STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

January 28, 2009 - 10:12 a.m.
Concord, New Hampshire **DAY I**

RE: **DG 08-009**
ENERGYNORTH NATURAL GAS, INC.
d/b/a NATIONAL GRID NH:
Notice of Intent to File Rate Schedules.

NHPUC FEB04'09 PM 2:52

PRESENT: Chairman Thomas B. Getz, Presiding
Commissioner Graham J. Morrison
Commissioner Clifton C. Below

Sandy Deno, Clerk

APPEARANCES: **Reptg. National Grid New Hampshire:**
Steven V. Camerino, Esq. (McLane, Graf...)
Thomas P. O'Neill, Esq.
Ronald Gerwatowski, Esq.

Reptg. Residential Ratepayers:
Meredith Hatfield, Esq., Consumer Advocate
Rorie Hollenberg, Esq.
Kenneth E. Traum, Asst. Consumer Advocate
Stephen Eckberg
Office of Consumer Advocate

Reptg. Pamela Locke:
Alan Linder, Esq. (N.H. Legal Assistance)
Daniel Feltes, Esq. (N.H. Legal Assistance)

Reptg. PUC Staff:
Edward N. Damon, Esq.

Court Reporter: Steven E. Patnaude, LCR No. 52

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P R O C E E D I N G S

CHAIRMAN GETZ: Okay. Good morning, everyone we'll open the hearing in docket DG 08-009. On February 25, 2008, National Grid filed a request to implement new permanent natural gas delivery service rates in New Hampshire. On March 14, 2008, Commission issued an order suspending the tariffs included in the Company's delivery rate filing and scheduling a prehearing conference. Subsequently, the Commission issued Order Number 24,888 approving temporary rates, and a revised procedural schedule for the consideration of permanent rates was issued on September 9th, and setting the hearings for this week. And, we have a Partial Settlement Agreement for consideration that was filed on January 23.

Can we take appearances please.

MR. CAMERINO: Good morning, Commissioners. Steven Camerino, from McLane, Graf, Raulerson & Middleton, on behalf of National Grid-NH. And, also with me at counsel table today is Ronald Gerwatowski, Deputy General Counsel for National Grid, and Thomas O'Neill, Senior Counsel.

CMSR. BELOW: Good morning.

CHAIRMAN GETZ: Good morning.

MR. FELTES: Good morning, Mr. Chairman,

members of the Commission. My name is Dan Feltes, Staff Attorney with New Hampshire Legal Assistance, helping to represent Pamela Locke, a low income residential ratepayer of National Grid. With me at counsel table is Alan Linder. Thank you.

CHAIRMAN GETZ: Good morning.

CMSR. BELOW: Good morning.

MS. HATFIELD: Good morning, Commissioners. Meredith Hatfield, for the Office of Consumer Advocate, on behalf of residential ratepayers. And, with me is Ken Traum, Rorie Hollenberg, and Steve Eckberg, on behalf of the Office.

CHAIRMAN GETZ: Good morning.

CMSR. BELOW: Good morning.

MR. DAMON: Good morning, Commissioners. Edward Damon, for the Staff. And, with me this morning are Stephen Frink and Dr. Pradip Chattopadhyay.

CHAIRMAN GETZ: Good morning.

CMSR. BELOW: Good morning.

CHAIRMAN GETZ: Well, how do you propose to proceed with the consideration of the Partial Settlement?

MR. CAMERINO: We are going to put a panel on consisting of Ann Leary and John O'Shaughnessy, from National Grid, and Steve Frink, from the Commission Staff. I also wanted to just mark for identification all the testimony in the case and the Settlement Agreement up front. So, maybe while they're getting themselves settled on the stand, we can go through that housekeeping detail.

CHAIRMAN GETZ: Everyone set with that procedure? Then, please go ahead, Mr. Camerino.

MR. CAMERINO: Okay. And, I've prepared a draft Exhibit List, which I can give to the Commission as well. And, if all goes well, we'll actually follow this numbering. And, the parties already have this, and the Clerk has one. And, what we plan to do is, rather than recopying all of the testimonies and supporting schedules that have been filed, particularly because this is a largely settled case, with the exception of the documents that I'm going to identify, we would ask the Commission simply move the materials from its -- I'll call it the "administrative file" into the record for the case.

For those documents that relate to the disputed part of the case and the Settlement Agreement, we'll actually give the Clerk a physical copy, so that the record is more definitive in that regard.

So, I'll just read through the list and I'll identify those things where I believe we're going to be filing a physical copy and I'll give those to the Clerk. We're going to begin with Exhibit 6. My understanding is Exhibits 1 through 5 were marked in the temporary rate phase of this proceeding. Exhibit 6 is the February 25, 2008 Direct Testimony of Nickolas Stavropoulos. I will be providing a copy of that to the Clerk. That actually doesn't contain anything regarding return on equity, but, because Mr. Stavropoulos will be here tomorrow, I thought that ought to be physically provided. Exhibit 7, February 25, 2008 Direct Testimony of John O'Shaughnessy; Exhibit 8, February 25, 2008 Direct Testimony of Ann Leary; Exhibit 9, February 25, 2008 Direct Testimony of Paul Moul, I'll provide a physical copy of that; Exhibit 10, February 25, 2008 Direct Testimony of Paul Normand; Exhibit 11, February 25, 2008 Direct Testimony of Gary Goble regarding rate design; Exhibit 12, February 25, 2008 Direct Testimony of Gary Goble regarding Lead/Lag; Exhibit 13, February 25, 2008 Direct Testimony of Susan Fleck; Exhibit 14, February 25, 2008 Direct Testimony of Gary Bennett.

Exhibit 15, Cost of Service/Rate of Return exhibits, which are EN 3-1, 3-2, 3-2A, 3-3, 3-4, 3-5, 3-6, and 3-7. Exhibit 16 are the Cost of Service exhibits and Rate Base. That's EN 2-4 and 2-4-1. Exhibit

17 is the Cost of Service exhibits and O&M. That's EN 2-2-2. Exhibit 18, Cost of Service exhibits, EN 2-1, 2-2, 2-2-1, 2-2-1A, 2-2-3, 2-2-4, 2-2-5, and 2-3. Exhibit 19 are the tariff pages for permanent rates, both clean and redlined that were originally proposed. Exhibit 20 is the Report of Proposed Rate Changes, based on the original permanent rate proposal. Exhibit 21 would be the Puc 1604.01 filing requirements, which were Volumes 2A, 2B and 3 of the Company's February 25, 2008 filing. Exhibit 22 is the April 23, 2008 Supplemental Direct Testimony of Gary Goble. Exhibit 23 are Mr. Goble's workpapers in support of Attachments GLG-LL-2 and GLG-LL-3. Exhibit 24 are revised exhibits, EN 2-1; EN 2-2-1; EN 2-2-1A; EN 2-2-5, Pages 1, 2 and 3; EN 2-4, Page 1; and EN -- I'm sorry, Revised 2-4-1, Pages 1 and 3.

Next we move to the Staff and Intervenor testimony. Exhibit 25 is the October 31, 2008 Testimony of Stephen Frink. Exhibit 26 is the October 31, 2008 Testimony of George McCluskey. Exhibit 27 is the October 31, 2008 Testimony of Pradip Chattopadhyay. Exhibit 28 is the October 31, 2008 Testimony of James Cunningham. Exhibit 29 will be Revised Testimony from Ken Traum filed with the Commission on January 23, 2009, and Ms. Hatfield will provide a hard copy of that to the

Clerk. Exhibit 30 is the October 31, 2008 Testimony of Lee Smith and Arthur Freitas. Exhibit 31, October 31, 2008 Testimony of Roger Colton. Exhibit 32, October 31, 2008 testimony of Pamela Locke.

Exhibit 33 is the December 15, 2008 Rebuttal Testimony of Paul Moul, which we'll provide a hard copy of. Exhibit 34, December 15, 2008 testimony of Paul Normand. Exhibit 35, December 15, 2008 Rebuttal Testimony of Gary Bennett. Exhibit 36, December 15, 2008 Rebuttal Testimony of John O'Shaughnessy. Exhibit 37, December 15, 2008, Joint Rebuttal Testimony of John O'Shaughnessy and William Richer. Exhibit 38, December 15, 2008 Rebuttal Testimony of Gary Goble. Exhibit 39, December 15, 2008 Rebuttal Testimony of Ann Leary. Exhibit 40, December 15, 2008 Rebuttal Testimony of Nickolas Stavropoulos. We'll be providing a hard copy of that. And, Exhibit 41 is the January 23, 2009 Partial Settlement Agreement.

I appreciate your patience in allowing me to read that into the record, and would hope that you appreciate the amount of effort that went into resolving this case through a settlement, rather than litigation.

CHAIRMAN GETZ: Okay. The exhibits will be marked for identification as described by Mr. Camerino.

(The documents, as described, were herewith marked as **Exhibit 6** through **Exhibit 41**, respectively, for identification.)

CHAIRMAN GETZ: Let me just note for the record also that Commissioner Morrison had an automobile mishap on the way in this morning, and he'll be participating by phone. It's a mishap with the automobile, and not with Commissioner Morrison.

CMSR. MORRISON: Thank you.

MR. CAMERINO: And, I'm just going to provide those copies to the Clerk now, if I can.

(Whereupon **Ann Leary**, **John O'Shaughnessy**, and **Stephen Frink** were duly sworn and cautioned by the Court Reporter.)

MR. CAMERINO: And, Mr. Linder indicated to me that there was no testimony from Ms. Locke. And, so, we'll take a look at that. And, that exhibit number probably should be left blank. I'm thinking that he probably knows what he filed better than I do. That would be number 32.

MR. LINDER: Mr. Chairman, we did submit testimony of our expert witness, Roger Colton, which is number 31.

MR. CAMERINO: Okay.

CHAIRMAN GETZ: And, it just indicates that it was "on behalf of Ms. Locke".

MR. LINDER: Yes. Thank you.

MR. CAMERINO: So, we have a number available.

CHAIRMAN GETZ: Well, we'll just leave Exhibit 32 blank then. And, please go ahead, Mr. Camerino.

MR. CAMERINO: Thank you.

ANN LEARY, SWORN

JOHN O'SHAUGHNESSY, SWORN

STEPHEN FRINK, SWORN

DIRECT EXAMINATION

BY MR. CAMERINO:

Q. I'm going to start with you, Ms. Leary. Would you just state your name and business address for the record please.

A. (Leary) Yes. My name is Ann Leary. I work for National Grid, at 201 Jones Road, Waltham, Mass. 02451.

Q. And, what is your position with National Grid and what are your responsibilities in that regard?

A. (Leary) I am the Manager of Pricing for the Gas

Division in New England. And, I am responsible for various regulatory filings both in Massachusetts and New Hampshire.

Q. And, were you involved in the negotiation of and preparation of the Settlement Agreement that's been filed in this proceeding?

A. (Leary) Yes, I was.

Q. And, you're familiar with its terms?

A. (Leary) Yes, I am.

Q. Okay. Mr. O'Shaughnessy, let me ask you the same questions. What's your name and business address?

A. (O'Shaughnessy) My name is John O'Shaughnessy. I work for National Grid in Brooklyn. And, the business address is One Metrotech Center, Brooklyn, New York 11201. I'm the Director of Gas Revenue Requirements. And, in that capacity, I was responsible for preparing various exhibits and providing accounting expertise of the cost of service and revenue requirement in this case.

Q. And, are you familiar with the Settlement Agreement that was filed in this case?

A. (O'Shaughnessy) Yes.

Q. And, were you involved with its negotiation and preparation?

A. (O'Shaughnessy) Yes.

MR. CAMERINO: Okay. And, with Mr. Damon's permission, I'm going to ask the same questions of Mr. Frink.

BY MR. CAMERINO:

Q. Would you give your name and business address for the record.

A. (Frink) Stephen Frink. And, my business is the New Hampshire Commission, at 21 South Fruit Street.

Q. And, what is your position with the Commission and your responsibilities?

A. (Frink) I'm the Assistant Director of the Gas and Water Division, and primarily oversee the natural gas industry.

Q. And, I take it you're familiar with the Settlement Agreement that was filed in this proceeding?

A. (Frink) Yes, I am.

Q. And, you were closely involved with its negotiation and preparation?

A. (Frink) Yes, I was.

MR. CAMERINO: Okay. Thank you. My questions are going to be for Ms. Leary. And, then, if the other witnesses need to provide clarification, we'll proceed to that.

BY MR. CAMERINO:

Q. Ms. Leary, would you summarize the Settlement Agreement. And, let's start with the "Revenue Requirement" portion of the Agreement.

A. (Leary) Well, to begin with, the Settlement does not include a revenue requirement, because the ROE has yet to be determined. This will be addressed in the litigated phase of the proceeding over the next few days.

Q. The Settlement discusses both delivery rates and supply rates. Can you explain why it's broken down in that way and how the Settlement is presented for the Commission's review in that regard?

A. (Leary) Yes. Actually, to take a step back first, the Settlement is basically -- is based on establishing an overall revenue requirement that is just and reasonable, and it's based on the Company's entire rate base and the operating expenses. What we then do is we need to break out that, those components, into the delivery portion and the gas cost portion. That is because some of our traditionally base rate items are now collected, due to unbundling, through our cost of gas factors. The delivery rate revenues will be converted into the base rates in accordance with our rate design principles, and you'll find those in Section II.F of our Settlement Agreement. And, the cost of gas portion of the revenue requirement will form the basis for our indirect gas costs that are recovered through the cost of gas. Those basically will consist of our production and storage costs that are fixed, our miscellaneous overhead, our gas cost related bad debts, and our gas cost related working capital.

Q. If the Agreement doesn't include a revenue requirement or a return on equity, what is there in the Agreement that would enable the Commission to actually come up with a revenue requirement at the end of this case?

A. (Leary) We've actually attached two appendices, Appendix 1 and Appendix 2. And, in there, we have disclosed all the pieces of the revenue requirement that have been agreed upon, basically, the operating revenues, the total rate base. Not only do we show that for the total company, we also break it up into the components, both the delivery components and the gas cost components. And, finally, in those two appendices, and let me just take one step back, Appendix 1 was an example of what the revenue requirement would look like at the Staff's recommended level of ROE, which is 9.01 percent. The Appendix 2 is the revenue requirement based on the Company's revised recommendation for an ROE of 12.25 percent. But, in both those calculations, we do include a section that shows the Commission that, once the decision has been made on the final ROE, all we simply need to do is to take that ROE, put it into the calculation, and a revenue requirement for all the various components will be determined.

Q. And, has that spreadsheet, that's shown in hard copy form in the Settlement, has that been provided in electronic format to the Commission Staff and parties in this case so that they could perform such an operation?

A. (Leary) Yes, it has.

Q. Okay. Now, return on equity is just one part of the overall rate of return. Would you describe the other elements of rate of return in this case and how they were established?

A. (Leary) Yes. The first thing we did is we had assumed a 50/50 capital structure, and that was in accordance with the KeySpan/National Grid merger, the DG 06-107 proceeding. We also assumed a 7.02 percent cost of debt. And, that was based on the resolution in the docket DG 06-122. And, finally, the last piece will be the actual return on equity that will be litigated over the next few days and determined by the Commission.

Q. Where in the Agreement would the Commission find the other ratemaking components, such as rate base or expenses and the like?

A. (Leary) Those will be identified in Appendix 1 and 2.

Q. And, are there -- sorry, go ahead.

A. (Leary) Oh, excuse me. And, they're also identified in the actual Settlement. Under Section II, B and C, we have identified the delivery rate base components. And, again, this is delivery, not total company. And, that component would be $140,239,771. We also have, you know, identified the delivery test year firm revenues, which are $42,224,238. We've also identified the delivery operating income net of taxes, which will be $9,702,677. And, finally, we've identified and agreed upon the tax factor that we'll be using, which will be 1.6814.

Q. And, what about with regard to the indirect gas cost portion?

A. (Leary) Yes. And, in terms of the indirect gas cost portion, for both the production and storage cost and the supply-related working capital, to perform those actual calculations we will also need the approved rate of -- the ROE calculation. So, again, we identified those components in Appendix 1 and Appendix 2. Once the final ROE is identified, we'll be able to calculate out very simply those components.

