## STATE OF NEW HAMPSHIRE

## PUBLIC UTILITIES COMMISSION

March 26, 2018-9:11 a.m.
DAY 6 HEARING
Concord, New Hampshire

RE: DG 17-048
LIBERTY UTILITIES (ENERGYNORTH NATURAL GAS) CORP. $d / b / a$ LIBERTY UTILITIES: Request for Change in Rates. (Hearing on the Merits)

PRESENT: Chairman Martin P. Honigberg, Presiding Commissioner Kathryn M. Bailey Commissioner Michael S. Giaimo

Sandy Deno, Clerk

APPEARANCES: Reptg. Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities:
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Reptg. Residential Ratepayers:
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Pradip Chattopadhyay, Asst. Cons. Adv.
James Brennan, Finance Director
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Paul B. Dexter, Esq.
Alexander F. Speidel, Esq.
Stephen Frink, Dir./Gas \& Water Div.
Al-Azad Iqbal, Gas \& Water Division

Court Reporter: Susan J. Robidas, NH LCR No. 44
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#### Abstract

PROCEEDINGS

CHAIRMAN HONIGBERG: We're here this morning to continue the EnergyNorth Gas rate case. This is Day 6, I think, of the hearing. Mr. Iqbal is still on the stand. Is there anything we need to do before questioning resumes?


[No verbal response]
CHAIRMAN HONIGBERG: All right.
Mr. Dexter, $I$ assume you have the microphone.
MR. DEXTER: Well, when we
finished Friday, $I$ had asked Mr. Iqbal a question about his concerns with the monthly aspects of the weather -- I'm sorry - decoupling adjustment that's incorporated into the settlement, and he had answered a sentence with a lot of adjectives. And I'd like to ask him to explain each of those adjectives, and that would be my final question. AI-AZAD IQBAL, PREVIOUSLY SWORN

DIRECT EXAMINATION (cont'd)
BY MR. DEXTER:
Q. So, Mr. Iqbal, do you recall the question that we ended with last week?
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A. Yes, I do.
Q. Do you recall that we were talking about the monthly adjustment aspect of the decoupling mechanism embodied in the settlement? You do recall that?
A. Yes, I do.
Q. And could you summarize, briefly, the answer that you gave. And then if you'd like to add something to those various elements of concern that you laid out in those answers, I'd like you to do that now.
A. Yes. The one-sentence answer I give is it's ineffective, costly, unclear, unnecessary, counterproductive on the goal of energy efficiency. And there are simpler solution of cash flow issue right now. Let's start with ineffective.

Now, the whole idea of this monthly adjustment is to give the customer some cash flow benefit, that they will get some money when the bill is higher. But if I remember, one of our question to the Company witness was that, when we are doing it, how much cash flow problem we are actually addressing. If
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you look at Company side, it's addressing almost all of their cash flow issue because all their revenue is coming from delivery rate. But on the customer side, the cash flow is almost less than 2 percent of their whole monthly cash flow. So, to address somebody's, one party's 100 percent cash flow and other party's 2 percent -- if you want me to explain why I'm saying 2 percent, I can explain -- but the whole idea is that it doesn't help any customer.

There is another reason why it doesn't help, that even that 2 percent, their expenses on gas bill, 50 percent of that is fixed cost. So we are addressing actually one percent of their cash flow issue. And we are saying that we are doing the same thing, addressing Company's 100 percent cash flow issue and customer's 1 percent cash flow issue. And we are going through all of these hurdles in between.

Second of all, the way we are giving it, if you look at Exhibit 61, that is the bill. It is totally uncertain for the customer that
how much or whether they will get a charge or a refund, because all depends on the weather. And customer cannot plan on this particular cash flow benefit, so which is uncertain, totally uncertain, even if they don't know percentage-wise what that percent might they get back or might they have to pay. So how does this -- it is another layer of uncertainty you are putting on the customer and saying that it's good for you.

Another issue is -- that's another related to regulatory issue. Commission's practice is to let the customer know exactly how much they are going to pay for each unit of their usage. I couldn't find any instance where it is fluid-like, this item, normal weather adjustment. Commission doesn't know what is going to happen next at the end of the month. Company doesn't know. Customer doesn't know. So it's almost like we are giving a totally uncertain -- approving totally uncertain item in their bill and saying that that could help them.

And another issue, I think Company
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witness, Mr. Therrien, actually pointed out five reasons why we should not be doing it. And one of their solution he provided is we'll talk about it, Company and Commission, and customer will be educated on this issues. But if you look at those problems, those are beyond customer issue. Those are regulatory issue. Those are audit issue. Those are not just talking to the customer and does not solve those things.

And it is unclear, as I said. I just explain how it is unclear. It's unclear for the Company, it is unclear for the regulator, it is unclear for the customer. And let's look at it as customer point of view.

The customer might get a refund or a charge in two different month, depending on the weather, if they use the same amount of energy or gas, because if one month the weather is colder, if they use 100 unit, they might get a refund. And the next month, for any -- let's assume that they are using same amount, 100 unit. They might get a charge because it was hotter than the normal. So
it's totally confusing for the customer, and there is no way they can predict it.
Q. Mr. Iqbal, did you have additional concerns about the weather -- about the monthly weather-normalization aspect of the decoupling proposal?
A. Yeah, I'm looking at my notes. Yeah, I have a couple.

The point $I$ was making, that currently -- if you'll remember, Company witness actually talked about the budget billing. Budget billing actually takes care of all uncertainty for the customer because they know exactly how much they are paying each month.

The reason behind -- the position from the Company witness is that it blunts the energy efficiency price signal. And on Friday I said how I -- I talked about how price signal is reversed in their proposal. And here, the budget billing, we are not proposing the budget billing should be mandatory, everybody should go through this budget billing.
Q. You are not proposing that.
A. No, we are not proposing that. We are saying what budget billing does, gives the customer to decide what they want to do, how much risk tolerance they have. And based on that, they can go for budget billing or they can go for monthly. And if you look at the participation of budget billing, it's lower teens percentage.

So, from the -- if you look that way, that will be argument that budget billing actually dampen the price signal, is not really that effective because most of the customer are not going for budget billing. So it all depends on the risk tolerance. And not only that, they can choose that way they want to go, through budget billing or not. Here, we are forcing everybody to go through this confusing mechanism. If Company is proposing that we want to give the customer to choose that, hey, this is a good idea, you can choose this methodology which might help your cash flow. Here, they're not giving that option. They're forcing everybody to go
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through this confusing -- which, at Company level, it is confusing for them, it is complicated for them. And they are forcing everybody, every customer to go through this weather-normalization adjustment.

So I have -- the idea of budget billing is giving us option, and here we are taking away their option and introducing a confusing rate mechanism. And it is costly. Even the Company said it will take at least $\$ 50,000$. That's not the only cost. Think about the customer. They have to spend a lot of time just to understand what is going on there. Think about the auditor, because it is moving. Actually, effectively, the delivery rate, the distribution rate is moving for each customer each month. It's not a fixed rate anymore. Effectively, it is moving for each customer each month, and it also depends on when the bill was rendered, how many cold days were there, how many warm days were there. So it is almost impossible for any professional auditor -- sorry -- auditor to figure it out what is happening. Right now,

Company has a levelized billing system. They don't have the budget billing. They have a levelized billing. What they do, I think -if I'm wrong, Company can correct me -- that they do three months' averaging of customer's bill. And just introducing these complicacies into this budget billing, from my -- what I know about this, from my colleagues around here, that the budget billing participation went down because it's not a fixed number anymore. So people are not comfortable about it.

And I think the last part I'll make -let's think about this: If this type of mechanism was implemented in any other consumption situation, like let's say a restaurant, okay. These are our rates for these things, for these food. If we sell more food, you might get some money back. But if we sell less, we'll charge you more. Would anyone go to that restaurant? Everybody wants I think -- and here, we are introducing uncertainty for every customer. I think the counterproductive issue we \{DG 17-048\}[Day 6 Hearing]\{03-26-18\}
talked about Friday, when we explained that it goes against the idea of price signal, it will reward more consumption than less consumption and --
Q. So, Mr. Iqbal, if you've got an additional point, I'd ask you to make that now rather than repeat anything you've already said. And if you've completed, then I would ask you to just make that final comment right now.
A. The final comment $I$ have, that during the discussion of Company witness, they talked about that -- even $I$ repeated it on Friday at the end of my testimony -- that the settlement eliminated weather for the Company and for the customer. It doesn't. It eliminates the weather for the Company because, remember, we talked about the cash flow for the Company is 100 percent. Beyond that, they -- if we look at the issue that Company has with customer as a combined unit, yes, it does, because Company cannot keep the money they over-collect, or they have to -or the customer has to pay for the under-collection. But that's not the risk
of -- that's the risk Company face. But the customer doesn't face that. Customer, even if you do a sample survey in this room, all these regulators and all these professional there, I can guarantee you that most of us don't know how much Company made last year, what was the revenue last year for the Company. So the reality, the risk reality for the Company is -- for the Company is reflected here, but the risk reality for the individual customer is not the same. They still have to pay for more every month.

And we have another wrinkle into that. But the question is that how do you -- what would be the equivalent for the Company risk reduction and the customer risk reduction? That will be Company's revenue by customer is based on normalized sales for the test year. Equivalent to do the same risk reduction for the customer, the Company have to set normalized uses for each customer during this part of the test year because they know their usage. And they can normalize that usage and can tell customer that every month,

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generally, you use 100 unit, and normalized use is 105, and this would be your rate. And that will be the fixed for the rest of the period. And it will be reconciled when Company would be reconciled at the end of the year, whether overall they over-collected or under-collected. In this case, customer will have the same idea that, okay, we fix -- we knew exactly how we have to pay it, how much we have to pay each month based on my normalized usage on test year. So at the end of the year, we can reconcile that. So in that case, we are doing the same for the utility and same for the customer. Without that, the current proposal doesn't reduce customer's risk. But we are not proposing that. The Company is not proposing that. That's another issue -- that's a total different impact for the goal we are going for the decoupling and energy efficiency. I think that concludes my --
Q. Okay. Thank you, Mr. Iqbal.
A. One last one. I can -- I apologize. This is the last one.
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During the Company witness, Mr. Johnson talks about that there is a difference between electric company and gas company. Electric company is saturated. There is no competitor who can deliver electricity -- in the future, if by chance, there are distributed electric system, if it comes fruitful.

For the gas company, they have competitors. So, taking away weather-related risk for gas company is giving a upper hand for the gas company compared to the competitors because they still have to face that, weigh the risk.
Q. And those competitors that you're referring to are oil and propane companies --
A. Whoever is competing with the Company.

So what we are doing, that we are giving up our hand for the gas utility, taking away the weather-related risk, and we are not doing that for the other competitors. What will that do? It will hamper free market. It is against the whole idea of free market competition, which will make utility more

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[WITNESS: IQBAL]
efficient. If we are giving them upper hand compared to the competitor, they will more or less to be efficient. In the optimal market -- Dr. Johnson actually talked about it. The market will not be optimal. It applies to that, too, that the market will not be optimal for particular heating market. Heating fuel will not be optimal because one party has a upper hand because they don't have to face weather-related risk, but all the other parties have to deal with it. I think that concludes me.
Q. Thank you, Mr. Iqbal.

MR. DEXTER: Staff has no further questions.

CHAIRMAN HONIGBERG: Mr. Sheehan.
MR. SHEEHAN: I'll defer to the OCA to cross on the topic of decoupling, and I will ask Mr. Iqbal questions on the training center.

CHAIRMAN HONIGBERG: Okay. So are you going to do training center?

MR. SHEEHAN: Mr. Kreis asked to go first.
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CHAIRMAN HONIGBERG: Mr. Kreis.
MR. KREIS: Thank you, Mr.
Chairman.
CROSS-EXAMINATION
BY MR. KREIS:
Q. Good morning, Mr. Iqbal.
A. Good morning.
Q. I'd like to start with your written prefiled testimony.
A. Let me get my -- yeah, I got it.
Q. Okay. Beginning on Bates Page 8 of your prefiled testimony, you trace the history of revenue decoupling at the New Hampshire PUC, and you noted that the Commission first Considered that issue in Docket No. DE 07-064. That was an investigation of energy efficiency rate mechanisms; correct?
A. Yes.
Q. And you would agree that the result of the investigation was that the Commission closed the docket and determined that it would handle rate design issues related to energy efficiency on a company-by-company basis?
A. Yes.
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Q. The docket, you would agree, didn't claim to be an overall examination of rate design issues, just an examination of the question of what mechanisms might best facilitate the objectives of what were then known as the CORE Energy Efficiency Program?
A. Yes. One of the objectives was that one you just mentioned.
Q. Were there any other objectives in that docket?
A. I don't have that in front of me, so I cannot -- but there might be. But I cannot tell you that there is at this time.
Q. As you testified on Friday, in its final order in that docket, DE 07-064, the Commission discussed the issue of decoupling in the context of what it might or might not do for the objective of energy efficiency.
A. Yes.
Q. Would you agree with me, subject to check, by reading Pages 20 to 22 of that order, that the Commission observed, back in 2009, that there were three possible approaches to revenue decoupling: Performance incentives,
rate design by more accurately aligning the Company's actual fixed costs with a fixed charge component of rates, and a so-called rate-reconciling adjustment mechanism?
A. Yes.
Q. And would you agree that in this case, the settlement called for the last of those three options, a rate-reconciling adjustment mechanism?
A. Yes.
Q. And would you also agree, subject to check, that when the Commission discussed the possibility of a rate-reconciling adjustment mechanism, one of the possibilities that the Commission referenced in that order was a so-called "comprehensive model"?
A. I guess so.
Q. And would you also agree that the Commission described this comprehensive model as "pertaining to all or nearly all sales volume fluctuations, such as volume fluctuations associated with energy efficiency programs, price changes, weather changes, economic fluctuations," et cetera?

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A. Subject to check, yes.
Q. And is that in fact what the settlement agreement calls for the Commission to approve here?
A. I'll just look at my --

MR. KREIS: Mr. Chairman, I'm trying to ask "Yes" or "No" questions here. BY MR. KREIS:
Q. Is that in fact what the settlement agreement calls for here, a comprehensive approach to revenue decoupling?
A. It is a comprehensive approach, and we are talking about merits of that approach.
Q. To your recollection, did the Commission indicate, back in 2009, that it didn't like or would not approve or review with any particular skepticism such a comprehensive approach?
A. I don't recall if they approve or disapprove. But I understand that was a generic docket.
Q. But as you note in your testimony here, and I'm talking about your prefiled testimony again, the Commission said, back in 2009, that there could be a potential to

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inappropriately shift risks from shareholders to customers.
A. Can I refer to which line you are talking about in my testimony?
Q. I'm talking about Page 22 of the Commission's order back in Docket No. 07-064. And, you know, I guess I can move on because the Commission can look back at that order.

Would you agree that this risk shifting that we're talking about kind of curved because of reduced earnings volatility?
A. Can you elaborate what do you mean by "risk earnings volatility"?
Q. Well, I mean that I think it's fair to say that shareholders prefer stable earnings rather than volatile earnings, and shifting -- stabilizing the revenue stream to the Company through revenue decoupling could have the effect of reducing earnings volatility by providing a steadier stream of earnings that the utility can pay out to shareholders. That's what I mean.
A. What I understand, the Commission has to decide on the return, reasonable return,
opportunity to do -- achieve reasonable return. That could be achieved different way. But the way you are describing here is it might be one of the way. But there is no -- from my perspective, from what I know, there is no principle which says that Commission has to provide a certainty that utility would get certain level of return.
Q. Okay. The next event that you discussed in your history of revenue decoupling in your prefiled testimony is Docket No. 15-157. Yes?
A. Yes, 137.
Q. Yes, 157.
A. It's 37 I think.

CHAIRMAN HONIGBERG: One thirty-seven.

BY MR. KREIS:
Q. Yes, Docket No. 15-137. That was the docket in which the Commission adopted the Energy Efficiency Research Standard; correct?
A. Yes.
Q. Did you skip over any piece of history when it comes to revenue decoupling here in New \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}

Hampshire?
A. I might. But this is what I found. My testimony talks -- actually explain itself. There might be other instance I missed. It's possible.
Q. Well, are you familiar with Docket No. DG 10-017, the EnergyNorth rate case filed in 2010 by this Company's former owner, National Grid?
A. I'm not sure $I$ was involved in that docket, but --
Q. I didn't ask you if you were involved in that docket. I asked if you recall that that docket happened.
A. I guess so. I haven't reviewed that.
Q. Okay. Do you recall the Company proposed their revenue decoupling plan in that docket?
A. I just said I didn't review that, so $I$ cannot recall which I didn't review.
Q. So you wouldn't remember that Staff filed testimony in response to that decoupling proposal?
A. Again, I didn't review that.
Q. And you wouldn't recall whether the Staff

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[WITNESS: IQBAL]
witnesses, Mr. Naylor and Mr. Franz, expressed fundamental objections to the whole concept of revenue decoupling?
A. I didn't review that. But that's possible.
Q. So do you recall how the decoupling issue got resolved in the 2010 rate case?

MR. DEXTER: I would object to the question. The witness has stated four times that he did not review that docket in preparing his testimony. If Mr. Kreis wants to include this in a closing statement, I think that would be a more appropriate place to review Commission precedent.

CHAIRMAN HONIGBERG: Mr. Kreis, now you got me interested. Ask him if it would surprise him if the Commission resolved the issue as follows.

MR. KREIS: Thank you, Mr.
Chairman.
BY MR. KREIS:
Q. Would it surprise you if you were to discover that in the 2010 EnergyNorth rate case, the Company withdrew its decoupling proposal, settled the case and then moved out of New
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Hampshire?
MR. SPEIDEL: Badgering the
witness. This is ridiculous. I'm sorry.
CHAIRMAN HONIGBERG: Mr. Speidel,
that's out of order. Mr. Dexter knows how to protect his witness if he feels it's important. Mr. Kreis is entitled to make his point through cross-examination. Thank you.
A. Can you repeat your question, please?

BY MR. KREIS:
Q. I asked if it would surprise you if you were to discover that at the conclusion of -well, that Docket number... let me get back to the docket number -- Docket No. DG 10-017 was resolved with the respect to decoupling by the Company withdrawing its decoupling proposal, settling the case and then leaving the state.
A. If you are saying that they settled, and because of decoupling they left the state, I'm not sure if you have substantial support for that. There might be other issue, like rate of return and all other issue. And might have internal issue. But if there is
no study or no investigation, without any investigation I cannot agree to your conclusion.
Q. Fair enough. But wouldn't it be fair to say, looking back at that docket and everything else that has ever transpired here with respect to revenue decoupling, that in contrast to the Commission, which has expressed open-mindedness about decoupling, the agency's Staff has historically been opposed to the idea?
A. The first part of your question that has conclusion you actually draw from your reading of that history. But yes. The second part, yes, I was involved in the electric division before we dealt with energy efficiency and decoupling. It's consistent with the Staff position that decoupling is not a good idea.
Q. Okay. Now let's take a look at Docket No. 15-137, the Energy Efficiency Resource Standard. And as I said, that is the docket in which the Commission approved the concept of an Energy Efficiency Resource Standard.

Yes?
A. Yes.
Q. Would you agree that the essence of an Energy Efficiency Resource Standard is that the utilities, as the administrators of ratepayer-funded energy efficiency programs, commit to achieving a specified percentage of reduction in their sales as a result of those programs?
A. Yes.
Q. And you would also agree that this creates a problem for utilities when their revenue is directly tied to how many units of electricity or natural gas they sell?
A. Yes and no, because there are models in
different states. When you're forcing a utility to go against their own interests selling more and asking them to demand something in that regard, yes, they have a reasonable concern that they should be able to have a reasonable opportunity to get their return on their investment. But the rest of your question is conclusion you draw from your perspective.
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Q. Docket No. DE 15-137 was resolved by a settlement agreement. You would agree with me, would you not, that the settlement agreement at least assumes that the so-called "through-put incentive" is something that needed to be addressed, and it addressed that issue by adopting what is known as a "lost revenue adjustment mechanism"?
A. What do you mean by "through-put incentive"?
Q. I mean that the fundamental objective of decoupling is to eliminate the incentive that utilities have to maximize the number of units of either electricity or natural gas that they sell to customers as they seek to obtain or maximize return on shareholder investment.
A. Can you refer to which particular line of this order actually talks about through-put incentive?
Q. Mr. Iqbal, I'm afraid it's my job to ask the questions and your job to answer.
A. Okay. Without reviewing that order, I cannot agree with that, because through-put incentive is not the concern of the
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Commission. Commission has to provide reasonable opportunity to get a return on their investment.
Q. So your testimony is that what $I$ just described as the "through-put incentive" is not something that the Commission should be concerning itself with?
A. As long as Commission -- Commission can do whatever Commission wants to do. I cannot tell Commission what they want to do. So if you're saying that there is a limit of what Commission can do, I cannot -- I think that's above my pay grade.
Q. You're familiar with the lost revenue adjustment mechanism in Docket No. 15-137. Yes?
A. Yes, I do.
Q. Would you agree, yes or no, that the lost revenue adjustment mechanism is itself a form of revenue decoupling, that is, with respect to the energy efficiency programs, the connection between sales and revenue is severed, at least to some extent?
A. I think that is not the case, that there is \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
not separate sales and revenue. It is lost revenue recovery -- LRAM itself is
self-explanatory. There is nothing to add to that. Lost -- I mention that last time, yes. MR. DEXTER: Lost revenue adjustment mechanism.
A. Yeah, lost revenue. And when you are talking about lost revenue, it doesn't mean that revenue should be stabilized. It's that because of the policy decision, they are losing some revenue. Commission is going to address that. But that doesn't mean that it has to -- the Commission has to address the overall revenue and the sales.

