UCG LYNCHBURG	TN	HAMBLEN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59027	19939	UCG MORRISTOWN	TN	HAMBLEN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59155	153811	UNITED CITIES MORRISTOWN SOUTH	TN	JEFFERSON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59103	20161	UCG ROCKFORD NORTH	TN	KNOX	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59055	32268	UCG COLUMBIA NORTH	TN	MAURY	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59026	20304	UCG COLUMBIA WEST	TN	MAURY	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59095	31740	UCG SPONTEX	TN	MAURY	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59112	32277	UCG FOOTHILLS POINTE	TN	MONTGOMERY	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59104	31556	UCG LYNCHBURG PORTABLE (FUEL)	TN	MOORE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59109	32303	UCG MOTLOW	TN	MOORE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59071	20583	UCG BLOUNTVILLE	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59002	20584	UCG BRISTOL	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59074	32190	UCG BRISTOL NORTH	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59067	32225	UCG KINGSPORT NORTH	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59124	31977	UCG KINGSPORT REGIONAL	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59051	31822	UCG KINGSPORT SOUTH	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59128	32160	UCG MILLER PARK	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59127	20582	UCG TRI CITIES	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
50009	482191	UNITED BRISTOL NOMINATION POINT	TN	SULLIVAN	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59130	28023	UCG ABINGDON	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59129	32142	UCG BOONES CREEK	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59126	32243	UCG GRAY	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59028	31985	UCG JOHNSON CITY EAST	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59050	32251	UCG JOHNSON CITY WEST	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59125	20021	UCG MORTON	TN	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY

**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105\_\_\_\_  
Exhibit CAPD-SB\_\_\_\_  
Direct: Decoupling Testimony\_\_\_\_  
Schedule 1\_\_\_\_  
Page 4 of 7\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
59306		CLEAR CREEK/FRANKFORT GATHERING-MORGAN CO.	TN	MORGAN	ETN		CLEAR CREEK OIL & GAS, INC.	RECEIPT
59320	153817	MORGAN COUNTY 7	TN	MORGAN	ETN		CNX GAS COMPANY LLC.	RECEIPT
59313	222221	TROUSDALE COUNTY RECEIVING	TN	TROUSDALE	ETN		COLUMBIA GULF TRANSMISSION COMPANY	RECEIPT
59052	20023	AFG BLUERIDGE	TN	SULLIVAN	ETN		CONSTELLATION NEW ENERGY-GAS DIVISION,LLC.	DELIVERY
59073	20014	AFG GREENLAND	TN	WASHINGTON	ETN		CONSTELLATION NEW ENERGY-GAS DIVISION,LLC.	DELIVERY
59198	322348	Rogersville M&R	TN	HAWKINS	ETN		DAUGHERTY PETROLEUM, INC.	RECEIPT
50007	322360	SOUTHLINE NOMINATION POINT	TN	MAURY	ETN		DYNEGY MARKETING AND TRADE	RECEIPT
59072	20012	HCCUD HAWKINS	TN	HAWKINS	ETN		EAGLE ENERGY PARTNERS,I.L.P.	DELIVERY
59019	20272	SOUTH PITTSBURG	TN	MARION	ETN		EAGLE ENERGY PARTNERS,I.L.P.	DELIVERY
59033	20381	ROCKWOOD	TN	ROANE	ETN		EAGLE ENERGY PARTNERS,I.L.P.	DELIVERY
50013	482180	COLUMBIA LATERAL - MAINLINE - LAWRENCEBURG, CO	TN	BLOUNT			EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
59154	153944	ETN MARKET TRADING PT.(D)	TN	PUTNAM	ETN		EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
59153	153943	ETN PRODUCTION TRADING PT.(D)	TN	PUTNAM	ETN		EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
50010	482190	PAL POINT OF TRANSACTION	TN	PUTNAM			EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
56000	125745	410 STORAGE INJECTION	TN	SULLIVAN	ETN		EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
56100	322368	410 STORAGE INJECTION STORAGE SERVICE	TN	SULLIVAN	ETN		EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
59172	222220	CENTRAL 3200 LINE	TN	DECATUR	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59174	222224	IAST POOLING 3100 LINE	TN	DECATUR	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59323	153945	PRODUCTION TRADING POINT (R)	TN	DECATUR	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59173	222219	WEST POOLING 3100 LINE	TN	DECATUR	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59324	153946	OBA TRADING	TN	MONTGOMERY	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
50095		ETNG LOBELVILLE AUCTION POINT	TN	PERRY			EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
50093		ETNG AUCTION GAS	TN	ROBERTSON	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
57000	125746	410 STORAGE WITHDRAWAL	TN	SULLIVAN	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
57100	322369	410 STORAGE WITHDRAWAL STORAGE SERVICE	TN	SULLIVAN	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59036	19875	ERPUD A E D C	TN	FRANKLIN	ETN		ELK RIVER PUBLIC UTILITY DISTRICT	DELIVERY
59006	19869	ERPUD ESTILL SPRINGS	TN	FRANKLIN	ETN		ELK RIVER PUBLIC UTILITY DISTRICT	DELIVERY
59034	19889	ERPUD TULLAHOMA	TN	FRANKLIN	ETN		ELK RIVER PUBLIC UTILITY DISTRICT	DELIVERY
59177	233678	OAK GROVE	TN	FRANKLIN	ETN		ELK RIVER PUBLIC UTILITY DISTRICT	DELIVERY
59088	19896	ERPUD SEWANEE	TN	GRUNDY	ETN		ELK RIVER PUBLIC UTILITY DISTRICT	DELIVERY
50011	482192	GALLATIN LATERAL - MAINLINE - SUMMER CO., TN	TN	SUMNER			GALLATIN NATURAL GAS SYSTEM	DELIVERY
50012	482193	GALLATIN LATERAL - SUMMER CO., TN	TN	SUMNER			GALLATIN NATURAL GAS SYSTEM	RECEIPT
59157	193270	MORGAN CO 3 DELIVERY	TN	MORGAN	ETN		GASCO DISTRIBUTION SYSTEMS, IN	DELIVERY
59032	20441	HARRIMAN	TN	ROANE	ETN		HARRIMAN UTILITY BOARD	DELIVERY
59187		HAWKINS CO. #2	TN	HAWKINS	ETN		HAWKINS COUNTY UTILITY DISTRICT	DELIVERY
59043	19787	JCCUD NEWPORT	TN	COCKE	ETN		JEFFERSON-COCKE COUNTY UTILITY DISTRICT	DELIVERY
59044	20090	JCCUD JEFFERSON CITY	TN	JEFFERSON	ETN		JEFFERSON-COCKE COUNTY UTILITY DISTRICT	DELIVERY