For the allowance of bad debt on the commodity side, the gas cost related portion, we've kind of resolved a pending dispute based on a four year phase-in that we agreed upon for the bad debt percentage for the gas cost related bad debt. And, this will be in recognition of, you know, some of our higher operating expenses that are going to required of us to achieve a lower level of uncollectibles. So, we're anticipating that the first few years that we try to, you know, increase our uncollectible activity, our bad debt levels may go up. But, eventually, that number will begin to taper down.

Q. There's a separate section that specifies the resolution of the issues on depreciation. Would you just summarize that.

A. (Leary) Yes. Pretty much the depreciation rates were accepted as adjusted, as proposed by the Company in its initial filing, with two adjustments proposed by Staff. The depreciation study also filed in this case showed an over depreciation of its assets. And, we have agreed that the variance in this will be flowed back to customers over a 13.1 year period, rather than the 26 years that originally was proposed by the Company. The Company has also agreed to make several changes in its record keeping for the depreciation purposes.

Q. The Settlement also addressed the filing of a lead/lag study. Could you indicate what that resolution was?

A. (Leary) Yes. Lead/lag only as it relates to the gas cost working capital component, not lead/lag on the O&M. And, what we agreed is that we will update this study every three years for the purposes of adjusting the supply-related working capital.

Q. There were a number of rate design principles that are articulated, and then that will be implemented once the Commission determines the actual revenue requirement. Could you summarize those.

A. (Leary) Yes. First of all, the first rate design principle that we were looking for was we wanted to closely more approximate the marginal cost to serve the customers. However, with consideration for bill impacts for the various rate classes, we also agreed that we wouldn't be able to achieve that, and that we would have to cap the revenue --

(Brief interruption.)

CHAIRMAN GETZ: Continue, Mr. Camerino, please.

MR. CAMERINO: Okay.

BY MR. CAMERINO:

Q. So, Ms. Leary, you had indicated that rate design would move more closely to marginal cost, and then proceed from there.

A. (Leary) Yes. The class revenue targets, however, will be capped at 112 and a half percent of the overall average delivery rate increase. We've also agreed that the volumetric charges, that's the head block and the tail block rates for the residential customers, we will actually reduce that variance between the head block and tail block by about approximately a half. Basically, we were looking -- the reason we were doing this is because we were concerned with the intraclass bill impacts for, let's say, a residential heating customer, and we wanted to more approximate the increase to all residential customers within a rate class, and not have disparities based on customer's usage. So, a larger customer will get a smaller increase, to avoid a larger customer getting a smaller increase, a smaller customer within that rate class getting a bigger increase. For all the other rate classes, the charges will be adjusted proportionately to achieve the class revenue targets, except for the non-heating residential class, which we will now replace the block structure with a flat volumetric rate.

We also agreed that the customer charges for all the rate classes will not exceed a 45 percent increase. And, no customer charge will exceed the customer's cost to serve. And, finally, just like we had for Appendix 1 and Appendix 2, in Appendix 4 and Appendix 5, we actually show the summary of the proposed rate changes, and we also show the class average.

(Brief interruption.)

MR. CAMERINO: Would you like her to keep going?

CHAIRMAN GETZ: Yes. Well, --

BY THE WITNESS:

A. (Leary) The class average bill increase at Company's --

(Brief interruption.)

CHAIRMAN GETZ: Yes, we'll just have to wait a second. Well, off the record.

(Brief off-the-record discussion

ensued.)

CHAIRMAN GETZ: Let's take a very short recess.

(Whereupon a recess was taken at 10:37 a.m. and the hearing reconvened at 10:44 a.m.)

CHAIRMAN GETZ: Mr. Camerino.

MR. CAMERINO: Thank you.

BY MR. CAMERINO:

Q. Ms. Leary, I'm not quite sure where we went off the record. So, I think what I'm going to do is ask you if you would begin with bill impacts for customers, and give the Commission a sense of what those impacts are at the different ROE levels that the parties have taken positions on.

A. (Leary) Okay. Well, as I said, in Appendix 4, we had included the proposed rates and the class average bill impacts based on the 9.01 percent ROE from the Staff. Appendix 5 is the identical schedules based on the 12.25 percent ROE that was recommended by the Company. And, just to give you an overall range, the first thing I looked at is the increase based on the distribution portion only on the customer's bill. So, again, this is not the total bill impact. This is just for the distribution component. And, the range -- And, I looked at a residential heating customer. And, at the 9.01 percent ROE, a typical residential heating customer would get, on the distribution only, about a 7 percent increase, versus a almost 16 percent increase at the 12.25 percent ROE. And, as a rule of thumb, to judge these two ranges, just to let you know, every half a percent change in the ROE equates to approximately a 1.4 percent change on the percent increase in the distribution rate only.

Now, I just want to give you a little sense of what this means in terms of dollars for residential heating customers. And, for a typical residential heating customer, at the 9.01 percent ROE, they would experience on average about a $2.87 monthly increase, which equates to about $34.40 on an annual basis. At the 12.25 percent ROE level, a typical average residential heating customer would see about a $5.43 monthly increase, which equates to about $65 on an annual basis. And, again, as a rule of thumb, for every half a percent change in the ROE will result in about a 40 cents per month charge variance for a residential heating customer.

I also wanted to point out to everybody

right now that, even at these two ranges, the 9.01 percent and the 12.25 percent, these are slightly lower than the temporary rates that we currently have in effect. Because, when we had put the temporary rates in effect back in August, what we had done was we had taken the whole $6.6 million rate increase that was approved on a temporary basis, and we had put that all to the distribution rate component. So, that was about a 16 percent increase. So, in total, on a class average, even at these two ranges, on a class average, there should be no rate increases. Because the actual bill -- the rate design changed slightly, there's no guarantee that no individual customer would not get a rate increase on either scenario because of the way we've designed these rates a little bit differently.

Finally, as I said, I was just talking on distribution rates. If I then look at the total bill increases, you know, since the distribution rate only represents about 20 to 25 percent of the customer's bill, the total bill increase will be significantly less. So, at the 9.01 percent ROE level, a typical residential heating customer would see about a 2.6 percent increase, and at the 12 percent ROE level would equate to about almost a 5 percent increase in their total bill. And, on a total bill basis, every half a percent change in the ROE will result in about three-tenths of a percent change in the total bill impact.

Q. Okay. The Settlement Agreement also addresses a number of low income issues. Would you just summarize those?

A. (Leary) Yes. The parties have agreed that they will meet to discuss whether or not we want to have a further increase in the low income discount. The parties have also agreed to meet to discuss whether or not there can be some improvement to the outreach efforts to determine whether there are additional customers who may qualify for the low income rate, but are currently not on the rate. And, finally, the Company will meet with Ms. Locke's counsel, the NHLA, to discuss its plans for enhanced collection efforts.

Q. Near the end of the Settlement Agreement there are a number of very specific tariff changes that are discussed. Would you just briefly summarize those.

A. (Leary) Yes. The first change was the main extension policy. The Company and the parties have agreed that we're going to eliminate the provision for the 80 feet or free -- 80 feet or less no charge to customers, by deleting Section 7(B) of NHPUC Number 5, and amending

Section 7(C) so that it applies to all customers. Therefore, we will no longer be giving the 80 feet free to residential customers. In all other aspects, the main extension policy shall remain unchanged. We've also included in Appendix 6 a revised tariff language to reflect these changes.

Another change that we made is we've agreed that we're going to combine our G-63 and G-54 rate classes into one single rate class. This is basically because right now we only have one customer on our G-54 rate. And, it's inappropriate to have a rate classification with just one customer on it.

We have also agreed that the bad debt -- excuse me, the bad check charge will increase from $5.00 to $15.00. We have also agreed that, currently, with our 280 day and our interruptible transportation rates, there are service agreements attached to those rates. They are -- They duplicate the terms and conditions that we have for all customers. So, we're going to eliminate, not the 280 day and the interruptible rates, but we're going to eliminate those service agreements, and just -- because they already reference the terms and conditions for the Company.

Q. When you say "eliminate the service agreements", you mean eliminate them from the tariff document?

A. (Leary) Yes, we are. We're also going to update the tariff to reflect the name "National Grid". Regarding the unauthorized gas use, we are going to increase the penalty for unauthorized volumes of gas taken by a customer during periods of supply and capacity curtailment from $1.50 per therm to five times the daily index. And, that can be seen on Page 94 of the tariff.

And, finally, we're going to change -- we're going to modify the availability clause of our R-1, which is our residential non-heating class. The reason we have to change the clause is because the rate design that we've come out with now for the R-1, by going to the flat rate, is actually less than the rates on our -- the rate design for our R-3. So, we're concerned that customers, who may decide to put in heating equipment, may not notify the Company, because they will see that it's advantageous for them to remain on the R-1 rate. So, we put some language in there talking about "total usage" and "load factor", so that the Company can now kind of try to start to police this rate and make sure that customers do not try to take advantage of that lower rate when they should not be on it.

Q. The Settlement Agreement makes some reference to two other proceedings that are currently open before the Commission. Can you indicate what has been agreed to among the parties related to that?

A. (Leary) Yes. The two dockets that Mr. Camerino is referring to is the DG 07-072, which dealt with the interest rate on supply-related cash working capital, and the Company has agreed to the outcome of that case, and to use the prime rate when calculating the gas supply working capital. And, also on -- the other docket was DG 07-050, that dealt with the transition regarding the use of billed -- going from billed revenues to accrued revenues in the calculation of the interest on the cost of gas -- deferred cost of gas reconciliation balances. And, the Company has agreed to adopt Staff's methodology. There will be separate settlement agreements that will be filed in those two proceedings.

Q. Finally, the Settlement discusses rate recoupment and the handling of rate case expense. Would you summarize the treatment of those items.

A. (Leary) Yes. As you know, there will be a difference between the permanent rates and temporary rates that will need to be either recovered or returned to ratepayers. What we've agreed to do is we will calculate that difference back down -- back to August 24th of 2008. And, we will, once we identify the difference between the revenues that were generated based on the temporary rates, versus the revenues that will be based on -- generated based on the permanent rates, we will take that amount, that variance, and we will refund it to all customers through our LDAC on a volumetric basis over a six month period. The only caveat to that is that amount, that variance, will be netted against our rate case expense. So, one number will be either returned or refunded or collected from all ratepayers.

MR. CAMERINO: Thank you. That completes the Company's direct examination.

CHAIRMAN GETZ: Mr. Feltes.

MR. FELTES: Thank you, Mr. Chairman.

CROSS-EXAMINATION

BY MR. FELTES:

Q. Ms. Leary, you spoke with Mr. Camerino about Appendix 4 and 5 to the Settlement Agreement concerning rate impacts. Do you remember that conversation?

A. (Leary) Yes.

Q. Okay. And, before the hearing, Ms. Leary, I handed you two exhibits concerning rate impacts.

MR. FELTES: And, Mr. Chairman, members, I'd like to approach to hand them out.

(Atty. Feltes distributing documents.)

BY MR. FELTES:

Q. Ms. Leary, do you have those two exhibits before you?

A. (Leary) Yes, I could.

Q. Have you seen them before?

A. (Leary) Yes, I have.

Q. Can you explain what those are?

A. (Leary) These are a bill frequency analysis for each individual rate class, both showing at the winter rates and the summer rates. And, basically, these show at various consumption levels what the rate impacts will be for residential nonheating customers, residential heating customers, and all the various commercial/industrial rate classes. This is -- One exhibit, I'm not sure which, well, one exhibit is based on the bill impacts based on an ROE using the 9.01 percent, the other one is based on an ROE at the 12.25 percent.

CHAIRMAN GETZ: Mr. Feltes, are these included in any of the exhibits that have been previously marked? Do you want to identify these separately?

MR. FELTES: We'd like to identify them separately.

CHAIRMAN GETZ: Okay. We'll mark the document that's titled "Bill Impacts at an ROE of 9.01%" as "Exhibit 42" for identification. And, as "Exhibit 43" will be the identification for "Bill Impacts at an ROE of 12.25%".

(The documents, as described, were herewith marked as **Exhibit 42** and **Exhibit 43**, respectively, for identification.)

MR. FELTES: Thank you.

BY MR. FELTES:

Q. All right. Ms. Leary, if you don't mind, can we open to Page 3 of both exhibits, Exhibits 42 and 43? Are you there?

A. (Leary) Yes, I am.

Q. Thank you. Am I correct that Page 3 of Exhibit 42 evaluates the rate impacts for R-3 residential winter heating, Page 3 of 24, excuse me, of Exhibit 42, evaluates the rate impacts at various usage levels for the R-3 winter heating season?

A. (Leary) That is correct.

Q. And, that is Exhibit 42. Is that an ROE of 9.01 percent?

A. (Leary) That is correct.

Q. And, a similar analysis, with all the same assumptions, except for a 12.25 ROE, is found on Page 3 of 24 on Exhibit 43, is that correct?

A. (Leary) That is correct.

Q. So, let's just walk through the information that's provided. And, let's just pick Page 3 of Exhibit 42, which is an evaluation of rate impacts at an ROE of 9.01 percent. Let's start with the bottom third of the page. On the left column on the bottom third of the page is the word "Customer Charge", and to the right of that it says "9.88/Customer". Did I read that correctly?

A. (Leary) That is correct.

Q. And, is that the Customer Charge under the current R-3 permanent rates for R-3 winter heating season?

A. (Leary) That is correct. Those are the rates that were in place before the temporary rates were approved back in August 24th of 2008.

Q. Okay. Thank you. Ms. Leary, just skipping to the right, it has "Proposed Rate", "Customer Charge", and it says "13.76". Is that the proposed Customer Charge at an ROE of 9.01 percent for R-3?

A. (Leary) That is correct.

Q. Thank you. And, underneath both of those customer charges are the per therm rates for the head block and the tail block, is that correct?

A. (Leary) That is correct.

Q. And, under the existing permanent rate design for R-3 winter heating season, and also under the proposed rate for R-3 winter heating season, is that right?

A. (Leary) That is correct.

Q. Okay. Going up to the top of this Bill Impacts Analysis, again still on Page 3 of 24, Exhibit 42. Let's start with the first column to the left, just to sort of explain the table. The first column on the left is entitled "Sales therm". Is that the usage levels?

A. (Leary) That is correct.

Q. And, can you describe the next column, the second column from the left and what that illustrates?

A. (Leary) Okay. The next levels are the calculation of a rate, let's say, if we take the first line item, at zero, zero therm levels, that we have two components. We're going to have the base rate component, which would be the multiplication of those therm levels based

on customer charge, head blocks, and tail block rates. The next component is total revenue, which means it would include both the cost of gas factor and the LDAC.
Q. Okay.
A. (Leary) We then, going across the board, we then show that exact calculation based on the proposed rates. And, then, we go right across the board showing the variances between the components, both on a dollar basis and on a percent basis.
Q. Ms. Leary, am I correct in reading the far right column, underneath "Difference with CGC Revenues", and the phrase "Percent Rate", that column indicates the percent rate increase by usage for the R-3 winter heating season at a 9.01 ROE?
A. (Leary) That is correct. That would be the total bill impact, the column all the way over to the right.
Q. And, that same analysis is performed on Page 3 of 24 in Exhibit 43, but at a 12.25 percent ROE?
A. (Leary) That is correct.
Q. Let's look quickly at sales therm usage level of 50 therms. And, does this assume that the total bill impact would be a person consuming 50 therms per month?
A. (Leary) That is correct.
Q. And, if we shoot over to the far right-hand column on

Page 3 of 24 of Exhibit 42, with an ROE of 9.01 percent, a person that consumes an average 50 therms would have a bill impact increase of 2.66 percent, is that right?

A. (Leary) That is correct.

Q. And, now looking at Page 3 of 24 of Exhibit 43, for a similarly situated customer who consumes on average 50 sales therms, 50 therms, if you look at the far right-hand column, with an ROE of 12.25 percent, their bill would go up over permanent rates that are existing of 5.37 percent, is that right?

A. (Leary) That's correct. Over the permanent rates, but not the rates that are currently existing, in place right now, not the temporary rates that are in place.