BY MR. KREIS:
Q. Would you also agree that as part of the approved settlement in Docket 15-137, each of the electric and natural gas utilities agreed to make a proposal to replace the lost revenue adjustment mechanism with something better in a future rate case?
A. I do. And I also know that Staff position was that lost revenue recovery methodology goes one way. It's not symmetrical. And
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that's the only reason, from my recollection, that Staff actually added a decoupling mechanism, which would be symmetrical both way. This lost revenue recovery, I think Mr. Johnson and Mr. Therrien also addressed that issue, that it is only one way that it increase their revenue. But when they over-collect, it doesn't get to come back to the customer. That's the weakness of the lost revenue recovery method. And decoupling, the beauty of decoupling, depending on how you are doing it, that concern is eliminated.
Q. Mr. Iqbal, when Liberty proposed decoupling in this docket, would you agree that the Company actually did that ahead of the schedule required by Docket No. 15-137?
A. Yes.
Q. In your prefiled testimony, you said at Bates Page 11, and I'm reading now, "The Company's proposal adjusts for all impacts on revenue -- e.g., the economy, energy efficiency, weather, et cetera -- which is well beyond the efficiency and
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conservation-related sales reductions. It also eliminates all risk, except the risk of management inefficiency." And it's fair, having listened to your testimony on Friday and again this morning, it's fair to say that you have the same objection to the modified proposal reflected in the settlement agreement. Yes?
A. It's actually made worse because of the monthly adjustment.
Q. Okay. And wouldn't you agree that
"inefficient management," as you use that term in your prefiled, is precisely what the Staff is trying to get Liberty to focus on, given all the concerns in various proceedings that have been pending here about poor planning and cost overruns?
A. That's one of our concern.
Q. And when you talk about risks being shifted from shareholders to customers in a manner that you don't like, you've talked about the weather risk. What other risks are we talking about?
A. Like inflation.
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(Court Reporter interrupts.)
A. Inflation one of the risks they have. That's one of the example. There could be other. I'm not trained economist. There is lots of economists. They can find out there might be other economic component which is not included in the proposal.
Q. So the one that you thought of is inflation. Is the way that the settlement treats that risk symmetrical or asymmetrical?
A. Inflation, just like weather, everybody faces the same inflation. So, symmetrical, in the sense they are facing same inflation impact on customer facing that and the Company is facing that could be totally different.
Q. You said at Bates 11 of your prefiled testimony that the original Company proposal was flawed because it does not weather-normalize their revenue adjustments, and you recommended weather normalization so that the risk of colder or warmer temperatures will stay with the Company. Aren't colder temperatures actually a benefit to the Company by increasing their
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Aren't colder temperatures actually a benefit
ling their
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distribution revenue?
A. Under what rate mechanism? Depends on ratemaking.
Q. So my question was, don't colder temperatures provide a benefit to the Company under the current rate mechanism by increasing the Company's distribution revenue?
A. Yes, I agree with that. But they have no policy actually of address or related to that weather-related revenue increase. There's not any policy for that increase or decrease.
Q. So your answer to my question is "Yes."
A. Yes.
Q. And your proposal, which involves weather-normalizing the revenue adjustment, simply takes weather out of the revenue decoupling process. Yes?
A. Yes.
Q. And if I understood your testimony on Friday correctly, the reason you want to do that is that you believe that weather effects are an entirely separate matter from the revenue lost to ratepayer-funded energy efficiency.
A. Exactly. And I added the competition --

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[WITNESS: IQBAL]

MR. KREIS: Mr. Chairman, it would help me if you would instruct the witness to answer my "Yes" or "No" questions with the word either "Yes" or "No."

CHAIRMAN HONIGBERG: Well, he did give you a "Yes" or "No" to that one and then wanted to add something. And as a general proposition, that's okay. I think thus far, notwithstanding some concerns earlier, the two of you seem to be communicating fairly well with each other. So I'm going to allow him to continue.

MR. KREIS: Okay.
A. Can you repeat your question?

BY MR. KREIS:
Q. Well, you testified on Friday, and I just want to make sure I'm understanding you, is the reason you want to sort of drop weather out of the revenue decoupling equation altogether is that weather is an entirely separate matter from the revenue lost to ratepayer-funded energy efficiency?
A. Yes.
Q. And you think the Company should -- or you
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think the Commission, that is, should confine any decoupling plan it adopts to simply addressing the objective of all cost-effective energy efficiency.
A. That's up to the Commission.
Q. But I'm talking about what your recommendation to the Commission is. And if I understand it correctly, you think the Commission, to the extent it is willing or interested in adopting a revenue decoupling plan, it should confine the revenue decoupling plan's objectives to correcting for the effect of ratepayer-funded energy efficiency.
A. The way we -- the proposal from our perspective, not only the ratepayer-funded energy efficiency, it takes care of other energy efficiency, standard change, economic change, everything. So we are not saying that -- if your question is that our proposal not to go beyond the ratepayer-funded energy efficiency program, that is not our proposal.
Q. Mr. Iqbal, are you familiar with the

Regulatory Assistance Project?
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A. Yes, I think we had a report with Friday.
Q. Would you agree that the purpose of the Regulatory Assistance Project is to provide unbiased advice to regulators, state regulators in particular?
A. I don't know about their goal or policy or their mandate.
Q. Are you aware that the Regulatory Assistance Project has an active advisory relationship with the New Hampshire PUC?
A. I don't know. Maybe.
Q. I'd like to have you look at Exhibit 59, which is the Revenue Decoupling Guide that has already been marked.
A. I got it.
Q. Okay. Just looking at Page 35 of Exhibit 59 of the Revenue Decoupling Guide, would you agree with me that it says there on Page 59 [sic], and I'm reading now, "Some states have preserved the existing burden of weather risk in a decoupling environment by weather-normalizing actual unit sales before computing the new price under limited decoupling. This has the effect of fully
[WITNESS: IQBAL]
exposing the utility and its customers to weather risk."
A. Which page?

MR. DEXTER: Can I ask the
Consumer Advocate what page he's reading from? I thought he said Page 59.

MR. KREIS: I know I said Page 35.

CHAIRMAN HONIGBERG: I think he said 35. And I, too, would like to be directed more precisely to where on that page you want us all to look.

MR. KREIS: You have to give me a second because I am -- okay. I'm reading from the paragraph that is one, two, three paragraphs up from the bottom of that page. Sorry. I extracted that little excerpt in my notes and then $I$ wasn't working from the exhibit myself.

CHAIRMAN HONIGBERG: So, the second line of that paragraph, the sentence that starts, "Some states have..."

MR. KREIS: Yes, exactly.
BY MR. KREIS:
Q. Okay. So you would agree that the Regulatory
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Assistance Project in that little analysis there is discussing risk that accrues to both customers and the utility.
A. Yes.
Q. So if the Company were to -- or if the revenue decoupling plan approved by a Commission were to take weather risk away from the Company, that would also tend to stabilize the earnings of the Company; would it not?
A. Yeah, any risk you take away from anyone's earning, that will stabilize their earning.
Q. Yes. So that would also potentially help customers, to the extent the Company becomes less risky, which would allow a lower return on equity and also perhaps the Company to adopt a more leveraged capital structure. Yes?
A. That's a possibility. But if you look at the experience of decoupling, full decoupling, there is no support that it reduces the rate of return. Just like you have testimony in this docket and some other dockets that -and the whole idea, you are saying that we

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have to stabilize, and risk reduction will help the customer. These are subjective matter. It might, it might not. And it might have other effect we haven't talked about right now.
Q. So you agree that it could justify a lower return on equity. And could it also justify a more leveraged capital structure because it would be easier for the Company to borrow money if it adopted a revenue decoupling plan?
A. That would help for lots of other reason, too, not only revenue decoupling.
Q. Okay. Looking at Page 45 of Exhibit 59 -- I just have to look where on the page I'm reading from because, again, I extracted my quote into my notes.
A. I think it's 12.3.
Q. So you would agree with me, at the end of 12.3 it says, "Decoupling mitigates earnings risk for utilities and expense risk for consumers, making both better off, and in the process it creates the earnings stability to justify a lower overall cost of capital which
reduces absolute costs to consumers." You don't necessarily agree with that statement?
A. No, I don't.
Q. Are you --
A. I explain that this morning.
Q. Are you aware of the recent decision in Maine about Northern Utilities granting that utility a 9.5 percent return on equity?
A. I'm not sure we can discuss that because the settlement we are talking about -- oh, you're talking about Maine?
Q. Yes.

MR. DEXTER: Northern Utilities
in Maine.
A. Oh, I didn't review that order.

BY MR. KREIS:
Q. But you have reviewed the agreement in this case, the settlement agreement, and you know and agree, right, that the settlement agreement here calls for return on equity of 9.4 percent.
A. Yes.
Q. Would you agree that some of the shareholder benefits of revenue decoupling, as a result
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of this risk mitigation, might only become apparent over time and that it could take several years to reflect the effect of revenue decoupling in the Company's return on equity or its capital structure?
A. That's, I think, what your witness also discussed about it. But revenue decoupling is almost 15 years old. If it is not still internalized, $I$ don't know why it would be internalized, because every time we are looking at rate of return, we are looking for similar companies, whether those are decoupled or not. And as you can see from your witness on revenue requirement -sorry -- rate of return and our witness on rate of return, it seems like it didn't move at all.
Q. Are you familiar with how the settlement agreement pending here treats the Company's fixed charges?
A. Yes, I am.
Q. And you would agree with me that the settlement calls for moving the R1 and R3 fixed charge to \$14.88; correct?
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A. Yes.
Q. And that's actually $\$ 2$ lower than the current R1 customer charge.
A. Yes.
Q. And that compares rather favorably, would you agree, to the Company's original proposal of a fixed charge of $\$ 21.50$ for R1 customers and \$25.50 for R3 customers?
A. Talking about favorable for the Company or the customer?
Q. Well, I'm the Consumer Advocate, so I'm talking about favorable for the consumer.
A. I cannot presume that because some of your position in this docket actually goes against consumer interests. So that's why I was asking.

MR. KREIS: Mr. Chairman, I would ask that that response be stricken from the record.

CHAIRMAN HONIGBERG: I think you invited that response, Mr. Kreis.

BY MR. KREIS:
Q. Would you agree that higher fixed charges is another form of revenue decoupling because it
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loosens the connection between sales and revenue in an asymmetrical way that is favorable to the Company?
A. Yes.
Q. So, could you -- or could one reasonably conclude that, to the extent a decoupling plan reduces risk to shareholders, reducing fixed charges builds some of that risk back in?
A. I think the fixed charge on the scheme of decoupling is a component. But crediting all this benefit of decoupling on the fixed charge changes might be overdoing it.
Q. Finally, with respect to weather adjustment, you would agree, would you not, that the Company's current rate design weather-normalizes distribution revenue by making adjustments twice a year?
A. When you are talking about "twice a year," what do you mean by that?
Q. Well, I mean the Company
weather-normalizes -- there is already a weather adjustment process in the Company's current rate design.
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A. Yes. Can I go back to that? Weather normalized to centigrade, but afterwards nothing happens.
Q. Yes. You're aware that Paragraph $L$ of the settlement agreement requires, not permits, but requires Liberty to come back in for a rate case in 2021, if not sooner?
A. As long as I remember, yes.
Q. And would you agree with me that the Commission could reasonably conclude that the reason for such a requirement is to provide an opportunity to re-examine the decoupling mechanism adopted here, in the event it provides unreasonably large windfalls to shareholders?
A. I don't think that particular aspect of the settlement actually does that. Every time Commission review a rate case, they can do that assessment at that time.
Q. When the Company comes back for that next rate case in 2021 , if not sooner, would the PUC be free to abandon decoupling or change it completely in that rate case?
A. That's up to the Commission.

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Q. So could the Commission reasonably conclude now that the decoupling plan in the settlement agreement is something of an experiment?
A. I reviewed the decoupling document. Nowhere in any of the testimony or any of the witness actually mention that, that this is a test case.
Q. In your testimony on Friday and then again this morning, you mentioned price signals. And I think I heard you say that you don't like real-time weather normalization because it would encourage customers to use more natural gas when the weather is colder than normal, which is just when you would want to send them the price signal that reminds them to conserve more. Did I get that right?
A. It will give that indication of when we are saying that when you use more, you might get the credit back.
Q. Do you have any evidence that natural gas customers who use natural gas for heating respond to price signals in that fashion?
A. Everybody respond to price signal.
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Q. Do you have actual evidence that everybody responds to price signals?
A. That's basic economics.
Q. Basic economics?
A. Yes.
Q. Basic economic theory.
A. Yeah.
Q. Do you agree that, to the extent customers respond to price signals, the response is a function of the overall cost of the service that they receive?
A. Yes, exactly my point you are making when you are saying that this adjustment doesn't make sense. It doesn't stabilize the customer's Cash flow.
Q. So, in other words, customers wouldn't isolate one charge on the bill and decide that that's the price signal they're going to respond to.
A. Customer might. That's why all this information we are putting in the bill, so customer can review those and take that decision. So you're saying the customer is not reviewing this particular item in their
bill? I don't agree with that.
Q. Did you hear Mr. Therrien and Dr. Johnson point out the other day that commodity charges will still go up in response to cold weather -- that is, the commodity charges on Liberty Utilities bills?
A. It depends on the demand and supply.
Q. Wouldn't the economic theory that you just referred to suggest that in times of cold weather, the commodity charges on customer bills would increase?
A. Yeah, that's a reasonable assumption.
Q. And did you hear Mr. Therrien and Dr. Johnson point out that those increases will more than offset any increases during cold weather arising out of the real-time weather normalization of the distribution charges?
A. Then why do you do this real-time adjustment anyway?

CHAIRMAN HONIGBERG: You want to try that answer again? I don't think that was responsive to the question.
A. Okay. Repeat the question.

BY MR. KREIS:
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Q. Well, my question was, really, did you hear Mr. Therrien and Dr. Johnson state here that the increases to the commodity charges as the result of cold weather would more than offset any decreases to the commodity charges -- to the distribution charges, that is, that the weather-normalization mechanism would produce on customer bills?
A. I remember that. And my point on that, that if that is the case, then why do you go through this painful way to refund this miniscule amount to the customer. I agree with that. And that's one of the reason I don't agree with this mechanism.
Q. I understand.

I think the last thing I want to cover with you is the two case studies that you drew the Commission's attention to on Friday. And just to refresh everybody's memory, I think those case studies are Exhibit No. 65. Those two case studies are a part of a larger document from the Regulatory Assistance Project entitled, "Decoupling Case Studies:

Revenue Regulation Implementation in Six

States"; correct?
A. Yes.
Q. And Exhibit 65 is just an excerpt from that Regulatory Assistance Project document.
A. Yes.
Q. Do you recall that the same case studies are appended to the document that is marked as Exhibit No. 59?
A. Can you refer to the page number? BY MR. KREIS:
Q. Well, the point I'm making, and maybe I can just say this: I just want the Commission to note that the six case studies that the witness or the Staff has excerpted are actually also appended to the Decoupling Guide that is Exhibit 59. We just didn't reproduce those for the Commission. So, really, we're looking at an overall
examination by the Regulatory Assistance Project of this question of decoupling, relying in part on some case studies.

CHAIRMAN HONIGBERG: I understand
what you're saying, I think. I want to repeat
it and make sure that Staff and the Company
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agree with what you just said, that Exhibit 59 and Exhibit 65 really have the same source and are from the same time; that when the Regulatory Assistance Project prepared its report, part of it was what we now have as 59 , another part of it is what we have as 65. And there's more because obviously 65 is just an excerpt from something.

MR. KREIS: Indeed. Exactly.
CHAIRMAN HONIGBERG: Okay. Mr.
Dexter, Mr. Sheehan, you agree with what Mr. Kreis just said?

MR. SHEEHAN: Yes, sir.
MR. DEXTER: I don't know, but I'll accept it.

CHAIRMAN HONIGBERG: Thank you.
MR. KREIS: And I have to
confess, I don't know why the regulatory
Assistance Project is essentially repackaging the same information in different documents. Maybe just trying to be helpful. Maybe it's doing different work for different clients. I really don't know. And I don't think the record needs to resolve that one way or the another.
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A. On that I think that I can help. They actually refer to, when they're doing case study, they actually refer to the original report.

BY MR. KREIS:
Q. The two case studies that you brought to the Commission's attention on Friday were the Idaho Power Company, and it's marked as Page 18 -- or excuse me -- Idaho Power Company marked as Page 11, actually Page 18 in the appendix to the document that is partially included in Exhibit 59. So, it's Page 11 for the Idaho Power Company's case study and Page 14 for the Maryland, Baltimore Gas and Electric study. Yes?
A. Yes.
Q. And just so it's clear, both of those decoupling plans concern electric rates and electric customers and not natural gas rates and natural gas customers. Yes?
A. Yes.
Q. And your point, I think, was that the so-called "weather risk" was left with the Company in the case of Idaho Power Company,

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but was adjusted in the case of the Baltimore Gas and Electric Company in a manner you regard as similar to what we're proposing here.
A. That's my understanding.
Q. Yes.

CHAIRMAN HONIGBERG: Mr. Kreis, before you continue, something you did confused me, okay.

MR. KREIS: Sorry.
CHAIRMAN HONIGBERG: You made a reference to Page 18, I think, of Exhibit 59?

MR. KREIS: The problem is that we didn't reproduce the appendix when we created Exhibit 59. There's an appendix to that document which we could provide you if you wanted. But it really is duplicative of what we're looking at here, the two case studies that Mr. Iqbal referenced. And I don't see a need for you to look at all six case studies or --

CHAIRMAN HONIGBERG: And is what you're telling me that Page 18 of that appendix, if $I$ had it in front of me, would be the Idaho study that is in front of me marked as Page 11
[WITNESS: IQBAL]
of Exhibit 65?
MR. KREIS: Yes, that's exactly right.

CHAIRMAN HONIGBERG: All right. For a moment there, $I$ thought you were referring me to something that is part of what $I$ have as Exhibit 65.

MR. KREIS: And what I am inadvertently imposing on you, Mr. Chairman, is my own confusion, because I've been looking at these case studies, but they are a different documents and in different forms, and I'm just trying to get it all straight.

CHAIRMAN HONIGBERG: All right. You're a carrier of confusion as well.

MR. KREIS: Yes, exactly. I'm a perpetrator of confusion, and I definitely apologize.

BY MR. KREIS:
Q. So you drew the Commission's attention to the table which also appears in the appendix to what is Exhibit 59. But here in Exhibit 65, it's the last page of that exhibit. It's marked as Page 37. And I think, if I'm
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remembering correctly, you drew the Commission's attention to that table because your point was -- well, if you can tell me, what was the point of drawing the Commission's attention to that table?
A. The point was the idea that the decoupling mechanism the Company in the settlement is proposing, and decoupling mechanism, what we are talking about from the Staff perspective, the point we are making here, that it doesn't impact the ultimate utility performance in saving the energy. So the whole idea of decoupling is energy efficiency. And it shows that energy efficiency savings from both model almost similar. If you look at the other models, still it seems like there is no impact on their performance, irrespective to the decoupling mechanism.
Q. Would you agree that the impact that you were just discussing in that chart is the impact of ratepayer-funded energy efficiency programs?
A. That's my understanding.
Q. So it doesn't purport to measure the overall

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impact of any efforts the Company might have undertaken that would have had the effect of reducing the Company's sales to customers.
A. I don't know about that.

MR. KREIS: With the Commission's indulgence, I think I have another exhibit that I'd like to hand out. Somebody will have to tell me what the next exhibit number is.
CHAIRMAN HONIGBERG: Sixty-six.
(The document, as described, was herewith marked as Exhibit 66 for identification.)

BY MR. KREIS:
Q. Okay. With respect to Exhibit 66, you would agree with me, Mr. Iqbal, that this is Page 35 from the document that you excerpted in order to create Exhibit 65?
A. I think so.
Q. Would you agree with that proposition, subject to check?
A. Yes.
Q. And would you look at the paragraph, or the section on Page 35 that's marked
"Complementary Policies."
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A. I am there.
Q. And would you look at the last sentence in the first paragraph.
A. Yes.
Q. And would you agree with me that it says that Idaho does not have an Energy Efficiency Resource Standard, but rather has energy efficiency objectives that are developed through an integrated resource plan process --
(Court Reporter interrupts.)
Q. Sure. I was just reading this sentence.
"Only Idaho does not have" -- and I assume this means only Idaho, out of the states that the Regulatory Assistance --

MR. DEXTER: Objection. I don't
think we need counsel's assumption as to what this means. If he'd like to phrase a question for my witness to answer, I'd appreciate that. CHAIRMAN HONIGBERG: I got it,

Mr. Dexter. I agree with you. Mr. Kreis, just go back to reading the sentence. And actually, you were paraphrasing it before.
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[WITNESS: IQBAL]

MR. KREIS: Fair enough. It says, "Only Idaho does not have an Energy Efficiency Resource Standard, but energy efficiency objectives are developed through an integrated resource plan process. Energy spending at IPC" -- which I assume means Idaho Power Company -- "has increased dramatically in recent years."

So you would agree with me, would you not, that what the Regulatory Assistance Project is saying here with respect to its case studies is that Idaho is different than the other states that it studied because that state does not have an Energy Efficiency Resource Standard?

MR. DEXTER: Objection. There's absolutely no foundation for the witness to make that conclusion on the basis of what Mr. Kreis has read into the record.

CHAIRMAN HONIGBERG: If he
doesn't know, he'll say he doesn't know.
A. I think that's it what says here. But I would say that that actually proves our point, that irrespective to the decoupling

[^0][WITNESS: IQBAL]
mechanism, the Company is actually encouraged to invest more in energy efficiency without any mandate from their commission.

CHAIRMAN HONIGBERG: Mr. Kreis, how long a document is the appendix that was part of the report that's Exhibit 59 and was excerpted in 65 and now 66?

WITNESS IQBAL: I can help on that.

CHAIRMAN HONIGBERG: Mr. Kreis is on it.

MR. KREIS: I can tell you the answer to that question. It is 85 pages long which I guess is why we didn't produce it for you.

CHAIRMAN HONIGBERG: Well, it's just become Exhibit 67.

MR. KREIS: We will be happy to produce it for you.

CHAIRMAN HONIGBERG: Thank you.
(The document, as described, was herewith marked as Exhibit 67 for identification.)

BY MR. KREIS:
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Q. Okay. Mr. Iqbal, you heard Mr. Therrien and Dr. Johnson testify on Friday that, with respect to energy efficiency, real-time weather normalization is useful in orienting the entirety of the utility's' organization with direction and conservation and efficiency?
A. That's their conclusion, yes.
Q. But it's not one you agree with?
A. No.
Q. Finally, if you -- I guess I'll skip that. I think just a couple of questions that arose out of your closing comments on direct.