**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105\_\_\_\_\_  
Exhibit CAPD-SB\_\_\_\_\_  
Direct: Decoupling Testimony\_\_\_\_\_  
Schedule 1\_\_\_\_\_  
Page 5 of 7\_\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
50008	322332	VS 3214	TN	BRADLEY	ETN		KGEN MURRAY I AND II,LLC.	DELIVERY
51008	322329	VS 3214	TN	BRADLEY	ETN		KGEN MURRAY I AND II,LLC.	RECEIPT
59000	20174	KUB EAST	TN	KNOX	ETN		KNOXVILLE UTILITIES BOARD	DELIVERY
59131	45342	KUB SOUTH	TN	KNOX	ETN		KNOXVILLE UTILITIES BOARD	DELIVERY
59005	20147	KUB WEST	TN	KNOX	ETN		KNOXVILLE UTILITIES BOARD	DELIVERY
50014	482181	COLUMBIA LATERAL - LAWRENCEBURG CO., TNB	TN	LAWRENCE			KNOXVILLE UTILITIES BOARD	RECEIPT
59197	482182	Marion Natural Gas - Marion Co., Tn	TN	MARION	ETN		MARION NATURAL GAS SYSTEM	DELIVERY
59164	216192	HARRIMAN SOUTH	TN	ROANE	ETN		MIDCOAST ENERGY RESOURCES INC	DELIVERY
59134	36448	MTUD FRANKLIN	TN	FRANKLIN	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59040	19916	MTUD ALTO	TN	GRUNDY	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59111	19934	MTUD HOLIDAY INN	TN	GRUNDY	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59011	19950	MTUD RED BANK	TN	HAMILTON	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59149	153809	MTUD BAXTER	TN	JACKSON	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59201	482196	MTNG/MCMINN CO. INTERCONNECT-MCMINN CO., TN	TN	MC MINN	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59031	19813	MTUD MONTEREY	TN	PUTNAM	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59015	20549	MTUD CARTHAGE	TN	SMITH	ETN		MIDDLE TENNESSEE NATURAL GAS UTILITY DISTRICT	DELIVERY
59020	32513	ORUD	TN	ANDERSON	ETN		OAK RIDGE UTILITY DISTRICT	DELIVERY
59078	32355	ORUD BEAR CREEK	TN	ROANE	ETN		OAK RIDGE UTILITY DISTRICT	DELIVERY
59179	233680	ORUD KINGSTON	TN	ROANE	ETN		OAK RIDGE UTILITY DISTRICT	DELIVERY
59035	20130	PCUD CLINTON	TN	KNOX	ETN		POWELL CLINCH UTILITY DISTRICT	DELIVERY
59168	222212	PCUD LAFOLLETTE	TN	ROANE	ETN		POWELL CLINCH UTILITY DISTRICT	DELIVERY
59158	193271	SEVIER COUNTY UTILITY DISTRICT	TN	SEVIER	ETN		SEVIER COUNTY UTILITY DISTRICT	DELIVERY
59144	31448	SEVIER SEYMOUR	TN	SEVIER	ETN		SEVIER COUNTY UTILITY DISTRICT	DELIVERY
59068	20499	SEVIERVILLE	TN	SEVIER	ETN		SEVIER COUNTY UTILITY DISTRICT	DELIVERY
59156	193272	SMELTER SERVICE CORPORATION	TN	MAURY	ETN		SMELTER SERVICE CORPORATION	DELIVERY
59098	20312	MONSANTO	TN	MAURY	ETN		SOLUTIA INC	DELIVERY
50017	482187	MONSANTO LATERAL - MAINLINE - MAURY CO., TN	TN	MAURY			SOLUTIA INC	DELIVERY
50018	482188	MONSANTO LATERAL - MAURY CO., TN	TN	MAURY			SOLUTIA INC	RECEIPT
59311	197030	SONAT BRADLEY	TN	BRADLEY	ETN		SOUTHERN NATURAL GAS COMPANY	RECEIPT
59182	322328	BEDFORD COUNTY UTILITY DISTRICT	TN	BEDFORD	ETN		TENNESSEE ENERGY ACQUISITION CORP	DELIVERY
59329	443344	Texas Eastern - Mt. Pleasant, Giles Co., TN	TN	GILES	ETN		TEXAS EASTERN GAS PIPELINE COMPANY	RECEIPT
53201	20418	EL PASO - LOBELVILLE RECEIVING	TN	PERRY	ETN		TEXAS EASTERN GAS PIPELINE COMPANY	RECEIPT
53101	20490	EL PASO - RIDGETOP RECEIVING	TN	ROBERTSON	ETN		TEXAS EASTERN GAS PIPELINE COMPANY	RECEIPT
59330	20606	TEXAS EASTERN - HARTSVILLE, TN	TN	TROUSDALE	ETN		TEXAS EASTERN GAS PIPELINE COMPANY	RECEIPT
59229	60678	EAST TN GAS - MT. PLEASANT, TN -DEL (B/D 59329)	TN	GILES	ETN		TEXAS EASTERN TRANSMISSION, LP	DELIVERY
59021	40251	DOE C STATION	TN	ANDERSON	ETN		UNITED STATES DEPARTMENT OF ENERGY	DELIVERY
59064	20479	DOE B STATION	TN	ROANE	ETN		UNITED STATES DEPARTMENT OF ENERGY	DELIVERY
59097	20443	PCUD OLIVER SPRINGS	TN	ROANE	ETN		UNITED UTILITIES	DELIVERY
59162	188025	UPPER CUMBERLAND GAS UTILITY DISTRICT	TN	FENTRESS	ETN		UPPER CUMBERLAND GAS UTILITY D	DELIVERY
59178	233679	US GYPSUM	TN	MARION	ETN		USG PIPELINE COMPANY	DELIVERY
50015	482185	STAUFFER CHEMICAL CO. LATERAL - MAINLINE - MAUF	TN	MAURY			ZENECA INC	DELIVERY
50016	482186	STAUFFER CHEMICAL CO. LATERAL - MAURY CO., TN	TN	MAURY			ZENECA INC	RECEIPT

