## In the Matter of:

## Byron S. Watson, CFA

March 14, 2019


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## BEFORE THE

## COUNCIL OF THE CITY OF NEW ORLEANS



Deposition of BYRON S. WATSON, CFA, 8055 EAST TUFTS AVENUE, SUITE 1250, DENVER, COLORADO 80237-2835, taken in the offices of Dentons US LLP, 650 Poydras Street, Suite 2850, New Orleans, Louisiana 70130, commencing at 2:06 p.m., on the 14 th day of March, 2019.

APPEARANCES:

DUGGINS WREN MANN \& ROMERO LLP
Attorneys at Law
(By: James F. McNally Jr., Esquire)
600 Congress Avenue, Suite 1900
Austin, Texas 78701

ENTERGY SERVICES INC.
Attorneys at Law
(By: Alyssa Maurice-Anderson, Esquire)
639 Loyola Avenue
New Orleans, Louisiana 70113

DENTONS US LLP
Attorneys at Law
(By: J.A. "Jay" Beatmann Jr., Esquire Presley R. Reed Jr., Esquire)
650 Poydras Street, Suite 2850
New Orleans, Louisiana 70130

KEAN MILLER, LLP
Attorneys at Law
(By: Carrie R. Tourmillon, Esquire)
909 Poydras Street, Suite 3600
New Orleans, Louisiana 70112

ROEDEL PARSONS KOCH BLACHE BALHOFF \&
MCCOLLISTER (via telephone)
Attorneys at Law
(By: Luke F. Piontek, Esquire)
1515 Poydras Street, Suite 2330
New Orleans, Louisiana 70112



S T I P U L A T I O N
It is stipulated and agreed by and between counsel for the parties hereto that the deposition of the aforementioned witness is hereby being taken under the Louisiana Code of Civil Procedure, Article 1421, et seq., for all purposes, in accordance with law;

That the formalities of reading and signing are specifically not waived;

That the formalities of filing, sealing and certification are specifically waived;

That all objections, save those as to the form of the question and the responsiveness of the answer, are hereby reserved until such time as this deposition, or any part thereof, may be used or sought to be used in evidence.

KELLY MANUEL, Certified Court Reporter, Registered Professional Reporter, in and for the State of Louisiana, officiated in administering the oath to the witness/witnesses.

> BYRON S. WATSON, CFA,
after having been first duly sworn by the above-mentioned Certified Court Reporter, did testify as follows:

EXAMINATION BY MR. MCNALLY:
Q. Good afternoon, Mr. Watson.
A. Good afternoon.
Q. My name is Jamie McNally. I'm an attorney with Duggins Wren in Austin. And I'm here representing the company, ENO, in this case.

Do you understand that?
A. I do understand.
Q. Okay. I'm going to ask you some questions today. And if you don't understand anything $I$ ask, if you could just let me know that, and I'll try and rephrase the question. Okay?
A. Okay. I will.
Q. Thank you.

Now, you make, in your direct testimony, an ROE recommendation to the Council in this case; correct?
A. Correct.
Q. Okay.

MR. MCNALLY:
Sorry. If you can wait just
a second.
I assume -- have you guys agreed, for these depositions, that we would waive objections, except to the form of the question or responsiveness of the answer?

MR. BEATMANN :
As long as it's a discovery deposition, yes.

MR. MCNALLY:
Okay. And I understand that we're taking these pursuant to Federal Rules.

MS. MAURICE-ANDERSON:
No. Local rules.
MR. MCNALLY:
Local rules. Okay.
MS. MAURICE-ANDERSON:
And we also wanted to
reserve the ability to do a
subsequent deposition relating to
subsequent testimony or evidence
that may be developed later in the case.

So not necessarily asking
anybody to take a position on
that at this point, but just
making that reservation.
MR. BEATMANN:
Okay. Well, we'll reserve
our right to object, if we feel it's objectionable.

But he would like to read
and sign.
MR. MCNALLY:
Okay. Do you want to get a
roll call of the folks that are
present or . . .
MS . MAURICE-ANDERSON:
Yes.
MR. MCNALLY:
Okay. Yeah. Can we do
that?
As I've indicated, I'm Jamie
McNally, from Duggins Wren in
Austin.
MR. BEATMANN :

Jay Beatmann, with the
Council's Advisors.
MR. PREP:
Victor Prep with the Council
Advisors.
MR. REED:
Presley Reed, legal counsel
for the Council of the City of
New Orleans.
MR. GALLAGHER:
Ken Gallagher, consultant to
Entergy New Orleans.
MS . ROSEMOND:
Polly Rosemond, Entergy
New Orleans.
MS. MAURICE-ANDERSON:
And Alyssa Maurice-Anderson,
counsel for Entergy New Orleans.
THE WITNESS:
Byron Watson, I'm the
deponent, and the Advisors to the
Council.
MR. LAUGHLIN:
Michael Laughlin, attorney
for the City of New Orleans.

MR. MCNALLY:
Thank you.
And no one's on the phone
yet; correct?
(No response.)
Q. Okay. Sorry for the interruption, Mr. Watson.
A. Quite all right.
Q. Now, you ultimately make, as I understand, the Advisors' ROE recommendation to the Council in this case?
A. That is correct.
Q. Okay. And as I understand that, that recommendation is based on your DCF ROE model?
A. It is based upon my two-step DCF ROE model, plus the analysis of a risk-based adjustment, plus an analysis of a flotation cost adjustment.
Q. Okay. And so you just mentioned three pieces. And I am going to ask you about those pieces.

And the first piece was the baseline ROE amount that your model produced; correct?
A. Correct. The two-step model.
Q. Okay. And as I understand it, that
is 8.09 percent --
A. That's correct.
Q. -- ROE?

And then you just testified that you made a couple of adjustments to -- two adjustments to that amount; correct?
A. Correct.
Q. One was a risk adjustment, for the company's risk; is that correct?
A. For the -- to take into account certain risk factors, based on the variability of other observed ROEs, and specific to the circumstances in this docket.
Q. Okay. And then the third adjustment was a flotation cost adjustment; correct?
A. Correct.
Q. And the sum of those parts made up your 8.93 percent, $I$ think, ROE recommendation; correct?
A. Yes. That's correct.
Q. So I just want to make sure that $I$ have an understanding, that it's those three parts that make up the 8.93 percent ROE
recommendation?
A. Correct.
Q. Okay. Now, the 8.09 percent result from the two-step DCF model, I understand that you actually calculated that; correct?
A. Yes.
Q. Okay. And your model produced that; correct?
A. That is correct.
Q. Okay. Now, did you -- you did not calculate, as $I$ appreciate it, the risk adjustment that you mentioned; correct?
A. That's correct.

Jim Proctor, Advisor Witness, performed a standard deviation analysis of the market excess returns from his capital asset pricing model results.
Q. Okay. And as I understand, that adjustment was an 81-basis point adjustment?
A. I'll accept that, subject to check.

My recollection, without checking, was 84, but perhaps I'm mistaken.
Q. Well, was the flotation adjustment three basis points?
A. That's correct.

You've cleared it up for me.
Yeah. Eighty-one for risk and
three for flotation makes 84.
Q. Okay. And then the 84 adjustment, the 84-basis point adjustment that you just talked about added to your 8.09 percent ROE results in the 8.93 percent $R O E$ that you recommend?
A. That's correct. That's the math.
Q. Okay.

MR. MCNALLY:
Oh, hello. Who joined?
MR. PIONTEK:
This is Luke Piontek, on
behalf of Crescent City Power
Users Group.
MR. MCNALLY:
Okay. Luke, we're underway
here.
MR. PIONTEK:
All right.
Q. Now, it was Mr. -- your colleague, Mr. Proctor, who calculated the 84 -basis point adjustment; correct?
A. I calculated the three percent
flotation cost adjustment as part of Exhibit BSW-4.

He calculated the 84 percent risk-related adjustment, based upon a standard deviation of the results of his CAPM analysis.
Q. Okay.
A. $\mathrm{C}-\mathrm{A}-\mathrm{P}-\mathrm{M}$.

Sorry.
Q. Okay. So you reflected the three-basis point flotation adjustment in your DCF calculation?
A. Yes. It -- it was a calculated factor on top of the observed ROEs for the proxy companies.
Q. Okay. But was it Mr. Proctor that determined that the three percent, or three-basis point adjustment for flotation cost was proper?
A. I think so. Yes.

I believe he is the witness that made the recommendation that a flotation adjustment was proper.
Q. And, but is he the one who determined what you should put into your model
for the flotation adjustment? Or did you do it?
A. I believe that, testimony-wise, he made that determination, as to how it would be calculated.

And then since the calculation
was based upon my data, the results of my analysis, rather, I performed the calculation that resulted in the three-basis-point adjustment.
Q. But he's the one who told you that three basis points would be appropriate for the flotation adjustment?
A. He is the one that indicated, in his testimony, that a flotation adjustment, based upon Entergy Corporation's recent indicated flotation cost for their, roughly, \$1.5 billion equity flotation, would be the basis for it.

And that flotation cost was then applied into the calculations underlying Exhibit BSW-4.
Q. Okay.
A. Then that resulted in three basis points.
Q. Oh, I got it. Okay. Gotcha. Now, the 81-basis-point risk adjustment, Mr . Proctor determined that, I understand; correct?
A. That's correct.

I did an agreement with him in calculating the 8.93.
Q. And so you essentially added the risk adjustment to your model's ROE result; correct?
A. That's correct.
Q. Now, you also performed a constant growth DCF analysis; correct?
A. Yes.
Q. But you declined to use those results for your ultimate recommendation, I understand; right?
A. I discussed, in my testimony, why the two-step methodology and calculation was more relevant and appropriate.
Q. Okay.
A. So I chose to use that.
Q. And you feel that there's some limitations with the constant growth model, and you prefer the two-step DCF model, as I
appreciate it?
A. Between the two, yes.
Q. Okay. The two-stage model results, unadjusted, as I understand, produced a range from a low of 5.74 percent to 10.64 percent; is that correct?
A. Subject to check, I would agree.
Q. Let's just take a look at page 44 of your testimony, lines 2 through 4.
A. (Complies).
Q. Is that range correct?
A. That is the -- that is what my testimony says. Yes.
Q. Okay. But that's what your -that's the range your model produced; is that correct?
A. That is the range my model produced. Yes.
Q. Now, as I understand it, within that range, the 8.09 percent that you're using for your recommendation is the median; is that correct?
A. That's correct.
Q. Okay. And, but $I$ also understand that there was a midpoint of 8.19 percent; is
that right?
A. That may be right, again, subject to my reviewing the table.
Q. And that would be Exhibit 4?
A. Correct.
Q. Okay. Hard to read.
A. Yes, 8.19 percent.
Q. Okay. I apologize, but I'm going to ask you about one more.
A. That's quite all right.
Q. I also understand that within that range, there was an average, or a mean, of 8.33 percent; correct?
A. That is the average, or mean.
Q. Okay. So of those three statistics which you list here, I understand that you chose the 8.09 percent to base your recommendation on.

And can you tell me why you chose that particular value, you know, of those three to base your recommendation?
A. I think that the median value is the most representative of an appropriate point within the range of the results, because the midpoint and the average give substantial
weight, by their mathematical nature, to outliers.

And the median, in my opinion, seeks the most useful point within the range of results.
Q. Okay. So is it your belief that with a range of values like this, the median is always the best choice to use?
A. "Always" is a very strong term.

People do indeed use the
midpoint, that $I$ have seen. If the distribution is normal, and the outliers are not extreme, then there may be no particular advantage to the median over the midpoint.

The midpoint offers an advantage
in terms of being easily understood.
But in general, I would favor the median for most circumstances I can foresee, sitting here right now.
Q. But perhaps not always?
A. Like I -- like I said, "always" is such a hard thing to get my head around, that I'm somewhat uncomfortable.

But generally, yes.
Q. Okay. Well, is it the -- it turns out that the value you selected was the lowest of those three; correct?
A. It does turn out to be that.
Q. And in fact, the mean is 24 basis points above the median; correct?
A. That's correct.
Q. Okay. And I am wondering, are you aware that there are certain statistical analyses you can perform to determine which of those three best fits a range of values?
A. I am aware that there are a variety of statistical tests for the quality of a distribution of samples and results.

You would have to be specific.
Q. Okay. Well, I guess my -- but you didn't perform any statistical analysis to determine which of those three would best fit that data array, did you?
A. The statistical analysis I performed was qualitative, in that $I$ observed that there was a wide range of results. And the outliers were quite prominent, compared to the midpoint of this range.
Q. Okay. So on a qualitative basis,
you thought that the median, in this case, would be appropriate?
A. Based on observation of the range of the proxy company results and the -- and the notable prominence of a couple of outliers.
Q. Okay. Now, did you review

Dr. Proctor[sic] -- let me back up.
I understand that Mr . Proctor
also performed an ROE analysis; correct?
A. That is correct.
Q. Okay. And he performed a CAPM analysis?
A. That's correct.
Q. And can you explain -- I mean, you've explained how your recommendation is based on your analysis.

Can you explain why Mr. Proctor performed a CAPM analysis?
A. CAPM is an accepted methodology in matters such as this. It is used.

Dr. Everett sponsored a CAPM analysis, himself.

And approaching the question of the appropriate allowed ROE for ENO from two different independent analytical points
of view seemed like a valuable check as to the rationality and range of our results.
Q. Well, if -- well, why did Mr. Proctor -- or why didn't you perform the CAPM analysis, in addition to the DCF analysis?
A. I can give you the simple answer: I was not asked to.

The deeper answer, $I$ think, is
that Mr. Proctor has a great deal of experience in CAPM analysis. And even though I'm capable of doing it, I think he added value to the proceeding, and to the information the Council can consider.
Q. Okay. So have you made CAPM analysis before, in prior cases?
A. I have performed CAPM analysis and evaluated CAPM analyses.

But I've not testified, in the past, to CAPM analysis in making an ROE recommendation. No.
Q. Okay. Have you made prior ROE recommendations in utility cases before?
A. I have had testimony where I discuss ROE, the role of ROE, and the, you know,
relative performance of utilities to their ROE. But I've not made a specific ROE in a rate recommendation, in a rate setting proceeding.
Q. Okay. So you've discussed the role of ROE in prior cases, but never made a particular ROE recommendation?
A. Made a particular ROE recommendation relative to setting rates --
Q. Relative --
A. -- what an ROE should be.
Q. Understood. Thank you.

But you didn't ask Mr. Proctor to do a CAPM analysis; correct?
A. No.
Q. Okay. So you were doing -- you were performing your own DCF analysis, and you didn't ask Mr. Proctor to do that, to perform a CAPM analysis to support your analysis; correct?
A. I was not the engagement manager for this proceeding. I didn't actually make decisions, or direct any witnesses as to what they would testify to, or whether they would testify.
Q. Okay. I am just -- if you're -- do you think it's appropriate to base the Advisors' ROE recommendation on your DCF analysis?
A. My recommendation to the Council for an ROE is equal to the output of my analysis, two-step analysis, plus the adjustments we discussed. But it is not based solely on that.

I think that the output and the analyses of Mr. Proctor is also the basis for it, and supportive of it.
Q. Well, if Mr. Proctor had not performed his analysis, is it your view that your analysis would be sufficient to produce a proper ROE recommendation to the Council?
A. I think that my analysis is sufficient basis for an $R O E$ recommendation. But I think that Mr. Proctor's analysis is part of the consideration that I undertook or, rather, considered, before I made the recommendation that I made.
Q. And how did you consider Mr. Proctor's -- the results of Mr. Proctor's analysis?
A. In my testimony, I state -- without flipping the pages and finding exactly -- that it is an indication, as his results were 45-some-odd, approximately, basis points lower, an indication that there was no need for the Council to adopt an ROE higher than the 8.93 percent I recommended.
Q. And that was based on what part of Mr. Proctor's CAPM analysis?
A. The totality of it.

He performed what $I$ believe is an analytically correct analysis, that is based upon, in my opinion, broadly accepted analytical methods. And, therefore -- and using a roughly comparable set of proxy companies, as I used, and not very different from that used by Dr. Everett either.

And as such, that when $I$
considered all of that, my conclusion and my testimony was that it was evidence that there's no need for the Council to adopt an ROE lower than 8.93.
Q. Mr. Proctor's -- from your description of your recommendation,

Mr. Proctor's CAPM analysis didn't actually figure into the quantitative recommendation of the 8.09 percent, as $I$ understand it.
A. That's correct.

The impact of Mr. Proctor's
analysis was qualitative and supportive of, and $I$ think that given the relatively narrow divergence between our end results, you know, a fairly high degree of concurrence between us.
Q. Okay. Now, the two-step analysis, the two-step model of the DCF model that you performed, is it your understanding that that's the same model that FERC currently requires?
A. It's my understanding that FERC may, in the near future, adopt a multiple model approach.

It is my current understanding
that it is still a matter that requires a final Commission decision.

But as of today, and certainly, I think, as of the preparation of this analysis, a two-step DCF model is the -- if not the only accepted, the primary accepted
method. Yes.
Q. So you -- I'm sorry -- you think that currently that the two-step DCF model is the preferred method at FERC? Is that --
A. Yeah. I -- today, certainly as of the preparation of my testimony, the answer is yes.

Whether or not FERC has taken
further action in a particular docket, where they are trying to adopt CAPM and two other risk-plus methodologies, I honestly don't know what the actions have been over the past couple of weeks.
Q. Are you aware that $F E R C$ has recently indicated that reliance on a DCF model would not be appropriate?
A. My understanding of the -- to my knowledge, currently not finalized, I believe that the organization of MISO states recently filed a brief generally in opposition of this approach, is that the two-step DCF model would remain one of, $I$ believe, four approaches that could be considered by the Commission.
Q. Okay. I'm sorry. I thought that I heard you say earlier that you thought it was
the preferred, that the two-step DCF model was the preferred method by FERC?
A. It used to be. To my knowledge, it used to be.

But I believe that we're in a period of transition, where it is quite probable that it will become one of several accepted methods, if it hasn't already happened, like I said.

If it has happened, it's probably
been in the past month.
Q. Okay.
A. The final -- a final Commission decision on the matter.
Q. Let me see if I can show you an exhibit, if I could.

MR. MCNALLY:
If $I$ could give you what's been marked as Exhibit 1, Jay. There's some other copies for folks as well.
Q. Now, I've handed you Exhibit 1, Mr. Watson.
A. Uh-huh (indicating affirmatively).
Q. And it's an order from the FERC, an
order directing briefs.
I'm just wondering -- it's dated
November 15 th -- and I'm wondering if you
happen to have seen this before?
A. (Reviews document).

I don't think I've seen this
exact document.
Q. Okay.
A. But $I$ am familiar with some of the stuff it's discussing.
Q. Okay. Fair enough. I appreciate that.

If I could just ask you to flip
to Paragraph 32.
MR. BEATMANN:
Let me just state, for the
record, Mr. McNally just handed
the witness a 37-page FERC Order
that he's stated he doesn't
recall seeing.
So to the extent that he can
answer --
MR. MCNALLY:
Sure.
MR. BEATMANN :
-- isolated questions about the document, we just wanted to reflect that on the record.
Q. Now, you indicated a few moments ago, Mr. Watson, that you thought you might be familiar with some of the items in here.

The second sentence, I would like to just call your attention to the second sentence in Paragraph 32 , where it says, The Commission previously relied solely on the DCF model to produce the evidentiary zone of reasonableness. (As read.)

And then it goes on, As explained below, we are concerned that relying on that methodology alone will not produce just and reasonable results. (As read.)

Do you see that there?
A. I do. I've read it.
Q. Okay. And had you seen that text before? Can you recall?
A. I am familiar with this matter, and that conclusion.

I do not recall seeing those exact words in this exact document.
Q. Okay. And if you look over on the
next page, on Paragraph 34.
A. (Complies).
Q. The third sentence, that says, For reasons that follow, we believe that in light of current investor behavior and capital market conditions, relying on the DCF methodology alone will not produce a just and reasonable ROE. (As read.)