You talked about the difficulties that the auditors would have in figuring out how the real-time weather-normalization adjustments were made. Are you yourself an auditor?
A. No, I'm not. And particularly those concern is raised by Mr. Therrien. He's not an auditor either.
Q. So you really have no way of knowing whether the auditors would find it impossible or difficult to retrace the steps of the
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real-time weather normalization, would you?
A. An auditor can answer that question. I cannot.
Q. Right.

Finally, I think the very last thing you said, and I think the very last question I'll ask, is you talked about -- or you testified that one of the reasons you don't like real-time weather normalization is that it provides an advantage to the Company vis-a-vis its unregulated competitors;
correct?
A. Yes.
Q. You're aware, are you not, that the Commission's statutory role is to serve as the arbiter between the interest of the customers of regulated utilities and the shareholders of regulated utilities? Yes?

MR. DEXTER: Objection. I don't think this witness's role is to describe for the Consumer Advocate what the Commission's role is. If the --

CHAIRMAN HONIGBERG: Overruled.
He can answer.
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A. Can you repeat the question, please? BY MR. KREIS:
Q. Well, $I$ was just asking if you are aware that the Commission's job by statute is to serve as the arbiter between the interests of customers of regulated utilities and shareholders of regulated utilities.
A. That's one of the effect of the Commission.

MR. KREIS: Mr. Chairman, I think
those are all the questions that I have.
CHAIRMAN HONIGBERG: Mr. Sheehan.
CROSS-EXAMINATION
BY MR. SHEEHAN:
Q. Good morning, Mr. Iqbal.
A. Good morning.
Q. We get to change topics back to the training center.
A. Yeah.
Q. Your testimony with regard to the training center was that the Company should recover zero in costs related to the training center; correct?
A. Costs related to the training center, yes.
Q. And that number that the Company requested
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was about $\$ 500,000$ per year.
A. Subject to check, yes.
Q. Your expertise in this docket is as a financial analyst; correct?
A. As an analyst.
Q. Your expertise in this docket is not on the utility's practices of training its employees.
A. No.
Q. So you cannot offer opinions on what is appropriate training or inappropriate training; correct?
A. Yes.
Q. And you cannot offer opinions on whether we do too much or too little training.
A. I think the question -- the couple questions you are asking, yes, $I$ cannot, but the Company could.
Q. And you cannot offer an opinion as to whether we should train certain employees on certain topics and other employees on other topics. Those are all questions outside the scope of your financial analysis expertise; is that correct?
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A. I think that's the work of the Company, not the Commission analyst like me.
Q. The Staff does have within its portfolio of people a safety division; correct?
A. Yes.
Q. And you're aware that, generally at least, what the safety division's expertise is; correct?
A. I have a vague idea, yeah.
Q. And would you agree that the safety division probably is qualified to offer opinions on training appropriateness, quality, frequency and those kinds of training topics? Would you agree?
A. Yes. And in my testimony I didn't comment on the appropriateness.
Q. Understood. And in this case, there is no testimony from the safety division, period.
A. Yes.
Q. There is no testimony either supporting or objecting to the training methods adopted by the Company; correct?
A. When you are talking about "training methods," what do you mean by that?
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Q. I'll move on.

And so the issue that you focused on in your testimony, again, was an economic issue. And I'd like to point your attention first to Staff's initial position in this docket at the prehearing conference when the parties were each allowed to make a statement of the issues they intended to explore.

Counsel for Staff said, "Staff will be looking at the significant increase in rate base from last case." This is from the transcript of prehearing conference. "We believe that to be a key issue in this case that requires examination. The Concord training center in particular is of concern to the Staff" -- and here's the part I want to draw your attention to -- "not necessarily in concept as much as it is in the amount of the training center as we understand its current cost versus its projected cost when it was first mentioned to the Staff several years ago." Do you recall that?
A. I recall that. That was the preliminary position of the Staff. That was not the
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final position.
Q. Understood. I just wanted to -- and you were the only witness that offered testimony on the reasonableness of the Company's request for recovery of the training center cost; correct?
A. Yes.
Q. And you chose not to offer any evidence on the actual cost incurred to build the training center; correct?
A. Yes.
Q. So you did not go through what makes up that $\$ 500,000$ revenue requirement request and say, for example, Line 7 should be deleted, Line 8 is okay, Line 10 -- you didn't do that kind of analysis here.
A. That was not my scope of my testimony.
Q. Your testimony was, and your recommendation is, the initial decision to build the training center was flawed, and therefore, everything that followed that initial
decision was imprudent; correct?
A. That's your conclusion. I think to certain extent, yes.
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Q. I'm sorry. Was that what your basic opinion is?
A. Yes. My testimony explain itself. So you can summarize it any way you want. But that's my point, that my testimony speaks for itself.
Q. And so understanding that's your position, if the Company had spent $\$ 1$ million or $\$ 2$ million or $\$ 3$ million, and it turned out to be $\$ 4$ million, it would not affect your opinion. That didn't go into your analysis; correct?
A. No. Yes.

CHAIRMAN HONIGBERG: Wait. You just said both "No" and "Yes." They can't both be right?

WITNESS IQBAL: Yes.
BY MR. SHEEHAN:
Q. And the core of your opinion, as I understand it, is that the Company did not adequately
look at the other options to the training center when it decided to go forward with the training center.
A. That's one of my observation, yes.
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Q. And you were told through discovery what options the Company did consider; correct?
A. Yes.
Q. And if you could pull up the data request that you introduced as Exhibit 36 -- I'm sorry. These are in your testimony. I'm sorry.

MR. DEXTER: I'm sorry. Which
exhibit are you looking at now?
MR. SHEEHAN: This would be another attachment to Mr . Iqbal's testimony at Bates 69. And we'll be moving between a couple of those data requests.
A. Yes, I'm there.

BY MR. SHEEHAN:
Q. And this is just an example of one data request and response in which you asked, with regard to Bates 69, about one of the options available to the Company, and that was to complete its training through exclusively on-the-job training; correct?
A. I didn't say about -- my question doesn't mention that exclusively, on-the-job
training.
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Q. Read the first paragraph of your request on Bates 69.
A. I was on the wrong page. Sorry. Yes, I'm there.
Q. And this particular answer was the Company's explanation why it did not want to rely exclusively on on-the-job training; correct?
A. Yeah, that's the answer from the Company.
Q. And again, going back to the exchange we just had a few minutes ago, you have no basis or expertise to challenge the Company's conclusion that exclusively using on-the-job training is inappropriate for the Company's needs.
A. On that point, $I$ asked the Company, one of the data requests where $I$ asked that is there any report, study or standard. And Company couldn't provide any of those. I think this is the question we are talking about, if you look at it, Please provide analysis, rules, standard, et cetera, which support this conclusion. And Company couldn't provide any.
Q. But you don't have the basis to say that
relying exclusively on on-the-job training is sufficient for Liberty Utilities. You can't say that; correct?
A. I cannot. That's why I asked this question, that if Company can say that.
Q. The Company did say that.
A. I asked for the support for that.
Q. I understand. But the Company did say that, and you don't have the basis to challenge that conclusion; correct?
A. Without support of any statement, I have a problem with that.
Q. In fact, they did describe it, not with studies, but with an explanation that's in front of us here of all the shortcomings of relying exclusively on on-the-job training; correct?
A. Just being limited, not being -- that if these are the reason one company is going for the training center and another company is not, that raised that issue that what is the support for that. If one can do on-the-job training and meet their requirement and then other company says that's not good enough,
then the new company has to provide the support. And that's what we asked in this data request.
Q. But even if we provided support that was satisfactory to you, you are still not the expert to say I accept that support.
A. If the support is provided, with my other expert we can review that.
Q. And since you did not get the support that you thought you should have gotten, you had the option of calling your colleagues in the safety department and saying we need your help.
A. If the Company had support, they should have provided it. That's my point.
Q. The next data request is Bates 59 in the same document. And this discusses another option available to the Company that was reviewed in discovery, and that is whether there were options or information available from our neighboring utilities; correct?
A. Page 59?
Q. Correct. Should be Request Staff 4-24.
A. Yes, I'm there.
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Q. And this is the answer where the Company describes its outreach to Unitil, the Co-Op, Green Mountain Power and Eversource, with the answers that the Company got from those companies; correct?
A. Yes.
Q. And again, the conclusion of this answer is: A, these other companies do not have something we could use; and $B$, it describes what, in some ways, what they offer their own employees. Correct?
A. That's what it says.
Q. Next one to look at is Bates 62. And this is where you asked for a financial analysis of efficiencies that we, in a prior document, said would be gained by the use of a training center; correct?

MR. DEXTER: Could I ask that the witness be allowed to view the answer or review the document?

MR. SHEEHAN: The document is the next one.

CHAIRMAN HONIGBERG: I don't think he has any questions about the document.
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He's just getting it out there. It was a little distracting, but --

MR. DEXTER: Could I ask counsel to repeat the question, please.

CHAIRMAN HONIGBERG: Sure.
BY MR. SHEEHAN:
Q. Looking at Bates 62 , which is in response to Staff 4-26, this is you asking, or Staff asking for some financial and economic analyses of the efficiency gain described here, and you're making a reference to Mr . Mullen's testimony.
A. Yes.
Q. And there's an answer there. In effect, it would be too complicated to engage in such kind of a spreadsheet, financial analysis, given all the variables involved; correct?
A. Yes.
Q. And that's why the Company, according to Mr .

Mullen's testimony in this answer, did not do that kind of economic analysis; correct?
A. I think I answered this question in my testimony, that $I$ don't agree with that.
Q. Okay. The next one to look at is Bates 56,
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and it goes into Bates 57 , which is a request in another docket, Staff 2-3. And the respondent is a person named Mark Smith. Do you recall who Mark Smith is?
A. I think so.
Q. He was --
A. He's a nice person.
Q. He was the human resources manager for Liberty.
A. I guess so, yeah.
Q. And this is a similar question asked in 2016 for the cost benefit analysis done by the Company in deciding to go forward with the training center; correct?
A. Yes.
Q. And again, he lists at a high level the cost and benefits that the Company considered, but again did not engage in what I'm paraphrasing as a spreadsheet analysis of those costs and benefits; correct?
A. It is a spreadsheet analysis. If you look at the attachment, it is a spreadsheet analysis.
Q. Okay. But not to the detail that you were looking for. Is that fair to say?
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A. It is fairly detailed.
Q. Okay.

MR. DEXTER: I'm sorry. Did the witness say, "It is fairly detailed"?

WITNESS IQBAL: Yes, because if you look at Page 58, there's number's of trainees, hourly overtime expenditure, average daily travel. I think this is the details. And this type of details I used in my table, too.
Q. Okay. So you did get some costs involved in the training of Liberty employees; correct?
A. Yes. This is the cost benefit analysis.

And I want to also point out that my critique on this particular analysis was done in previous docket, and our point was that this analysis doesn't make sense at all.
Q. You agree that we can't today do an analysis that you think should have been done five years ago.
A. This is the analysis you provided, and it didn't say when it is done.
Q. Okay. Turning to the document that was just handed out, which is a response to Staff 4-25. And that will be marked as --
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# CHAIRMAN HONIGBERG: 68. <br> (The document, as described, was herewith marked as Exhibit 68 for identification.) 

MR. SHEEHAN: Thank you. BY MR. SHEEHAN:
Q. This is yet another question and answer concerning the Company's ability to use a building in its Manchester facility, which was one of the options considered by the Company; correct?
A. Correct.
Q. And this is the answer that says we could not use the Manchester facility because any needed renovations would run into environmental issues because this particular location is a site of manufactured gas pollution; correct?
A. That's what it says.
Q. Do you have any reason to dispute that?
A. I don't have any reason to dispute that. But I will add that these are the type of facilities the previous company actually performed their training activities. That's
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my understanding.
Q. And again, going back to our earlier exchange, you can't tell me that the current training is inappropriate as compared to the training done by the prior company; correct?
A. What do you mean by "inappropriate"?
Q. If Liberty today chooses to do training that cannot be accommodated in a building in Manchester, for example, even though a prior version of Liberty did do training in that building, you can't tell us, the Commission, that that was a good or a bad decision by Liberty with regard to the type and quality of training.
A. Yes.
Q. So these few data requests we went through mentions some of the options available to Liberty when it decided to build a training center, including exclusive reliance on on-the-job training, what other utilities were doing or had available, other buildings that Liberty may have in its portfolio. And you would agree that the Company concluded that none of those were viable options;
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correct?
A. That's Company conclusion.
Q. Were there any other options the Company should have included or should have reviewed, in your opinion?
A. I detail that in my testimony.
Q. Okay.

CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record)
CHAIRMAN HONIGBERG: We're going
to take a 10-minute break.
(Brief recess was taken at 10:38 a.m., and the hearing resumed at 10:58 a.m.)

CHAIRMAN HONIGBERG: Mr. Sheehan.
MR. SHEEHAN: Thank you.
BY MR. SHEEHAN:
Q. I understand, Mr. Iqbal, from your testimony that you don't think the Company did appropriate analyses before making this decision. I want you to assume that we did, that we did an analysis of all these options we just talked about, an analysis that you find to be appropriate, and it came to a
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ranking, in effect, of the costs of all these options. Okay?
A. I disagree with that, that conclusion, that my analysis only looked at --
Q. No, no. You're misunderstanding. I want you to assume that we did an analysis that you would find acceptable. Okay? I know we didn't, according to you. I want you to assume --
A. Hypothetical we're talking about.
Q. Yes. And so you now have in front of you four stacks of paper for our various options: one analysis of using the Manchester site, one analysis of using exclusively on-the-job training, one analysis of RFP-ing out training services, whatever. And we have them all stacked up next to you. And one for the training center as we built. Now I want you to assume that the training center was not the cheapest option. Is your testimony that we must choose the less expensive option?
A. Without going into the details of all these options, I cannot conclude.

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Q. Okay. Would you agree that, if that scenario played out, that the Company would have a right to choose the more expensive option if it provided better training?
A. Still talking about hypothetical. Without going into the details, $I$ cannot comment on that.
Q. We do have some information about costs at this time; correct?
A. Some .
Q. And we've been through it a little bit before. And if you turn to Page 25 of your testimony, it's that chart listed
"EnergyNorth -- or titled "EnergyNorth Training Costs."
A. Table 2.
Q. Correct. You there?
A. Yeah.
Q. And Mr. Mullen testified about 4,000 hours being added. And then I think you testified that that's probably not the right number. The more appropriate number to add would be 1900 hours; correct?
A. I'm not sure about that, because of the 1900
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hours... Exhibit 62, this 1900 hours you are talking about based on Exhibit 62 and 63. And I say that on Friday that we are not sure what you're saying here is incremental to what you provided in the response of the total training cost yearly.
Q. I believe the evidence is -- and correct me if you disagree -- that if you look at the Hours column on Table 2 -- and let's just focus on 2016 -- the number is 2,756; correct?
A. Correct.
Q. I believe that number came from certain data requests that you posed to the Company asking for training hours information; correct?
A. I think I provided that --
Q. I'm not asking you to find it. But that's how the number came about.
A. No, I have problem with your characterization what I asked.
Q. Okay.
A. I think several time we ask all that training-related cost and information in different dockets. And last docket we asked
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about this, details about from '13 to '15 -2015 cost, and Company provided that. And that was part of my testimony in that docket, which is Bates Page 46. And this year I just updated the EnergyNorth part.
Q. Fair to say there have been dozens of data requests regarding the training center through the four dockets it's now been reviewed in?
A. I can agree with that.
Q. The first EnergyNorth rate case, the 16-560 contract case, the Granite State case from last year and the current case?
A. I think Mr. Mullen's rebuttal testimony actually spent a lot of time on that.
Q. And so sometimes a question would be asked with one focus and the answer would be provided, and then the information may not be what you wanted, so there would be a follow-up question. So, fair to say there was some talking past each other through this discovery process? Would that be fair?
A. Yeah. We are trying to understand what's going on.
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Q. I understand. So what's your understanding of what is included in the 2756 hours that is in your Table 2?
A. If you look at Page 46, it says Actual Cost, Management, Uni and Environment.
Q. And those were for the mandated training; correct?
A. Those are the total training. That's my understanding. Because my question was the total training cost for those three years, and I asked to update that. My understanding, those are the training, each item. There is one item I didn't include, that's safety and some other stuff.
Q. So the 1900 hours you're saying today is what, the so-called extra, "1900 extra hours"?
A. First of all, $I$ don't know "extra." Second of all, if you look at the training performed, it is very detailed document. The Excel sheet has lots of information. So it seems like those are the training. But from my understanding, from my -- as I said that, I'm not sure these are incremental. If these

[^1]are incremental, then my question would be what are the actuals then. So I'm confused when you are saying that these are the trainings we performed in 2016 at training center, and that doesn't include these 2756 hours. I don't know what to make of that.
Q. Okay. And going to the first column, Training Costs, there's a number of $\$ 237,000$; correct?
A. Correct.
Q. And you said the other day that that number should -- well, let me ask you. What do you think is in that number?
A. I just said that it is the corresponding number or corresponding cost the Company provided for those type of training $I$ just talked about.
Q. Is it your understanding whether the wages for employees attending training is in that figure?
A. Yes.
Q. What leads you to that conclusion?
A. Can you clarify? What do you mean by that?
Q. You understand that the Company has two
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full-time trainers.
A. I do.
Q. You understand that their cost would be included in training cost; correct?
A. My understanding, those are included in these numbers.
Q. And would it be a real rough estimate to say their salary and benefits are roughly $\$ 100,000$ each?

MR. DEXTER: Objection. I
actually asked that question of Mr . Mullen, and Mr. Mullen wouldn't answer it. So I think it's patently unfair for Mr. Sheehan to ask Mr. Iqbal that question.

MR. SHEEHAN: I'm asking what the witness thinks is in a number that is in his testimony.
A. Only thing I can say --

CHAIRMAN HONIGBERG: Hang on,
hang on.
MR. DEXTER: I asked that exact question of Mr . Mullen, what's the approximate salary and benefits of the two trainers, and he wouldn't tell me, he couldn't tell me. He
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[WITNESS: IQBAL]
didn't answer. So I object to that same question being asked of this witness. CHAIRMAN HONIGBERG: I don't know that that's what Mr. Sheehan asked. I may have misheard the question but -- can you repeat the question? I may be confused.

MR. SHEEHAN: I'm trying to ask if that $\$ 237,000$ includes the training wages or not. And to do that, I'm asking if it includes the trainers' salary that might comprise the bulk of the $\$ 237,000$.

CHAIRMAN HONIGBERG: And you're just asking for the witness's understanding of the number that he put in his testimony.

MR. SHEEHAN: Correct.
CHAIRMAN HONIGBERG: Overruled.
BY MR. SHEEHAN:
Q. So, just to start off, Mr. Iqbal, having heard the exchange we just had, if the trainers' salary and benefits are in your number -- is the trainers' salary and benefits in that $\$ \mathbf{2 3 7 , 0 0 0}$ number, if you know?
A. I'm looking for a data response which

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actually is source of this table. And as far as I remember, that has a column which is trainer cost. But if you're implying that those two trainers' cost is included in 237,000, I disagree, because those are two electric and -- I think I better look at the responses, the source matter on this particular --
Q. Okay. And you raise a valid point. If there's two trainers the Company has, one is electric and one is gas; correct?
A. That's my understanding.
Q. So it would only be appropriate, if the trainer's cost were in this column, that it would only be the gas trainer.
A. Yes, on that I have to -- I think I have to add one more thing, that these trainers are included from 2013 to 2015 because trainer -when Company was training at National Grid facility, at that time Company actually hired these two trainer. And one of the data request in a previous docket I asked about the cost for National Grid trainers' cost. And the response I got is that those costs we

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never paid, so it's not reflected in this number. But their internal trainers number included. That's my understanding. That's what Commission -- sorry. That's what Company told me at that time. And I don't have anything which $I$ can dispute. I just trust Company response.
Q. So it's your understanding that the Company has had full-time trainers on staff since 2013 or so?
A. That's my understanding.
Q. And it's your understanding that those trainer costs are included in the column you have listed in Table 2, Training Cost.
A. I think the source material would tell you what is included or is not included. So if you want $I$ select one item from that, you can do that. But if I say that that is only cost of training, there is payroll cost, there is travel cost, there are other cost included in there.
Q. Where I'm going with this, Mr. Iqbal, and I'm not trying to be clever, is you testified the other day that if you add employees to the

Hours column, you need to add in the time of their salary into the Training Cost column; correct?
A. Exactly.
Q. And my question is: The chart you have doesn't seem to have enough money in the Training Cost category to account for 2700 hours of employee wages. You follow?
A. If that is the case, it's all on the Company. I relied on the Company. If Company is saying that their data was wrong, that's not my problem. And if that is the case, I have to redo the -- I think one of the tech session we talked about it, that Company raise the issue that this number doesn't reflect everything. Then we have to rely on the Company. We don't have the data. We cannot --
Q. I heard you the first time.

So, going back to the 1900 hours, I understand you're saying you're not sure if that is incremental or not.
A. It doesn't say incremental.
Q. Let's assume for a moment it is. Okay?
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A. Okay.
Q. Then you would add 1900 to the 2700 in your column, and that would be about 4600 hours of training; correct?
A. Hypothetically, yes.
Q. And if you carry through the existing math, that would lower the training cost per hour, correct, because you have more hours with the same dollars?
A. That's what $I$ dispute on Friday, yes.
Q. I understand. I'm just walking you through it.
A. Okay.
Q. And then if you were to add in the employee hours, if that's the case, then that would increase the training cost per hour back up a bit; correct?
A. Hypothetically, yes.
Q. Okay. I'm going to give you some hypothetical numbers so we can have something in front of us. They're hypothetical. I understand you may not agree with them. If you were to add 1900 hours to what's there, and you take the 600,000 total
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training cost and divide by the new number of 4600 hours, I'll represent to you the math lowers the per-hour cost to \$133. My question is: Do you accept the math, not the concept behind the math?
A. I'll accept the math. But I might accept the concept behind the math that you are adding numbers of hours and you are adding corresponding cost.
Q. I haven't added the corresponding cost yet. All I did was add the hours, and that brought the average down to $\$ 133$. And again, if you were to hypothesize with me that employees -$\$ 50$ an hour is a rough approximation for a union employee wages and benefits, if you apply that to the 1900 hours, that would add about $\$ 90,000$ to the Cost column. Again, you don't have to accept those numbers. But as a concept, does that make sense?
A. I think I can agree with that.
Q. Okay. And again, $I$ have done the math, and it brings the hourly cost back up to about \$152 per hour.
A. That's possible.
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Q. And that's what your reservation's about, what is in and what is not in these various numbers; correct?
A. I explain that in my testimony.
Q. I'd like you to turn to Exhibit 35 and 36. These are data responses from Northern Utilities that were introduced earlier in this case.
A. I guess I don't have those.
Q. I have some of them for you. The first to look at is Exhibit 36, which is Northern's response to Staff Tech 1-10. Do you have that?
A. Yeah, I do.
Q. The first sentence reads, "When the Company acquired Northern Utilities, the Portsmouth facility underwent extensive building renovations to accommodate Unitil's operating requirements. Included in these renovations was space to accommodate classroom training needs."

