BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 080317-EI

In the Matter of:

PETITION FOR RATE INCREASE BY TAMPA ELECTRIC COMPANY.
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VOLUME 5

Pages 542 through 744

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PROCEEDINGS: HEARING

BEFORE: CHAIRMAN MATTHEW M. CARTER, II
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Tuesday, January 27, 2009

TIME: Commenced at 9:41 a.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: LINDA BOLES, RPR, CRR
Official FPSC Reporter
(850) 413-6734

APPEARANCES: (As heretofore noted.)

INDEX

EXHIBITS

NUMBER:		ID.	ADMTD
19			650
105	Code of Conduct Fundamentals of Credit Rating Agencies	617	651

P R O C E E D I N G S

(Transcript continues in sequence from Volume 4.)

CHAIRMAN CARTER: Good morning. Call this conference to order.

First of all, just a few comments here just before we get started here just so that everyone will know what the plan is.

First of all, we have a lot of work to finish and we don't have much time to get it done. In two days of hearing we've managed to examine two witnesses. I wish I had a word to describe that. We have nearly 20 witnesses left to go but we do not have 20 days to examine them. We've got four days. After today, Commissioners, we'll begin our work at 9:00 a.m. and starting tonight we will work late. I don't envision us finishing before 8:00 p.m. for the remainder of these hearings.

The parties can help us out by focusing their examination of the witnesses, avoiding repetitive and redundant questioning and limiting friendly cross. I'm going to do my best to help you accomplish this goal. If we focus all our efforts and if all of us focus our efforts, I know we can finish our work on time in these last four days.

With that, staff, you're recognized for preliminary matters.

MR. YOUNG: Thank you, Mr. Chairman. Mr. Chairman, yesterday staff, staff delivered to each of the Commissioners' offices Exhibits 93 and 96. These were, these were from Gordon Gillette's testimony. 93 is the exhibit that the Commissioners asked for. It's the RRA report and the ROE comparison, the comparison of ROEs of regulated utilities across, nationally across the nation. 96 is an exhibit that Mr. Wright asked be sorted from the, from the RRA report, and it's the expended (phonetic) RRA with an additional sort of the ROEs. I think, speaking to the parties, I think Mr. Moyle has some questions.

CHAIRMAN CARTER: Questions in regard to the exhibits or what?

MR. WRIGHT: Yes, sir.

MR. YOUNG: Yes, sir.

CHAIRMAN CARTER: Okay.

MR. WRIGHT: Just briefly, Mr. Chairman.

CHAIRMAN CARTER: Briefly. You're recognized.

MR. WRIGHT: Thank you, sir. I thought that I had asked not only for the sort by commission RRA ranking but also in date order. I'm really quite sure I asked for that. And I would still renew that request and ask that it be incorporated as part of Exhibit 96.

CHAIRMAN CARTER: Okay. Let's make it so.

MR. YOUNG: So just to be clear, Mr. Chairman, TECO is going to provide a, redo the exhibit in sort order in terms of dates, is that Mr. Wright's concerns?

MR. WRIGHT: Yeah. By the date of the commission order, the respective regulatory authority order granting the increases shown in the table.

CHAIRMAN CARTER: Is there anything else we need on this so we cannot beat a dead horse to sleep, is there anything further on this matter?

MR. MOYLE: I have a question, if I could, Mr. Chairman.

CHAIRMAN CARTER: You're recognized.

MR. MOYLE: We got this document yesterday, and this may go to Mr. Wright's point, but if you look at Page 2, in the first paragraph it says that a separate special report will be published later in January 2009 that will provide chronological listings of all electric and gas cases decided during 2007 and 2008 as well as quarterly and annual historical averages. That seems to be what Mr. Wright is seeking and probably is more relevant than, you know, decisions from 1990 to 2008. I was just curious as to whether that report is available and is it part of this or could it be a late-filed when it becomes available?

CHAIRMAN CARTER: Mr. Willis, is it available?

MR. WILLIS: I have no idea.

CHAIRMAN CARTER: Okay. Mr. Wright.

MR. WRIGHT: Mr. Chairman, thank you, sir. I really thought it was simply a matter of sorting the data that are already shown here in date order and that was all I asked for.

CHAIRMAN CARTER: Okay. Well --

MR. WILLIS: And we can do that, if that's what --

CHAIRMAN CARTER: We can do the date order. Mr. Moyle, that document that you are talking about, they may or may not have that, so.

MR. MOYLE: I can check into it, call them and see.

CHAIRMAN CARTER: Okay. Let's proceed. Thank you. Anything further on 93 and 96?

MR. YOUNG: Just for clarification, sir.

CHAIRMAN CARTER: You're recognized.

MR. YOUNG: So is it Mr. Wright's objection to the exhibit until he gets the date order?

CHAIRMAN CARTER: He's not objecting to the document. He's just saying that to complete the document by adding it in, just rearranging it in date order is all he's, that's what he's saying. It's just a qualifying statement. Is that right, Mr. Wright?

MR. WRIGHT: Yes, sir, Mr. Chairman. My understanding is the data shown will be exactly the same, it will just be organized differently. In addition to the ranking by, the RRA's ranking of the utility commissions there will be another, I guess, three-page or four-page document that would, three-page document that would list all the same information sorted by date order. Thank you.

CHAIRMAN CARTER: On this same issue, Ms.

Christensen? This same issue?

MS. CHRISTENSEN: Yes.

CHAIRMAN CARTER: You're recognized.

MS. CHRISTENSEN: On Exhibit 93, since we just got it yesterday, I'm not objecting to the document, but I would be, ask the Commission's indulgence that if once we get time to look through it a little bit more thoroughly, if we see anything remiss, that we could bring it to the Commission's attention before the close of this hearing.

CHAIRMAN CARTER: Okay. Duly noted.

Staff, you may proceed with further preliminary matters.

MR. YOUNG: Yes, sir. Mr. Devlin is here to respond to a question that came up last week during our hearing.

CHAIRMAN CARTER: Mr. Devlin, you're recognized.

MR. DEVLIN: Thank you, Mr. Chairman. It regards a question of Commissioner Argenziano, and I have the transcript so I'd get it perfectly right. And we would, staff would like permission to answer this question on the record.

CHAIRMAN CARTER: You're recognized. It's kind of -- I'm twisting around to see you. Could you sit over there by Ms. --

MR. DEVLIN: Oh, yeah. Sure. I'm sorry.

CHAIRMAN CARTER: That would be very helpful to me. It's hard to see through Commissioner Skop.

MR. DEVLIN: I apologize, Mr. Chairman.

CHAIRMAN CARTER: You're recognized.

MR. DEVLIN: Again, the question we would like to answer is, pursuant to the transcript, "Does the Commission have the authority to hold TECO to a specific level of debt-to-equity ratio?"

The answer, staff, no, the Commission does not have the authority to tell the utility what levels of debt and equity it must maintain. The utility has the ability to choose how much equity and how much debt it believes necessary for business purposes. The relationship of debt and equity is dependent upon internal corporate policies regarding equity infusions from the parent company to the subsidiary utility and dividend payments from the utility subsidiary to the parent company. However, the Commission does have the authority in this rate proceeding to decide the equity ratio in which rates will be set. The Commission also has the authority to make adjustments to capital structure that it believes necessary in order to ensure only reasonable capital costs are recovered from ratepayers. This could entail an adjustment to the actual or projected debt and equity levels.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: I appreciate that. That makes a big difference to me having that answer and given what the testimony was at the time for Mr. Gillette. So I thank you very much.

MR. DEVLIN: You're welcome.

CHAIRMAN CARTER: Thank you, Commissioner.

Staff, any further preliminary matters?

MR. YOUNG: No, sir.

CHAIRMAN CARTER: Okay. Now has Ms. Abbott been sworn? No?

MR. YOUNG: No, sir.

CHAIRMAN CARTER: Will Ms. Abbott and all other witnesses that are present, would you please stand so we can swear you in as a group? Swear you in as a group. Would you please raise your right hand.

(Witnesses collectively sworn.)

Thank you. You may be seated.

SUSAN D. ABBOTT

was called as a witness on behalf of Tampa Electric Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. WILLIS:

Q Please state your name, occupation, employer and business address.

A Yes. My name is Susan Abbott. I am an investment banker with New Harbor, Incorporated, which is located at 546 5th Avenue in New York, New York.

Q Did you prepare and cause to be prefiled in this proceeding the direct testimony consisting of 28 pages and an exhibit titled Exhibit of Susan D. Abbott prenumbered SDA-1 containing five documents?

A Yes, I did.

Q Do you have any additions or corrections to your testimony?

A We submitted a -- oh, not to the testimony itself. No.

Q Do you have any additions or corrections to your exhibit?

A Yes. On Exhibit 5 we submitted a correction on October 3rd of 2008.

Q Did you mean Document 5 to your exhibit, which has been identified as Exhibit 19?

A Yes. Yes. Document -- yes.

MR. WILLIS: I would ask that the Document 5 revised on October 3rd be substituted for Document 5 in Ms. Abbott's prefiled exhibit to her testimony which has been preidentified as Exhibit 19.

If I were to ask the questions contained in your prepared direct testimony, would your answers be the same?

A Yes, sir.

MR. WILLIS: We'd request that the prepared direct testimony of Susan D. Abbott be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though read.

BY MR. WILLIS:

Q Did you prepare and cause to be prefiled the rebuttal testimony of Susan D. Abbott consisting of 22 pages?

A Yes, I did.

Q Is there an exhibit to your rebuttal testimony?

A No, there is not.

Q If I were to ask you the questions in your prepared rebuttal testimony, would your answers be the same?

A Yes.

MR. WILLIS: I ask that Ms. Abbott's rebuttal testimony be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witness will be entered into the record as though read.

Oh, one other thing that I did not say in my preliminary statements is that I told the lawyers when we began this, as your witnesses do your briefing, not more than five minutes. And I would like, would not like to have to say that again and I would not like to have to reach over, give Chris the signal to shut the mike off because that would be seemingly rude. But really rules are how we live by. Okay? So let's stay focused. You may proceed.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

SUSAN D. ABBOTT

ON BEHALF OF TAMPA ELECTRIC COMPANY

Q. Please state your name, occupation and employer.

A. My name is Susan D. Abbott, and I am a managing director of New Harbor Incorporated. New Harbor is an investment-banking firm engaged in strategic advisory services to the electric, gas and water utilities sectors.

Q. Please provide a brief outline of your educational background and business experience.

A. I have a Bachelor's Degree in Literature from Syracuse University, and an M.B.A. in Finance from The University of Connecticut. I sit on the Board of Directors of the Student Managed Funds for the University of Connecticut ("UConn"), and am a member of the UConn Business School Hall of Fame. I have worked in the financial services industry for 30 years, first as an institutional investor, and most recently as an investment banker.

For 20 years, I worked for Moody's Investor Service. For 13 of those years, I was either a member or the Managing Director of the Power and Project Finance Group. Since leaving Moody's and joining New Harbor, I have been involved in rating agency advisory work. I chair the rating agency panel for the Edison Electric Institute/Gee Strategies "Dialogue with Wall Street" series, and I provide consulting and other services relative to credit and rating issues on behalf of clients in the United States.

Q. Have you prepared an exhibit for presentation in this proceeding?

A. Yes. Exhibit No. ___ (SDA-1) entitled "Exhibit of Susan D. Abbott on Behalf of Tampa Electric", consisting of five documents, was prepared under my direction and supervision. These documents consist of:

Document No. 1	Testimony
Document No. 2	Rating Agencies' Rating Symbols
Document No. 3	Public Utility Commission Rankings
Document No. 4	Standard & Poor's Corporate Ratings Matrix
Document No. 5	Tampa Electric's Credit Metrics Versus Standard & Poor's Metrics

Matrix

Q. Have you previously testified before state public service commissions?

A. Yes, I have. A list of previous cases in which I have testified is attached as Document No. 1 of my exhibit.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to describe how rating agencies rate companies, the importance of regulation to ratings, and the basis of Tampa Electric Company's ("Tampa Electric" or "company") current and targeted ratings. In particular, I have analyzed Tampa Electric's current creditworthiness, its ratings, the reasons the company is rated as it is and the likely implications of its current rate request to its future ratings. I discuss the consequences of regulatory actions relative to Tampa Electric's current rate filing. Finally, I provide support for Tampa Electric's targeted credit ratings.

Q. What are rating agencies and what do they do?

A. There are three principal U.S. rating agencies: Moody's Investors Service ("Moody's"), Fitch Ratings ("Fitch"), and Standard and Poor's ("S&P"). They have been in business since the turn of the 20th century or shortly thereafter, and they function as gatekeepers to financial marketplaces. Their primary function is to evaluate the creditworthiness of companies wishing to access capital in the public debt markets.

Their ratings, expressed as a series of letters and numbers, are used to indicate to investors the likelihood that a company issuing debt will pay principal and interest on time, and in amounts expected. S&P, one of the largest rating agencies in the world, defines its ratings as an "evaluation of default risk over the life of a debt issue, incorporating an assessment of all future events to the extent they are known or can be anticipated"[i].

The "rating symbols" are English alphabet letters used by all three major U.S. rating agencies and are recognizable regardless of an investor's native language. The rating scales of each major U.S. rating agency are shown in Document No. 2 of my exhibit. Each rating level represents the probability of default. The lower the rating, the higher the probability of default. When ratings fall from investment grade to non-investment grade, the probability of default rises rapidly to levels that are often double those of the lowest investment grade rating.

From 1982 through 2006, the average cumulative credit loss as the result of a default was 13.4 percent by year 20 in the life of a Baa bond, according to Moody's. In the same report, they calculated that 30.8 percent of Ba- rated issuers default, a rate more than twice as high as Baa-rated securities.[ii] Conversely, an investor in an A rated issuer will experience 6.4 percent loss over 20 years, less than half that of a Baa rated investment and a quarter of the loss that can be expected for a Ba rated investment.[iii] Any company that loses its investment grade status, in addition to paying more for the money it borrows to reflect the higher probability of default, has the added challenge of trying to regain its investment grade rating. According to Moody's, fewer than 35 percent of such companies regain their investment grade rating within five years.[iv]

Q. How are ratings used?

A. Ratings are used by investors to help them determine companies in which they should invest, the appropriate interest rate that should be paid, and the likelihood that their investment is going to behave as expected in terms of timely payment of interest and principal. When rating agencies' opinions contain discussions of higher risks, some companies cannot issue securities under certain circumstances and market conditions regardless of how much they are willing to pay.

The rating level is critical to investors because regulations and/or internal charters and standards prohibit many investors from investing in fixed income instruments that are rated below a certain level. Institutional investors have fiduciary responsibilities to their clients, and in some cases, are not allowed or will not invest in securities rated below a single A. An investor is less likely to invest in securities offered by a lower rated issuer when the investor perceives that the risk that principal and interest will not be paid in a timely manner is higher than for a higher rated security, and greater than that investor's risk appetite.

Q. Why is investment grade status important?

A. The probabilities of default, reflected in ratings levels, have serious implications for both the cost of borrowing money and more importantly, access to borrowed funds. The lower the rating, the higher the risk profile and the higher the cost of borrowed money. In addition, low rated companies have problems accessing capital markets in tumultuous times like those being experienced currently. The dislocation in the credit markets resulting from the sub-prime mortgage crisis has resulted in even creditworthy utilities being shut out of the markets.

Electric utilities are entering a period of heavy capital spending needed to refurbish, rebuild and expand their systems to provide for a growing customer base and to meet mandated requirements for environmentally conscious investment. They need to be able to access the capital markets freely. Without free access to the capital markets at reasonable prices, borrowing and building becomes more expensive than it otherwise would be, and those costs are ultimately borne by the customer. An A credit rating would make it more likely that a company could access the credit markets at reasonable prices even during times of financial market distress.

Q. Can credit be foreclosed by unforeseen events extraneous to the utility industry?

A. Yes. Market instability resulting from the sub-prime mortgage problems has affected the liquidity in the entire financial sector. This is a good example of how access to the marketplace can be shut off for even creditworthy borrowers by extraneous, unforeseen events, and it emphasizes a strong credit rating is essential to ongoing, unimpeded access to the capital markets.

Q. What are the implications of being foreclosed from the markets?

A. Utility finance is complex with a relatively constant stream of both long-term and short-term financings. In the unique case of Florida utilities, the need to be able to recover quickly from storm damage requires a greater degree of financial flexibility than companies not subject to the same devastating weather. Utilities also need to pay large amounts to suppliers of essential goods and services on an ongoing basis, maintain creditworthiness for counterparties, and access large amounts of capital frequently during a construction cycle. Being unable to access funds can place the completion of critical infrastructure construction in jeopardy and undermine reliability of service.

Q. What has happened in the electric industry in the past few years?

A. Two things of importance. Most utilities have gone "back to basics", meaning they have adjusted their business strategies to refocus on regulated electric and gas services. The other important issue is capital spending. The last construction cycle was completed almost 20 years ago. The infrastructure of the industry needs to be renewed, and growth has necessitated additional spending for new generation equipment as well as new distribution and transmission lines in addition to the extension of those already in place. A report published on March 24, 2008 by S&P reflects its current concerns, and is titled Credit Perspective: Regulatory Risk Remains for U.S. Utilities. In it, S&P states that for "utilities….entering a multiyear capital expansion phase for growth and to accommodate mandatory environmental standards and replace aging infrastructure, borrowing needs will rise…" Therefore, "regulatory risk remains key to credit quality". I believe Tampa Electric's challenges mirror those of the entire electric industry.

Q. Is there anything unique to utilities operating in the Southeastern United States that makes it more important to have strong ratings?

A. Yes. Utilities operating in Southeastern United States face potentially devastating weather-related event risk from unpredictable hurricanes. Maintaining financial strength is essential for these utilities so that they may brace for the inevitable financial strain they could experience if a hurricane strikes their service territory. The Florida Public Service Commission ("FPSC" or "Commission") has demonstrated a highly sophisticated understanding of the risk posed by the severe weather Florida is subject to, and has established forward-looking regulatory procedures for storm recovery, including the potential for securitization. This makes Florida unique relative to regulatory practices. However, continuation of this regulatory framework is important for the credit strength of utilities in Florida, and adequate storm accruals and prompt renewal of depleted storm reserves are important to protect against the serious and potentially devastating risks faced by these companies.

Q. What implications does this have on this rate proceeding and this Commission's actions?

A. It is important for this Commission to understand the magnitude of Tampa Electric's capital spending program, the need for stronger credit ratings going forward, and how the Commission's actions in this rate proceeding will be perceived by the rating agencies. Florida has a long history of providing the regulatory support necessary to ensure credit ratings that will provide utilities appropriate access to capital markets, even during times of financial market distress. Continuing to provide regulatory support in the form of adequate rate relief will ensure that Tampa Electric will be able to meet its capital expenditure program, which is necessary to ensure reliable customer service. This rate proceeding, the first in 16 years, provides the Commission the opportunity to provide a platform for Tampa Electric to improve its credit standing. Providing adequate rates could have positive implications for customers and investors alike, far beyond the immediate proceeding.

Q. Why should regulatory commissions be concerned about the views held by the ratings agencies?

A. Regulators should be concerned about the views held by rating agencies because electric utilities are capital intensive entities that must obtain capital from the markets to provide service. The California Public Employee Retirement System estimates that $20 trillion needs to be invested in the U.S. infrastructure over the next 25 years. This includes investments in electric utility transmission and distribution equipment, generation, water facilities, bridges, tunnels, and toll roads among other things. The need for capital in the electric utility industry alone will more than double from 2004 levels to approximately $60 billion annually by 2010 according to Lehman Brothers' estimates.[v]

Utilities throughout the U.S. are faced with large capital programs needed to upgrade aging equipment, provide for growth in their service territories, make environmentally conscious investments and maintain service quality. Utilities must rely on either debt or equity capital provided from external sources and the funds a company can generate internally to finance these capital programs. There are no other options. A company's creditworthiness, as expressed through its ratings, will dictate its ability to attract capital in an increasingly competitive capital market.

Q. What impact does regulatory action have on a utility's ratings?

A. Quite a lot. Capital-intensive companies like utilities need to maintain access to capital markets on reasonable and sustainable terms. Regulated utilities are unique, because they are not free to set their own prices for service. Their financial integrity is a function of the way the company is managed and the price levels set by regulators in a rate case. Rates are established by regulators to permit recovery of operating expenses and to provide a fair return on the capital invested. It follows that rate decisions by utility commissions have a major impact on the financial health of utilities.

Indeed, it is fair to say that the investment community perceives that utility commissions have a significant impact on the financial health of the utilities they regulate. For example, Moody's states that "the supportiveness of the regulatory framework under which a utility operates is a critical rating factor"[vi]. Moody's states further, that "the most significant risk [for utilities] might be future disallowances of investments that were made with an understanding that those investments were prudent and necessary at the time they were made"[vii]. And, in its 2008 Industry Outlook, Moody's cites as a key risk, "an increasing likelihood that utility cash outflows could materially outpace authorized cash inflows - thereby potentially creating an acute deferral/recovery overhang risk"[viii]. S&P expressed its view on the subject even more explicitly by naming an article written in 2004, "Utility Regulation Determines its Ratings". The article is a tutorial on how S&P analyzes regulation in light of the "renewed and increasing influence that regulators are asserting on the creditworthiness of utilities…".

Q. What are rating agencies looking for relative to regulation going forward?

A. Rating agencies are keenly aware of the capital spending cycle utilities have just entered. They have opined that while the "fundamental credit outlook for the U.S. electric utility sector currently remains stable, material negative bias appears to be developing over the intermediate and longer term due to rapidly rising business and operating risks"[ix]. The rising business and operating risks referred to are associated with the current building cycle. Therefore, rating agencies are looking to see whether regulators are taking sufficient action to preserve the financial integrity of the utilities they regulate.

Q. How are ratings established?

A. Ratings analysis is a complex exercise that strives to balance financial results against qualitative risks. That result is then viewed in the context of the corporate structure and industry in which the company operates. While there are dozens of metrics calculated to determine a rating, S&P publishes a grid in which it overlays ranges of financial results for the three most important financial metrics with risk levels determined by examining a company's operating risks, political environment, and competitive position. S&P emphasizes, however, that "it is critical to realize that ratings analysis starts with the assessment of the business and competitive profile of the company. Two companies with identical financial metrics are rated very differently, to the extent that their business challenges and prospects differ"[x]. S&P describes its ratings grid as one that shows how "the company's business-risk profile determines the level of financial risk appropriate for any rating category"[xi]. The primary business risk the agencies focus on for utilities is regulation.