Do you recall having seen that before?
A. Again, $I$ don't recall reading this exact document.

I am aware of that FERC position, and some of the things leading up to this point.
Q. Got it.

Well, given that awareness, are you concerned at all about your ROE recommendation in this case being based on the two-step DCF model?
A. Well, in my testimony, I stated that it would be -- that it would be appropriate if the Council were to choose Mr. Proctor's ROE results from his CAPM model, as adjusted for risk and flotation.

But I outlined relative risks to ratepayers of accepting that lower ROE as being largely incalculable, in the event that the lower ROE were to cause damage to the various standards applicable to ENO's credit worthiness related to its allowed return.

And I concluded that the, if I recall, roughly, $\$ 3.4$ million a year, subject to check from my testimony, that my higher ROE result caused was considering the risk of the harm if the CAPM results turned out to be low enough to cause harm to ENO's credit rating in related matters, that considering those risks, it was better to take the 8.93.
Q. Right. I understand.

The 8.93 that was produced by your DCF analysis; correct?
A. Correct.
Q. So I guess what I'm asking is: Are you concerned at all about making a DCF recommendation to the Council based on that DCF model and not, perhaps, some other models as well?
A. Well, as I said, it was not based solely on my DCF analysis.

It was based upon the DCF
analysis, and also considering the
relatively strong concurrence and results
from Mr. Proctor's results, and also -- and
also, you know, just a general consideration of all the relevant circumstances.

And so the answer is: I am
confident that my recommendation to the Council represents a reasonable ROE, and the fact that it's computationally equal to the results of the DCF analysis is true.

And so just to take it one step further, $I$ believe that discounted cash flow analysis is a tool that, while notwithstanding what is said in the document you put before me from FERC, represents a consideration of the present value of expected future cash flows, which is a bedrock financial concept.
Q. So I gather from that that you feel comfortable basing your analysis solely on the quantitative results of the DCF?

MR. BEATMANN:
Well, I'm going to object to
that. That's a
mischaracterization of his
testimony.
A. As I said, it is equal to the results of my analysis.

But the basis is the consideration of more than one factor.
Q. Okay. What were -- you indicated earlier that the constant growth DCF analysis, you felt, suffered from some flaws.

Could you explain those to me, please?
A. Yeah. The constant growth DCF analysis assumes a single growth rate in dividends and/or earnings, assuming dividend payout ratio remains roughly unchanged.

And the growth rates that are projected by industry professionals, institutional organizations, are typically over the relatively near term. And by that I mean, five years, roughly, three to five years.

> And it is possible, it is
reasonable to conclude that those nearer-term growth rates do not reflect the growth rate that is maintainable indefinitely, which is the variable $G$, in the Gordon constant rate growth model.

And so to the extent they are too high, valuations would be unreasonably high.

And to the extent that they are being estimated to be, in the near term, lower than the long-term potential of the utility, it will be too low.

And therefore, the two-step model
is intended to address that problem.
Q. And so you used two different growth rates, essentially, in the two-step model; correct?
A. That's right. A short-term growth rate, which is specific to each utility and -proxy company utility, I mean. And a long-term growth rate, which is an average of various, three, expert organizations' projections of GDP growth.
Q. Okay. Doesn't it also -- the model also assume that there's never a change in the
dividend yields?
A. The model assumes there's no change in the dividend payout ratio.

I don't -- I don't think that if you were to apply the growth factors through the model, and reduce it back to its original form, as $I$ discussed early in my testimony, necessarily, that the dividend yield would be equal throughout every period, out to infinity.

I guess my answer is: I don't
know. I would have to examine the math.
Q. Well, let me explore that a bit.

I mean, the model assumes that a dividend that a company pays stays the same in perpetuity; correct?
A. No. No. There's a dividend growth factor that is assumed. And so the dollar dividend amount -- dollar dividend amount is assumed to grow at the short-term growth rate for a period of time, and the long-term growth rate thereafter.
Q. Okay. So it's your view that the dividend yield would change that?
A. That consideration is not necessary
to the application of the model at the practitioner level.

To answer that question, I would have to do some calculations that I could do, and answer it for you.

The model formula, which I
outlined in my testimony, does not involve an input as to the future dividend yield. It involves inputs related to the growth rate of dividends, and the present dividend yield.

And sitting here right now, without taking a 15-minute break to get out my pencil and paper and work it out, I cannot be certain about that math.

The only thing $I$ can say with certainty is it's not necessary to the application of this model.
Q. Okay. Would you agree that after the last financial crisis that the Federal Reserve became active in the market to facilitate liquidity?
A. Yes. The Federal Reserve is always active in the market.

And they purchased different -- a
variety of different kinds of bonds to inject liquidity.
Q. Okay. And that had -- would you agree that that had an effect on the market?
A. It had an effect, in my opinion, on some markets. I have not evaluated every market for every security. In my opinion, there is no single market.

And specific to Entergy
New Orleans, I did not evaluate to what extent it may have had an effect on investment-grade bonds issued by utilities.
Q. How about equity in the market for utility stocks, do you think it had an impact on that?
A. There are innumerable factors causing the -- or affecting the price of utility stocks, in my opinion. To what extent quantitative easing, for example, by the Federal Open Market Committee affected them, I do not know with certainty.

The price of utilities is broadly regarded as a defensive stock, because of the perceived risk of most US utilities. And as such, I'm not certain that the
effects of quantitative easing necessarily were the prime drivers of stock prices for utilities.
Q. Okay. But the Fed's actions, since 2008, have largely had the effect of keeping interest rates low. Would you agree?
A. I would agree that interest rates
fell and stayed low, roughly concurrent with the initiation of quantitative easing.

But I note that interest rates remain fairly low, despite the gradual reversal of those balance sheet positions held by the Treasury. And therefore, I can't -- I can't say that -- I certainly would not agree it's the entire cause of it.

And I can't say, nor do I believe it can be said, you know, to what extent it was the cause of interest rates outside of those instruments that the Fed directly participated in.
Q. Well, since you just kind of indicated that utilities are generally -utility stocks are generally defensive --

I think you used the word
"defensive."
A. Correct.
Q. -- wouldn't you imagine that in
periods of low interest rates, investors might be more attracted to utility stock investments?
A. Well, first of all, I think I was meaning to be discussing utility equities, not necessarily utility bonds.

And I do not, sitting here,
recall a particularly sharp increase in the coupon rates of Entergy New Orleans bond issuances over the past couple of years, during which quantitative easing has been slowly, initially taking the first steps of being reversed.

And certainly, the purchases of bonds and the increase to the balance sheet has stopped.

So I am not certain that $I$ can completely agree with you. Although I accept the notional logic of your question.
Q. Yeah. I mean, if interest rates are low, wouldn't you agree that utility stocks that, you know, pay dividends would be
relatively more attractive in periods of low interest rates?
A. I am aware of a theory that, again, has some notional logic to it, but $I$ have not seen, have not tested, myself, quantitatively that the Fed's quantitative easing, and its efforts to keep short-term interest rates low, have driven yield-interested equity investors, or driven investment in equities to seek a higher yield, and that that may have driven up some stocks, and, thereby, driven down their dividend yields.
Q. Right.

And when you say "driven up," you mean increased prices for the equity; correct?
A. Correct. That's what I meant.
Q. And I guess the DCF model doesn't, another aspect of the DCF model, indicate or assume that there's no change to the price-earnings ratio?
A. I can't say with mathematical certainty that there's no change. But an open market for a utility stock would suggest that it would tend to be true.
Q. I'm sorry. That what?
A. That it would tend to be true, that the $P E$ ratio would remain the same throughout this analytical period of the DCF model.
Q. Yeah.

And so if the Fed reverses
course, can you explain what effect you think that might have on --
A. Well, what course are you assuming the Fed is on?
Q. I apologize. We've been talking about Fed actions that keep interest rates low, which keep utility equity investments relatively more attractive.

And so I guess I'm asking you: When that Fed activity ceases, wouldn't you expect that the price-earnings ratio of those utility stocks would then fall?
A. It's my understanding that the Fed has ceased to take positions, balance sheet positions, intended to inject liquidity by buying long-term bonds. So the course the Fed is on, as $I$ understand it, with regard to that, is a very gradual unwinding of its balance sheet positions. It continues to
maintain, probably, historically below average short-term target interest rates.

And to my understanding, although
I haven't checked in the past several
months, continues to pay a 25-basis-point premium to bank depositors. But those are short-term interest rate targets and actions.

So I don't agree that the Fed is continuing to, at this time, attempt to maintain below-market normal long-term debt interest rates.
Q. Well, are you concerned at all about the results of your DCF model, given that historic Fed activity since 2008 may change in the future?
A. Well, as I said, it's my understanding that the Fed has been slowly, very slowly reducing its balance sheet. And therefore, there's no, you know, further activity.

I am not concerned by that for a couple of reasons, with regard to my DCF analysis.

One, the Fed's position has been
largely stable for the six-month period during which my model and my analysis was collecting the data, the second half of 2018, is my general understanding of the Fed's activities. Therefore, you know, you've got a stable thing.

Two, the IBES growth expectations are based upon the rational expectations of institutional brokers who make these estimates. And so, you know, there is a rational expectation component to my analysis based on a consensus of these institutional brokers.

And as such, unless the Fed takes substantial unexpected action in one direction or the other, I think that the underlying analysis and assumptions of the DCF are okay for the perspective of the Fed.
Q. Now, did you do anything, any sort of quantitative analysis to determine whether your overall recommendation of 8.93 is otherwise reasonable?

MR. BEATMANN:
Other than what is contained
in his testimony?
MR. MCNALLY:
I'm sorry. Other than the
DCF analysis.
A. Well, as I said, Mr. Proctor's CAPM analysis was probative. It was a basis. It was an element of the basis of my recommendation. It offered, in my opinion, general concurrence between the two methods and the two analyses.

And then, also, before any adjustments to Dr. Everett's two-step DCF analysis, if you were to adjust for, as I discussed in my testimony, a not, in my opinion, reasonable long-term growth factor assumption, there was also some reasonable concurrence with his analyses.

So I think that -- I think that those were the analyses and the factors that $I$ considered in making my recommendation.
Q. Okay. Did you consider other recent ROE awards around the country?
A. I'm aware that some are higher.
Q. Okay. But did you compare your DCF
result, you know, to check for reasonableness against what's been awarded recently around the country for utilities?
A. Many ROE decisions are made by regulators that -- they are the adoption of a settlement. And many of them involve the considerations that regulators have the authority and latitude to make beyond the types of analytical things.

In my review, it's common for a regulator to adopt an $R O E$ that is higher than that recommended by some of the participants in the relevant proceeding. And so while I was aware that other regulators had approved ROEs higher than my recommended 8.93, I didn't consider that to be the most relevant factor to consider.
Q. Okay. But you didn't do any sort of quantitative analysis to determine where your recommendation fell within the range of recent awards, I gather; correct?
A. I evaluated that. And it's my recollection that it is lower than the range of most recent awards that I looked at.
Q. Did you do -- when you say you evaluated that, how did you evaluate that?
A. All the ones that $I$ saw, that $I$ became aware of, they did indeed authorize an ROE that was higher, at least somewhat higher than the 8.93.
Q. So these were results that you happened to come across? Or did you do a calculation of these or . . .
A. I did not seek to examine every ROE, retail ROE award.

You know, we certainly looked at the most recent Entergy Operating Company awards.

I looked at recommended ROEs at the FERC level, that to my knowledge are pending a final Commission order.

So that would be the extent of it.
Q. Can you recall, was there any ROE -do you recall seeing any ROE for a vertically integrated utility this year that was as low as 8.09 percent?
A. I don't recall that.
Q. You don't recall seeing one that
low?
A. That's correct.
Q. Do you remember seeing one as low as
8.93 percent?
A. No.

I'm confused. I thought that's
what you just asked me.
Q. 8.09, your --
A. Oh.
Q. My first question dealt with the result, the unadjusted result of your model. And I'm sorry.

MR. BEATMANN :
Jamie, if we could, could
you just repeat the original
question?
MR. MCNALLY:
Yeah. Let me --
MR. BEATMANN :
So that the record --
MR. MCNALLY:
I will do that.
Q. Do you recall, in this year, seeing any ROE result for a vertically integrated utility as low as your unadjusted 8.09 percent
recommendation?
A. I didn't recommend 8.09 to the

Council as an ROE.
But no, I didn't see -- I'm not
familiar with, in the past year, a
commission that ordered or authorized an
8.09 ROE.
Q. Okay. And how about an 8.93 percent ROE?
A. So that is my recommendation to the Council.

And no. I am not familiar with a retail regulator, or regulator that has ordered an ROE of 8.93.
Q. Well, let me back up.

Would that be the same case for the year 2017?
A. I don't think I reviewed any data for 2017.
Q. Okay. So did the data -- the recent data you reviewed was just for 2018 then?
A. It's a rough range of 2018.

There's, you know, the order date, effective date. But generally, yes. That's correct.
Q. Well, can you -- I mean, when was
the last time -- or can you point me to the last time you're aware that a regulatory jurisdiction ordered an 8.93 percent ROE for a vertically integrated utility?
A. I am not familiar with that.

But just to reiterate my earlier answer, the previous orders of other commissions that the Council is not obligated to follow, in my experience, are based on their application of many factors, and a broad authority, and are not a strong factor supportive of my recommendation.
Q. Okay. Thank you, Mr. Watson.

Now, I believe you -- didn't you
testify in Docket Number UD 1602, which
is -- which was the company's application
to construct the New Orleans Power Station?
A. Yeah. Yes, I did.
Q. Do you recall that case?
A. I do.
Q. And you did file testimony in that case, is my understanding; correct?
A. I did, yes.
Q. Okay. And I understand that you estimated the bill impacts in that testimony,
in your case -- in that particular case?
A. That's correct.
Q. And for the purpose of that, my understanding is that you used an estimated ROE of 9.75 percent. Is that accurate?
A. That's -- I did not estimate an ROE.

That is the ROE I used for my analysis. But I did not estimate an ROE.
Q. Right.

And an ROE was not set in that case, is my understanding; correct?
A. That's correct.
Q. Okay. But your analysis required you to use an ROE; correct?
A. The various options that were under consideration had different degrees of capital intensity. And some had more O\&M and less capital, relative to the others. And therefore, using an ROE of 11.04 , which is the electric average ROE in New Orleans most recently approved by the Council, might have skewed my analysis in terms of the relative economic attractiveness of those options.

And therefore, I chose, for the purpose of that analysis, 9.75.
Q. And you thought that for the purposes of that analysis, you thought the 9.75 percent ROE was appropriate; correct?
A. For the purposes of the analysis of relative economic attractiveness of different options in that docket, at that time, yes.
Q. My understanding is that from the Commission's -- or, I'm sorry -- from the Council's resolution in that case, that your testimony indicated that that 9.75 percent ROE was in line with ROEs recently set by regulators.

Do you recall that particular statement?
A. I think, if I recall, my testimony was that 9.75 was in the range of recently approved Entergy Operating Company ROEs. And therefore, would be more closely in line with the ROEs the Council would be expected to consider in this proceeding. And that's why -- and that's why I chose it for the purpose of that analysis.
Q. So is it a fair characterization of your testimony that you just looked at other Entergy Operating Companies' ROEs?

MR. BEATMANN:
In Docket UD 1602?
MR. MCNALLY:
I'm sorry. Yes. In Docket
UD 1602.
A. I have -- I don't recall.

I most certainly looked at the most recently authorized Entergy Operating Company-allowed ROEs.

But at that time, I may also have been considering some nationwide survey data as well.
Q. And the 9.75 percent ROE, in that particular docket, was in line with that national survey data that you saw?
A. I think, primarily, it was in line with the Entergy Operating Companies.

And the national survey, to the extent $I$ reviewed it for that particular docket would have been more like a check.
Q. Okay. But when you say "like a check," was it in line with what you consider in line with 9.75?
A. I don't recall the specifics of what the average, or median, or midpoint of the
range of the ROEs were from the national survey. But I think yes.
Q. And do you recall the time that the -- over which the survey was taken?
A. The survey would have been an annual survey that was then performed by a trade magazine called Public Utilities Fortnightly. They no longer provide that service. Although there are others that do.

So I would suspect that that time frame would have been, to the extent I did it, 2016.
Q. Okay. Is there a reason you might have looked at other regulator awards in that docket, and not in this particular case?
A. The purpose of my testimony before NOPS was the relative economic attractiveness of different options to solve certain reliability concerns for New Orleans. It was not to set an ROE.

I think it would have been excessive, superfluous for me to have performed a complete ROE analysis solely for the purpose of a discount factor and a return factor, to calculate the relative
economic attractiveness of certain options.
Going to that level of precision just wouldn't have added any value.
Q. Yeah.

No. I'm asking why you would
perform a survey of recent awards in that docket, but not do the same survey in this docket?
A. Because, in my opinion, the awarded, the allowed ROE, by a regulator, is not a strong indicator of what is appropriate as a recommendation.

Because, as I said, it's my
understanding and experience that regulators might accept a negotiated settlement, and then, additionally, they might apply a great number of considerations when setting an ROE apart from, you know, a market-based analysis, such as discounted cash flow and CAPM.
Q. Now, you've testified about Mr. Proctor's CAPM analysis.

I take it you think his results are reasonable; correct?
A. Because he is applying an accepted
methodology, and using market-based data in what appears to me to be an impartial analytical fashion, yes.
Q. Okay. And my understanding is those results -- that analysis produced two basic ROE results, a 6.68 percent ROE result, and a 7.57 percent result. Is that correct?
A. I recognize the second number better.

What -- can you give me the context of the 6.68 , so 1 could answer that?
Q. Well, I'm asking -- so you don't recall the 6.68 percent?
A. I guess what I'm saying, if you give me the context of it, I might very well recall it.
Q. Okay. Fair enough.

My understanding is he did two sets of analysis. Each one producing an ROE result.

My understanding is one, the higher one, is 7.57 percent. Is that correct?
A. That's correct. That's the -- that
is the primary value that $I$ relied upon with regard to his work.
Q. Okay. So you didn't rely on a lower value that was produced by his analysis?
A. No. I think that when you look at my testimony, when $I$ discuss the basis-point differences between the results of our analyses, that the 7.57 works out mathematically.
Q. Okay. And so it was mainly the
7.57 percent ROE result that you were considering when you testified that you thought that was reasonable?
A. That's right.

I was -- you know, when $I$ was discussing the reasonableness of it, I believe that I cited that value. And I discussed the basis-point difference between his result and my result.
Q. Did you discuss the inputs of his CAPM analysis with him?
A. During the preparation of our respective testimonies?
Q. At any time.
A. Yes.
Q. Okay. So you're familiar with his inputs?
A. Yes.
Q. Okay. And you think they are appropriate?
A. Yeah. Yes. I do.
Q. Okay. Now, my understanding is that Mr. Proctor used the 13 -week treasury bill yield as the proper measure of the risk-free rate.
A. That's correct.
Q. Is that your understanding?
A. That's my understanding as well.
Q. And you think that use of the 13-week treasury bill yield is proper for that purpose?
A. The theory, as I understand it, underlying CAPM, the risk-free rate should be free of risk. And longer-term treasuries, while the default risk is generally regarded, for analytical purposes, as negligible, do bear an interest rate risk. And therefore, the shorter-term treasuries both have no default risk and have minimal interest rate risk.

And so yes.
Q. So are you aware of contrary
financial opinion to the effect that, in fact, you should use the yield on a longer-term instrument, so that you can match the period of the stock investment?
A. Yeah. I am aware of that.
Q. But you disagree with that?
A. I think that the notional application of the regression theory underlying the capital asset pricing model is consistent with what Mr. Proctor did.

I am not going to say that I
would necessarily disagree with the results that people are seeking to get from using the longer-term interest rate. But Mr. Proctor is more correct.
Q. Okay. So you're aware that there's financial authority out there that says a longer-term, 30-year, for example, instrument would be more appropriate than the 13-week; correct?
A. I am aware that there's a difference of opinion. Yes.
Q. Okay. But you think it's more
correct, more proper to use the 13-week yield that Mr. Proctor used?
A. Yes. Because equities are highly
liquid. Utility equities are highly liquid.
And their prices are based, to a strong degree, on the immediately upcoming earnings and dividends that are payable. And that is closer to a short-term instrument.