**East Tennessee Pipeline:  
Master List Of Points, Point Type  
Point Operator, County and Location**

Docket 07\_00105\_\_\_\_  
Exhibit CAPD-SB\_\_\_\_  
Direct: Decoupling Testimony\_\_\_\_  
Schedule 1\_\_\_\_  
Page 6 of 7\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
59148	153807	APPALACHIAN CASTLEWOOD DELIVERY	VA	RUSSELL	ETN		APPALACHIAN NATURAL GAS DISTRIBUTION COMPANY	DELIVERY
59150	222216	APPALACIAN LEBANON	VA	RUSSELL	ETN		APPALACHIAN NATURAL GAS DISTRIBUTION COMPANY	DELIVERY
59010	27925	UCG BLACKSBURG	VA	MONTGOMER	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59022	31780	UCG RADFORD	VA	MONTGOMER	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59118	31748	UCG RADFORD EAST	VA	MONTGOMER	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59077	27965	UCG DUBLIN	VA	PULASKI	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59013	27963	UCG PULASKI	VA	PULASKI	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59121	28010	UCG CHILHOWIE	VA	SMYTH	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59075	28011	UCG MARION	VA	SMYTH	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59116	31772	UCG MARION EAST	VA	SMYTH	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59120	31732	UCG MARION NORTH	VA	SMYTH	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59185	322373	UCG - GLADE HIGHLANDS	VA	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59117	31706	UCG ABINGDON EAST	VA	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59076	31698	UCG ABINGDON WEST	VA	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59119	28016	UCG GLADE SPRINGS	VA	WASHINGTON	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59122	32073	UCG RURAL RETREAT	VA	WYTHE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59069	28020	UCG WYTHEVILLE	VA	WYTHE	ETN		ATMOS ENERGY CORPORATION	DELIVERY
59193	322375	UCG, Progress Park - Wythe Co., VA	VA	WYTHE	ETN		ATMOS ENERGY CORPORATION	DELIVERY

