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May 1, 2007

The Honorable Pat Miller, Director
Tennessee Regulatory Authority
460 James Robertson Parkway
Nashville, Tennessee 37243

filed electronically in docket office on 05/01/07

IN RE: Petition of Tennessee American Water Company to Change and Increase Certain Rates and Charges So as to Permit it to Earn a Fair and Adequate Rate of Return on its Property Used and Useful in Furnishing Water Service to its Customers

Docket No. 06-00290

Dear Director Miller:

Pursuant to your request during the hearing in the above referenced docket, held Thursday, April 26, 2007, please find the transcript of the Direct Examination of TRA Staff Economist, Jerry Kettles, from Docket No. 05-00258.

Please feel free to contact me should you need anything further.

Sincerely,

Vance L. Broemel

Vance Broemel
Assistant Attorney General

106833

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing is being forwarded via electronic mail and U.S. mail, to:

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on this the 1st day of May, 2007.

Vance L. Broemel

Vance L. Broemel

106833

BEFORE THE TENNESSEE REGULATORY AUTHORITY

IN RE:

PETITION OF THE CONSUMER ADVOCATE TO OPEN AN INVESTIGATION TO DETERMINE WHETHER ATMOS ENERGY CORP. SHOULD BE REQUIRED BY THE TENNESSEE REGULATORY AUTHORITY TO APPEAR AND SHOW CAUSE THAT ATMOS ENERGY CORP. IS NOT OVEREARNING IN VIOLATION OF TENNESSEE LAW AND THAT IT IS CHARGING RATES THAT ARE JUST AND REASONABLE

Docket No. 05-00258

TRANSCRIPT OF PROCEEDINGS

Wednesday, August 30, 2006

VOLUME VI

APPEARANCES:

For Atmos Energy Corp.:	Ms. Misty Kelley Mr. Clinton Sanko
For Atmos Intervention Group:	Mr. Henry Walker
For Atmos Energy Marketing:	Mr. Melvin Malone
For Consumer Advocate:	Mr. Vance Broemel
For Chattanooga Gas:	Ms. Jennifer Brundige
For TRA Investigative Staff:	Mr. Gary Hotvedt

Reported By:
Teri A. Campbell, RPR, CCR

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(August 30, 2006 - Volume VI)

EXHIBIT

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8	7/14/06 E-mail to David Foster from Dan McCormac	57

(The aforementioned cause came on to be heard on Wednesday, August 30, 2006, beginning at approximately 3:50 p.m., before Chairman Sara Kyle, Director Pat Miller, and Director Ron Jones, when the following proceedings were had, to -wit:)

MR. BROEMEL: I have an announcement to make that we think you will like to hear. It's not about the whole case, but it's about a large part of the case. At the break, the parties all discussed this. We've agreed with your approval, of course, to waive cross-examination of each cost of capital witness. They would each be permitted to give a summary like Dr. Brown did up to 20 minutes; that is, Mr. Kettles and Dr. Murry. Then their testimony would go in without any cross-examination.

We believe this would speed the hearing up. I suppose, of course, if the directors wanted to ask questions, that would be fine. But we think that would bring us a long way to moving this case along. I'll let the other parties confirm that that's their understanding.

MS. KELLEY: Yes. Atmos is in agreement.

MR. HOTVEDT: The TRA Staff is in

agreement. We would expect the directors to ask questions. And Mr. Walker is just walking in and so is Mr. Malone -- they need to agree -- and Ms. Luna. We assume you'll agree. I'm sorry.

MS. BRUNDIGE: I'm sure Ms. Luna wouldn't appreciate that.

MR. HOTVEDT: I'm sorry. It's late.

DIRECTOR JONES: Mr. Malone, I think Mr. Broemel has --

MR. BROEMEL: The parties during the break discussed waiving cross-examining the cost of capital experts and letting them each put on a summary up to 20 minutes -- the remaining experts; that is Mr. Kettles and Dr. Murry. Then all the parties would waive cross-examination. So the case would go much more quickly. Atmos has agreed to that as well as the TRA staff.

MR. WALKER: No problem.

MR. MALONE: No problem.

DIRECTOR MILLER: As long as we get to ask questions because I've got some questions of Mr. Kettles.

DIRECTOR JONES: Certainly we'll proceed in that manner. So, at this point, has Dr. Brown finished?

MR. BROEMEL: He's finished his summary. As we said, if the directors or anyone has questions of any of these people, that's of course fine. Otherwise. That concludes our case.