It is true that an equity
persists indefinitely, but its cash flows are not fixed, or, in particular, tied to what came before it. And so the theory of using a 30 -year or some longer-period treasury as the risk-free rate does not -does not fit as well as Mr. Proctor's application.
Q. Well, if that's the case, and 13-week yield is preferable to the yield of a 30-year instrument, why didn't Mr. Proctor use a four-week instrument yield? That's even shorter term; correct?
A. That's correct.

My recollection is that he discussed that in his testimony. But sitting here right now, $I$ do not remember
the justification for it.
Q. But you don't have an opinion on that, whether a four-week would be more preferable than a 13-week?
A. The market segmentation theory of highly short-term treasuries would suggest that there could be something potentially anomalous in their yields that would make it less useful than a somewhat longer-term, but still short-term treasury.
Q. So that same logic wouldn't apply to the 30 -year instrument in your view?
A. I recognize that people employ the longer-term treasuries as risk-free input to the CAPM. And I note that the difference is not strictly additive, because the risk-free component exists both inside and outside of the multiplication factor. And so because of that, I don't lose sleep over people's use of that.

But because you're asking, I think that the shorter-term ones are closer to the theoretical application of this model.
Q. For Mr. Proctor's risk premium
portion of his analysis, I believe he used historical estimates.

Is that your understanding as
well?
A. I don't recall.

If you could clarify, by
historically, you mean he took market measurements?
Q. Yes.
A. I see.

That's my understanding.
Q. Okay. And those market measurements he took were for past historical periods; correct?
A. Yes. That's -- yes, I think that's how he did it.
Q. Okay. And would you agree that the whole concept of this CAPM analysis is that it's forward-looking?
A. I think CAPM is better described as "in the moment." Because you have a regression factor beta. And you have the present risk-free rate.

And so I don't know that $I$ can agree that it's forward-looking in terms
of -- I'm not aware of an input to it that involves somebody's projections of the future in the same way that the DCF does.
Q. Well, are you aware that, again, financial -- there's quite a bit of financial literature that suggests, in fact, what you should be doing is thinking -- is using investors' expectations of what that premium would be?
A. I have not read financial
literature.
I am aware that -- I'm aware that practitioners use both, or that I'm aware that it's -- I'm aware that people have used the forward-looking ones.

I think that -- I think that underlying the CAPM is the assumption that the general paradigm of the market for the regression period will hold into the future. And therefore, also relying upon market premiums, historically, may not add a significant error, or problem, or reason to distrust the results.
Q. But you think it would be preferable to use analysts' expectations of what that
premium would be?
A. Preferable, no.

I am aware that -- I'm aware that
that is a method that is used by some people.
Q. Well, do you think it's preferable to use historical information on what that premium was?
A. Well, like I said, the CAPM relies upon the evaluation of the historical performance in the calculation of beta. And therefore, preferable, maybe, I've not formulated an opinion.

I didn't sponsor CAPM analysis in this proceeding. But it is, in my opinion, acceptable and analytically consistent to calculate the market premium.
Q. Okay. Now, I believe you had said that you talked about the basis-point difference between your ROE result and Mr. Proctor's ROE result with the CAPM model.

And if I could get you to look at page 44, here, of your testimony.
A. (Complies).

I'm there.
Q. Now, I believe on line 19, you suggest that there's a 52-basis-point difference; correct?
A. Yes.
Q. And just so I understand, that's between a 7.57 percent and the -- your unadjusted 8.09 percent; correct?
A. Correct. I think the math works out.
Q. So for that, for those purposes, you were comparing it to your unadjusted model result of 8.09 ; correct?
A. Correct.
Q. Okay. And you think that -- or you believe that the 52-basis-point difference is an indication that the results are essentially in the same ballpark?
A. First of all, $I$ don't think that there's any reason why they should match precisely. They are different models.

But yes, being off by 52 basis points between the two does suggest that the two different approaches are moving in towards a common understanding of what the right ROE is.
Q. And would you feel similarly if the result were 52 basis points above the 8.09 percent DCF result?
A. I imagine I might.

I hadn't -- I hadn't given it any thought until this moment, but $I$ imagine $I$ might.
Q. But a 52-point basis ROE -unadjusted ROE 52 basis points above your 8.09 percent would also be reasonable?
A. I think, now that you ask me that, that would still indicate that the two separate models, using separate methodologies, were pointing towards a common range of reasonable ROEs.
Q. Okay. How are you doing on time?

Do you need a break?
MR. BEATMANN:
I do.
MR. MCNALLY:
You do? Okay.
If anyone needs a break,
please --
THE WITNESS:
Sure.

MR. MCNALLY:
Are you okay?
MR. BEATMANN:
It can be short.
MR. MCNALLY:
We've been going a while, so
let's take a break.
(Whereupon the proceedings went off the record.)
Q. So, Mr. Watson, one question about your testimony on your ROE recommendation.

I believe you indicated that it was lower than other ROE awards that you had seen recently. And I'm wondering, if that's the case, if you would be at all concerned about the company being able to compete in the market for equity capital, if other -- if other companies had higher ROEs?
A. That does not concern me.

The market for equity capital is, as I understand it, quite robust. And it's based upon the market yield of the utilities.

And so long as ENO is allowed a

## Byron S. Watson, CFA <br> 3/14/2019

total rate of return that fulfills, or gives it the opportunity, rather, to earn a fair return, maintain its credit, I think that's indicative that it will be able to also track capital, which is yet another standard.

And so, in my opinion, no.
Q. Okay. So you're not concerned about an ROE award for ENO that would be lower than what its peers have recently gotten?
A. That, in and of it -- well, you asked me, as I understand the original question, am I concerned that they would not be able to attract equity capital. My answer is no.

The second question, as I understand it, am I concerned, in general. Also no.

An ROE, should ENO, through
prudent operation and management, achieve it, of 8.93, just a bit below nine percent is, in my opinion, a reasonable market return that you would see for a low-risk company in the open stock market.
Q. Let me ask you about -- you have a
discussion of double leverage in your
testimony. And I would like to ask you what your explanation of that concept is.
A. I would -- I would rest upon my testimony. And that is, a double leverage occurs when there's a significant deviation between a subsidiary, such as ENO's equity ratio and the equity ratio of the parent company, in this case, Entergy Corp.
Q. Why is that a concern?
A. The effect of it is that -- well,
let me start over, please.
Customary ratemaking involves
return on rate base at WACC. WACC, one of the key factors is the equity ratio.

Equity is almost invariably
higher cost than debt, for a reasonably
healthy company, for two reasons.
One, because of the economic
logic that equity should have a higher return than debt.

And two, because dividends are not tax deductible.

Those two factors cause the total before tax cost of equity to be higher than
debt. And therefore -- which is the case for ENO, I might add -- and so the higher the equity percentage, the higher the WACC, which, when multiplied by your rate base, gives you a higher revenue requirement.

And so maintaining a high equity
ratio, if it is allowed, as the basis for ratemaking, higher, significantly higher than that of the parent company, imposes costs on ratepayers that $I$ don't think have a corresponding benefit.
Q. What cost does it impose on ratepayers?
A. A higher-than-otherwise revenue requirement.
Q. Is the concern that the parent would borrow money at one rate and invest it in equity in the subsidiary utility?
A. There is no one transaction that is required to achieve the state of double leverage. So the parent company does not have to borrow money and put paid-in capital into the subsidiary to achieve it.

You can achieve the state of double leverage through other methods, such
as reducing the dividend payout of the subsidiary to the parent. And that would achieve the same state. So the means by which you achieve it is not important.

The question is, is it -- is any
difference between the two equity ratios unreasonable, and does it impose an unreasonable cost on ratepayers that has no corresponding appreciable benefit.
Q. So you think any difference -- or, I'm sorry.

Can you define what an unreasonable difference would be?
A. I can't define it in terms of
numbers. And I think it would be specific to the utility.

Entergy Corp's equity ratio of in
the rough range of 35 and a half percent, would not, in my opinion, be reasonable to apply to ENO. Because that -- if ENO, as a stand-alone organization, had so much leverage, that much leverage, I'm not certain that given its other overall circumstances, it could maintain a good credit rating, and attract capital, and all
of those good things.
And so there is no number that I
can give you, because $I$ don't think that that's how I would determine reasonable.
Q. Well, I guess I'm confused.

Is the concern that the debt at
the parent level is priced less than the equity at the sub, it holds at the sub level?
A. The debt held by the parent, to my knowledge, has no impact on the ratemaking of the sub. Except, perhaps, to a minor extent, to the extent that the -- that the overall organization has serious financial problems or something. But generally, no impact.
Q. Well, if the debt at the parent has no impact on ratemaking, then why are you suggesting a change to ratemaking equity ratio based on the debt level of the parent?
A. Well, the way I interpreted your previous question was the debt rate, the coupon rate, the yield to maturity of the parent's debt. That's what I was answering.

So to the extent I misunderstood your question, I apologize.

The coupon rate, the yield to maturity of the parent's debt, is not a significant concern.
Q. So it's just the percentage difference in debt?
A. That's what I thought I heard your question asking.

If the question is the amount of
the debt versus equity at the parent level being relevant, it can be.
Q. I'm sorry. I didn't hear that.

It can be?
A. It can be.

You know, the ratio of the debt to equity at the parent level can be relevant to the consideration of what a reasonable equity ratio is at the sub.
Q. Okay. So, but the concern is not that the parent is borrowing money and contributing it in exchange for equity. Is that -- is that what you're saying, that that's not a concern?
A. Well, what I said is, that's not the only -- that is one way that you can achieve a state of double leverage. And if that were
done, and it could be proven that it was done with the intent of achieving double leverage, I think that would be inappropriate.

But you can achieve double
leverage in other ways, by, again, adjusting your dividend payout ratio for the subsidiary.
Q. What if what I described, where the parent borrowed money and then invested it as equity in the sub was done without the intent that you talked about?
A. Well, I mean, for example, ENO is in the process of constructing the New Orleans Power Station. And my review of their capital planning, as I recall, sitting here, is that they are going to make an equity contribution from Entergy Corp, or Entergy Utility Holdings, or a senior organization, down to ENO to be one of the sources of capital to construct that. That's not inherently wrong. And, you know, treasury principles, as I understand them, you don't generally borrow money specifically because you're going to do any one thing. You borrow money because your overall capital
planning indicates a needed amount of capital, and then you pursued various means of doing that, such as retained earnings, and issuing new debt, and occasionally issuing new equity.
Q. Okay. I would like to -- I believe you answered an RFI question on this issue that I wanted to show you --
A. Okay.
Q. -- if $I$ can locate it.

Just a second.
MR. MCNALLY:
If $I$ can mark this as
Number 2, please.
A. Thanks.
Q. Mr. Watson, this is a response to

ENO Discovery Requests 2-27.
A. Yes.
Q. Okay. And you've seen this before?
A. I have.
Q. And did you -- you drafted it;
correct?
A. I was a primary author.

The responses are those of the
Advisors.
Q. Okay. So the response there says, on page 51 of your testimony, A utility that engages in double leverage effectively borrows money at the top corporate level and places that money into its utility subsidiary as common equity. (As read.)

Correct?
A. That's what it says. Yes.
Q. Okay. Now, I apologize. I thought I asked you whether that was what you were talking about with double lever -- excuse me -- double leverage. And I thought I heard you just testify that that really wasn't it.
A. Well, no. Well --
Q. I may have been wrong. But --
A. In this response, we sought to clarify that.

And what I mean, on page 51 of my testimony, is, the effect is as if Entergy had done it. And the purpose of that was just to illustrate what -- what a mechanism and what an effect is.

So what I mean by the word
"effectively" in that testimony, on page 51
is, there are many ways to get there. But
the effect is as if Entergy Corp borrows money and places it into ENO as common equity.
Q. Okay. And you have an objection to that?
A. My objection, like I said earlier in this testimony, prior to this passage, is the ratepayer cost of maintaining a significantly higher and unreasonable equity ratio at the ENO level, as compared to -- as compared to the Entergy Corp level.

And then later on in my
testimony, I discuss that the double leverage effect of ENO is higher than the average of the other operating companies.
Q. So your view, you determined the reasonableness of the subsidiary's equity ratio by looking at the parent?
A. That would be one factor, yes.

As I discussed in my testimony,
Entergy has a non-vertically integrated regulated utility business, EWC, Entergy Wholesale, that reasonably might, given all the issues surrounding merchant nuclear operations, have a different equity ratio,
and is not subject to regulation rate of return-type regulation.

And therefore, I note that, presently, Entergy Corp's equity ratio is not -- is not the only indication of double leverage.
Q. Well, I guess that's my question, Mr. Watson.

Entergy Corp does have other subsidiaries, some of which that are unregulated. And so why would you -- to determine ENO's -- the reasonableness of ENO's equity ratio, why would you look at the equity ratio of the parent?
A. Well, like I said, that is one factor I looked at.

I also looked at the average equity ratio of the other regulated utilities, Entergy Operating Companies, and I looked at the ratemaking treatment that was given to other assets, that are currently being given to other assets at the ENO level.

And taking all of those things into consideration, I made my
recommendation.
Q. Right.

No. I understand that you looked at those other things. But I'm curious as to why it's important to look at the parent.

## A. The utility is separated into

 subsidiaries. And they have some individual credit characteristics. But the utility is operated, if it's operated properly, I should say, a corporation is properly operated to maximize the value for its top-level shareholders, its ultimate shareholders, its owners.And so -- and so it is possible to select a wide range of equity ratios and achieve a wide range of equity ratios for different organizations within the company, but it's still constrained by the capital markets for the whole organization.

And therefore, you can -- you can have whatever the market most positively rewards for the organization as a whole. In this case, it would appear, roughly, 35 and a half percent equity for the
organization as a whole.
And then there is a revenue
requirement effect of deviating from that, at the regulated level. And the deviation
that currently exists favors shareholders in a way that $I$ cannot identify $a$ particular advantage to ratepayers.
Q. So you generally think it's a bad thing if there's a deviation between the equity ratio at the subsidiary utility level and the parent level?
A. Well, $I$ would say it's a cause for concern, absent some other consideration.

And as I discussed in my testimony, the EWC consideration presently is of worthwhile note. And that is a primary reason why I didn't consider recommending an equity ratio down in the 30 s for ENO.
Q. So it would clearly be unreasonable; correct?
A. Today, given my understanding of today's market and Entergy's circumstances, today, yes.
Q. Okay. If I could ask you to take a
look at Subsection $A$ of that response.
A. (Complies).
Q. The second sentence at the end of it, where you say, The top corporate level borrows money and places that money into its utility subsidiary as common equity. (As read.)

Do you see that language there?
A. I do.
Q. Okay. So do you think it's possible to trace the dollars that a parent borrows to the dollars that it -- to the equity that it places into the subsidiary?
A. I don't think that that is how corporate treasury principles and practices work, tracing individual dollars. But every debit and credit is traced.
Q. So you do think it's possible to trace dollars that are borrowed at the parent level, and then contributed as equity to the sub level?
A. No. I -- the contributions can be traced. The borrowing can be traced. But money is fungible.

And the way corporate treasury
works, you do not, you know, segregate individual dollars for only one purpose, as I understand it.

So the answer is no, because of
the corporate treasury.
But $I$ was merely noting that accountants do trace inflows and outflows.
Q. So dollars are fungible -- or is it your position that dollars are fungible and can't be traced, but because of accounting systems, they can effectively be traced?

MR. BEATMANN :
Let me object to the question.

I think it mischaracterizes
his previous answer. If you want
to restate it -- but I don't
think the question fairly
characterizes his previous
answer, which attempted to do
that.
Q. Yeah. And Mr. Watson, my question may not have fairly characterized your testimony. And if it hasn't, please correct me.
A. Well, then $I$ will gently just note that the reference part of Response Subpart A, you know, it says words like "in general", "as being", "as if" the corporate level borrows money. And so it's -- you know, those words are meant to be illustrative.

And to be clear, money, cash is fungible. And it is not the practice to segregate and trace individual dollars.
Q. Okay. And in this case, you don't recommend that the Council adopt the parent's debt ratio, in this particular case, for ratemaking purposes; correct?
A. In this proceeding, as of right now, that's right. Yes.
Q. So you don't actually -- your adjustment to the capital structure isn't really determined by the double leverage adjustment that you have been talking about; correct?
A. So I -- my intent of my testimony, without rereading every word, is to describe double leverage, in general. Describe the effect in cost to ratepayers of double leverage in terms of the application of the

WACC ratemaking concept. And then make a recommendation as to what an appropriate equity ratio is for ENO.
Q. Okay. But that recommendation isn't based on a double leverage calculation; correct?
A. It's based on the recognition that double leverage appears to be existing, and that it imposes a cost on ratepayers.

But it is not based upon the
actual amount of double leverage that may be occurring.
Q. All right. Thank you, Mr. Watson. Now, I would also like to visit with you, briefly, about this concept of accumulated deferred income tax associated with AMI meters.
A. Yes.
Q. I understand, from your testimony, that you're proposing an adjustment to rate base to include accumulated deferred income taxes associated with that equipment; is that correct?
A. I would characterize it as, I'm recommending the Council deny ENO's proposed
exclusion.
Q. Okay. Fair enough.

So would it -- so this is ADIT
that --
A. Correct.
Q. And that is a deferred tax
liability; correct?
A. In this case, it's a liability.

Yes.
Q. Okay. And it has been on the company's books; correct?
A. To my understanding, it is on the company's books.
Q. And that's because it was associated with public utility property that was also on the company's books; correct?
A. That's right.

And specifically, I believe
substantially all of it is meters that were retired before the end of their depreciable life.
Q. Okay. So the meters were retired before the end of their depreciable life, but they still had some net book value on the books; correct?
A. Yeah. Per FERC Electric Accounting Instructions, they became, as I understand it, a debit to accrued depreciation.
Q. Okay.
A. Accumulated depreciation.
Q. Okay. When they were retired, they were essentially removed from Entergy, the asset was essentially removed from Entergy's balance sheet; correct?
A. No. My understanding of the way it is accomplished is that, effectively, there's multiple entries, but the end result is a net debit to accumulated depreciation equal to the net book value of those meters.

So it remains on the balance sheet, just not in plant, in service. It's on the balance sheet in the form of a debit to accumulated depreciation.
Q. Okay. But the debit to accumulated depreciation for the net book value?
A. Yes. Correct.
Q. Not original cost?
A. I believe that the original cost is one of the ledger entries, general entry components. But the accumulated depreciation
also remains. And so the net effect, regardless of the actual debits and credits, is that what remains on ENO's books is the net book value when they are retired.
Q. Okay. Let me -- it's your understanding that when equipment is retired, its net book value remains on the books?
A. That is my understanding.
Q. And it's not your understanding that the original cost is both reduced from the asset and accumulated depreciation?
A. No. I think that you are right.

But I believe that the net effect of that is that the remaining net book value stays on the books, at one form or another.
Q. So it's your understanding that, as we sit here today, after the retirement, that there's net book value on ENO's books associated with those assets?
A. Well, no. Because there was an AIP that converted it to a regulatory asset. So it was negotiated that that would be taken off the books and replaced by a regulatory asset that's being amortized.
Q. Okay. So --
A. I was discussing accounting in
general, when I said what I said prior to now.
But specific to this instance,
there's an AIP and a regulatory asset.
Q. Fair enough.

Let's start with -- let me go back to just accounting, in general.

And I would just like to get your understanding of when an asset with remaining net book value is actually retired, what happens to it.
A. Well, let me state that I am not holding myself forth as a CPA in this preceding.
Q. Fair enough.
A. It is my -- not $C P A$, but rather financial analyst's understanding that FERC Electric Instruction Number 10 calls for, effectively, a debit to accumulated depreciation, and that those assets then cease to be -- the original cost ceases to be multiplied by the depreciation rate thereafter. And so it stays on the books in one account or another.
Q. Is it your understanding that it would be included in rate base?
A. It's my understanding that, generally speaking, that is -- that has been ENO's position, that $I$ don't believe we're disputing.