**East Tennessee Pipeline:  
Master List Of Points, Point Type  
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Schedule 1\_\_\_\_  
Page 7 of 7\_\_\_\_

PROP LOC	DRN NUMBER	LOCATION NAME	STATE	COUNTY	LOC ZN	SERVICE_POINT_NB R	OPERATOR NAME	LOC PURP DESC
59336		CHESAPEAKE ENERGY-WAKENVA GATHERING-DICKE	VA	DICKENSON	ETN		CHESAPEAKE APPALACHIA, LLC	RECEIPT
59334		CNX-Jewell Ridge	VA	TAZEWELL	ETN		CNX GAS COMPANY LLC.	RECEIPT
58110	467402	VA GAS STOR EARLY GROVE INJ STORAGE SERVICE	VA	PULASKI	VGS		DUKE ENERGY EARLY GROVE COMPANY	DELIVERY
58211	467405	VA GAS STOR EARLY GROVE WTHD STORAGE TRANSP	VA	PULASKI	VGS		DUKE ENERGY EARLY GROVE COMPANY	DELIVERY
58500	467522	VGC/UNITED CITIES P-25 LINE	VA	PULASKI	VGP		DUKE ENERGY EARLY GROVE COMPANY	DELIVERY
59766	216190	SALTVILLE STORAGE INJECTION	VA	SMYTH	ETN		DUKE ENERGY EARLY GROVE COMPANY	DELIVERY
59147	153806	EARLY GROVE DEL/INJ (BI-D 59009)	VA	WASHINGTON	ETN		DUKE ENERGY EARLY GROVE COMPANY	DELIVERY
58210	467404	VA GAS STOR EARLY GROVE INJ STORAGE TRANSP	VA	PULASKI	VGS		DUKE ENERGY EARLY GROVE COMPANY	RECEIPT
58111	467403	VA GAS STOR EARLY GROVE WTHD STORAGE SERV	VA	PULASKI	VGS		DUKE ENERGY EARLY GROVE COMPANY	RECEIPT
59777	216191	SALTVILLE STORAGE WITHDRAWAL	VA	SMYTH	ETN		DUKE ENERGY EARLY GROVE COMPANY	RECEIPT
59009	16026	EARLY GROVE REC/WD (BI-D 59147)	VA	WASHINGTON	ETN		DUKE ENERGY EARLY GROVE COMPANY	RECEIPT
58100	467398	VA GAS STOR SALTVILLE INJECTION	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	DELIVERY
58201	467401	VA GAS STOR SALTVILLE WITHDRAWAL TRANSPORT	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	DELIVERY
58310	467406	VIRGINIA GAS, PULASKI CO - DELIVERY	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	DELIVERY
58311	467407	VIRGINIA GAS, PULASKI CO - RECEIPT	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	DELIVERY
58200	467400	VA GAS STOR SALTVILLE INJECTION TRANSPORT	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	RECEIPT
58101	467399	VA GAS STOR SALTVILLE WITHDRAWAL	VA	PULASKI	VGP		DUKE ENERGY VIRGINIA PIPELINECOMPANY	RECEIPT
50091		JEWELL RIDGE	VA	SMYTH	ETN		EAST TENNESSEE NATURAL GAS, LLC	DELIVERY
50092		MAINLINE JEWELL RIDGE	VA	SMYTH	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59771	467523	PATRIOT EXTENSION ACCOUNTING POINT	VA	WYTHE	ETN		EAST TENNESSEE NATURAL GAS, LLC	RECEIPT
59315	14102	DICKENSON CO RECEIVING	VA	DICKENSON	ETN		EQUITABLE ENERGY, LLC	RECEIPT
59326	222223	DICKENSON COUNTY 3	VA	DICKENSON	ETN		EQUITABLE ENERGY, LLC	RECEIPT
59332	482194	EREC, Dickenson #4, Dickinson County, VA	VA	DICKENSON	ETN		EQUITABLE ENERGY, LLC	RECEIPT
59110	27927	ROANOKE ELLISTON	VA	MONTGOMER	ETN		ROANOKE GAS COMPANY	DELIVERY
59105	31462	ROANOKE CAVE SPRINGS	VA	ROANOKE	ETN		ROANOKE GAS COMPANY	DELIVERY
59004	27980	ROANOKE CLEARBROOK	VA	ROANOKE	ETN		ROANOKE GAS COMPANY	DELIVERY
59003	27975	ROANOKE SALEM	VA	ROANOKE	ETN		ROANOKE GAS COMPANY	DELIVERY
59196	482195	ROANOKE West Salem-Roanoke Co., VA	VA	ROANOKE	ETN		ROANOKE GAS COMPANY	DELIVERY
50094		SALTVILLE LLC - EVAP FUEL	VA	SMYTH	ETN		SALTVILLE GAS STORAGE COMPANY, LLC	DELIVERY
59760	193268	SALTVILLE LLC STORAGE INJECTION	VA	SMYTH	ETN		SALTVILLE GAS STORAGE COMPANY, LLC	DELIVERY
59770	193269	SALTVILLE LLC STORAGE WITHDRAWAL	VA	SMYTH	ETN		SALTVILLE GAS STORAGE COMPANY, LLC	RECEIPT
59194	322372	Virginia Gas Co., Pulaski Co., VA - DEL	VA	PULASKI	ETN		VIRGINIA GAS COMPANY	DELIVERY
59207		VGS-WYTHE CO. INTERCONNECT	VA	WYTHE	ETN		VIRGINIA GAS COMPANY	DELIVERY
59195	322371	Virginia Gas Co., Pulaski Co., VA - REC	VA	PULASKI	ETN		VIRGINIA GAS COMPANY	RECEIPT
59192	322374	United Cities - Wolf Hills Power Plant	VA	WASHINGTON	ETN		WOLF HILLS ENERGY, LLC	DELIVERY