The rating agencies have their own views of the regulatory climate in which a company operates, but also pay attention to knowledgeable Wall Street and other financial firms who express views on state regulatory climates. Florida is presently regarded by a number of equity analysts as having a constructive regulatory environment because of innovative and forward looking regulatory practices, including the timely recovery of storm restoration costs as a result of hurricanes in 2004 and 2005, and timely recovery of changes in fuel, purchased power, conservation, and environmental compliance costs. Regulatory Research Associates ("RRA"), a firm that focuses entirely on regulation of utilities, ranks the FPSC as "Above Average 2"[xii] on a scale that runs from Above Average 1 (in which there are no entries currently) to Below Average 3. The entire RRA rankings are presented in Document No. 3 of my exhibit.

Constructive regulatory policies and practices that support the creditworthiness of the utilities a regulatory body oversees is one of the most important issues rating agencies consider when deliberating ratings. Regulation in Florida is considered among the best in the country, and that has benefited customers by allowing utilities to provide for their customers' needs at a lower cost than they might otherwise. This has been one of the factors that have helped Florida utilities maintain pace with the growth in the state, which is essential to economic development.

Q. What does S&P emphasize in its ratings grid?

A. S&P emphasizes three metrics: 1) funds from operations as a percentage of debt outstanding ("FFO/Debt"), 2) funds from operations coverage of interest ("FFO/Int"), and 3) debt to total capitalization ("Debt/Cap"). All three metrics measure cash flow or the obligations that need to be covered by that cash. The first two are cash measurements that describe how well a company's cash flow from operations supports its debt and interest burden. The third metric, Debt/Cap, describes how heavy that burden is. Numerous other financial metrics are calculated when a rating is assigned, but cash flow metrics are the most important. After all, cash obligations can only be paid by cash. Therefore, how well a company generates cash relative to its cash obligations is critical to an analysis of creditworthiness. S&P calls "cash-flow analysis the single most critical aspect of all credit rating decisions"[xiii]. Although they do not publish a ratings grid, Moody's and Fitch use similar financial metrics and emphasize cash flow strongly.

Q. Do the agencies overlay qualitative measures on the financial metrics in assigning ratings?

A. Absolutely. There are a number of qualitative issues that affect a company's rating, but the single most important qualitative risk factor analyzed by the rating agencies for electric utilities is the quality of regulation. Strategy, capital programs, customer base, and basic business profile (*i.e.*, whether a utility is a low risk transmission and distribution company or a higher risk vertically integrated one) are all important, but a company's financial integrity is significantly impacted by the rates regulators allow a company to charge. Regulators authorize the level of return on equity, the amount of equity on which a company is allowed to earn, and rate design, and these factors help determine cash flow. Since cash flow is of resounding importance, rating agencies are keenly focused on rates and whether they create cash flow that adequately covers fixed obligations.

S&P recently changed their descriptive ratings grid relative to utilities to normalize their expression with that used for all other corporate entities. They rank companies for business risk using the following appellations: "excellent", "strong", "satisfactory", "weak", and "vulnerable". Financial risk is described as "minimal", "modest", "intermediate", "aggressive", or "highly leveraged". All utilities have been judged to have "excellent" or "strong" business risk profiles. This reflects the quality of regulation and the continued need for supportive regulation to maintain credit ratings that allow free access to capital markets. The entire S&P grid is shown in Document No. 4 of my exhibit.

Q. Once ratings analysts have all of this information, how is a rating determined?

A. Ratings are determined through an extensive process that involves a detailed examination of all the information available to the analyst, and the application of a significant amount of judgment based on experience. It is always difficult to accurately predict what a rating agency will do. However, rating agencies provide investors and rated companies some guidelines as to their methodologies. S&P is the most transparent about their rating practices, although their matrix that compares business risk and financial risk is very broad, so understanding when they might move a rating is extremely difficult. Nevertheless, the process rating agencies use to determine a rating is fairly straightforward. Once the financial metrics are calculated and an analyst has determined the business risk level of a company, he or she compares the results to those of comparable companies in the industry as well as against internal standards that have been developed at each rating agency.

Q. In your opinion, what should Tampa Electric be targeting as its credit rating?

A. Tampa Electric needs to access the capital markets in order to make capital investments for the benefit of its customers. Because it is in competition for capital with other utilities and infrastructure entities, it is essential that Tampa Electric have credit quality sufficient to ensure access to capital under all market conditions. In my opinion, that desired rating level is in the A range. To achieve this rating, regulation must support the financial integrity of the company to a degree that provides the basis for a strong investment grade rating. Such a rating will not only benefit investors, but will provide capital to the company at more attractive rates, and continued access to the markets that will enable the company to pursue its capital investments for the benefit of its customers.

Q. What are Tampa Electric's current ratings, and how do they compare to those of other major, vertically integrated utilities?

A. Tampa Electric's current senior unsecured debt ratings of Baa2 from Moody's, BBB- from S&P, and BBB+ from Fitch put the company in the lowest investment grade category by all three major U.S. rating agencies. While the average rating of regulated electric utilities in all sub-sectors is, according to Moody's, in the Baa range, the average rating of vertically integrated utilities like Tampa Electric is A3. As most vertically integrated electric utilities are facing large construction programs which can put serious stress on financial health, a solid investment grade rating of at least an A is needed to provide enough creditworthiness to not only attract capital, but to provide protection against the strains of a protracted construction spending period and potential hurricane damage.

Q. How does S&P view Tampa Electric under its descriptive ratings grid?

A. Tampa Electric is considered to have an "excellent" business risk profile in part because it is a regulated electric utility serving a growing customer population in Florida. However, it is considered to have an "aggressive" financial risk profile, indicating that the financial metrics are relatively modest.

S&P's business risk level of "excellent", and financial risk profile of "aggressive", qualifies the company for a BBB rating, which is the rating Tampa Electric currently has. For Tampa Electric to achieve a better rating to carry it through its construction program, during which financial stress may degrade its metrics, the company should have stronger financial metrics. Document No. 5 of my exhibit contains a comparison of Tampa Electric's financial metrics to the range needed for both the current BBB rating, assuming an "excellent" business risk ranking, as well as what is necessary to move the financial risk indication to a more reasonable "intermediate" level, which would qualify for an A rating.

As can be seen, Tampa Electric's metrics, especially the important cash flow metrics of FFO/Debt and FFO/Interest, currently fall in, or near, the guidelines for the BBB rating category. More importantly, however, they are deteriorating. With a heavy capital program and persistent need to access the capital markets, Tampa Electric requires healthier financial metrics to ensure capital market access on a sustainable basis. As mentioned previously, Moody's is concerned about the overall industry's financial indicators, which "have been relatively stable over the past few years … a *credit negative* since stronger metrics would be needed to offset the pace of rising business and operating risk"[xiv].

Q. Document No. 5 of your exhibit shows that some of Tampa Electric's credit metrics in 2007 and in projected 2009 fall within the A range of the S&P matrix. Doesn't that indicate that Tampa Electric already has credit metrics that should qualify it for an A rating?

A. Clearly not. All three of the rating agencies affirmed Tampa Electric's ratings in the BBB category. The rating reports state either that Tampa Electric's credit metrics are consistent with the current rating, or that improvements in the company's credit metrics could lead to ratings improvements. The S&P matrix that compares business risk and financial risk is, as I noted, very broad and does not represent the only factors affecting a rating. For example, a utility with the same credit metrics as Tampa Electric but with modest capital needs that are expected to be met entirely with internal cash flows might be rated A. But, it is very clear that Tampa Electric has significant capital spending requirements that will require external funding, and this is a continuation of a trend that has resulted in the deterioration of the company's credit metrics over time, as Document No. 5 of my exhibit illustrates.

Q. What are the most recent pronouncements of the rating agencies that you believe are relevant to Tampa Electric's financial standing?

A. Most recently, Fitch affirmed Tampa Electric's rating, citing credit concerns related to construction expenditures, environmental requirements, and the need for base rate relief to maintain current metrics. At the same time, recognizing the distinction between Tampa

Electric and TECO Energy, Fitch upgraded TECO Energy, Tampa Electric's parent company, to BBB- (investment grade) from BB+ (non-investment grade). Similarly, Moody's affirmed Tampa Electric's ratings in December of 2007 but upgraded TECO Energy's ratings. In its press release, Moody's stated that a "rating upgrade of the utility (Tampa Electric) could be considered if there is additional clarity on the size and timing of its capital expenditure program and the magnitude and regulatory response to potential rate increases related to these capital expenditures"[xv]. Finally, in June 2008, S&P changed its outlook on TECO Energy and Tampa Electric to positive from stable stating that the company "should be able to achieve better credit metrics as it focuses on achieving greater cash realization through the regulatory process". They go on to say that, "the company's ability to manage regulatory risk during the construction program will be an important factor in resolving the positive outlook"[xvi].

Q. In your opinion, what are the implications of those pronouncements for Tampa Electric?

A. First, all three of the rating agencies cite the same capital program and necessary rate relief as issues of concern. Moody's stated, in its Credit Opinion on Tampa Electric published in December of 2007, that "the rating is constrained by expected high capital expenditure requirements for the system reliability and environmental compliance…".[xvii] All three rating agencies have clearly expressed their opinion that Tampa Electric's financial position results from the need to recover significant expenditures on its system and the uncertainty regarding future rate decisions. As a result, they are keeping Tampa Electric's ratings at the BBB/Baa level in anticipation of continued financial strain and uncertainty about regulatory outcomes.

Q. If the Commission approves the rate increase as requested by Tampa Electric in this proceeding, will this be sufficient to improve its credit rating?

A. Yes, it should be sufficient. Looking at the S&P grid for the 2009 test year and assuming the requested rate increase is approved, the credit metrics appear to be in the range of "intermediate", and should support credit ratings in the A range. More importantly, the credit metrics would improve measurably from their current levels and reverse the declining trend, something the rating agencies have cited as a catalyst for future upgrades of Tampa Electric's credit ratings.

Q. Please summarize your direct testimony.

A. My direct testimony supports the conclusion that Tampa Electric's current ratings are primarily the result of 1) changes in the risk level and general nature of the regulated electric utility sector since the company's last rate filing, and 2) an unrelenting need to fund capital expenditures in order to provide service to a constantly growing customer base. I also conclude that in order for Tampa Electric to access the capital markets to continue to fund a robust and necessary capital program at costs that limit rate impacts on customers, it needs to improve its ratings to the A level. Approval of the company's requested rate increase should improve its credit metrics and result in an A level profile.

Q. Does that conclude your direct testimony?

A. Yes it does.

TAMPA ELECTRIC COMPANY
DOCKET NO. 080317-EI
FILED: 12/17/08

BEFORE THE PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY

OF

SUSAN D. ABBOTT

ON BEHALF OF TAMPA ELECTRIC COMPANY

Q. Please state your name, business address, occupation, and employer.

A. My name is Susan D. Abbott. My business address is 546 5th Avenue, New York, New York 10036. I am employed by New Harbor Incorporated as a Managing Director.

Q. Are you the same Susan Abbott who filed direct testimony in this proceeding?

A. Yes I am.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to address serious errors and shortcomings in the prepared direct testimonies of Mr. Tom Herndon, testifying on behalf of The Florida Industrial Power Users Group and The Florida Retail Federation; Mr. Kevin O'Donnell, testifying on behalf of The Florida Retail Federation; and Dr. J. Randall Woolridge, testifying on behalf of the Citizens of the State of Florida.

Q. Please summarize the key concerns and disagreements you have regarding the substance of Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon's testimonies.

A. My key concerns and disagreements are as follows:

- All three seemed to have missed the point of my testimony. It was not written in support of return on equity. Instead, it was written to provide the Florida Public Service Commission ("the Commission") with a detailed understanding of the importance of financial integrity to the company's access to capital.

- None of the three acknowledged the importance of what the rating agencies do and how they do it, or what effect ratings have on access to funds for the company. Several statements were made in their testimonies that indicate some confusion about the ratings process.

- Dr. Woolridge, Mr. Herndon, and Mr. O'Donnell underestimate how investors perceive risk, both in a general sense and relative to specific issues. Such underestimations can have dire consequences for the customers of capital intensive companies like Tampa Elcctric.

- All three demonstrate a lack of understanding about recent conditions in the debt markets including the availability and cost of funds.

Q. Why do you believe Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon misinterpreted your testimony?

A. Dr. Woolridge and Mr. O'Donnell apparently believe that my testimony was, or should have been, in support of a particular return on equity. It is Tampa Electric witness Dr. Donald Murry's responsibility to support a particular return on equity. I never intended, and in fact never addressed the issue of the appropriate return on equity. Mr. Herndon at least acknowledges the focus on A level ratings, but then ties it completely to a stated return on equity. All three missed the focus and importance of the issue of financial integrity. It is critical for the Commission to appreciate the importance of financial integrity to a company with a large construction program and the need to purchase large amounts of fuel and purchased power on a regular basis. Solid creditworthiness is essential for both access to the financial markets, and to make capital expenditures and to purchase fuel, materials, and supplies necessary to produce electricity for ratepayers. My testimony is meant to help the Commissioners make a fully informed decision by providing insight into 1) how financial integrity is regarded by the rating agencies, 2) how rating agency actions affect a company's access to capital, and 3) what the financial metrics would be with and without the rates requested, both cases assuming a 55 percent equity level, as a way to gauge the effect on Tampa Electric's financial integrity of any decision the Commission makes. Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon make no attempt whatsoever to provide information on what their recommendations would do to the financial integrity of Tampa Electric.

Q. How do Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon reflect their interpretation of your testimony?

A. In his direct testimony, Dr. Woolridge states on pages 85, lines 19 through 21 and 86, lines 1 and 2, that I do "not perform any studies to evaluate the adequacy of Dr.

Murry's 12 percent rate of return recommendation." Mr. O'Donnell states on page 41, lines 28 and 29, that my testimony implies that a "certain return on equity and capital structure [is needed] in order to ensure the utility will have a credit rating that [I deem] suitable for the company's credit needs." He also complains that I do not provide a return on equity or capital structure recommendation. Mr. Herndon states on page 18, lines 11 and 12, of his direct testimony that I suggest that "an A level profile will automatically result from a certain ROE".

Q. If you were not submitting direct testimony in order to support the recommended return on equity, why did you submit testimony?

A. I stated very clearly on page 3, lines 11 through 21, of my direct testimony that I was providing testimony regarding the rating agencies, how their decisions affect the credit standing and, therefore market access, of any company they rate, and how important an understanding of the consequences of the decision in this case is to Tampa Electric's creditworthiness. Finally, I stated that I was providing support for Tampa Electric's targeted credit ratings.

Q. But shouldn't Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon expect ratings analysis to include consideration of allowed returns on equity?

A. Yes. Any credit analysis includes an examination of allowed returns on equity. However, more important to creditworthiness than the level of returns allowed is how ROE, capital structure and rate design work together in light of the level of a company's business risk to generate cash flow that is adequate to support a company's credit ratings. Mr. Herndon fatuously states that I suggest that the company's ratings would "automatically" improve if it were granted its requested return on equity. After 20 years of working at a rating agency, and more than ten years working with them from the outside, I know that nothing is "automatic" about what they do, and the return on equity is far from the only thing the rating agencies look at. What I did suggest was that approval of the requested rate increase and capital structure would improve the company's financial profile to the point where A ratings by the rating agencies would be warranted.

Q. Why have you concluded that none of the three intervenor witnesses demonstrates an understanding of the rating agencies?

A. All three intervenor witnesses made statements in their direct testimony that indicate a lack of appreciation of how the rating agencies operate, what their influence is in the marketplace, and why their behavior is important to the Commission.

Q. Can you elaborate?

A. Yes. Let me take each witness's statements individually. Dr. Woolridge argues two erroneous points of view. First, he argues that the inclusion of the cost of purchased power agreements ("PPAs") as a debt equivalent in Tampa Electric's capital structure is inappropriate because the cost of PPAs is passed through to customers through a Commission-endorsed adjustment clause. He further argues that the 25 percent risk factor the company included in its calculation should be disregarded because Dr. Woolridge believes there is no evidence to conclude that Standard & Poors ("S&P") actually uses a 25 percent risk factor in Tampa Electric's case. He also concludes that because Moody's approaches PPAs as a debt equivalent differently than S&P that the topic should be ignored.

Q. Why is Dr. Woolridge mistaken in his approach to this issue?

A. The inclusion of PPAs as debt equivalents has been incorporated as a core part of utility credit analysis by the rating agencies since the early 1990s. S&P has always taken a more systematic approach to the issue than has Moody's. S&P has published numerous articles on the topic, and clearly stated in its May 7, 2007 update on the topic, "in cases where a regulator has established a power cost adjustment mechanism that recovers all prudent PPA costs, we employ a risk factor of 25 percent…" Florida has established such an adjustment mechanism, and therefore, Tampa Electric qualifies for S&P's 25 percent risk factor adjustment. In addition, as Tampa Electric witness Gordon Gillette discusses in his rebuttal testimony, S&P has told Tampa Electric that this is the risk factor they use when making adjustments to the company's balance sheet. Even though there is a purchased power cost pass-through mechanism in Florida, S&P apparently believes there is enough residual risk to reflect a 25 percent risk factor in its analysis, indicating that they do not believe the pass-through clause entirely mitigates the risk of the PPAs.

Q. How do you respond to the claim that Moody's does not adjust for PPAs, and, therefore, those adjustments should be ignored?

A. The truth is that Moody's does calculate a debt equivalent for PPAs. They just do not put as much weight on them as does S&P, and may not, under certain circumstances, reflect the adjustment in their metrics. Nevertheless, the concept that if rating agencies make different adjustments, those adjustments should somehow be negated makes no sense. That approach shows a lack of understanding of how investors view ratings and risk.

Q. Why is that?

A. If the inclusion of PPA obligations as debt equivalents results in pressure on either a rating that becomes visible to investors in the form of a negative outlook, or a lower rating than another agency has for that same company, the investors will default or give more weight to the lower outlook or rating. That negatively affects a company's ability to access the market and affects the interest rates for new debt.

Q. You cited two issues Dr. Woolridge is mistaken about.

What is the second?

A. Dr. Woolridge emphasizes that debt imputed by S&P relative to PPAs is not GAAP accounting, and therefore investors will not see the liability on the company's financial statements.

The rating agencies use GAAP statements as a starting point in their analyses. However, since they are interested only in cash flow measures of creditworthiness, they make routine adjustments to financial statements to include or exclude items. The rating agency believes those items represent a fixed obligation or change the level of cash flow. They make these adjustments regardless of what the GAAP treatment of those items may be. In addition, the rating agencies routinely publish reports on the adjustments they make, so investors are well aware of what they are. Investors do not blindly accept GAAP statements as the whole truth of a company's creditworthiness. If Dr. Woolridge understood that, he would never have made the odd statement that investors would never see the adjustments the rating agencies make.

Q. What statements did Mr. O'Donnell make that indicates he does not understand the rating agencies?

A. Mr. O'Donnell, having obviously not understood the point of my testimony, interprets it as being in "support [of] the testimony of other witnesses" and therefore irrelevant. Had he read my testimony more thoughtfully, he would have seen that the case I made for financial integrity, as measured by the criteria used by rating agencies, was the core of my testimony. He also asserts a number of other things that are erroneous or irrelevant. He purports that my testimony indicated that rates should be set according to credit ratings, and then, either erroneously or with forethought, referred to the ratings as being set by "investment banks in New York" (page 42, line 1 and 2). He disparages the rating agencies for their "substantial conflicts of interest" (page 42, line 7), and states that if the Commission is targeting a credit rating as opposed to granting a company an opportunity to earn a particular return, company management is going to be incented to take risks they otherwise wouldn't take.

Q. Why are these issues indicative of Mr. O'Donnell's lack of understanding of the function of ratings?

A. Mr. O'Donnell is being provocative rather than helpful in his critique of my testimony. The "conflict of interest" that he refers to on page 42, lines 6 and 7, is grossly misunderstood by most and irrelevant to this case. It involves the erroneous assumption on the part of some that the rating agencies cannot be objective because they are paid by the issuers they rate. It is hard to see why, even if the assertion were true, it is relevant here. In addition, he suggests that I believe rates for electric service should be set by the rating agencies and that I do not understand the regulatory process. Further, the idea that a management concerned with its ratings is going to take risks it otherwise would not demonstrates a complete lack of understanding of rating agencies. Rating agencies do not like risk, and would, therefore downgrade or otherwise maintain a low rating on a company that increased its risk. Therefore, where is the incentive provided by a rating agency for company management to take risk? There simply is no incentive. Mr. O'Donnell's statements have nothing to do with the substance of my testimony, or Tampa Electric's financial integrity. He seems to have been unable to formulate a cogent argument as to why Tampa Electric's financial integrity is not important to the Commission, and has chosen instead to attack the rating process.

Q. How do you respond to these issues?

A. Much of what Mr. O'Donnell says in response to my testimony is irrelevant or not based on fact. I never stated nor even implied that rates for electric service should be set by the rating agencies. It is the Commission's job, and its alone, to determine the balance between the interests of the ratepayers and those of the company. My testimony was presented as a tool to help the Commission to achieve that balance. It needs to be recognized that in the end, a healthy utility benefits both ratepayers and financial constituents. A healthy utility can access markets when needed so as to pursue its capital requirements for the benefit of its customers. A healthy utility provides investors with the returns they expect so that they will continue to invest in the company, and again, allow access to funds used to satisfy the needs of the utility's customers.

Q. Does Mr. Herndon understand rating agencies in your opinion?

A. Mr. Herndon, aside from making the overly broad statement that I suggested an upgrade to an A would be automatic, joins Mr. O'Donnell in making inflammatory statements about the rating agencies, I assume in an attempt to discredit them. He states that the mistakes the rating agencies have made "led us to the current financial situation" (page 18, line 11). The current financial crisis resulted from the failure of the subprime real estate financing market. The rating agencies, while among those receiving criticism for their part in the crisis, are still highly respected and valued for their opinions on utilities and other corporate and municipal borrowers. The credit rating process is not perfect, but is still relied upon by investors to make decisions. It is still the best tool available to the Commission to evaluate the impact of its own decisions on the company's creditworthiness. Assigning blame for the credit crisis is irrelevant, but the crisis does make financial integrity that much more critical. Further, Mr. Herndon makes another statement at lines 8 and 9 on page 18 of his testimony that recent experience "amply demonstrates that their work is art, not science". That is not new. It has never been science, and whether that is true or not is irrelevant. I do, however, agree with Mr. Herndon that ratings are valuable aides in making investment decisions, but "not the final answer" (page 18, line 14).