I think that in this immediate rate case, this instant rate case, there's roughly $\$ 10$ million of such assets that we are going to have a special form of depreciation expense to amortize.
Q. Let me -- okay. When you say "special form of depreciation," I understand that there was a settlement, and there's a regulatory asset that will be amortized over, I believe, a 12-year period.

Is that your understanding?
A. That's correct. That is the, roughly, $\$ 24$ million net book value of meters.

I regret bringing in extraneous
facts. There's an unrelated $\$ 10$ million
that is not in a regulatory asset, that is
reflective of this FERC Electric
Instruction 10 accounting, to my
understanding, that, separate from the
meter issue, it's separated from the ADIT issue we're discussing, will have a, roughly, million dollars a year depreciation expense intended to get it off the books.
Q. Okay. So let me -- I'm not sure I followed that.

Is it your contention, then, in
addition to this regulatory asset, which will be amortized, that the net book value of the meters is still effectively on ENO's books?
A. No.
Q. Okay. Then --
A. I have muddied the waters.

The $\$ 10$ million is unrelated to meters, to my knowledge.
Q. Okay.
A. It is similar in concept, which is why I brought it up. Because it does relate to other assets that were retired before they were fully depreciated.
Q. Okay. But in this case, it's your understanding that the net book value of those meters is not in rate base -- I mean -- I'm
sorry -- not on the books?
A. That is correct. There was an AIP in the AMI proceeding, and the net book value of those meters, $\$ 24$ million, roughly, was taken off the books.

And there is a regulatory asset
that has a prescribed amortization of $\$ 2.4$ million a year, electric, and a bit less than $\$ 400,000$ a year, gas, as $I$ recall.
Q. Okay. And then you're taking -- so it's your position that the regulatory -- the amount of the regulatory asset is the net book value of the meters that we're discussing?
A. It's my position that the regulatory assets is a negotiated amount.
Q. Okay. So now, you -- my
understanding is, you recommend, I guess, denying Entergy's exclusion of the ADIT, the associated ADIT, from rate base; correct?
A. ENO's per books reporting in this application included that ADIT gas and electric. And then, if $I$ recall correctly, AJ15 excluded it from the adjusted rate base.
Q. Okay. Now, and it's your position
that ratepayers ought to get the benefit of that in rate base; correct? That offset to rate base?
A. That's correct. I think that the best of that ADIT should enure to the ratepayer.
Q. Okay. Now, you said that the amount of the regulatory asset was negotiated. If the amount of that regulatory asset included the benefits of any ADIT, then you -- would you agree that the adjustment you propose, the additional adjustment that you propose, would be appropriate?
A. Well, first, not necessarily, because a deal is a deal.

And the words of the deal, in the
AIP, in my opinion, are clearly consistent
with my recommendation to the Council.
Second of all, the underlying
negotiation derivation of that amortization amount did not reflect ADIT. Not that that, in my opinion, matters.

But just for clarification, if
you take ENO's then debt rate of
4.97 percent present value of the
\$24 million, and a 12-year period, and then calculate a payment with those inputs, you will get a value slightly lower than our negotiated amortization expenses.

And so I believe that -- I
believe that both conceptually and just in terms of my plain language, nonlawyer reading of the AIP, the ADIT should be allowed in rate base.
Q. Okay. So you believe that based on your calculation that you just described, that the regulatory asset does not include any ADIT benefits?
A. Actually, my testimony is that based upon the plain language of the AIP, and the common understanding of what a net book value means, the ADIT should not be excluded in this proceeding.

I was just adding to that, that the calculation of the negotiated amortization expenses, not that that matters, because, in my opinion, it's an AIP, it's a negotiated deal, did not include ADIT.
Q. I understand.

If the negotiated amount, in fact, did include that ADIT benefit, or a negotiated amount representing that benefit, would you still advocate for your adjustment in this case?
A. If the AIP had said something to the effect of net book value less ADIT, or net book value, or, you know, rate -- customary rate base related to the meters, something like that, then, no, I would not have -- I would not have opposed, or recommended to the Council, rather, rejecting those proposed adjustments. And so, but it didn't.
Q. Okay. And so you think your adjustment isn't any sort of double accounting?
A. No.
Q. Now, the agreement does also -- that you quoted, also does indicate that this negotiated regulatory asset amount is not in rate base; correct?
A. That's right.

The amortization is the only form of recovery of the regulatory asset, the negotiated amortization.
Q. Okay. I'm sorry.

So there's no return on that amount while that amount is being amortized?
A. That is correct.

However, again, the AIP speaks
for itself, in my opinion.
However, I will say that, as I've just explained a few questions ago, my derivation of that proposed settlement amount of $\$ 2.4$ million electric, for example, included a return of 4.97 percent.
Q. Are you concerned that there would be -- are you familiar with the -- I know you indicated you are not an accountant. I appreciate that.

But are you familiar with the normalization rules of the Internal Revenue Code?
A. I am familiar with normalization rules from the regulatory ratemaking point of view.
Q. Okay. Given that the regulatory asset that we've been discussing is not in rate base, are you concerned that your
inclusion of the associated ADIT in rate base might constitute a normalization violation?
A. I don't see -- I don't personally
see why. Normalization involves placing ADIT
on the books to recognize temporary timing differences.

I am not aware of a normalization rule where failure to recover ADIT, or failure to allow ADIT in ratemaking is normalization violation.

Normalization violations, as they
have been presented to me, are where you seek some sort of -- some sort of flow-through.

So, you know, I'm sure ENO is free to make its argument in the next round of testimony. But no. I don't see a problem.
Q. Okay. Have you ever heard of a general proposition that, perhaps, ADIT should not be included as an offset to rate base when the associated asset is not in rate base?
A. I am not familiar with that argument.

And I note that ADIT does not
have to relate to an asset. There's ADIT related to deferred O\&M, which becomes a regulatory asset.

So again, I would be very happy
to read and consider carefully a contrary argument in the next round of testimony. But no.
Q. Okay. Thank you, Mr. Watson. Now, you have a section in your testimony on single rate -- single-issue ratemaking, I believe. And I would like to ask you just a couple of questions, if I could, on that.

You recommend, in your testimony, against the adoption of several proposed riders for a number of reasons; is that right?
A. That's correct.
Q. And as I understand, your principal objection to these collection of riders is that they constitute impermissible single-issue ratemaking. Is that accurate?
A. And I could not identify a good reason to make an exception to that general proscription.
Q. Okay. Can you describe to me what you mean about single-issue -- what you mean by "single-issue ratemaking," when you use that term?
A. Sure. I believe I defined it the way I mean it in my testimony.

And my recollection of my
testimony is that it's a deviation from the generally accepted principle that a utility, for ratemaking purposes, a utility's costs should be evaluated as a whole.

And Advisor Witness Prep goes into the advantages, and his desire for that form of ratemaking analysis. And single-issue ratemaking is a deviation from that, and is regarded as inappropriate as such.
Q. Okay. Is it your view that that would always be inappropriate?
A. No.
Q. Can you just describe to me when you think that that might be appropriate?
A. In my opinion, if the underlying cost is variable, unpredictable, and outside
of ENO's control, then it might be appropriate to allow single-issue ratemaking and single-issue recovery, which are similar.
Q. Okay. So if a cost is variable and outside the utility's control, then --
A. And unpredictable.
Q. -- and unpredictable, then it would be appropriate, perhaps, to use a rider in that case?
A. It would be appropriate to engage in single-issue ratemaking, which could be effected through a rider. Yes.
Q. And so you think, like, for example, a fuel adjustment clause would be acceptable?
A. I think that's a -- sort of an ideal example of when single-issue ratemaking is okay.
Q. Because it meets all of your criteria?
A. Yes.

And also my understanding that it's generally accepted practice.
Q. Okay. So would there be any other instances you can think of, where a rider might be appropriate?
A. Well, Advisor Witness Rogers recommends a series of riders, MISO rider, PPCACR rider, that constitute single-issue ratemaking. And I agree with his conclusions there.
Q. Well, is that because they meet your -- the criteria you just enumerated?
A. I think they do. Yes.
Q. But you disagree, for example, with the proposed GERP rider, in this case, as I understand it?
A. I do.
Q. Correct?
A. Correct.
Q. Can you explain why that is?
A. GERP is not variable. GERP is substantially either a capital investment, or there's also an O\&M project. But it is a measurable, as $I$ understand it, external project. And so its -- its rate of spend is predictable. And its total amount, to my understanding, is known.

And so GERP doesn't meet the tests, as I see it.

Or I wouldn't say "tests." Let
me retract that.
The considerations for an
exception to the single-issue ratemaking proscription, because capital expenditures are budgeted in advance.

The Council, for the GERP to date, you know, set an annual spending amount. And as such, the related costs of depreciation and return on rate base are not variable and are well known.

And I might add that it's our recommendation, I believe, through the testimony of Vic Prep, and also through my testimony, indirectly related to Adjustment 14, Entergy Adjustment 14, that you can have out-of-test-period pro forma adjustments for things just such as GERP.

And so not only does it not meet with the criteria for an exception, there is another alternative that should allow ENO satisfactory recovery of its cost. And that's why I recommended against the GERP rider.
Q. I wonder if there are not some other factors, perhaps, the need to keep GERP
contractors available and ready in the jurisdiction, that might not also be an additional reason to consider a rider like this?

MR. BEATMANN:
Is that a question?
MR. MCNALLY:
Yeah.
A. I don't agree that the need that whatever advantages there are to continuity of keeping the crews working at a predictable level applies to the need for the rider. Because the more predictable, you know, long-term engagement you have with these people, the less you need a rider, in my opinion. Because the costs and the rate of expenditures are even more well known.

If you say, you know, we have you people on staff, and you are able to expend 12 and a half million dollars per year -by "staff," I mean as external contractors -- 12 and a half million dollars per year, then the FRP process is even more, in my opinion, able to allow ENO recovery of related costs.
Q. When you said -- I think you referred to "people" in that answer, were you referring to contractors?
A. Yes. My understanding is that GERP is accomplished substantially through external contractors.
Q. Okay. So you don't think that the need to keep contractors available warrants an exception to your criteria for a rider in the instance of GERP, as $I$ understand it?
A. I don't see the connection.
Q. Okay. You also mentioned the FRP. And as I understand it, the FRPs would be for three years, and the GERP program would be for 10 years.

I'm wondering if that disparity
in ensuring that a program like that could be completed, once it is undertaken, might not warrant, perhaps, another exception to your criteria for a rider?
A. No. First of all, my recommendation is in this docket. And this docket relates to the next several years.

If, at the conclusion of the $F R P$, you know, there is not another rate case,
and if even then, an $F R P$ is not contemplated, then some form to allow recovery of ENO's capital expenditures, which are many, cost-related capital expenditures, which are many, and not just GERP, might need to be addressed.

But assuming the Council approves
an FRP, I believe that that is an appropriate means by which ENO can more or less contemporaneously recover its related cost to any GERP investment the Council might authorize.

MR. MCNALLY:
If I could just have a
moment.
MR. BEATMANN :
Okay. Do you want us to
step out? We can step out.
MR. MCNALLY:
Okay. Okay.
(Whereupon the proceedings went off the record.)

MR. MCNALLY:
Thank you, Mr. Watson. I
have no further questions. I



## Byron S. Watson, CFA <br> 3/14/2019

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Byron S. Watson, CFA
3/14/2019
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# 165 FERC 961,118 <br> UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION 

Before Commissioners: Neil Chatterjee, Chairman; Cheryl A. LaFleur and Richard Glick.

Association of Businesses Advocating Tariff Equity
Docket No. EL14-12-003
Coalition of MISO Transmission Customers
Illinois Industrial Energy Consumers
Indiana Industrial Energy Consumers, Inc.
Minnesota Large Industrial Group
Wisconsin Industrial Energy Group
v.

Midcontinent Independent System Operator, Inc.
ALLETE, Inc.
Ameren Illinois Company
Ameren Missouri
Ameren Transmission Company of Illinois
American Transmission Company LLC
Cleco Power LLC
Duke Energy Business Services, LLC
Entergy Arkansas, Inc.
Entergy Gulf States Louisiana, LLC
Entergy Louisiana, LLC
Entergy Mississippi, Inc.
Entergy New Orleans, Inc.
Entergy Texas, Inc.
Indianapolis Power \& Light Company
International Transmission Company
ITC Midwest LLC
Michigan Electric Transmission Company, LLC
MidAmerican Energy Company
Montana-Dakota Utilities Co.
Northern Indiana Public Service Company
Northern States Power Company-Minnesota
Northern States Power Company-Wisconsin
Otter Tail Power Company
Southern Indiana Gas \& Electric Company


Arkansas Electric Cooperative Corporation
Mississippi Delta Energy Agency
Clarksdale Public Utilities Commission
Public Service Commission of Yazoo City
Hoosier Energy Rural Electric Cooperative, Inc.

## v.

ALLETE, Inc.
Ameren Illinois Company
Ameren Missouri
Ameren Transmission Company of Illinois
American Transmission Company LLC
Cleco Power LLC
Duke Energy Business Services, LLC
Entergy Arkansas, Inc.
Entergy Gulf States Louisiana, LLC
Entergy Louisiana, LLC
Entergy Mississippi, Inc.
Entergy New Orleans, Inc.
Entergy Texas, Inc.
Indianapolis Power \& Light Company
International Transmission Company
ITC Midwest LLC
Michigan Electric Transmission Company, LLC
MidAmerican Energy Company
Montana-Dakota Utilities Co.
Northern Indiana Public Service Company
Northern States Power Company-Minnesota
Northern States Power Company-Wisconsin
Otter Tail Power Company
Southern Indiana Gas \& Electric Company

## ORDER DIRECTING BRIEFS

(Issued November 15, 2018)

1. Two complaint proceedings involving the return on equity (ROE) of Midcontinent Independent System Operator, Inc.'s (MISO) transmission-owning members (MISO TOs) are currently pending before the Commission. The Commission set these
proceedings for hearing after it issued Opinion No. 531, concerning the ROE of the New England Transmission Owners (New England TOs). ${ }^{1}$ In the order setting the first MISO proceeding for hearing, the Commission stated that it "expect[ed] the participants' evidence and [Discounted Cash Flow (DCF)] analyses to be guided by our decision in Opinion No. 531., ${ }^{2}$ Subsequently, in Emera Maine v. FERC, ${ }^{3}$ the U.S. Court of Appeals for the District of Columbia Circuit (D.C. Circuit) vacated and remanded Opinion No. 531. On October 16, 2018, the Commission issued an order proposing a methodology for addressing the issues that were remanded to the Commission in Emera Maine and establishing a paper hearing on how that methodology should apply to the proceedings before the Commission involving New England TOs' ROE. ${ }^{4}$ In this order, we similarly establish a paper hearing on whether and how this methodology should apply to the proceedings pending before the Commission involving MISO TOs' ROE.

## I. Background

## A. Opinion No. 531 et seq.

2. In Opinion No. 531, the Commission adopted certain changes to its use of the DCF methodology for evaluating and setting the Commission-allowed ROE for the New England TOs. In particular, the Commission elected to replace the "one-step" DCF model, which considers only short-term growth projections for a public utility, with a "two-step" model that considers both short- and long-term growth projections. ${ }^{5}$ The Commission also departed from its typical practice of setting the just and reasonable ROE of a group of utilities at the midpoint of the zone of reasonableness. The
[^0]Commission explained that evidence of "anomalous" capital market conditions, including "bond yields [that were] at historic lows," made the Commission "less confiden[t] that the midpoint of the zone of reasonableness . . . accurately reflects the [ROE] necessary to meet the Hope and Bluefield capital attraction standards." ${ }^{6}$ The Commission therefore looked to four alternative benchmark methodologies: Three financial models-a risk premium analysis, a capital-asset pricing model (CAPM) analysis, and an expected earnings analysis-as well as a comparison with the ROEs approved by state public utility commissions. ${ }^{7}$ In considering those methodologies, the Commission emphasized that it was not departing from its long-standing reliance on the DCF model, but rather relying on those methodologies only to "inform the just and reasonable placement of the ROE within the zone of reasonableness established . . . by the DCF methodology., ${ }^{8}$ Based on these alternative methodologies, the Commission determined that an ROE of 10.57 percent, the midpoint of the upper half of the zone of reasonableness produced by the DCF, would be just and reasonable. Because that figure differed from the New England TOs' existing 11.14 percent ROE, the Commission concluded that the existing base ROE had become unjust and unreasonable and it therefore set New England 'TOs' base ROE at 10.57 percent, pending a paper hearing concerning the long-term growth projection to use in the DCF analysis. Following that hearing, in Opinion No. 531-A the Commission reaffirmed its conclusion that 10.57 percent was the just and reasonable ROE and that New England TOs' existing ROE was unjust and unreasonable. The Commission required New England TOs to submit a compliance filing to implement their new ROEs effective October 16, 2014-the date of Opinion No. 531-A.

## B. Opinion No. 551 et seq.

3. On November 12, 2013, multiple'complainants ${ }^{9}$ filed a complaint (First Complaint) pursuant to section 206 of the Federal Power Act (FPA), ${ }^{10}$ alleging, among
${ }^{6}$ Opinion No. 531, 147 FERC ๆ 61,234 at PP 144-145 \& n.285. "Hope" and "Bluefield" refer to a pair of U.S. Supreme Court cases that require the Commission "to set a rate of return commensurate with other enterprises of comparable risk and sufficient to assure that enough capital is attracted to the utility to enable it to meet the public's needs." Boroughs of Ellwood City, Grove City, New Wilmington, Wampum, \& Zelienople, Pa. v. FERC, 731 F.2d 959, 967 (D.C. Cir. 1984) (citing FPC v. Hope Nat. Gas Co., 320 U.S. 59 I, 603 (1944) (Hope) and Bluefield Waterworks Improvement Co. v. Pub. Serv. Comm'n of W.V., 262 U.S. 679 (1923) (Bluefield)).
${ }^{7}$ Opinion No. 531, 147 FERC $\$ 161,234$ at PP 147-149.
${ }^{8}$ Id. P 146.
${ }^{9}$ The First Complaint complainants consist of a group of large industrial customers: Association of Businesses Advocating Tariff Equity (ABATE); Coalition of MISO Transmission Customers (Coalition of MISO Customers); Illinois Industrial (continued ...)
other things, that MISO TOs' base ROE reflected in MISO's Open Access Transmission, Energy and Operating Reserve Markets Tariff (Tariff) was unjust and unreasonable. ${ }^{\text {t1 }}$ At the time of the First Complaint, MISO TOs (except for ATC) had a base ROE of 12.38 percent, and their total ROE-i.e., the base ROE plus any ROE adders approved by the Commission-was not permitted to exceed 15.96 percent. The Commission established the MISO TOs' preexisting 12.38 percent ROE in a 2002 decision. ${ }^{12}$ That ROE was based on a DCF analysis using financial data for the six-month period ending February $2002{ }^{13}$

[^1]${ }^{10} 16$ U.S.C. § 824e (2012).
${ }^{1 I}$ The following MISO transmission owners were named in the First Complaint: ALLETE, Inc. for its operating division Minnesota Power (and its subsidiary Superior Water, L\&P); Ameren Services Company, as agent for Union Electric Company, Ameren Illinois Company, and Ameren Transmission Company of Illinois; American Transmission Company LLC (ATC); Cleco Power LLC; Duke Energy Corporation for Duke Energy Indiana, Inc.; Entergy Arkansas, Inc.; Entergy Louisiana, LLC; Entergy Gulf States Louisiana, L.L.C.; Entergy Mississippi, Inc.; Entergy New Orleans, Inc.; Entergy Texas, Inc.; Indianapolis Power \& Light Company; International Transmission Company; ITC Midwest LLC; METC; MidAmerican Energy Company; Montana-Dakota Utilities Co.; Northern Indiana Public Service Company; Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation, subsidiaries of Xcel Energy Inc.; Northwestern Wisconsin Electric Company; Otter Tail Power Company; Southern Indiana Gas \& Electric Company; and Wolverine Power Supply Cooperative, Inc. Intervenor Xcel Energy Services Inc. did not join certain of the MISO Transmission Owners' pleadings in this proceeding, but generally supports this brief on behalf of respondents Northern States Power Company, a Minnesota corporation, and Northern States Power Company, a Wisconsin corporation.
${ }^{12}$ See Midwest Indep. Transmission Sys. Operator, Inc., 99 FERC $\uparrow 63,011$, initial decision affirmed as to base ROE, 100 FERC 961,292 (2002), reh'g denied, 102 FERC I 61,143 (2003), order on remand, 106 FERC $\$ 61,302$ (2004). ATC's base ROE of 12.2 percent was established as part of a settlement agreement that was filed with the Commission on March 26, 2004. In Docket No. ER04-108-000, the Commission
approved the uncontested settlement. Am. Transmission Co. LLC, 107 FERC ๆ 61,117 (2004).
${ }^{13}$ Midwest Indep. Transmission Sys. Operator, Inc., 99 FERC 9 63,011, Appendix A.
4. On October 16, 2014, the same date that the Commission issued Opinion No. 531A, it set the First Complaint for hearing before an Administrative Law Judge and established a refund effective date of November 12, 2013. ${ }^{14}$
5. Following the hearing, the Commission issued Opinion No. $551 .{ }^{15}$ In Opinion No. 551, the Commission calculated the just and reasonable ROE using the two-step DCF methodology from Opinion No. 531 and financial data for the period January 1 through June 30, 2015. The Commission affirmed the conclusions of the Initial Decision, finding that the Presiding Judge correctly applied the two-step DCF analysis required by Opinion No. 531. ${ }^{16}$ The Commission also affirmed the Presiding Judge's determination that, as in Opinion No. 531, there were anomalous capital market conditions such that the Commission had less confidence that the midpoint of the zone of reasonableness produced by a mechanical application of the DCF methodology satisfied the capital attraction standards of Hope and Bluefield. ${ }^{17}$ The Commission found that the Presiding Judge reasonably considered evidence of alternative methodologies for determining the ROE and the ROEs approved by state regulatory commissions, for purposes of deciding to set the ROE at the central tendency of the upper half of the zone of reasonableness, setting the base ROE for MISO TOs at 10.32 percent. ${ }^{18}$ The Commission required MISO TOs to submit a compliance filing to implement their new ROEs effective September 28, 2016, the date of Opinion No. 551, and to provide refunds for the November 13, 2013February 11, 2015 refund period. Following the issuance of Opinion No. 551, numerous parties submitted requests for rehearing, which are currently pending.