# Gas Nomination Timeline Impact Upon LDC Operations

## **Presentation Overview:**

**LDC Goals and Obligations**

**LDC/Customer Load Characteristics**

**General Concepts**

**Gas Supply Planning/Nomination Timeline**

**No-Notice Service**

**Third Party Transportation on LDCs**

**Regional Pipeline Grid Considerations**

**Important Gas Scheduling “Rules of the Road”**

**Impact of Gas-fired Generation Behind the City Gate**

**Questions?**

# Gas Nomination Timeline Impact Upon LDC Operations

## Local Distribution Company´(LDC) Goal:

**Provide Safe, Economic and Reliable Service to Customers.**

Most LDCs have a statutory Obligation to Serve.

Gas Control/Dispatch has a central role ensuring that customers are served:

- Monitoring system pressures and flows, deploying contingencies as needed.
- Keeping the system in balance to avoid an adverse impact on reliability and to promote structural integrity.
- Maintaining constant contact with pipelines and suppliers.

´ From Section 5 (a) of the Natural Gas Act ... “gas distributing company”

# Gas Nomination Timeline Impact Upon LDC Operations

## **LDC/Customer Load Characteristics**

LDC Customers, for the most part, take gas on demand.

Most Customers, particularly residential and small commercial customers, have weather responsive consumption profiles. Even the largest industrial customers sometimes have a weather responsive demand component.

Industrial Customers typically have a process dependent load profile, consuming the bulk of their daily requirement during the hours their manufacturing process is running, for example, 24/7, M-F 9-5, or based upon product pricing.

Gas-fired Electric Generation can be a large component of the LDC's load with the potential to create large load swings. Some generators have no base load.

Most customers have a base load component, that is, a portion of the load that is neither weather or process dependent. The base load component can sometimes be seasonal.



# Gas Nomination Timeline Impact Upon LDC Operations

## **LDC/Customer Load Characteristics (continued)**

As a whole, the cumulative customer load does not occur on an even-hourly basis. A common LDC load profile has a major peak from 7 A.M. to 9 A.M. local time and a secondary peak from 5 P.M. to 7 P.M. local time.

Every LDC is a little different. The presence of on-system balancing or gas-fired electric generation behind the city gate can alter the LDC load profile described above.

LDCs balance the load throughout the day by relying upon system line pack (usually very minimal on LDCs) and a mix of firm pipeline services, for example, No-Notice, peaking, storage and other balancing services.