Q. Ms. Leary, just going down to "75" usage, 75 sales therms, on Page 3 of 24 of Exhibit 2 -- 42, excuse me, at 75 therms, at an ROE of 9.01, this customer would see a bill impact increase of 1.12 percent increase, is that correct?

A. (Leary) That is correct.

Q. And, going over to an ROE of 12.25 percent, in Exhibit 43, Page 3 of 24, a person who consumes 75 therms on average would see a bill increase of 3.44 percent, is that right?

A. (Leary) That is correct.
Q. A similar illustration is at 100 therms of usage, on Page 3 of 24, Exhibit 42, of an ROE of 9.01 percent, and that person would see a bill impact increase of 0.29 percent, is that right?
A. (Leary) That is correct.
Q. And, just going over to Exhibit 43, at 100 therms, that person, at a ROE of 12.25 percent, would see a bill impact increase of 2.41 percent?
A. (Leary) That is correct.
Q. Okay. Thank you, Ms. Leary. I have just a couple more questions. Earlier you indicated that the proposed rates are an overall decrease from temp. rates. Can you confirm that the temp. rates were based on the current rate design, not the proposed rate design?
A. (Leary) That is correct. In the temporary rate design -- excuse me, with the temporary rates, we took the currently approved rate design and just escalated each component, Customer Charge, head block, and tail block, by the overall increase, which turned out to be approximately 16 percent.
Q. Thank you, Ms. Leary. One last question. If you can turn to Page 8 of the Settlement Agreement, and let me know when you make it there.

A. (Leary) I am there.

Q. Thank you. Reading from Item 2 on Page 8, first sentence: "While not all parties agree that marginal costs should be used to allocate class revenue requirements or to design rates, the rate design in this case will more closely approximate the marginal costs to serve as calculated by the Company." Did I read that correctly?

A. (Leary) Yes, you did.

Q. And, do you agree that not all parties agree that marginal costs should be used to allocate class revenue requirements or design rates?

A. (Leary) Yes, we are aware from the prefiled testimony of both the OCA and NHLA that not all parties agree that that's the appropriate methodology.

MR. FELTES: Thank you. No further questions.

CHAIRMAN GETZ: Thank you. Ms. Hatfield.

MS. HATFIELD: Thank you, Mr. Chairman. Good morning, Ms. Leary.

WITNESS LEARY: Good morning.

BY MS. HATFIELD:

Q. I have a question for you also on Page 8 of the

Settlement Agreement, which is Exhibit 41. If you could look at Paragraph 4.

A. (Leary) Yes.

Q. Could you just look at the second sentence and describe the impact of reducing the current declining block price differential by half on the impact on customers?

A. (Leary) Yes. I mean, the reason, as I said earlier, the reason why we reduced the disparity between the head block and the tail block was we were concerned with the intraclass bill impacts that would occur. So, what we had done is, by reducing this variance between these two components, the overall rate increase for like a typical residential heating customer would be similar, you know, it would not vary greatly, depending on the customer's usage. We had looked at these bill impacts that you saw in Exhibit 42 and 43 that the NHLA had just walked us through, and we were concerned, when we looked at the total impact, and the parties were concerned, that there was too much disparity between a low use customer and a high use customer.

MS. HATFIELD: Thank you very much. No further questions.

CHAIRMAN GETZ: Thank you. Mr. Damon.

MR. DAMON: Thank you.

BY MR. DAMON:

Q. As I understand it, the Partial Settlement Agreement remains valid regardless of what decision the Commission makes on return on equity, is that correct?

A. (Leary) That is correct, as long as they approve the Partial Settlement that we see here today, yes.

MR. DAMON: No further questions.

CMSR. BELOW: Yes.

BY CMSR. BELOW:

Q. You're distinguishing between the R-1 non-heating residential rate and the R-3 and 4 rates for residential heating. And, I was just curious, I think you were making a clarification with the tariff as part of the Settlement or allowed that possibility. And, there's a reference to "gas space heating equipment". And, I was just curious, as there's a tendency to use gas hot water heaters, high-efficiency gas hot water heaters for space heating, if you have accommodated that or would you consider a gas hot water heater that's used for space heating to be gas space heating equipment?

A. (Leary) A gas hot water heater that is used for --

Q. Space heating. Such as a condensing hot water heater high output, it's something that contractors are doing these days, particularly with highly insulated homes.

A. (Leary) Well, I think that what we're looking for is really the purpose, whether it's a gas hot water heater or if it's a boiler or furnace, the purpose is "what are you using it for?" If it's using it to heat your home, then you would be on our residential heating rate. More than what appliance you're using, how you're using an appliance.

Q. Right. That was my question.

A. (Leary) Yes.

Q. It's the intent of the tariff is to address how it's used, and if you've accommodated this changing use of an appliance that traditionally was just used for hot water heating, which would be just an R-1 rate, if there was no space heating. Is that correct?

A. (Leary) Well, I mean, I wonder if we would classify that, even though it's a hot water heater that's used for -- that's used for space heating, then it would be classified as, based on the availability clause in our tariff, we could classify that as a R-3 customer, a space heating customer.

CMSR. BELOW: Okay. Thank you.

CHAIRMAN GETZ: All right. Any further questions for the panel?

MR. CAMERINO: I just have one clarification.

CHAIRMAN GETZ: Mr. Camerino.

REDIRECT EXAMINATION

BY MR. CAMERINO:

Q. Ms. Leary, and you may have said this, but Mr. Feltes was taking you through Exhibits 41 **[42?]** and 42 **[43?]** for the bill impacts. And, that document, the first set of rates is entitled "Present Rate", do you see that?

A. (Leary) Yes, I do.

Q. Okay. When that document says "Present Rate", am I correct that it's actually referring to the rates that were formerly in effect?

A. (Leary) That is correct. And, I think he pointed that out at the beginning. Those are not the temporary rates that are currently in effect. Those are the rates that were in effect during the test year.

Q. And, I take it you could rerun this type of schedule, if you were to compare it to the temporary rates that are currently in effect?

A. (Leary) Yes, we could.

Q. I'm not asking you to do that, though.

A. (Leary) Thank you.

Q. I want to live after today's hearing. And, just give us a rough sense of what would happen to these differences, would they -- and I'm not looking for actual numbers, but just a sense of magnitude or positive or minus, what would happen if we reran it --

A. (Leary) Well, I think --

Q. -- if we reran it comparing it to what's currently in effect?

A. (Leary) Yes. I think that, on a -- as I mentioned in the direct testimony, even at the 12.25 percent ROE, the total increase will be less than what was in effect on the temporary rates. However, the problem that we have is the temporary rates were based on current rates escalated, each component was escalated by the overall increase of 16 percent. And, as an example, let's look at the residential heating customers. I think we are close to $12 for a Customer Charge. The rates that we're proposing today, either at the 12.25 percent ROE or even at the 9.01, is closer to $14. So, even though, compared to the temporary rates, in total we should not see an increase, there will be small increases for lower use customers based on that.

MR. CAMERINO: All right. Thank you. And, then, Mr. Chairman, I just have one clarification for the record. In this Settlement Agreement, we actually attached the tariff provision for the main extension policy, which is Appendix 6. And, I just want to make clear that we believe, in the compliance filing portion of this proceeding, there are probably some minor non-substantive wording changes or formating changes, collapsing sections together, that type of thing, that will need to occur. And, so, we wouldn't want the order to reflect that, because the tariff provision is actually in the Settlement Agreement, that the final language needs to be verbatim, we would obviously work that out with Staff and the parties, but we do expect some non-substantive changes there.

CHAIRMAN GETZ: Okay. Thank you.

MR. CAMERINO: Thank you.

CHAIRMAN GETZ: Anything further? Mr. Damon.

MR. DAMON: Yes, I have a few questions for Mr. Frink. It's more in the nature of direct examination.

DIRECT EXAMINATION

BY MR. DAMON:

Q. Mr. Frink, would you state what concerns the Staff had regarding the Company's rate filing?

A. (Frink) Staff's primary concerns rated to the return on equity, construction work in progress, bad debt, cash working capital, the amortization of the depreciation reserve surplus, a pension reconciliation mechanism proposal, rate design, and the proposed line extension policy.

Q. Does the Settlement Agreement -- the Partial Settlement Agreement address the concerns that Staff raised?

A. (Frink) Other than the ROE, all of Staff's concerns were addressed.

Q. And, what needs to be done to finalize the revenue requirement for delivery service?

A. (Frink) At this point, there's a minor difference, but that's being worked out between the Company and Staff, and it will have a negligible, if any, impact on rates. It's more of a compliance filing issue.

Q. Okay. I think the question was actually maybe something that was addressed to Ms. Leary. She described how the revenue requirement could be derived from the information in the Settlement Agreement, and then plugging in an ROE number, correct?

A. (Frink) Correct.

Q. So, that still needs to be done?

A. (Frink) Yes, it does.

Q. Okay. And, could you briefly describe how the Settlement addresses the Staff's concerns?

A. (Frink) Well, in the filing, there were projects identified as "construction work in progress" and "jobs in progress", which were actually placed into service during the test year, and therefore don't violate the state's anti-CWIP statute. And, accordingly, Staff agreed to include them in rate base, which is encompassed in the Settlement.

For bad debt, there were two parts to bad debt. With regard to delivery related bad debt costs, the Settlement establishes a bad debt percentage of 1.75. That's substantially less than what the Company is currently experiencing. In order to achieve this percentage, the Company will need to hire additional collection personnel. The Settlement revenue requirement provided for the recovery of increased collection costs. With regard to commodity costs, the Settlement establishes a four year phase-in period, beginning with a bad debt percentage of 2.54 percent and ending with a 1.75. This phase-in of the commodity-related bad debt percentage recognizes it will take some time to reduce the write-offs.

With regard to cash working capital, the cash working capital requirement for delivery and commodity services will be included in rate base and in the cost of gas respectively at the levels recommended by Staff.

Amortization of depreciation surplus, there's a surplus of over $12 million, and it's going to be returned to ratepayers at about a million dollars a year. And, while eliminating that reserve will take longer than Staff normally has -- Staff's agreed to in other proceedings, the Settlement Agreement recognizes the unusual size of the surplus.

The pension reconciliation mechanism, and the filing proposed a mechanism that would adjust rates based on the actual pension and related costs experienced each year. That mechanism has been eliminated in this provision -- in this Settlement.

For rate design, in order to reflect the results of the Company's cost of service study, some rate classes will be subject to higher rate increases than others. However, no class will experience an increase in revenue requirements greater than 112.5 percent of the overall average rate increase. A significant percentage of the increased revenues will be collected through higher customer charges.

Regarding the line extension policy, the Settlement retains the current line extension policy with one exception: Residential customers within 80 feet of an existing main will no longer be guaranteed service, but will be subject to a revenue -- will no longer be guaranteed free service, but will be subject to the revenue test that applies to non-residential service. In the limited instances where four years of projected revenues does not exceed the expected capital cost, a customer contribution will be required. The revenue test reduces the risk of subsidization of new customers by existing customers.

Q. Do you have other comments regarding the Settlement Agreement?

A. (Frink) Yes. The adjustments made to rate base, revenues and expenses reflected in the Settlement are based on sound ratemaking principles and have been appropriately allocated between delivery and commodity services. Although the outcome of the Commission's deliberations on return on equity will impact the return on rate base, it will not impact the size of the rate base. The rate base adjustments encompassed in the Partial Settlement Agreement are appropriate and were made independent of the debate over the return on equity.

Q. In conclusion, in Staff's view, is the Partial Settlement Agreement consistent with the public interest?

A. (Frink) Yes, it is.

MR. DAMON: Thank you.

CHAIRMAN GETZ: Mr. Camerino, any questions for Mr. Frink?

MR. CAMERINO: I have a couple.

CROSS-EXAMINATION

BY MR. CAMERINO:

Q. Mr. Frink, in your summary, you identified what you said were the resolution of certain issues, and I won't take you through each one. One of them comes to mind, though, for example, the bad debt rate for the delivery portion. And, not all of those items that you discussed are spelled out in the Settlement Agreement, correct?

A. (Frink) Correct.

Q. And, that's in part because the parties actually don't agree on exactly what those components are, although they agree on the total outcome of the case. Is that a fair statement?

A. (Frink) It is.

Q. And, it's the parties' intention that it's the provisions of the Settlement Agreement, once approved by the Commission, that would be binding on them and be implemented into rates. And that, to the extent that you identified resolution of issues that are not spelled out in the Settlement Agreement, those are not binding or -- nor precedential, is that a fair statement?

A. (Frink) That is correct, yes.

Q. Okay. So, you're really articulating kind of how the Staff was conceptualizing the resolution that it reached?

A. (Frink) Right. I was trying to -- well, I was simply trying to explain that the concerns raised by Staff have been satisfactorily addressed. And, some of the details, for instance, of bad debt is contained in the Settlement Agreement. But, you're right, overall, the Commission -- the Settlement doesn't tie the Company to specifics other than as explicitly stated in the Agreement.

MR. CAMERINO: Right. Thanks very much.

CHAIRMAN GETZ: Mr. Feltes?

MR. FELTES: Nothing further. Thank you.

CHAIRMAN GETZ: Ms. Hatfield?

MS. HATFIELD: One moment please.

(Short pause.)

MS. HATFIELD: Thank you.

BY MS. HATFIELD:

Q. Mr. Frink, I believe in response to a question from Mr. Damon, regarding what needs to be done to finalize the final rates that will be approved by the Commission, you referenced a minor discrepancy that was being worked out between the Company and Staff. I'm wondering if you can describe what that is and also explain how that fits into the Settlement that the Commission is considering?

A. (Frink) As I tried to articulate, there's a -- it's more of a compliance issue. Mr. McCluskey, a utility analyst, is working with one of the Company's representatives. And, this Settlement Agreement, Partial Settlement Agreement, once a rate of return on equity is determined, we'll establish a revenue requirement, which is then recovered through the rate design process using a functional cost of service study. And, it is that second step where Mr. McCluskey and the Company have been working on establishing that the rate design is getting exactly to that number that is the revenue requirement. And, they're extremely close, at this point it's a matter of thousands of dollars on over a 5 million -- on approximately a $5 million revenue requirement or higher. And, so, I don't imagine, if you were to -- that difference would even impact the rate at all. But it's one minor item that the Company and Staff had agreed that they work out when the time comes.

Q. And, does the difference come down to how the Company recovers the costs, whether it's through distribution rates or through the cost of gas rate?

A. (Frink) Yes, this -- that pertains to the delivery rate.

MS. HATFIELD: Mr. Chairman, it might be helpful for the parties just to take a brief recess to discuss this issue off the record. Because my understanding is that the OCA just isn't aware of a previous discussion, but I don't think -- it sounds, from Mr. Frink's testimony, that this doesn't have an impact on the Settlement or on the final revenue requirement. And, in fact, we don't need to do it right now. We can do it later off the record.

CHAIRMAN GETZ: Well, why don't we -- this is pretty much the substance of your questions for

Mr. Frink?

MS. HATFIELD: Yes.

CHAIRMAN GETZ: Why don't we complete the panel, and then we'll take a brief recess. You can discuss this issue, report back any issues that may persist when we come back on the record. But, then, I presume that, when we come back on the record, we'll be hearing from the Company's return on equity witness, is that correct?

MR. CAMERINO: That's correct.

CHAIRMAN GETZ: Okay.

MS. HATFIELD: Actually, if I could just ask Mr. Frink one last question.

BY MS. HATFIELD:

Q. Would Staff be willing to include the other parties in the discussions related to this matter with the Company?

A. (Frink) Certainly.

MS. HATFIELD: Thank you.

CHAIRMAN GETZ: Okay. Is there anything? Commissioner Below, do you have any questions?

CMSR. BELOW: No.

CHAIRMAN GETZ: Anything else for the panel?

(No verbal response)

CHAIRMAN GETZ: Okay. Hearing nothing, then the panel is excused. And, we'll take a very brief recess and resume with the Company's return on equity witness.

(Whereupon a recess was taken at 11:25 a.m. and the hearing reconvened at 11:45 a.m.)

CHAIRMAN GETZ: Mr. Camerino.