Do you know how much they spent on these "extensive building renovations"?
A. I don't know, and it doesn't matter.
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Q. Didn't ask you that, sir. Do you know how much they spent on these renovations particular to training?
A. What training we're talking about?
Q. It appears from this answer that part of the renovations was space to accommodate training. Do you have any knowledge as to what part of the cost to renovate pertained to their training?
A. No.
Q. Did you ask Northern what options it considered before deciding to make extensive renovations to accommodate training?
A. I was talking about when those cost are included in rate base.
Q. So the answer is "No."
A. I don't know.
Q. Turning to Exhibit 35, at Bates 5, which is Northern's response to Staff 2-48 --
A. I'm there.
Q. -- this has similar broad categories of training costs as are contained in your Exhibit 2, correct -- or your Table 2?
A. I guess so.
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Q. And briefly, and it's in front of us, the Company invested $\$ 420,000$ in total training costs over a period of time. It's got a list of number of hours, and it breaks out the hours, the cost of those hours as $\$ 87,000$; correct?
A. What are you looking at, 87,000?
Q. The first bullet says the Company invested \$420,000 in total training costs; correct?
A. Yes.
Q. The second bullet says 2,373 hours of training are covered by that same period of time.
A. Yes.
Q. The third breaks out the labor cost associated with those hours to be $\$ 82,000$.
A. Yes.
Q. And the last does the math. Takes the 420,000, takes out the 80,000 in labor charges and has the $\$ 337,000$ of non-labor training costs; correct?
A. Seems that way.
Q. If you were to, in effect, apply these numbers to your Table 2, and we took total
training costs divided by the number of hours of training, that would be the 420,000 divided by the 2,373 , and the math says $\$ 177$ per hour.
A. Subject to check, yes.
Q. And if you were to remove the labor costs and just apply the hours to the non-labor, the number would go down to about $\$ 142$ per hour.
A. Subject to check.
Q. Mr. Iqbal, you have visited the training center; have you not?
A. I did.
Q. You were not part of the official view last week, but you were part of an informal tour last fall.
A. That's my understanding.
Q. Is it your recommendation to the Commission that that training center has no value?
A. That's a tricky question, because if you look at the -- if you want to value something which is part of your overall operation, I have question about that. That's what I raised in my testimony. But as isolated building, yes, that has a value. If you sell
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it, you might get some money on that.
Q. But your recommendation to the Commission has the effect of giving the training center no value to the Company. To remove the entire \$500,000 revenue requirement means, from a ratemaking perspective, it has no value.
A. From my analysis, yes.
Q. And you think that's a reasonable treatment for the Company's investment of that training center.
A. That's my conclusion.
Q. And you disagree that the training center is being used?
A. I think so. The data says that.
Q. So you agree with that.
A. Yes.
Q. And you agree that training is happening at the training center.
A. Yes.
Q. And you've seen all the schedules to see the thousands of hours of training happening at the training center.
A. I have no reason to dispute that.
Q. And you have no basis to challenge the types
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and quantity and caliber of training that is being performed at the training center.
A. The Company provided the list of the training.

MR. SHEEHAN: I have no further questions. Thank you.

CHAIRMAN HONIGBERG: Commissioner
Bailey.
QUESTIONS BY COMMISSIONERS:
BY COMMISSIONER BAILEY:
Q. Mr. Iqbal, in response to one of Mr .

Sheehan's questions I think you said you didn't count the hours of training that were associated with safety?
A. Yeah. Company provided -- actually do a symposium for all -- my understanding from discussion with the Company, that they provide training to all their employees. And they do it in a symposium-type arrangement, which is not done in training center or the office. It is done almost like a retreat.

So those are not the required training the
training center was built for.
Q. So does that training or does that retreat \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
happen at the training center now because they have it?
A. My understanding, no.
Q. Oh, okay. So that's why you wouldn't count it?
A. Yes, that's one of the main reason.
Q. Okay.
A. And I think the point I was making, that the training center, total justification of training center is to train the management and union employees, which was done at National Grid training center facilities. So it is replacing the National Grid training facilities. Everything else, like customer service and other training, doesn't require any training center. So, to apple-to-apple on decision-making, we have to focus on management and union.
Q. And is it true that they can't use the National Grid training facility anymore?
A. That's what Company is saying.
Q. Do you have any reason to doubt that?
A. No.
Q. Okay. So if that's true, then where -- how

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can they get that training done without the training center?
A. That's exactly my point, that they should have explored all these options and do cost/benefit analysis on this option and then took a position. My argument is not about whether they need training to train people or not. Yes, they do. But my objection is about their decision-making. It seems like the decision to build the training center is not supported by the analysis or documents they provided to us.
Q. So you don't know whether or not they could have trained, performed similar training or paid for similar training without building the facility. They just didn't consider that.
A. Yeah, exactly my point. I don't know because they didn't know. And the point I was making, that their decision was not supported by any analysis which says that those option are not available. Those option are not, from my perspective, those option are not considered properly.
Q. I want to ask you a few questions about decoupling, but $I$ have to find my notes first.
A. I have to find mine, too.
Q. Let me start with this question: Your testimony is not that there should be no decoupling.
A. No, that's not part of Staff position.
Q. Okay. Your position, however, is that they should have an established, set rate, charge that same rate every month, and then weather-normalize their revenue when they're trying to figure out whether there's a surplus or a deficit in the revenue that they have collected?
A. Exactly. Because when you're setting the rate, it's based on normalized sales. If you look --
Q. Excuse me. It's based on normalized what?
A. Sales or revenue.
Q. Sales. Okay.
A. Yeah. So that means that Commission is trying to say that, if the weather was normal, this is the RPC, revenue per

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[WITNESS: IQBAL]
customer, you should be collecting. So, being consistent with that, in my testimony $I$ argue that, being consistent with that, we are saying that the revenue shortfall should be calculated the same way, because the rates are set that way. So, to be consistent, when you are saying that whether we over-collected or under-collected, that should be done the same, using the same methodology.
Q. Can you look at Bates Page 10 of your testimony?
A. Yes, I'm there.
Q. And you list those six items that you believe should be included in the decoupling mechanism.
A. Yes.
Q. And the first one is the adjustment should be based on weather-normalized revenues.
A. Yes.
Q. We just talked about that. And you would do it weather-normalizing revenues, and they would do it, weather-normalizing effectively the rate each month.
A. Yeah. They are doing weather normalization \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
at monthly level. Not only monthly level, at customer level and their billing cycle level. And then they would be reconciling the difference at the end of the year.
Q. But isn't there less to reconcile at the end of the year if they get it right?
A. Yes, that's correct.
Q. Okay. So there could be some benefit to that. I understand you think that there are a lot of drawbacks to that.
A. Yeah.
Q. But there also could be a benefit.
A. Very minimal. That's my point, that they have -- as you put it that way, when we are talking about benefit, we have to look at the other drawbacks and costs, too. There is real cost for the customer, for the Company, and for the regulators, too, because if we are doing -- providing that benefit, so-called "benefit" -- and in my testimony this morning I pointed out those benefits doesn't matter. Even OCA also addressed that people look at the overall number, not individual item. That's my point, that then
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why do you go through all this pain to give up that individual item which creates problem for everybody in this room.
Q. Okay. The second point, the adjustment should be performed at the rate class level. They've done that in their proposal now; right?
A. I agree with that.
Q. Okay. And then the third, expected revenue should be calculated at individual rate class level, not in a combined rate class level. Was that with respect to when they reconciled?
A. Yes, I think they also added that. That's my understanding.
Q. So the settlement proposal takes --
A. Yeah, takes care of that.
Q. -- takes care of that. Okay.

Expansion rate customers should be included in the revenue decoupling mechanism calculation. And they did that.
A. They did that.
Q. Okay. Revenue decoupling mechanism adjustment should be capped at plus or minus

2 percent.
A. They didn't address that issue.
Q. They didn't address that issue, but I think they said something about why it wasn't necessary. Was that because of the monthly weatherization normalization, and so they don't need to cap it?
A. As long as I remember, Mr. Therrien addressed that issue, and that was his testimony.
Q. Okay. And then no mid-period adjustment should be made. If needed, adjustment can be made at the time of the Company's next rate case.
A. You want an explanation about what it means?
Q. Sure. Well, is that requirement still necessary with the settlement proposal that they --
A. I don't know, because $I$ think if there is no cap, then this requirement is not really necessary.
Q. If there's no cap what?
A. If there is no cap adjustment, that means that every year they will reconcile total amount.
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Q. Okay. And that's their plan.
A. Yes.
Q. So that item is also taken care of.
A. Yes.
Q. So the big item in this list that you have a problem with is No. 1.
A. Yeah, No. 1 problem.
Q. Okay. All right. Thank you. That's all I have.

CHAIRMAN HONIGBERG: Commissioner
Giaimo.
QUESTIONS BY COMMISSIONER GIAIMO:
Q. Good morning.
A. Good morning.
Q. So what I heard was that one of your concerns is uncertainty for the consumer.
A. Can I clarify? You're talking about decoupling still?
Q. Yes. I'm sorry. Yes, that's correct.

Uncertainty to the consumers is one of your concerns?
A. There was different uncertainty. If you're talking about any specific one, $I$ can address that.
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Q. Okay. The pricing uncertainty. It sounded like you thought that the changing price created uncertainty for the consumer and made things confusing to them. Is that accurate?
A. Yes, that's accurate. I think I made two point. One is uncertainty, this building, that which Company don't know, Commission cannot know, customer cannot know. So those are uncertainty that is very difficult to cope with. And that creates all this other problem for all this professional, Mr. Therrien, in his rebuttal actually pointed out.
Q. Does anything in this proposal preclude the Company from providing budget billing going forward?
A. No, there is nothing in the settlement which says they would not provide budget billing if this get -- if the settlement is approved.
Q. Okay. Does that help alleviate some of your concerns with respect to price uncertainty to the consumer?
A. No, that doesn't.
Q. Okay. Can we look at Exhibit 65, Page 37 of
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the RAP decoupling document?
A. Yeah, I got that.
Q. I was a little confused by the purpose of this document with respect to Staff's position. What I thought I heard you say was that basically the Idaho Power Company and BGE lines show that, irrespective of which methodology you choose, the effect, the outcome is the same.
A. Similar.
Q. Similar.
A. Yeah.
Q. Okay. Help me run through that, because the Idaho Power Company began decoupling in 2007, and theirs was . 6 percent; and BGE started same year, and theirs was 0.0 percent; and then over the course of the next three years, Idaho doubles to 1.3 percent, but BGE goes from 0 percent to 1.7 percent.
A. What I was trying to indicate, that irrespective to the decoupling model they're using, the direction is higher -- the direction is the same direction. That is going up. We are not saying that that should
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match each other. If you look at the other model in that document, too, you can see that direction is the same way. So we cannot expect that all these numbers should be the same. But we can conclude that, irrespective to the model, the decoupling model they're using, those are actually enhancing the energy efficiency.
Q. Okay. The last exchange you had with Attorney Sheehan, he asked you did the training center have no value, and then you said, well, it does have an inherent value; it has property value. So, assuming that for revenue treatment purposes it's excluded, getting your way, eventually when the Company sells the facility, all that flows back to the shareholders.
A. I'm not sure about that treatment. I think Mr. -- I think the revenue requirement witness could provide you that. I don't know how they would treat this asset if it is not included in their rate base. So, based on that, it could be included if they sell this Company, or it could be -- I don't know. I

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don't know how they would treat if Commission says it is not part of the rate base. It all depends on the management decision I think.
Q. Okay. You see the principle of what I'm trying to -- the suggestion I'm making. If the shareholders are assuming all of the risk and through the years don't have the customers contributing to it, why, when it's eventually sold, should any revenue associated with that flow back to the ratepayers?
A. I think it would be treated the same way if it is part of the rate base. It will be -the new company will treat it as part of rate base. And if it is not, then new company could say that we don't want to buy that one. COMMISSIONER GIAIMO: Thank you.

QUESTIONS BY CHAIRMAN HONIGBERG:
Q. Mr. Iqbal, you started this morning going over the problems you had with the Company's monthly reconciliation. And I think the first one you talked about was that it was ineffective, and that it was ineffective -and I tried to write your words down and may
not got it right -- that the whole idea of the monthly reconciliation is directed at the cash flow of the customers. Is that --
A. That's their argument. Now --
Q. Okay. I didn't hear their argument to be that. I heard that to be one feature of monthly reconciliation, that it would have some mitigating effect on rates, on that portion of the rates when weather was unusual. And so -- just let me finish. I heard them say that a big point of the monthly reconciliation associated with this was to eliminate large movements later on, that it was to mitigate large swings in rates caused by under- or over-collections, not so much cash flow of customers, but expectations of customers as they plan what they're doing. This was mainly directed at large users. Do you disagree with that concept?
A. I would defer to Mr. -- Dr. Johnson's testimony. If you look -- my understanding from his testimony, that it helps customer in respect to their cash flow. And then some other -- then he elaborated -- I think he
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didn't, actually. His testimony here, he added all this other information. But in his testimony, original testimony, the main idea is coming from the cash flow idea.

If you go to the source material, like the RAP here I think most his ideas came from, they talk about cash flow, that we are helping customers 118 we are taking care of Company cash flow, and then we have to find a reciprocate benefit for the customer; that means we are helping customers' cash flow.
Q. Would you agree with me, though, that the commodity price overwhelms any changes in the distribution adjustment that takes place? If there's a very cold month, a user is going to use a lot more gas heating than that small offset would be; correct? You agree with that; right?
A. Right, I agree with that. And that's one of the reason $I$ said that it doesn't make sense.
Q. I understand that. So I think you and I would agree that the small adjustment probably doesn't do much for customer cash flow.
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A. Exactly.
Q. But it does do other things for large users who can know a portion of the bill.

Sophisticated users will know a portion of the bill. Joe Blow Homeowner, like me, you know, I'm just going to look at the bottom line. I know when it's cold I'm going to use more and it's going to be an expensive month. But the large commercial users, they're going to be different a little, aren't they?
A. Very little. This is why: 118 I pointed out that even those large customer would not know that if they could get refund or a charge 118 it all depends on the weather.
Q. Here's where I disagree with you: I think you and I disagree about customers being motivated to use more by a small, potential adjustment when it's cold. If it's cold, I know I'm going to use more. And the fact that a tiny -- there might be a tiny offset that's going cause me somehow to change my behavior seems unrealistic to me. That doesn't -- that's not how people behave. And maybe there's some social science out there
that tells me I'm wrong. But what are you relying on to say that the presence of an adjustment on the bill is going to change people's behavior?
A. Any cost -- it's not only -- let's go back a little bit. That this gives the wrong -- if you're talking about the same thing, I think it will require you inquiring that how come it is a cost signal which is change for anyone's behavior.
Q. Right. A tiny adjustment in an otherwise large bill you think motivates people in a way that is counterintuitive to me.
A. It might be tiny, but the signal we are providing is wrong. That's my point.
Q. You hypothesized this morning a user in a cold month using 100 units, and then in the next month, in a mild month, also using 100 units. Isn't that example completely unrealistic by definition when we're talking about a heating customer?
A. No, that's not completely 118 I experience that situation. 118 let's say that one month my in-laws are with us, so $I$ have to heat the \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
house for the whole day. So when they are not, even though it's cold, I'm not heating that.
Q. You've changed the variable. That's not what you said this morning. Your only variables in your example this morning involved user decision-making of 100 -- I think it was 100 units in a month, a cold month, and then 100 units in a warm month. Unless you change a lot of other facts, that doesn't happen, 118 in the cold month, in the same usage pattern, you're going to use a lot more in the cold month than you will in the mild month, and you'll spend more. And that modest adjustment which will appear after the fact isn't going to change how you're going to heat your house.
A. Yes, everything is the same. Yes, I agree with your conclusion, yeah.
Q. The phrase that Mr. Sheehan didn't use with you in talking about the training center was "used and useful." He got a bunch of questions that were relevant to asking the question whether it was "used and useful."
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Is it your opinion that it is currently "used and useful"?
A. Yes.
Q. So you get off in the decision-making process earlier. You take an earlier exit ramp and say, 118 the decision-making process was inadequate, it can't be included in rate base 118 it wasn't prudent at the time it was made; is that right?
A. Exactly right. And I would point out that "used and useful" is a starting point when the Company can put those investment in their rate base. So they have to take that decision beforehand. So that's why the way I did my analysis.
Q. I'm wondering why some parts of what the Company offered you weren't adequate explanations for the decision they made to build the facility. One of the explanations that was in the data responses that Mr . Sheehan went over with you this morning was that we have people in the Company who have worked in this industry for a long time, and our considered judgment is that on-the-job
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training is inadequate; we need a separate facility. You seem not to accept that as a satisfactory explanation to reject the on-the-job training approach.
A. Yes, there is no support for that. They are saying that, yes, from our experience, our experience guy said that. But they're not the authority to say that this is good or bad.
Q. What authority would you be looking for? What would have been a satisfactory support for that statement?
A. If there is any standard or any rule which says that these are the requirement for this type of training and this is the way we have to provide, which doesn't include on-the-job training. But no rule actually says that, that we have, on-the-job training is inferior to training center training. So until we have that, anything the Company is saying, I don't have -- I trust them, but I want to verify that. If it is their conclusion not verifiable, $I$ cannot agree with them.
Q. So you would say that statement may be true, \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
you just haven't proven it.
A. The Company hasn't proven it.
Q. Right, "you" being the Company.

Also, the Company provided an answer, or a couple of answers that talked about trying to partner with another utility. They asked Unitil. They did some co-training with Eversource at a facility that no longer exists. They talked to the Co-Op. And they concluded that there were no partnering opportunities that were viable. Why was that not an adequate explanation for at least part of the decision that they made?
A. The most important part of the decision-making option they had that buying the service from other service provider, training provider, and they totally forgot about that option.

And to give an example, like Unitil
provide their training within their facilities. And they also have agreement with local technical training center and university. So those are the option. And if I was in their position, that would be first \{DG 17-048\} [Day 6 Hearing]\{03-26-18\}
[WITNESS: IQBAL]
thing should come to my mind, that is there any institution other than utilities who are providing this type of service. And from what I know from Unitil responses, yes, they have the options, and they didn't even consider that option.

Okay. Thank you. I think that's all I have. CHAIRMAN HONIGBERG: Mr. Dexter, do you have any further questions for Mr. Iqbal?

MR. DEXTER: I would like a
five-minute huddle with Mr. Iqbal before I do redirect, and I think it will be fairly brief. And then maybe that would be an appropriate time to break for lunch so we can prepare for

Mr. Normand in the afternoon?
CHAIRMAN HONIGBERG: Off the record.
(Discussion off the record) CHAIRMAN HONIGBERG: So we'll take a five-minute break.
(Brief recess was taken at 11:48 a.m.,
and the hearing resumed at 12:00 p.m.)
CHAIRMAN HONIGBERG: Mr. Dexter.
MR. DEXTER: Thank you, Mr.

Chairman.
REDIRECT EXAMINATION

BY MR. DEXTER:
Q. Mr. Iqbal, I'd like to direct your attention to your prefiled testimony in this case at Page 25. There's a chart there entitled "EnergyNorth Training Cost" that was the subject of questions this morning. Do you have that in front of you?
A. Yes, $I$ am there.
Q. Do you see the figure for 2016 training costs of $\$ 237,084 ?$
A. Yes.
Q. Do you recall being asked questions from Attorney Sheehan about what might be in that number, hypothetically and otherwise?
A. Yes, I remember that.
Q. Can you tell the Commission exactly what's in that number and indicate the source for that number, please?
A. The source for this number is Exhibit 64, where we asked for updated version of the previous data request, just to add 2016 number.
Q. And can you go through -- my understanding is that Exhibit 64 is a multi-page document. Could you take us through the document and indicate exactly where that number comes from?
A. That document have actually year-by-year management, union, and then health and safety and the safety symposium number. And it has several columns. First column is obviously the year; second column is how many trainings actually trained; then training per hour of training; training hours total -- that's multiplication of this second and third column -- average hourly pay; and then average overtime hourly pay, which is overtime hours; and then overtime hours for training; payroll, including burden -- that's actually inflated, this number, total cost with this burden. And then the gas technical training stuff, that's the number associated with the trainer. And as I indicated in my testimony, these are the internal trainer, 118 in one of the data request Company said they didn't pay anything to National Grid for
their training 118 they didn't charge them anything. So all the training, gas technical training staff, these are the internal training staff cost. And then aggregating all together in the last column.
Q. Well, let's simplify this, if you could. There are three numbers, are there not, in that document, Exhibit 64, that add up to the $\$ 237,000$ that's included in your chart on Page 25 of your testimony?
A. Yes. My testimony, we went through that number. I can go through that.