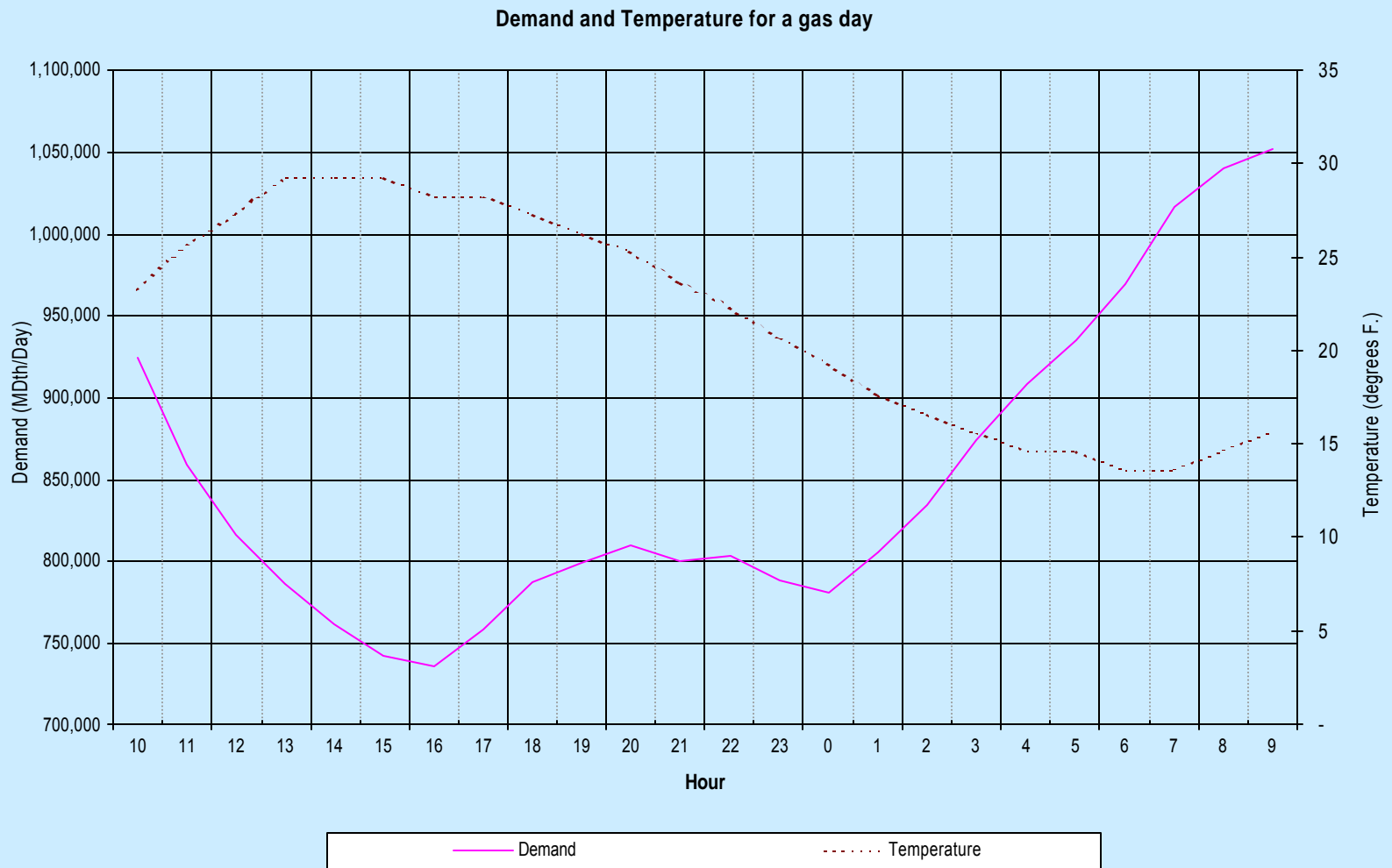
Some LDCs also have storage assets, LNG and/or other peaking facilities attached to their systems. Flexible pipeline takes and interruptible services can also make a contribution towards balancing.

## Gas Nomination Timeline Impact Upon LDC Operations

The Gas Nomination Timeline is a key tool, helping to match system supplies with customer demand.

To determine how much should be nominated, an LDC forecasts market demand and projects deliveries by third-party suppliers for transportation customers.

In order to provide its backstop function at the city gate, the LDC contracts for a mix of firm services and supplies to meet its (the market's) requirements. Firm supply contracts will sometimes provide for flexibility in terms of daily take obligations.



# Gas Nomination Timeline Impact Upon LDC Operations

Concerning the gas nomination timeline and transportation on the gas grid, LDCs have multiple roles:

## Pipeline Shipper (nomination role)

- LDCs place nominations on pipelines to move supplies from receipt points to the city gate and/or other delivery points.

## Transportation Scheduling (operator role)

- LDCs process nominations from their End User customers and/or their suppliers to transport gas from the city gate to the customer burner tip.

## Point Operator at the City Gate (confirmation role)

- LDCs reconcile nomination information with the pipeline to develop a schedule for the city gate.

# Gas Nomination Timeline Impact Upon LDC Operations

## **Gas Supply Planning/Nomination Timeline:**

Based upon the weather forecast and other consumption intelligence, the LDC develops a consumption forecast for the next gas day - 9 A.M. to 9 A.M. Central Clock Time (CCT).

Gas Supplies and transportation services are nominated in quantities sufficient to meet forecasted customer demand by 11:30 A.M. CCT the day before gas flows (Timely Cycle).

- Note1: The gas nominated at the Timely Cycle does not begin to flow for another 21 ½ hours.
- Note 2: Except for western LDCs, the peak morning burn falls at the end of the gas day or approximately 44 hours from the time the nomination is placed. This creates a balancing challenge because the morning peak is the largest source of load forecasting error and it occurs well after the last intraday nomination deadline.

## Gas Nomination Timeline Impact Upon LDC Operations

### **Gas Supply Planning/Nomination Timeline (continued):**

By 4:30 P.M. CCT, the LDC learns whether gas (including third party gas) nominated at the timely cycle was scheduled.

- Nominated gas is not scheduled (at any cycle) for a variety of reasons including insufficient transportation priority, loss of supply and confirmation errors.

Additional nominations to accommodate changed forecasts and to replace timely nominations that were not scheduled are placed by 6:00 P.M. CCT the day before gas flows (Evening Cycle) by the LDC and in some cases, third parties.

Note: The gas nominated at the Evening Cycle does not begin to flow for another 15 hours.