MR. CAMERINO: Thank you. The Company's prepared to -- well, first of all, I think I just want to confirm that Ms. Hatfield has resolved whatever remaining issue there was related to the questions for Mr. Frink.

MS. HATFIELD: Yes. Thank you. Mr. Chairman, we did speak with Staff and the Company at the break. And, it's our understanding that the ongoing conversation between Staff and the Company will not result in any change to any of the Settlement terms as proposed to the Commission.

CHAIRMAN GETZ: All right. Thank you.

MS. HATFIELD: Thank you.

MR. CAMERINO: So, the Company is prepared to proceed on the litigated portion of this docket on return on equity. And, just to clarify procedurally for the Commission, we plan to present Paul Moul as the witness on direct, and in that he will present both his direct and rebuttal testimony. Then, it's my understanding that the Staff will present its witness. And, then, the Company will present Mr. Stavropoulos as a rebuttal witness. We're doing that for two reasons. One is, his ROE testimony is only in his rebuttal testimony, not in direct. There is about a page of it there. The other, frankly, is a scheduling reason, which is he won't be available until tomorrow either. But we would expect his testimony to be relatively brief. So, that's the order that we plan to proceed in.

CHAIRMAN GETZ: Okay. And, then, followed by -- and that will be all the witnesses on ROE?

MR. CAMERINO: That's my understanding. That the other parties do not have witnesses on return on equity.

CHAIRMAN GETZ: All right. Please proceed.

MR. CAMERINO: Thank you. The Company calls Paul Moul.

(Whereupon **Paul R. Moul** was duly sworn and cautioned by the Court Reporter.)

PAUL R. MOUL, SWORN

DIRECT EXAMINATION

BY MR. CAMERINO:

Q. Okay. Mr. Moul, would you give us your name and business address for the record please.

A. Yes. My name is Paul Moul. It's spelled M-o-u-l. And, the way I pronounce it, it rhymes with the word "owl". It's a tough one to pronounce. My address is 251 Hopkins Road, Haddonfield, New Jersey 08033.

Q. And, would you just identify your employer and what you do for that employer?

A. Yes. I'm the Managing Consultant at the firm P. Moul & Associates, an independent financial and regulatory consulting firm.

Q. Okay. And, your testimony today, I take it's going to concern return on equity?

A. It does.

Q. Okay. And, you've submitted written direct and rebuttal testimony in this proceeding?

A. Yes, I did.

Q. Okay. And, I want to show you those documents, which we've previously marked as "Exhibit 9", which is your February 25, 2008 direct testimony, and "Exhibit 33", which is your December 15, 2008 rebuttal testimony. And, ask you if these documents were prepared by you or under your direction?

A. Yes, they were.

Q. And, subject to any corrections that you may be about to make, are they true and accurate to the best of your knowledge and belief?

A. They are.

Q. And, if I were to ask you these questions today, subject to the update in your rebuttal, your responses would be the same, I take it?

A. Yes, they would.

MR. CAMERINO: Okay. For the Commission's information, just for clarity of the file, the document that we have marked as "Exhibit 9" has two pages inserted to it that were left out of the original filing. That's Page 6, down in the middle of the page, which on your copy should be numbered as an absolute page number "5A". I just want to make sure you have that, because, if you don't, we can supply those to the Commissioners. And, I think the Clerk will need, again, on Page 6 of Exhibit 9, I think the Clerk will need to insert a "5A" in the lower right-hand corner so that the absolute numbering is there.

CHAIRMAN GETZ: Yes, I don't see those pages here.

MR. CAMERINO: And, we can provide those. Those were submitted shortly after the initial filing. The other page is, if you look on Page 17, down in the middle of the bottom of the page, that should be numbered in the lower right-hand corner as "15A". Sounds like the Commissioners do not have those pages?

CHAIRMAN GETZ: Not inserted in the originals.

MR. CAMERINO: Okay. Well, we'll provide those during the lunch break.

BY MR. CAMERINO:

Q. So, Mr. Moul, with those page numbering changes, do you have any corrections to your testimony?

A. Yes, I'm aware of one correction we need to make at this time. And, it relates to what is shown as Page "12" in the center of the sheet, but Page "11" in the lower right-hand portion of the sheet. And, the correction I'd like to make is on Line 18.

MR. DAMON: Which exhibit?

WITNESS MOUL: That's on 9, I'm sorry.

BY MR. CAMERINO:

Q. So, that's in your direct testimony?

A. Correct.

CHAIRMAN GETZ: And, you're talking

about the section of the percentages of operations for the gas utility business, I take it?

WITNESS MOUL: Yes, Mr. Chairman.

BY THE WITNESS:

A. What I'm looking at there is the first percentage, after the word "revenues", it says "70 percent"; the correct number is "66 percent".

BY MR. CAMERINO:

Q. And, that correction was previously provided to the parties in the response to a data request?

A. It might have been. Certainly, the data request contained the correct percentage. And, by looking at the data request response, that triggered the correction that we made here this morning.

Q. Thank you. All right. I'd like to begin by just asking if you would summarize your educational and professional experience. And, let's just start with some of your prior employers and what that work entailed?

A. Yes. I've been in the public utility business approximately 35 years. I began my employment with American Water Works Service Company in the Eastern Regional Treasury Department, where I performed treasury duties for the 13 operating subsidiaries of

American Water Works here in New England, including one of the subsidiaries they had in New Hampshire. After a couple of years with American Water Works, I went on to work for Betz Environmental Engineers. There I provided a number of different financial studies for principally municipally owned water and wastewater utilities. Subsequently, I went to work for Associated Utility Services in 1974, and was at AUS for 20 years, doing much of the same work that I'm doing today as an independent consultant. I formed my own consulting firm in 1994, and for the last 15 years have been doing this type of work for both investor-owned utilities and for other entities.

Q. And, I take it you've testified in regulatory proceedings on prior occasions?

A. Yes, many times. I've testified -- At the time I prepared the direct testimony, the count was 30 regulatory agencies, both at the state, federal and municipal level. It's now increased to 35. And, I've appeared in over 200 rate cases. And, of course, I do other types of consulting work as well.

Q. And, have you -- has your work been just for investor-owned utilities or have you done work for other entities as well?

A. No, I have done work for other entities as well. I've been hired has a consultant to the Staff of the Delaware Public Service Commission. I've done quite a bit of work for other municipally owned or publicly owned utilities. I've represented the County of Baltimore in a water rate dispute with the City of Baltimore representing the customers of the Metropolitan District. I've done a similar type of work in Bucks County, Pennsylvania, and for other entities as well.

Q. And, how about in terms of this particular industry, the gas industry, have you worked on a number of occasions on gas utility issues?

A. Yes. I have a long history of doing work in the natural gas industry, both at the distribution level and also at the interstate pipeline level. And, of course, my consulting experience goes to the electric utility industry and other types of regulated entities as well.

Q. And, I take it that the detail behind your experience is set forth in Attachment PRM-1? Is that the right attachment to your direct testimony? It looks to me like it starts on absolute Page 43 of what has been marked as "Exhibit 9"?

A. Yes, that's correct.
Q. Okay. Mr. Moul, --

MR. CAMERINO: And, Mr. Chairman, we haven't done this in a long time, but just to be careful, I would ask that Mr. Moul be qualified to testify as an expert in this proceeding?

CHAIRMAN GETZ: Any objection to that, qualifying Mr. Moul as an expert for the purposes of this proceeding and his testimony?

(No verbal response)

CHAIRMAN GETZ: And, we recognize him as such.

MR. CAMERINO: Thank you.

BY MR. CAMERINO:
Q. Mr. Moul, I'd like you to summarize your testimony. And, if you would begin with the return on equity that you're recommending in this case.
A. I originally conducted my study of the cost of equity using market evidence through calendar year-end 2007. And, it took a while to prepare the testimony, but the testimony was ultimately filed in February 2008. So, it's been nearly a year since the direct testimony was prepared. And, in the direct testimony, I arrived at a recommended 11.5 percent rate of return on common

equity, using the four approaches that I use to measure the cost of equity.

So, so much time had elapsed, and so much turmoil developed in the capital markets since the direct testimony was filed, at the point where we filed the rebuttal testimony, we took the occasion to update those methods and methodologies. The updates were applied with the very same companies, the very same methods, the very same types of sources, but with more current information. And, we filed that update with the rebuttal on February [December?] 15th, 2008. So, that's ten months later. And, in the update, due to all the turmoil that's going on in the capital markets today, I increased my recommended rate of return on common equity to 12 and a quarter percent.

Now, in both the original and the update, I used four measures to measure the cost of equity: The Discounted Cash Flow Method, which the Commission is very familiar with; the Capital Asset Pricing Model, which the Commission is also very familiar with; the Comparable Earnings Method; and the Risk Premium Method. And, as I indicated in both my direct and rebuttal testimony, each of these methods has simplifying assumptions, which do not necessarily conform with the way investors behave in the capital markets when they purchase stocks, or bonds, for that matter. And, because of the simplifying assumptions, we find that each method has, to varying degrees, a certain amount of infirmities in it. Because we're trying to measure something that is not directly observable in the capital markets, the cost of equity.

And, if you want to know what the interest rate on a bond is, just look it up in the paper or the Internet and you can see what the yield on a bond is. But the cost of equity is not directly observable. That's why we need to use models. With hard data, but the models themselves have simplifying assumptions or omissions that bear on what investors perceive to be important in their decision to buy, hold or sell a stock, and what the models themselves attempt to deal with. And, because of the limitations and infirmities in each of the models, I feel it's important to look at a variety of models to try to get a handle on the cost of equity. Because the methods we use to measure the cost of equity, they seem very scientific, there are specific inputs. But, when push comes to shove, the cost of equity is more of an art than it is a science. Even though we have a lot of empirical data to look at, there is a considerable amount of judgment that goes into coming up with the final recommendation that may or may not be reflected in the results of the models.

Q. Okay. So, I think to some extent you touched on this, but what is it that causes you to rely on multiple models, rather than a single model?

A. Well, one of the advantages of looking at multiple models is, we can get a sense of whether the result of a particular model is an outlier or not. By looking at a variety of models, we can look at the results of each, and then make a determination whether one particular model is giving a rational, reasoned assessment of the cost of equity by reference to other models. It brings perspective to the results of any one of the models.

Q. Okay. I'm going to ask you a couple of other questions about those infirmities, but first I just want to get on the record, could you just provide the results of each of the models that you used and how they affected your recommended return on equity in this case?

A. Oh, sure. And, what I would do is is focus on the updates, because that's, at this juncture, the most important data that I think the Commission ought to look at. The results of the DCF model with the updated information is 10.55 percent. The results of the Risk Premium model is 12.71 percent using the updated data. And, the results of the CAPM is 13.91 percent with the updated data. And, those are the three, I know I mentioned four models at the outset, but these three are the market-based models, which I emphasize the most in coming up with my recommendation, because they are -- they do use market data, unlike Comparable Earnings, which is driven more by the business cycle, rather than by market information. And, I would urge the Commission to consider the results of DCF, Risk Premium, and CAPM.

Q. Okay. In your -- And, actually, one clarification I want to just make for the record. I think you referred to your rebuttal testimony as being dated "February 15"?

A. Oh, I'm sorry. It was December 15th.

Q. Thank you. So, in your testimony, you indicate that you believe that the DCF is less reliable, a less reliable method, and that's the one that the Staff witness relied on primarily. Would you just indicate why that's your view?

A. Well, I think it's manifest in the numbers that I just relayed to the Commission. The 10.55 percent DCF result is well below the results of both the Risk Premium and the CAPM model results, and indeed less than Comparable Earnings as well. And, I think that, just by looking at the magnitude of the numbers, it seems quite obvious that the DCF is the outlier here.

Q. Now, you indicated that there are problems with each model. Can you give us a sense of the problems that you see with the DCF model as the Staff has applied it?

A. Yes. On DCF, and, again, I go back to the point I made earlier with the simplifying assumptions, there's a variety of simplifying assumptions related to DCF. One is that there's a constant dividend payout ratio. There's an assumption that the price earnings multiple will remain constant and not change. There's the assumption of a constant return on book equity. There's issues of whether you should give greater emphasis to historical or forecast data developed by financial analysts. There's the issue of what variables we should give greatest weight to: Earnings per share, dividends per share, book value per share, retention growth. And, of course, one of the things you also want to look at is whether flotation costs are an appropriate component of the DCF model. So, there's lots of issues with DCF. But we could go through the other models and find issues with them, too.

Q. And, it's those infirmities, as you said before, that cause you to use multiple models, rather than just one?

A. Correct. As I said, at the end of the day, when it comes to the cost of equity, the number has to pass the sniff test. And, if you have one model that's clearly producing a number that is out of keeping with other models, either we have to go back and look at some of the assumptions implicit in the model, how it's being applied, or, if we can't deal with some of those issues, then we need to supplement that model with other results.

Q. Okay. In your testimony, you discuss why setting the return on equity is such a critical function, and why it's important to the Company and its investors. Could you summarize that please.

A. Yes. In my rebuttal testimony, I relayed to the Commission the importance of the rate of return in public utility rate cases. In the reporting of rate case outcomes, the ROE is always prominently discussed. And, the reason that is so is because it's a number that's widely understood by all types of investors. It is a number that can be compared from one company to another, or from one industry to another. It's widely understood. It's commonly used. Everybody understands rates of return. Whether they be expressed in terms of the interest rate you pay on a credit card or what you get from your bank on your savings account or what the money market from a mutual fund is paying or what type of return you can realize by investing in stocks, bonds, mutual funds, and so forth. It's -- It's the fundamental benchmark that can be objectively assessed to compare one investment opportunity to another.

Q. Well, in this case, there were a lot of issues in dispute that got resolved in varying ways. Are you saying that the investment community doesn't care about the resolution of those issues?

A. Oh, I think they do. But it takes varying degrees of sophistication to pick up on the nuances of rate design or depreciation issues or how you do the test year and how you annualize for this cost or that cost, so forth and so on. Those are all very important issues. But it takes, in some instances, a lot more sophistication to make a judgment on whether this particular set of circumstances is any better or worse than another set of circumstances. But everybody gets the rate of return, because it's something everybody understands, and you can compare it from one company to another, or one rate case decision to another.

Q. In your testimony, you also discuss several ways that one can judge the reasonableness of the recommendation that the Staff witness has made in this case. Can you summarize those comparisons, the touch points that you discussed?

A. Yes. There were generally several items that I felt could be used to assess the Staff's recommendation, without getting down in the minutia of all the nitty-gritty details of how you got to what you got. And, I think it's important for the Commission, again, at the end of the day, when it finally comes time to make the decision, to compare what it is contemplating, insofar as the types of returns that are available, that have been granted by other state regulatory commissions. Now, I'm not trying to tell you that you have to mimmick what everybody else is doing. That's not it. But what you do need to be thinking about is whether the return is within the range of types of returns other -- other regulatory bodies have recently granted, because those are the kinds of comparisons that investors are going to make before they commit capital to an enterprise.

The other thing I -- One of the other things I looked at, again, without getting down into all the gory details, was I looked at the kind of returns that Value Line was publishing that the gas industry generally is expected to realize or achieve. And, in that particular regard, as with the comparison of the other returns granted by the regulatory agencies, I find that the Staff recommendation is just way too low.

The third thing that I thought you could look at, again, without getting bogged down in all the nuts and bolts, is to be mindful of the general state of the capital markets. We've gone through disruptions, turmoil, crisis, unlike anything since the Great Depression, over the last year. And, I could sit here and go through all the events, the Lehman Brothers, Bear Sterns, and all that kind of stuff, the Jenny Mae -- or, Fannie Mae and Freddie Mac and Merrill Lynch, all that kind of the stuff we could go through, and it's in my testimony, if you care to read it. But what you find is that the equity markets in particular are so much more volatile than they ever have been. And, high volatility in the equity markets means investors are faced with higher risk. And, when they're exposed to higher risk, they demand higher returns. So, just on the surface, it seems quite obvious to me that returns today need to be higher in recognition of this higher volatility and higher risk in the equity markets.

Q. The Staff, in developing the growth factor for their DCF method, relies on three different indicators, earnings per share, dividends per share, and book value per share. Would you summarize your testimony about what you think is wrong with the reliance on those three indicators, versus your methodology of your using the earnings per growth -- your earnings per share growth factor alone?