## C. Subsequent Complaint against MISO TOs' ROE

6. On February 12,2015, a new set of complainants ${ }^{19}$ filed a complaint (Second Complaint) also alleging that the MISO TOs' base ROE, of 12.38 percent was unjust and

[^2]unreasonable. ${ }^{20}$ Relying on an updated two-step DCF analysis, the Second Complaint complainants argued that the base ROE should be no higher than 8.67 percent. ${ }^{21}$ On June 18,2015 , the Commission established hearing procedures and set a refund effective date of February 12, 2015. ${ }^{22}$
7. Parties filed requests for rehearing of the MISO II Hearing Order, and on July 21, 2016, the Commission generally denied these rehearing requests. ${ }^{23}$ Following the MISO II Hearing Order, the Presiding Judge issued the Initial Decision on June 30, 2016. ${ }^{24}$ The Presiding Judge adopted a zone of reasonableness of 6.76 percent to 10.68 percent based on financial data for the period July 1, 2015 through December 31, 2015. The Presiding Judge also determined that the anomalous market conditions identified in Opinion No. 531 persisted and, after considering the alternative benchmark methodologies, that the just and reasonable ROE was 9.70 percent-halfway between the midpoint and the

Cooperative Corporation (Arkansas Electric Cooperative); Mississippi Delta Energy Agency and its two members, Clarksdale Public Utilities Commission of the City of Clarksdale, Mississippi and Public Service Commission of Yazoo City of the City of Yazoo City, Mississippi; and Hoosier Energy Rural Electric Cooperative, Inc. (Hoosier Cooperative).
${ }^{20}$ The following MISO transmission owners were named in the Second Complaint: ALLETE, Inc. (for its operating division Minnesota Power, Inc. and its wholly-owned subsidiary Superior Water Light, \& Power Company; Ameren Illinois Company; Union Electric Company (identified as Ameren Missouri); Ameren Transmission Company of Illinois; ATC; Cleco Power LLC; Duke Energy Business Services, LLC; Entergy Arkansas, Inc.; Entergy Gulf States Louisiana, LLC; Entergy Louisiana, LLC; Entergy Mississippi, Inc.; Entergy New Orleans, Inc.; Entergy Texas, Inc.; Indianapolis Power \& Light Company; International Transmission Company, ITC Midwest LLC, and Michigan Electric Transmission Company, LLC; MidAmerican Energy Company; Montana-Dakota Utilities Co., Northern Indiana Public Service Company; Northern States Power Company-Minnesota; Northern States Power Company-Wisconsin; Otter Tail Power Company; and Southern Indiana Gas \& Electric Company.
${ }^{21}$ Ark. Elec. Coop. Corp. v. ALLETE, Inc., 151 FERC 961,219 , at P 1 (2015) (MISO II Hearing Order), order on reh'g, 156 FERC 1 61,061 (2016) (MISO II Rehearing Order).

[^3]upper bound of the zone of reasonableness. The participants filed briefs on and opposing exception, which are currently pending before the Commission.

## D. Emera Mainc

8. On April 14, 2017, the D.C. Circuit issued its Emera Maine decision, vacating and remanding Opinion No. 531 et seq. As an initial matter, the D.C. Circuit rejected New England TOs' argument that an ROE within the DCF-produced zone of reasonableness could not be deemed unjust and unreasonable. The D.C. Circuit explained that the zone of reasonableness established by the DCF is not "coextensive" with the "statutory" zone of reasonableness envisioned by the FPA. ${ }^{25}$ Accordingly, the D.C. Circuit concluded that the fact that New England TOs' existing ROE fell within the zone of reasonableness produced by the DCF did not necessarily indicate that it was just and reasonable for the purposes of the FPA. ${ }^{26}$
9. Nevertheless, the D.C. Circuit found that the Commission had not adequately shown that their existing ROE was unjust and unreasonable. The D.C. Circuit explained that the FPA's statutory "zone of reasonableness creates a broad range of potentially lawful ROEs rather than a single just and reasonable ROE" and that whether particular ROE is unjust and unreasonable depends on the "particular circumstances of the case." 27 Thus, the fact that New England TOs' existing ROE did not equal the just and reasonable ROE that the Commission would have set using the current DCF inputs did not necessarily indicate that New England TOs' existing ROE fell outside the statutory zone

[^4]of reasonableness. ${ }^{28}$ As such, the D.C. Circuit concluded that Opinion No. 531 "failed to include an actual finding as to the lawfulness of [New England TOs'] existing base ROE" and that its conclusion that their existing ROE was unjust and unreasonable was itself arbitrary and capricious. ${ }^{29}$
10. The D.C. Circuit found that the Commission had not adequately shown that the 10.57 percent ROE that it set was just and reasonable. Although recognizing that the Commission has the authority "to make 'pragmatic adjustments' to a utility's ROE based on the 'particular circumstances' of a case," the D.C. Circuit nevertheless concluded that the Commission had not explained why setting the ROE at the upper midpoint was just and reasonable. ${ }^{30}$ The D.C. Circuit noted, in particular, that the Commission relied on the alternative models and state-regulated ROEs to support a base ROE above the midpoint, but that it did not rely on that evidence to support an ROE at the upper midpoint. ${ }^{31}$ Similarly, the D.C. Circuit noted that the Commission had concluded that a base ROE of 9.39 percent-the midpoint of the zone of reasonableness-might not be sufficient to satisfy Hope and Bluefield or to allow the utility to attract capital, but that the Commission had not similarly explained how a 10.57 percent base ROE was sufficient to meet either of those conditions. Because the D.C. Circuit found that the Commission had not pointed to record evidence supporting the specific point at which it set New England TOs' ROE, the D.C. Circuit held that the Commission had not articulated the "rational connection" between the evidence and the rate that the FPA demands. ${ }^{32}$
11. Based on those two conclusions-that the Commission had not met its burden either under the first or the second prong of FPA section 206-the D.C. Circuit vacated and remanded Opinion No. 531 et seq. ${ }^{33}$ Thus, the current state of affairs concerning the -
${ }^{28} I d$. at 27 ("To satisfy its dual burden under section 206, FERC was required to do more than show that its single ROE analysis generated a new just and reasonable ROE and conclusively declare that, consequently, the existing ROE was per se unjust and unreasonable.').
${ }^{29}$ Id.
${ }^{30}$ Id. (quoting FPC v. Nat. Gas Pipeline Co., 315 U.S. 575, 586 (1942)).
${ }^{31}$ Id. at 29 ("FERC's reasoning is unclear. On the one hand, it argued that the alternative analyses supported its decision to place the base ROE above the midpoint, but on the other hand, it stressed that none of these analyses were used to select the 10.57 percent base ROE.").
${ }^{32} \mathrm{Id}$. at 28-30.
${ }^{33} \mathrm{Id}$. at 30.

MISO TOs' ROE is this: There are two currently pending complaints against their ROE, both of which have been fully litigated before a Presiding Judge. The D.C. Circuit vacated the Commission's determinations in Opinion No. 531, upon which the Commission relied extensively in its order on the First MISO Complaint (i.e. Opinion No. 551 ), meaning that Opinion No. 531 is no longer precedential, ${ }^{34}$ even though the Commission remains free to re-adopt those determinations on remand as long as it provides a reasoned basis for doing so. ${ }^{35}$ In the meantime, MISO TOs are continuing to collect their 10.32 percent ROE, although the Commission has broad remedial authority to correct its legal error in order to make whatever ROE it sets on rehearing effective as of the date of Opinion No. 551. ${ }^{36}$

## E. Briefing Order in New England TO ROE Proceedings

12. On October 16, 2018, the Commission issued an order proposing a methodology for addressing the issues that were remanded to the Commission in Emera Maine and establishing a paper hearing on whether and how this methodology should apply to the four complaint proceedings concerning the New England TOs' ROE. ${ }^{37}$ In that order, the Commission proposed to change its approach to determining base ROE by giving equal weight to four financial models, instead of primarily relying on the DCF methodology. The Commission stated that evidence indicates that investors do not rely on any one model to the exclusion of others. Therefore, relying on multiple financial models makes it more likely that our decision will accurately reflect how investors make their investment decisions.
13. Specifically, the Commission proposed to rely on three financial models that produce zones of reasonableness-the DCF model, the CAPM model, and the expected earnings model-to establish a composite zone of reasonableness. The zone of reasonableness produced by each model would be given equal weight and averaged to determine the composite zone of reasonableness. The Commission proposed a framework for using the composite zone of reasonableness in evaluating whether an existing base ROE remains just and reasonable.

[^5]14. For purposes of establishing a new just and reasonable base ROE when the existing base ROE has been shown to be unjust and unreasonable, the Commission proposed to rely on four financial models-the DCF model, the CAPM model, the expected earnings model, and the risk premium model-to produce four separate base ROE estimates that would then be averaged to produce a specific just and reasonable base ROE. The risk premium model produces a single numerical point rather than a range; therefore it cannot be used in establishing a composite zone of reasonableness.
15. The Commission established a paper hearing and directed the participants in the four complaint proceedings to submit briefs regarding this proposed new approach and how to apply it to those four proceedings.

## II. Determination

16. Below we describe how the Commission proposes to address, in the two proceedings involving the MISO TOs' ROE, the issues that the D.C. Circuit remanded to the Commission in Emera Maine. In short, we propose to adopt the same approach recently proposed in the Coakley Briefing Order, ${ }^{38}$ which gives equal weight to the results of the four financial models in the record instead of primarily relying on the DCF model. In relying on a broader range of record evidence to estimate MISO TOs' cost of equity, we can ensure that our chosen ROE is based on substantial evidence and bring our methodology into closer alignment with how investors inform their investment decisions.
17. We begin with the Commission's proposed framework for determining whether an existing ROE remains just and reasonable (i.e., the first prong of the FPA section 206 analysis). Specifically, we propose, (1) relying on the three financial models that produce, zones of reasonableness-the DCF, CAPM, and Expected Earnings models- to establish a composite zone of reasonableness; and (2) relying on that composite zone of reasonableness as an evidentiary tool to identify a range of presumptively just and reasonable ROEs for utilities with a similar risk profile to the targeted utility. Under this approach, we would dismiss an ROE complaint if the targeted utility's existing ROE falls within the range of presumptively just and reasonable ROEs for a utility of its risk profile unless that presumption is sufficiently rebutted.
18. We then turn to the Commission's proposed framework for establishing a new just and reasonable ROE, where the existing ROE has been shown to be unjust and unreasonable (i.e., the second prong of the FPA section 206 analysis). At that stage, we propose to rely on all four financial models in the record-i.e., the three listed above, plus the Risk Premium model ${ }^{39}$-to produce four separate cost of equity estimates. We

[^6]propose to then give them equal weight by averaging the four estimates to produce the just and reasonable ROE. For each of the DCF, CAPM, and Expected Earnings models, we propose to use the central tendency of the respective zones of reasonableness as the cost of equity estimate for average risk utilities. ${ }^{40}$ We would then average those three midpoint/median figures with the sole numerical figure produced by the Risk Premium model to determine the ROE of average risk utilities. We would use the midpoint/medians of the resulting lower and upper halves of the zone of reasonableness to determine ROEs for below or above average risk utilities, respectively. Because our current policy is to cap a utility's total ROE, i.e., its base ROE plus incentive ROE adders, at the top of the zone of reasonableness, we propose to use the composite zone of reasonableness produced by the DCF, CAPM, and Expected Earnings to establish the cap on a utility's total ROE.
19. After explaining our proposed frameworks for the first and second prongs of our FPA section 206 analysis, we then perform an illustrative calculation using record evidence from the First Complaint proceeding. That calculation indicates that, for the time period at issue in the First Complaint, (1) the range of presumptively just and reasonable ROEs for MISO TOs is 9.55 percent to 10.95 percent; (2) MISO TOs' preexisting ROE of 12.38 percent is therefore unjust and unreasonable; (3) the just and reasonable ROE is 10.28 percent; and (4) the cap on MISO TOs' total ROE is 13.06 percent. However, these findings are merely preliminary.
20. We conclude by establishing a paper hearing on whether and how our proposed frameworks should apply to the two complaint proceedings involving MISO TOs' ROE. In this order, as in the Coakley Briefing Order, we do not make any final determinations with respect to the proposed new methodology for analyzing the base ROE component of rates under section 206 of the FPA. The scope of the paper hearing established in this order includes all aspects of this order's proposed methodology. Accordingly, the briefs directed by this order may address the justness and reasonableness of any aspect of the
be used to determine a zone of reasonableness. Accordingly, we propose to use the Risk Premium model output in the second prong of the FPA section 206 analysis where we determine a specific just and reasonable ROE, but not in the first prong of the analysis, which requires models that produce a range that can be used to determine a zone of reasonableness.
${ }^{40}$ The Commission will continue to use the midpoint of the zone of reasonableness as the appropriate measure of central tendency for a diverse group of average risk utilities and the median as the measure of central tendency for a single utility. See Coakley Briefing Order, 165 FERC $\$ 61,030$ at P 17 n. 46. See also S. Cal. Edison Co., 131 FERC ${ }^{\text {I }} 61,020$, at P 91 (2010), remanded on other grounds sub nom. $S$. Cal. Edison Co. v. FERC, 717 F.3d 177, 183-87 (D.C. Cir. 2013).
proposed methodology. The participants are free to present evidence supporting the proposed new methodology or supporting a different or revised new methodology.

## A. Determining Whether an Existing ROE has Become Unjust and Unreasonable

21. In this section, we describe the approach recently explained in the Coakley Briefing Order, which represents the Commission's new proposed approach for determining whether an existing ROE remains just and reasonable. ${ }^{4}$ That new approach reflects the Commission's proposed policy for addressing this issue in the proceedings currently pending before the Commission. Before outlining that approach, however, we review the guidance that the D.C. Circuit has provided regarding this task.

## 1. Background

22. The D.C. Circuit has explained that, to satisfy the first prong of an FPA section 206 inquiry into an ROE, the Commission must "make an explicit finding that [an] existing [ROE is] unjust and unreasonable before proceeding to set a new rate." ${ }^{, 42}$ Although Emera Maine held that a difference between the existing ROE and the just and reasonable ROE that the Commission would set under current circumstances is, by itself, insufficient to show that the existing ROE is unjust and unreasonable, the D.C. Circuit has also held that a comparison between the existing ROE and the just and reasonable ROE that the Commission would establish under current circumstances is relevant-and, in some cases, determinative-for whether the existing ROE remains just and reasonable. ${ }^{43}$ In addition, the D.C. Circuit has explained that, although showing that an existing ROE is entirely outside a zone of reasonableness produced by a.financial model, such as the DCF methodology, is one way of demonstrating that an existing ROE is unjust and unreasonable, it is not the only way in which the Commission can satisfy its
${ }^{41}$ Coakley Briefing Order, 165 FERC $\mathbb{1} 61,030$ at P 19.
${ }^{42}$ Emera Maine, 854 F.3d at 24.
${ }^{43}$ Papago Tribal Util. Auth. v. FERC, 723 F.2d 950, 957 (D.C. Cir. 1983) (Papago) (concluding that the difference between the existing ROE and the just and reasonable ROE that the Commission would have set was sufficient as a matter of law to show the existing rate was unjust and unreasonable); see also Emera Maine, 854 F.3d at 26 (explaining that the Commission's "finding that 10.57 percent was a just and reasonable ROE, standing alone, 'did not amount to a finding that every other rate of return was not"" (citing Papago, 723 F.2d at 957) (emphasis added)).
burden under the first prong of FPA section 206. ${ }^{44}$ The Commission may also find that an existing ROE-even one that is within the zone of reasonableness produced by its financial analysis-is unjust and unreasonable based on the "particular circumstances" of the case. ${ }^{45}$
23. The D.C. Circuit has not discussed in detail what "particular circumstances" are relevant to that determination in the context of an FPA section 206 proceeding. Nevertheless, it has, in the context of an FPA section 205 proceeding, noted factors that may be relevant to determining whether an ROE is just and reasonable. ${ }^{46}$ Chief among those factors is the company's risk profile, with a riskier profile indicating that a higher ROE may be appropriate. ${ }^{47}$ As the Supreme Court explained in Hope, when describing what has become the standard for evaluating whether an ROE is just and reasonable under the FPA, a utility's ROE "should be commensurate with returns on investments in other enterprises having corresponding risks," ${ }^{48}$ Indeed, the D.C. Circuit has explained that failing to consider a utility's risk profile, at least relative to the proxy group

[^7]${ }^{48}$ Hope, 320 U.S. 591 at 603 (emphasis added); Petal Gas, 496 F.3d at 698 (discussing this standard in the context of whether rates are just and reasonable).
companies, can itself be arbitrary and capricious. ${ }^{49}$ In addition, the D.C. Circuit has noted that financial considerations, such as the state of the capital markets, the financial condition of the utility in question, and other "financial risks" may also be relevant. ${ }^{50}$