Q. Why do you believe Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon have misinterpreted the issue of risk?

A. While utilities are considered less risky than a lot of companies operating in other sectors, they are not without risk. Messrs. O'Donnell and Herndon appear to be somewhat dismissive of the risks utilities retain, while Dr. Woolridge does acknowledge that utilities have greater than average financial risk. Yet, he too is somewhat dismissive of that risk. Mr. Herndon does say, "the utility business is not completely risk free" (page 10, line 18). Mr. O'Donnell delineates the costs that aren't covered by cost recovery clauses but then states, if the company can't generate enough revenue to cover costs, it can simply apply to the Commission for a rate increase, as if that were a simple exercise that will be followed by easy recovery of their costs. Utilities are at greater risk than other companies because they can not institute price increases to reflect increased costs unilaterally. They must wait on the regulatory process and hope they receive sufficient rate relief. While both Messrs. O'Donnell and Herndon cite the various cost recovery clauses the FPSC allows which do diminish risk to a certain degree, they have not demonstrated that they understand that the utility industry suffers from high levels of financial risk.

Q. What do you mean by "financial risk"?

A. Rating agencies construct ratings by examining both business risk and financial risk. Business risk includes such issues as regulatory practices, the growth rates for electric service in the service territory, fuel use, customer mix, etc. Financial risk relates to how much leverage a company has and how well its cash flow covers its obligations. As I explained in my direct testimony, S&P evaluates all companies for business risk on a scale of "Excellent" to "Vulnerable", and for financial risk on a scale of "Modest" to "Highly Leveraged". Although 133 of the 180 utilities S&P rates have "Excellent" business risk profiles, meaning their business risk is low, 106 are deemed to have "Aggressive", or high financial risk, while 65 have "Intermediate" financial risk. Only one is deemed to have "Modest" financial risk. As a result, even their "Excellent" business risk positions only generate an average industry rating of BBB. In today's markets, BBB utilities can not access the markets at all at times, or can do so, but only at very high cost.

Q. What indicates that Dr. Woolridge, Mr. O'Donnell, and Mr. Herndon are out of touch with market conditions?

A. Several things. First, Mr. Herndon illogically claims that a 7.5 percent return on equity would be attractive to investors. In the current market environment, if BBB utilities even have access to the markets, they are paying 9 percent and 10 percent for 10-year debt. No equity investor will accept an equity return that is less than the company's cost of debt, simply because the equity holder's risk is higher than the debt holder's. In fact, that subordinate position leads equity investors to demand a reasonable spread between the cost of debt and the return on equity. Mr. Herndon also compares his recommended return on equity to the risk free rate, which is quite low. In fact, the Treasury rate has been pushed down to stimulate economic growth, while the credit markets, when they are open, are requiring higher and higher spreads to that Treasury rate. The new issue bond market was closed entirely for two weeks in September. When it reopened, it opened to A and AA rated utilities and AAA corporations. Spreads, which had been in the 175 to 300 basis points range for A rated utilities at the low end, and split rated utilities in the BBB range at the high end, prior to the market closing increased to 350, then 400, and were recently at almost 700 basis points for unsecured 10 year debt of investment grade split rated companies. Dr. Woolridge claims that capital costs are at historic lows. This is the same misinformation provided by Mr. Herndon. Treasury rates may be at historic lows, but utilities do not borrow at Treasury rates. The evidence is clear that interest rates required by investors to lend money to utilities are higher than they have been since the recovery from the economic slump of the early 1990's. In addition, the difference in cost from one rating category to the next is higher than it has been in at least 20 years. More importantly, access is limited. Despite most utilities having aggressive construction spending needs, issuance of utility debt in the U.S. dropped in the third quarter of this year by half, from $20.1 billion to $9.7 billion, according to Dealogic.

Q. The absence of a study of the cost of an increase in Tampa Electric's ratings, assuming the requested return on equity is granted, has been criticized by both Mr.

O'Donnell and Mr. Herndon. How do you respond?

A. It is true that a study was not done. The more important issue than the cost of debt is the availability of funds. From 2009 through 2013, Tampa Electric has a $2.5 billion construction program that is being pursued to provide reliable service to its customers. Without base rate relief, only about half of the funding will come from internally generated funds. In order to borrow that amount of money, the company will need to carefully plan its issuances of debt. Since the market has become unreliable, and there is no way to determine if or when that condition will cease, it is important that the company have a level of financial integrity that will allow it to access the markets whenever it needs to. The only way to ensure access to the financial markets is to have an A rating.

Q. Do you agree with Dr. Woolridge's assertion that your ratings parameter exhibit shows that Tampa Electric is on the high end of the BBB range even without rate relief?

A. No. In my direct testimony, I presented information that illustrated Tampa Electric's financial metrics at the targeted 55.3 percent equity ratio, with and without the requested rate increase. However, Tampa Electric's witness Mr. Gillette provided a complementary exhibit to mine which included what the financial metrics would be without the proposed rate increase at Tampa Electric's 2007 equity ratio of 46 percent. The resulting financial metrics indicate the company needs both rate relief and the proposed equity ratio to be more assured of achieving credit rating parameters within its targeted single A debt rating.

Q. Please summarize your rebuttal testimony.

A. My rebuttal testimony explains my view that Dr. Woolridge, Mr. O'Donnell and Mr. Herndon either did not understand, or will not acknowledge that my direct testimony was in support of Tampa Electric's need for improved financial integrity in order to access the capital markets to successfully pursue an ambitious construction program undertaken for the benefit of ratepayers. None of them explored what their own recommendations meant to the financial integrity of the company, and they seem to have failed to understand the benefits to both consumers and financial partners of a financially healthy utility. I have demonstrated that, contrary to Dr. Woolridge, Mr. O'Donnell and Mr. Herndon's claims, the financial markets are both difficult to access and are demanding higher rates of interest, even for what would be considered "creditworthy" entities. I have also injected some balance into their views of how much risk the utility industry endures. My direct and rebuttal testimonies were written to illuminate the issue of financial integrity and how important it is to a company that needs to access the capital markets on a regular basis. Not one of the witnesses acknowledges my focus on cash flow and how a regulatory decision affects credit metrics. The Commissioners, while taking into consideration all of the relevant testimony provided them in this case, must understand that their decision, which is theirs alone to make, will have a profound impact on Tampa Electric's ability to access the capital markets, and at what price. Credit metrics combined with business risk factors dictate the level of a company's creditworthiness. Creditworthiness defines the ability of a company to access the capital markets. With a $3.5 billion construction program in progress, Tampa Electric needs to improve and then maintain its financial integrity in order to access the markets at will. This message was lost on Dr. Woolridge, Mr.

O'Donnell, and Mr. Herndon

Q. Does this conclude your rebuttal testimony?

A. Yes, it does.

BY MR. WILLIS:

Q Please summarize your testimony.

A Thank you. Good morning, Commissioners. My testimony provides background on the importance of financial integrity to electric utilities. It identifies and describes the general opinions of the rating agencies and institutional investors and emphasizes the importance of the outcome of these hearings to Tampa Electric's creditworthiness.

I support the company's position that an A level rating is desirable and important and that such a rating will benefit customers by allowing unfettered access to the capital markets. This unfettered access is not only important to meet the traditional infrastructure capital needs of Tampa Electric, but it's also essential in allowing the company the capital it needs to invest in the renewable and low carbon technologies required by policies here in Florida and probably at the national level to meet the mandated requirements for environmentally conscious investment.

It is important to recognize for the next decade or more utilities will need to have free access to capital markets in the current building cycle to continue to make investments in their existing systems and invest in new technologies. Many of these factors will be viewed as risks in the capital markets. Only the strongest companies will be able to have access to the markets to compete for capital on favorable terms in such a market.

Tampa Electric's bond ratings are constrained by expected high capital expenditure requirements for the system reliability and environmental compliance. There are two reasons that the company's credit rating is important. First, its substantial construction program which is being pursued to fulfill the company's obligation to safely and reliably serve its customers requires substantial borrowing in the capital markets. Those markets even under normal circumstances are becoming increasingly competitive as utilities and infrastructure entities seek funds necessary to invest approximately $20 trillion over the next 25 years. In addition to traditional electric service infrastructure needs, as Tampa Electric looks to implement Florida's energy initiatives it knows investors will have many choices and will inevitably be attracted to stronger companies rather than weaker ones. During turbulent times such as these an A rating is particularly important since A and high-rated utilities have led the way to accessing capital when closed markets have opened again.

Pursuing a large construction program in order to ensure safe and reliable electricity for its customers necessitates that Tampa Electric have access to public market funds at all times. No options exist under these circumstances to decide to raise funds some other time.

Second, that same construction program will place enormous stress on the company's ability to maintain its financial integrity. Therefore, the ability to generate adequate cash flow in order to maintain healthy financial metrics as the company enters the next spending cycle is critical. Only then will the company have access to the markets at reasonable costs.

The regulatory decisions being made in this proceeding will directly affect Tampa Electric's ability to strengthen and maintain its financial profile at a level that will enable the company to access the funds it needs in order to serve its customers while supporting Florida's energy policies. This concludes my summary.

MR. WILLIS: I would tender the witness. I would point out that Ms. Abbott was deposed for about five hours and that transcript of her deposition is in the record.

CHAIRMAN CARTER: Thank you.

Ms. Christensen, are you first?

MS. CHRISTENSEN: That's correct.

CHAIRMAN CARTER: You're recognized.

CROSS EXAMINATION

BY MS. CHRISTENSEN:

Q Okay. Good morning.

A Good morning.

Q Good morning. Ms. Abbott, you testify about U.S.

rating agencies; correct?

A Yes.

Q And so far you've testified on behalf of utilities only; correct?

A Yes. Well, let me correct that a little bit. I was involved in two lawsuits that were not related to utilities but were related to what rating agencies would think. That was the question at hand.

Q Okay. As far as proceedings before public service commissions, you've only testified on behalf of utilities; correct?

A Yes. That's correct.

Q Okay. And your testimony here is to support TECO getting a higher rate of return to get a better rating; is that correct?

A My testimony is in support of the importance of Tampa Electric's financial integrity, which is described by the ratings that it receives from the rating agencies.

Q Okay. So you're not here to support the return on equity that Dr. Murry has put forth?

A Dr. Murry is here to support the return on equity that he has, has suggested. My role and the way I look at these questions is that the return on equity has a lot to do with how a company is able to generate cash flow. Its ability to generate cash flow relative to the obligations that it has describes its financial integrity, which in turn results in a particular rating which allows it access to the capital markets.

Q Let me see if I can get you to answer yes or no and try and keep it on track.

You are aware that because TECO or Tampa Electric pays 100 percent of its net income to TECO Energy, Tampa Electric is dependent on TECO Energy to make equity infusions to balance its capital structure and to achieve a particular equity ratio; correct?

A Yes.

Q Okay. And you're aware, right, that the timing and the amount of any equity infusions from TECO Energy to Tampa Electric are entirely under the control of TECO Energy; correct?

A I don't agree with that.

Q Okay. TECO Energy was recently upgraded by the credit agencies; is that correct?

A Tampa Electric or TECO Energy was. Yes.

Q TECO Energy. And that was from a noninvestment grade to an investment grade; correct?

A Correct.

Q And you would agree that that was based on TECO Energy paying off a significant amount of its debt; correct?

A That was one of the reasons. Yes.

Q Okay. You would agree that even if TECO or Tampa Electric is given everything that they ask for in the petition that this is not a guarantee that the credit rating agencies will raise Tampa Electric from a triple B to a single A.

A No, it is not a guarantee, but it would put the company in a position to be considered for a single A.

Q And you would also agree that a credit agency's rating is not the result of a purely mathematical application of matrix; correct?

A That's correct.

Q Okay. And isn't it also correct that some level of discretion is involved on the rating agency's part in determining the rating level given to electric utilities?

A Yes. I believe I made that very clear in my testimony.

Q Okay. And you would agree that a triple B rating is not a bad rating; correct?

A No, I would not agree because that's too simplistic of a statement. It is not a bad rating. But in a market that is difficult and very competitive, it does not allow a company access to that market at all times, which a company in a very active construction program needs to have.

Q Okay. Isn't it also correct though that the average rating for electric utilities is triple B?

A Yes, that is correct.

MS. CHRISTENSEN: I have no further questions.

CHAIRMAN CARTER: Thank you.

Ms. Bradley.

CROSS EXAMINATION

BY MS. BRADLEY:

Q Ms. Abbott, you said your primary interest is in generating, making sure they can generate cash flow?

A Yes. I, I am interested in what is going to allow a company to generate enough cash flow to cover its obligations to maintain its financial integrity. Yes.

Q Has TECO had any problems in the past generating cash flow for that purpose?

A Generating cash -- no, they haven't. But generating cash flow is a relative thing. It can be -- they can generate a lot of cash flow or they can generate a little bit of cash flow, and Tampa Electric has been able to generate enough cash flow in order to maintain a triple B rating and no better.

Q And isn't it true that utilities are generally a good investment?

A No. Again, I wouldn't say a good or a bad investment. They tend to be an investment that is more, more steady than many other companies that an investor could invest in. But an investor is going to make a decision about what's a good investment or a bad investment by determining whether or not the likelihood that they might not get the return that they expect is commensurate with the, the amount of yield that they're getting.

Q And during a rough economic time people generally do not expect the same return on equity, same return on their investments as they do at other times; correct?

A No, I would not suggest that that is the correct answer to that question.

In rough economic times people will expect, for instance, that a particular company who is sensitive to economic cycles might have a hard time returning continuing dividends or, or having a share price increase. However, one of the phenomenons that is happening now is that interest rates have gone up so much that equity investors are looking to at least beat that return. Because if, if a company is paying 10 percent for debt, then the equity investor who is in a, a lesser position than the debt investor is going to require a higher return than what the debt could get because otherwise they'd buy the debt because they'd be in a better position. So in that sense I would suggest that the answer to your question is no.

Q I'm not even sure I understood any of that, but we'll move on.

Isn't it true that most people that have invested over the past year or two have not seen the return on their investments?

A For the last --

Q Let me interrupt you just a second.

A Sure.

Q If you would answer yes or no, and then if you have to explain something.

A Sure. The answer to that is -- well, I'm not sure if you put that in the negative or the positive. But, yes, people have not had a good performance on their portfolios. That's very true. And --

Q And would they look to invest --

CHAIRMAN CARTER: Let her explain her answer.

MS. BRADLEY: I'm sorry?

CHAIRMAN CARTER: Let her explain. She said yes, then -- let her explain why she said what she said.

BY MS. BRADLEY:

Q Okay. You're not through?

A No.

CHAIRMAN CARTER: She was mid sentence.

THE WITNESS: Yes. I -- people have not had the kind of performance on their portfolios that they had expected that they would. These are very extraordinary times. If someone is going to go in and invest anew, they're going to invest in a new company or in a company they have invested in and feel that there is a good future for it, they are going to require that whatever their return is going to be is going to be commensurate with the risk that they take.

If you are a, an equity investor, your risk is greater than a debt investor, and therefore you are going to require that you have a greater return than the debt investor. Otherwise, you would invest in the debt.

So there -- it's not apples and apples when you say people haven't gotten the returns that they expect over the last -- it's been six months, eight months -- and if somebody is investing today in something new. So it's a different, it's a different answer depending on what the question is.

BY MS. BRADLEY:

Q And isn't it also true that people that are investing usually see monopolies as being a safer bet generally speaking?

A Generally speaking, yes, monopolies are considered to be more predictable.

MS. BRADLEY: No further questions.

CHAIRMAN CARTER: Thank you.

Mr. Wright.

MR. WRIGHT: Thank you, Mr. Chairman.

Good morning, Ms. Abbott.

CHAIRMAN CARTER: Mr. Moyle, that means you have no questions; right? Because I won't be coming back to you.

MR. MOYLE: No. I have some. I was going to let Mr. Wright cover the ground and come back. If you want me to go now, I will.

CHAIRMAN CARTER: Yeah. Let's proceed on so we can -- yeah. Let's proceed that way.

CROSS EXAMINATION

BY MR. MOYLE:

Q Ms. Abbott, there are hundreds of rating agencies; correct?
A Around the world, yes, there are.
Q All right. And you don't profess to have expert knowledge about all the rating agencies, do you?
A No, I don't. I have expert knowledge about the four principal NRSROs in the United States.
Q Fitch's, Standard & Poor's, A.M. Best and Moody's?
A No. I wasn't referring to A.M. Best. I was referring to DBRS, which is based in Canada.
Q You've never worked for Fitch's, have you?
A No, I haven't.
Q And you never have worked for the company in Canada, DBR --
A S. No, I have not.
Q And you've never worked for Standard & Poor's?
A No, I haven't.
Q In fact, it's been over six years since you worked for Moody's; correct?
A That's correct. But I, because of the nature of what I do, I stay in close touch with all four of those rating

agencies, speak to them frequently, read all of their publications.

Q So you rely on what you read or what they tell you, which sometimes lawyers call hearsay, but then you take that and formulate that to form your opinion; is that right?

A Yes. But I would suggest that the, the fact that the rating agencies publish as much as they do means that they want us to know what it is that they're doing, and so therefore I would call it something other than hearsay. It's actually educational and instructive to people in the marketplace.

Q The rating agencies' practices change over time, don't they? They're not static.

A No, they are not static. They evolve just like any other thinking in the human realm.

Q All right. And you would agree that really rating agencies essentially are in the business of selling their opinions about the creditworthiness of the companies that issue debt; correct?

A They are in the business of formulating opinions, yes. They are in the business of formulating opinions to assist investors in making decisions. They get paid for that.

Q Okay. And the opinions about a particular company can and do vary often times though. One company can rate it, you know, triple B, another could say it's something else. Isn't that correct?

A Yes.

Q You'd also agree that the rating agencies can view the actions of the Florida Public Service Commission differently, wouldn't you?

A Yes. I, I assume that they could view it somewhat differently.

Q And even when you worked with the rating agency, wasn't it very difficult to predict what action a rating agency committee may or, may or may not take in judging a company?

A No, I wouldn't call it very difficult. Because ratings are decided by a committee it's not always a foregone conclusion that the recommendation that the analyst makes and that the analyst supervisor may agree with is the one that's going to be adopted by the committee, but, but a large percentage of them are.

Q I'm sorry. The -- are you suggesting it's not, that it is not difficult to predict how the rating agencies will view actions?

A I am suggesting that when you work inside of a rating agency -- and I did say in my testimony that it was difficult from the outside. When you work inside a rating agency, you have a better opportunity to understand what the likely outcome would be. It's not always certain, but there's a difference between being inside the rating agency and being outside the rating agency.

Q And you gave -- I asked you that question or a similar question during your deposition and you gave a different answer, didn't you?

A I think I probably said that it's difficult to understand and I was interpreting your question to mean from the outside.

Q Okay. I'll see if you remember this. On your depo, Page 139, you said, quote, now I did this for 20 years and I know how difficult it is to determine what the committee is going to say in the end even when you're on the inside. Was that not your testimony?

A I believe -- what line are you on? Page 129?

Q Page, it's Page 139, Line 19.

A 139. Okay. Hold on a second. I'm sorry. Line what?

Q Line 19.

A Okay. I have different pagination than you do, I think. I do remember the question; however, the difference I think is the way you posed the question this morning.

Q The depo is in the record, so we'll have the benefit of that.

As we sit here today, you're not, you're not testifying as to what the rating agency, rating agencies will do in response to the PSC's decision in this case, are you?

A No. I'm testifying as to how important this decision is to what the rating agency will do.

Q And, in fact, you don't, you don't know what the rating agencies will do based on the PSC's decision in this case; correct?

A No, I do not.

MR. MOYLE: If I could approach, Mr. Chair.

CHAIRMAN CARTER: You may proceed.

MR. MOYLE: Mr. Chair, I think this may be Exhibit 105 for identification.

CHAIRMAN CARTER: Exhibit 105. Title?

MR. MOYLE: Code of Conduct Fundamentals for Credit Rating Agencies.

CHAIRMAN CARTER: Okay.

(Exhibit 105 marked for identification.)

BY MR. MOYLE:

Q Ms. Abbott, I've handed you a document that's been marked for identification as 105. Are you familiar with this document?

A I am not familiar with the document. I'm familiar with the contents of it.

Q All right. I think I can ask you this question even though you're not familiar with the document. If you'd turn to Page 5 of the document.

A Yes.

Q There's a paragraph 1.14.

A Yes.

Q And I'll read it into the record for you. It says, "The CRA and its employees should not, either implicitly or explicitly, give any assurance or guarantee of a particular rating prior to a rating assessment."

Would you agree that that's a fundamental ethical tenet of rating agencies?

A Yes. It has always been a fundamental ethical tenet of rating agencies.

Q I have some other questions on that, but I'm going to try to shorten them given the time constraints and the Chair's opening comments. So let me move on and ask you a few questions about the relationship between TECO Energy and the, and the rating agencies.

You're an expert in rating agencies, so I just want to make sure we're clear, isn't it true that rating agencies make most of their money from the companies that they, they rate?

A Yes. And that's -- that is true. But it's not that different from a lot of other organizations that provide money to people that regulate them, for instance. In the utility industry that happens all the time. In the insurance industry it happens all the time.

Q And when we -- the subscription service is a minority portion of the revenue stream; correct?

A Yes. I would say it's probably about 20, 25 percent.

Q Okay. And also companies get advanced copies of rating reports from rating agencies before they're issued; correct?

A Yes, they do, but they get them an hour before they're issued. And the only reason they get them is to check for accuracy and to make sure that the rating agency isn't inadvertently providing insider information or information that is private.

Q When we talked in our deposition, you indicated that you were of the understanding that to the extent additional information was in privy of the company, that the company would have a chance to provide that information to the rating agency before the release of the report. Is that not correct?

A I did say that. And that is -- the standard is that it has to be material information that hasn't been revealed to the, to the rating agency in order for the rating agency to even ask themselves the question: Will we reconsider this rating? That is a standard that the rating agencies use. I was with Moody's for 20 years. I never saw it happen.

Q Rating agencies aren't regulated by any third party, are they?

A They are regulated to an extent by the SEC, yes.

Q Tampa Electric currently is fiscally sound, aren't they, at least according to the rating agencies?