DIRECTOR MILLER: Let me see if I have questions of Dr. Brown.

DIRECTOR JONES: Are there any questions of Dr. Brown?

DIRECTOR MILLER: My brain tells me there are no questions from me.

DIRECTOR JONES: Dr. Brown, I have no questions. You can be excused. Thank you.

MR. HOTVEDT: The TRA staff would like to call Jerry Kettles.

DIRECTOR JONES: Mr. Kettles, raise your right hand.

JERRY KETTLES,

was called as a witness, and having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HOTVEDT:

Q. Please state your name for the record.

A. Jerry Kettles.

Q. Mr. Kettles, have you previously filed testimony, rebuttal testimony, and exhibits in this case?

A. Yes, I have.

Q. Do you have any corrections? Were there any typographical errors in any of that?

A. I have two corrections; one in my rebuttal and one in my direct.

Q. What is the typographical correction in your direct?

A. On page 1, line 17 and 18, starting at, "I joined the TRA in June 2000. I have held the position of TRA Economist since 2002."

Q. What was the precise date you actually became the TRA Economist?

A. I became the TRA Economist in March 2003. The sentence should read, "I joined the TRA in June 2000. I have held the position of TRA Economist since 2003."

Q. Thank you. What is the other correction that you would like to make?

A. On Page 4 of my rebuttal testimony starting on line 9. "A 50 percent equity ratio is not supportable given the company's own projections, analyst projections and the ruling of another

regulatory agency."

I would like that to read, "A 50 percent equity ratio is not supportable given the company's own projections and analyst projections." That's deleting the phrase "and the ruling of another regulatory agency."

Q. Is that the entire corrections?

A. Yes, that is.

Q. Thank you. Mr. Kettles, did you prepare a summary of what the direct, your rebuttal, and your exhibits go to?

A. Yes, I have.

Q. Would you please give it to us.

A. Unfortunately, I didn't bring any visual aids. I'll try to keep this brief.

My approach to cost of capital analysis is quite simple. I developed a capital structure for Atmos, debt cost estimates; I utilized the CAPM of the DCF models to develop equity --

Q. Talk into the mike and slow down.

A. Excuse me. I utilized the capital asset pricing model and the discounted cash flow model to develop equity returns by investors. I took this information, the capital structure of the debt cost and equity return information, and basically determined a

weighted cost of capital that describes the overall return by the company. This is the standard ratemaking procedure for cost of capital.

I derived my capital structure by looking at the company's September 30, 2005 data report and its SEC 10-K filing and projected for the year. I calculated a capital structure that is approximately 43 percent equity and 57 percent long-term debt. The cost of debt I propose in this proceeding is 5.77 percent.

For determining the cost of equity, I implement the capital asset pricing model and two variants of the DCF model. The DCF model variants incorporate different growth rates corresponding to two factors investors value. Income stemming from dividends and the value of the stock is measured by earnings per share growth. The estimates demonstrate considerable variants.

As Atmos increases its dividends by 2 cents per year, its dividend growth rate is quite low. The DCF model utilizing dividend growth produces equity returns between 6.17 percent and 7 percent. When implementing the DCF model utilizing earnings per share information, the equity return estimates increase from between 11.17 percent and 12 percent. Based on these

estimates, I selected my capital asset pricing model estimate of 10.75 percent to represent Atmos' equity return.

Overall, based upon my proposed capital structure, debt cost, and equity return estimates, I calculated a required return of 7.9 percent. By comparison, the company proposes a 9 percent return, while the Consumer Advocate proposes a 6.6 overall return.

In my rebuttal testimony, I address a limited set of issues. First, I address the hypothetical capital structure proposed by the company. My testimony is directed at the analysis provided by Dr. Murry, but also applies to Atmos' witness Sherwood as well.

I show the analyst projections and the company's own projections of equity ratio do not support a 50 percent capital structure. The preponderance of estimates show that Atmos will not reach a 45 percent equity ratio until 2010 showing that 50 percent is not reasonable.

With respect to Dr. Murry's testimony, I also note several similarities between our equity cost estimates generated by both our capital asset pricing model and the cash flow model.

Concerning Dr. Brown's testimony, I address two claims concerning the implementation of the CAPM model. First, I counter the assertion that arithmetic averages are inappropriate in measuring market returns. Secondly, I counter the assertion that long-term government securities are not the appropriate proxy for risk-free rates in the CAPM model. For each of these arguments, I cite the Ibbotson Associates text as a source.