If you look at Bates 2, just focus on year 2016. The annual training cost is 24,500-something; then union, 173,000-and some. And if you go to the Bates Page 4, 2016 gas, I think it's line 2016 number, that's $\$ 39,507$. If you combine all three of these component, that will give you $\$ 237,000$.
Q. Thank you. Now can you read the question that's contained in Exhibit 64 that led to the spreadsheet that you just read from?
A. This is a long history, so... "Please provide 2016 actual itemized expenses for training in
the format of DE 16-383, Response to Staff 11-5. Please provide in live Excel format (with formulas intact)."
Q. So as I understand it, you asked the Company to provide you the 2016 actual training costs that they incurred. Is that essentially --
A. Yeah, actual training cost with all these details: Actual training hours, actual number of training, their overhead, their travel cost and everything.
Q. And the reason you asked for it in that format is 118 you had received that format in the prior docket where this was examined. Would you agree with that?
A. Exactly.
Q. Did you find that question to be at all ambiguous when you wrote it?
A. No.
Q. Did the answer indicate that -- was the answer qualified, that we don't really know what's in here? Was there any qualifications to that answer?
A. There was no qualification. And this is not the first time. This is the third response

of similar question. We asked one time, and then we -- the Company has to update this number 118 they didn't calculate the travel hours, I think that DE 16-383, one of the tech session number. And then this is the latest version of that.
Q. Okay. So you had no reason to question the information you were receiving from the Company .
A. I have no reason to question this Company's numbers, no.
Q. Thank you. That's all I had on the training center.

With respect to decoupling, there was some discussions this morning about whether or not customers would receive higher commodity rates in cold weather. Do you recall that?
A. I do.
Q. Would you agree that customers that have opted for EnergyNorth's fixed price option rate would not see higher commodity rates during cold weather?
A. Rate, yes, they would not see. But that's
[WITNESS: IQBAL]
called "fixed price option." So it's fixed.
Q. It's fixed for the entire winter if they opted for it.
A. Entire winter, yes.
Q. Would you also agree that there are firm transportation customers that may have fixed their commodity costs through a deal with a third-party supplier?
A. That's my understanding.
Q. And so if a customer had fixed his commodity cost through a third-party supplier and the weather got colder, they wouldn't necessarily see a higher commodity rate. Would you agree?
A. Yeah, rates would not go up. Yes.
Q. And you were never suggesting that when it's colder and people use more, that their bill won't go up. You understand that, that when it's cold out, their bill will go up. Would you agree?
A. Yes, I do.

MR. DEXTER: Thank you. I don't have anything further.

CHAIRMAN HONIGBERG: All right.

Thank you, Mr. Iqbal. We've come to the lunch break. We will come back at 1:15.
(Lunch recess taken at 12:07 p.m, and the hearing resumed at 1:21 p.m.)

CHAIRMAN HONIGBERG: All right. We're ready to go. We are back. Before we do anything else, $I$ will thank, I assume Mr. Kreis, for providing us with Exhibit 67, which we now have and is now part of the record.

MR. KREIS: I think you can thank
Mr. Buckley for the hard labor that was involved.

CHAIRMAN HONIGBERG: Thank You,
Mr. Buckley.
Is there anything else we need
to do before we have the witness sworn in?
[No verbal response]
CHAIRMAN HONIGBERG: All right.
Sue, would you do the honors, please.
(WHEREUPON, PAUL M. NORMAND was duly
sworn and cautioned by the Court
Reporter.)
DIRECT EXAMINATION
BY MR. SHEEHAN:
Q. Mr. Normand, could you tell the Commissioners your name and the Company that you work for.
A. My name is Paul M. Normand, $N-O-R-M-A-N-D$. I'm a principal with Management Applications Consulting, 1103 Rocky Drive, Reading, Pennsylvania, 19609.
Q. And what topic brings you here today?
A. Depreciation.
Q. And in a sentence or two, can you give us your experience on the topic of depreciation?
A. I've been heavily involved since 2000, where it's been -- I've been integral with studies and the presentation of exhibits and so forth.
Q. And prior to working as a consultant on this topic, did you have any jobs with industry or other areas that gave you experience related to this topic? That was a terrible question. But if you understand it --
A. I think you're trying to make me look old.
[Laughter]
A. I started doing cost and rate studies in 1978.
Q. Mr. Normand, you've filed testimony in this
matter, the Liberty Utilities rate case?
A. Yes, I did.
Q. What did the Company ask you to do in this case?
A. They asked me to prepare a depreciation study with the test year ending 2016.
Q. And you prepared that study and the testimony to go along with it?
A. Yes, I did.
Q. And I can tell you that's been marked as Exhibit 10 in this docket. If I were to ask you the questions in your written testimony today, would your answers be the same?
A. They would.
Q. Do you have any corrections to your testimony that you would like to make today?
A. No, I do not.
Q. So do you adopt your testimony today as your sworn testimony?
A. Yes, I do.
Q. Thank you, sir. No further questions at this time.

CHAIRMAN HONIGBERG: Mr. Kreis,
can I assume you have no questions for the
witness?
MR. KREIS: Correct.
CHAIRMAN HONIGBERG: Mr. Dexter.
MR. DEXTER: Thank you, Mr.
Chairman.
CROSS-EXAMINATION
BY MR. DEXTER:
Q. Mr. Normand, good afternoon.
A. Good afternoon.
Q. So I'd like to ask you questions on two subtopics of depreciation that have been raised as issues in this case. The first one has to do with average service lives; the second one has to do with the recommended amortization period for the reserve variance. These questions have to do with average service life. And what I'd like to do is ask you to turn to your testimony that Mr . Sheehan just identified and go to Bates Page 445, if you would. And it's a schedule that talks about Account 367, which contains mains.
A. Yes, I have that.
Q. And in the right-hand corner, on the upper
right-hand corner of this page, there's a box called "Recommendations." Do you see that?
A. Yes, I do.
Q. And would you agree that your proposal in this case is that gas mains be amortized over a 60-year period? Is that what the line "Average Service Life" means?
A. That's correct. That's the expected average life of the entire account.
Q. And the column next to Proposed says Prior. What does that column mean?
A. That's the average service life in the last study.
Q. From the last study. And when was that done?
A. That was test year 2016. And I believe the results of that study are included at the end of this report. So the results of that study are on Page 471.
Q. And did you prepare the prior study as well?
A. Yes.
Q. So in the middle of the page you talk about the service life analysis. And would you agree that your conclusion from this analysis is that no change should be made to the

|  | right-hand corner of this page, there's a box called "Recommendations." Do you see that? |
| :---: | :---: |
| A. | Yes, I do. |
| Q. | And would you agree that your proposal in |
|  | this case is that gas mains be amortized over |
|  | a 60-year period? Is that what the line |
|  | "Average Service Life" means? |
| A. | That's correct. That's the expected average |
|  | life of the entire account |
| 2. | And the column next to Proposed says Prior. |
|  | What does that column mean? |
| A. | That's the average service life in the last |
|  | study. |
| Q. | From the last study. And when was that done? |
|  | That was test year 2016. And I believe the |
| A. | results of that study are included at the end |
|  | of this report. So the results of that study |
|  | are on Page 471. |
| Q. | And did you prepare the prior study as well? |
| A. | Yes. |
| Q. | So in the middle of the page you talk about |
|  | the service life analysis. And would you |
|  | agree that your conclusion from this analysis |
|  | is that no change should be made to the |

average service life of mains at this time? Is that true?
A. That's correct.
Q. Okay. Now, Staff had asked a data request that asked for some backup to the conclusions that you just went through, along with all the other accounts. I'm just using this one as an example. And that was Data Request 2-38. Do you recall that request?
A. I have it in front of me.
Q. Okay. Well, what I have done and asked to be marked as Exhibit 69 is excerpted about nine pages from that response 118 I was -- and that covers four accounts. And I was going to ask you about four accounts. I'm not going to go through every account. So that's why I don't have the whole response there.

But if you were to look at Exhibit 69, and I'll direct your attention -- there aren't Bates pages on this, but there are pages numbers on every sheet. And direct your attention to the pages that are marked as Page 13 of 36,14 and 15. Do those have to do with gas mains?
(Witness reviews document.)
A. Yes, they do. And you can tell from the upper left that it does describe it as "mains," but it uses the PUC account, which is 1356.
Q. And there's some -- on Page 13 there's a little writing up in the right-hand corner that says "367." That's writing that Staff put on there. You did not write that 367; correct?
A. No, I did not.
Q. And we just penciled that in 118 it deals with Account 367.

Are these the -- do these three sheets underlie your conclusion that the 60-year average service life that existed should not change?
A. That's correct.
Q. And in the line under Average Service Life -and now I'm back on Bates 445 -- under the title Requirement Curve, you see under the Proposed column there's a notation "R3.O." Can you tell me what that is?
A. That's a distribution curve or a mortality
curve that says how the assets are going to end or be retired.
Q. And now I'm back on Exhibit 69, and I'm on Page 13, 14 and 15. Can you point out where the R3 curve shows up on those pages?
A. The curves show up in the bottom grouping, the third from the bottom, in each one.
Q. Well, let me back up and ask you another question. So we've got one account, 367 , but we've got three pages that deal with Account Mains -- or deal with Account 367 in Exhibit 69. We've identified those pages as 13, 14 and 15. Could you tell me why there are three pages for mains rather than just one page?
A. What $I$ do is $I$ have a history of data. And in looking at that data, 1 break it down into 30 years, 20 years and 10 years. And what you find is, there is a shift or a change in looking at these different subgroups. Typically the better weighting is the 20-year. Ten years is kind of short. So you have to be cautious about that one.
Q. So, typically you look at 20 years of
historical data.
A. I start with that one, and then I go to 30. And 10 is the least weighted one.
Q. Okay. And again, we're all trying to figure this out here. So let's go to Page 14 then, which is the 20-year curve. So if I go to the sheet, about 80 percent of the way down this upper block of numbers and letters there's a line that's called "R" and a Subtype that's called "3.0" and a Life that's called "72.28." Do you see what I'm talking about?
A. Yes.
Q. Okay. Could you tell me what that line means?
A. That's the -- if you look way on top, that's the average service life for that Iowa curve.
Q. And that Iowa curve you've identified as R3. 0.
A. That's correct.
Q. And now if I jump back to your testimony on Bates 445, that's the Retirement Curve that shows on 445; correct?
A. That's correct.
Q. And so what does that mean? Does that mean that, in your judgment, that's the best curve to use? Can you explain what the significance of that is?
A. No. What that says is if you look at Page 14, you have the statistics there. So the last three rows, what you have is the R-curve Type means it's slanted to the right versus a symmetrical curve. So that means, typically, your assets will retire a little above average. That's an $R$ curve, skewed to the right. Next to that is the curve type. That's the height of the curve. The higher the curve height, the greater will be your depreciation factor. So it will increase the expense.
Q. Which is the height of the curve? Which column?
A. There's an "R" the first column. The second column --
Q. Subtype?
A. That's correct. And what that is, is the height of the distribution curve from flat, which is zero or one, all the way up to five,
which is a very steep curve. So as you go up the curve, what you find is that your depreciation parameters and the results are increasing.

Next to that is the average service life. Next to that are the statistics I look at. So you've got the $C$ Index, which is the conformance index. What that is, is a measure of how well the curve fits against the data points. So the way that's calculated is they take the square of the -square differences between the data points and the Iowa curve. So, typically what you want is these numbers to be above 50 , which is a good fit.

Then, next to that is the retirement index. What the retirement index says is how well does the curve capture retirements. So the higher that number, that's what you want. And then you keep going to the right. And the Rank, what the rank says is in the overall range of curves from 1 to 27 , which we have in the model, these rank 24, 27 and 22, okay. And to the right of that, what
it's saying is Cycle index. What that says is how much of the curve are you using. So the key parameters are the $C$ Index, the $R$ Index and the Cycle. So the higher those are, the better.
Q. And when you say "the better," what do you mean by that?
A. Well, if the indices are increasing, the curve fit is getting better.
Q. Okay.
A. But the key, again, you've got a bunch of data points and you're running a curve through it. So you want the significance to be higher on the $C$ Index, conformance index it's called. And the $R$ Index, you want that very high if you can. And then the last index way on the right says you would like that to -- you want to use as much of the curve as you can with the data points. So as you can see, as the life increases, everything starts to deteriorate. You go up.
Q. So I'm just -- kind of a chicken and egg thing here. So in your study back on Bates 445, you're saying the recommended
retirement curve to use is R3.0?
A. Correct.
Q. And you make that recommendation on the basis of looking at the data, and primarily the data in the $C$ Index, the $R$ Index and the Rank columns on Page 14 of Exhibit 69. Do I have that right?
A. That's correct.
Q. Okay. And so then you look at what the life is as recommended by that curve, and the life recommended by that curve in this instance is 72.28. Do $I$ have that right?
A. That is correct, but it's not the best conformance index. If you look at the bottom one, that's the best conformance index for the group, 133.48 .

What $I$ did is $I$ says, well, it's got 60.
I can easily argue to maintain 60 looking at these parameters, and therefore $I$ maintain 60.
Q. So you look at -- you find the best curve. And, again, $I$ 'm just trying to figure this out. So you find the best curve, but then you test that selection of the best curve and
your ultimate recommendation as to average service life by looking at the other data, the other curves that are on this sheet.
A. That's correct.
Q. So there's a fair amount -- not a fair amount -- there is an amount of judgment in there.
A. There always is. A lot of numbers. So what you find is, in theory now, the best curve is a 51-year curve, the bottom one, okay. And then you go up and you say, well, I have a good one above it. It's not as good. And I have another one above it that's not as good. But I'm saying given these parameters, I'll stay with 60. There's nothing else that stands out that says it should be anything. And 60 is still a valid life to estimate for this account.
Q. When you make that, do you somehow sort of take a step back and say, well, the gas mains' 60 years, that makes sense?
A. Yes, it makes sense. It really depends.

It's all over the place, meaning I've seen
some at 70 , I've seen some at 55 . So,
basically you would expect the life in this type of setting versus like a downtown or something like that, the life would be less.
Q. Okay. And then I want to direct your attention to Mr. Iqbal's testimony, which has been marked as Exhibit 18. And on Bates Page 32 we have a chart where his recommended average service life shows up. Do you have that in front of you?
A. No. I have his testimony.

MR. SHEEHAN: That's what I just handed you, Mr. Normand.

BY MR. DEXTER:
Q. Yeah, I've got a schedule in the back of his testimony, Bates Page No. 32. Actually, it starts on Bates Page 31. But I want to look at the same account, so I'm on Bates 32 .
A. I have it.
Q. So do you see the line, 367 Gas Mains?
A. Yes, I do.
Q. You see that Mr . Iqbal's recommended life is 60 years?
A. That's correct.
Q. So there's no dispute. I mean, you both
recommended the same life.
A. Right. And that's a very large dollar value for the account for the Company.
Q. Right. A lot of the Company's plant falls into 367.
A. That's correct.
Q. Okay. So thank you for that detailed explanation.

And as I said, I want to do this over four accounts. And I'd like to look next at Account 320.1. And here we're dealing with Other Equipment Production. And in your testimony, I'd like to look at Bates Page 440.
A. I have that.
Q. Okay. And in the Service Life Analysis in the middle of the page where you talk about the results of your study, here you recommend a change from the existing service life of 30 years. You're recommending it go up to 35; is that right?
A. That's correct.
Q. And maybe without me repeating all the questions that $I$ just went through with the
other account, if you could, looking at the upper right-hand corner where you have your recommendations and your Average Service Life of 35 and your Retirement Curve of R1.0, could you just maybe bring us through the same sort of analysis you went through with 367, except this time it led you to recommend a change from the existing life.
A. Okay. In this account -- I guess you're referring to the handout you gave me, Staff 2-38?
Q. Yes. Exhibit 69, Staff Response 2-38. Right.
A. Okay. But what that response -- those pages for this account, which are on Page 10, 11 and 12, what you look at is, again, the analyses of all the curves that are in the model. And what you find is, for instance, just to give you an example -- I should have done it for the other -- but sometimes what you have to do is interpret what these results are. You know, these are statistical results. But if you go to the second column from the right, you see Rank there, No. 1.

That's the best curve. And then you go way to the left and that's an SC curve. What an SC curve is, is a straight line. So what that says is every vintage of all that's in this account will retire the same percentage every year, which is illogical. But this is a mechanical process. So what you have to do here is you look at the best curves. And if you look at the 30 , which is Page 10, okay, so here what you find is the $C$ Index is all under 50.
Q. And you indicated earlier that you like to see this over 30118 -- over 50118 that's an indication of a "good fit" I think you said.
A. Yes. That's correct. If you -- the gentleman that developed the method and enhanced it was a person by the name Alex, A-L-E-X, Bauhan, B-A-U-H-A-N. And papers that he authored in 1947 have been used as the benchmark since then, whether it's the NARUC manual on depreciation or in these proceedings. And what he says at the end of that article is that, if the $C I$ and $R I$, which is the retirement, is they're not over 50,
you should not use them or recommend them. They're not dependable. So, usually that's my benchmark for looking at this.

So if you look at Page 10 here for the CI, which is the fourth column in, they're not even -- well, there's only one over 30 . So that wouldn't do anything. So then I go and I look at the next grouping analysis I have, and that's 20, which is Page 11. Here, again, it's all -- it's not good. So I say to myself, I'm not comfortable with this. So all I've got left that passes the test is the 10, which is a short period of time. And so what I looked at there is, I said, okay, what are my best options here, knowing that the $C$ Index is over 50. And so what I have is, if you look at that as -- if you go from the bottom and start at the R5.0 and go to the right, you'll see there life of 46 , the $C$ Index is 29.30. So I don't want to use that. So I go up one more. So as you go up, what you find is the C Index, again, which is the conformance index, that maps a curve against data points. It improves. But what you see
oftentimes is, as that improves, what deteriorates is the $R$ Index, which says how much does that curve represent of the retirements. So if you gain in this account, if you gain on the confidence [sic], you lose on the retirement index. Now, you can wiggle all the way up. So with this, this being my weakest presentation, which is 10 years, it's short, I said, well, it looks like and it appears in time this life should be increased. So what $I$ did is I increased it, like, 15,16 percent. So $I$ went from 30 to 35, and I used an R1 curve, which is an extremely conservative, flat curve. I wanted the accrual rate that comes out of this to be low, but in the right direction. So that's what $I$ did with this one.
Q. And I'm on Page 12 now that you were just looking at.
A. Yes, sir.
Q. The bottom, the last number on this page says "Mean value of best fitting lives is 69.07 years." What does that mean?
A. It takes all the curves above it and averages
it. It means nothing. It's basically -- in other words, when I told you that if you go to the left column, two thirds of the way up you see an SC curve. It makes no sense, and it has a life of 132 years. But it's an output of a mechanical process. So, for every account, what $I$ do is $I$-- what the program does is it increments one-tenth until it hones in on a life. And with that it selects a curve, an Iowa curve, and then tells you, given that selection, what the conformance index is, the retirement index and the cycle index, how much of the curve you're using. So it's basically you have to be very careful. You have a lot of output, but you got to, shall we say, interpret.
Q. Sure. So did I hear you say that the 69.07 is meaningless?
A. It's just a reference point of all the curves. It averages everything. So you've got good and bad curves. If you look above, like all the curves that are basically low, like at the end, the $C I$ is below 50; it averages all the curves.
Q. I understand that. So it's an average. But it's an average that you would rely on or would not rely on?
A. I would not rely on it.
Q. So I think, if I understand what you're saying, is that if we go back to the R1 curve, which is the one you recommended be used, the recommended average service life on this curve is 86.5 years.
A. That's correct.
Q. And 118 that number was significantly higher than the existing average service life of 30 years, you felt that warranted an increase.
A. It warranted an increase. But keep in mind, in making that decision I'm also using just a 10-year analysis.
Q. You didn't want to place too much reliance on the 86 years.
A. No. I usually go 20,30 and 10 , in the weighting. So here I had no choice but saying, okay, this is my last choice, and it's weak, but the indications are I should increase the life.
Q. Okay. Fair enough. And again, that's the
judgment part that you talked about.
A. That's correct.
Q. Okay. Again, I'm trying to move this along quickly, but it's important.

I want to go to Account 303 now. I think Account 303 is shown on Bates Page 436 of your study.
A. I have it.
Q. And this is an instance where the existing service life is 7 years, and you're proposing 6.2 years; is that right?
A. That's correct. It's a dollar-weighted average.
Q. And again in the upper right-hand box it says, "Retirement curve best 4.0." See that?
A. That's correct.
Q. And so if I go to Exhibit 69 -- now I know there's three of these for each account, so I'm going to look at Pages 25, 26 and 27. Can you describe for us what the 54 curve presents in terms of average service life in this instance?
A. I'm sorry. Which page are you on?
Q. I'm on Page 25, 26 and 27 of Exhibit 69. And
[WITNESS: NORMAND]

I'm looking at account -- again, I penciled "303" up in the right-hand corner, but I guess as a preliminary question $I$ should confirm that I'm looking at the right pages for Accounts 303 I want to talk about.

CHAIRMAN HONIGBERG: Just to be clear, to help people find those pages, they're very early in Exhibit 69. They're, in fact, the second and third pages of that.

MR. DEXTER: I can't tell you how gratified I am to hear everyone and the Bench is following along with this complicated round of questioning. I appreciate that. And the reason I went to those pages is that on Bates 436, where it says Account 303, the other account number in parentheses is 1372.1, and that shows up as the account number on Pages 25, 26 and 27.
A. Again, the reason for that, the first number is the FERC account. The second number in parentheses, that's the PUC account.
Q. Right.
A. The analyses that you discussed at Page 25, 26 and 27, those are based on -- you see the 1372.1. The reason for that is the
[WITNESS: NORMAND]
historical database that we've got, which is a long history, is PUC accounts. So that's why you see that number there.

BY MR. DEXTER:
Q. Fair enough. And I just want to make sure that I'm directing you to the right page. So would you agree that Pages 25, 26 and 27 are the right pages to look at this account?
A. Yes.
Q. Okay. Good. And so, again, if you could go to the 54.0 curve on any or all of these three pages and tell us what the average service life is recommended by the proposed curve, and then if there's any deviation from that, how it was you came to your conclusion.
A. Well, if you look at Page 25, which if you look at the upper right, that's 29 years of analysis of data points, on the upper right there you'll see 29. So the R4 curve -- no, S4. I'm sorry. The 54 curve says that the average service life is 9.65 years, if you see that there. See it?
Q. I do see that, yes.
A. Okay. I'm sorry.
Q. I thought you had more.
A. No, no. Then you go to Bates 26, and the 54 curve there is 9.66 years.
Q. Yes, I see that.
A. Then you go to the next page, the 54 curve is 9.76. So they're all consistent with around 9-1/2 to 10 .