A They are an investment grade company. Yes.

Q And the rating agencies haven't indicated they would take any negative action against Tampa Electric recently, have they?

A No, they haven't. But they have pointed out the construction program that the company is involved in as well as the outcome of these hearings as being very important to their future determinations.

Q You reviewed Mr. Gillette's testimony and his rebuttal testimony in this case?

A Yes, I did.

Q Okay. He had an exhibit that showed companies with A ratings and with triple B ratings accessing the market in the fourth quarter. Are you familiar with that exhibit?

A Not the details of it, but I do remember having seen it.

Q But as we sit here today, you're aware that companies with triple B ratings like Tampa Electric can access the debt markets; correct?

A Yes. Today they can but at very high prices.

Q What's the spread between a triple B and an A, if you know?

A The last time I looked, which was probably maybe a week or so ago, it was 100 basis points or more.

Q So that's a 1 percentage point?

A Yes.

Q Were you here last week when Mr. Twomey asked Mr. Gillette questions about how savings related to an interest rate for the utility would translate into possible savings for the consumers as compared to having a high ROE with each percentage point of the ROE representing about $30 million? Were you here for that line of questioning Mr. Twomey asked?

A I wasn't actually here, but I did listen to it over the phone and I have read the transcript.

Q Okay. Was Mr. Twomey off base?

A I would -- I don't know if I can answer yes or no to that question. I would not, I would not calculate it that way.

Q I may let him follow up on that.

You're aware that rating agencies have been criticized in the past for having cozy or close relationships with companies they regulate; correct?

A Yes, I am -- well, they don't regulate companies.

Q I'm sorry. That they rate.

A But, yes, I know that they have been criticized. But I must point out that they have been criticized in the structured finance area and not the fundamental rating area, which is where utilities are rated.

Q And as we sit here today, a majority of the, of the regulated electric utility companies in the United States are rated triple B just like TECO; correct?

A Yes.

MR. MOYLE: Mr. Chairman, if you would just give me a minute, I'll check my notes.

COMMISSIONER ARGENZIANO: Mr. Chairman?

CHAIRMAN CARTER: Okay. Commissioner Argenziano.

COMMISSIONER ARGENZIANO: While he's checking his notes, he asked a question that sparked some interest to me.

How long have the rating agencies been regulated? And I don't even know to what degree they've been regulated. I'm under the understanding, and it's just recently since we've had the problems in our financial economies, that the SEC has looked at the rating agencies. And I'd be curious to find out any information I can.

CHAIRMAN CARTER: Ms. Abbott, do you know the answer to that question?

THE WITNESS: I don't know exactly when they, when the SEC decided on what an NRSRO is, which stands for National Statistical Rating Organizations -- NR, Nationally Recognized Statistical Rating Organization. There is a designation NRSRO that requires certain, certain things. You have to have been doing ratings for, now the standard is at least three years, you have to publish your methodologies that, that allow people to understand how you do what you do and you have to publish your ratings obviously, and I'm sure there are a few other requirements. The NRSRO status has been in effect for a few decades. Changes to the requirements to be an NRSRO are more recent.

COMMISSIONER ARGENZIANO: Let me get this straight. So basically you just have to publish and have been practicing for three years.

THE WITNESS: Well, that, that is the basic framework. There are other things in, that are more current in the SEC requirements such as the agency has to produce documents to prove that they have followed their own methodology as published at the request of the SEC for any reason whatsoever.

COMMISSIONER ARGENZIANO: Isn't, isn't the regulation that you had mentioned just more recent?

THE WITNESS: As I just said, that particular requirement is more recent. Yes.

CHAIRMAN CARTER: Okay. Anything further from the bench?

Mr. Moyle, you may proceed.

MR. MOYLE: Just a few more points of inquiry, Mr. Chairman.

BY MR. MOYLE:

Q Ms. Abbott, is it true in your opinion that rating agencies have become more conservative over time and that this bias is likely to continue in the current economic and capital market uncertainty, thus the firms may adopt more conservative structures, making it, making it sort of difficult for companies to increase their ratings?

A Yes and no. I believe that the rating agencies get very concerned during economic instability because of the uncertainties about how that is going to affect the companies that they rate, and in that regard they may adhere more strictly to the guidelines that they use. And in my experience it's, it's been a little bit of an ebb and a flow. When things are going well and there's more clarity about what's going to happen in the future the rating agencies are more comfortable with a company's particular position. During these particular times I think they're probably quite nervous.

Q Yeah. Tampa Electric filed an exhibit last week to Mr. Gillette's deposition that was a report affiliated with J.P. Morgan Securities. And there was a statement in that report that suggested, suggested on Page 19 that given the current situation, that rating agencies were likely to be a little more constrained in their views and maybe not take rating actions as business as usual. Would you kind of agree with that generalization?

A That's very hard. In a sense, yes, but I don't really know what they mean, and that's J.P. Morgan's point of view.

My particular point of view would be that the business as usual under these circumstances is that the glass is going to be even less than half full, which is what their normal point of view of the world is, and so they're going to be much more conservative. When it comes to changing ratings, they'll probably change ratings on the downside quicker than they might otherwise.

Q And if they are more conservative, that would make it harder to get a single A rating; correct?

A It might make it harder to get a single A rating. But if the, if the case is clear, then there, there wouldn't be a reason why they wouldn't.

Q You have expertise in ratings. Tampa Electric has not retained you to give them advice as to how to achieve a single A rating; correct?

A No, they have not.

Q Okay. And in the rating process we've talked about these different rating agencies, they have different processes, and I think it would be fair to describe them as somewhat esoteric, correct, as to the processes that they go through internally?

A Yes. Well, esoteric is a, is a nebulous word. The processes are not strict and straightforward the way you might say two and two is four. There's a lot of judgment involved. But there's a framework based on the financial condition of a company, and then around that judgments are made about the ability of a company to improve that financial condition or not.

Q A few more questions about access to the capital markets and I'll be, I'll be done.

If I understand your testimony, part of what you're suggesting is that it's important for Tampa Electric to obtain an A rating so they can have access to credit, to capital markets; correct?

A That is my position, yes.

Q Okay. Are you, are you aware, how many times has Tampa Electric since it was formed in 1899 been unable to access capital markets?

A I don't know that they have not been able to access capital markets. I know that they have, they make choices about timing depending on what's going on in the market just like any other borrower might. The real issue here is that they have a very, a very aggressive construction program that includes very important environmental standards that they need to meet, and so having that choice of timing their entrance into the capital market isn't quite as much of a choice as it used to be.

Q Do you know when they're next scheduled to go into the capital market to secure debt?

A I believe it's in the fall.

Q Fall of 2009?

A Yes. Fall of 2009.

Q And you would expect that the capital markets would be different in the fall of 2009 as compared to today; correct?

A I can only hope. But nobody really knows what the capital markets are going to be like, and from my own personal point of view things are moving much more slowly than they should be or what we would like them to or given the amount of resources we've thrown at the problem.

Q And the credit shutdown as you reference in your testimony, that was for a limited period of time; correct?

A It was 11 days in September. It's never happened before.

Q Okay. And with respect to Tampa Electric construction projects, you're aware, aren't you, that they build contingencies into those construction budgets, timing contingencies?

A Yes. Every construction budget has a timing contingency in it, yes.

Q So if the access to credit markets were shut down for 11 days, and you said it's never happened before, couldn't Tampa Electric, if it did in November of 2009 encounter a situation where they might have difficulty accessing the capital markets, if you look at past performance, couldn't they just wait a couple of weeks?

A If you look at -- well, yes, they could wait a couple of weeks. But if you look at what happened after the markets reopened, the cost of funds started to climb dramatically. And so therefore the choice about when to go back into the capital markets can be very difficult depending on what the, what the conditions are. It's not like they open up and everything is hunky-dory. They open up and things are difficult and they remained difficult for quite a while and costs kept, kept increasing. If you have to, if you find yourself in a situation like that and you're in the middle of construction, the construction of a project, you are adding enormous cost to that by, by just stopping the construction because you can't access funds.

Q Are you aware that Tampa, that TECO Energy has warned investors in their annual report that the company may have access, difficulty accessing capital?

A Yes, I have seen that.

MR. MOYLE: Okay. I have no further questions.

CHAIRMAN CARTER: Thank you.

Mr. Wright.

MR. WRIGHT: Thank you, Mr. Chairman.

CROSS EXAMINATION

BY MR. WRIGHT:

Q Good morning, Ms. Abbott.

A Good morning, Mr. Wright.

Q Fortunately the other attorneys have asked most of my questions. I don't have very many.

I understood the tenor of your testimony to Mr. Moyle just now to be that if the company gets a higher ROE award, that should result in a higher bond rating, which should result in lower costs to customers and better access to the capital markets. Is that an accurate characterization of your testimony?

A No, but only in one, one way.

Q Please.

A My testimony never suggested that getting a high return on equity would lead to anything other than a better cash flow generative capability for the company. The fact is that I am not supporting a particular return on equity. What I am supporting is anything that would generate cash flow to levels that would allow the company to have financial metrics that will qualify them for a single A rating.

Q Thank you. Did you mean to suggest in your, in your testimony, I think in particular in your summary, that cost of capital, the overall cost of capital to customers would be lower if the company gets a higher ROE?

A What I believe -- no. What I believe I said in my testimony was that if the company has a single A rating, the cost of debt would be lower.

Q The cost of debt would be lower.

A And I know this, this discussion has been had with Mr. Gillette for quite a period of time last week, and the fact is that if you calculated the weighted cost of capital today, given the spreads between triple Bs and single As, it is cheaper to be a single A. There are other points in time when it's cheaper to be a triple B. But the fact is that being a single A is the only way you can guarantee that there's going to be access to the markets, as, as has been demonstrated in current times.

And so therefore the combination of having spreads that are so wide between single A and triple B and having a market that's very difficult to access tells me that a single A rating is better for the customer as well as giving the company access to the market at all times.

CHAIRMAN CARTER: Excuse me. I'm a little like Ms. Bradley on that one. I don't --

THE WITNESS: I'm sorry?

CHAIRMAN CARTER: I'm like Ms. Bradley on that, I have no clue as to what you just said.

THE WITNESS: What I just said?

CHAIRMAN CARTER: Yes.

THE WITNESS: Okay.

CHAIRMAN CARTER: Can you break it down to the pedestrian level?

THE WITNESS: Yes. I will be very happy to try and make myself more clear.

CHAIRMAN CARTER: Mr. Wright, can you answer your --

ask your question again and let's kind of dumb it -- not -- basically tone it down to a more pedestrian level on your responses there. I'm trying to follow you and I didn't. Ms. Bradley, I hope you don't mind me using your terminology there, but it just, I was in the trees on that one.

Mr. Wright.

MR. WRIGHT: Mr. Chairman, I believe my question was this: Is it your testimony that -- I think the original question was is it your testimony that a higher ROE will result in lower overall cost of capital to customers? I believe Ms. Abbott then said a single A rating would result in lower cost of debt. And I said of debt, whereupon she proceeded to explain that -- well, why don't we leave it there.

BY MR. WRIGHT:

Q You did say, you did say of debt and I asked you about that.

A Yes.

Q And then you proceeded to give the explanation that resulted in the follow-up questions.

A And I have apparently confused everyone. So let me try and break it down to its component parts.

Q Can I, can I ask that you include in this answer one, one bit of information?

A Yes.

Q Could you tell us approximately today what the, what you think the current interest rate on a single A issue versus a triple B issue would be?

A Sure. Sure.

Q Thank you.

A Okay. Let's start with the fundamental structure of how I would calculate the cost of capital to any company. There's a cost of debt and a cost of equity. The cost of debt is going to be whatever the market requires. To answer your question, today a triple B company is paying between 8 and 9 percent. A single A company is paying 6 or 7 percent. You know, it depends on the situation, the tenor, that kind of thing.

So if you take -- because the difference between what a single A and a triple B are paying, when you do the calculation and you multiply their equity ratio times their, or, I'm sorry, their debt ratio times their cost, that will give you one number. If you multiply their equity ratio times whatever return you're, you're discussing and then you add those two numbers up and you do that for a single A rated company and a triple B rated company, because the cost of debt is so different between the single A and the triple B at the moment it is cheaper to be a single A. Therefore -- even with, even with a higher return on equity than, than the triple B company would have. You can play with those numbers until that's not true by having such a high return on equity for the

A and a very low return on equity for triple B.

But in reality, I've done this recently myself for, for someone else to see and look, look what the answer was, and the answer was simply that because of the difference between the cost of debt for an A and a triple B, being an A is cheaper today.

That changes over time and -- because the spreads between single As and triple Bs change over time. However, if you look at the overall cost of capital today and you see a single A is cheaper, then you add on top of that the fact that a single A can access the capital markets even in the worst of times, then doesn't that just logically fall out to the idea that being a single A is of benefit to the people who are paying the bills, which are the customers, because the company not only gets a lower cost of capital but they also can access the market when they need to? That, that was what I was trying to express, and I apologize for being so unclear.

CHAIRMAN CARTER: Okay. Thank you.

Yield for a moment, Mr. Wright.

MR. WRIGHT: Certainly.

CHAIRMAN CARTER: Commissioner Skop.

COMMISSIONER SKOP: Thank you, Mr. Chairman.

Just I've been following the discussion and, again, I just want to seek some clarification myself to be clear. But I think, and correct me if I'm wrong, Ms. Abbott, but in summary

I think that your testimony is saying that in today's tight credit market, access to capital would be ensured by having a single A debt rating at a lower overall cost, lower, at a lower overall borrowing rate than that of having a triple B rating; is that correct?

THE WITNESS: That, yes, that is correct.

COMMISSIONER SKOP: Okay. But I think as you also stated that that may not be true if, in times where access to capital and the credit market were not so tight, there may be a negligible difference between triple B and A in different environments.

THE WITNESS: Yes, that's absolutely right. You're correct. There can be a smaller spread between those two ratings. Yes.

COMMISSIONER SKOP: Thank you.

CHAIRMAN CARTER: Thank you.

Mr. Wright, you may proceed. Thank you.

MR. WRIGHT: Thank you, Mr. Chairman.

BY MR. WRIGHT:

Q Now, Ms. Abbott, you testified that we don't, we can't tell whether the rating agencies will assign Tampa Electric a single A rating even if the Commission gives them a 12 percent ROE in this case; correct?

A That's correct. I said that that would merely put them in a position to be considered for a single A.

Q Would you agree with Mr. Gillette that the overall pretax cost of equity capital based on a 12 percent ROE is approximately 19.6 percent?

A Yes.

Q Would you similarly agree that if one were to substitute for 12 percent in that calculation the consumers' recommended rate of 9.75 percent or less, let's use 9.75 percent now, that the pretax cost of raising equity capital based on a 9.75 percent ROE is approximately 16 percent?

A Yes. I believe the math works out to about that.

Q Okay. I don't understand how it can produce a cheaper overall cost of capital to customers to borrow capital at 7 percent when they're paying 19 percent on the equity piece. Can you explain that?

A Do the math. And the return that they actually achieve is not a pretax return. It's an after-tax -- they have to pay taxes.

Q But, of course, you're aware that the regulatory authority, the Florida Public Service Commission in this case, sets the revenue requirement, and accordingly the rates based on a gross up of the after-tax ROE, 12 percent by the company's recommendation, 9.75 percent or less by our recommendation; correct?

A Yes.

Q So the dollars to pay those taxes are built into the rates; correct?

A As they should be. Yes.

Q Will you agree, I'll try to speed things up, will you agree that a lot of utilities, both single A and, and triple B, have access to capital markets since the 11-day meltdown in September?

A Yes. There have been issuances by triple B companies.

Q Thank you. I just have one more line of questioning regarding your fees and costs for participating in this case on behalf of Tampa Electric.

Who hired you to testify on behalf of Tampa Electric in this case?

A Tampa Electric.

Q What individual?

A I don't remember who signed the contract. DeLaine Bacon was the one who contacted me.

Q That's fine. How did you negotiate your fees?

A I started with a number. They countered with another number. We came to something in between.

Q Okay. And in this case you're getting a flat fee of $25,000 per month plus expenses; is that correct?

A Yes. It's a retainer fee.

Q In your deposition I asked you when you started, and you said it was in April or May of last year. Do you recall which it was, April or May?

A I haven't gone back to look. No, I don't remember.

Q Okay. So if it was May, we're now in January, I'd be correct doing the arithmetic that you should have at least billed $225,000 in fees, May, June, July, August, September, October, November, December, January.

A Well, we've only billed eight months so far.

Q But you will bill them $25,000 for January, I'm sure, after being here today; is that correct?

A Yes, I do plan on doing that.

Q Okay.

A But that's not, that doesn't add up to $225,000.

Q Well --

A Does it?

Q Let's try again. May, June --

A May, June, July, August, September, October, November, December, January. Nine. Yeah. Okay.

Q Okay. Isn't it true that in November 2006 you testified on behalf of Public Service Company of Oklahoma in a rate case?

A Yes.

Q And you subsequently testified live in that case as well.

A Yes.

Q Do you recall your fee arrangements for that case?
A For that particular case I don't. I think there was a retainer in the first and last month and then a, like a by the, by the month, by the hour, something like that, in between with a minimum of some kind.
Q Isn't it true that you were paid $25,000 to prepare the testimony and then a fee of $4,000 a month until the case was over?
A It was a minimum of $4,000 a month.
Q Permission to approach. I'm simply going to hand the witness an excerpt from her testimony in that case.
A Yes.
Q I'll simply ask do you recall giving that testimony?
A I do. But I also remember, or I recall, maybe I'm incorrect, but I do recall that the deal was that the $4,000 was a minimum and that it --
Q Okay. But your testimony to the Oklahoma Public Service Commission didn't tell them that, did it?
A I did not get into that detail with them. No.
MR. WRIGHT: Okay. That's all I have. Thank you, Mr. Chairman. Thank you, Ms. Abbott.
CHAIRMAN CARTER: Thank you, Mr. Wright.
Mr. Twomey, good morning.
MR. TWOMEY: Good morning, Mr. Chair.

CROSS EXAMINATION

BY MR. TWOMEY:

Q Good morning, Ms. Abbott.

A Good morning.

Q I'm here on behalf of AARP. A minute ago when you said that you had a contract, was I correct in assuming you have a written contract with Tampa Electric Company for your services in this case?

A Yes.

Q Is it in any way, the payment of your fees in any way contingent upon the percentage of revenues TECO gets as to what has been requested?

A Absolutely not.

Q Is your fee pursuant to your contract in any way contingent upon the amount of your fees that the Commission allows for recovery from customers through approved rate case expense?

A No, it is not.

Q So that it follows then, doesn't it, that if the Commission were to see fit to disallow a portion of the contract fees paid to you by Tampa Electric Company, it would not affect your, your recovery?

A No, it wouldn't.

MR. TWOMEY: That's all I have. Thank you.

CHAIRMAN CARTER: Thank you.

Commissioner Edgar.

COMMISSIONER EDGAR: Thank you, Mr. Chairman. Just a couple of questions.

Ms. Abbott, in your testimony, prefiled testimony on rebuttal you used the term frequently "financial integrity." And I'm looking, and I don't think you need this in front of you but, I'm looking at the moment on Page 2 of the rebuttal. And in that you say that one of the purposes of your direct testimony was to give a detailed understanding of the importance of financial integrity to the company's access to capital. How do you define financial integrity?

THE WITNESS: Financial integrity is actually a neutral term because you can have strong financial integrity or weak financial integrity. And what I was trying to convey was that the company's financial integrity needs to be supported by the decision, meaning that the, the financial integrity of the company will improve if a decision is supportive of the company's cash flow ability and that having good financial integrity is critical to a company being able to access capital when it needs it. Is that at all clear on --

COMMISSIONER EDGAR: It is. Just again when I read the direct and the rebuttal, that term "financial integrity" and then also "financial health," "financial strength," et cetera, is used. But "financial integrity," I didn't count them, but seems to be the term you used most frequently and especially in the rebuttal. And it just seems like kind of a circular, and maybe you could speak to this point, when in your rebuttal it says that one of the most important purposes of your testimony was to give a detailed understanding of the importance of financial integrity, and I take that to mean in this case to TECO, then to say that that financial integrity is necessary for the company's access to capital, but yet it seems like we're defining financial integrity by access to capital.

THE WITNESS: Okay. I understand how that can be confusing.

Financial integrity, it's, it's like saying if you're healthy, you'll stay out of the hospital and you'll stay out of the hospital if you're healthy. Right? Financial integrity, if you have good financial integrity, if you have financial strength, then you will have access to capital whenever you need it. I would not say that -- well, yeah, if you have access to capital whenever you need it, that means that you have financial strength or financial, good financial integrity. So it's, it's not really circular. It's that if you're strong, if you're financially strong, you can have access to the capital markets. If you have access to the capital markets, it means that you are financially strong. So you have to be financially strong to get access. Okay? It's not the other way around. It's not I get access to the capital markets and that makes me stronger. It's you can't get access unless you're strong. But if you're strong, you get access. Does that help at all?

COMMISSIONER EDGAR: That sounds like it's still the same thing, but I appreciate you elaborating. I do. And if I may, let me just move on.

THE WITNESS: Okay.

COMMISSIONER EDGAR: In your direct testimony you say that it's important to understand the magnitude of TECO's capital spending program. What witnesses -- do you know which witness in this proceeding is the best witness on that point, the magnitude of the capital spending program?

THE WITNESS: Well, I know Mr. Gillette was asked a little bit about how big it was, but I'm sure there must be other witnesses who are more in touch with the details.

COMMISSIONER EDGAR: Well, that's kind of what I was thinking. I'll look to Mr. Willis.

MR. WILLIS: Mr. Chronister.

COMMISSIONER EDGAR: I'm sorry?

MR. WILLIS: Mr. Chronister.

COMMISSIONER EDGAR: Okay. Thank you.

And just one other question, if I may. In the exhibit to your direct testimony --

THE WITNESS: Yes.

COMMISSIONER EDGAR: -- there is a one-page document that is headed Public Utility Commission Rankings Compiled by RRA.

THE WITNESS: Yes.

COMMISSIONER EDGAR: What is -- there's no -- at least if there is, I didn't see -- descriptors of the rankings. Maybe that's in another document. But since this one page is attached to your direct testimony, how would you describe the meaning of the ranking for Florida which is Above Average/2 and how does that differ from, say, an Above Average/3 or an Average/3?