And that concludes my summary. I'm ready for your 50 questions, Director Miller.

DIRECTOR MILLER: Okay. Now -- I'm sorry.

DIRECTOR JONES: No. Go ahead.

DIRECTOR MILLER: Explain this chart to me that Dr. Brown -- I'll give it to you. It's from page 8 of 38 of Dr. Brown's rebuttal testimony where he outlines your equity estimates and Dr. Murry's and compares it to his. I've got a copy here if you want it.

THE WITNESS: I've got mine right

here.

DIRECTOR MILLER: It starts out attacking your 12.5 percent market rate estimate.

THE WITNESS: All right. You'd lke me

to explain how I got 12.5 percent?

DIRECTOR MILLER: Yes.

THE WITNESS: Basically, I determined the 12.5 percent by looking at the Ibbotson's text. I found one figure that supported a 12.3 percent long-term growth rate. This is the arithmetic average. That spans from 1926 to 2004.

What I also wanted to do was I wanted to incorporate some returns on small stocks as well because we're trying to get a picture of the overall economy. We've got big companies. We've got little companies. We've got a lot in between.

What I chose to proxy the small market returns was returns on small stocks held for 20 years. When I combined those, I ended up with a market rate of 12.5 percent. So basically it's a combination of rates from small companies and large companies over a long period of time.

DIRECTOR MILLER: But he says Ibbotson's, you know, no longer forecasts above 10 percent.

THE WITNESS: Well, you know, it's really interesting because if you read the whole

article -- and there is an excerpt there. There's like
I think five pages to the article. You notice lots of

things.

One of the first things you'll notice is the article states that Ibbotson started doing these calculations back in 2001. What you notice is that when you look at the yearbooks -- I looked at I think the 2004 yearbook and I have looked at the most recent 2006 yearbook -- I don't see the 9.6 number anywhere in the standard tables we use.

The other thing we find is that the arithmetic averages that are reported -- I found I think 12.4 percent for the year I looked at. And the number has been revised down to 12.3 percent.

Now, what's important about this is the 2006 yearbook came out after this article came out, from my understanding. And those numbers still exist. Roger Ibbotson is still the research director at Ibbotson Associates. So my interpretation of the article as presented by Dr. Brown is they're talking about geometric returns and they're talking about some averaging.

In addition, once I read that article, I was really intrigued by the assertions in the article. So I did a serach of the academic literature using Econolit. I found one article from Dr. Ibbotson. It was a preprint article available from Yale

University preprints -- you know, associate of economics department. The data he uses in there is actually from the Ibbotson's yearbook and it contains the higher 10 percent number.

So I'm a little confused at, you know, the basis of the article or what the article was getting at. I do understand that there's a -- you kow, there's always a controversy in the economics literature about how you measure that. So, as far as I know, Ibbotson is still the research director at Ibbotson and the numbers have been consistent, you know, over the years I've been able to look at it.

DIRECTOR MILLER: Okay. Take us through the risk-free rate.

THE WITNESS: All right. The risk-free rate. What I did is I looked at 20 and 30-year U.S. securities -- the 20 and 30-year T-Bonds. What I found was that at the time I looked at it, the rate on the 20-year was basically in the range of 5 and a quarter. What I did is I went ahead and capitalized an expected quarter point increase by the Federal Reserve into our risk-free return because my intention was to try to look out to September 30.

Now, apparently, my Fed-watching skills have declined given the recent Federal Reserve rates. But that's how I derived the number of 5.5 percent. Basically, 5.25 percent for a 20-year note at the time and adding a quarter point to it. You subtract those two numbers and you get 7 percent. That's the risk premium.

DIRECTOR MILLER: Would your testimony be different now given what the Fed has done?

THE WITNESS: You know, I sort of -- you know, I think you can drive yourself crazy looking at it. I was checking -- I got the Federal Reserve August 25th, 20-year bond yield information. It was trading in the low 12s. At the same time, I think what you find is that the three-month rate has actually crept up over 5.

So, I mean, you know, based on the information I had at the time, I think my estimate is reasonable. But at the same time, I think we have to look at the recent economic developments including the Fed action and the recent Consumer Price Index numbers as well.

As a side note in this, Dr. Brown reports the Beta as being .87. That .87 is derived from my comparable companies. My actual estimate for Atmos specifically is .75 which takes that number down to 10.75, which you'll find in my testimony.

DIRECTOR MILLER: Thank you. Could you explain the size bias in the CAPM model and comment on whether the adjustment recommended in Dr. Murry's rebuttal testimony is justified? And you can tell I formulated that question on my own.