A. Yes. The empirical evidence shows that earnings per share growth is the primary driver of investor expectations when it comes to the DCF model. Professor Myron Gordon, one of the foremost proponents of the DCF model, made that determination. And, the basic assumptions of DCF indicate that earnings per share is the right measure. Because, with a constant price earnings multiple, the price of your share of stock is going to go up at the same rate as earnings.

Now, Staff also looked at the book value growth and dividend per share growth. And, the problem

I have with book value per share growth is that stocks don't always trade at the same multiple of book value. So, I believe that the evidence indicates that book value is a pretty poor indicator. But what's worse is the dividend per share growth rate. And, if you look at the Staff numbers, DPS growth, dividend per share growth, is clearly an outlier. It is so much different to all of the other indicators, and then we need to answer the question "Well, why is that?" And, the reason that it's so much lower is that -- it is there's a forecast of declining dividend payout ratios. So, what's going to happen is, with declining dividend payout ratios, earnings are going to grow, and hence stock price is going to grow, at the higher rate than dividend per share growth, because the forecast is for a declining payout ratio. So, I think it looks pretty clear to me, in both looking at the numbers and thinking about the theory of DCF, that dividend per share growth should not receive a lot of weight, if any, in this type of analysis.

Q. You've indicated that you think that the Staff relied on data or calculations that were unrealistic or outliers, as you just indicated, on the dividend piece. What, in terms of an overall approach, how does one deal with that in running these calculations? Do you use all of the data that you have or what is your way of dealing with that?

A. Well, it's the role that judgment plays in applying these methods. As I said, since the cost of equity is not directly observable, a considerable amount of judgment needs to be applied to solve the equations represented by these models to come up with an answer. And, I will agree with Staff, because I, myself, in the preparation of my analysis, have looked at all the variables. I would never urge the Commission to ignore any of the valid variables that investors would look at to come up with a growth rate.

But what you need to do, after you look at the full array of variables, you have to think to yourself and say "Well, what is the most plausible growth rate from this broad array?" And, when you look at the numbers, dividends per share really doesn't fit, and shouldn't receive the type of emphasis that earnings per share growth should receive, based both on the theory of the model and on the empirical evidence.

Q. Okay. In your testimony, you describe the leverage adjustment that you make for each of the methodologies. Could you summarize what that is and why you think it's necessary?

A. Yes. I spent a lot of time on this in both my direct and rebuttal testimony, and I really need to boil it down in as simpler terms as possible. What it comes down to is this: When you inject borrowed funds into a firm's capital structure, and I use the term sort of loosely because that also accounts for preferred stock, because it has a fixed cost. But, when you inject fixed cost capital into a firm's capital structure, over top the ownership interest in the Company, which is the common equity, it increases the financial risk to the firm. And, quite simply, and perhaps this is sort of a shame the way the testimony is structured, but it's a very simple concept. What it says is that your cost of equity is equal to the cost of capital as if you had 100 percent equity, you had no borrowed funds in your capital structure, plus compensation for the additional risk for debt, compensation for the additional risk of preferred stock. And, you solve for that with the book value capital structure to come up with the cost of equity that you'll set in this case, being mindful of the fact that there's a totally different set of ratios out there that investors look at when they price a stock using market values. And, it's a rather simple process. It's essentially unlevering the cost of equity and relevering the cost of equity for the actual debt and equity we use to set the weighted average cost of capital in a rate case.

Q. You discussed earlier the extreme volatility that the marketplace is seeing at the moment. And, if you would just summarize how, in your view, the models take account of that and whether they reflect it?

A. Well, certainly, DCF doesn't. There is an attempt in the CAPM, through the calculation of beta, to deal with the very -- well, actually, volatility. But, certainly, DCF does not deal with it. And, I've got a number of tables, graphs, charts in my rebuttal dealing with the VIX, which is the widely recognized measure of the stock market volatility that's traded on the Chicago Board Options Exchange, I believe it is. And, it's been around since the beginning of the '90s. It's for a very long period of time traded within a relatively narrow range. And, then, when this credit crisis hit, which turned into an overall financial crisis, I mean, it just went wild. I mean, it blew way out of the bands that it had traded at for over 15 years. And, that is a clear demonstration of how much volatility and increased risk exists today, as compared to before, and that increased risk investors require compensation for.

Q. And, finally, I want to direct your attention to Page 9 of your testimony, and you'll see you've included a list of returns on equity set in other jurisdictions in 2008.

A. That's on 33?

Q. That is in Exhibit 33, yes.

A. Yes, I have that.

Q. Okay. And, what can you determine by looking at that and comparing the return on equity that the Staff has recommended in this case, what does that tell you?

A. Well, what it tells to me is that, based upon both gas -- all energy decisions, both gas and electric and gas alone, that investors are expecting returns in rate case decisions to be in the mid tens, 10, you know, somewhere between the 10.4/10.5 area.

Q. Well, and then, if you look at Page 10, what do you see if you compare the Staff's recommendation to returns that you cite there from this Commission?

A. Well, I came to two conclusions there. One is that, even if you don't adjust for what has -- all that has happened since the Commission made these determinations way back when, and you compare what the Commission has accepted and what the Staff proposed in this case, it's way different. The Commission has been accepting higher numbers. But I think the more important thing is, a lot has changed since the Commission made its determination in these older cases. And, if we update those decisions for increased interest rates since that time, you would find that, even those decisions, on an updated basis, would be up in the mid tens today.

MR. CAMERINO: Thank you. That concludes my direct examination.

CHAIRMAN GETZ: Mr. Feltes?

MR. FELTES: Mr. Chairman, we have no questions for Mr. Moul.

CHAIRMAN GETZ: Ms. Hatfield.

MS. HATFIELD: One moment please.

(Atty. Hatfield conferring with OCA staff.)

MS. HATFIELD: Mr. Chairman, due to the number of questions that the OCA has, it might be appropriate if the Commission wishes to take a lunch recess at this time. I don't know if you intend to do that today with the weather or not.

CHAIRMAN GETZ: Well, let's go off the record for a second, talk about planning here for the remainder of the day.

(Brief off-the-record discussion ensued.)

CHAIRMAN GETZ: All right. Let's go back on the record. All right. We're going to break, take the lunch recess. It's 12:20 now. Let's try to resume at about 1:30. We are recessed for lunch. Thank you.

(Whereupon the lunch recess was taken at 12:20 p.m. and the hearing reconvened at 1:41 p.m.)

CHAIRMAN GETZ: All right. Good afternoon. We're back on the record in DG 08-009. And, turning to Ms. Hollenberg, apparently.

MS. HOLLENBERG: Thank you. Well, I have good news and bad news. The good news is I don't have as many questions as Attorney Hatfield estimated earlier; the bad news is I actually have to ask the questions. Mr. Moul, good afternoon. How are you today?

WITNESS MOUL: Good. Thank you.

MS. HOLLENBERG: Good. I would just like to ask you to identify some responses that you provided on behalf of the Company to data requests propounded by the Office of Consumer Advocate in this proceeding. And, I believe you have these questions before you. And, I would ask the Commission at this time if these responses to data requests could be marked for the record as the next three consecutive exhibits.

CROSS-EXAMINATION

BY MS. HOLLENBERG:

Q. I believe you have before you your response to OCA 1-62. Do you see that?

A. I do.

Q. Can you confirm for me that this is a response that you provided on behalf of the Company?

A. Yes, I prepared this response.

Q. And, it's true and accurate to the best of your knowledge and belief?

A. Yes.

Q. Thank you. Turning to the next question, which is OCA 1-67. Do you see this response?

A. I do.

Q. And, you provided this on behalf of the Company?

A. Yes, ma'am.

Q. And, this is true and accurate to the best of your knowledge and belief?

A. It was correct at the time it was prepared, yes.

Q. And, could you -- could you give us an update, if there is an update to this response please.

A. I wish I could, but I can't. Because I'm just reading the response, and it talks about particular plans in the next two to three years, and it was dated "May 21". I really haven't discussed this matter further with the Company. And, I couldn't tell you whether their plans have changed or not. I'd have to get back to you on that.

MS. HOLLENBERG: Okay. I guess I would ask then, in light of the fact that under the Commission's rules data responses are required to be updated, if necessary, that the Company update this if this is necessary.

MR. CAMERINO: Maybe I can suggest, we could do it that way, but Mr. Stavropoulos will be here tomorrow, and we could see if he is able to answer the question on the record, rather than providing another document.

MS. HOLLENBERG: I'm happy to follow up with him tomorrow. Thank you.

BY MS. HOLLENBERG:

Q. And, if I could ask you to look at the next document, which is labeled "OCA 2-23". And, do you agree that this is your response on behalf of the Company?

A. Yes, it is.
Q. And, is it true and accurate to the best of your knowledge and belief?
A. Yes.
Q. Thank you.

CHAIRMAN GETZ: Okay. We'll mark for identification as "Exhibits 44", "45", and "46" National Grid responses to OCA Questions 1-62, 1-67, and 2-23.

(The documents, as described, were herewith marked as **Exhibits 44**, **45**, and **46**, respectively, for identification.)

MS. HOLLENBERG: Thank you. I just have a couple of questions.

BY MS. HOLLENBERG:
Q. You testified in rebuttal and today about ROE decisions in other jurisdictions.
A. I did.
Q. And, would you then agree that it's appropriate for the Commission to look at other decisions on ROE in assessing the reasonableness of the ROE recommendations in this case?
A. I do.
Q. Thank you. And, you also testified in rebuttal, and again this morning, about the volatility of the market.

Do you agree with that?
A. Yes, that's correct.
Q. And about the VIX index?
A. Yes.
Q. Do you agree that this index measures the implied volatility of the S&P 500 index options?
A. Yes.
Q. And, that it does not measure the volatility of public utility equity?
A. I disagree with that, because S&P Public Utility Index is part of the S&P 500. So, to the extent that utilities are embedded in the 500, there is some measurement in that regard.
Q. Okay. I guess I should have asked it in a different way. Would you agree that there are no measures, specific measures explicitly about the volatility of public utility equity?
A. Yes, there is none that I know of.

MS. HOLLENBERG: Okay. Thank you. If I could have a moment please.

(Atty. Hollenberg conferring with OCA staff.)

MS. HOLLENBERG: I don't have any other questions. Thank you very much, Mr. Moul.

WITNESS MOUL: You're welcome.

CHAIRMAN GETZ: Mr. Damon.

MR. DAMON: Thank you. Before I start asking Mr. Moul the questions, I would just want to note for the record that Staff and the Company have indeed finalized the revenue requirement for delivery service. So, that one hanging matter that was alluded to this morning I think is solved.

CHAIRMAN GETZ: Thank you.

MR. DAMON: Good afternoon, Mr. Moul.

WITNESS MOUL: Good afternoon.

BY MR. DAMON:

Q. I'd like to ask you a few follow-ups on your summary of your testimony this morning. And, at the end of your testimony you were talking about the New Hampshire decisions on Page 10 of your rebuttal testimony. And, you mentioned that "a lot has changed since the older cases were decided", and you alluded to the increase in interest rates since then. And, could you restate or restate what significance an increased interest rate would have on what is the appropriate ROE for this case?

A. Well, you're quite correct. Interest rates and the change in the level of interest rates would be one

measure to use to place into current context older decisions. So, one of the things I looked at in the rebuttal testimony was to index more or less those older decisions for changes in interest rates. And, as interest rates go up, the returns would go up. And, if they went down, the converse would be true. But, of course, there's other things that impact that as well, and we talked about the volatility, which is greater than existed when these older cases were decided.
Q. Right. And, I'm afraid, in my notes, I didn't write it down carefully enough, but you had said something about the effect of these increased interest rates on what is an appropriate ROE, and I think you alluded to a number. Do you recall that?
A. Well, I don't know, well, maybe I did say something in the summary about a number. Now, there is a number on Page 11 of my testimony.
Q. Well, I'm not sure it was in your testimony exactly. I do remember from this morning's, I wrote it down in my notes, and I'm just trying to recreate what that is.
A. Well, let me just look back at my notes, I don't know if I volunteered a number or not to -- there certainly was a number in the testimony.
Q. Well, if it's difficult, I could ask, with the

Chairman's permission, the Clerk to read back that answer.

A. I think I referred to something along the lines of "mid tens". I don't know if I was any more specific than that, as to a number.

Q. Okay. And, so, I do want to just make sure I understood what you said. You said that the increased interest rates would suggest that what, "mid tens are reasonable", is that what you said?

A. Yes. If you were to update the old Commission orders, using that as a benchmark.

Q. Okay. Another follow-up question is, you do not favor using dividends per share as a measure of the growth rate in a DCF calculation, is that right?

A. Yes.

Q. But what is the growth factor that is placed into the equation that expresses the DCF calculation?

A. Well, it depends on how you define the DCF model. There is a form of the model that is the discount of an endless stream of growing dividends that is discounted back to current price to explain the current price. That's one form of the model. The other form is the yield plus the capital gains or price appreciation that investors realize to provide their total return expectation.

So, it depends on how you define the model. I agree with you that what you're suggesting is one form of the model, but there are others.

Q. Right. Because, in recent days, I have re-read a Commission order involving Public Service Company a few years ago. And, as I recall, the way the Commission described the "G" in the formula, it was an expected dividends per share.

A. That's one way to look at the model. But that's not the way the investors price stocks.

Q. Okay. But that is one way to look at it?

A. That's one way to look at it. But I don't believe investors price stocks that way.

Q. Okay. Another point that you made this morning was that you mentioned that, in your view, "the DCF method is less reliable". And that, as proof of that, when you look at the numbers that you have obtained from both the DCF method, the RPM, Risk Premium method, and the CAPM method, that it's clear that the 10.55 that you got for DCF is well below the other two results. But what is the difference between the DCF result and RPM?

A. Well, the difference is the DCF produced 10.55 and the

Risk Premium approach produced 12.71.

Q. And, if you take -- if you subtract that number, what is it?

A. Oh. It's 2.15 percent.

Q. And, the difference between the 12.71 in the Risk Premium method and the 13.91 percent in the CAPM method, how much -- what's the difference there?

A. 1.20 percent.

Q. Now, in your updated December 15th testimony, you relied on some historical information. And, as I understand it, you used the Value Line information from September for your CAPM estimate. Is that correct?

A. September 12th I believe was the date. It's the source of information on my Attachment PRM-23.

Q. But it is true, is it not, that there was available more recent information than that as of December 15th?

A. Yes. And, that information became available after this was prepared. That was not available to me when we prepared the rebuttal. So, I used the most recent data available when the rebuttal was put together.

MR. CAMERINO: Mr. Moul, just at the end of some of your statements, your voice is trailing off a little. If you could just keep it up for the stenographer.

BY MR. DAMON:
Q. Okay. And, again, this morning you testified about the information that you showed on Page 10 of your rebuttal, that is the New Hampshire rate case decisions regarding cost of equities. And, it's true, is it not, that the authorized return on equity ordered in those cases all came as a result of a settlement agreement, is that true?
A. Yes, that's what's shown on that schedule or on that page.
Q. Mr. Moul, is it fair to say that the lion share of your consulting business is presenting rate of return testimony on behalf of utilities around the Company -- around the country?
A. Yes, I present more rate of return testimony for investor-owned utilities than other types of clients I have. But I do have other types of clients.
Q. And, you've been representing utilities for a long time?
A. About 35 years.
Q. And, as I understand it, you presented testimony to the Commission on behalf of Northern Utilities back in DG 01-182?
A. I couldn't confirm that particular docket, but I have

testified for Northern Utilities in the past, correct.
Q. And, when I went and looked at your testimony in that docket, I believe you recommended a rate of return on common equity of 13 percent?
A. I can accept that. I haven't look at that testimony in a long time.
Q. And, I'm not sure that that case ended up on your list on Page 10. But would you be willing to accept it subject to check that Northern ended up settling for 9.67 percent return on equity?
A. I couldn't, I'll accept that subject to check, I just really have no recollection of that. I'm sure that case goes back at least five years or more.
Q. Okay. In looking at your chart of certain return on equity decisions that you have on Page 9 of your updated testimony, how did you choose or what information did you choose to include on this table?
A. Well, I included the information on this table that I believe to be relevant insofar as the return on equity determination goes. I mean, there's other -- other information available about these cases. But I selected what I believe to be relevant concerning the subject of rate of return on equity.
Q. Okay. But is the information on this sheet drawn from

a larger document?