THE WITNESS: Okay. RRA divides the world into five different rankings and they go from Above Average/1, 2, 3 to Average/1, 2, 3 and then Below Average/1, 2, 3. At the moment there are no Above Average/1s. So Florida is in the highest category that they have assessed at this point in time. And what that means is that --

COMMISSIONER EDGAR: So, I'm sorry, so one is higher than three.

THE WITNESS: One is higher than three.

COMMISSIONER EDGAR: Okay.

THE WITNESS: What that means is that in Regulatory Research Associates' view the Florida Commission makes decisions that support their companies' financial integrity to a greater degree than to somebody who is, say, an Average/1. That means that they have more forward-looking policies, they have adjustment clauses, they allow an equity thickness that is adequate and reasonable, that the returns on equity that they vote for are, are such that companies can generate cash flow to levels that are supportive of their financial integrity.

So if you, if you look at, let's somebody -- let's say somebody who has got a not very good, a Below Average/2 for Illinois, for instance, one of the reasons for that is simply that the Illinois Commission has made some decisions in the last couple of years that have been very destructive to the companies that they regulate, specifically allowing the Legislature to tell them what to do and let politics (Laughter) -- more so than they should. How is that? They let politics enter the regulatory process and it resulted in the companies losing their investment grade ratings and that kind of thing. So that was considered to be very bad for everybody concerned: The utilities, their customers, everybody. So that would describe a below average type of regulatory environment. An Above Average/1 obviously is, as I described, like Florida.

COMMISSIONER EDGAR: Thank you. Thank you, Mr. Chairman.

CHAIRMAN CARTER: Commissioner Argenziano.

COMMISSIONER ARGENZIANO: Thank you, Mr. Chair. I have a short series of questions also.

CHAIRMAN CARTER: You're recognized.

COMMISSIONER ARGENZIANO: I'll try to be quick.

I've been trying to put a lot into understanding how the models work. I'm going to ask you a few different questions and maybe jump around a little bit and maybe you can help me better understand.

I understand the CAPM model uses the expected return on capital assets, the sensitivity of asset returns and expected return of market and risk premium combined and that the DCF is cash flow to discount, expected growth and the discount rate. But I feel as I'm learning more about them that they're subjectively determined. And I look at risk premium as being, I guess, exclusive, if it's used exclusively, has the benefit of a certain honesty and that honesty basically is like a, just a factor to multiply the risk-free rate that puts, gets put in play.

Doesn't that -- I mean, isn't the risk premium model the one that has certainty, that we know what the numbers are rather than being subjective?

MR. WILLIS: Commissioner, may I interject just, just a moment? Those are very good questions. I do believe they would be best directed to Dr. Murry who can address those.

COMMISSIONER ARGENZIANO: Okay. Okay. We can go there. Let me try to then zero in on what I can ask you about.

THE WITNESS: Okay.

COMMISSIONER ARGENZIANO: Some of I guess your comments then, and I'll save those for Dr. Murry. I appreciate that, rather than having to repeat them again.

If -- and I guess the better way to put it and the only way I can put it, and maybe I'm not totally understanding how it benefits the ratepayer, isn't a triple B bond still investment grade?

THE WITNESS: Yes, it is investment grade. The problem with it is that, as recent experience has shown us, getting access to the capital markets with a triple B is sometimes at best problematic and impossible at some times. And then on top of that the cost in this particular period of time is, is pretty enormous.

COMMISSIONER ARGENZIANO: Haven't utility stocks long been a place that investors go because of the safety and with the regulatory scheme in Florida being pretty certain that most recoveries, I mean almost all recoveries will be recovered, isn't that, don't investors look at that as a safe haven?

THE WITNESS: You're absolutely correct. Historically utilities have been a, quote, unquote, safe haven or a safer haven, I would say. Not necessarily totally safe but a safer haven than other industrial companies. However, everything is relative.

And if you look at the, for instance, the Dow Jones Utility Index, a year ago, let's see, in November or December I think it was, December of 2007, the volatility in that index was about 17 percent. Not a lot of volatility. Utilities were pretty steady. The volatility in the same period in 2008 was 69 percent. So that safe haven has become a little rockier than it used to be, and so I think that that needs to be understood so that people don't just say, well, there's a flight to quality and therefore everybody is going to invest in utilities. They're not.

COMMISSIONER ARGENZIANO: Well, wouldn't -- but in overall, I guess looking at it overall, I would think even in a stressed economy that the utility stocks are still viewed as a better stock because of its monopoly, because of its low risk, because of its pretty much guaranteed, especially in Florida, guaranteed recovery through all the clauses that we have. So even in times of economic uncertainty doesn't the utility stock do better than most out there, fare well? Isn't there a trend that usually looks like they're, even in hard times the utility stocks still do well?

THE WITNESS: I think your, your comments are on point. However, again, everything is relative. And doing, if you're doing better than Chrysler, that doesn't mean a lot because Chrysler is just, you know, in the tank.

COMMISSIONER ARGENZIANO: No. But, but if you're an investor and you're looking for security, Chrysler may not be the place but the utility may be because of its, all those components of being a monopoly, of being certain. And understand, I know if I'm investing money and I choose between Chrysler and a utility, I'm going to feel a lot more comfortable with a utility having, and as I think you said it in your, in your comments, that Florida has very favorable, if not the most favorable regulatory commissions have existed here in Florida.

So with that, given your comparison between Chrysler and a utility, if I were investing even in the worst of times when things looked the most glum, I guess, or gloomy, the utility would still be the safer stock to invest in because of those certainties.

THE WITNESS: Yes, if that's your only choice. The issue is that most investors are going for treasuries instead, so.

COMMISSIONER ARGENZIANO: Right. Okay. I think I'll save my other questions for Mr. Murry.

CHAIRMAN CARTER: Thank you. And, Commissioners, I'm going to go to staff, but I'll still come back to the bench just in case we have further questions.

Staff, you're recognized.

MR. YOUNG: Thank you.

CROSS EXAMINATION

BY MR. YOUNG:

Q Ms. Abbott, during cross-examination by Mr. Wright you stated that, and I want to get it correctly, that it was cheaper to be a single A company than a triple B company at this point in time. Do you recall that, do you recall this discussion?

A Yes.

Q All right. What type of analysis did you do to reach this opinion?

A I was doing some analysis for somebody else whose staff in their case had posed a question. If -- and what they had done was they had taken two companies, one of which was rated single A and one of which was rated triple B, and asked which would be cheaper. So I just simply did a weighted cost of capital for that company and came out with the answer that single A was better.

Now I also said in the answer to Mr. Wright's question that you could use numbers that would show you something totally different, and I admit that. But, but it is the case -- and J.P. Morgan has said in their piece that they wrote in December that being a single A was a cheaper option these days. Paul Bowers, the CFO of Southern Company, testified to that fact in front of FERC recently. There's a lot of evidence that that's true in many cases.

Q All right. Let me ask you, have you done an analysis in this case comparing --

A I have -- no, I have not done the numbers in this case.

Q Okay. When you said it was cheaper, you mean cheaper on the margins; is this correct?

A It would be cheaper going forward. Yes.

Q Okay. Are you aware that with the, with the exception of the return on equity, all the cost, all the cost rates including this company's capital structure are embedded, embedded in the cost rates, not the margins, not the marginal cost rate?

A Yes. I do realize that, which actually is a bit of a problem because the company will have to pay higher prices for debt than is embedded in the rate order and therefore cannot recover that cost. In not recovering that cost, that is going to put pressure on their financial condition because they're not recovering costs that they're incurring, and that means that their financial metrics will come under pressure, which means that their rating will come under pressure.

MR. YOUNG: All right. Thank you.

CHAIRMAN CARTER: Thank you.

Commissioners, anything further?

Mr. Willis.

MR. WILLIS: We have no redirect, and would ask that Exhibit Number 19 be admitted into the record.

CHAIRMAN CARTER: Any objections? Without objection, show it done.

(Exhibit 19 admitted into the record.)

Now we had -- Mr. Moyle, you just, that was just for cross-examination purposes, the one that you used, Number 105?

MR. MOYLE: It was. I identified it. You know, if there's no objection, I'll go ahead and move it in.

CHAIRMAN CARTER: Mr. Willis? 105 is the Code of Conduct.

MR. WILLIS: No objection.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibit 105 admitted into the record.)

Okay. Also, let's back up for a second. I think that's it for this witness. Is that correct?

MR. YOUNG: Yes, sir.

MR. WILLIS: And I ask that Ms. Abbott be excused then.

CHAIRMAN CARTER: Okay. You may be excused.

MR. BEASLEY: We'll call Dr. Murry.

CHAIRMAN CARTER: Call your next witness.

Commissioner Argenziano, this is, Dr. Murry is the witness.

COMMISSIONER ARGENZIANO: I'm ready.

DONALD A. MURRY, PH.D.

was called as a witness on behalf of Tampa Electric Company and, having been duly sworn, testified as follows:

DIRECT EXAMINATION

BY MR. BEASLEY:

Q Sir, have you been administered the oath in this proceeding?

A I have.

Q Would you please state your name and your business address?

A My name is Donald Murry, and my business address is 5555 North Grand Boulevard in Oklahoma City.

Q Dr. Murry, by whom are you employed and in what position?

A I'm an economist with C. H. Guernsey & Company in Oklahoma City.

Q Sir, did you prepare and submit a 68-page document in this proceeding entitled Prepared Direct Testimony of Dr. Donald A. Murry?

A I did.

Q Do you have any corrections to make to your direct testimony?

A I do not.

Q If I were to ask you the questions contained in that testimony, would your answers be the same?

A They would.

MR. BEASLEY: Madam Chair, I'd ask that Dr. Murry's testimony be inserted into the record as though read.

COMMISSIONER EDGAR: The prefiled testimony of the witness will be inserted into the record as though read.

BY MR. BEASLEY:

Q Sir, did you also prepare or have prepared under your direction and supervision the exhibit that accompanies your direct testimony, which is identified as Exhibit DAM-1 and marked hearing Exhibit Number 20?

A I did.

Q Do you have any corrections to your Exhibit 20?

A No, I do not.

DOCKET NO. 080317-EI
FILED: 08/11/2008

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

DR. DONALD A. MURRY, PH.D.

ON BEHALF OF TAMPA ELECTRIC COMPANY

Q. Please state your name, position and business address.

A. My name is Donald A. Murry. My business address is 5555 North Grand Blvd., Oklahoma City, Oklahoma 73112.

Q. By whom are you employed and in what position?

A. I am a Vice President and Economist with C. H. Guernsey & Company, working primarily out of the offices in Oklahoma City and Tallahassee. I am also a Professor Emeritus of Economics on the faculty of the University of Oklahoma.

Q. What is your educational background?

A. I have a Bachelor of Science degree in Business Administration and a Masters Degree and a Doctorate in Economics from the University of Missouri - Columbia.

Q. Please describe your professional background.

A. From 1964 to 1974, I was an Assistant and Associate Professor and Director of Research on the faculty of the University of Missouri - St. Louis. For the period 1974 to 1998, I was a Professor of Economics at the University of Oklahoma, and since 1998, I have been Professor Emeritus at the University of Oklahoma. Until 1978, I also served as Director of the Center for Economic and Management Research. In each of these positions, I directed and performed academic and applied research projects related to energy and regulatory policy. During this time, I also served on several state and national committees associated with energy policy and regulatory matters and published and presented a number of papers in the field of regulatory economics in the energy industries.

Q. Please describe your regulatory experience.

A. Since 1964, I have consulted for a number of private and public utilities, state and federal agencies, and other industrial clients regarding energy and regulatory matters in the United States, Canada and other countries. In 1971-72, I served as Chief of the Economic Studies Division, Office of Economics of the Federal Power Commission. From 1978 to early 1981, I was Vice

President and Corporate Economist for Stone & Webster Management Consultants, Inc. I am now a Vice President with C. H. Guernsey & Company. In all of these positions I have directed and performed a wide variety of applied research projects and conducted other projects related to regulatory matters. Recently, I have assisted both private and public companies and government officials in areas related to the regulatory, financial and competitive issues associated with the restructuring of the utility industry in the United States and other countries.

Q. Have you previously testified before or been an expert witness in proceedings before regulatory bodies?

A. Yes, I have appeared before the U.S. District Court-Western District of Louisiana, U.S. District Court-Western District of Oklahoma, District Court-Fourth Judicial District of Texas, U.S. Senate Select Committee on Small Business, Federal Power Commission, Federal Energy Regulatory Commission, Interstate Commerce Commission, Alabama Public Service Commission, Regulatory Commission of Alaska, Arkansas Public Service Commission, Colorado Public Utilities Commission, Florida Public Service Commission, Georgia Public Service Commission, Illinois Commerce Commission, Iowa Commerce Commission, Kansas Corporation Commission, Kentucky Public Service Commission, Louisiana Public Service Commission, Maryland Public Service Commission, Mississippi Public Service Commission, Missouri Public Service Commission, Nebraska Public Service Commission, New Mexico Public Service Commission, New York Public Service Commission, Power Authority of the State of New York, Nevada Public Service Commission, North Carolina Utilities Commission, Oklahoma Corporation Commission, South Carolina Public Service Commission, Tennessee Public Service Commission, Tennessee Regulatory Authority, The Public Utility Commission of Texas, the Railroad Commission of Texas, the State Corporation Commission of Virginia and the Public Service Commission of Wyoming.

Q. What is the purpose of your testimony in this case?

A. Tampa Electric ("Tampa Electric" or "company") has retained me to analyze its current cost of capital and to recommend a rate of return that is appropriate in this proceeding. Tampa Electric, an electric utility company serving retail electric customers in Florida, is a division of Tampa Electric Company, which is, in turn, a wholly owned subsidiary of TECO Energy, Inc. ("TECO

Energy").

Q. How did Tampa Electric's affiliate relationship with TECO Energy affect your analysis of the cost of capital in this proceeding?

A. I selected a group of electric utilities to serve as proxy companies for Tampa Electric in my analysis because Tampa Electric is not publicly traded and it is only a small component of TECO Energy. Although for comparative purposes, I did review some of the market-based costs of TECO Energy; however, because of the differences, the TECO Energy financial information was not useful for determining the cost of capital of the electric utility. Instead, I focused my analysis on the market-based financial information of the group of comparable electric companies.

Q. Methodologically, how did you use these electric utilities?

A. The comparable companies are the primary focus of my analysis of the cost of capital of Tampa Electric, and I used them as proxies for Tampa Electric. Methodologically, I selected these companies for my analysis because they were comparable to Tampa Electric in key financial statistics. I also analyzed the relative financial and business risks of Tampa Electric and the electric utilities.

Q. Are you sponsoring any exhibits with your direct testimony?

A. Yes. I am sponsoring Exhibit No. ___ (DAM-1) entitled "Exhibit of Dr. Donald A. Murry, Ph.D. on Behalf of Tampa Electric Company", which consists of 24 documents.

Document No. 1	Real GDP Consensus Forecast
Document No. 2	Comparison Of Selected Bond Yields
Document No. 3	*Blue Chip* Treasury Forecasts
Document No. 4	*Value Line* Interest Rates And Forecasts 2003 - 2013
Document No. 5	Proposed Capital Structure As Of December 31, 2009
Document No. 6	Comparison Of Common Equity Ratios
Document No. 7	Comparison Of Financial Strength And Bond Ratings
Document No. 8	Comparison Of *Value Line's* Safety And Timeliness Rank
Document No. 9	Comparison Of Returns On Common

	Equity
Document No. 10	Comparison Of Declared Dividends
Document No. 11	Comparison Of Dividend Payout Ratios
Document No. 12	Comparison Of Average Annual Price-Earnings Ratios
Document No. 13	Discounted Cash Flow Growth Rate Summary
Document No. 14	Dividend Growth Rate DCF Using Current Share Prices
Document No. 15	Dividend Growth Rate DCF Using 52-Week Share Prices
Document No. 16	Earnings Growth Rate DCF Using Current Share Prices
Document No. 17	Earnings Growth Rate DCF Using 52-Week Share Prices
Document No. 18	Projected Growth Rate DCF Using Current Share Prices
Document No. 19	Projected Growth Rate DCF Using 52-Week Share Prices
Document No. 20	Size Adjusted Capital Asset Pricing Model
Document No. 21	Historical Capital Asset Pricing Model
Document No. 22	Summary Of Financial Analysis

Document No. 23 Proposed Cost Of Capital As Of December 31, 2009

Document No. 24 Comparison Of After-Tax Times Interest Earned Ratios

Q. Did you or someone under your direct supervision prepare this exhibit?

A. Yes.

UTILITY REGULATION

Q. Please explain how regulatory policies may have affected your analysis and recommendation of the cost of capita in this proceeding.

A. I structured my analysis based on prevailing regulatory policies regarding the electric industry. Economies of scale at the distribution level of utility service indicate that duplicative facilities can be economically inefficient. For this reason, analysts have long recognized the potential for market power to exist in franchised utility markets, and this is the principal economic rationale for utility regulation.

Q. How did this rational for utility regulation influence your analysis and recommendations concerning the appropriate allowed return for Tampa Electric in this proceeding?

A. I recognized that a utility market structure and the associated economic rationale implied that an allowed return for Tampa Electric should be sufficient to recover its costs of providing service, but at the same time, not be higher than necessary to attract and maintain capital. This was the objective of my analysis. I also believe this analytical objective is consistent with my understanding of the legal standard of a fair rate of return in regulation.

Q. Please explain the term "fair rate of return" as you understand it.

A. When I used the term "fair rate of return", I was referring to a return that meets the standards set by the United States Supreme Court decision in *Bluefield Water Works and Improvement Company vs. Public Service Commission, 262 U.S. 679 (1923) ("Bluefield")*, as further modified in *Federal Power Commission vs. Hope Natural Gas Company, 320 U.S. 591 (1944) ("Hope")*. As an economist, I believe that a rate of return is "fair" if it provides earnings to investors similar to returns on alternative investments in companies of equivalent risk. Such a return will be sufficient to enable the company to compensate investors for assumed risk, attract capital, operate successfully and maintain its financial integrity. As an economist, I believe one should recognize that this standard implies that utilities typically do not face the same market influences as more competitive markets, and a single supplier is likely to exist in a market because of economies of scale and scope in providing retail service. This market structure is the common economic rationale for regulation

ECONOMIC ENVIRONMENT

Q. What economic factors are important to your analysis of Tampa Electric's cost of capital in this proceeding?

A. Expectations regarding inflation and interest rates are major economic factors that influence investors' decisions. Generally, inflation expectations cause investors to require returns sufficient to compensate for any loss of purchasing power over the life of a security. In many cases, increasing inflation leads to higher long-term interest rates. Higher interest rates, in turn, lead to higher overall costs of capital. In the case of a regulated utility such as Tampa Electric, the regulatory environment is also a critical component of the business environment. Anticipated regulatory actions, as well as forecasts of inflation and interest rates, affect investors' expectations of utility returns and their evaluations of the risks and returns of alternative investments.

Q. How would you describe the current economic environment?

A. Entering the third quarter of 2008, the U.S. economy is facing record oil prices, increasing inflation, a continuation of the housing market contraction, further credit-market write-downs, increasing unemployment, and falling consumer confidence. On July 11, the price of a barrel of crude oil on the New York Mercantile Exchange traded for over $148—the highest price ever recorded and more than double the price from a year earlier. Strong worldwide demand for crude and the low value of the U.S. dollar have some market analysts estimating the price of a barrel of oil could reach $170. On July 2, 2008, the Dow Industrial average closed down 20 percent from October 2007. In May 2008, consumer prices rose at an annual rate of 4.2 percent while the labor department reported that wholesale prices rose 7.2 percent.

According to the Reuters/Jeffries CRB Index of raw materials prices, commodity prices rose to a record on June 26, 2008 and are up 29 percent in 2008.

Financial institution asset write-downs and credit losses have totaled approximately $400 billion since 2007 and an estimated additional $170 billion may have to be written off by the end of 2009. In June 2008, Moody's downgraded bond insurers MBIA and Ambac to A2 and Aa3 respectively, from AAA. This could lead to further downgrades by financial institutions for structured product hedges. These bond insurers play important roles in financial markets and their downgrading could have serious ramifications. Consequently, it is possible the ongoing crises in the credit and capital markets could re-intensify.

The housing market continues in a severe slump that threatens the prospects for a second-half economic recovery in 2008. Rising mortgage rates, stricter borrowing rules, and a glut of unsold homes indicate the housing market still faces a period of adjustment. New home sales fell to an annual rate of 512,000 in May 2008 and are at their lowest rate since 1991. Housing starts and building permits suggest the slump in housing may intensify. Housing starts in March 2008 of 947,000 stand in stark contrast to the 2.3 million housing starts at the peak of the housing cycle in January 2006. Sales of previously owned homes increased 2 percent in May 2008 to a 4.99 percent annual rate from a record low in April 2008, indicating depressed prices are attracting buyers. The May 2008 sales were down 16 percent from May 2007.

First quarter Gross Domestic Product ("GDP") rose at a revised 1.0 percent annual rate as a result of strong U.S. export activity, an increase in government spending, and an increase in inventories. Continued strength in exports, the government's stimulus program and the lagged effect of the Federal Reserve Board's ("Fed") seven rate cuts since September 2007 are expected to counter the overall general economic malaise and result in a low increase in economic activity in the second half of 2008 continuing into 2009. I have shown the *Blue Chip Financial Forecasts' ("Blue Chip's")* consensus forecast for GDP in Document No. 1 of my exhibit.

Q. Why did you use *Blue Chip* information and forecasts in your analysis?

A. *Blue Chip* is a respected publication that reports the consensus forecasts of forty-six leading financial forecasters. These consensus forecasts, which embody the expectations of the leading forecasters of major financial institutions, will influence the market. In this analysis, it is the overall opinion of investors that we are trying to determine and this is a very likely source of information upon which investors will rely.

Q. Have the Federal Reserve interest rate cuts lowered relevant long-term interest rates?

A. Unfortunately, they have not. The Federal Open Market Committee ("FOMC") has reduced the target federal funds rate seven times since September 2007, a reduction from 5.25 percent to 2.00 percent. However, the aggressive cutting of the federal funds and discount rates by the Fed has not resulted in lower long-term rates to consumers or businesses similar to the reduction in short-term rates. Although the Fed's actions directly affect short-term borrowing rates between banks, long-term rates are set competitively in the marketplace and only are indirectly affected, if at all. As shown on Document No. 2 of my exhibit, rates for long-term Baa/BBB utility bonds are virtually unchanged from a year ago-6.53 percent then to 6.48 percent today. Rates for A-rated industrial bonds also are virtually unchanged at 6.21 percent one year ago and 6.19 percent today.