## 2. Proposed Approach

24. As recently proposed in the Coakley Briefing Order, here, we also propose to adopt a new framework for evaluating whether an existing ROE remains just and reasonable for purposes of the first prong of FPA section 206. In sum, we propose to establish a range of presumptively just and reasonable ROEs, within the zone of reasonableness indicated by the record evidence. As explained below, this framework reflects the D.C. Circuit's guidance, both in Emera Maine as well as in the D.C. Circuit's other decisions regarding the determination of a just and reasonable ROE.
25. The Commission has long relied on a financial model to guide its evaluation of whether an ROE is just and reasonable. ${ }^{51}$ As explained below, we propose to continue using an analysis of the relevant financial considerations to establish an initial zone of reasonableness. However, as the D.C. Circuit observed in Emera Maine, even where the Commission's financial analysis produces an initial zone of reasonableness, the presence of that record evidence is not necessarily the end of the inquiry, and it is not a proxy for the just and reasonable standard in the FPA. Instead, the Commission may look to the particular circumstances of the case to determine whether an ROE-even one that falls within that zone - is just and reasonable for purposes of the first prong of FPA section $206 .{ }^{52}$
26. Consistent with the Commission's established practice and the D.C. Circuit's guidance, we continue to find that a utility's risk profile remains the "particular

[^8]circumstance[]" most relevant to determining whether a point within a zone of reasonableness is a just and reasonable ROE for that utility. In particular, as noted, the courts have held that, to be just and reasonable, an ROE must be "commensurate" with the returns on investments in other enterprises having "corresponding risks." By the same token, an ROE-even one within the zone of reasonableness-that is not commensurate with the returns on investments in other enterprises having "corresponding risks" will not be just and reasonable. Accordingly, we conclude that a utility's relative risk profile should be the most critical consideration when identifying the "broad range of potentially lawful ROEs" that Emera Maine contemplates within the overall zone of reasonableness produced by the DCF when determining whether an existing ROE remains unjust and unreasonable.
27. The Commission has historically accounted for a utility's risk profile in two ways. First, it has attempted to compare that utility to other utilities facing similar risks by establishing a proxy group of comparable risk companies. Thus, for example, the Commission has limited the composition of the proxy group to utilities with a credit rating similar to that of the utility in question. ${ }^{53}$ Second, recognizing that, nevertheless, the particular circumstances facing a utility may differ from some or all of the proxy group companies, the Commission has adjusted the ROE within the zone of reasonableness derived from the proxy group, increasing the ROE for a riskier utility and decreasing it for one that is less risky. Thus, as the D.C. Circuit explained in Emera Maine, the Commission has in multiple instances set a utility's ROE at the midpoint of the upper half of the zone reasonableness after finding "that the utility at issue was riskier than the proxy group, meaning that the utility's costs fell somewhere above the midpoint of the zone of reasonableness." ${ }^{5.5}$ The D.C. Circuit has approved this approach, noting that, when dealing with a relatively risky utility, "the midpoint of the upper half [of the zone of reasonableness] was 'an obvious place to begin"' the analysis of what constitutes a just and reasonable ROE. ${ }^{55}$ Similarly, the Commission has also held that, where a utility's risks are significantly less than those of the proxy group companies, an ROE at the relevant measure of central tendency for the lower half of the zone of reasonableness represents a just and reasonable ROE. ${ }^{56}$

[^9]28. Those longstanding determinations form the basis of the Commission's proposal to evaluating whether an existing ROE may be found unjust and unreasonable under the first prong of FPA section 206. In particular, we believe that the principal consideration for determining whether an existing ROE within the overall zone of reasonableness has become unjust and unreasonable is the risk profile of the utility or utilities for which the Commission is setting the ROE. This is consistent with the Commission's wellestablished policy on relative risk analysis, in which the presumptively just and reasonable ROE for an average-risk utility is the relevant measure of central tendency for the entire zone of reasonableness while the presumptively just and reasonable ROE for an above- or below-average risk utility is the relevant measure of central tendency for either the upper or lower half of the zone of reasonableness, respectively. Following that approach, logic dictates that it typically would be unjust and unreasonable for an averagerisk utility to receive an ROE that is closer to the ROE that would be just and reasonable for a utility of above- or below-average risk.
29. With these principles in mind, we believe that, for an average risk utility, the "broad range of potentially lawful ROEs" that the D.C. Circuit contemplated in Emera Maine should correspond to those points that are closer to the ROE that the Commission would set for that utility than to the ROE for a utility of a different risk profile. As illustrated below in Figure 1, for a diverse group of average risk utilities, such as MISO TOs, this range constitutes one quarter of the zone of reasonableness, centered on the midpoint. Every potential ROE within that range is closer to the current just and reasonable ROE for an average-risk utility than the current just and reasonable ROE for a utility of a different risk profile. ${ }^{57}$

Figure 1: Zone of Reasonableness Quartiles


[^10]30. Pursuant to this framework, a finding that the existing ROE of an average risk utility falls within the applicable range of presumptively just and reasonable ROEs (in the case of an average risk utility, the middle quartile of the newly-calculated zone of reasonableness) ${ }^{58}$ would support a holding that the existing ROE has not been shown to be unjust and unreasonable under the first prong of FPA section 206, at least absent additional evidence to the contrary. By the same token, a finding that the existing ROE of an average risk utility falls outside that range may support a holding that that the ROE has become unjust and unreasonable.
31. In evaluating whether an existing ROE has become unjust and unreasonable, the Commission may, in addition to applying the above framework, consider other indications of a change in capital market conditions since the existing ROE was established. For example, since the existing ROE was established, a significant decrease in financial indicators, such as prime interest rates and U.S. Treasury and public utility bond yields as well as changes in the returns on investments in other enterprises having corresponding risks, may indicate that the existing ROE has become unjust and unreasonable. A utility's cost of equity is determined, at least in part, by comparison with other potential investments. As the return on those investments fluctuates, so too will the utility's cost of equity and, by extension, the ROE needed to service that cost of equity.
32. Lastly, it is important to explain how we propose to calculate the predicate, evidentiary zone of reasonableness that we will use to identify the range of presumptively just and reasonable ROEs. The Commission previously relied solely on the DCF model to produce the evidentiary zone of reasonableness. As explained below, we are concerned that relying on that methodology alone will not produce just and reasonable results. Therefore, we propose to expand the evidence on which we rely. Specifically, we propose to use the composite zone of reasonableness produced by the DCF, CAPM, and Expected Earnings models. Each of these three methodologies relies on a proxy group to determine a zone of reasonableness, and thus the top and bottom of the zone of reasonableness produced by each methodology can be averaged to determine a single composite zone of reasonableness. After determining the composite zone of reasonableness, we would then calculate the lower midpoint/median, midpoint/median, and upper midpoint/median of that zone. The presumptively just and reasonable ROEs for below-average-, average-, and above-average-risk utilities would then be the quartile of the zone corresponding to the lower midpoint/median, midpoint/median, and upper midpoint/median, respectively.
${ }^{58}$ Similarly, for a utility of above-average risk, the zone of presumptively just and reasonable ROEs is the quartile centered on the upper midpoint/median; for a utility of below-average risk, the zone of presumptively just and reasonable ROEs is the quartile centered on the lower midpoint/median.
33. As discussed below, because we are proposing to adopt a new approach to meeting the Commission's burden under the first prong of the FPA section 206 inquiry, we will institute a paper hearing on whether and how our approach should apply to the records assembled in the two complaints against MISO TOs' ROE.

## B. Determining a Just and Reasonable ROE

34. The Commission has relied upon the DCF methodology to determine a just and reasonable ROE for a public utility since the 1980s. However, as the D.C. Circuit has repeatedly observed, the Commission is not required to rely upon the DCF methodology alone or even at all. ${ }^{59}$ For the reasons that follow, we believe that, in light of current investor behavior and capital market conditions, relying on the DCF methodology alone will not produce a just and reasonable ROE. Instead, we propose to rely upon the results of all four financial models in the records for these proceedings: the DCF, CAPM, Expected Earnings, and Risk Premium models. We propose to give each of those four models equal weight by calculating a single cost of equity estimate for each model and then averaging those four figures together to produce the just and reasonable ROE. To determine the cost of equity figure for average risk utilities using the DCF, CAPM, and Expected Earnings models, we propose to calculate the midpoint or median of the zone of reasonableness produced by each model, depending upon whether we are determining the ROE of a diverse group of utilities or a single utility. Those three midpoint/median figures would then be averaged with the single numerical figure produced by the Risk Premium model. We propose to use the midpoint/medians of the resulting lower and upper halves of the zone of reasonableness to determine ROEs for below or above average risk utilities, respectively.

## 1. Use of Multiple Financial Models

35. In Hope, the Supreme Court held that "the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial
${ }^{59}$ Tenn. Gas, 926 F.2d at 1211 (explaining that the Commission is free to reject the DCF methodology, provided it adequately explains its reasons for doing so); Elec. Consumers Res. Council v. FERC, 747 F.2d 1511 , 1514 n. 6 (D.C. Cir. 1984) ("neither statutes nor decisions of this court require that the Commission utilize a particular formula or a combination of formulae to determine whether rates are just and reasonable"); NEPCO, 668 F.2d at 1345 ("FERC is not bound 'to the service of any single formula or combination of formulas."' (quoting FPC v. Natural Gas Pipeline Co., 315 U.S. at 586)); see also Emera Maine, 854 F.3d at 27 (noting that the Commission has authority to make "'pragmatic adjustments' to a utility's ROE" based on the facts of the particular case (quoting FPC v. Nat. Gas Pipeline Co., 315 U.S. at 586)).
integrity of the enterprise, so as to maintain its credit and to attract capital."60 Thus, a key consideration in determining just and reasonable utility ROEs is determining what ROE a utility must offer in order to attract capital, i.e., induce investors to invest in the utility in light of its risk profile. ${ }^{61}$ As the Commission stated in Opinion No. 414-B, ${ }^{62}$ "the cost of common equity to a regulated enterprise depends upon what the market expects not upon precisely what is going to happen." ${ }^{63}$ Thus, in determining what ROE to award a utility, we must look to how investors analyze and compare their investment opportunities.
36. The record in these proceedings includes four traditional methods investors may use to estimate the expected return from an investment in a company. These are the DCF, CAPM, Expected Earnings, and Risk Premium methodologies. ${ }^{6 \dagger}$ The DCF analysis provides a market-based approach based upon market-determined dividend yields and expected dividend growth. The CAPM provides a market-based approach determined by beta, a measure of the risk based upon the volatility of a company's stock price over time in comparison to the overall market, and the risk premium between the risk-free rate (generally, long-term U.S. Treasury bonds) and the market's return (generally, the return of the S\&P 500 or another broad indicator for common stocks). The Expected Earnings methodology provides an accounting-based approach that uses investment analyst estimates of return (net earnings) on book value (the equity portion of a company's overall capital, excluding long-term debt). Finally, the Risk Premium methodology is a market-oriented methodology based on the premium investors require above the return they expect to earn on a bond investment to reflect the greater risk of a stock investment. In New Regulatory Finance, a leading academic text, Roger Morin explains that none of these methods "conclusively determines or estimates the expected return for an individual firm. Each methodology possesses its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Each

[^11]method proceeds from different fundamental premises that cannot be validated empirically. ${ }^{\text {"65 }}$
37. Investors have varying preferences as to which of these or other methods they may use to inform their investment decisions. As Morin states, "Investors do not necessarily subscribe to any one method, nor does the stock price reflect the application of any one single method by the price-setting investor. There is no monopoly as to which method is used by investors." ${ }^{\text {" }}$. While some investors may give some weight to a DCF analysis, it is clear that other investors place greater weight on one or more of the other methods for estimating the expected returns from a utility investment, as well as taking other factors into account. Thus, cost of equity estimates based on all four of the methods described above are a reasonable measure of investor expectations, since they are among the information that investors rely upon when making investment decisions. ${ }^{67}$
38. In these circumstances, we believe that averaging the results of the three methods that produce zones of reasonableness-the DCF, CAPM, and Expected Earnings methodologies-will produce a composite zone of reasonableness that most accurately

[^12]captures the cost of equity ${ }^{68}$ that informs the ROE that the Commission must award to a utility so that the ROE can provide the return to investors necessary to satisfy their expectations. Additionally, the Risk Premium methodology should be included in the calculation of the average return of the composite zone of reasonableness for the same reason. Giving equal weight to all four of these methodologies in determining a utility's ROE is supported by Morin:

In the absence of any hard evidence as to which method outdoes the other, all relevant evidence should be used and weighted equally, in order to minimize judgmental error, measurement error, and conceptual infirmities. A regulator should rely on the results of a variety of methods applied to a variety of comparable groups, and not on one particular method. There is no guarantee that a single DCF result is necessarily the ideal predictor of the stock price and of the cost of equity reflected in that price, just as there is no guarantee that a single CAPM or Risk Premium result constitutes the perfect explanation of that stock price. ${ }^{69}$
39. Record testimony also supports using multiple methodologies to determine a utility's ROE. For example, Mr. Adrien M. McKenzie testified on behalf of MISO TOs that "the Commission should consider alternative methods and ROE benchmarks in all conditions and in all cases, because the DCF model - like any model . . . is not infallible." ${ }^{70}$ Similarly, Ms. Ellen Lapson testified on behalf of MISO TOs that "it is wise to consider a broader set of evidence from alternate models and methods of estimating investors' cost of equity . . . . Although all such methods are potentially subject to error, the use of multiple models that are based on different underlying assumptions provides a check on the reasonableness of the results of the DCF model and the placement of the [MISO TOs'] base ROE with the DCF range."71
${ }^{68}$ A utility's cost of equity is the return that the utility must provide its shareholders in order to induce them to invest their capital in that utility. A utility's ROE is the return that the utility generates by using that invested capital in its operations.
${ }^{69}$ Morin at 429.
${ }^{70}$ Docket No. EL15-45-000, Ex. MTO-22 at 21 ; see also Docket No. EL15-45000, Tr. 283:16-284:2 (McKenzie) (explaining "that alternative benchmarks should be considered, even when conditions are not anomalous....[as] that's widely done in other jurisdictions. And I think given the fact that no particular method is infallible, it makes sense to check the results of any method with the results of other approaches.").
${ }^{71}$ Docket No. ELI4-12-001, Ex. MTO-39 at 37.
40. Moreover, any methodology has the potential for errors or inaccuracies. Therefore, relying exclusively on any single methodology increases the risk that the Commission could authorize an unjust and unreasonable ROE. For example, in discussing "model risk," Mr. McKenzie explained that "when conditions associated with a model are outside of the normal range, there is a risk . . . that the theoretical model will fail to predict or represent the real phenomenon that is being modeled."72 There is significant evidence indicating that combining estimates from different models is more accurate than relying on a single model. ${ }^{73}$ We conclude that, by providing four different approaches to estimating the cost of equity and determining ROEs, using these models together reduces the risk associated with relying on only one model; that is, the risk of misidentifying the just and reasonable ROE by relying on a flawed cost of equity estimate.
41. In the briefs directed by this order, the participants may address the merits of these models and whether there should be any adjustments in the manner these models were implemented in Opinion No. 551. In Opinion No. 551, the Commission emphasized that it was using the alternative methodologies only for the purpose of corroborating the

[^13]decision to place the ROE above the midpoint of the zone of reasonableness, ${ }^{74}$ and therefore, in discussing the alternative methodologies, the Commission explained that it was "appropriate to look at other record evidence to inform the just and reasonable placement of the ROE within the zone of reasonableness produced by the DCF methodology., ${ }^{75}$ The fact that the Commission is now proposing to give equal weight to the alternative models along with the DCF methodology raises the issue of whether there should be any adjustments in how we implement them.

## 2. Difficulties with Sole Reliance on the DCF Methodology

42. Our proposal to rely on multiple methodologies in these two complaint proceedings is based on our conclusion that the DCF methodology may no longer singularly reflect how investors make their decisions. We believe that, since we adopted the DCF methodology as our sole method for determining utility ROEs in the 1980s, investors have increasingly used a diverse set of data sources and models to inform their investment decisions. ${ }^{76}$ Investors appear to base their decisions on numerous data points and models, including the DCF, CAPM, Risk Premium, and Expected Earnings methodologies. ${ }^{77}$ As demonstrated in Figure 2 below, which shows the ROE results

[^14]from the four models over the two test periods at issue in these proceedings, ${ }^{78}$ the DCF model does not always correspond to movements or lack thereof in other models. In addition, as illustrated in the Coakley Briefing Order, over longer periods, the four models can diverge from each other even more, underscoring the problem of only relying on one of them. ${ }^{79}$ In fact, in some instances, their cost of equity estimates may move in opposite directions over time. Although we recognize the greater administrative burden on parties and the Commission to evaluate multiple models, we believe that the DCF methodology alone no longer captures how investors view utility returns because investors do not rely on the DCF alone and the other methods used by investors do not necessarily produce the same results as the DCF. Consequently, it is appropriate for our analysis to consider a combination of the DCF, CAPM, Risk Premium, and Expected Earnings approaches.

Figure 2: ROE Results from ROE Models


[^15]43. During the periods used for the DCF analyses in these two complaint proceedings, capital market conditions differed significantly from those during the mid-1980s, when the Commission began relying exclusively on the DCF methodology to set ROEs, through the mid-2000s, when the Commission set MISO TOs' preexisting 12.38 percent ROE. For example, except for brief periods in 2002-2004, the 10 -year U.S. Treasury bond never fell below 4.00 percent during that entire period until January 2008, and its lowest rate was 3.33 percent in June 2003.
44. In contrast, the 10-year U.S. Treasury bond rates, beginning with the recession of 2008/2009 and continuing through the periods at issue in these proceedings, are the lowest since the early $1960 \mathrm{~s} .{ }^{80}$ In December 2008, the 10 -year U.S. Treasury bond rate fell below 3.00 percent for the first time since June $1958{ }^{81}{ }^{81}$ During the six-month periods used for the DCF analyses in these two complaint proceedings, the 10 -year U.S. Treasury bond rate was always below 2.50 percent. During the January to June 2015 period at issue in the First Complaint, the 10 -year U.S. Treasury bond rate ranged from 1.88 to 2.36 percent. ${ }^{82}$ During the July to December 2015 period at issue in the Second Complaint, the 10 -year U.S. Treasury bond rate ranged from 2.07 to 2.32 percent. ${ }^{83}$
45. In Opinion No. 551, the Commission relied on the low 10-year U.S. Treasury bond yields during the January to June 2015 period to find that capital market conditions were "anomalous" during that period. ${ }^{84}$ The Commission found that, in those circumstances, the Commission had "less confidence" that the midpoint of the zone of reasonableness determined by the DCF analysis satisfied the Hope and Bluefield capital attraction standards. ${ }^{85}$ The Commission then considered the alternative cost of equity

[^16]models to corroborate the Commission's determination to set MISO TOs' ROE "at a point above the midpoint" of the DCF analysis' zone of reasonableness, i.e., the midpoint of the upper half of the zone. ${ }^{86}$ However, the Commission emphasized that it was not departing from the use of the DCF methodology to determine the zone of reasonableness. ${ }^{87}$ At the hearings on the Second Complaint, the participants devoted a substantial portion of their evidentiary presentations to debating whether the continuing low-interest rate capital market conditions should be considered "anomalous" and whether those conditions distort the results of a DCF analysis. ${ }^{88}$
46. Those issues are largely irrelevant under the approach to determining just and reasonable ROEs that we are proposing in this order. Under this approach, we are averaging the cost of equity results produced by the DCF model and the other three models, using the midpoint/medians of the models that produce zones of reasonableness, to get one average figure for the cost of equity. We are not making an adjustment above the midpoint/median as we did in Opinion No. 551. There is thus no need to find that low-interest rate capital market conditions distort the results of a DCF analysis so as to justify adjusting the ROE for average risk utilities above the midpoint. To the contrary, our primary reason for proposing to average the results of a DCF analysis with the results of the CAPM, Expected Earnings, and Risk Premium analyses is that investors use those models, in addition to the DCF methodology, to inform their investment decisions. Under this approach, whether a change in the capital market conditions is anomalous or persistent is of less importance, because relying on multiple financial models makes it more likely that our decision will accurately reflect how investors are making their investment decisions. As discussed above, a key consideration in determining just and reasonable utility ROEs is determining what ROE a utility must offer in order to attract capital, i.e., induce investors to invest in the utility in light of its risk profile. For this purpose, we must look to the methods investors use to analyze and compare their investment opportunities in determining what ROE to award a utility consistent with the Hope and Bluefield capital attraction standards, and those methods include methods other than the DCF methodology.
47. We also note that, in recent years, utility stock prices appear to have performed in a manner inconsistent with the theory underlying the DCF methodology. ${ }^{89}$ Under that theory, increases in a company's actual earnings or projected growth in earnings would

[^17]ordinarily be required to justify an increase in the company's stock price. However, as described in the Coakley Briefing Order, although the Dow Jones Utility Average increased by almost 70 percent from October 1, 2012 through December 1, 2017, there was not an increase in either utility earnings or projected earnings during that period that would justify the substantial increase in stock prices. This is an example of what MISO TOs have described as "model risk" - the risk that in some circumstances a model will produce results that do not reflect real world experience. ${ }^{90}$ It appears that, for whatever the reason, investors have seen greater value in utility stocks than the DCF methodology would predict. This suggests that the ROE estimated by that methodology may be correspondingly inaccurate.
48. We are also generally concerned with the low number of current IBES three to five-year earnings growth projections available for use in a two-step DCF analysis. The Commission has based the short-term growth projection in the two-step DCF analysis on IBES three to five year earnings growth projections because those growth projections represent the consensus projection of a number of investment analysts. ${ }^{91}$ For example, the Commission's 1999 decision in Northwest found that the IBES data "reflects an average of numerous projections of short-term growth of the proxy companies."92 In that same decision, the Commission rejected the use of Value Line growth projections because those projections are made by a single analyst. ${ }^{93}$ Although IBES growth projections represented a consensus in the past, we are concerned that they may not reflect as robust a consensus, or perhaps any consensus, now. The majority of investment analysts that make and publish quarterly and annual earnings estimates no longer make and publish three-to-five year short-term projections of earnings growth. The Coakley

[^18]${ }^{92}$ Northwest, 87 FERC at 62,059 (emphasis added).
${ }^{93} \mathrm{Id}$.