# Gas Nomination Timeline Impact Upon LDC Operations

## **Gas Supply Planning/Nomination Timeline (continued):**

By 9:00 P.M. CCT, the LDC learns whether gas nominated at the evening schedule was scheduled. If gas scheduled at the timely cycle utilized interruptible transportation, it may become unscheduled or “bumped” by gas scheduled under a firm transportation schedule.

Additional intraday nominations (Intraday 1 cycle) can be placed during the gas day at 10:00 A.M.CCT to begin flow at 5:00 P.M.CCT. As with the evening cycle, gas scheduled at prior cycles utilizing interruptible transportation may be “bumped” by gas scheduled under a firm transportation schedule. An intraday 1 nomination can provide at least two-thirds of the contract maximum daily quantity.

And finally, additional intraday nominations (Intraday 2 cycle) can be placed during the gas day at 5:00 P.M. CCT to begin flow at 9:00 P.M.CCT. No gas scheduled at prior cycles may be “bumped” by gas scheduled regardless of service priority. An intraday 2 nomination can provide at least one-half of the contract maximum daily quantity.

## Gas Nomination Timeline Impact Upon LDC Operations

### **No-Notice Service – the descendant of pre-Order 636 bundled pipeline sales services.**

LDCs, in most cases, are more likely to depend upon the timely and evening cycles to schedule gas. Each of these cycles results in a full day's quantity.

When capacity is tight, that is, situations where no interruptible gas is flowing and the pipeline is flowing at or near capacity, no gas can be bumped. Depending upon a variety of operational factors and assets on hand, intraday nomination cycles 1 and 2 provide less value to some LDCs.

While intraday nominations could be used to approximate the daily load profile, LDCs most often rely upon No-Notice used to balance hourly flow fluctuations and to accommodate the difference between supply scheduled to the system and market demand on a daily basis.

No-Notice also reduces staffing requirements – more intraday nomination deadlines would require additional staff to handle the nomination/confirmation process.



## Gas Nomination Timeline Impact Upon LDC Operations

### **No-Notice Service (continued)**

No-Notice Service varies from pipeline to pipeline often relying upon pipeline storage assets. The pipeline may have unique rules fashioned around its capabilities and assets.

Sometimes, the combination of a firm transportation service and a firm storage service create the no-notice service. In addition to providing hourly balancing, the daily difference between gas scheduled and gas delivered at the city gate is injected into storage or withdrawn from storage.

In other cases, multiple balancing services can be tied to the city gate imbalance. The LDC instructs the pipeline through a ranking mechanism which services to utilize in high burn or low burn situations.

While the amount of no-notice service is often proportional to the primary delivery capacity contracted to a primary delivery point, lower priority deliveries (such as secondary firm) that are scheduled to the same delivery point, in some cases displace or decrease no-notice and unscheduled primary firm rights.

# Gas Nomination Timeline Impact Upon LDC Operations

## Third Party Transportation on LDCs

Increases the complexity and uncertainty of supply planning and balancing. LDCs may operate under three broad regulatory and/or business paradigms:

1. LDCs that provide bundled sales service to all of their customers.
2. LDCs providing transportation services that permit their largest customers (industrial and commercial) to arrange for their own supplies.
3. LDCs providing transportation services that permit all customers (including residential) to arrange for their own supplies.

LDCs often coordinate with transportation customers and their suppliers to balance the system. In some cases, LDCs require third party suppliers to hold firm transportation capacity and can direct them to bring additional supplies. Those suppliers will place intraday nominations, if necessary, to meet their share of the market.

# Gas Nomination Timeline Impact Upon LDC Operations

## **Third Party Transportation on LDCs (continued)**

Depending upon business circumstances and the regulatory environment, LDC's support the Gas Nomination Timeline (and Intraday nominations) in varying degrees:

- Some LDCs provide all balancing at the city gate – transportation customers (if present) do not place intraday nominations.
- Other LDCs provide their transportation customers with limited intraday nominations.
- Finally, some LDCs fully support the gas timeline (including all intraday nominations) and have full-blown nomination systems. In effect, these LDCs schedule like a pipeline.

**No matter which model, in the end, the LDC is responsible for seeing that its system is in balance on both an hourly and daily basis.**

# Gas Nomination Timeline Impact Upon LDC Operations

## **Regional Pipeline Grid Considerations**

In some areas of the continent, transportation capacity is tight, that is, delivery capacity approximates market demand at peak periods.

In other areas of the continent, transportation capacity may exceed market demand at peak periods which makes the gas nomination timeline more forgiving in terms of scheduling, that is, intraday nominations can be more reliable. Even then, a supply constraint could undo a successful nomination.

The best way to ensure gas flow is to contract for firm capacity and firm supplies, to nominate gas at primary receipt point (where the firm supply is located) and primary delivery points (where the load is located), to nominate without error at the timely nomination cycle and match nominated flow to the best possible consumption estimate.