The problem you have is none of this means anything, and the reason being, we go back, and the $C$ Index is about as poor and meaningless as you can get. Out of a 100, it doesn't even break 10. So $I$ would never rely on any of this for anything. This is just it's about as poor as you can get a result.
Q. So the numbers on Pages 25, 26 and 27 didn't form the basis of your recommendation then.
A. At all. It couldn't. Statistically it means nothing.
Q. Fair enough. So then, what formed the basis of your recommendation to go from 7 years to 6.2 years?
A. Well, when $I$ saw these results, $I$ says we can't use this stuff. So then I sent an e-mail to the Company and requested that the

Company list all of its software and provide an estimated life for each of the software line items. And that's what the Company provided me. And I believe I must have provided that to you in a data response. And that data response was $L U$ 1-6. And the summary of that is presented in the depreciation study on 436 that we've been looking at.

So the summary of that is the dollars at the bottom there, weighted average, you're saying, okay, here's my plant and here's the weighting. Just the dollars times the average service life. So I grouped all those together, and I came up with an average of 6.2.
Q. So where did the average service lives -again, I'm on Page 436 in the lower left-hand corner. You've got average service lives 3 , 5 and 10. Where did those come from?
A. Those are the individual line-by-line items from that data response for all the software they have in this account, as to the life they would expect from each of those software
items at a 3-year, a 5-year or a 10-year. I did the analysis. And what $I$ didn't do is $I$ was going to change a couple of them, but I did not. I left them the way they were 118 two of them reflect SCADA software, S-C-A-D-A, and they had a 10-year life on both of them. And I question that today is even valid 118 that's representing data and interfaces in the field. And the security of that equipment and the software is growing under tremendous pressure in the last five years, and it will continue. Data integrity and security is paramount for utilities.

And so what $I$ did is I say, okay, this goes from 7 to 6.2. If I change the 10-year life shorter, it will drop to 6.2. So I said, no, I'm going to leave it where it is.
Q. Now, I don't have LU 1-6 in front of me. Do you have that there?
A. Yes, $I$ have it in front of me.
Q. Is that a response you prepared?
A. Yes. I'm not sure who... no, I think the Company provided this, I think. My name's not on it. But $I$ have the response.
Q. So my question really is, then, who was it that developed these average service lives of 3, 5 and 10 for the software?
A. That was the Company.
Q. Do you know who in the Company?
A. I would not. I would have to ask someone in the Company. I don't know.
Q. Was there any analysis or support that came with the document that you've identified as LU 1-6 or --
A. No.
Q. So you just relied on the Company's judgment in this or the Company's information in this regard?
A. That's correct. Typically that's what I do. What I do is I scrutinize some line items once in a awhile based on looking at other companies. But in essence, companies definitely have a plan for the software they have to replace. So there's no way for me to make a three-month study period to analyze every piece of software. So I had to have some input from the Company's judgment.
Q. Sure. So just one last question on the
software category. In the middle of the Service Life Analysis paragraph, where you recommend the change from the 7.0 to 6.2 years, you say "with a 54.0 Iowa curve." Did you still recommend a curve, and if so, why?
A. Yes, 118 what happens is, if you recall our earlier discussion, as you increase the height of the curve, it increases the depreciation factor. So your annual expense will increase. An $S$ curve is a symmetrical curve that basically says I'm going to retire some software early or late. But it's not skewed either way. So an S4 curve says I'm going to get activity here. I've seen activity here. And an $S 4$, to me, represents a reasonable approximation of the life or the phasing out of software over time.
Q. So in the absence of the statistics on Page 25 that you termed as "good," and I hate to use qualitative terms like that, but the $C$ statistic that you termed as "good" or "reliable," did you consider as an option, leaving the service life at 7.0 as the prior study recommended?

A. No, 118 what $I$ find is you do these studies, and what you find, probably in the last 10 years, but more so in the last 5 years, that the level of detail, as far as customer information and security, has really shrunk the life of software. Basically you take smart metering today or you take -- like they have remote metering for gas companies. And what you find is the data -- you become very data-intensive. And the software most people have today can't handle that. The billing systems for most people can't handle that. And so what you're seeing is that evolution of software that's moving towards more data-intensive, as well as an emphasis on protecting customer data. And a lot of that isn't existing. It's evolving. So that's why the shrinking.

MR. DEXTER: So I'd like to hand out one more exhibit at this point. Mr. Iqbal is going to distribute it. It's the data request in this case prepared by Mr. Normand to Staff 3-17. I think we're up to Exhibit 70. CHAIRMAN HONIGBERG: We are.
[WITNESS: NORMAND]
(The document, as described, was herewith marked as Exhibit 70 for identification.)

MR. DEXTER: And again, $I$ haven't produced all the attachments that were referenced in this response. But we have produced Attachment 3-17.1, and I'd like to ask Mr. Normand to take a look at that spreadsheet and go to the Intangible Plant Category 303 that we've been talking about.

BY MR. DEXTER:
Q. Do you have that in front of you?
A. Yes, I do.
Q. Well, first of all, you provided this chart. So why don't you tell us what this chart is.
A. This is a sample of utilities that was prepared by EEI/AGA, American Gas Association. And it represents a sampling of utilities over time and their range of average service life for these accounts, the average service life that they come up with, the average, and then the accrual ranges that you have for all accounts for natural gas. So this survey pretty much groups a broad
range. So, for me to say that this sample represents more of a small utility like Liberty-EnergyNorth or it represents Boston Gas or KeySpan, there's a world of difference. So this is just an average of a whole bunch. I might add, this is about 15 years old, so it would not reflect current practices. But it is to give you an idea of the stats that were produced 15 years ago, looking at a whole bunch of utilities around the country. This gives you a range. I typically don't use it. I provide it when people want to have a reference. That's all I do with it.
Q. So the chart was provided in response to a question that asked, "Please amplify on the statement that MAC's evaluation included its experience with 'like assets.' Please provide any comparative data for other natural gas utilities that support MAC's proposed average service lives and salvage rates for EnergyNorth." So that was the question. The chart came in response. But I think what you're saying now is you don't
rely on this or you didn't rely on this or --
A. No, I look at it periodically. But to say that my numbers have to hit these numbers -like we talked about 303 software. This stat that you have here for 303 doesn't reflect what's happened for software for the last 10 , 15 years.
Q. And -- I'm sorry. Go ahead.
A. For some accounts it makes sense, for some other accounts it doesn't. For instance, we were talking about, let's see, mains. And here, mains, you would go to the third page. That would be Account 376 , okay. The range is 26 to 80. The average is 55. We recommended 60. So we're above the average. Are we outside the normal? No. I think over time what happens is you move towards slightly higher average service life. That's why you do these studies periodically.
Q. And the chart that we're talking about is part of Exhibit 70. The average service life for intangible plant is 9 years, as shown on Page 1 of the chart; correct?
A. That's correct. But, again, it's dated. Got
to keep that in mind.
Q. Understood.

Last account $I$ want to look at in your study is Account 381, meters. And I believe that shows up in your testimony on Bates 448, 449,450 and 451 ; is that right?
A. That's correct.
Q. Okay. Can you explain why there's four pages for meters rather than one page for the other accounts that we were looking at?
A. 118 what we did there is, going forward, we're going to try to split this account out. And the reason for that is you've got four categories of dollars, and the dollars vary quite a bit by the subaccounts. For instance: The meters, 381 , is 14.6 million; 381.1 is only 188,000, roughly speaking. And the next page, the meters themselves, which is ERTS, electronic recording, that's 5.6 million, and meter installation is 14 million. So the lion's share of this is two accounts. And so what we said is, okay, over time, what happens is if you look at the progression, typically the longest slide will
be the installation. The next longest will be meters. The next longest will be instruments. And then the shortest that you'll have is ERTS, electronic recording.

And so when $I$ did the analysis of this account, it wasn't segregated, and I did not have the historical data to do the analysis. So I did the analysis as an integrated, shall we say "basket of dollars," and came up with an answer for that basket of dollars, which was the 32-year life.
Q. So what was the current life for this basket?
A. Thirty-five.
Q. So you went from 35 to 32?
A. That's correct.
Q. But if I look at Bates Page 50 -- or 450 , you went to 15 years for the ERTS; correct?
A. That's correct. If you recall, when you go through the lives of these four accounts, the shortest life you will ever experience is the ERTS, the electronic recording units.

They're little modules that you put on the big meter, and it allows you to do remote meter reading. And so that's typically --
that life typically is 12 to 15 years. I use 15 years as the outside to be reasonable.
Q. So if I understand what you're saying, then, there is a significant drop in the electronics part of the meter? Is that what the ERTS issue is? You said electronic something.
A. That's correct. It's not mechanical. It's electronics. And electronics changes over time, 118 what you're doing is you're doing remote metering. And the advances in requirements in security, these modules don't last like the length of the meter. But at the same time, if you look at the module, it's small compared to the overall meter. It's almost like, oh, probably that cup of coffee to that computer. It's very small. And it's a unit you put into the big meter, and it allows the data gathering.
Q. So how about the parts of the meter that aren't electronic? What was the basis behind reducing the average service life for those from 35 to 32?
A. I didn't do an analysis. I basically said
the statistical analysis I did gave me 32-year life using a composite, okay. Would some of the lines be longer? Yes. The installation, as I said earlier, would be a little longer. It always is longer. Basically, installation may be 35. It's usually 10 percent higher than the meter life.

The problem I had is I had to recognize in the composite that what was bringing the life down was the electronic metering. And so the 32 -year represents a composite of all the dollars.

Now, instruments, probably you'll get 20 years out of that, but there's no money there. So that has very little influence on the results.
Q. Right. So where did the weighted average then come from?
A. It's not. It's just $I$ did the analysis on the total account. Like we were talking before on the curves and the accounts, the statistics, I did that for the total account.
Q. Okay. Does that show up on Page 22, 23 and

24 of Exhibit 69?
A. Yes, that's the full account, all dollars.
Q. Could you go through the analysis like you did for the other four accounts as to how you came up with the recommendation to go down to the 32 years?
A. Okay. What I did here is I said I have to recognize $I$ don't have the dollars or the analysis capability for all these subsets. So the dollars $I$ have represent a composite basket of dollars, some small lives, some short lives. So what I did is I said, okay, if I'm going to come up with a life for this, I need to make sure these statistics are strong. So I need the $C I$ to be above 50 . That's the fourth column in. I need the retirement index to be a 100 and the curve to be a 100. So if you look at what I had, and I go up and I said, okay, the second from the bottom in the third-year analysis gives me 31.86 --
Q. And we're on Page 22 now; correct?
A. We're on Page 22. That's correct. And that gives me a CI of 61, which is very good. So

| 24 of Exhibit 69? |  |
| :---: | :---: |
|  |  |
|  | Yes, that's the full account, all dollars. |
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you go down to the 20-year analysis, the next page, and you look at the same thing; there it's a 31.89 life. Again, you go across and you'll find the C Index is better. And the retirement index and cycle is a 100, which means, using all the curves, $I$ am reflecting all the retirements, and I've got a very nice conformance index of 67.3. And that tells me the life there is 31.89. So this, I said, well, I'll just use 32 .
Q. So did your study incorporate 32 for the ERTS, or did it incorporate 15?
A. What happens is, 118 the basket of dollars includes the ERTS, but it's 5 million out of let's say 33 million, or whatever it is, it's going to bring the average service life down a little bit, okay. So the 32 was just what I used for all of the accounts except ERTS, which is the electronic recording.
Q. And was the 15-year life for the ERTS based on any curve?
A. No, it's just the manufacturer's life of the equipment. I think I told you it was 12 to 15.
Q. And when I go to Bates Page 450, where it says Retirement Curve under the 15.0 , Proposed life of 15.0 , it says Retirement Curve SQ. What does that mean?
A. That's a unique curve. It's a square curve. It says when you get to 15 , it disappears. It's square. A straight line down. In other words, there's no lingering like you would have in a non-curve.
Q. So did you rely on the $S Q$ curve?
A. Yes, 118, as I said, if you expect the life to be in the range of 12 to 15 , I took the outside range and said by then they'll all be gone. But you replace them periodically.

You'll have early failures. But this does not represent that. This is just an average service life. So...
Q. So I'd like to move to the second topic that I mentioned we were going to question about, and this has to do with the amortization of the reserve imbalance. And I'd like you to start by explaining what this imbalance is.
A. The imbalance is a comparison of the Company's book reserves versus a theoretical
reserve. Now, a theoretical reserve basically says, if I look at this plant account and I apply the curve and life that you give me for that account from this study, what the program does is it calculates what the reserves would be to the end of that account if the behavior of the retirements would reflect the chosen curve and life. Now, we all know that doesn't happen. But that's the best information we have today. So I ran these calculations, and from that it gives me every account a theoretical reserve level, and then we compare that against what the Company's book reserves are, and there goes the difference. That's in my Schedule A in the back of this report.
Q. Schedule A you said?
A. Yes. If you go to, oh, let's see, Page 464, something like that. Yeah, 464.
Q. And the Reserve Variance appears in the second to the last column on the right; correct?
A. That's correct, Column 13 at the bottom, and it says 9.946 million.
Q. And at the time this case was filed, that was the reserve difference.

Now, does the fact that that's a positive number, does that indicate that it's a surplus or a deficit?
A. If it's a positive -- remember it's basically Column 11, okay, less Column 12. So that says theoretical reserves should be 165 million plus change, and the book reserve is 155 million plus change. So that positive indicates a deficit. I'm sorry.
Q. So the more you depreciate, the smaller this deficit would be; right?
A. Yes, if you increase the depreciation accrual rates, yes.
Q. But to deal with this recommendation -- to deal with this reserve variance, the recommendation was to amortize this reserve over a certain period of time; correct?
A. That's correct. It emanated from the Company's last study, where a gentleman from PUC Staff, Mr. Cunningham, and I had some discussions. And what I was concerned about was, in that instance, it was the other way,
completely the other way. So whether it's this way or what the Company faced for the last 10 years, what you try to do is dampen the effect of swings in accrual rate.

However, I have to fault myself and my shortsightedness in the last study 118 I said two cycles. A cycle to me is you do a cycle every 5 to 7 years. So, 6 years, twice that is 12 years. That's typically what I recommend for whole life rates. Not for remaining life, but for whole life. When you do that, what's come out in this case, which didn't come out last case, is I assumed incorrectly that the Company would file several rate cases before that 12 years was over. I had no idea they would file no cases until now. And so what happens is the Company kept returning dollars, but there was no check. This time you have the complete swing on the opposite side, and that's a function of the Company investing a lot of dollars. If you look at some of these accounts, they almost doubled in 10 years. And you see that in this account. In this

Company, it's mains and services. Those are the big-dollar items. You don't have to look any further. And that's what's driving the imbalance.

Now, I would suspect, and personally, the Company ought to do one of these studies again when they have five full years of data points -- meaning, we did a study on 2016 calendar, so they should do a study on 2021. I'm sorry. Slow with the number here. 2021 calendar year. So that probably would be in 2022 that you'd have the results of the study. But you'd have five more data points from which to draw conclusions.
Q. Now, the last study that you mentioned that you pointed out earlier in the document here was done based on 2006 data; correct?
A. That's correct.
Q. And would you agree that that was in connection with a rate case that had a docket number from 2008? I think it was DG 08-009; correct? Or would you accept that as correct?
A. Subject to check. There's always a lag from

|  | 172 |  |
| :---: | :---: | :---: |
| 1 |  | the time -- see, I take a calendar year, and |
| 2 |  | I probably won't have the data to do a study |
| 3 |  | until probably towards the end of that year. |
| 4 |  | And it takes me three months to evaluate and |
| 5 |  | then produce a report. So, typically it will |
| 6 |  | flow, usually it's a year plus. |
| 7 | Q. | And in the last case, when you did this study |
| 8 |  | in the last case based on 2006 data, there |
| 9 |  | was a reserve imbalance in that case as well; |
| 10 |  | correct? |
| 11 | A. | That was correct. It was the other way. |
| 12 | Q. | The "other way" meaning that it was -- that |
| 13 |  | there was over -- is it fair to say there was |
| 14 |  | over-depreciation? |
| 15 | A. | Yes. The reserve was higher than the |
| 16 |  | theoretical reserve. That's correct. |
| 17 | Q. | And the amortization that took place was a |
| 18 |  | situation where money was being returned to |
| 19 |  | customers. |
| 20 | A. | That's correct. |
| 21 | Q. | Okay. And in that case, you recommended that |
| 22 |  | that money be returned back to customers over |
| 23 |  | a 12-year period; correct? |
| 24 | A. | That's correct. Again, remember, the |

assumption there, which I didn't state, was that I assumed the Company would be filing rate cases --
Q. Right.
A. -- which they did not.
Q. So you assumed back in 2008 that they would file a rate case in the next how many years do you think?
A. At that time, about maybe three to five years. Now, what's happening now is that period shrinks. I mean, I'm looking at Northern and I'm looking at Fitchburg and Massachusetts Gas Electric, and they're getting into the two- to three-year cycle. Mid-Atlantic same way, two to three years. I can't speak for the Company as to what they're going to do. But the period -- you would expect in the 12 -year cycle you're going to probably have three rate cases.
Q. And what's the 12 -year cycle you're talking? Oh, the two cycles.
A. Yeah, a cycle meaning the time span between depreciation studies, six years.
Q. Six years, okay.

Now, do you recall back in 2008 when you did this study, do you recall when the prior depreciation study was done for EnergyNorth?
A. I wish you would have asked that question. I would have produced the report. I don't remember.
Q. Okay. So, going forward from 2008, you said that your understanding is that the next rate case filed by EnergyNorth is the one that we're in now?
A. That's correct.
Q. That's in fact not correct. I think it's easily verifiable that there was an interim rate case filed in the 2013 time frame that was decided in 2014. So you're completely unfamiliar with that case?
A. I have no idea of that case.
Q. Okay. Well, assuming that that was the case, and it was --
A. But there was no depreciation study done.
Q. Well, that was going to be my next question. Was there a depreciation study done in that case? Again, you're not familiar with it.

We went down this road this morning, so...
A. No.
Q. So we have two frequencies that we're talking about. We're talking about frequencies of rate cases and frequencies of depreciation studies. And I'd like to talk about them separately.

Is it your understanding that a Company like EnergyNorth -- is it your recommendation that a company like EnergyNorth -- I'll rephrase that.

Is it your recommendation that
EnergyNorth file a depreciation study in each rate case?
A. No. If the rate case -- let's make the assumption that EnergyNorth would file a rate case in three years. You wouldn't have enough data points to make any meaningful changes. If you go another three years or two years, then you would. As I said, if you have at least five more years, 2016 puts you to 2021. And you probably, if things worked right, and they knew that, you could probably get this thing done and finished in 2022.

MR. DEXTER: So I have another
document $I$ want to hand out. I just need to find it. If I could take a minute to -- Mr. Chairman could I take a five-minute recess to get these documents straightened out?

CHAIRMAN HONIGBERG: Sure.
MR. DEXTER: Thank you. (Brief recess was taken at 2:29 p.m., and the hearing resumed at 2:50 p.m.) (The document, as described, was herewith marked as Exhibit 71 for identification.)

MR. DEXTER: Thank you for the break, Mr. Chairman. I appreciate it. And while you were out, we distributed one more document. That would be Exhibit 71, and it has to do with this issue. I believe all the parties and the witness have a copy. Is that right?

BY MR. DEXTER:
Q. Mr. Normand, in addition to that document, I'd like you to turn to Page 405 of your original testimony, please.
A. Yes, I have that.
Q. And both of these documents state that your
recommendation was that this reserve variance be amortized over 12 years; correct?
A. That's correct. As I mentioned before, that's the -- the underlying assumption there was the Company would file rate cases. And so my simple definition, if you're going to file a rate case, you're going to file a depreciation study. But that's a function of the frequency. But $I$ would expect over six years that you'll file -- I can't speak for the Company -- you'll file a couple of rate cases, and over 10 years, probably three rate cases, and probably have two depreciation studies. So the Commission would have ample reference to reset things.
Q. In fact, your testimony says that, and I'll kind of paraphrase it. But what it actually says is, "Our recommendation with respect to this variance is to amortize it over two depreciation cycles, or 12 years, as one cycle reflects periodic studies taken every five to seven years." That's what your testimony says; right?
A. That's what my testimony says.
Q. And so in this case, the last -- for this Company, the last depreciation study was done in -- was based on 2006 data I believe you said.
A. That's correct.
Q. And this depreciation study was done on the basis of 2016 data; correct?
A. That's correct.
Q. And I think you said just before the break that you would expect that the next depreciation study would be done based on 2021 data.
A. That's correct. What you'd want is at least five more data points for every account.
Q. So, two depreciation cycles under that would be 10 years? Is that what you're saying?
A. Yes, roughly speaking.
Q. So are you recommending that your testimony on 405 be switched to 10 years, or are you still comfortable with the 12 years?
A. Well, what my recommendation says is you do them every five to seven years. So I just took the midpoint.
Q. Okay. So you're not recommending that your
testimony be changed. You were just dealing with sort of rough average numbers here.
A. That's correct.
Q. Okay. And in fact, the proposal -- well, before we get to that, on the document that was handed out as Exhibit 71, on the back of it, Page 2 of it, you had talked about a couple of different methods to handle reserve variances. And in Method No. 2, you talked about not amortizing the variance at all within a particular band width of 5 to 10 percent. Could you explain this a little further, please?
A. What happens when you get a variance, every time you do a depreciation study the parameters change a little bit. So, 118 of that, you'll have a variance. In order for you not to encourage playing with the rates too much, typically commissions will say if the variance is within 5 or 10 percent, we do nothing. Wait until the next case or the next study. And that's reasonable. In other words, you just -- every study will give you parameters that will give you new numbers.