Briefing Order described evidence that in recent years the IBES data for many proxy companies have reflected only one to three analyst short-term growth projections. ${ }^{94}$
49. The reduced number of current IBES growth projections raises the question of whether the IBES growth rates reflect a consensus among investors. Further, the reduced number of short-term growth projections means that a significant change in a single analyst's growth projection for a particular proxy company can have a major effect on the DCF analysis result for that company. ${ }^{95}$ Accordingly, the decreased number of shortterm growth projections necessary to perform a DCF analysis of the proxy companies reduces our confidence in the results of that analysis and its suitability as the sole basis for our ROE determinations. However, because at least some investors continue to use the DCF model, we believe that it is reasonable to give that model some weight, along with other models used by investors, in the overall approach to determining ROE proposed in this order.

## 3. Proxy Groups to be used for DCF, CAPM, and Expected Earnings Analyses

50. As described above, three of the four methodologies that we discussed above for determining the cost of equity use proxy groups to determine a range of reasonable returns. These include the DCF, CAPM, and Expected Earnings analyses. In selecting these proxy groups, the Commission intends to continue to use the same screens for developing a proxy group as the Commission has used in recent cases, including Opinion Nos. $531^{96}$ and $551 .{ }^{97}$ These screens are: (1) the use of a national group of companies considered electric utilities by Value Line; ${ }^{98}$ (2) the inclusion of companies with credit ratings no more than one notch above or below the utility or utilities whose ROE is at issue; ${ }^{99}$ (3) the inclusion of companies that pay dividends and have neither made nor

[^19]announced a dividend cut during the six month study period; ${ }^{\text {to0 }}$ (4) the inclusion of companies with no merger activity during the six-month study period that is significant enough to distort the study inputs; ${ }^{101}$ and (5) companies whose ROE results pass threshold tests of economic logic, including both a low-end outlier test and a high-end outlier test, as discussed below.
51. The first four screens listed above evaluate particular characteristics of the companies in question that do not vary depending upon the results of the DCF, CAPM, or Expected Earnings analyses. Accordingly, those screens may be used to develop a single group of proxy companies eligible for inclusion in the proxy group to be used for the purposes of DCF, CAPM, and Expected Earnings analyses, subject to the availability of data such as three-to-five year growth rates, betas, and earnings estimates, respectively. However, application of the last screen-whether the company's cost of equity estimate passes threshold tests of economic logic-depends upon the cost of equity estimate each of the three models produces. Thus, in determining the zone of reasonableness produced by each of these models, the low-end and high-end outlier tests must be applied separately to each model.
52. Under the low-end outlier test, the Commission excludes from the proxy group companies whose ROE fails to exceed the average 10 -year bond yield by approximately 100 basis points, taking into account any natural break between the cost of equity estimates of the companies excluded from the proxy group and the lowest cost of equity estimate of the companies included in the proxy group. ${ }^{102}$ The Commission excludes these low-end outliers on the ground that investors generally cannot be expected to purchase a common stock if debt, which has less risk than a common stock, yields essentially the same expected return. ${ }^{103}$ The Commission will continue to use this test for . purposes of the CAPM and Expected Earnings analyses as well as the DCF analysis.
53. As noted in the Coakley Briefing Order with respect to use of the high-end outlier test, neither the CAPM nor Expected Earnings analyses include a long-term growth projection based on GDP that would normalize the ROEs produced by the model, similar to that used in the two-step DCF methodology. Moreover, the Commission recognizes that in unusual circumstances the two-step DCF methodology may produce unsustainably high results for a particular proxy company. Accordingly, given these facts and our decision to give the same weight to the CAPM and Expected Earnings analyses as to the

[^20]DCF analysis, we believe that a high-end outlier test should be applied to the results of each of these three methods.
54. Consistent with the Coakley Briefing Order, we propose to treat as high-end outliers any proxy company whose cost of equity estimated with a given model is more than 150 percent of the median result of all of the potential proxy group members in that model before any high or low-end outlier test is applied, subject to a "natural break" analysis similar to the approach the Commission uses for low-end DCF analysis results. ${ }^{104}$ This test should identify those companies whose cost of equity under the model in question is so far above the cost of equity of a typical proxy company as to suggest that it is the result of atypical circumstances not representative of the risk profile of a more normal utility.
55. To illustrate how this high-end outlier test would be applied, in the First Complaint, this test would exclude two companies from the proxy group used for the Expected Earnings analysis. The median ROE under that methodology of all the companies eligible for inclusion in the proxy group after applying the first four screens described above is 10.20 percent. One hundred fifty percent of 10.20 percent is 15.30 percent. Dominion Resources Inc.'s (Dominion) and ITC Holding Corp.'s (ITC Holdings) cost of equities under the Expected Earnings analysis are 18.24 percent and 16.37 percent, respectively, and therefore this test would exclude Dominion and ITC Holdings in the determination of the Expected Earnings zone of reasonableness for the First Complaint. The next highest Expected Earnings ROEs in that proceeding is 15.21 percent for Vectren Corp. Thus, there is a 116 basis point break between ITC Holding's 16.37 percent ROE and Vectren Corp's 15.21 percent, which is large enough to constitute a significant break under the'proposed high-end outlier test. In the First Complaint, this high-end outlier test does not eliminate any company from the proxy groups used in the DCF or CAPM analyses. The elimination of such outliers is particularly important where the Commission uses the midpoint of the zone of reasonableness because a single outlier can dramatically affect the resulting ROE.

## C. Preliminary Results of Applving Proposed Approach to the First Complaint

56. Having described, above, our proposed approaches to determining whether (1) an existing ROE is unjust and unreasonable under the first prong of FPA section 206 and (2) if so, what the replacement ROE should be under the second prong of FPA section 206, we now explain how those approaches would apply in the First Complaint. This description represents the Commission's preliminary determinations as to how we should resolve the issues remanded by the D.C. Circuit in Emera Maine. However, as described in the next section, we are also directing participants to file briefs regarding our proposed

[^21]approaches to the FPA section 206 inquiry and how they should apply to the Second Complaint.
57. Under our proposed framework for determining whether MISO TOs' preexisting 12.38 percent ROE is unjust and unreasonable under the first prong of FPA section 206, we must first determine what a composite zone of reasonableness would be. For this purpose, we find that the DCF zone of reasonableness, as determined in Opinion No. 551 based on financial data from the period January to June 2015, is 7.23 percent to 11.35 percent. ${ }^{105}$ Similarly, the CAPM zone of reasonableness as determined in Opinion No. 551 is 7.50 percent to 12.61 percent. ${ }^{106}$ With the adjustment discussed in the preceding section, the Expected Earnings approach's zone of reasonableness is 7.61 percent to 15.21 percent. Averaging these results, we determine that the composite zone of reasonableness is 7.45 percent to 13.06 percent. The top of this new composite zone of reasonableness would also determine the cap for the total ROE, i.e., the base ROE plus any ROE incentives.
58. It is undisputed that MISO TOs are of average risk. Accordingly, the range of presumptively just and reasonable ROEs for MISO TOs is the middle quartile of the composite zone of reasonableness. ${ }^{107}$ As discussed above, this represents the "broad range of potentially lawful ROEs" for MISO TOs that the D.C. Circuit contemplated in Emera Maine for purposes of determining whether an existing ROE is unjust and unreasonable under the first prong of FPA section 206. Here, that range specifically corresponds to the one quarter of the overall zone of reasonableness centered around the 10.26 percent midpoint of the zone of reasonableness. That quarter of the 7.45 percent to 13.06 percent zone of reasonableness is 9.55 percent to 10.95 percent. MISO TOs' preexisting 12.38 percent ROE is outside this range of potentially lawful ROEs; it is closer to the current just and reasonable ROE for a utility of above average risk than for utilities of average risk such as MISO TOs. This supports a finding that a 12.38 percent ROE is unjust and unreasonable for average risk utilities, such as MISO TOs. If any total ROEs-i.e., base ROE plus incentive ROE adders-exceed 13.06 percent, we would find those ROEs unjust and unreasonable as well.
59. Moreover, a finding that MISO TOs' preexisting 12.38 ROE has become unjust and unreasonable is buttressed by the substantial change in capital market conditions since the Commission established that ROE. The 12.38 percent ROE was based on a

[^22]DCF analysis using financial data from August 2001 to January 2002. ${ }^{108}$ During the August 2001 to January 2002 period, average Baa corporate bond yields ranged from 7.81 percent to 8.05 percent. By contrast, during the January to June 2015 period at issue in the First Complaint, Baa corporate bond yields ranged from 4.45 percent to 5.13 percent. The substantial reduction in Baa corporate bond yields since MISO TOs' preexisting 12.38 percent ROE was established buttresses a finding that capital market conditions have so changed as to render that ROE unjust and unreasonable. Based on these facts, we would reaffirm our holding in Opinion No. 551 that MISO TOs ${ }^{\text { }}$ preexisting ROE is unjust and unreasonable.
60. We thus turn to selecting a replacement just and reasonable ROE for MISO TOs. Under the approach outlined above, to select a replacement just and reasonable ROE, we average the central tendencies of the zones of reasonableness produced by the DCF, CAPM, and Expected Earnings analyses together with the estimated cost of equity produced by the Risk Premium method, with each figure being given equal weight. Accordingly, we average the 9.29 percent midpoint of the DCF analysis, the 10.06 percent midpoint of the CAPM analysis, the 11.41 percent midpoint of the Expected Earnings analysis, and the 10.36 percent result of the Risk Premium analysis to arrive at a preliminary 10.28 percent just and reasonable ROE for MISO TOs, exclusive of incentives. Further, we would cap any preexisting incentive-based total ROE above 13.06 percent at 13.06 percent.
61. If the Commission adopts this finding in its order following the briefing directed by this order, the Commission will exercise its "broad remedial authority" to correct its legal error in order to make the 10.28 percent ROE, exclusive of incentives, effective as of the September 28, 2016 date of Opinion No. 551, and the Commission will order refunds of amounts collected in excess of 10.28 percent pursuant to the 10.32 percent ROE established by that opinion. ${ }^{109}$ Accordingly, the issue to be addressed in the Second Complaint is whether the ROE established on remand in the First Complaint remained just and reasonable based on financial data for the six-month period July to December 2015 addressed by the evidence presented by the participants in the Second Complaint.

## D. Briefing

62. As discussed above, we are directing the participants to these proceedings to submit briefs regarding the proposed approaches to the FPA section 206 inquiry and whether and how to apply them to the First and Second Complaints. The participants should submit separate briefs regarding each of the two complaints. In addition, the

[^23]participants may supplement the record with additional written evidence as necessary to support the arguments advanced in their briefs. ${ }^{111}$ However, to the extent that participants submit additional financial data or evidence concerning economic conditions in any proceeding it must relate to periods before the conclusion of the hearings in the relevant complaint proceeding. Any additional evidence shall be submitted in the form of affidavits accompanying the relevant brief(s). Initial briefs shall be due 60 days from the date of this order. Responses to those initial briefs shall be due 30 days later. No answers or additional briefs will be permitted.

## The Commission orders:

The participants are directed to submit supplemental briefs and additional written evidence, as discussed in the body of this order.

By the Commission. Commissioner Mclntyre is not voting on this order.
(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

${ }^{110}$ See Consolidated Edison of N.Y., Inc. v. FERC, 315 F.3d 316, 323 (D.C. Cir. 2003) (holding that the Commission may apply a new policy "retroactively to the parties in an ongoing adjudication, so long as the parties before the agency are given notice and an opportunity to offer evidence bearing on the new standard") Town of Norwood, Mass. v. FERC, 80 F.3d 526, 535 (D.C. Cir. 1996) (holding that, "the Commission takes account of changes that occur between the ALJ's decision and the Commission's review of that decision ... the Commission may not depart from the zone of reasonableness on the basis of the change without giving parties an opportunity to reopen the record" (citing Union Elec. Co. v. FERC, 890 F.2d 1193, 1201-04 (D.C. Cir. 1989)); see also ClarkCowlitz Joint Operating Agency v. FERC, 826 F.2d 1074, 1081 (D.C. Cir. 1987) (en banc) (discussing factors that the D.C. Circuit considers when determining whether it would be inappropriate to apply new policy retrospectively).

## Appendix

The four traditional methods investors may use to estimate the expected return from an investment in a company.

## DCF Methodology

With simplifying assumptions, the formula for the DCF methodology reduces to: $\mathrm{P}=$ $D / k-g$, where " $P$ " is the price of the common stock, " $D$ " is the current dividend, " $k$ " is the discount rate (or investors' required rate of return), and " $g$ " is the expected growth rate in dividends. For ratemaking purposes, the Commission rearranges the DCF formula to solve for " $k$ ", the discount rate, which represents the rate of return that investors require to invest in a company's common stock, and then multiplies the dividend yield by the expression $(1+.5 \mathrm{~g})$ to account for the fact that dividends are paid on a quarterly basis. Multiplying the dividend yield by $(1+.5 \mathrm{~g})$ increases the dividend yield by one half of the growth rate and produces what the Commission refers to as the "adjusted dividend yield." The resulting formula is known as the constant growth DCF methodology and can be expressed as follows: $\mathrm{k}=\mathrm{D} / \mathrm{P}(1+.5 \mathrm{~g})+\mathrm{g}$. Under the Commission's two-step DCF methodology, the input for the expected dividend growth rate, "g," is calculated using both short-term and long-term growth projections. ${ }^{111}$ Those two growth rate estimates are averaged, with the short-term growth rate estimate receiving two-thirds weighting and the long-term growth rate estimate receiving one-third weighting. ${ }^{112}$

## CAPM

Investors use CAPM analysis as a measure of the cost of equity relative to risk. ${ }^{113}$ The CAPM methodology is based on the theory that the market-required rate of return for a security is equal to the risk-free rate, plus a risk premium associated with the specific security. Specifically, the CAPM methodology estimates the cost of equity by taking the "risk-free rate" and adding to it the "market-risk premium" multiplied by "beta." 114 The risk-free rate is represented by a proxy, typically the yield on 30 -year U.S. Treasury bonds. ${ }^{115}$ Betas, which are published by several commercial sources, measure a specific stock's risk relative to the market. The market risk premium is calculated by subtracting

[^24]the risk-free rate from the expected return. The expected return can be estimated either using a backward-looking approach, a forward-looking approach, or a survey of academics and investment professionals. ${ }^{116}$ A CAPM analysis is backward-looking if the expected return is determined based on historical, realized returns. ${ }^{117}$ A CAPM analysis is forward-looking if the expected return is based on a DCF analysis of a large segment of the market. ${ }^{118}$ Thus, in a forward-looking CAPM analysis, the market risk premium is calculated by subtracting the risk-free rate from the result produced by the DCF analysis. ${ }^{119}$

## Risk Premium

The risk premium methodology, in which interest rates are also a direct input, is "based on the simple idea that since investors in stocks take greater risk than investors in bonds, the former expect to earn a return on a stock investment that reflects a 'premium' over and above the return they expect to earn on a bond investment."120 As the Commission found in Opinion No. 531, investors' required risk premiums expand with low interest rates and shrink at higher interest rates. The link between interest rates and risk premiums provides a helpful indicator of how investors' required rate of return have been impacted by the interest rate environment.

Multiple approaches have been advanced to determine the equity risk premium for a utility. ${ }^{121}$ For example, a risk premium can be developed directly, by conducting a risk premium analysis for the company at issue, or indirectly by conducting a risk premium analysis for the market as a whole and then adjusting that result to reflect the risk of the company at issue. ${ }^{122}$ Another approach for the utility context is to "examin[e] the risk premiums implied in the returns on equity allowed by regulatory commissions for utilities over some past period relative to the contemporaneous level of the long-term U.S. Treasury bond yield." ${ }^{123}$

[^25]
## Expected Earnings

A comparable earnings analysis is a method of calculating the earnings an investor expects to receive on the book value of a particular stock. The analysis can be either backward looking using the company's historical earnings on book value, as reflected on the company's accounting statements, or forward-looking using estimates of earnings on book value, as reflected in analysts' earnings forecasts for the company. ${ }^{124}$ The latter approach is often referred to as an "Expected Earnings analysis." The returns on book equity that investors expect to receive from a group of companies with risks comparable to those of a particular utility are relevant to determining that utility's cost of equity, because those returns on book equity help investors determine the opportunity cost of investing in that particular utility instead of other companies of comparable risk. ${ }^{125}$ Because investors rely on Expected Earnings analyses to help estimate the opportunity cost of investing in a particular utility, we find this type of analysis useful in determining a utility's ROE.
${ }^{124}$ See Opinion No. 531-B, 150 FERC 761,165 at P 125.
${ }^{125}$ Id. P 128.

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Document Content(s)


## BEFORE THE

## COUNCIL OF THE CITY OF NEW

ORLEANS

| IN RE: APPLICATION OF ENTERGY NEW | ) |
| :--- | :--- |
| ORLEANS, LLC FOR A CHANGE IN ELECTRIC | , |
| AND GAS RATES PURSUANT TO COUNCIL | , |
| RESOLUTIONS R-15-194 AND R-17-504 AND FOR |  |
| RELATED RELIEF |  |

DOCKET NO. UD-18-07

Response of: Advisors to the Council of the City of New Orleans ("Advisors")
To the Second Set of Data Requests
Of Requesting Party: Entergy New Orleans, LLC

Question No.: ENO 2-27
Question:
Referencing page 52 , lines $7-8$ of Mr . Watson's testimony, please respond to the following:
a. Does Mr. Watson assert that Entergy Corporation has borrowed money and placed that money in ENO as common equity?
b. Provide all Documents relied upon by Mr. Watson for the above assertion.

Response:
Page 51 of Mr. Watson's direct testimony says, "A utility that engages in double leverage effectively borrows money at the top corporate level and places that money into its utility subsidiaries as common equity providing a potential return which is likely greater than its original borrowed cost."