Q. Has the Federal Reserve Board undertaken any exceptional policies in responding to these market conditions?

A. Yes. In December 2007, the Fed announced it would inject emergency short-term funds into the market through a never before used Term Auction Facility ("TAF") to address "heightened liquidity pressures in term funding markets". On May 2, 2008, the Fed announced it would boost the TAF to $150 billion per month from $100 billion per month, the third increase since the program began in December 2007. The TAF's began as a coordinated effort with the central banks of the United Kingdom, Canada, Switzerland and the European Union to increase short-term funds after losses on subprime mortgages unhinged normal bank lending practices.

On March 11, 2008, the Fed announced another new vehicle, the Term Securities Lending Facility ("TSLF"), to address the deepening crisis in the credit markets. Under this new program, the Federal Reserve Board will lend up to $200 billion of Treasury securities to primary dealers to promote liquidity and to foster the functioning of the financial markets generally. The TSLF program subsequently expanded the list of acceptable collateral for loans. The Fed also established the Primary Credit Dealer Facility that made the Fed the lender of last resort to brokers as well as banks. This marked the first time since the 1930's the Fed lent money directly to non-depository institutions.

On March 16, 2008, the Fed arranged a $30 billion bail out of investment bank Bear Stearns Cos. using J.P. Morgan, another investment bank, as a conduit. The extraordinary measures needed to be taken by the Fed highlight how the crises in the credit and capital markets have increased risks to investors.

Q. What are some of the consequences of the current economic situation?

A. Forecasts for economic growth have decreased over the last several months while forecasts of inflation have gone up. Blue Chip predicts 0.8 percent real GDP growth for the second quarter of 2008, 1.2 percent real GDP growth for the third quarter, and 0.9 percent growth for the fourth quarter. *Blue Chip* forecasts a 4.2 percent increase in the Consumer Price Index ("CPI") in the third quarter of 2008 and increasing interest rates through the fourth quarter of 2009.

Q. You mentioned the inflation rate as an important factor to examine. What are the current inflation considerations?

A. The forecast for core inflation, which excludes food and energy prices, is 2.4 percent for 2008, which is above the Fed "comfort zone" of 1 percent to 2 percent. In its June 25, 2008 press release, the FOMC stated, "Although downside risks to growth remain, they appear to have diminished somewhat, and the upside risks to inflation and inflation expectations have increased."

Increasing energy prices and the developing economies continue to exert pressure on world commodity prices and hence, U.S. inflation. Prices paid to factories, farmers and other producers were up 6.5 percent in April. Steel-mill products increased 5.5 percent in April and agricultural chemicals were up 5.6 percent. Scrap steel and iron increased 32 percent, the most since July 2004, and scrap copper was up 5.3 percent. The Reuters/University of Michigan Survey of households showed inflation expectations of 5.1 percent for the coming 12 months--the largest increase since 1982.

Q. What is the forecasted level of bond interest rates?

A. Generally, analysts expect long-term bond rates to increase despite the Federal Reserve's efforts to lower short-term rates. For example, in the near-term, *Blue Chip* forecasts show increases from 4.75 percent today to 5.1 percent for the 30-year Treasury through the fourth quarter of 2009. I have shown the forecasts for the 10-year and 30-year Treasuries in Document No. 3 of my exhibit. As an example of longer-term forecasts, *Value Line* recently predicted the AAA corporate bond yield would increase from 5.6 percent today to 6.5 percent over the 2011-2013 period. As a benchmark for the rates of return set in this proceeding, the long-term corporate interest rates are the most relevant for utility returns. I have shown the longer-term forecasts for long-term corporate yields and some Treasury securities in Document No. 4 of my exhibit.

Q. Can you summarize how the economic environment was important to your analysis and recommendations in this proceeding?

A. The risks facing the credit and capital markets are significant. Energy prices are at all-time highs and inflation is accelerating. At the same time, utilities are facing record high energy prices, increasing infrastructure and environmental requirements, and increasing operating costs. The challenges facing the credit and capital markets compound the risks to capital-intensive utility companies. Rising inflation and rising interest rates erode earnings and adversely affect the cost of a utility's debt and equity, eroding utility margins. That is, despite the lowering of short-term rates, the expected increase in long-term interest rates increases the cost of utility securities.

METHODOLOGY

Q. How did you conduct your analysis and determine your recommendation?

A. I studied the current economic environment to provide a perspective for my analysis. The current and forecasted long-term interest rates and investors' fears of inflation are the backdrop for electric utility rates of return at this time. I also noted the current return on common stock equity earned by the comparable companies and Tampa Electric. I reviewed published financial information for Tampa Electric, TECO Energy, the parent company of Tampa Electric and the comparable electric utilities. Because of the recent and prospective volatility of the equities markets, I took special note of the financial and business risks faced by Tampa Electric.

Because Tampa Electric does not have publicly traded common stock, I applied the generally accepted Discounted Cash Flow ("DCF") and Capital Asset Pricing Model ("CAPM") methods to the comparable companies to develop a market-based measure of the cost of common equity of Tampa Electric. The comparable companies are electric utilities that are similar in many respects to Tampa Electric so, as representative, proxy electric utilities; their costs of common equity are also relevant to Tampa Electric.

As an important measure of adequacy in determining a sufficient but not higher than necessary return, I tested my recommended return by evaluating the After-Tax Interest Coverage ratio at my recommended return. Then I compared this coverage to similar coverages for the comparable electric utilities.

Q. What criteria did you use to select the comparable companies in your analysis?

A. I identified criteria that were similar in many respects to Tampa Electric and which would provide a good representative sample of financially healthy regulated electric utilities. First, I identified electric utility companies that have publicly traded common stock. I used the electric utilities identified by *Value Line* as the primary sampling frame from which to select companies comparable to Tampa Electric. Then I excluded all companies actively involved in a merger. A company involved in a merger will have its common stock value affected by investors' evaluation of the merger rather than just utility operations, and it would not be a good proxy for Tampa Electric. Next, I selected firms that have not reduced or eliminated their dividend in the past five years. Companies that have failed to maintain dividends are likely to be under some financial stress, and this means that they would not be a good standard for determining the cost of capital of a financially healthy utility in current markets. I removed those utilities for which *Value Line* is forecasting zero or negative earnings growth. Again, this criterion will help assure that my analysis focuses on healthy utilities. I further narrowed the group by focusing on companies that have market capitalization greater than $2 billion and less than $8 billion. The size of a company may affect its costs of operations and the market cost of capital, and this criterion identifies companies with similar characteristics to Tampa Electric. Finally, companies may have investments in non-electric utility enterprises. In order to assure that the companies identified as electric utilities are principally in the electric utility business, I excluded any company that earned less than 60 percent of their operating income from electric utility operations. Using these criteria, I selected a group of electric utilities that provided a sample that was similar to Tampa Electric in key respects. Notably, TECO Energy does not meet these criteria because it cut its dividend during the period. This points out the methodological importance of using the comparable companies as the standard for ratemaking in this proceeding.

Q. You said that you used TECO Energy market data. How did your use of these data to develop the cost of capital of Tampa Electric affect your analysis?

A. I recognized TECO Energy as the source of the common equity funds for Tampa Electric and the cost of capital of the two are obviously somewhat related, I did not use the TECO Energy market data in my determination of the appropriate cost of capital for Tampa Electric. The financial information and the cost of capital of the comparable companies are more relevant and the determinant information for establishing an allowed rate of return for Tampa Electric in this proceeding. These companies provide a representative sample of the financial and cost of capital information for a financially healthy electric utility such as Tampa Electric.

Q. Why did you not use the TECO Energy information in your analysis?

A. The risks associated with the recent financial difficulties of TECO Energy are not relevant to measuring the cost of capital of Tampa Electric. Consequently, I did not use the market-based calculations of the cost of capital of TECO Energy and the financial information of TECO Energy had little bearing on my analysis.

Q. Can you explain in more detail why you used *Value Line* as the source for choosing comparable electric utilities for your analysis?

A. *Value Line* is a respected financial information source. It is readily available to investors and often found in most libraries, so it is a source that is likely to influence investors' decisions. A second important consideration for selecting *Value Line* is that it is independent from the investment community. *Value Line* does not underwrite securities. In the past, critics have justifiably condemned organizations that publish financial data while benefiting directly from a relationship with the company under review. In contrast, but *Value Line* just sells financial information and does not have this conflict of interest.

Q. What utilities did you choose as comparable to Tampa Electric?

A. The utilities that I selected are DPL, Inc., Northeast Utilities, NStar, OGE Energy, Pepco Holdings, Pinnacle West, SCANA Corp and Wisconsin Energy.

CAPITAL STRUCTURE

Q. What capital structure did you use in estimating Tampa Electric's cost of capital in this proceeding?

A. For ratemaking purposes in this proceeding, Tampa Electric's capital structure in the projected test year consists of long-term debt of $1,397,566,000 (38.22 percent), short-term debt of $8,002,000 (0.22 percent), customer deposits of $103,724,000 (2.84 percent), tax credits of $8,780,000 (0.24 percent), deferred income taxes of $302,744,000 (8.28 percent) and common equity of $1,835,985,000 (50.21 percent). This capital structure is illustrated in Document No. 5 of my exhibit.

Q. How does the capital structure projected by Tampa Electric for ratemaking purposes compare to the capital structures of the comparable electric utilities you have used as proxy companies in your analysis?

A. I compared the common equity ratio proposed by Tampa Electric for ratemaking purposes to the common equity ratios of the group of comparable companies. Tampa Electric's common equity ratio for ratemaking purposes is 50.21 percent. However, this equity ratio includes components that analysts typically do not consider as capital structure items, such as customer deposits, deferred taxes and investment tax credits. By removing these items and focusing on the investor sources of capital results in a 55.3 percent equity ratio for Tampa

Electric's 2009 test year.

Q. How does the 55.3 percent equity ratio compare to the proxy group?

A. As shown on my Document No. 6, the 2007 average equity ratio for the proxy group is 47.3 percent. However, this equity ratio represents the capital structures of the consolidated holding companies. The equity ratios of the regulated company subsidiaries within this proxy group averaged 53.3 percent in 2007 with two utility capital structures in excess of 60 percent. Comparing the equity ratios for the regulated companies within the proxy group to Tampa Electric's 55.3 percent equity ratio in the 2009 test year suggests that Tampa Electric's capital structure is consistent with the proxy group.

COST OF DEBT AND OTHER CAPITAL COMPONENTS

Q. What has Tampa Electric projected as its cost of short-term debt?

A. Tampa Electric has projected a cost of short-term debt in the projected test year of 4.63 percent.

Q. What is Tampa Electric's cost of long-term debt?

A. The embedded cost of long-term debt in the projected test tear is 6.80 percent.

Q. What are the costs of the other capital structure components in the projected test year?

A. The costs for the remaining capital structure components, except common equity, are 6.07 percent for customer deposits, 9.75 percent for weighted tax credits and zero for deferred income taxes.

FINANCIAL RISK

Q. You said you considered "financial risks". What do you mean by the term financial risk?

A. Financial risk is the risk to a company's common stockholders resulting from the company's use of financial leverage. This risk results from using fixed income securities, or debt, to finance the company. Any return to common stockholders is a residual return because it is available only after a company pays its debt-holders. This means the return on common stock is less certain than the contracted return to debt-holders. Consequently, the common stock equity ratio is a measure of financial risk. The lower the common equity ratio, the greater the relative prior obligation owed to debt-holders and the greater the risk faced by common stockholders.

Q. You indicated that a low common equity ratio was a measure of financial risk. Are there other measures of financial risk that you think are important?

A. As I stated, a direct measure of financial risk is the common equity ratio. Financial analysts assess other measures of financial risk, but because of the underpinning of the common equity ratio, most of these measures, in one way or another, tie back to this ratio. For example, other measures of financial risk are bond ratings and *Value Line's* financial strength rating. In my analysis, I reviewed Standard & Poor's ("S&P's") bond ratings and *Value Line's* "Financial Strength" measures for the comparable companies. *Value Line* ranks all of the comparable electric utilities between A and B in Financial Strength. The comparable companies all have S&P bond ratings between BBB- and A+. *As* I illustrate in Document No. 7 of my exhibit. As a measure of risk, Tampa Electric has a BBB- bond rating, which is equal to the lowest of the bond ratings of the comparable electric utilities.

BUSINESS RISK

Q. You referred to business risk. What do you mean by the term "business risk"?

A. Business risk is the exposure of investors' anticipated returns to the uncertainties of a company's day-to-day business activities. Examples of important business risks for electric utilities include such factors as the risk of recovering fuel costs, increasing costs of investment in infrastructure, storm damage expenses, and increasing operating and maintenance expenses.

Q. How did business risk affect your analysis?

A. In order to determine how business risk might affect the cost of capital of Tampa Electric, I compared measures of business risk for Tampa Electric and the comparable companies. For the publicly traded companies, financial publications address risks of the industry and individual companies such as Tampa Electric and the comparable companies. Tampa Electric has the usual business risks that many utilities face, such as timely recovery of proposed capital expenditure and increased fuel costs. Additionally, Tampa Electric has the unique risk exposure of timely recovery of hurricane expenses.

Q. What published measures of business risk did you review in your analysis?

A. I reviewed the *Value Line* rankings of "Safety" and "Timeliness". Although these two measures are both broader than just business risk, they both are influenced significantly by business risks. *Value Line* defines its "Safety" ranking as a measurement of the potential risk associated with individual common stocks; it defines "Timeliness" as a measure of a stock's probable performance in the forthcoming year relative to the overall market. The comparable companies have an average Safety rank of 2.4 and average Timeliness rank of 2.8. Both are slightly better than the average for the securities in the entire market, which is 3. I show this comparison in Document No. 8 of my exhibit.

Q. Have you reviewed any financial information concerning the business risks facing Tampa Electric?

A. Yes. I reviewed analysts' reports that noted the business risks facing Tampa Electric and the effect of these factors on investor expectations. Analysts have generally noted the housing slowdown in Tampa Electric's service territory and higher operating costs. Analysts also have recognized the threats to future returns from potentially large capital expenditure programs.

FINANCIAL STATISTICS

Q. What financial statistics did you review of the companies that you studied?

A. I reviewed some key financial statistics for the comparable companies. These statistics include recent and expected common stock earnings, dividends paid and payout ratios, and price to earnings ("P/E") ratios.

Q. What are the current common stock earnings for the comparable electric utilities?

A. *Value Line's* average for the current returns on common stock equity for 2008 for the comparable companies is 12.2 percent. However, this estimate for the comparable companies is undoubtedly influenced by some extreme values. On the one hand, Pinnacle West has a very low 7.0 percent estimated return on common stock equity for 2008, and Northeast Utilities' estimated return on common stock equity is 9.0 percent, for example. At the same time, DPL, Inc. has an inordinately high estimated return of 24.0 percent on common stock equity in 2008. Although these extreme values are not single-year anomalies, their values as benchmarks for an allowed return in this proceeding are probably limited. I show this comparison of common equity returns in Document No. 9 of my exhibit.

Q. You reviewed the dividend payments of the comparable companies. What did your review show?

A. Document No. 10 of my exhibit shows that the declared dividends of the comparable companies were generally stable, with modest increases in some cases.

Q. What were your findings when you reviewed the dividend payout of common stock earnings of the comparable companies?

A. The average dividend payout of the comparable electric utilities has declined in recent years, and this is consistent with my observations of the industry generally. Document No. 11 of my exhibit shows that *Value Line* estimates the average payout ratio of the comparable electric utilities at 58.3 percent in 2008.

Q. What did your review of the price-earnings ratios of the comparable companies show?

A. The P/E ratio of the comparable electric utilities according to *Value Line* is currently an average of 13.7. This is consistent with my review of P/E ratios of other companies in the electric utility industry. Document No. 12 of my exhibit compares these ratios.

COST OF COMMON STOCK

Q. You stated previously that you calculated the cost of common stock equity for Tampa Electric. What methods did you use?

A. I used the two generally accepted market-based methods, the DCF and the CAPM, to estimate the cost of common stock in my analysis. I applied each of these methods to estimate the costs of common stock equity for Tampa Electric by estimating the cost of common equity of each of the comparable electric utilities, and I compared the results among these various companies. For each of these two methods, I assessed their underlying assumptions and their analytical strengths and weaknesses. Subsequently, I evaluated the results from these analyses in the context of current market conditions and the relative risks.

DISCOUNTED CASH FLOW METHOD

Q. Can you define the Discounted Cash Flow, or "DCF" methodology for measuring the cost of common equity?

A. The following formula expresses the DCF calculation of an investor's required rate of return:

$$K = D/P + g$$

Where: K = cost of common equity
D = dividend per share
P = price per share and
g = rate of growth of dividends, or alternatively, common stock earnings.

In this expression, K is the capitalization rate required to convert the stream of future returns into a current value. "D" is the current level of dividends paid to the common stock holders. "P" is the valuation of the common stock by the investors reflected by recent market prices. Consequently, the ratio "D/P" is the current dividend yield on an investment in the company's common stock. The "g" is the growth rate anticipated by the investor.

Q. What assumptions underlying the DCF method are important when estimating the cost of common equity in practice?

A. I believe one can identify the following important underlying assumptions associated with the basic annually compounded DCF model:

1. Investors are risk averse. That is, for a given return, investors will seek the alternative with the lowest amount of risk. In other words, the greater the risk that investors attribute to a given investment, the greater the return they require from that investment.
2. The discount rate must exceed the growth rate, i.e. *K*, in the stated expression, must exceed *g*. The mathematics associated with the derivation of the basic annually compounded DCF model requires this assumption.
3. The payout and the price earnings ratios remain constant.
4. Expected cash flows consist of dividends and the future sale price of the stock. The sales price in any period will equal the present value of the dividends and the sales price expected after that period including any liquidating dividend. Consequently, the sales price in any period is equal to the present value of all expected future dividends.
5. Dividends are paid annually.

6. There is no external financing.

As noted in these assumptions, expected cash flows consist of dividends and the future sale price of common stock. Common stock earnings are the critical common denominator because earnings make paying dividends possible, while retained earnings provide for future growth in stock value.

STRENGTHS OF THE DCF

Q. What are the key strengths of the DCF method that you think are important to your analysis?

A. The DCF method is theoretically sound and this is its greatest strength. It relates an investor's expected return in the form of dividends and capital gains to the value that an investor is willing to pay for those returns. The DCF implies that an investor is willing to pay a market price that is equal to the present value of an anticipated stream of earnings. This relationship theoretically reveals the opportunity cost of investors' funds. In this way, the DCF relates known market price information and the company's dividend and earnings performance to determine the value that investors place on anticipated returns. A practical advantage of the

DCF, as a cost of capital tool in a ratemaking proceeding, is that regulatory analysts commonly use it, and participants in proceedings generally understand it.

Q. Is this estimate of the cost of common equity consistent with the regulatory objective of setting an allowed return equal to the returns of equivalent risk?

A. Yes. The DCF develops an estimate of the marginal cost of investing in a given utility, but this may not be sufficient to attract capital in subsequent markets. It is consistent with the principle of setting a return equal to returns of equivalent risk at the margin, but this cost of capital is not necessarily sufficient to assure that a return at this level will attract and maintain capital even in the near term.

WEAKNESSES OF THE DCF

Q. What weaknesses of the DCF may be important when used in a ratemaking proceeding?

A. A DCF analysis may have either conceptual or data problems or both. As to the conceptual problems, analysts may misinterpret and consequently misapply the DCF because they do not understand the limits of the analysis. For example, a common conceptual problem is the use of historical growth rates in DCF calculations, when these rates are not accurate estimates of investors' expectations of the future returns. Likewise, using dividend growth rates mechanically in a DCF formulation will be misleading if investors are purchasing and selling a stock because of anticipated changes in earnings and potential capital gains. That is, if an assumption (such as dividends being the sole source of value expectations of an investor) is not accurate, then analysts will err if they do not recognize this.

In addition, as I stated previously, the DCF method calculates the *marginal, or incremental, cost of common* stock equity of a company. If analysts do not recognize the theoretical significance of this calculation, they may misapply the results of their calculations. As a marginal cost estimate, the DCF produces an estimate of the minimal return necessary to attract or maintain investments in a company's common stock.

Q. From a practical standpoint, why is the marginal cost nature of the DCF significant in a regulatory setting?

A. If a DCF-based cost of common equity, even if realistically developed, becomes the allowed return for a regulated utility, this will not provide enough cushion so the realized return will be sufficient to attract and maintain capital. Analysts, interpreting the results of the DCF calculations, may not recognize this. Consequently, the DCF-based calculations may be misleading. In fact, this misunderstanding of the DCF results can virtually assure that a regulated company will not have the opportunity to earn its allowed return.

Q. Do you know whether regulatory commissions have recognized these limitations of the DCF?

A. Yes. Regulatory commissions have recognized the difficulties of relying on the raw, unadjusted DCF calculations. In one such example, a regulatory commission recognized that the assumptions underlying the DCF model rarely, if ever, hold true.[1] This commission stated that an "…unadjusted DCF result is almost always well below what any informed financial analyst would regard as defensible and therefore requires an upward adjustment based largely on the expert witness' judgment".[2]

Q. In addition to an adjustment based on "expert" judgment,

[1] Phillips, Charles F., Jr. and Robert G. Brown, *Chapter 9: The Rate of Return,* The Regulation of Public Utilities: Theory and Practice, (1993: Public Utility Reports, Arlington, VA) p. 423.

[2] Ibid, *In re Indiana Michigan Power Company,* 116 PUR4th 1, 17 (Ind. 1990).

in your experience, are you aware of any attempts by regulators and analysts to compensate for the marginal cost nature of the DCF?

A. Yes. Both regulators and analysts have often applied compensating adjustments for the marginal cost nature of the DCF method, and they do so in a variety of ways. Although these various adjustments may differ greatly in their approaches, each addresses the inadequacy of the marginal cost estimates of the cost of capital in some manner. For example, I have observed such practices as applying a "flotation" adjustment, a "market pressure" adjustment or an adjustment to common equity to reflect the market values of debt and common equity.

Q. What is a flotation adjustment?

A. It is a calculation adjustment applied to the DCF to compensate for costs associated with the issuance of new securities.