A. Yes.

Q. Okay. And, I'd like to show you a document. And, this is your response, I believe, to Staff 5-1. And, ask you if your response is that document?

(Atty. Damon handing document to the Witness.)

BY THE WITNESS:

A. Yes. This looks to be the response, correct. Yes.

MR. DAMON: Okay. Thank you. You can keep that.

WITNESS MOUL: Okay. Thanks.

MR. DAMON: I'd like to offer this as an exhibit. I think that everybody should have a copy.

MR. CAMERINO: Actually, if you've got an extra one.

(Atty. Damon distributing documents.)

CHAIRMAN GETZ: Okay. We'll mark for identification as "Exhibit Number 47" National Grid's response to Staff Question 5-1.

(The document, as described, was herewith marked as **Exhibit 47** for identification.)

BY MR. DAMON:

Q. Okay. So, could you just describe how you went from this larger data set to the shorter listing of information that you have in your rebuttal testimony?

A. Sure. One of the initial things I did was to look at the most recent decisions, beginning with May 27, 2008. So, there's likely, as a matter of fact, we know there's decisions or there's cases listed on the larger document that predate that. Then, what I did, I eliminated some of the other -- well, they're important items, but it seemed to me that they distracted from the focus of what I was trying to present in the testimony. So, I got rid of things like common equity ratios and the amount of the rate base and other information, while they're important to a rate case determination and outcome, really didn't lend themselves to the type of information I was trying to portray on Page 10 -- or, Page 9, I'm sorry.

Q. Would you agree that before you can assess the significance of a particular number in a rate case, such as return on equity, it is important for all the other information in the case, such as size of the rate base, capital structure, operating expenses, all those other pieces of information also are important in determining what the true situation in these rate cases is?

A. I would agree with that, sure. And, there's other elements that enter into a rate case decision that aren't even revealed by those types of numbers. Commissions often look at the quality of the management or whether sales -- average sale per customer is increasing, declining. There's a whole host of factors that enter into the equity return determination, other than what the O&M is and the rate base and capital structure. But, clearly, they all enter into that type of determination.

Q. The Commission, of course, regulates a number of investor-owned utilities in the electric industry in New Hampshire, as well as natural gas industries -- natural gas utilities. And, have you studied the health of those utilities in New Hampshire?

A. Not specifically. I'm aware of identities of the other utilities in the state, but I haven't conducted an in-depth financial analysis of the condition of those utilities for the purpose of this case. I mean, I study utilities all the time. And, I'm aware of generally what's going on in this region when it comes to the electric and gas companies. But I haven't conducted the analysis that you're asking about.

Q. Okay. One decision that is not on your list, and it wouldn't have been because it wasn't decided at the time your answer was made, but there was a very recent decision in Connecticut regarding United Illuminating Company. And, that's only a draft decision that was issued last week. And, as I understand it, the ROE granted in that case was 8.75 percent.

A. Well, you're right about it being a draft decision. That is not the final order of the Commission. If you're familiar with the way the process works in Connecticut, after the end of the hearing process, a draft decision is put out there, essentially prepared by the Staff, but has not been ruled on by the Commission. And, after the draft decision comes out, the parties to the case, the Company and the Consumer -- well, maybe it's People's Counsel, I forget what the Consumer Advocate in Connecticut is known as, and the intervenors all have an opportunity to comment on the draft decision. So, that's not final.

Q. Right. As I understand it, the Company itself had proposed 9.75 percent.

A. Well, I don't --

MR. CAMERINO: I'm just going to object at this point, because we don't have this information in the record. We've got facts coming in from Mr. Damon on a case where we don't even have a final order. I know we don't normally follow the rules of evidence here, but I think there has to be some probative value of information that's being proffered, and here it's not a final order. And, I'm concerned we're going to get a lot of information in the record that nobody has had a chance to review, that no witness is sponsoring, and then we're going to see it again in the briefs.

CHAIRMAN GETZ: Well, it seems to me, Mr. Camerino, your issue is more to the weight we should give it, rather than to the admissibility. If there's a draft order, it seems we could take administrative notice of that, as we could of any other kind of order in any of the decisions that are noted in the testimony.

MR. CAMERINO: No, I think it does go to admissibility, actually. And, I know the Commission sometimes even takes newspaper articles into evidence, so the standard is fairly low. But I didn't object when Mr. Damon referred to the "8.75". But now we're going into the position of the parties. And, I think that's where we really get into something that is objectionable in terms of admissibility. And, I think we should just leave it with what the Hearing Examiner ruled, and we've had testimony that it hasn't been reviewed by the Commission yet.

MR. DAMON: Well, the Company has made a point in its rebuttal testimony, and again this morning in his summary, of the relevance and importance of the Commission's understanding of what ROEs have been granted in other states. And, this is a decision, and it is a draft decision, and I can provide a copy of it, it's a very lengthy decision, happy to do that, and let it have whatever weight the Commission wants to give it. But it does reflect other numbers that are inconsistent with the tens that appear on Page 9 of the rebuttal testimony.

CHAIRMAN GETZ: Well, we're going to allow the admission of this Draft Order. And, let's just save Exhibit 48 for the Draft Order from the Connecticut -- it's a United Illuminating case?

MR. DAMON: Yes.

CHAIRMAN GETZ: And, we'll give it the weight we deem appropriate in our deliberations.

(Exhibit 48 reserved)

MR. DAMON: I can even give you, if you'd like, probably an order number.

MR. CAMERINO: I'd like to ask that that be provided to us this afternoon, an actual copy of that order, because we may have questions about it, we may not. But it seems to me that something of that magnitude we're entitled to question witnesses on and not be provided with at this late date.

MR. DAMON: Yes, it's an order dated January 20, 2009, in Docket Number 08-07-04.

CHAIRMAN GETZ: And, you can provide a copy to Mr. Camerino?

MR. DAMON: Sure. Yes. Not right now, but soon.

CHAIRMAN GETZ: Thank you.

BY MR. DAMON:

Q. On Page 7 of your rebuttal testimony, you referred to a "study by the American Gas Foundation". Is that right?

A. Yes.

Q. Yes. And, that's an organization that's overseen by representatives of gas interests, is it not?

A. Well, I think it's affiliated some way with the American Gas Association.

Q. Right. Which -- And, the American Gas Association represents industry interests?

A. Yes, it's a trade group.

Q. Yes. In your initial testimony, Mr. Moul, on Page 6, Lines 1 to 3, and that's -- when I'm referring to page numbers here, I'm referring to the page numbers that are shown on the lower right-hand corner, not the one in the middle.

A. You're in Exhibit --

MS. HOLLENBERG: Nine.

BY MR. DAMON:

Q. Exhibit 9.

A. Nine, I'm sorry. Page what? What was that again, I'm sorry?

Q. Page -- Well, I take that back. Actually, it is 5A, which is a new page.

A. That was the 6 that got omitted that we submitted later we identified as 5A?

Q. Yes.

A. Okay. I have that.

Q. Okay.

MR. CAMERINO: Now, what -- Mr. Damon is showing me to not have kept my word, which was I was going to supply those two pages to the Commission --

CMSR. BELOW: I found my copy.

CHAIRMAN GETZ: We're all set.

MR. CAMERINO: Okay. Sorry.

BY MR. DAMON:

Q. Well, in any case, you stated there that you believe that the "other methods", i.e. RP, CAPM, and Comparable Earnings, "are more reliable indicators of the cost of common equity in the present environment." Is that -- Is your position still the same, that that is true today?

A. Yes.

Q. But it is true, is it not, that the DCF method, like the other methods for estimating return on equity, is used in a variety of economic situations, both good and bad?

A. I agree with that. But, in most instances where DCF is used, at least in the investment community, it's usually compared with implied returns that are derived from other models.

Q. Okay. And, a question also on comparable earnings. You did do the calculations to come up with an estimate based on comparable earnings. But, as I understand it, your recommendation, both in your initial and updated testimony, is not based on comparable earning, is that right?

A. That is correct.

Q. And, you alluded to shortcomings in the various methodologies this morning. And, in particular, I think you acknowledge that there are shortcomings in the Risk Premium, CAPM, and Comparable Earnings methods, correct?

A. I agree with that.

Q. Okay. And, in fact, you answered a data request put to you by the OCA on that point.

(Atty. Damon showing document to the Witness.)

BY THE WITNESS:

A. Sure, I put this together.

MR. DAMON: Okay. I've shown you a document, which is your response to OCA 1-65. And, I would ask that this be marked for identification.

CHAIRMAN GETZ: It will be marked for identification as "Exhibit Number 49".

(The document, as described, was herewith marked as **Exhibit 49** for identification.)

MR. DAMON: Did I leave you with a -- I'm sorry, I apologize.

(Atty. Damon handing document to the Witness.)

BY MR. DAMON:

Q. The question was answered -- was asked in terms of "shortcomings", and you have perhaps rephrased it as listing "restrictive assumptions". But you mean the same thing basically. A "restrictive assumption" is a "shortcoming" basically?

A. Sure, by definition it is.

Q. Okay. As I understand it, too, your updated estimates are not based on any financial weakness of National Grid as a whole, are they?

A. I don't think I understand that question.

Q. Well, when you make your estimates, do you look at the Company of which EnergyNorth is a part, to get an idea of the relative financial health of that company?

A. Well, I'm not trying to be difficult in responding to your question, but I didn't look at the larger National Grid USA in any way. But I did provide you, in Attachment Number 11, a historical analysis of the performance of what used to be called, I guess still is, "EnergyNorth Natural Gas, Inc.", doing business as National Grid. And, I did go through in my direct testimony and conducted what I labeled a fairly comprehensive fundamental analysis that was beginning on Page 11 of my direct testimony. And, I just compared all types of factors between, in this case, EnergyNorth and my proxy group.

Q. Okay. So, the Page 11 you're talking about is

Exhibit 9, right?
A. Correct. I'm sorry, yes.
Q. Okay.
A. And, actually, it would really be Page 10 under that other numbering scheme.
Q. And, did you review the November 20, 2008 National Grid, PLC six month report for the period ended November 30, 2008?
A. If I did, I don't recall. And, I'm not sure I understand, when you say "National Grid", that's the New Hampshire company or --
Q. No, it's the big company.
A. Oh. No, I didn't. No.
Q. Okay. I'd like to turn your attention now to your DCF estimate. And, I'd like to try to tease out of your overall estimate, and I think -- I think it's helpful just for the record to go back and see if we can get this. But what would be your estimate, under DCF, excluding flotation and leverage adjustments that you applied, in both your initial and updated testimony?
A. Excluding the leverage adjustment/flotation cost, the update would provide 9.77 percent.
Q. Okay. And, do you know what it is for your initial testimony?

A. Sure. 9.11 percent.
Q. Again, this morning, in your summary, and in your rebuttal testimony on Page 3, you talk about the "unprecedented turmoil in the financial markets during the last six months." So, if I'm calculating that right, you're actually talking about the events since about June 2008, is that right?
A. Roughly. Things started -- well, when you think back, the whole thing began in August of 2007 with the meltdown in the subprime mortgage market, or that's when that began. And, things went along, and people were concerned. And, then, on March 16th of last year, in 2008, we had the Bear Stearns rescue. And, then, a period of time went on, and then we just had this rapid fire sequence of events that just roiled the capital markets. And, I mean, there was IndyMac failing, you had a "run on the bank", and all those types of things.
Q. Sure. Now, in your testimony, the specific aspect of "turmoil" that you discuss at some length is volatility in the stock markets or in the markets generally, right?
A. Yes.
Q. And, is the VIX, is that a stock market indicator or does that take into account bonds, volatility of the

bonds?

A. It would be -- I'm sorry, it would be for stocks.

Q. Stocks. Would you agree with me that the volatility associated with the gas utilities in your proxy group could be significantly different from the volatility present in the market as a whole?

A. Could be. I haven't looked at that, but it could be.

Q. Also, as I understand it, you stress the importance of earnings growth rate forecast in determining the growth component. And, as I understand it, you rely, at least in large part, on a paper by Myron Gordon as support for your way of approaching that?

A. That's part of it. I think I explained this morning in my opening remarks that the parameters of the model also require that. But I think I mentioned in my opening remarks about the empirical evidence that supports that notion, and that was the Gordon article that you're referring to.

Q. Okay. And, I'd like to show you an answer that you gave asking for a copy of that. And, ask if that is the article that you're speaking about?

A. Yes, it is.

Q. Okay. I'll leave you with that copy.

A. Okay. Thanks.

MR. DAMON: And, I would ask that this document, which is the Company's response, Mr. Moul's response to Staff 1-136 be marked for identification.

CHAIRMAN GETZ: It will be marked for identification as "Exhibit Number 50".

(The document, as described, was herewith marked as **Exhibit 50** for identification.)

(Atty. Damon distributing documents.)

BY MR. DAMON:

Q. I'm not going to go through all the math involved that he refers to there, but I did want to draw your attention to the conclusion on the last page of that exhibit. And, I'll just read it, what I think is the important part that I want to draw out for purposes of my question. The conclusion is: "We have compared the accuracy of four methods for estimating the growth component of the discounted cash flow yield on a share, past growth rate in earnings (KEGR), past growth rate in dividends (KDGR), past retention growth rate (KBRG), and forecasts of growth by security analysts (KFRG)." So, as I understand it, that would be a statement of the various -- or, the accuracy of the four methods that he -- that they looked at in this paper?

A. That's right.
Q. Yes. And, this paper does not, in and of itself, compare the accuracy of forecast of dividend growth rates and book value growth rates to the four other methods that are specifically listed there, is that true?
A. Well, that's right. And, I believe the reason that is is because there are no other consensus forecasts of those variables, dividends and book value, that would be comparable to the IBES or First Call consensus forecasts of earnings per share growth. Because the only other service that provides forecasts of dividends and book value is Value Line. And, Value Line is the result of a single analyst. And, what Gordon was trying to look at was whether a consensus estimate of many analysts does a better job in explaining the growth rate in the DCF model.
Q. Right.
A. And, what you wouldn't want to do is test that against the growth rate and dividends or book value from just a single analyst. I mean, you're looking at a consensus here, versus growth rates from Value Line, in those other two variables you asked me about, that are only from a single analyst.

Q. Okay. But the paper does not explicitly support the use of earnings growth rate forecasts as being preferrable compared to forecasts of dividend growth rates and book value growth rate forecasts, does it?

A. Well, that's right, because he didn't test for that, because there are no consensus forecasts of dividend growth rates or book value per share growth rates. The only consensus forecasts that are out there are for earnings growth rates. Because, to look at the other two variables, you only have a single source, which is Value Line, and that's not a consensus.

Q. On Page 16 of your rebuttal, at Lines 12 to 14, I think you're suggesting there that "book value per share growth rates are inapplicable because stocks do not trade at constant market-to-book ratios." Am I reading that right?

A. That's right.

Q. And, on the previous page, that is on Page 15, Lines 17 to 18, you refer to the "constant price-earnings multiple assumption of the DCF". That's correct, right?

A. Yes, that's a necessary assumption of the DCF model. Uh-huh.

Q. But, in reality, of course, the price-earnings ratio

doesn't remain constant over time either, does it?
A. Well, exactly. And, that's one of the major infirmities of the DCF model. That's why the DCF model often produces results that don't capture the investors' full expectation of the returns they expect in the marketplace, because, just like you said, price-earnings multiples do change, and, in fact, change virtually daily.
Q. Yes. But, despite that infirmity, I mean, the DCF method is commonly applied in rate cases around the country?
A. I agree with that.
Q. Okay. I have a few questions about the proposed leverage adjustment as well.
MR. CAMERINO: Can I just interrupt for one second for just one record clarification. We can come back to this when we're off the record. But my copy of Staff 1-136 has additional pages, and it looks like the one that Mr. Damon handed out may be missing some material. So, if we can check on that off the record and then provide a complete copy, I'd appreciate that.
CHAIRMAN GETZ: Our copy appears to end abruptly as well.
MR. DAMON: Okay. I will ask someone to

look into it.