# Gas Nomination Timeline Impact Upon LDC Operations

## Important Gas Scheduling “Rules of the Road”:

### **The “Lesser Of” Rule**

When two confirming parties have different nomination quantities for the same transaction at an interconnect, the smaller quantity will be confirmed and/or scheduled. This means zero in some cases.

Supply reliability is key. A loss of supply at any nomination cycle can un-schedule or reduce any transaction depending upon the cycle. If the loss occurs at the intraday 1 or intraday 2 confirmation cycles, one-third and one-half of the gas originally scheduled, respectively, continues to flow (elapsed pro-rata).

## Gas Nomination Timeline Impact Upon LDC Operations

Important Gas Scheduling “Rules of the Road” (continued):

### **Transportation Priority: Primary Firm, Secondary Firm, Interruptible.**

- At the Timely Cycle primary capacity has the highest priority and secondary capacity has priority over interruptible capacity.
- Starting with the Evening Cycle (and applicable to the Intraday 1 cycle), secondary firm capacity that has been scheduled at a prior cycle becomes equivalent to primary capacity. New nominations for primary or secondary capacity can bump scheduled interruptible capacity but primary firm cannot bump scheduled secondary firm. For unscheduled capacity, timely priorities still apply.

This leads to the rule: **Secondary Firm, once scheduled, is Firm.**

When transportation is bumped, it creates a loss of supply for a downstream party, creating a need for intraday nominations to replace the supply and/or creating a balancing demand on the LDC.

## Gas Nomination Timeline Impact Upon LDC Operations

Important Gas Scheduling “Rules of the Road” (continued):

### **Transportation Priority: Primary Firm, Secondary Firm, Interruptible.**

- At the Intraday 2 cycle, the priority of all gas scheduled at a prior cycles (including interruptible) becomes equivalent to primary capacity. New nominations cannot bump any scheduled capacity. For unscheduled capacity, timely priorities still apply.

Each of these rules impacts an LDC from both Shipper and Operator perspectives. Even though it may be possible for the LDC or a third party to place an intraday nomination, that nomination may not have a chance of being scheduled. The LDC still bears the balancing responsibility – it will most often utilize its no-notice service to balance the system when additional nominations cannot be scheduled.

# Gas Nomination Timeline Impact Upon LDC Operations

## **Impact of Gas-Fired Electric Generation Behind the City Gate**

Much depends on the operating profile of generating facility:

- Baseload plants are much like large process customers – in effect, they dampen the LDCs load profile.
- Intermediate load generators alter the load profile depending upon the timing and duration of operation. When adequate lead-time is provided, gas supplies can be arranged in advance (often by the generator itself) and LDC operations are manageable. Usually, Generators will schedule some gas and then attempt to adjust based upon actual dispatch.
- Peaking plants, which can be dispatched with little or no advance notice, can radically alter the LDCs load profile. Due to the uncertainty of dispatch, nominations are difficult. Generator operations coincident or just in advance of LDC peak periods can significantly reduce system pressure creating operational challenges for the LDC.



# Gas Nomination Timeline Impact Upon LDC Operations

## **Impact of Gas-Fired Electric Generation Behind the City Gate (continued)**

Much depends on the character of service provided by the LDC to the generating facility, for example, a restriction on or interruption of operation when temperatures are below a certain level.

For LDCs, whether a gas-fired generator is behind the city gate or immediately upstream, unplanned/unscheduled operation could lead to a rapid drop in pipeline pressure, which in turn, could hinder an LDC's ability to meet its Obligation to Serve.

Rapid and/or unexpected changes in consumption can also lead to increased costs for LDCs in terms of storage operations or in some cases, penalties. LDC tariffs often only contemplate monthly or daily imbalances and not hourly imbalances.

In the end, the key to successfully sharing the gas grid is a combination of appropriate gas supply and transportation contracting decisions (for services on both the pipeline and the LDC) and ensuring that operators are never "surprised".

# Gas Nomination Timeline Impact Upon LDC Operations

## **Impact of Gas-Fired Electric Generation Behind the City Gate (continued)**

A natural tension exists between generation plant operators that want to provide minimal advance notice and gas system operators that need time to reconfigure their system. Gas moves slowly – maybe 15 to 30 miles per hour in pipelines.

Each LDC responds to sudden load changes differently depending upon its asset mix and upstream services. Even if intraday nominations are made, due the slow speed of gas, pressures can continue to drop for a period because generator consumption occurs at a faster rate.

Planning and advance notice are critical. There are operational constraints on the pipelines to deliver and the LDCs to accept a large quantity of gas within a flow day. A very large shipper cannot wait to nominate all or a significant portion of their gas needs until flow day. Operationally the gas may not physically be deliverable depending upon the hourly capabilities and/or configuration of the gas system.

Good communication is essential to ensure that gas systems can respond with short notice to increases or decreases in plant consumption. Generators, Pipelines, LDCs and RTO/ISOs need to be “on the same page” to help avoid problems and ensure the gas system is responsive to all customers.

# Gas Nomination Timeline Impact Upon LDC Operations

## Questions?