Assuming this is the testimony to which the DR refers, the Advisors respond as follows.
a. Mr. Watson does not make such an assertion, and his referenced testimony does not discuss Entergy Corporation specifically. Rather, Mr. Watson's testimony referenced in the DR discusses the effect of double leverage of a utility in general as being as if the top corporate level borrows money and places that money into its utility subsidiaries as common equity. Please refer to Mr. Watson's direct testimony at page 52, which says ". . . ENO or Entergy Corp. may achieve any reasonable equity ratio for ENO through the capital planning process. ENO's HSPM response to DR CNO 1-1 presents a forecast of long-term debt issuances and redemptions and a forecast of common equity dividends and infusions. ENO may choose a different mix of such capital transactions to achieve a different equity ratio." As such, Mr. Watson observes that Entergy's double leverage is not contingent on Entergy Corp. borrowing money and placing that money in ENO as common equity.
b. $n / a$. See the response to part a.


[^0]:    ${ }^{1}$ Coakley v. Bangor Hydro-Elec. Co., Opinion No. 531, 147 FERC $\ddagger 91,234$ (Opinion No. 531), order on paper hearing, Opinion No. 531-A, 149 FERC $\$ 161,032$ (2014) (Opinion No. 531-B) (Opinion No. 531-A), order on reh'g, Opinion No. 531-B, 150 FERC ๆ 61,165 (2015), rev'd. Emera Maine v. FERC, 854 F.3d 9 (D.C. Cir. 2017) (Emera Maine).
    ${ }^{2}$ Ass'n of Bus. Advocating Tariff Equity v. Midcontinent Indep. Sys. Operator; Inc. 149 FERC $\ddagger$ 61,049, at P 186 (2014) (MISO I Hearing Order), order on reh'g, 156 FERC 61,060 (2016) (MISO I Rehearing Order).
    ${ }^{3}$ Emera Maine, 854 F.3d 9.
    ${ }^{4}$ See Coakley v. Bangor Hydro-Elec. Co., 165 FERC $q$ 61,030 (2018) (Coakley Briefing Order).
    ${ }^{5}$ See generally, Opinion No. 531, 147 FERC ๆ 61,234 at PP 8, 32-41, Opinion No. 531-A, 149 FERC \$1 61,032, Opinion No. 531-B, 150 FERC | 61,165 , rev'd, Emera Maine, 854 F.3d 9 .

[^1]:    Energy Consumers; Indiana Industrial Energy Consumers, Inc.; Minnesota Large Industrial Group; and Wisconsin Industrial Energy Group.

[^2]:    ${ }^{\text {E }}$ MISO I Hearing Order, 149 FERC $\mathbb{1} 61,049$ at P 188. On July 21, 2016, the Commission denied requests for rehearing and clarification of the MISO I Hearing Order. MISO I Rehearing Order, 156 FERC $\$ 61,060$. In the MISO I Rehearing Order, the Commission clarified that non-public utility transmission owners are subject to the outcome of that proceeding. Id. PP 47-48.
    ${ }^{15}$ Ass'n of Businesses Advocating Tariff Equity, Opinion No. 551, 156 FERC - 61,234 (2016).
    ${ }^{16}$ See generally Opinion No. 551, 156 FERC 761,234 at P 9.
    ${ }^{17}$ Id.
    ${ }^{18}$ Opinion No. 551, 156 FERC 961,234 at P 9.
    ${ }^{19}$ Complainants for the Second Complaint consist of: Arkansas Electric (continued ...)

[^3]:    ${ }^{22}$ Id.
    ${ }^{23}$ MISO II Rehearing Order, 156 FERC $\$ 61,061$.
    ${ }^{24}$ Ark. Elec. Coop. Corp. v. ALLETE, Inc., 155 FERC T 63,030 (2016).

[^4]:    ${ }^{25}$ Emera Maine, 854 F.3d at 22-23.
    ${ }^{26} \mathrm{Id}$. at 23.
    ${ }^{27} \mathrm{Id}$. at $23,26$.

[^5]:    ${ }^{34}$ ISO New England Inc. v. Bangor Hydro-Electric Co., 161 FERC $\mathbb{1} 61,031$, at P 28 (2017).
    ${ }^{35}$ Emera Maine, 854 F.3d at 30.
    ${ }^{36}$ See ISO New England Inc. v. Bangor Hydro-Electric Co., 161 FERC 961,031 at PP 24, 34.
    ${ }^{37}$ See Coakley Briefing Order, 165 FERC 9 61,030.

[^6]:    ${ }^{38} / d$.
    ${ }^{39}$ Unlike the DCF, CAPM, and Expected Earnings models, the output of the Risk Premium model is a numerical point and therefore, it does not produce a range which can (continued ...)

[^7]:    ${ }^{44}$ Emera Maine, 854 F. 3 d at 24; see also Pub. Serv. Comm'n of State of N.Y. v. FERC, 642 F.2d 1335, 1350 n. 27 (D.C. Cir. 1980) (finding that the fact that an existing ROE was outside the zone of reasonableness was sufficient to carry the Commission's burden to show that an existing rate was unjust and unreasonable under the analogous section 5 of the Natural Gas Act).
    ${ }^{45}$ Emera Maine, 854 F.3d at 23, 26.
    ${ }^{46}$ See, e.g., NEPCO Mun. Rate Comm. v. FERC, 668 F.2d 1327, 1344 (D.C. Cir. 1981) (NEPCO) (observing in the context of a challenge to the Commission approval of an FPA section 205 filing, which, among other things, established an ROE, that "[r]atemaking is a complicated process involving many factors, e.g., money market conditions, financial health of the utility, and financial risks.") (NEPCO).
    ${ }^{47}$ Petal Gas Storage, L.L.C. v. FERC, 496 F.3d 695, 700 (D.C. Cir. 2007) (Petal Gas); Canadian Ass'n of Petroleum Producers (CAPP) v. FERC, 254 F.3d 289, 295 (D.C. Cir. 2001) (noting that, after establishing a proxy group, the Commission "then determin[es] where [the filing entity] belong[s] within that group, in large part on the basis of . . . business risk"); Williston Basin Interstate Pipeline Co. v. FERC, 165 F.3d 54, 57 (D.C. Cir. 1999) ("Once the Commission has defined a zone of reasonableness . . . , it then assigns . . . a rate within that range to reflect specific investment risks . . . as compared to the proxy group companies."); see also Emera Maine, 854 F.3d at 29-30 (discussing instances in which the Commission had awarded a higher ROE because "the utility at issue was riskier than the proxy group.").

[^8]:    ${ }^{49}$ Petal Gas, 496 F.3d at 700.
    ${ }^{50}$ See, e.g., Aera Energy LLC v. FERC, 789 F.3d 184, 194 (D.C. Cir. 2015) (observing that, in general, "the higher the proportion of equity capital, the lower the financial risk . . . and thus, in this respect, the lower the necessary rate of return' on equity." (quoting Mo. Pub. Serv. Comm'n v. FERC, 215 F.3d 1, 2 (D.C. Cir. 2000))); NEPCO, 668 F.2d at 1344 (listing considerations for setting the ROE, including the health of the utility and its "financial risk").
    ${ }^{51}$ See generally Emera Maine, 854 F.3d at 21 (explaining the Commission's approach to setting ROE); Canadian Ass'n of Petroleum Producer's v. FERC, 308 F.3d 11, 15 (D.C. Cir. 2002) (similar); Tenn. Gas Pipeline Co. v. FERC, 926 F.2d 1206, 1209 (D.C. Cir. 1991) (similar) (Tenn. Gas).
    ${ }^{52}$ Emera Maine, 854 F.3d at 23, 27.

[^9]:    ${ }^{53}$ See, e.g., Opinion No. 531, 147 FERC $\mathbb{T} 61,234$ at PP 106-108 (citing Tallgrass Transmission, LLC, 125 FERC ${ }^{[1 / 61,248,} 62,240$ n. 79 (2008)); see also Petal Gas, 496 F.3d at 699 ("[P]roxy group arrangements must be risk-appropriate . . . [t] hat principle is well-established.').
    ${ }^{54}$ Emera Maine, 854 F.3d at 29-30.
    ${ }^{55} \mathrm{Id}$. at 30 (quoting Tenn. Gas, 926 F.2d at 1213).
    ${ }^{56}$ See Potomac-Appalachian Transmission Highline, LLC, 158 FERC $\mathbb{1}$ 61,050, at PP 270, 273 (2017).

[^10]:    ${ }^{57}$ In cases where the ROE of a single utility is at issue, the quartiles will be centered on the median of the overall zone of reasonableness for a single utility of average risk and the medians of the lower and upper halves of the zone of reasonableness for single utilities of below and above average risk, respectively.

[^11]:    ${ }^{60}$ Hope, 320 U.S. at 603. See also CAPP v. FERC, 254 F.3d at 293 ('In order to attract capital, a utility must offer a risk-adjusted expected rate of return sufficient to attract investors.").
    ${ }^{61}$ See Bluefield, 262 U.S. at 692-93 (discussing factors an investor considers in making investment decisions).
    ${ }^{62}$ Transcontinental Gas Pipe Line Corp., Opinion No. 414-B, 85 FERC ${ }^{\text {|| }} 61,323$ (1998) (Opinion No. 414-B).
    ${ }^{63}$ Id. at 62,268. See also Kern River Gas Transmission Co., Opinion No. 486-B, 126 FERC $\mathbb{1} 61,034$, at P 120 (2009).
    ${ }^{64}$ See, e.g., Roger A. Morin, New Regulatory Finance 428 (Public Utilities Reports, Inc. 2006) (Morin). These methods are described in the appendix to this order.

[^12]:    ${ }^{65}$ Morin at 429. See also Docket No. EL15-45-000, Ex. MTO-1 at 12 ("Different methodologies have been developed to estimate investors' expected and required return on capital, but all such methodologies are merely theoretical tools and generally produce a range of estimates, based on different assumptions and inputs."); Docket No. EL15-45000, Ex. MTO-1 at 28 ("While it is true that every approach to estimating the cost of equity is founded on a theoretical abstraction, each model is based on its own set of assumptions regarding investors' behavior and uses different capital market inputs."); Docket No. EL15-45-000, Ex. S-3 at 500 ("Theories are simplifications of reality and the models articulated from theories are necessarily abstractions from and simplifications of the existing world so as to facilitate understanding and explanation of the real world.") (quoting Morin at 255).
    ${ }^{66}$ Morin at 429. See also Docket No. EL15-45-000, Ex. MTO-1 at 13 ("The DCF method ... is only one theoretical approach to gain insight into the return investors require; there are numerous other methodologies for estimating the cost of capital and the ranges (or zones) produced by the different approaches can vary widely.").
    ${ }^{67}$ We note that we will not consider the level of state ROEs when we are determining the composite zone of reasonableness, nor will we weight it equally with the financial models in establishing a new just and reasonable ROE. We will, however, consider evidence of state ROEs to the extent that the record adequately demonstrates that investors are using it to inform their investment decisions.

[^13]:    ${ }^{72}$ Docket No. EL15-45-000, Ex. MTO-22 at 18-19 (citations omitted). See also Morin at 428 ("Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data."); id. at 429-30 ("If a regulatory commission relies on a single cost of equity estimate or on a single methodology, that commission greatly limits its flexibility and increases the risk of authorizing unreasonable rates of return. The results from one methodology . . . are likely to contain a high degree of measurement error and may be distorted by short-term aberrations.").
    ${ }^{73}$ See, e.g., In re. Connect Am. Fund, 28 FCC Rcd. 7123, 7147 (2013) ("As the cost of equity reflects the uncertain expectations of investors, there is potential for introducing significant errors into the estimates, and no single model can be counted on exclusively to provide a precise estimate of the cost of equity."); Use of a Multi-Stage Discounted Cash Flow Model in Determining the Railroad Industry's Cost of Capital, STB Ex Parte No. 664 (Sub-No. 1), 2009 WL 197991, *11 (S.T.B. Jan. 23, 2009) ("As the Federal Reserve Board noted in its testimony in STB Ex Parte No. 664, academic studies had demonstrated that using multiple models will improve estimation techniques when each model provides new information. In addition, there is robust economic literature confirming that, in many cases, combining forecasts from different models is more accurate than relying on a single model.") (citations omitted); EL15-45-000, Ex. MTO-1 at 28 ("Rather, reference to the results of a number of well accepted methodologies provides greater clarity regarding the extent to which DCF results may be distorted, and the use of multiple benchmarks is useful in guiding the determination of a just and reasonable ROE within the zone of reasonableness.").

[^14]:    ${ }^{74}$ See, e.g., Opinion No. 551, 156 FERC 9 61,234 at PP 66, 135.
    ${ }^{75}$ Id. P 137. For example, the Commission found that "MISO TOs' risk premium analysis is sufficiently reliable to corroborate our decision to place MISO TOs' base ROE above the midpoint of the zone of reasonableness produced by the DCF analysis." Id. P 195.
    ${ }^{76}$ See, e.g., Docket No. EL15-45-000, Ex. MTO-22 at 92 ("The risk premium, CAPM, and expected earnings benchmarks . . . are generally accepted and widely referenced by investors, analysis, and regulators as useful methodologies to estimate the cost of equity"); Docket No. EL15-45-000, Ex. MTO-1 at 66 ("As explained in New Regulatory Finance, '[r]eliance on any single method or preset formula is inappropriate when dealing with investor expectations because of the possible measurement difficulties and vagaries in individual companies' market data") (quoting Morin at 428).
    ${ }^{77}$ See, e.g., Docket No. EL14-12-001, Ex. MTO-1 at 96 ("The CAPM approach generally is considered to be the most widely referenced method for estimating the cost of equity among academicians and professional practitioners . . ."); id. at 99 ("[The risk premium approach] is routinely referenced by the investment community and in academia and regulatory proceedings . . . "); id. at 94 ("the expected earnings approach provides a direct guide to ensure that the allowed ROE is similar to what other utilities of comparable risk will earn on invested capital.").

[^15]:    ${ }^{78}$ The midpoints are used for the DCF, CAPM, and Expected Earnings analyses; however, the Risk Premium model does not produce a range from which to calculate a midpoint, so the actual Risk Premium output is the numerical point plotted for that model in the figure. This chart reflects the ROE models removing high-end and low-end outliers, as discussed below.
    ${ }^{79}$ See Coakley Briefing Order, 165 FERC $\$ 61,030$ at Figure 2. The test periods in the four complaint proceedings involving the New England TOs' ROE include four sixmonth periods within the five years from October 2012 to October 2017. Specifically, those six month periods were October 2012 to March 2013, September 2013 to February 2014, November 2014 to April 2014, and May to October 2017. The two test periods at issue in this case are the first and second halves of 2015.

[^16]:    ${ }^{80}$ See Aswath Damodaran, Equity Risk Premiums: Determinates, Estimation and Implications - The 2014 Edition 81 ( $7^{\text {th }} \mathrm{ed}$.2014 ) (submitted as part of Workpapers of J. Randall Woolridge in Docket Nos. EL13-33-002 and EL14-86-000).
    ${ }^{81}$ See Docket No. EL14-12-001, Ex. S-1 at 13.
    ${ }^{82}$ During this six-month period, the average 10 -year U.S. Treasury bond rate was 2.07 percent and the average 30 -year U.S. Treasury bond rate was 2.72 percent. See Docket No. EL14-12-001, Ex. JC-16 at 1; see also Docket No. EL15-45-000, Ex. S-5 at 1.
    ${ }^{83}$ During this six-month period, the average 10 -year U.S. Treasury bond rate was 2.21 percent and the average 30 -year U.S. Treasury bond rate was 2.96 percent. See Docket No. EL15-45-000, Ex. S-5 at 8.
    ${ }^{84}$ Opinion No. 551, 156 FERC 961,234 at P 121.
    ${ }^{85}$ Id. P 122.

[^17]:    ${ }^{86}$ Id. P 135.
    ${ }^{87}$ Id. P 137.
    ${ }^{88}$ Sce, e.g., Docket No. ELI 5-45-000, Exs. JCA-1 at 6-18, JCI-1 at 29-32, 38, ICG-15 at 18-30, MTO-1 at 21-28, 102-105, MTO-16 at 16-38.
    ${ }^{89}$ See Coakley Briefing Order, 165 FERC 9 61,030 at P 45.

[^18]:    - ${ }^{90}$ See Docket No. EL15-45-000, Ex. MTO-16 at 36 ("There is 'model risk' associated with the excessive reliance or mechanical application of a model when the surrounding conditions are outside of the normal range. 'Model risk' is the risk that a theoretical model that is used to value real-world transactions fails to predict or represent the real phenomenon that is being modeled. Although the concept of model risk was originally applied to derivative instruments and hedging transactions, it applies equally to models used to value companies, to manage investment portfolios, to assign credit ratings, or in this case, to determine the ROE that will provide a fair return and encourage investment in critical infrastructure.").
    ${ }^{91}$ Opinion No. 414-B, 85 FERC $\mathbb{1}$ 61,323 at 62,268-69. Northwest Pipeline Corp. 87 FERC 7 61,266, at 62,058-9 (1999) (Northwest). Composition of Proxy Groups for Determining Gas and Oil Pipeline Return on Equity, 123 FERC 1 61,048, at PP 75-76 (2008).

[^19]:    ${ }^{94}$ See Coakley Briefing Order, 165 FERC $\$ 61,030$ at P 47.
    ${ }^{95}$ See e.g., id. P 48 (noting, for example, that one analyst's error involving the growth projection for Portland General Electric Company (Portland General) reduced the overall Reuters consensus projected short-term percentage growth in earnings for Portland General from 10.96 percent to 7.80 percent).
    ${ }^{96} 147$ FERC 961,234 at $P 97$.
    ${ }^{97}$ 156 FERC 1 61,234 at P 20.
    ${ }^{98}$ Opinion No. 531, 147 FERC 9 | 61,234 at PP 96 and 100-102.
    ${ }^{99}$ The Commission requires use of both Standard and Poor's corporate credit ratings and Moody's issuer ratings when both are available. Id. P 107.

[^20]:    ${ }^{100}$ Id. P 112.
    ${ }^{101}$ Id. P 114; Opinion No. 551, 156 FERC $\mathbb{1}$ 61,234 at PP 37-43.
    ${ }^{102}$ Opinion No. 531, 147 FERC 461,234 at P 123.
    ${ }^{103}$ S. Cal. Edison Co., 92 FERC 9 61,070, at 61,266 (2000).

[^21]:    ${ }^{104}$ Coakley Briefing Order, 165 FERC 961,030 at $P 53$.

[^22]:    ${ }^{105}$ Opinion No. 551, 156 FERC 9 61,234 at P 65.
    ${ }^{106}$ Id. PP $140,165$.
    ${ }^{107}$ MISO TOs being a diverse group of average risk utilities, the relevant central tendency is the midpoint. See supra n. 40.

[^23]:    ${ }^{108}$ Midwest Indep. Transmission Sys. Operator, Inc., 99 FERC 963,011 at P 33, aff $d, 100$ FERC $\$ 61,292$.
    ${ }^{109}$ Opinion No. 551, 156 FERC $\uparrow 61,234$ at PP 9, 67.

[^24]:    ${ }^{111}$ Opinion No. 531, 147 FERC 961,234 at PP 15-17, 36-40; Opinion No. 531-A, 149 FERC 761,032 at P 10.
    ${ }^{112}$ Opinion No. 531, 147 FERC $\mathbb{1} 61,234$ at PP 17, 39.
    ${ }^{113}$ Id. P 147.
    ${ }^{114}$ Morin at 150 .
    ${ }^{115} \mathrm{Id}$. at 151 .

[^25]:    ${ }^{116} \mathrm{Id}$. at 155-162.
    ${ }^{117} \mathrm{Id}$. at 155-156.
    ${ }^{118} \mathrm{Id}$. at 159-160.
    ${ }^{119}$ See id. at $150,155$.
    ${ }^{120}$ Opinion No. 531,147 FERC $\mathbb{1} 61,234$ at P 147 (citing Morin at 108).
    ${ }^{121}$ See generally Morin at 107-130.
    ${ }^{122}$ Id. at 110.
    ${ }^{123}$ Id. at 123.