CMSR. BELOW: It looks like it was two-sided, and we only got half the sides.

MR. DAMON: Oh. Oh, yes. Absolutely, we'll fix that. Yes.

BY MR. DAMON:

Q. Okay. Going back to the subject of "leverage adjustment", it's true, is it not, that, as a general matter and in general, utilities have lower business risks than other unregulated companies -- than unregulated companies?

A. I agree with that, but that has nothing to do with leverage adjustment.

Q. And, on Page 24, Lines 22 to 25 of your direct testimony, that's Exhibit 9, --

A. I'm sorry, what were those line numbers again please?

Q. Twenty-two to twenty-five.

A. Okay. I'm with you.

Q. You say "The leverage adjustment I use deals with the issue of financial risk and is not intended to transform the DCF result to a book market value return through a market-to-book adjustment." Do you see that down there?

A. Yes. I think what I said was "result to a book value return through".

Q. Right.

CMSR. BELOW: Excuse me, what page are you on?

MR. DAMON: It's Page 24, that's the number in the lower right-hand margin, not the one in the middle.

CMSR. BELOW: Okay.

BY MR. DAMON:

Q. Okay. And, I think you go on to talk about that in certain other ways later on, --

A. Yes.

Q. -- but just to get us oriented, I wanted just to start out there. Now, I believe on Page 67 of your initial testimony, that's Exhibit 9, you explain how you calculate the leverage adjustment. And, there's, on Page 67, there's two equations in Line 1, with letters, in Line 2 I believe there are numbers substituted for the letters in the equation in Line 1. And, similarly, in Line 9, there's an equation with letters, and there's, in Line 10, numbers that are substituted for those letters in the equation in Line 9.

A. Yes, that's correct.

Q. Okay. Now, the leverage adjustment for your updated estimates is a little different from what you calculated initially. What is the leverage adjustment that you've included in your updated testimony?

A. The numerical value for the leverage adjustment in the update is 0.57 percent. And, that compares with 0.54 percent in the original testimony.

Q. Okay. And, you get a slightly higher number, but that's because the input numbers changed a little bit?

A. Sure. The formula is dynamic. I mean, it's designed to deal with changes in the capital markets. The formula has a number of inputs. One is the simple yield plus growth term of the DCF. But there's also terms in there for interest rates and the rate on preferred stock, the dividends, and all those variables change over time.

Q. Okay. Now, looking at Line 2, the number "9.11 percent" appears, and that's the number for *ke*, which is the market determined cost -- cost equity or equity cost?

A. Yes.

Q. Right?

A. Yes. And, that's the simple yield plus growth figure I think we talked about maybe five or ten minutes ago.

Q. Okay. And, that 9.11 percent is, as you just mentioned

I think, the sum of the dividend yield of 3.86 percent and the 5.25 percent growth factor that you show on Page 28 of your testimony?

A. Yes, that's correct.

Q. The equation in Lines 1 and 2, it's true, is it not, that the *D/E* and *P/E* ratios are based on market values?

A. Yes, that's based upon the market value of those companies' long-term debt and the market value of those companies' common equity, correct.

Q. And, in Lines 9 and 10, the *D/E* and *P/E* ratios are based on book values, that's correct, right?

A. Yes, that's correct.

Q. So, as I understand it, the leverage adjustment is the difference between the market determined cost equity in Line 9 and the -- or, no, excuse me, between the book value cost of equity in Line 9 and the market cost of equity in Line 1, is that right?

A. I think I'm with you. I don't think you stated the parameters quite correct in your question.

Q. Okay.

A. The difference is between the *ke* on Line 2, I think you mentioned "Line 1".

Q. Right.

A. You really mean to refer to Line 2, and the *ke* value on

Line 10.

Q. Right. So, what it is, it's, if you take the 9.65 percent in Line 10, and you subtract from that the 9.11 percent in Line 2, that gets you your leverage adjustment of 0.54 percent?

A. Yes. But I only do that -- yes, I agree with your question. But I only do that as a matter of convenience to express DCF in the traditional yield plus growth plus leverage. But when you look at what's going on in Line 10, the cost of equity is actually 8.43 percent, which is the cost of equity and the cost of capital with 100 percent equity in the capital structure, plus 1.2 percent is compensation for having debt in the capital structure, plus 0.01 percent for having preferred stock in the capital structure. And, I tried to explain this in rebuttal, and maybe I'm just confusing the issue. But the way I initially expressed the leverage adjustment, I was trying to say it this morning also in my summary, was to present, as a matter of convenience, a way to isolate that factor. But the calculation for that cost of equity really has nothing to do with the amount that I add to yield plus growth to get the leverage adjustment. It's the cost of equity, the 9.65 percent, on Line 10 of Page 67, is equal to 8.43, 100 percent equity capital structure, plus 1.21 percent, because you have debt in the capital structure, plus 0.01 percent for having preferred, and they're all risk adjustments.

Q. Okay. But, you know, I'd like to keep going with my line of questions, if I could, --

A. Okay, I'm sorry.

Q. -- because this is an important point to the Staff. The "*ku*", the unleveraged cost of equity, in Line 1, is the same "*ku*" as in Line 9, right?

A. That's right.

Q. And, the "*t*", the small "*t*" is the same in both lines.

A. Correct.

Q. The small "*d*", which -- what's that? Oh, yes, the dividend rate on preferred stock, that's the same.

A. Correct.

Q. And, the "*i*", which is the cost of debt, the "*i*" is the same in both Line 1 and Line 9, right?

A. Yes. Those are all market-derived cost rates, that's correct.

Q. Okay. So, the leverage adjustment is calculated based on the difference between big *D*, divided by *E*, or the ratio *D* divided by *E*, and I guess those themselves are ratios, but measured at market value in Line 1, and the

D/E measured at book value in Line 9, as well as the difference between the *P/E* measured at market value in Line 1 and *P/E* measured at book value in Line 9. That's true, right?

A. That is true. That's how those ratios were computed, based on the market values and the book values, correct.

Q. And, of the total amount of the leverage adjustment of 0.54 percent, the amount of the leverage adjustment associated with the *P/E* ratio, that's preferred stock to equity -- common equity ratio, is tiny, right?

A. As I said, it's 0.01 percent.

Q. Right. And, that's rounded up a little bit, too.

A. I don't know. I'll take your word for it.

Q. I think so. So, would you agree with me that overwhelmingly the leverage adjustment is due to the difference between *D/E* measured at market value and at book value?

A. Yes. It's the market value of the debt capital versus the book value of the debt capital, and similarly for the equity capital.

Q. But "*D*", which is the debt ratio, is essentially measured at the actual amount, and it's the same amount in both cases. You'd agree with me there, too?

A. No, that's dead wrong. The "*D*" is the market value of the debt.
Q. Okay. But the total amount of the "*D*" is the same --
CHAIRMAN GETZ: Do we need to be drawing distinctions between lower case *d*'s and upper case *D*'s for the record here?
MR. DAMON: Yes. When I'm -- Unless otherwise noted, I'm referring to *D*. Thank you.
BY MR. DAMON:
Q. Okay. Let me rephrase this question. I would like to ask you now, Mr. Moul, the amount of the debt in total -- in the total capital, which is part of the ratio, goes into the debt ratio, in other words, the *D*. And, that's the same in both, both equations, am I right about that?
A. You're wrong.
Q. Okay. How different are they?
A. It depends upon how the debt was valued for each firm. Because I looked at each firm's amount of debt outstanding, and I looked at the book value amount, and then I looked at the market value amount of that debt. And, it varied. I mean, some was higher and some was lower. Because the market value, unless all your debt is priced at the marginal cost of debt, that's the only

time that the par value of the debt and the market value of the debt would be the same. And, because everybody attracted debt at different points in time, the market value of the debt changes over time relative to what interest rates are doing. So, the answer to your question is "no, they're different." And, the same thing for the preferred stock, they're different.

Q. Okay. Let me ask the question this way. How different is the debt amount in the market value calculation and the book value calculation?

A. I'd have to check my workpapers on that. I couldn't volunteer for you a specific dollar amount right now without looking at my workpapers, but I do know they are different.

Q. Do you have your workpapers here?

A. I might. Bear with me a second.

CHAIRMAN GETZ: Let's take a quick recess while the witness is searching for his workpapers.

(Whereupon a recess was taken at 2:43 p.m. and the hearing reconvened at 2:51 p.m.)

CHAIRMAN GETZ: Mr. Damon.

MR. DAMON: Thank you.

BY MR. DAMON:

Q. Mr. Moul, I think we were talking about the amount of or the difference in the debt amounts in the *D/E* ratios. And, you were going to look at some workpapers and give us the answer to that.

A. Yes. I've looked at all seven companies in my proxy group. And, in eight of the -- I'm sorry, I misspoke, in six of the seven instances, the market value of the debt exceeded the book value of the debt. And, in one instance, the market value of the debt was less than the book value of the debt. So, in every instance there was a difference.

Q. In terms of the proxy, what is the -- can you give us an idea of the average amount of the increase?

A. It's over $18 million.

Q. I apologize.

A. Over $18 million.

Q. Okay. But, on average, what was the increase? Because you're saying that, in six out of seven instances, market value exceeded book, and, in one instance, market value was less than book. But, on average, what was the situation?

A. $18 million. As a matter of fact, the exact number is $18,232,000 higher average market value of debt as compared to book value of debt.

Q. So, the $18 million appears in both equations, in Lines 1 and 2 and 9 and 10?
A. No, I'm sorry. I'm confusing you. The market values of debt appears in row 2, and the book value of debt shows up in Line 10.
Q. Okay. How much higher is the market value than the book value in total, as far as debt is concerned?
A. You know, I may have misspoke again on that. $18 million -- what was that $18 million? No, that was an average. Okay. And, now you want the total? I'll have to solve that. I don't have that number in front of me. That was the average. Bear with me a second, I have to add up 14 numbers here.

(Short pause.)

BY THE WITNESS:
A. Total would be $126,625,000.

CHAIRMAN GETZ: So, it's basically the average of 18 times the seven proxy group members?

WITNESS MOUL: Yes. I could have shortcut that a lot, your Honor, by just multiplying it by seven, right.

MR. DAMON: I would like to ask some follow-up questions, but I'm obviously not getting at the right point. So, at this point, I would like to ask permission to have Dr. Chattopadhyay ask a couple of follow-ups on this, just to clarify things, because I'm probably not helping the process.

CHAIRMAN GETZ: Please proceed.

MR. CHATTOPADHYAY: Thank you.

BY MR. CHATTOPADHYAY:

Q. The question really I'm interested in is the amount of debt measured in market value that is appearing in your Line 2, is that higher than the value of debt when measured in book value that appears in Line 9?

A. Yes.

Q. If that is the case, then, for the leverage adjustment that is on account of the change in the *D* over *E* in those two equations, which you implied would be 0.53, because the one that was associated with the *P* over *E* ratio was 0.01, that is predominantly driven by the value of the difference in the book value of common equity and the market value of common equity, is that correct?

A. That is a second component of it, correct. But, just to be clear, it is also a function of the tax deductibility of interest costs, and it's a function of the unlevered cost of equity over the marginal cost of debt. So, it's just the spread between the cost of equity and cost of debt with 100 percent equity in the capital structure, times the tax effect, times what you suggest. I mean, there's lots of moving parts here.

Q. I understand that. All I'm trying to confirm here, in asking you about it, is that, because the other numbers that you talked about, the tax rates, *i*, *D*, and whatever else, they are same in both of these equations. Therefore, really, that 0.53 is mainly driven by the difference in the *D* over *E* ratios, and because you just confirmed that the market value of debt is higher than the book value of debt, all I'm asking you is, doesn't this confirm that the 0.53 leverage adjustment is most -- is driven by the difference in the market value of equity and the book value of equity?

MR. CAMERINO: Objection. We're in a bit of a tricky spot here, but Mr. Chattopadhyay is a witness in this case. He's not supposed to be testifying now. And, that was quite a long question, with a lot of foundation in it, that, you know, there's no ability for me to cross-examine him on that question. I just think -- I know that typically the Commission allows Staff members to assist counsel on technical matters. But we're in a litigated case. It's the witness, a future witness who's not under oath, and he's including facts in his question. So, maybe there's a way to have, I know it was a long question, but maybe there's a way to have the question formulated so that it doesn't state facts where we have a witness doing the questioning. Just ask the question.

CHAIRMAN GETZ: Well, I think it could be handed off to Mr. Damon. But, I mean, I guess where I'm taking the question is, given the fact that, between the market value calculation and the book value calculation, there are certain constants between the two calculations that the leverage factor is driven largely by two subsets that are market driven. I mean, is that a -- I think that should be easy enough to turn into a question, where it's not the testimony by Mr. Chattopadhyay.

MR. CAMERINO: And, that's kind of where I'd like to end up. I'm just sensitive that, and I understand we're trying this before a commission and not a jury, but we have somebody who is a witness, and the questions are to become part of the record in a way that's very muddled. And, honestly, in something of this complexity, it's hard for me to follow. And, that was quite a long question, with a lot of information in it. So, I guess maybe it's just asking that Staff conduct the examination in a way that the questions are clearly questions and aren't containing, especially if the witness is doing the questioning, aren't containing facts, but rather are simply questions.

MR. DAMON: Well, Dr. Chattopadhyay is not testifying. He was simply trying to ask a question about a complicated technical subject that he could try and write out for me on a piece of paper, but I can't read his writing very well, and I am just trying to move things along.

MR. CAMERINO: I think I've made my point. I'm sure we're going to have to have the question restated anyway.

CHAIRMAN GETZ: Yes, I don't think we --

MR. CAMERINO: I'm just asking for brevity and directness in the question, so that we don't run into this problem.

CHAIRMAN GETZ: I think the question could be culled down, but we do need an answer to it. And, rather than me trying to formulate it, I guess Mr. Damon can just ask -- see if you can ask the question.

MR. DAMON: Yes. Well, I would like to have that question read back, and that would be my question.

CHAIRMAN GETZ: Because I don't think there were any facts in it. I think all that Mr. Chattopadhyay did was, you know, repeat what's in Mr. Moul's testimony. So, we're going to have to get this back on the record. So, I guess I don't have any concern about Mr. -- or, Dr. Chattopadhyay asking the question. But I'd like to try and just see if there's a way that it can be more briefly stated. Can you do that, Doctor?

MR. CAMERINO: Could I just, it is possible that Mr. Moul understands the question. And, if he does, it's in the record, and I'm comfortable with us proceeding on that basis so we don't have to have it restated --

BY THE WITNESS:

A. Yes. I think, if I understood the question through what the Chairman had said, my answer would be "yes". It is -- There's certain variables in there, they'll change between the two equations. So, it's a market value of the debt and the market value of the equity that are the drivers of the difference.

MR. DAMON: I think I would like to ask that that question be read back, because I think the Staff was trying to get at a slightly different point.

CHAIRMAN GETZ: Well, rather than read

it back, which I think may cause more issues, let's just have the question, Dr. Chattopadhyay, if you could ask the question that you wanted to do as follow-up.

BY MR. CHATTOPADHYAY:

Q. To make things simple, let me again repeat, I'm just looking at the *D* over *E* piece right now. So, comparing the term with the *D* over *E* in Line 1, with the one that appears in Line 9. Okay? So, really, you have, if I understood it correctly, confirmed that the market debt amount is higher than the book debt amount?

A. Yes.

Q. And, what that tells me is that the leverage adjustment, which is associated with these, you know, the component that has *D* over *E* in it, is you have implied as being 0.53, this is overwhelmingly driven by the difference in the book value of common equity and the market value of common equity, isn't that correct?

A. Generally speaking, yes. What you're saying is or I think what your understanding is, and it's correct, that the market value of equity exceeds its book value by a larger amount than the amount of market value of debt exceeds its book value. I agree with that.

MR. DAMON: Okay. Thank you. At this time, I would like to give everyone a complete copy of that exhibit, I think it was 50, it's the response to Staff 1-136. And, I think that has both sides copied.

(Atty. Damon distributing documents.)