THE WITNESS: I can tell.

Basically, my approach to the testimony is to provide the simplest implementation of the models. When you read any textbook, the first model you see is the straight CAPM model. That's the estimate I propose. Size adjustment basically descends from a body of academic literature that I think starts with economist bonds and Regon bond. These are actually cited in the Ibbotson's text. What they found was that firm size is explanatory in basically looking at returns. Correlated to that is that small firms, when you look at Beta which measures systematic risk, it doesn't tell the whole story of the average returns. It just doesn't do it. So the solution was, to sort of conform to the CAPM model, was to adjust up the estimates for small firms. Okay?

Now, I chose not to do this. One, because I was trying to do the simplest implementation. Secondly -- well, frankly, though, Ibbotson's concludes that you should do this. I give the Ibbotson's text

credit for this. They're very good at laying out the arguments against it.

My rationale or what I would have argued here earlier is that we would probably think that just applying an adjustment due to firm size may not be granular enough. What I would argue is we probably want to look at the industry or something specific about the industry.

Now, there is information in there. Basically, they go by two-digit SIC codes, which is basically very broad measures of industrial activity. What they find is, yeah, small firms do tend to earn more, but they're not very definitive about it. So I think that, you know, until we get something more definitive about industry size, I think we should consider both the firm size adjustment and the standard CAPM model.

There are things that, you know, jumped out at me in reading the Ibbotson's text on this. They stated the size adjustment is cyclical. Now, that was really interesting. Actually, it mentioned that it changed every few years. Now, the implication as I understand it is that we may positively adjust a small stock at one time. But over the course of rates in effect, that number may switch.

So, basically, I look at it as something that statistically shows up in the CAPM, you know, that you could adjust for and we should consider that. But at the same time, I really wonder if the literature is granular enough to take into account the features of the market, the sector, and of the firm itself before you adjust.

DIRECTOR MILLER: How would using an attrition year ending September 30, 2007 impact the capital structure of the cost of capital recommendations?

THE WITNESS: You can find a lot of this in my rebuttal testimony. Basically, when you look at the analyst estimate out to 2007, I think the value line gives you 43/57, which is basically what I have. Also what I understand is the company in -- the company in some discovery to the Consumer Advocate, which I reviewed after I filed my testimony, provided some revised estimates. Those are unfortunately up in my office right now. But I think basically going out one year, 43/57, you know, is basically where we would end up.

As far as the cost of capital information, we've had a lot of uncertainty in the economy over the past month. To try to forecast out

basically risk-free interest rates out another year, that's a pretty Herculean task right now. So basically what I would, you know, say is let's stick with the estimates we have now. And if we have a problem, we can look at them again when that time comes.

DIRECTOR MILLER: Thank you, Mr. Kettles. I appreciate it.

CHAIRMAN KYLE: That's all I have -- I don't have any.

DIRECTOR JONES: Mr. Kettles, Dr. Brown started out in developing his equity return by dividing the comparable or in between dividend companies and capital gains companies. Did you follow that similar methodology?
THE WITNESS: No.
DIRECTOR JONES: You did not?
THE WITNESS: No, I did not.
DIRECTOR JONES: Okay. That's all I have. Thank you.
DIRECTOR MILLER: Why not? To follow up, why not?
THE WITNESS: Well, basically -- and I think this is very explicit in Dr. Brown's testimony. You'll notice in the early part of his direct testimony he states opinions. Basically, he places a high

emphasis on basically dividend paying companies and avoiding capital gains speculation.
How can I put this? The market doesn't care about that. The market is what the market does. And simply limiting the market to the group of companies you think satisfy your own subjective beliefs about it colors the analysis. You're not getting the full impact of the market and that's going to bias your results.
DIRECTOR MILLER: Thank you.
DIRECTOR JONES: You may step down.
MR. HOTVEDT: Director Jones, may I

move his direct and rebuttal testimony into the record?

DIRECTOR JONES: Without objection.

MS. KELLEY: No objection.

MR. HOTVEDT: The staff would like to call David Foster.

DIRECTOR JONES: Mr. Foster, raise your right hand please.

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DAVID FOSTER,

was called as a witness, and having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. HOTVEDT:

Q. Please state your name for the record.

A. David Foster.

Q. Mr. Foster, did you previously file direct and rebuttal testimony in this case along with some exhibits?

A. Yes, I did.

Q. Do you have any corrections you want to make to that testimony or those exhibits?