And what you find is when you have a curve in the life of an account, you're saying the behavior of that account will follow this curve in life. And I don't know if I said it in my testimony or my report, but we're giving you the best information we have, given the data we have. But for me to sit here and say mains account, whatever account it is, will behave for 60 years according to this mortality characteristic, I say that, but quite candidly, $I$ don't think it will happen 118 there's too many variables. I can't predict 40 years out the road.
Q. Okay. And what is the level of the reserve variance in this case? Does it fall inside that 5 to 10 percent level that you mentioned?
A. No, it follows way outside.
Q. It does. What is the level of the variance?
A. It's almost 10 million.
Q. And so 10 million as compared to what to get to this percentage we're talking about?
A. If you go to 464 --
Q. Bates 464? Yup, I'm there.
A. And if you go to the reserve variance, it's 9 million.
Q. We talked about this earlier. It's 9,946,778; correct?
A. Right.
Q. And so what number am I comparing that to, to come up with this band width of 5 to

10 percent?
A. You're basically saying that the account would be on the theoretical reserve with net salvage.
Q. And that figure is $165,193,965$; correct?
A. That's correct.
Q. So if I were to divide 9,946,778 by 165,193,965, wouldn't you agree that $I$ would get a number between 5 and 10 percent?
A. That's correct.
Q. So then I'm confused by your prior statement that said it was way outside the band width.
A. Well, $I$ was assuming basically the 5 percent.
Q. Okay.
A. But very few -- there's only probably two or three PUCs that do that. 118 whole life is not rampant by regulators, most of the
depreciation studies are done on remaining life.
Q. Right. No, I understand that. And your answer on Exhibit 71 said that if you're in a whole life situation, which we are here, one option would be to not do any amortization if it fell within this band width; correct?
A. If you selected a band width, yes. The other way to do it is to spread your deficiency or excess over a period of time.
Q. And that's what's recommended in this case.
A. Yes. And the third option is to do it over a period of time and then do another study to see if you're on track.
Q. Okay. We've already talked enough about frequency of depreciation studies, so $I$ won't ask you further about that.

So then I'd like -- 118 you understand that the Company's position in this case is not to amortize the reserve variance over 12 years, but in their original filing was to amortize it over 3 years. You understand that; right?
A. That's what the Company proposed. But they

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|  | life. |
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|  | not to amortize the reserve variance over 12 |
|  | years, but in their original filing was to |
|  | amortize it over 3 years. You understand |
|  | that; right? |
| A. | That's what the Company proposed. But they |

were looking at different factors.
Q. Right. And I wanted to get into that. But go ahead. I didn't mean to interrupt you.
A. Well, I don't look at the financial impact and so forth. I do a study. These are my results. If the differences are large, then you should take an extended period of time to adjust for them. Now, I also know, and it's obvious at this point in this proceeding, that you ought to do a study every five to six years. At that point, you will have a new reference point to say what actions you've taken, are they working in a direction that will resolve the problem, or it's not enough to resolve the problem.

In other words, what happened since the last case that created this is that the Company, which surprised me, but they made major plant investments. As I said earlier today, in some accounts it was double. And so what happens with that is, you got to remember, if you take the life of an asset being 60 years, mains, in the period of 10 years you're not going to get to a reserve
level that makes sense. So what you're doing is you're incrementally getting there. But if the average life is 60 years, your reserve is going to be severely deficient if you're putting a lot of dollars in the ground. And I suspect -- again, you'd have to ask the Company. If the Company's investments in the next three, five or ten years continues at the rate it had been doing, you're going to have a -- you're going to compound this problem.
Q. So if I understand, if $I$ can sum up, and if $I$ get this wrong, please tell me, your recommendation is that you set the amortization assuming two depreciation cycles, 10 to 14 years, but that you recommend that it be looked at every time a depreciation study is filed before the Commission.
A. That's correct. What that would give you is a reference point to say what I've done, the actions I've taken, are they correcting the problem. 118 you got to do this with whole life. Remaining life doesn't have that, but
whole life does.
Q. Okay. So I'd like you to look at a document. And I confess I don't remember the exhibit number. But it's Mr. Mullen's rebuttal testimony filed in this case in January of 2018. And on Bates Page 133, Mr. Mullen talks about this very issue. Do you have that in front of you?
A. Yes, I have. Yeah.
Q. In fact, there's an indented paragraph there that quotes from the data requests we were just looking at, Exhibit 71. And Mr. Mullen states that your recommendation was based on looking at the topic of depreciation in isolation, whereas the Company's proposal took into account the entirety of the filing. Do you see that?
A. That's correct.
Q. And then he goes on to say, "including the circumstances regarding the length of time over which the depreciation reserve imbalance has accumulated." So you understand what that means, the "length of time"?
A. Yes.
Q. Okay. And what does that mean in your view? What is Mr. Mullen talking about there?
A. I can't speak for him. I can interpret what I think he's saying.
Q. That's what I'd like you to do.
A. Basically he's saying -- what you're saying is since the last study in 2006, for 10 years we've swung from a reserve that was too high to now a reserve that's deficient. So the only thing that caused that is a massive infusion of dollars in plant, mainly mains and services. I think I gave you a data response to that effect. In any event, that will always occur, as I said earlier. The fact that you put a million dollars of mains in, you're not going to recover that for over 60 years. So if these are new dollars that are occurring in let's say the next 5 or 10 years, your reserve will be deficient until you get to a certain point in time. Now, at some point this Company, as all companies, the construction and new dollars going in will slow down and then you'll catch up. When that occurs, $I$ have no idea what their
plans are or what their construction plans are.
Q. So what, then, is the length of time over which this depreciation reserve imbalance accumulated in this case?
A. I would say the Commission has to find a middle ground as to what it is, and then my recommendation is they do another study with five more years of data.
Q. So do you know or do you not know the length of time over which this reserve imbalance accumulated?
A. The reserve imbalance, as $I$ just said, went from a negative 8 or 9 million in -- the study was in ' 06 , and the rate case was, I think you said, '08. But from that time to this time, we swung from over probably 8 million to under 10 million, all driven by major capital additions.
Q. Okay. And you understood that when you put your testimony together. This is not a surprise to you; right?
A. No, no. But it was a surprise, as I said earlier. I did not anticipate this level of
plant additions and the fact that the Company did not have a rate case where there was a new depreciation study submitted. See, a lot of times I look at a rate case -- typically when you file a rate case, you file a depreciation study, unless the frequency's under three years, and then you'll skip one.
Q. So the second part of Mr. Mullen's statement as to what he looked at was along with the time period over which the imbalance should be addressed. Did you look at that when you came up with your recommendation? That, in fact, is your recommendation; right? Do you see anything different between that statement and your recommendation that it should be addressed over two depreciation cycles?
A. Yes. Again, all of this is driven. It's unique. The size of this Company and the plant investments they made, made a swing I would never have anticipated back in the last case. I had no way of anticipating that. In hindsight, I should have known. I should have asked more questions and said, Do you have any major construction? I didn't know.

But if I'm doing this study, I should have known better, but I didn't.
Q. Okay. I don't have any further questions. Thank you.

CHAIRMAN HONIGBERG: Commissioner Bailey.

CMSR. BAILEY: I have no questions. Thank you.

CHAIRMAN HONIGBERG: Commissioner Giaimo.

COMMISSIONER GIAIMO: Same.
CHAIRMAN HONIGBERG: And I have no questions.

You would like to redirect,
Mr. Sheehan?
MR. SHEEHAN: Thank you. I do have some questions.

REDIRECT EXAMINATION
BY MR. SHEEHAN :
Q. Mr. Normand, a couple basic questions. The imbalance that existed the last time you did a study in 2006 was, in essence, money the Company owed to its customers 118 it had depreciated too fast.
A. That's correct.
Q. And from that time, you said $\$ 8-$ or $\$ 9$ million dollars was the imbalance in that direction. It's now swung to a $\$ 10$ million imbalance, where, in effect, the Company has been depreciating too slowly, so that the customers owe the Company money. That's a simplification, but that's the gist of it.
A. That is. It's almost like -- and it's due directly to massive plant infusion.
Q. And there seems to be some confusion over your testimony about the existence of intervening rate cases. Am I correct to say your point was, between your study of '06 data until today, it wasn't the lack of rate cases, it was the lack of depreciation studies that occurred during those 10 years?
A. Yes. When I was testifying, I basically linked a rate case with a depreciation study. Of course that's shortsighted, 118 if you do a rate case every two or three years -- I can honestly say you shouldn't do one. But if you want me to do one, that's fine.
Q. And for the record, $I$ think everyone else in
the room knows, there was a rate case done in 2010 and another rate case done in 2014, neither of which had depreciation studies.
A. As far as $I$ know, they didn't.
Q. And so what happened is the adjustments made in the 2008 rate case to return money to customers was never looked at for 10 years.
A. That's the problem. As I've said, that's probably my shortsightedness at the time.
Q. And you don't know, or you didn't know that there was a change in ownership of the Company which may have impacted those decisions and many other factors. Again, that's outside the scope of your normal investigation; is that fair?
A. That's correct.
Q. Going back to the first hour of your testimony, Mr. Dexter walked you through the process for assigning lives to certain categories of assets. And my question as to that process you described through the four or five that he went through, you went through that process for every category of assets that you studied on behalf of the

Company.
A. That's correct. You have to go through all of them. The only process where you don't go through that -- remember, you need a retirement index. So if you have accounts that have no activity or no retirements, you can't do a whole bunch about that. You just rely on whatever the Commission approved last time. That's what you accept until you get experience with retirements.
Q. You were not -- were you involved in the discussions that resulted in the settlement agreement that we have in front of the Commission for approval?
A. No, I was not a consultant.
Q. We have informed you since that the proposal in the settlement agreement is to amortize or recover that $\$ 10$ million which has been reduced to $\$ 9$ million -- and I'll get to that in a minute -- over a period of five years.

We've informed you of that; correct?
A. Yes.
Q. And we've also informed you that it's the expectation that the Company will come back
for another rate case, at most, four years out, and likely three years out, which has been our schedule recently. You're aware of that?
A. Yes.
Q. And what would be your recommendation to do vis-a-vis whatever comes out of this order about the imbalance when we're back in for another rate case in three or four years?
A. Well, what you would do, or what I would recommend that you do is that at the time you come in, you can do a mini depreciation study. And all you would deal with is the theoretical reserve and book reserve. And what that will tell you for each of the accounts is like my study now produces almost 10 million. So if you come in in three years and it says it's down to 7 million, now, part of the reason you say, well, it hasn't come down very much. But the offset during that period of time is how much investment in plant has the Company made. That's going to be an offset. Will the investments they make follow what they've done historically? I
don't know. You'd have to ask the Company that.
Q. If the investments of the past few years continue for the next few years, all else being equal, what would you expect to happen to the imbalance?
A. If you use a five-year amortization, probably change a little bit, but not a whole bunch, if they're at these levels of putting dollars in.
Q. And if you use a 12-year amortization?
A. You'll be way up.
Q. The imbalance will be worse.
A. Yes. But at some point the Company will slow down. You can't put this much money continuously for -- you know, at some point it slows down, and that's when you catch up.
Q. Having been told that the proposal in this rate case -- well, first of all, the settlement agreement also accepted some -changed your depreciation lives somewhat. We moved off of what you recommended. And I'm giving you that as assume that's true. And we moved into generally slightly longer lives

overall. And applying those longer lives to the formula, the imbalance has gone from 10 million to 9 million. Follow?
A. Yes.
Q. So, assuming we now have a $\$ 9$ million imbalance under the terms of the settlement agreement, and assuming that we amortize over five years, with the expectation we come back in three to do the check you just described, do you think that's a reasonable way to approach the existing amortization imbalance?
A. It's an approach. And again, if I was the Commission, I'd ask someone in the Company, "Is your projection of investments going to continue at the rate you've been having?" If that's the case, you're correct.
Q. So if that is the case, that our projections are to continue investing at the rate of recent years, if not greater, would you agree that the proposal in the settlement agreement, the five-year amortization, come back in three, is a reasonable way to address the existing $\$ 9$ million imbalance?
A. That's correct. It's a reasonable approach,
as long as there is a check in three years and another study in five. I think the Commission would have some comfort that there's going to be a check and balance.
Q. So what I understand you just said, if the Commission were to approve this part of the settlement agreement which includes this language, you would recommend that the Commission also require us to do this check on the depreciation balance at the next rate case.
A. That's correct. It's not a major effort. It's probably two to three days of work.
Q. Compared to three months for the whole study?
A. That's correct.
Q. Thank you. I have no further questions.

CHAIRMAN HONIGBERG: Thank you,
Mr. Normand. You can return to your seat.
I think Mr. Iqbal is returning
to the witness stand?
MR. DEXTER: Yes.
CHAIRMAN HONIGBERG: We'll note
for the record he is still under oath.

AI-AZAD IQBAL, PREVIOUSLY SWORN

CHAIRMAN HONIGBERG: Mr. Dexter.
MR. DEXTER: Thank you.
DIRECT EXAMINATION (CONT'D)
BY MR. DEXTER:
Q. Mr. Iqbal, we're going to continue asking you questions concerning the topic of depreciation. And I'd like you to turn to your prefiled testimony. Do you have that before you?
A. Yes.
Q. It's Exhibit 18 in the case. And I'd like you to go to Bates Page 31, which is the chart of your proposed average service lives.
A. I'm there.
Q. Do you have that in front of you?
A. Yes.
Q. Now, this chart, which goes on for three pages, contains about 20 different recommended average service lives. Would you agree?
A. Yes.
Q. And there were certain instances where you disagreed with the average service lives
recommended by the Company; is that correct?
A. Yes.
Q. Is one of those average service lives that you disagreed with Account 303, Capitalized Software?
A. Yes.
Q. And could you indicate what average service life you recommended as compared to what the Company recommends?
A. My recommendation is average service life of seven years. That is existing average service life. And Company proposed 6.2 years.
Q. You were in the room when Mr . Normand took us through his calculation of the 6.2 years; correct?
A. Yes.
Q. How is it -- or explain to me -- I'm sorry. Let me rephrase that. Would you please explain for the Commission how you came to your recommended seven-year life?
A. First of all, I didn't do any study, depreciation study. We have to rely on the

depreciation study the Company provided, the previous depreciation study and current depreciation study. So I had to go through those --
(Court Reporter interrupts.)
A. We have gone through during this session which account we should select, which number we should select, what is the ASL from those curves. Those are not provided in the original testimony of Mr. Normand. It is part of the data request. So $I$ was trying to understand then what is the method he used to come up with this number, particularly, as he explained in his testimony, that 6.2 didn't come from any study; it is coming from the Company's data. They said that these are 3 years, these are 5 years, these are 10 years ASL. And there is no support provided for that. Even Mr. Normand didn't ask for the support. He just used the Company number. I would prefer to base it on existing number, which is -- which Commission actually
approved than based on unsupported number which is proposed in this case.
Q. So if I understand what you're saying, your recommendation was to continue the existing life 118 it was based on a prior depreciation study.
A. That's my position, yes.
Q. And factoring into that position was your understanding that Mr. Normand said the study he did in this case, the results were unreliable. We just heard that. For this particular account, the results were unreliable.
A. Yes. On that, I think I would add one more caveat on that, that the person who actually created the $C$ Index, $R$ Index, $M r$. Bauhan, he actually went -- one of his conclusion is even if those are not acceptable which are not above 50, but is better than using any random number. So, yes, those are not -doesn't meet the standard. But in his 1940 s paper Mr. Normand actually referred to, that paper says that even when it is not acceptable, it is better to use a number based on analysis than a random number. And that's what $I$ am following here, that this
number, 3, 5 and 10-year number, is provided by the Company, and they didn't provide any analysis. But we have a SPR --
(Court Reporter interrupts.)
A. We have a SPR analysis here which is giving us a higher number that is almost 11 years. We are not proposing that. We are being very consistent and conservative. We are just saying let's keep the current number 118 your number is not supported by anything. Current number we can live with.
Q. Are there other instances in your charts, starting on Bates 31, where you proposed keeping the remaining average service lives rather than relying on the study that was presented by Mr. Normand?
A. Which one you are talking about?
Q. I'm on Bates Page 31. And I'm asking on this two- or three-page chart, are there other instances like Account 303 where you chose to recommend keeping the existing average service life as opposed to going with the number that was recommended by Mr. Normand?
A. Yes, that's my approach, that if there is
enough support to change it, I agree with Mr. Normand. And when I found that he is not relying on any study, I'm being conservative and I'm recommending that we keep the existing ASL.
Q. And in particular, we spent some time earlier today looking at Account 381 and various subaccounts that had to do with meters. Do you recall that?
A. I recall that.
Q. Is that a situation where you recommended the existing average service life be maintained rather than changing it, as Mr . Normand did?
A. The existing number is overall at the account level, not subaccount level. So when you are changing or reducing the ASL from one of those big subaccount, that means that the other account -- 118 when you are doing the analysis on the overall account and you are giving it 35 years, and then you are changing one of the subaccounts, which is very big, almost five points, 5 million or 6 million, and reducing that significantly, that means that 35 for other accounts should be higher,

118 this 15 number, that overall the weighted number should be around 35. But what Company is doing here, they're reducing the meter ERTS to 15 years and also reducing the other numbers, too. So, from my perspective, if somebody doesn't know anything about depreciation, they will tell you that it doesn't make sense, 118 the study says overall number should be 35. We are reducing the overall number for all accounts and going down to almost half in one of the -- half of the account of 5 million -- essentially $\$ 5$ million, and saying that that's a reasonable approach. And I don't agree with that. That's why our proposal was keeping the 35 ASL for every subaccount. And I understand that ERTS has a lower ASL. I said take a more gradual approach, and instead of 35 we'll move it to 25. But the Company proposed 15.
Q. With respect to the other meter accounts, your recommendation was to leave those alone at 35?
A. Yes, that's my recommendation.
[WITNESS: IQBAL]
Q. And that's based on your interpretation of the study results that Mr . Normand presents?
A. His study and the existing numbers.
Q. Okay.

MR. DEXTER: Can I ask the witness a question off the record, please?

CHAIRMAN HONIGBERG: You want to have a conversation with your witness?

MR. DEXTER: Yes.
CHAIRMAN HONIGBERG: Sure.
(Off the record discussion between counsel and witness.)

MR. DEXTER: I'd like to hand out one more document and ask that it be marked as Exhibit 72. It's the Company's response to Data Request Staff Tech 1-45.
(The document, as described, was herewith marked as Exhibit 72 for identification.)

BY MR. DEXTER:
Q. Mr. Iqbal, do you have the document that's been marked as Exhibit 72?
A. I do.
Q. And the long paragraph, the second paragraph
in this response sort of traces this issue of amortizing reserve variances. Would you agree?
A. Yes.
Q. And you heard Mr. Normand's testimony today; did you not?
A. Yes, I do.
Q. You heard Mr. Normand say that, in his view, a lot of the volatility in this reserve imbalance was due to recent investments in gas mains. Is that a fair assessment of what he said, in your view?
A. Yes, that's what he said.
Q. And do you have anything to add about why you believe there's a swing in this reserve variance?
A. Yes. I have high respect for Mr . Normand. He has been a perfect witness in this docket. And there are other dockets I deal with him. He is very competent.

And in this point, Mr. Mullen actually tried to explain what happened in between. And one of the component is under line -second paragraph, where he is talking about
$\$ 933,000$ the Company are giving back to the customer 118 they over-collected. And if you look at Mr. Normand's recommendation, Exhibit 71, on the second page he has three recommendation: One is remaining life, one is threshold 5 to 10, and other one is the recommendation he provided in this docket and the previous docket.

Just to look at Mr. Normand's analysis, this $\$ 10$ million deficit right now, we can say that $\$ 7$ million is coming from that refund to the customer. So that actually vindicate Mr. Normand's second solution, that if there was 5 to 10 percent of reserve variance, we shouldn't have done nothing. But we did last time. And that contributed 7 million of the 10 million right now we are dealing with. And if you look at the updated number, 118 this is 10 million 118 some of the big accounts number, the ASL was reduced. And if you look at the settlement agreement, this 10 million number become, I think, 7.8-something number. So it is reduced 118 the ASL number was changed, increased --
Q. If I can interrupt for a second. So I just want to make sure I understand what you're saying, is that Exhibit 72 demonstrates that the $\$ 10$ million reserve variance, approximately $\$ 7$ million it, according to Mr . Mullen, was attributable to the amortization that was started back in the case in 2008.
A. Exactly.
Q. And you're saying that, had the Commission back in 2008 followed Mr. Normand's recommendation in Exhibit 71 and made no amortization, that we wouldn't -- that we would have solved 70 percent of the problem that we're facing now.
A. More than 70 percent. 118 we are using the same amortization, ASL, average service life, as I recommended, based on my analysis, for that 10 million right now, eight point-something million will be much lower. So it eliminate the whole reserve variance.
Q. So, in your view, then, it would be a reasonable approach in this case not to amortize this $\$ 10$ million variance at all.
A. Exactly.
Q. Now, your testimony didn't recommend no amortization. Your testimony recommended a 12-year amortization; correct?
A. Yes. I think that's a reasonable approach, as Mr. Normand testified today. And just being consistent with what we did last time when it was other way, we aggregated that 12 years, I think actually 13-point-something years. And right now we are saying that we want to be consistent with that. We are not going to go back and say that, hey, don't do it now 118 it's other way. We are saying be consistent. And that's what we are trying to do.
Q. So you adopted what you understood to be Mr . Normand's recommendation to amortize this variance over 12 years.
A. Exactly.
Q. Now we've talked about the other way a little bit, and I want to make sure everyone understands what we're talking about. So I'd like to go to Bates Page 473 in Mr. Normand's testimony.
A. I'm here.
Q. So the second line from the bottom is entitled "Amortization of depreciation reserve surplus, $\$ 12,400,000 . "$ Do you see that?
A. Yes, I do.
Q. So this is the situation from the last case, and you can see the docket number up on top, we were in a situation where the Company had over-depreciated and, therefore, money had to be returned to ratepayers; correct?
A. Correct.
Q. You see that it was done by looking at the right-hand column in an annual amount of \$934,000; correct?
A. Correct.
Q. Doing the math, would you agree that's about a 13-year amortization period?
A. Correct.
Q. So that was done through settlement; correct?
A. Correct.
Q. And that's been going on ever since.
A. Yes.
Q. Okay. So, last case when there was \$12 million to be reserved to customers, it
was done by settlement over a 13-year period. Is that your understanding?
A. Yes.
Q. In this case, where there was a $\$ 10$ million surplus to be collected from customers, it was recommended that it be done over a three-year period by the Company; correct?
A. Yes.
Q. And you understand that the settlement now recommends that it be done over a five-year period; is that correct?
A. Yes.
Q. Okay. Thank you. I don't have anything further.