BY MR. DAMON:

Q. Mr. Moul, would you agree with me that recent market prices reflect what you have described as "unprecedented turmoil in the financial markets"?

A. Yes.

Q. So, to that extent, would it also not be true that the market price and the dividend yield component of the DCF calculation would reflect the investor's perception of risk?

A. In part.

Q. What's the other part?

A. Well, if you're talking about prices -- I presume prices in the context of the DCF model, correct, or am I misunderstanding?

Q. Yes.

A. Sure.

Q. Yes.

A. And, I agree with that. But, to the extent there are factors other than those captured by *D* over *P* plus *G* components of the DCF model, there are other factors that influence investor return expectations.

Q. Sure. Okay. Thank you. Let me ask one more simple-minded question about the leverage adjustment. If you look at a particular company, the financial risk of that company, as the investors see it, is what it is. But isn't it true that, whether market values or book values are used in the measurement, it's still the same company?

A. Sure it is. I agree with that. But investors can only realize their returns on the market value. They can't purchase the book value of a company.

Q. Right. Moving on briefly to the flotation adjustment -- did you want to add anything to that last answer?

A. No.

Q. I'd like to move on briefly to the floatation adjustment. And, as Staff understands it, the Company has no plans to issue new stock for sale, is that true?

A. Yes. And, that was my understanding back to the interrogatory we talked about earlier with the OCA, I believe it was the OCA. I prepared a response back in May.

Q. Well, let me, and I'll show it to you again. And, that is --

A. That's based on what I understood at the time.

Q. Yes. This is a response to OCA 1-67.

A. Yes, that is Exhibit -- wherever it was.
CHAIRMAN GETZ: Forty-five.
WITNESS MOUL: Yes, that was 45.
BY MR. DAMON:
Q. Okay.
A. Correct.
Q. Yes.
A. That was my understanding at the time this was prepared.
Q. And, as far as you know, the answer is still correct, to the best of your ability, right?
A. Now that I can't say, because I haven't discussed the matter with the Company since then. It may well be the same, but you will have to check with the company.
Q. Okay. Okay, I'd like to move on briefly to the Risk Premium method. Now, the inputs for the Risk Premium calculation are based on historical data, isn't that -- that's true, right?
A. Could I have that question back again please.
Q. The inputs to the Risk Premium calculation are based on historical data, correct?
A. Some of them are, but others are forward-looking.
Q. Okay. And, on -- drawing your attention now to Page 27, Lines 8 and 9 of your rebuttal testimony, you

say: "Second, an analyst can develop a risk premium from historical data that seeks to emulate investors' current expectations." Do you see that?
A. Yes, sir.
Q. Okay. But, when the analyst does that, the analyst is also exercising judgment, is that not true?
A. I agree with that.
MR. DAMON: Thank you very much, Mr. Moul. I have no further questions.
CHAIRMAN GETZ: Thank you. Commissioner Morrison?
CMSR. MORRISON: My questions were answered by Staff's cross.
CHAIRMAN GETZ: Thank you. Commissioner Below.
CMSR. BELOW: Yes.
BY CMSR. BELOW:
Q. Mr. Moul, you conclude your rebuttal testimony by stating "The return on equity required by National Grid's investors has increased to 12.25 percent as a result of the ongoing financial crisis." And, that's compared to your recommended 11.5 percent in your original testimony, is that correct?
A. Yes, sir.

Q. And, what do you mean by "required" in that statement?
A. Well, based upon the market evidence I looked at, as measured by the proxy group, that's the basis I had for making that -- reaching that conclusion.
Q. I mean, do you mean that's what's required to maintain the market value of the stock or to acquire new debt or to sell new common stock?
A. All of the above.
Q. Okay.
A. I mean, those are the standard tests of a fair rate of return. And, since we have a company that has no traded stock, and even its parent isn't traded, the U.S. company isn't traded, we look to the proxies, and say to ourselves "Well, gee wiz, if this company stock were traded, it would behave like the proxy companies behave."
Q. On Page 8 of your rebuttal testimony, at Line 16, you state that "The current financial market turmoil clearly points to a higher cost of capital for public utilities." I presume in that statement you're including both debt and equity, in terms of higher cost of capital, is that correct?
A. Yes, that is. And, what's nice about looking at the debt side of it, it's much more observable,

quantifiable, because you can look and see what happened between the spreads between treasuries and public utility bonds, and that information is -- it's harder evidence, as it were, than some of the other measurements of cost of equity. Like, if we go back to -- well, I'll just guide you to the particular schedule I had in mind when I wrote that. If you look at my Attachment PRM-25, Page 2, you can see how, on the debt side, the spreads have increased enormously as the financial crisis unfolded for public utilities. And, by extension, I have come to the conclusion that, if the cost of debt is that much higher, so is the cost of equity.

Q. Would you say that you could say with greater confidence that the current financial market turmoil points to higher cost of debt for public utilities, could you say that with more confidence than you could say it with regard to equity?

A. Sure. Because the cost of debt is directly observable, I mean, just look at what the numbers are. There's no judgment involved. When you get to the cost of equity, I mean, it becomes more murky. I mean, there's more judgments that are required to come up with those kind of determinations. But, it seems to me, if the cost of

debt is going up, so is the cost of equity.
Q. Do you have a sense of what has happened to spreads between Treasury and corporate bonds in general, compared to public utility bonds specifically?
A. I have looked at that. I have looked at that.
Q. You have looked.
A. And, I'm not thinking my memory is very good on that one, though.
Q. So, you don't know whether the spreads have grown faster or slower for general corporate bonds than say for public utility bonds?
A. I'm thinking they're about the same. But what's interesting about corporate bonds is, as you move down the rating scale, and you get weaker and weaker credit quality, the spreads explode. They become enormous. They're like six and eight percentage points for, you know, very weak credit quality. And, that shows up much more on the industrial side than it does on the public utilities.
Q. So, in general, investors, of course, they look at the ratings, although there have been questions about the rating agencies' ratings, but, in general, would it be your opinion that investors that are looking at an unregulated business that is seeing a decline in sales,

decline in earnings, lay off, might see that as a higher risk than utility bonds, where there's perhaps not a similar decline in earnings or lay offs?

A. I would agree with that.

Q. On Page 6 of your rebuttal testimony, at Line 3, you state that "Due to the financial crisis, there has been a flight to quality". And, then you point to the "increasing demand and reducing yields on Treasury obligations". Have you heard the term "flight to quality" used in reference to regulated utility debt or equity?

A. Yes. And, I think I heard it from the Staff testimony, as a matter of fact.

Q. Okay. Obviously, what you're trying to do is or what we're trying to do is come up with a fair return on equity. I mean, in this time of sort of unprecedented economic turmoil, is there a factor of quality that might reduce the perceived risk among investors for regulated utility stocks?

A. I think I understand your question. And, on one level, I would agree with you. Utilities certainly aren't being impacted to the same degree as other types of competitive, non-regulated companies in our economy. And, I agree with that. But you also have to keep in mind what utilities are and how utilities behave through good and bad economic times. And, I'll give you two quick examples, if I can. One is, in a time such as this, when there's a lot of economic difficulty, and there is high capital costs, non-regulated companies can pull back, they can stop spending. But utilities are required to provide safe, reliable, and dependable service, safe service, through good economic times and bad. And, so, while other companies can step back and say "Oh, we're going to cut back substantially on our CapEx, capital expenditures", utilities can't do that. So, utilities, even during times such as this, are continuing to commit capital to an enterprise, where others are pulling back or have stopped.

On a second level is the way utilities are treated in the regulatory framework that we have. During good economic times, unregulated competitive firms can realize enormous levels of profits, and utilities can't do that. So, on the downside, utilities can expect to realize higher profits during bad economic times perhaps that are better than other companies that are suffering during an economic crisis, such as we have today, and financial adversity, but utilities never participated when times were good. So, what it is is utilities are operating in a much more narrow band than non-regulated companies. So that, in good economic times, utilities don't have the opportunity to participate to the good times like other companies can. And, then, they get protected, to some extent, on the downside. I mean, that's the nature of regulation. That's why we have protected markets and why we regulate public utilities. So, the upside is removed during good economic times, and there is, quite honestly, some protection on the downside. But that's the way that public utilities are regulated.

Q. But the conclusion of your rebuttal testimony is that, though, perhaps actual earnings have collapsed for many sectors of the economy, especially the financial sector, that the required rate of return actually goes up at this point in time for the equity in the regulated public utility that doesn't have the same downward-side risk, is that correct?

A. Yes. But not to the same degree as, say, a non-regulated company that's facing even more adversity, because they don't have the protected markets like the utility has.

Q. So, they have seen a much more dramatic increase in the yield -- in the earnings they have to produce to attract new capital?

A. That's exactly right. And, it goes back to my earlier observation that, while utilities have some downside protection in this type of economic situation, they don't have the upside potential that the other companies had when times were good.

Q. Back on the leverage adjustment, can you describe the period of time where the snapshot -- is that the September date that you looked at the market values to input into the formulas that you used to determine the leverage adjustment?

A. Yes. What I did, on the original calculation, was to use a capital structure calculation at the end of the most recent fiscal reporting period for each company. So, I put this together last December/January. So, my guess is -- well, we don't have to guess, we can look. I can tell you exactly what period that was for. The last fiscal reporting period for these companies were either September or December of 2006, because we worked with the data in 2007. And, the interest rates would have been for the six months ended December of that year.

Q. And, for the update in the rebuttal testimony?

A. Oh, the update in the rebuttal testimony, that would have been moved, since a year had passed, I would have moved forward to fiscal year-end 2007, which would be either September or December, depending on the company, and the interest rates would have been six months ended October.

Q. The interest rates for -- I guess I don't understand where the interest rates come to bear in the formulas that were referenced on Page 67 of your original testimony?

A. It would have come from --

Q. And, there's a dividend rate.

A. Yes. Sure. The interest rate would have come from Attachment PRM-18, Page 2 of 5. There's the 6.18 percent, that would have been for the six months ended October of --

Q. Oh. Okay.

A. Oh, I'm sorry.

Q. I'm sorry. I didn't see that that's what you call "cost of debt", Footnote 3, that's the average yield. That's the interest rate you're referring to.

A. Yes. Yes, your Honor.

Q. Okay. So, that figure is more recent, but you're saying the market valuation of the debt and equity

would more likely be in the closing fiscal period, maybe December '06 and December '07 respectively?
A. Yes. The fiscal reporting period immediately preceding when I did the analysis, that would have been the latest fiscal reporting period that I had.
Q. Annual, not quarterly?
A. Annual.
Q. Okay. So, at least in terms of those components, there's little impact from the current financial turmoil reflected in that increase in the leverage adjustment from 0.54 percent to 0.57 percent?
A. You're right.

CMSR. BELOW: Okay. That's all.

CHAIRMAN GETZ: Do you have redirect, Mr. Camerino?

MR. CAMERINO: I have a small amount. If we could take a very brief break, I'd just like to confer with my co-counsel.

CHAIRMAN GETZ: We'll take a brief recess before we do redirect.

(Whereupon a recess was taken at 3:29 p.m. and the hearing reconvened at 3:38 p.m.)

CHAIRMAN GETZ: Mr. Camerino.

MR. CAMERINO: Thank you. I apologize for that delay. Had you given us a few more minutes, we might have even had fewer questions, but I don't have too much.

REDIRECT EXAMINATION

BY MR. CAMERINO:

Q. Mr. Moul, you were asked some questions by Mr. Damon regarding the form of the DCF equation. And, you said that there's the one model that the Staff uses that assumes an "infinite stream of dividends", that the value of the stock is equal to an infinite stream of dividends, and then you referred to a second model, which you said reflects the "yield plus price appreciation", I think is the way you phrased it, and if I've got it wrong, you can rephrase it please. So, you referred to those two models. I'd like to just understand why you reject the Staff's model for solving for the cost of equity and favor the second model?

A. Well, there's several reasons. First of all, investors don't purchase a stock and hold it in perpetuity. The time horizon of the investors is much shorter. And, we can see that by observing the turnover statistics, how frequently stocks trade in the market, and you can sort of get a sense, in maybe three or four years the stock of a firm will turn over. Which gives you an indication of what kind of horizon investors really have. It's not a horizon into perpetuity. So, then, what we're left with, in DCF, is the dividend yield, and the capital gains yield or price appreciation investors expect to realize over their holding period to give them the total return that they're looking for. And, in that context of the DCF formula, earnings per share growth by analysts has been shown to be the best measure of growth. It is not dividend per share growth, which is associated with the other form of the model, which, in fact, investors don't use when they buy and sell stocks in the marketplace every day.

Q. And, your model that you used in this case, which theory is that based on?

A. It's based upon yield plus price appreciation or the capital gains yield. And, that's best measured by analysts' forecast of growth earnings per share, because the price then will grow at the same rate as earnings per share over their holding period, which -- and the analysts' forecast period also matches the investor horizon that we see in the turnover statistics of how frequently a firm's shares trade.

Q. And, the purpose of the exercise that the Commission goes through here in solving, if you're using DCF, solving for that K, is it to come up with a theoretical number or is it to try to determine what cost it will actually take for real investors to invest their capital?

A. It's the return that investors require or expect a firm to actually achieve. It's -- What we're trying to do is to match -- is to provide a return to the utility that can, in turn, provide its investors with the return that it requires over the horizon of its investment.

Q. Okay. Commissioner Below asked you some questions comparing general corporate industrial bonds to utility bonds, and asked you about utility bonds being lower risk. Do you recall those questions?

A. Yes.

Q. Okay. When you say that "the utility bonds are lower risk", are you referring to lower than general commercial/industrial -- corporate industrial bonds or lower than they were prior to the global turmoil that we were talking about?

A. Oh, it would by referencing the industrial bonds. And, again, I think what I said in response to the Commissioner's question was, it's at the very low end

of the credit quality ratings where that difference becomes magnified.
Q. So, when you talk about a "flight to quality", and, first of all, the idea that the flight to quality, I take it, reduces interest rates on a relative basis of the bonds that the flight is to?
A. That's the key point. It's the flight to quality reduces the interest rate for the target of the flight. And, as I used it in my rebuttal testimony, the flight to quality had to do with yields on the Treasury bonds. Those Treasury bonds were the target of the flight. Everybody went for the Treasury bonds, increased the demand, drove down the yield, along with monetary actions that the Federal Reserve took on its own, which is what drove down Treasury yields so dramatically.
Q. And, lastly, you talked about how utilities are different than general commercial/industrial companies, in that they have to keep investing capital. Do you recall that?
A. Yes, I do.
Q. And, if a utility's earnings are diminishing, they may even be negative, is it able to stop investing capital in order to maintain its system?
A. Well, it depends on the individual circumstance of the

utility. At some point, capital -- well, what will happen first is capital will become very costly to that utility that has to continue to invest with inadequate returns. And, at some point, capital just won't be available at all. And, we saw that for a brief period back in October. No matter who you were, it was extremely difficult to attract capital. I can think of utilities back in the October/November time frame when they were paying 10 percent or more to sell debt capital in those kinds of markets. But capital will become much more difficult to attract if the utility is not in a position where it's earning a decent return.

MR. CAMERINO: Thank you.

CHAIRMAN GETZ: Okay. Anything further for this witness this afternoon?

(No verbal response)

CHAIRMAN GETZ: Hearing nothing, then you're excused. Thank you, Mr. Moul.

WITNESS MOUL: You're welcome.

CHAIRMAN GETZ: Is there anything that we need to address before we recess for the day? My understanding is we will begin tomorrow with Dr. Chattopadhyay, and then go to Mr. Stavropoulos, is that correct?

MR. CAMERINO: I think that's correct. I was wondering, and I haven't talked to the parties about this, whether it makes any sense, I just want to make sure we're going to get done tomorrow, and wondering whether, as a safeguard, we should start at 9:00, if there's any interest in that or not? I mean, --

CHAIRMAN GETZ: Well, let's go off the record for a second here.

(Brief off-the-record ensued.)

CHAIRMAN GETZ: All right. Back on the record. Okay. We will recess for the day and resume at 9:30 tomorrow morning. Thank you, everyone.

(Whereupon the hearing adjourned at 3:46 p.m. and the hearing to reconvene on January 29, 2009, commencing at 9:30 a.m.)