Q. Why do analysts use a flotation adjustment as one way of addressing the marginal cost nature of the DCF?

A. Analysts apply a flotation adjustment because the market-based DCF estimate of the cost of capital does not account for the costs of issuing common stock. That is, the market-based DCF does not incorporate the unavoidable costs incurred when issuing securities, such as legal fees, investment banker fees and the publication costs of a prospectus. The flotation adjustment attempts to raise the market-measured cost of capital, which is the return required to attract the marginal investor, to the same level as the true cost of capital of the utility.

Q. Did you apply a flotation adjustment in your DCF analysis?

A. No, I did not. I believe that recognizing the high end results of the DCF method is usually sufficient compensation for the price impact of flotation costs on a common stock.

Q. If a utility incurs flotation costs that reduce the level of funds received from a stock issuance, why did you not apply such an adjustment?

A. Although the costs of flotation are inescapable and real, I believe it is an adequate recognition of the marginal cost nature of the DCF, which also recognizes the potential impact of flotation costs, to focus on the higher end of the various DCF results. In my opinion, this normally provides appropriate compensation to attract and maintain investment in a utility's common stock, and it also avoids trying to exact a level of implied precision from the DCF methodology that is not realistic.

Q. What is a "market pressure" adjustment?

A. A market pressure adjustment is compensation for the impact of a common stock issuance on the prices of that common stock. Analysts apply this adjustment because the DCF measured cost of common stock cannot account for the prospective price impact of additional, newly issued shares. This is another instance when the marginal cost of common stock measured prior to this issuance will fail to capture the true cost of capital necessary to attract investors.

Q. Are you recommending that an analyst should add a market pressure adjustment to a DCF result when determining a recommended allowed return?

A. No. Normally, the higher end of the DCF market-based results will provide an adequate return on common stock for a regulated utility, which is sufficient under most market circumstances. Such a return should be adequate to compensate for the impact of newly issued securities and to attract investors to newly issued common stock.

Q. Why would an adjustment to the cost of equity to reflect market values for debt and equity be appropriate?

A. Regulatory convention dictates that an analyst should use the book values of securities when establishing the capital structure of a utility for ratemaking. However, some analysts adjust the cost of equity for ratemaking to compensate for the difference between market value and book value. Of course, investors must measure the marginal cost returns against the market values of their investment. Some analysts recognize the difference between market valuation and book valuation of common stock to recognize the marginal cost nature of the DCF method.

Q. Did you adjust Tampa Electric's capital structure for the differential in market value and book value?

A. No, I did not. As in the cases of the other adjustments that analysts and regulators develop largely to compensate in ratemaking for the marginal cost nature of the DCF technique, I believe that recognizing the high end of the DCF results is adequate.

DATA USED IN DCF ANALYSIS

Q. You defined the variables used in the DCF analysis. What growth rate data did you use in your DCF analysis?

A. I used forecasted earnings growth estimates as the primary measure in my DCF analysis. Forecasts of common stock earnings capture investors' expectations about future returns, and these are the expectations that affect their decisions to invest. The financial academic literature is replete with findings that analysts' forecasts are superior to historical performance for determining expected growth.

Q. You mentioned findings in the academic literature. Have analysts performed studies regarding which data used in a DCF analysis are most likely to capture investors' expectations about future returns?

A. Yes. As early as 1982, academic studies showed that analysts' forecasts were superior to historical, trended growth rates for DCF analyses.

Q. Please explain some of those studies.

A. A number of authors have addressed the merits of analysts' forecasts in a DCF analysis of the cost of capital. For example, a well-known financial textbook by Brigham and Gapenski explains why analysts' growth rate forecasts are the best source for growth measures in a DCF analysis. They state:

> "Analysts' growth rate forecasts are usually for five years into the future, and the rates provided represent the average growth rate over the five-year horizon. Studies have shown that analysts' forecasts represent the best source for growth for DCF cost of capital estimates."[3]

Research reported in the academic literature supports this position. For example, Gordon, Gordon and Gould found:

> "…the superior performance by KFRG (forecasts of growth by security analysts) should come as no surprise. All four estimates of growth rely upon past data, but in the case of KFRG a larger body of past data is used, filtered

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[3] Brigham, Eugene F., Louis C. Gapenski, and Michael C. Ehrhardt, "Chapter 10: The Cost of Capital," Financial Management Theory and Practice, Ninth Edition (1999: Harcourt Asia, Singapore), p. 381.

through a group of security analysts who adjust for abnormalities that are not considered relevant for future growth."[4]

Q. Are you familiar with academic articles that apply specifically to the DCF growth rates used in regulatory proceedings?

A. Yes. Timme and Eisemann examined the effectiveness of using analysts' forecasts rather than historical growth rates for determining investors' expectations in rate proceedings. They concluded:

"The results show that all financial analysts' forecasts contain a significant amount of information used by investors in the determination of share prices not found in the historical growth rate…The results provide additional evidence that the historical growth rates are poor proxies for investor expectations; hence they should not be used to estimate utilities' cost of capital."[5]

Q. Do you find these statements by these authors credible?

A. Yes. These results are not surprising because investors,

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[4] *Gordon, David A., Myron J. Gordon, and Lawrence I. Gould, "Choice among methods of* estimating share yield," *Journal of Portfolio Management;* Spring 1989, Volume 15, Number 3, pages 50-55.

[5] Timme, Stephen G. and Peter C. Eisemann, "On the Use of Consensus Forecasts of Growth in the Constant Growth Model: The Case of Electric Utilities," *Financial Management*, Winter 1989, pp. 23-35.

when contemplating an investment in a common stock, very frequently review reputable analysts' forecasts. Such information, available to them at the time they contemplate investing, will influence their decision to invest.

Q. In developing your DCF analysis, did you also review historical common stock earnings and dividend information?

A. Yes. For a historical perspective, I also reviewed the common stock earnings and dividend history of the companies studied. As I stated previously, for analytical purposes and to enhance the reliability of my DCF analysis, I relied principally on forecasted common stock earnings in my DCF analysis.

Q. What did your review of the growth rates of common stock earnings and dividend histories show?

A. The most significant observation was that TECO Energy's dividends and earnings both declined significantly, i.e., 11 percent, over the previous five years. Also, the financial decline of TECO Energy reinforced my methodological decision to use the comparable companies as proxies for Tampa Electric in this analysis. Consequently, I focused my analysis to determine a recommended allowed return for Tampa Electric primarily on the results of the analysis of the comparable companies. Also, in general, for these utilities the earnings per share growth rates are higher than the dividend growth rates, probably because of other factors influencing the dividend decisions. I have shown these comparative dividend and earnings per share growth rates in Document No. 13 of my exhibit.

Q. Why did you state that other factors probably affected the relationship between the earnings per share and the dividend growth rates?

A. Earnings must be sufficient to support the dividend policies of the companies over time, and many factors influence boards of directors in determining common dividend policies. In the industry generally, the relatively stable dividend growth rates, as compared to common stock earnings, have been observable for many electric utilities for a number of years. As shown previously, the declared dividends of the comparable companies have been relatively stable. Moreover, the relatively stable dividend policies have evolved despite a reduction in the dividend tax rate in 2003. For TECO Energy, the declines in earnings and dividends are especially important, because this means that its market-measured cost of capital may not be a reliable estimate of the cost of capital of Tampa Electric. Again, this confirms my methodological decision to use the comparable electric utilities as proxies for Tampa Electric in my analysis.

Q. What was the source of the common stock price data that you used in your DCF analysis?

A. I used *YAHOO! Finance* as the source of market price information. I obtained current prices for a recent two-week period and the high and low share prices for a 52-week period. *YAHOO! Finance* is a widely used internet portal that provides electronic financial information including daily prices. The current market prices reflect current market valuations. The longer time period recognizes the changing market conditions over time and helps determine a reasonable allowed return to be used to develop rates expected to be in place for a period.

DCF CALCULATIONS

Q. Please explain the results of your DCF calculations.

A. In one DCF analysis, I took a relatively long-term outlook by reviewing the combined historical and forecasted dividend growth rates and the common stock prices for the past year. Looking at more current DCF results, I used these longer-term growth rates and market prices from a recent two-week period. The estimate of the cost of common stock equity of TECO Energy is absurdly low in this analysis, and it is an example of the unreliability of the DCF methodology and its potential for misrepresenting the cost of capital, as I discussed previously. The estimated cost of common equity in this instance is less than the current low-risk 30-year Treasury Bond rate, which is unrealistic. Even the high DCF results for the comparable companies of 9.73 percent and 10.21 percent in current markets are probably not representative of the current market conditions. I illustrate the results of these DCF calculations using the two different price series in Document No. 14 and Document No. 15 of my exhibit).

Q. You mentioned that earnings per share growth is likely to be a more reliable estimate of the cost of common equity for Tampa Electric. What were the results of your analysis using earnings per share growth rates?

A. To take a longer-term view of the earnings per share growth, I combined the historical earnings per share growth and the forecasted earnings per share growth. These DCF results are somewhat higher although the very low historical growth has affected the longer period growth rates. For the current prices, these DCF estimates are 10.64 percent for the average of the comparable companies. The average high-end estimate for the comparable companies is 11.12 percent using the longer price time series. I have illustrated these results in Document No. 16 and Document No. 17 of my exhibit.

Q. When you discussed the problems with the DCF analysis and findings reported in the academic literature you pointed out the reliance of investors on analysts' forecasts. What were the results of your DCF analysis using financial analysts' forecasted growth rates?

A. Recognizing that the comparable companies are proxies for Tampa Electric and are representative of the returns on common equity over time, I noted the wide range of DCF results using forecasted earnings. Using the current price series, the higher end of the cost of capital was 12.80, which is in the middle of the current expected earnings of the group of comparable companies. Using prices over a longer period, the higher end of the DCF results for the comparable companies was 13.27 percent. Document No. 18 and Document No. 19 of my exhibit show these results.

CAPITAL ASSET PRICING MODEL

Q. You said you also used the Capital Asset Pricing Model in your analysis. What is the Capital Asset Pricing Model?

A. The Capital Asset Pricing Model ("CAPM") is a risk premium method, which means that it is a method for measuring the risk differential, or premium, between a given investment and the market as a whole. It recognizes an investor's ability to diversify his portfolio by combining securities of various risks into that portfolio, and through diversification of investments, reducing the investor's total risk. However, some risk is non-diversifiable, e.g., market risk, and investors remain exposed to that risk. The theoretical expression of the CAPM is:

$$K = R_F + \beta \ (R_M - R_F)$$

Where: K = the required return.

R_F = the risk-free rate.

R_M = the required overall market return; and

β = beta, a measure of a given security's risk relative to that of the overall market.

To elaborate on these definitions, the risk free rate is the known benchmark rate of a particular security. Analysts may use a variety of rates, such as rates of Treasury securities and corporate bonds, for this benchmark rate. The overall market return is the return on all of the investment alternatives available to the investor that investors may combine into a portfolio. The beta represents the relative volatility of the analyzed security to the market return. In this above expression, the value of market risk is the differential between the market return and the "risk-free" rate. By estimating the risk differential between an individual security and the market as a whole, an analyst can measure the relative cost of that security compared to the market as a whole.

Q. What are the notable strengths of the CAPM method?

A. The CAPM is a risk premium based method that typically provides a longer-term perspective of capital costs than more market sensitive methods such as the DCF. The CAPM relates current debt costs to the cost of common stock by linking the incremental cost of capital of an individual company with the risk differential between that company and the market as a whole. Although it is a more general calculation than the DCF, it is a valuable tool for assessing the general level of the cost of a security. Since, the DCF estimates are more sensitive to changes in market prices and earnings, and hence, are more volatile than the CAPM estimates, I have used the CAPM as a stable benchmark of the reasonable cost of common stock of the studied companies. The CAPM will also typically produce relatively similar results for companies in the same industry, whereas the DCF method may produce wide-ranging calculations even among companies in the same industry.

Q. Does the CAPM have problems that may be important when applying it in a ratemaking proceeding?

A. Yes. The CAPM results are very sensitive to a company's beta. The beta is a single-dimension, market-volatility-over-time, measure of risk. For this reason, the CAPM cannot account for any risks not included as measures of market volatility, and may not identify significant market risks to investors. It may also understate or overstate the cost of capital. Most utilities have betas less than one, and a number of analysts have shown that the CAPM underestimates the cost of capital of companies with betas less than one. This is obviously important when one uses the CAPM to estimate the cost of capital in a rate proceeding because utilities generally have betas less than one. The *Value Line* betas for the comparable electric utilities range between 0.75 and 0.90. Consequently, the CAPM results in this analysis are likely to underestimate the cost of common stock equity of each of the comparable electric utilities. In addition, the academic literature has shown that the standard CAPM underestimates the cost of capital of smaller companies, and this underestimation of capital costs may require an adjustment.

Q. Can you cite sources in the academic literature that recognize that the CAPM method underestimates the cost of capital of smaller companies?

A. Yes. For at least two decades, various authors have reached this conclusion and together they reveal the empirical consistency of this finding. For example, R. W. Banz[6] and M. R. Reinganum[7], in the 1980s, pointed out

[6] Banz, R.W., "The Relationship Between Return and Market Value of Common Stock," *Journal of Financial Economics*, March 1981, pp. 3-18.

the size bias resulting in an under estimate of the cost of capital of smaller firms. Reinganum examined the relationship between the size of the firm and its price-*earnings ratio. He found that small firms experienced* average returns greater than those of large firms that had equivalent risk as measured by the beta. Of course, the beta is the distinguishing measure of risk in the CAPM. Banz confirmed that beta does not explain all of the returns associated with smaller companies; hence, the CAPM would understate their costs of common equity. In the same time frame, Fama and French confirmed that the Banz analysis consistently rejected the central CAPM hypothesis that beta sufficed to explain the expected return of investors.[8]

Q. What did you mean when you said that the CAPM method *requires an adjustment?*

A. Although repeated studies showed that the CAPM method possesses a bias that understates the expected returns of small companies, this remained only an empirical observation without a clear remedy. However, Ibbotson Associates, which is the common source of data for the risk premium used in CAPM analyses, has developed an adjustment for this bias. Ibbotson Associates discusses

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[7] Reinganum, M. R., "Misspecification of Capital Asset Pricing: Empirical Anomalies Based on Earnings, Yields, and Market Values," *Journal of Financial Economics*, March 1981, pp. 19-46.
[8] Fama, Eugene F., and Kenneth R. French, "The CAPM is Wanted, Dead or Alive," *The Journal of Finance*, Vol. LI, No. 5, pp. 1947-1958.

the problem as follows:

> "One of the most remarkable discoveries of modern finance is that of the relationship between firm size and return. The relationship cuts across the entire size spectrum but is most evident among smaller companies, which have higher returns on average than larger ones. Many studies have looked at the effect of firm size on return."[9]

To account for this empirical bias against smaller companies, Ibbotson Associates has prescribed quantitative adjustments to the CAPM. It publishes this in the same data source used by many analysts to estimate the risk premium in their CAPM analyses.

Q. Did you apply the adjustment recommended by Ibbotson Associates in your analysis?

A. Yes. In my CAPM analysis, I followed the method recommended by Ibbotson Associates to compensate for this inherent data bias.

Q. Does this size bias of the CAPM apply to the companies in your analysis?

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9 Chapter 7: Firm Size and Return, "Ibbotson Associates' Stocks, Bonds, Bills, and Inflation: 2008 Yearbook Valuation Edition," edited by James Harrington, p. 129.

A. Yes. Using the size criteria recommended by Ibbotson all of the comparable companies in my analysis were subject to the CAPM size bias.

Q. Does the size bias adjustment for the CAPM measured by Ibbotson apply to regulated utilities?

A. Yes. Ibbotson calculated a measured adjustment specifically for traditional regulated utilities. In fact, the illustrative, example calculation presented by Ibbotson used an electric utility to demonstrate the correct manner to apply the size adjustment.

Q. To your knowledge, have any regulatory commissions accepted this size adjustment to the CAPM in rate proceedings when determining the cost of common equity?

A. Yes. I know of at least one instance where a commission recognized the adjustment to the CAPM proposed by Ibbotson. The Minnesota Public Utilities Commission has done so in an Interstate Power and Light Company case. The Commission observed:

> "...the Commission concurs with the Administrative Law Judge in his conclusion that, whatever the merits and applicability of

the Ibbotson study, for purposes of this case, it is reasonable to accept its principal conclusion - that size of a firm is a factor in determining risk and return".[10]

Q. Can you explain more fully the CAPM methodology that you used in your analysis?

A. I applied two different, but complimentary, approaches to estimate a CAPM cost of capital of Tampa Electric. One of these methods examines the historical risk premium of common stock over high grade corporate bonds. The other integrates the risk premium of common stocks to long-term government bonds in recent markets. This second method requires an adjustment for the bias due to company size that I mentioned previously. The financial literature has recognized this bias as an empirical problem for a long time, but correcting for this bias is a recent analytical development.

Q. One of the CAPM methods that you developed used high grade government bonds as representative of the market rates. Why did you use this method?

A. The Federal Reserve uses short-term Treasuries as a

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[10] *In the Matter of the Petition of Interstate Power and Light Company for Authority to Increase its Electric Rates in Minnesota*, Docket No. E-001/GR-03-767, p. 12.

monetary policy vehicle, and the government market actions preclude an accurate, unbiased measurement of market valuations. The government securities are subject to the risk of changing Fed policies. The government securities also have been directly influenced by the "flight-to-quality" in the current volatile markets. Corporate bonds are a step removed from these direct federal policy influences and more representative of market-measured, benchmark measures for a risk premium analysis.

Q. Does the decline in earnings per share and declared dividends that you noted previously affect the CAPM in the same way that it affects the DCF analysis?

A. No. The decline in earnings and dividends directly influence the mathematical DCF of the cost of capital. The decrease in common stock earnings and dividends will not affect the CAPM calculations in the same direct way. The CAPM has longer-term, risk premium perspective.

Q. What approaches to the CAPM did you use?

A. As I stated previously, I used two different CAPM analyses based on slightly different assumptions. These two methods provide comparative long-term calculations. They provide complementary CAPM analyses and stable benchmarks for comparison with the more volatile DCF analysis. One of these methods recognized the risk associated with size of company in a rather traditional CAPM methodology, and I applied the compensation method recommended by Ibbotson Associates. The other method uses historical market relationships to reveal a risk premium that I use in another CAPM analysis.

Q. How did you calculate the estimated cost of common equity using the more traditional CAPM method?

A. In this more traditional method, I used the risk premium of common stocks and the "risk free rate" of 20-year Treasury bonds in current markets as reported by the Federal Reserve. I used the company betas reported by *Value Line* to calculate the "Adjusted Equity Risk Premium". As this method requires an adjustment for the size bias that I described earlier, I applied the appropriate adjustment recommended by Ibbotson and Associates. The sum of these results is the estimated cost of common equity for the comparable electric utilities. Using this method produced an average CAPM result of 11.24 percent for the comparable electric utilities. I have illustrated these results in Document No. 20 of my exhibit.

Q. You said that you also developed a CAPM analysis that was based on historical market relationships. What did this method show?

A. The second CAPM method is a method that does not require a separate recognition of the size bias because it embodies the historical relationship between common equity and debt. In this analysis, I used the long-term Aaa corporate bond rates as reported by the Federal Reserve and an arithmetic mean of the returns on Ibbotson Associates' small and large company stocks to estimate the historical market returns. From this relationship, I calculated the differential as the historical market risk premium. Again, I used the betas for the respective companies as reported by *Value Line* to estimate the "Adjusted Risk Premium". Applying this method, the average CAPM estimate for the comparable electric utilities was 12.42 percent. I calculate and illustrate these results in Document No. 21 of my exhibit.

Q. Please summarize the results from your DCF and CAPM analyses.

A. As I noted, the comparable companies' DCF results are very relevant, and those cover a wide range from 11.12 percent to 13.27 percent. The CAPM results are 11.24 percent and 12.42 percent for the comparable electric utilities. I show a summary of the relevant DCF and CAPM results in Document No. 22 of my exhibit.

RECOMMENDED ALLOWED RETURN

Q. Please identify some of the more significant factors to consider in recommending an allowed return for Tampa Electric in this proceeding.

A. The turmoil in the debt and equity markets, especially in recent months, is a significant influence on the current cost of common equity. Although the Federal Reserve has moved aggressively to make credit available to avoid a more serious economic slow down and a financial collapse, the threat of inflation has kept long-term rates from declining, and most forecasters expect long-term rates to increase. Of course, long-term interest rates are the most relevant competitive rates for allowed returns of any regulated utility, including Tampa Electric. Rising long-term corporate rates are an important background for setting an allowed return in this proceeding.

As representative of current market returns, the comparable companies have current expected returns on common equity of 12.2 percent, and this is an important standard in the current, volatile markets. The most relevant DCF and CAPM results range from 11.12 percent to 13.27 percent in these markets. The inflationary and increasing interest rate expectations and the market volatility suggest that a return toward the center of these wide-ranging results is appropriate. The current, competitive market returns on common equity of the comparable companies also indicate this is prudent.

Q. What rate of return on common equity are you recommending for Tampa Electric in this proceeding?

A. For ratemaking purposes, I am recommending an allowed return on common equity for Tampa Electric of 12.00 percent.

Q. What return on total capital are you recommending for Tampa Electric in this proceeding?

A. Based on the relevant capital structure, the cost of long-term and short-term debt, and my recommended allowed return, the total cost of capital appropriate for this proceeding is 8.82 percent. I have illustrated the calculation of this recommended allowed total return on Document No. 23 of my exhibit.

INTEREST COVERAGE RATIOS

Q. How did you verify that your recommended allowed return on common equity for Tampa Electric is sufficient?

A. I calculated the After-Tax Interest Coverage ratio at my recommended allowed return and compared that coverage to the after tax coverages of the comparable companies. In this way, I could determine if my recommended allowed return is reasonable.

Q. What was the result of your analysis of the after-tax interest coverage ratios of Tampa Electric and the comparable electric utilities?

A. As Document No. 24 of my exhibit, shows Tampa Electric's After-Tax Interest coverage is 3.14 times at my recommended allowed return. By comparison, the average coverages of the comparable electric utilities range from 2.27 times to 4.04 times in the current markets. This coverage similarity confirms that my recommended allowed return of 12.00 percent is reasonable in the current volatile markets.

Q. Please summarize your findings and recommendations in this matter.

A. After recognizing a wide divergence of returns of electric utilities comparable to Tampa Electric plus measures of the estimated cost of capital, I concluded that an allowed return of 12.00 percent is appropriate for Tampa Electric at this time. To determine this return I studied the recent volatile credit and equities markets, a number of current financial statistics, current electric utilities earnings and market-based measures of capital costs.

For my analysis of the cost of capital of Tampa Electric, I considered the appropriate capital structure for this proceeding. The critically important common equity ratio as used for ratemaking purposes is 50.21 percent. The long-term debt ratio is 38.22 percent. Tampa Electric has estimated that its cost of long term debt is 6.80 percent, the cost of short-term debt is 4.63 percent, the cost for customer deposits is 6.07 percent and for tax credits 9.75 percent.

The volatile debt and equity markets are important factors affecting the market currently, and some of the market consequences are yet unclear. For example, the Federal Reserve has aggressively enhanced credit availability, forcing down short-term interest rates, but the relevant long-term rates continue to increase.

The comparable companies, as representative of healthy electric utilities, are significant standards for Tampa Electric in this proceeding. On average, the comparable companies have expected common equity returns of 12.2 percent in 2008. For market-based measures of the cost of common stock, I used Discounted Cash Flow and Capital Asset Pricing Model analyses and applied them to the common stock of each of the comparable companies. The most relevant DCF results for the comparable companies are 11.12 percent and 13.27 percent. Even the more stable CAPM estimates covered a wide range from 11.24 percent to 12.42 percent for the average of the comparable companies. The inflationary and increasing interest rate expectations and the market volatility suggest that a return close to center of these market-based results is appropriate at this time. The current, competitive market returns on common equity of the comparable companies also indicate this is prudent. I concluded that an allowed return on common equity of 12.00 percent is appropriate for Tampa Electric in this proceeding. The associated total cost of capital is 8.82 percent.

Finally, I verified that my recommended allowed return is appropriate by comparing Tampa Electric's After-Tax Interest Coverage at my recommended range to the coverages of the comparable companies. This comparison verifies that my recommended allowed return is reasonable in current markets.

Q. Does this conclude your direct testimony?

A. Yes, it does.

BY MR. BEASLEY:

Q Would you please summarize your direct testimony?

A Good morning, Commissioners. I conclude that an allowed return on common equity capital of 12 percent is appropriate for Tampa Electric at this time. To determine this return I studied the recent volatile credit and equities markets, a number of current financial statistics, current electric utility earnings and market-based measures of capital costs. The volatile debt and equity markets are important factors affecting the market currently. The Federal Reserve has aggressively enhanced credit availability, forcing down short-term interest rates of treasuries, but the relevant long-term rates of corporate bonds continue to increase.

The comparable companies as representative of healthy electric utilities are significant standards for Tampa Electric in this proceeding. On average the comparable companies expect common equity returns of 12.2 percent in 2008. For market-based measures of the cost of common stock I used Discounted Cash Flow and Capital Asset Pricing Model analyses and applied them to the common stock of each of the comparable companies.

The most relevant DCF results for the comparable companies are within range of 11.12 percent and 13.27 percent. Even the more stable CAPM estimates cover a wide range from 11.24 percent to 12.42 percent for the average of the comparable companies.

The inflationary and increasing interest rate expectations and the market volatility suggest a return close to center of these market-based results is appropriate at this time.

The current competitive market returns of common equity of the comparable companies also indicate this is prudent. I conclude that an allowed return on common equity of 12 percent is appropriate for Tampa Electric in this proceeding. The calculated total cost of capital is 8.82 percent.

Finally, I verified that my recommended allowed return is appropriate by comparing Tampa Electric's after-tax interest coverage of my recommended range to the coverages of the comparable companies. This comparison verifies that my recommended allowed return is reasonable in current markets. This concludes my summary.

MR. BEASLEY: Thank you. We tender Dr. Murry for cross-examination.

COMMISSIONER EDGAR: Okay. And, Mr. Beasley, just so I am clear, is this witness coming back on rebuttal?

MR. BEASLEY: Yes, ma'am, he is.

COMMISSIONER EDGAR: He is. Okay. Thank you.

Ms. Christensen.

CROSS EXAMINATION

BY MS. CHRISTENSEN:

Q Good morning. Good morning, Dr. Murry. I'm going to ask you a few questions regarding your DCF results and your CAPM results this morning.

A Okay.

Q Turning to your exhibits, document DAM-1, document Number 14, you show DCF results with a dividend growth rate, and I see an average low and high cost of capital of 9.67 percent to 9.73 percent for comparable companies. Is that correct?

A That's correct.

Q Okay. And I also see a low and high cost of capital for TECO Energy of 2.32 percent and 2.44 percent. Is that also correct?

A That is correct.

Q Okay. And this table is the growth rate that is projected dividend per share growth rate from Value Line; right?

A That's correct.

Q Okay. In the DCF model the annual cash flows that investors receive are in the form of dividends; is that correct?

A It depends on how you formulate the model. Some people formulate it with only dividends. That would be correct. It's the anticipated returns of investors, it's their discount rate.

Q Okay. And generally speaking, those are in the form of dividends; correct?

A Well, I think all investors look for dividend return and capital gains. I think that's especially true in the markets today.

Q Okay. Now looking at your figures for TECO Energy, those are quite low, are they not?

A They're -- yes, they're certainly low.

Q Okay. And you've ignored the DCF results for TECO Energy; is that correct?

A I did. Yes. I, in my direct testimony I think I explained very carefully why I thought that was not relevant for analysis in this proceeding. I think I also explained why I thought the dividend growth rate was not appropriate for analysis in today's market.

Q Okay. So it is correct, in fact you've not used the data for TECO Energy at all in your analysis.

A That would not quite be correct because I think I, I think I referred to it. I certainly was interested in what it was, but I didn't consider it was relevant in really making a judgment for the appropriate return for Tampa Electric.

Q So it would be correct to summarize that you presented the results for TECO Energy but you did not use them; right?

A I think that, I think that's a safe statement. I explained this in my direct testimony.

Q Okay. Looking at Document Number 15, you showed DCF results with the dividend growth rate, and I see an average low and high cost of capital of 9.14 percent to 10.21 percent for comparable companies; is that correct?

A That's correct.

Q And in Document Number 16 your DCF results show, using the current share prices and EPS growth rate estimates from Value Line produces a low and a high cost of capital of 10.58 percent and 10.64 percent for the comparable companies; is that correct?

A That's correct.

Q Okay. Looking at Document 17, your DCF results using the 52-week prices and the, with the EPS growth rate estimates from Value Line, and for these comparable companies I see a low cost of capital of 10.05 percent and a high cost of capital of 11.12 percent; is that correct?

A That's correct.

Q Okay. Now looking at 18, your DCF results using current stock prices with the EPS growth rate estimates from Value Line and Yahoo! for the comparable companies produces a low of 10.9 percent with a high of 12.8 percent; correct?

A That's correct. Yes.

Q And moving on to Document 19, your DCF results using the 52-week prices with the EPS growth rate estimates from Value Line and Yahoo! for comparable companies produced a low of 10.38 percent; correct?

A Yes.

Q And a high of 13.27 percent; correct?

A That's correct.

Q Did you use these figures in estimating a cost of equity rate of 12 percent for Tampa Electric?

A Certainly.

Q Okay. And in -- your DCF results yielded the figure of 10.38 percent; correct?

A Excuse me?

Q Your DCF result yielded a 10.38 percent figure; correct?

A That was the, that was the low, the low DCF calculation showing the, over that period of time showing the prices.

Q Okay. Now going --

A That calculation -- let me finish that answer, please.

Q I'm sorry.

A That calculation at that point in time I performed in June. The market has gone down another 12 percent even since the first of this year. This is a good example of the volatility of the DCF and why the timeliness of selecting the data you're going to use and how you in fact can misinterpret the results.

Q Well --

A You currently have debt costs that are running 8 to 9 percent for, for Baa corporate bonds, and so clearly an 8 percent or lower return has no meaning.

Q I want to make sure -- I don't want to cut you off again.

A Thank you.

Q Let me take you to Document 22.

A Okay.

Q Which is your summary of results; correct?

A Yes.

Q Okay. And as we can see from the table, you did not include the TECO Energy results or you did not use the TECO Energy results in this table; is that correct?

A I reported it. I explained in my testimony why I thought in this case looking at the comparable companies made a great deal more sense analytically to determine cost of capital for Tampa Electric in this proceeding.

Q Okay. In the table I see the result of 10.05 percent and 11.12 percent for the earnings growth DCF analysis and the 10.38 percent and 13.27 percent for the projected growth DCF analysis; is that correct?

A Yes.

Q Okay. And on reviewing your DCF results on Page 63 of your testimony you state that your DCF results range from 11.12 percent to 13.27 percent. Is that correct?

A That's the statement I think at that point in my testimony after I explained the thought processes I went through to interpret the DCF results.

Q Now let me see if I understand this. Would it be correct that you did not use the DCF figures in Document Number 14 of 9.67 percent and the 9.73 percent in arriving at your equity cost rate of 12 percent for Tampa?

A You said "did not use." I -- if I did not use them, I wouldn't have reported them.

Q Okay. But they were not reported in the table.

A I did not think that they were appropriate in determining the cost of capital in this proceeding.

Q Okay. And you -- and it would also be correct to say that in Document 15 you didn't use the 9.14 percent or the 10.23, excuse me, .21 percent in arriving at your equity cost rate of 12 percent for Tampa Electric.

A My answer for that is the same. I -- you said I didn't use it. I wouldn't have reported it if I didn't make the calculation and had thought it might have some bearing on this proceeding.

Q Okay. But you did not include those in the table on Document 22; is that correct?

A That's correct. Yes.

Q Okay. And let me just speed this up. You also did not include in the table in Document 22 the DCF figures in Document Number 16 of 10.58 percent and 10.64 percent; correct?

A That's correct.

Q And it would also be correct that you didn't use the Figure 17 numbers of 10-point -- well, never mind. Let me move on to the next question.

Would it be correct to say that you did not use the 10.05 and 11.12 percent in arriving at the equity cost ratio of 12 percent?

A If you said "use" again, it's not the right interpretation.

Q Okay. Would you say that it's, that you did not include the 10.9 percent or the 12.8 percent in arriving at the equity cost ratio of 12 percent for Tampa that you had reported in Document Number 18?

A I think it's very clear what I reported on that, on that schedule, Number 22.

Q Okay. So let me --

CHAIRMAN CARTER: Was that a yes or a no?

THE WITNESS: That's a yes, sir. I'm sorry, sir.

CHAIRMAN CARTER: Okay.

BY MS. CHRISTENSEN:

Q Let me see if I understand. It's your testimony that the only relevant DCF equity cost rates are in the 11.12 percent to 13.27 percent range; is that correct?

A That is probably true, with some qualification. I took into account all the other factors, the origin, the origination of these particular numbers, and I certainly looked at the CAPM calculations. I certainly greatly discounted the TECO Energy calculations, and I was very cognizant of what the current market conditions were at that time, which was June. Of course it's deteriorated greatly since that point.

Q Okay. But based on your responses to the other questions, wouldn't it be fair to say that you have ignored a vast majority of the DCF results in arriving at the 11.12 percent to 13.27 range?

A No, that's not a true statement. I did not ignore them.

Q You just didn't use them; is that correct?

A Again, you're using the term "use." I would not have reported them if I did not find it worth investigating what those numbers were.

Q Okay. In determining the relevant range --

CHAIRMAN CARTER: Excuse me, Ms. Christensen. Do you mind yielding for a moment?

MS. CHRISTENSEN: Certainly.

CHAIRMAN CARTER: Okay. So instead of "use," what word would you use? What's the term? You say --

THE WITNESS: Did not consider them as important, sir.

CHAIRMAN CARTER: Okay.

THE WITNESS: I tried to explain at some length in my direct testimony --

CHAIRMAN CARTER: Okay.

THE WITNESS: -- the thought process I went through to look at these various numbers and interpret them to determine what was appropriate. I mean, in the language that she's using, I didn't use the 13.27 percent either. But in fact I did. I made that calculation. I decided that was higher than appropriate for Tampa Electric in this proceeding.

CHAIRMAN CARTER: Okay. I just wanted to be straight because the lawyers are cooperating with my admonition this morning and we're trying to move further. So let's --

THE WITNESS: I understand, sir.

CHAIRMAN CARTER: -- be as direct as we can.

You may proceed.

MS. CHRISTENSEN: Thank you.

BY MS. CHRISTENSEN:

Q In determining the relevant range of the DCF results you relied solely on the EPS growth rates in your, for earnings growth DCF analysis and the projected growth DCF analysis; is that correct?

A I relied primarily on the earnings per share growth.

That's correct.

Q Okay. Now the growth rate for the projected growth DCF analysis is the projected EPS growth rate of the Wall Street analysts as published by Yahoo!; is that correct?

A Excuse me?

Q Would you agree that the growth rate for the projected growth, projected growth DCF analysis is the projected EPS growth rates of Wall Street analysts as published by Yahoo!; is that correct?

A Well, I used both, I used both Value Line and Yahoo!.

Q Okay. Would you agree that given the events of the past year and a half that we should be careful in listening to Wall Street analysts?

A I think Wall Street analysts had some problems because of the conflict of interest in some of the cases in which they were making forecasts. That doesn't apply to Value Line, which is a service that provides, sells information and has no conflict of interest because they're not involved in issuing securities.

Q Okay. So you would agree in part as to the Wall Street analysts?

A I would agree that there has been problems with some Wall Street forecasts by analysts.

Q Okay.

A But it was, the allegation was a conflict of interest because the same organization was also issuing securities.

Q Okay. Let me turn your attention back to the DCF results you used in arriving at the cost equity range of 11.12 percent to 13.27 range which you have in your Document Number 22. Wouldn't you agree that you are only using the high end of the range of your DCF results?

A No.

Q Well, let me look at Document 22. I see a low to high range for the projected growth DCF analysis of 10.38 percent to 13.27 percent; is that correct?

A Oh, I think I understand the sense of your question. I think I can shorten it. You're saying that the 11.12 and 13.27 are both, in those particular methods of calculation are the high results. I think that's your question. The answer to that is yes.

Q Okay. Now looking at the range from 10.38 percent to 13.27 percent, that's a range of almost 300 basis points. Would you agree that that's a pretty high difference?

A That's a good example of the volatility -- the answer is yes. And that's a good example of the volatility of the DCF and its dependence on the, on the data you use to calculate a number from using the DCF formula.

Q And having listened to your testimony today, it seems that your opinion is the low end of the range of like the majority of the DCF results which you have in your documentation here today you would categorize as meaningless in determining the equity cost rate for Tampa; is that correct?

A I don't know that I used the word "meaningless." If I did, I think it's, the question is being taken out of context.

I think, I think the calculations of, of the low results of the DCF formula are relevant for consideration. But in my direct testimony I explain in some detail the nature of the DCF, which is a marginal cost formula, and the purpose of this proceeding is to set a return that has a reasonable probability of success in the future. And therefore a marginal cost of return at the current market rate is unlikely. The probability is it would not, not survive in the future. And therefore I explained I think in some detail why I thought looking to the higher end of the ranges of these kinds of calculations was appropriate.

Q Okay. I think from our discussion here today we can agree that you've excluded most of the DCF results because they were too low. Have you excluded any of the results in your DCF analysis because the numbers were too high?

A The answer to -- the first part of that question was not correct because I did not exclude them. The second part of the question was that I, I did not go to the high end of all the calculations for recommended return.

Q Let me turn to your CAPM analysis, which I believe is

Document 20; is that correct?

A Yes.

Q Okay. Is it correct that you use a risk-free rate of 4.60 percent and would you agree that the current long-term Treasury bond is only about 3 percent as of today?

A The answer to both parts of that question is yes.

Q Okay. If we were to use the long, current long-term Treasury yield in your CAPM model, your results would decline by approximately 160 basis points; is that correct?

A I haven't made that calculation and I'm not positive the result would change exactly that amount because of the other factors that might change. But the, the rate I used here as a risk-free rate would decline by that amount.

Q Is there approximately 160 basis points difference between the risk-free rate that you used of 4.6 percent and the current long-term Treasury rate of 3 percent?

A Yes.

Q Now the equity risk premium you used in Document Number 20 is the difference between the arithmetic mean stock and bond returns from 1926 through 2007 as published by Ibbotson Associates, which is now Morningstar; is that correct?

A As I understand the question, yes.

Q Okay. And the Ibbotson study is updated each year; is that correct?

A Yes.

Q And would you agree that the results which include the year 2008 would be out soon?

A I can't remember when it comes out, but it should be out -- I think it's more in the spring, but I can't recall.

Q Okay. Would you agree that the return on the stock market in 2008 is approximately negative 35 percent?

A Yes. I say return, I think you're talking about a decline in price as opposed to returns. I'm sorry. I think the question was do I, would I agree that the price of the common stock, industrial common stock index has declined about 35 percent. The answer to that is yes.

Q Okay. And based on that response, if we were to update your CAPM results with the 1926 to 2008 Ibbotson results, your CAPM would be lower because the Ibbotson equity risk premium would be lower once you've included the historic results from 2008 stock market returns of about negative 35 percent; correct?

A I have no idea. I can't, as I'm sitting here, I can't mathematically figure how much the impact of the last year of the market would have on the Ibbotson calculation.

Q You would expect though that that would have some negative downward effect; correct?

A That, that would be -- it's a down year and so it would have some slight negative effect, I presume.

MS. CHRISTENSEN: Okay. I have no further questions.

CHAIRMAN CARTER: Before -- Commissioner Argenziano, you want to wait until --

COMMISSIONER ARGENZIANO: I'll wait.

CHAIRMAN CARTER: You'll wait? Okay.

Ms. Bradley.

MS. BRADLEY: Thank you.

CROSS EXAMINATION

BY MS. BRADLEY:

Q Sir, is it fair to say that the comparable utility stocks that are traded have faired better over the last six months than some of the general stock, nonutility stock such as S&P 500?

A I think it's fair to say that, yes.

Q Okay. In recommending a 12 percent return on equity, did you take into account the effect this would have on the customers?

A No. I think I was -- I'm always, I think I'm always aware of the balance between the impact on rates and the, keeping the lights turned on as a phrase and the consequences. But my focus is on trying to determine what the cost of capital is in today's markets necessary to attract capital on the equity -- and primarily in the equities.

Q You weren't at the public hearings that were held, were you?

A No.

Q Have you reviewed any of that testimony?

A No. I heard one person testify last week on behalf of the school district.

Q Would it be fair to say that people that are having trouble paying their utility bills at this point in time are going to have a lot harder time if you get your 12 percent return on equity recommended?

A A 12 percent, 12 percent return calculated weighted average cost would be higher than what's been recommended by some other witnesses.

Q So if they were to go with the 12 percent, that would be harder on a lot of folks; correct?

A The rate, the 12 percent would be higher than 9.75 percent. Yes.

Q Are you aware that TECO has a policy that they make someone that misses a payment or is late on a couple of payments, that they have to pay a month and a half deposit?

A I'm not familiar with the collection policies.

Q And are you aware that folks sometimes have to pay to pay? In other words, that TECO closed some of their offices so that people have to go to gas stations and other places in order to pay their bills and have to pay those people to let them pay there?

A I am not familiar with collection policies.

MS. BRADLEY: Okay. No further questions.

CHAIRMAN CARTER: Thank you, Ms. Bradley.

Mr. Moyle.

CROSS EXAMINATION

BY MR. MOYLE:

Q Mr. Murry, do you have a calculator at your disposal?

A I do not. I don't have one with me.

Q Can we get the witness a calculator? Do you have a calculator?

A I was just handed one. I left my calculator in my computer case. Okay.

Q Later in your, in your cross I'm going to ask you to help me with a calculation.

A Okay.

Q Math's not my strong point.

Dr. Murry, you were, you were here for the opening statements in this case; correct?

A Yes, I was.

Q And I referred to the Bluefield opinion which you've referenced in your, your direct testimony. You would agree, would you not, that ultimately establishing a return on equity is a question of judgment?

A I agree that judgment is important in establishing a return on equity. Yes, sir.

Q And these tools that you used, this Discounted Cash Flow model and this CAPM model, I mean, that's what they are, they're tools to help and form a judgment; correct?

A Yes.

Q Have you ever provided expert testimony in a case in which other, another ROE expert offered an opinion that the ROE should be higher than the number that you proposed?

A Well, I'm sure I have. Yes.

Q In this case your number is the highest number proposed out of the others; right?

A Yes.

Q And the range is from 7 percent to 12 percent; correct?

A 7.5 percent to 12 percent, I believe. Yes.

Q Okay. And are you saying that you've testified in other cases where you have not been the highest ROE?

A I'm sure I have.

Q Can you recall?

A I'm trying to remember when it might have been, but I don't, I don't recall.

Q Let me spend a couple of minutes to talk a little bit about these, these tools that help inform judgments. You would agree that the DCF and the CAPM are not the exclusive tools that could be used; correct?

A Yes.

Q All right. And the DCF model has some weaknesses; correct?

A Yes.

Q You have to interpret the results and you could have differences in interpretation.

A Yes. I think I spent some time in my direct testimony discussing some of the pros and cons of the DCF method.

Q Right. And also just I want to highlight a point. I mean, you have indicated that the assumptions underlying the DCF model rarely, if ever, hold true; correct?

A I think, I think that would probably be a fair statement.

Q Okay. A couple of questions about the CAPM. CAPM has problems as well; correct?

A Of course.

Q It's overly sensitive to a, to a company's beta or risk measurement; is that correct?

A That's one of the allegations. Yes.

Q And it may improperly or erroneously state the cost of capital?

A Of course.

Q These models, they don't dictate the ROE; correct?

A They should not.

Q Right. And in Bluefield there was that language about, you know, you don't just plug it into a formula and get the number. You have to, you have to make a judgment. It's a legislative act. You would agree with that; correct?

A Yes, I would.

Q Okay. I want to ask you if you would, I don't know if this model has any literature or data out there that supports it, but I want to suggest that there might be another way to look at this and would ask you, do you have a copy of the exhibit, hearing Exhibit Number 93? It was just talked about this morning. I think Tampa Electric prepared it over the weekend. Do you have a copy of that? I could get you a copy.

A I think I have the document you're referring to. What I have doesn't have a label on it. Okay. I'll use this one.

(Transcript continues in sequence with Volume 6.)

STATE OF FLORIDA)
: CERTIFICATE OF REPORTER
COUNTY OF LEON)

I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 20th day of January, 2009.

Linda Boles

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