CHAIRMAN HONIGBERG: Mr. Sheehan.
CROSS-EXAMINATION (CONT'D)
BY MR. SHEEHAN :
Q. Mr. Iqbal, as $I$ understand it, the swing in the reserve imbalance has been $\$ 22$ million.
A. Yes.
Q. From 12 in one direction to 10 in the other direction.
A. Yes.
Q. And so we have now gone $\$ 10$ million in the
other direction. And Mr. Normand just testified that, due to the Company's aggressive growth, it will tend to put an upward pressure on that variance. Do you disagree with that?
A. No, I do not.
Q. So you do agree with that then.
A. Yes.
Q. Prior to Liberty's ownership of the last few years, the prior owner did not have an aggressive growth policy; correct?
A. From the numbers, it seems like you are correct.
Q. So there has been a significant change in the way the Company invests; correct?
A. Yes.
Q. And so if we don't -- if we adopt Staff's proposal and we don't meaningfully address the variance in the shorter term as we proposed, there's a very good chance we will be facing a much larger variance in three or four years.
A. That's the point $I$ was making, that even if you don't do it, if you don't do it 118 it's
below 10 percent threshold, it might not happen 118, yes, immediate upward pressure might have impact. But if you look at the average remaining life, the other approach Mr. Normand proposed, actually listed in Exhibit 71, if you apply that, it will be longer than 12 years, 118 the whole idea is, remaining life idea is that how much time we have to recover this deficit. If the remaining life is long enough and we can distribute that way, that's one of the approach. So we are looking at all three approach, and none of that actually support the Company's position.
Q. If Mr. Normand is correct, in three years we will have a \$12- or $\$ 14-$ or $\$ 15$ million imbalance.
A. That's possible. But you have to also think about it, that you have another 15 years to recover that money.
Q. That's all I have. Thank you.

CHAIRMAN HONIGBERG: Mr. Kreis, anything?

MR. KREIS: No, sir.

Q. I showed you something I questioned Mr. Therrien about, and it presents the Company's compound annual growth over the last 10 years. Do you recall that?
A. Yes, I do.
Q. And do you recall Mr . Therrien saying that the annual growth -- basically, the Company was adding approximately 1 percent customer growth per year?
A. Yes.
Q. Would you consider that aggressive growth?
A. Compared to what? That's the problem. So, from outside it doesn't look like that's aggressive.
Q. Well, compared to what -- according to what's on the sheet, the sheet goes back to 2005; does it not?
A. Yes. On that point, yes, we can see that 2005, until Liberty took over, I think 2012, the average growth rate, there is a spike at the later two years, but it's almost like the same, the 1 percent average.
Q. Thank you. That's all I have.

CHAIRMAN HONIGBERG: Thank You,
[WITNESS: IQBAL]

Mr. Iqbal. You can return to your seat.
I believe there are no other
witnesses from Staff; correct?
MR. DEXTER: That's correct.
CHAIRMAN HONIGBERG: So if you
have rebuttal, now would be the time.
MR. SHEEHAN: We do, and we might be able to streamline it if we could have five minutes to collect our thoughts and figure out exactly what we need to address.

CHAIRMAN HONIGBERG: That's fine.
So let's go off the record for a minute and talk about what else needs to be done.
(Discussion off the record.)
(Brief recess was taken at 3:38 p.m.,
and the hearing resumed at 4:11 p.m.)
(The documents, as described, were herewith marked as Exhibits 73-77 for identification.)

CHAIRMAN HONIGBERG: All right.
Are we going to do anything before we hear from Mr. Mullen, or are we doing Mr. Mullen?

MR. SHEEHAN: Paul and I decided to defer the exhibit discussion until after the
close of today. We can sort through things. Sandy has a few questions. And then, since we're rolling into tomorrow morning, we should be able to have it all tidied up by tomorrow.

CHAIRMAN HONIGBERG: Okay. Fair enough.

I see Mr. Mullen has returned to the witness stand. He is still under oath. And you have some rebuttal testimony you want to elicit from him, Mr. Sheehan?

MR. SHEEHAN: Yes, sir. CHAIRMAN HONIGBERG: You may proceed.

STEVEN E. MULLEN, PREVIOUSLY SWORN
REBUTTAL DIRECT EXAMINATION
BY MR. SHEEHAN :
Q. Mr. Mullen, in the context of the discussion over the iNATGAS facility, I believe it was towards the close of Mr. Frink's testimony, there was an exchange about whether and should the company have informed the Commission about the increased cost. Do you recall that exchange?
A. I do.
Q. And do you recall that the exchange included something to the effect of -- and I'm paraphrasing, if we knew the costs were going up, we could have possibly done something about it? Do you recall that?
A. That's consistent with my recollection, yes.
Q. Did the Company inform Staff about the increased costs related to iNATGAS?
A. Staff and the Commission, yes.
Q. I have circulated Exhibit 73, which is a transcript from the Company's cost of gas proceeding in 2015. And I'd like you to turn to page -- this is an excerpt. It doesn't have all the pages. The second page in the document is Page 16 of the transcript, into 17. Do you see the question by Mr. Speidel?
A. I do.
Q. And what is that question?
A. Starting on Line 23, it says, "Continuing on the iNATGAS theme, for both EnergyNorth and iNATGAS, what work has been completed and paid for? And, what work remains to be done to complete the project and commence service? And, what is the time line for each task?"
Q. The balance of that Page 17 is your description of the construction progress, supplies that have been ordered and the like; is that correct?
A. The discussion really goes on for a few pages, but it begins on Page 17, yes.
Q. And I'm going to point you to the middle of Page 18, the question that begins, "Do you have, Mr. Mullen, an overall cost estimate for the project that would be allocated to the Company, Liberty?" What was your answer to that question?
A. Starting on Line 16, my answer is, "Yes. To date, our direct investment has been approximately 2.95 million, and remaining direct cost is about 750,000."
Q. And the conversation continues through Page 9 of the project in general, all the way to nearly the bottom of Page 23, where the questioner, Mr. Speidel, says, "Thank you. Switching gears"; correct?
A. Yes. That's on Line 17.
Q. Next page of this exhibit, which jumps in the transcript, is a question by Commissioner

Scott at the very bottom of the page asking why there has been a delay with iNATGAS; correct?
A. Yes.
Q. And you give the answer to that beginning on Page 33.

Recalling the docket, it was -- iNATGAS was filed in the early spring or summer of 2014. There was an order that summer. So we are now, with this transcript, in October of 2015, approximately one year later; correct?
A. Yes.
Q. And it finally went into service the following year, at the end of 2016.
A. That's correct.
Q. And then a couple pages further in the transcript, again page numbering jumps, top of Page 50 there's a question. And I can represent this is from Chairman Honigberg. "Mr. Mullen, should we be comfortable with the situation with iNATGAS?" And again you respond affirmatively; is that correct?
A. Yes.
Q. So in this hearing in October, Staff
informed -- the Company informed Staff and the Commission of the cost status of the iNATGAS project; is that correct?
A. Yes.
Q. Marked as Exhibit 74 is, again, an excerpt from the order that came out of that cost of gas proceeding. I've included Page 1 and Page 8. Page 8 has a section titled "iNATGAS"; is that correct?
A. Yes.
Q. And it recaps the transcript that we just went through; right?
A. In that first paragraph, yes.
Q. And what's the very last couple lines where it mentions the cost of the iNATGAS project?
A. If you're referring to the last sentence of that paragraph --
Q. Yes.
A. "Liberty committed to continue sharing information with Staff regarding the status of iNATGAS."
Q. And the sentence immediately previous to that.
A. "Liberty expects iNATGAS to commence
operations by June 1, 2016, and provided a narrative explanation of the contractual and financial safeguards in place to protect Liberty's investment to date of approximately \$3 million in iNATGAS-related physical plant."
Q. It is correct that you, through the testimony, informed the Company -- Staff and Commission that $\$ 3$ million had been spent and that another $\$ 750,000$ was expected to be spent? Correct?
A. Yes, that was in the transcript.
Q. Did Staff take any action with regard to that information that you're aware of?
A. No.
Q. Did Staff, as far as you know, ask the Company to stop or pause or rethink the project?
A. No.
Q. Did Staff communicate anything to the Company suggesting it should change course at all with regard to the iNATGAS project?
A. No.
Q. Exhibit 75 is a DCF printout. Do you have
that in front of you?
A. Yes, I do.
Q. And to orient you to make sure you have the right one in front of you, the left column is Minimum Take-or-Pay Level, and it has NPV of $\$ 213,000$. Do you see that?
A. I do.
Q. And what can you tell us about this NPV? What is your understanding of -- let me ask you a question.

The testimony in the hearing was that the original NPV, based on the $\$ 2$ million estimate in the minimum take-or-pay, that was relied on in approving the Special Contract. There was testimony that, I think it was by Mr. Clark or Mr. Hall, that if you increased the investment in this DCF analysis to the actual cost of roughly $\$ 4$ million at the take-or-pay minimum, without the AFUDC, it was still positive. Do you recall that testimony?
A. I do.
Q. And is this that DCF analysis we have marked as Exhibit 75?
A. Yes. And if you turn to what would be the second page that has some text in blue and in red, on Line 10 you will see in red the dreaded AFUDC acronym we've talked about. And the line there now has no dollars in for AFUDC. That is the only change to this, as compared to the earlier exhibit that was discussed at length.
Q. And do you know if the Company has at least informally calculated the effect on net present value if we applied the current tax rate to this analysis?
A. Yes. Although I don't have those numbers in front of me, that would make the result more positive.
Q. And that also contains the updated capital structure of the Company; is that correct?
A. Yes.
Q. The next topic, although the horse is pretty dead by now, this training center, the only thing I wanted to ask you about is the -- as I said in my questions with Mr. Iqbal, there were many, many, many discovery requests in all the various dockets about the costs
related to the training center. You agree?
A. The capital costs or training costs?
Q. The training costs.
A. Actually, there's been a lot on both. But yes, there were a number on training costs.
Q. Is it fair to say you were the person answering and/or the point person for probably all of them?
A. Depends on which docket you're referring to because a lot of these refer to prior dockets where it may have been Mr. Smith who filed rebuttal testimony with me on this same topic in the Granite State Electric rate case. He also provided some discovery responses in the affiliate lease docket.
Q. And what became a focus during this hearing was the Table 2 in Mr . Iqbal's testimony, those various costs, training costs, hours, et cetera. And just most recently in the final questions between Mr. Dexter and Mr. Iqbal, there was discussion about a data request that was answered in a way that seems like there was a disconnect between what was asked and what was answered. Do you recall
that exchange?
A. Oh , yes.
Q. Can you explain at least what the Company's perspective was in providing the information that resulted in the hours listed in Table 2?
A. Okay. Well, now we have a history lesson as to where this first started.

As mentioned in my rebuttal testimony, this is the fourth docket where the training center has been discussed. In the initial docket where it was discussed, EnergyNorth's last rate case, DG 14-180, there was some discovery provided in that proceeding that gave historical information about training costs incurred to attend training at National Grid's facility in Millbury, Massachusetts. That was all done in the form of text in a discovery response. With each subsequent case that's come up, there's been a request to update that information. And it was provided in a spreadsheet form, and that spreadsheet has kind of lived on. However, that is not really the way that we track it. But we've been asked to provide it in the
same format so, you know, you can follow it. And it still has mandatory technical
training. It has health and safety training, same sort of categories. So that's been brought forward in each docket. And the request has been to update that information and provide it in the same format. That's what we've done. Now --
Q. Let me just stop you there. Is that most recent incarnation of the update what Mr . Iqbal said he used as the source for the hours that appear in Table 2?
A. I believe that is the most recent one, yes.
Q. Okay.
A. So, as that's been brought forward now, that is also not facility-specific 118 some of that information goes to 2013, 2014. The training center came online at the end of March of 2015. So it was basically trying to grab like dollars for like types of training to put information in the same format.

However, as has been discussed in my
testimony in this proceeding, as well as
rebuttal testimony that $I$ filed with

Mr. Smith in the Granite State Electric rate case, we are doing more training. We are doing other types of training. So, trying to capture -- I mean, there's lots of different ways to capture training costs, and it's all a matter of how you slice it.

What we've tried to do in responding to these questions over the course of these cases is to provide information based on what has been asked in a similar format. So, you know, even in this proceeding $I$ was asked to provide a breakdown of the roughly 4,000 hours of training at the training center. Well, that's a different group of information compared to what was in the other spreadsheet that Mr. Iqbal was relying on. Some of that may be duplicative, some of it may not be, 118 the spreadsheet Mr . Iqbal is relying on, again, isn't facility-specific, whereas the other question was facility-specific.
Q. Let me stop you there. So, Mr . Iqbal was reasonably relying on the information we were providing. And you're now saying that perhaps that data request was -- doesn't
include some types of training that you described in your -- when did you describe that disclosure or discuss the other kinds of training that the Company was doing that may not be in the spreadsheet that Mr. Iqbal was citing?
A. It was in a -- first mention would have been in a prior proceeding. My best recollection, at least in terms of testimony, would have been in the Granite State rate case, DE 16-383, in the rebuttal testimony.
Q. To put a label on this "other training," is it what we have often referred to as the "CSR training" up at the training center?
A. It's like that. And that's the sort of thing where the CSRs will go up to the training center, get some technical training that they otherwise wouldn't have gotten. But those are the types of things that would not be in that other spreadsheet that had categories for mandatory technical training, health and safety training. So those -- when the spreadsheet was filed, you know, we tried to keep -- again, when asked to provide
information in the same format, that's what we tried to do.
Q. Was there any intent to not provide Staff the information it was requesting about the training center?
A. Absolutely not.
Q. Going to your reference to 4,000 hours, that comes from your testimony in 16-393; is that correct?
A. That was the first place it showed up, yes.
Q. And when it lists the 4,000 hours, does it describe what employees were using those 400 [sic], gas versus electric? Does it make a that distinction?
A. I think it says gas and electric. And I think it also -- actually, $I$ can refer to the testimony if that would be helpful.
Q. Sure.
(Witness reviews document.)
A. And this is my rebuttal testimony -- no. Sorry. Wrong one. This is my June 30th testimony in this proceeding, which I believe is Exhibit 13. And the relevant $Q$ and $A$ starts on Line 5 of Bates 25 in that
testimony. The testimony -- that portion of the testimony is in italics, which, when $I$ filed that testimony, was my way of demonstrating that this had been provided in the DE 16-383 proceeding.
Q. And again, the specific quote as to what was included in those 4,000 hours.
A. It really starts on Line 7 of that page -CHAIRMAN HONIGBERG: Before you go on, I'm sorry, Mr. Sheehan. It seems like none of us can find Mr. Mullen's testimony, the original. So maybe we can get some help off the record. Let's go off the record.
(Discussion off the record)
CHAIRMAN HONIGBERG: We'll go
back on the record.
BY MR. SHEEHAN:
Q. Again, Mr. Mullen, the question is there's a reference to 4,000 hours in this June 30 th testimony. Just read the sentence that says the 4,000 hours, and if you can provide context of what that testimony said it included.
A. The context really starts a few lines before
that. So what $I$ plan to do is read from Line 7 through 14.
Q. Certainly.
A. Leading to that was a question that said, "Other than training of gas and electric employees, how has and how will the training center be used?"

And the answer that starts on Line 7 says, "In addition to almost daily usage for training of gas and electric employees, the training center has been and will continue to be used to train other Liberty employees on the basics of gas and electricity. To date, many customer contact center and office employees have gone through this beneficial training to provide them a better understanding of the electric and gas utility industries. This is training that would not otherwise have occurred with the use of an outside training facility was required due to limited availability. During 2016, Liberty gas and electric employees received 116 sessions of training, totaling 4,095 hours at the training center."
Q. Okay. Thank you. And then in your testimony at the outset of this case, you carried that 4,000 hours into Mr. Iqbal's Table 2 to do some math. Was that appropriate?
A. I think Mr. Iqbal classified that as an "Off-the-cuff calculation," and I think that's a correct characterization of what I did. The main point $I$ was trying to make was that the numbers in the spreadsheet he relied on were too low.
Q. And the reason the off-the-cuff wasn't the right thing to do is because, as you just quoted, that 4,000 includes both gas and electric.
A. Yes.
Q. And so if there was a gas-only portion of that 4,000, it would be something less than 4, 000 .
A. Yes.
Q. And I believe Mr. Iqbal actually came up with, and I don't mean that in a pejorative way, a number of 1900 hours attributable to gas employees. Do you recall that?
A. Yes. And that was derived right from the
spreadsheet we provided.
Q. Okay. So, suffice to say the point, as you just said, that you were trying to make is that Table 2 should include more hours than is listed in Table 2.
A. Yes.
Q. And if more hours were included, that would lower the per-hour cost listed in Table 2.
A. All else being equal, yes.
Q. Thank you.

One question on the subject of the topic of depreciation. Mr. Normand talked about a data request response he received on which he based his conclusions about computer software. Do you recall that?
A. I do.
Q. Can you explain what he was talking about?
A. Typically when we hire a consultant, especially to work on a rate case, they will send the Company their own data request saying, I need this information to do my work, I need that information. So when he was referring to what $I$ believe was LU 1-6, that was information that he sent to Liberty
saying -- or a question he sent to Liberty saying I need information. That particular one would have been related to the Company's computer software.
Q. Do you recall receiving that particular question?
A. I recall not specifically the question, but I recall being involved in the preparation of the information that was provided in response.
Q. And you heard Mr. Iqbal say that it was unsubstantiated information; correct?
A. Yes.
Q. Can you tell us what you did to provide that information to Mr. Normand?
A. Mr. Normand requested a list of all the items that were in our software account, Account 303. With that, we provided the information, as well as a breakdown of the average lives. And this information -- well, I shouldn't say average. The life that was recommended was based on the people at the Company who used that software on a day-to-day basis and are familiar with how long it's expected to be
useful.
Q. Did you collect this information within the Company?
A. I did.
Q. So you actually called Person $X$ and said, Are you using software $Y$ ? Tell me about it and how long it will last, and those kinds of questions?
A. Yes. Went out to different departments, depending on their particular software.
Q. And you collected that information and sent it along to Mr. Normand.
A. Yes.
Q. Was that information available to Staff?
A. Certainly.
Q. Next topic, Keene production costs. During Staff's testimony about the production costs, there was a suggestion, and I think even perhaps a question from the Bench was asked: Is there sufficient information in the record on which to make a decision about whether the Keene production costs are prudent? And by "production costs" I'm referring to the so-called "response costs" to the


December 2015 incident and the so-called "24/7 costs" to man the facility. Do you recall that back-and-forth conversation?
A. Yes. I don't remember if the specific words were on the record or provided in this proceeding. But yes.
Q. Do you think the Company has presented sufficient evidence in this record on which the Commission can decide whether those costs are prudent?
A. And that's why I make the distinction between "in the record," 118 a lot of these are in discovery responses which have not been entered into the record.

The Company certainly provided a lot of information for review by Staff in response to discovery questions. Plus, there is information in other proceedings that have already been held before the Commission on these very topics.
Q. Is there a part of the filing, the initial filing in this docket, that specifically mentions the Keene production costs, and in particular, the permanent rate testimony of

Mr. Dane and Mr. Simek?
A. Yes.
Q. And where would the Commission find that testimony?
A. Again, that's the permanent rate testimony of Mr. Simek and Mr. Dane. I don't know, offhand, what the exhibit number is for that. But it's Bates 26 of that testimony. I believe it's Exhibit 3.
(Witness reviews document.)
Q. And on Bates Page 26, the first question on that page is, "What adjustments were made to Keene's amortization expense?" Is that correct?
A. Yes.
Q. And the Commission can certainly read the answer for themselves. But it does mention amortization of costs incurred in December 2015 related to the incident and a total of $\$ 116,000$. Do you see that?
A. Yes.
Q. And it references a schedule which appears on Bates Page 64; is that correct?
A. I believe it's Page 63.
Q. You're correct. Bates 63 lists two categories of costs. Can you read those to us, please?
A. On Line 2 there's a line for 2016 Keene Production Costs, 148,410. On Line 3, there's December 2015, Keene Incident, $\$ 201,000$. I believe this schedule may have been updated during the proceeding, but this was the initial filing.
Q. And there's a reference in the testimony of how the Company proposed to treat that cost, and that has since changed in the settlement agreement; is that correct?
A. Yes. We initially, consistent with prior Commission guidance in a cost of gas proceeding, we included those costs in the distribution rate case. And our initial proposal was to amortize them over three years as part of distribution rates.
Q. As part of this rate case, did the audit division look into these response costs, the 24/7 and the response costs?
A. Yes. Well, the $24 / 7$ costs were reviewed as part of a cost of gas reconciliation.
Q. Okay. And did they issue a report on that topic?
A. On the production costs, yes. The Keene response costs were included in the overall audit report they did as part of this DG 17-048 rate proceeding.
Q. So there are several pages in the audit report discussing those costs.
A. Yes.
Q. Is evidence related to these costs attached to Mr. Frink's testimony?
A. Attached to Mr. Frink's testimony are, I believe, a Staff recommendation related to production costs, as well as a copy of the Staff's report on the investigation into the December 2015 incident.

MR. SHEEHAN: I prepared and put in front of you a binder with a series of data requests over various proceedings that relate to this issue. For the rest of the room's benefit, I have not made copies 118 I do not intend to -it's just to highlight the questions asked and answered. Certainly, if anyone wants copies, we can make them. But it's lengthy, and I was
burning up the printer last night.
BY MR. SHEEHAN:
Q. So if you could just flip through what we prepared and list the case and the data request data, just what was asked by Staff related to production for $24 / 7$ costs.
A. Yes. And this really relates to information provided in two proceedings. First was the DG 16-812, which is the winter cost of gas proceeding --
Q. Just for reference, that was a proceeding in which the Company proposed to include those costs in the cost of gas and Staff objected and it resulted in discovery and a settlement agreement in spring of 2017; is that correct?
A. Yes.
Q. So these data requests were exchanged during the progress of that particular case; is that right?
A. That's correct.
Q. And without any great detail, just if you could highlight the information that Staff was requesting in those data requests.
A. Yes, and I can kind of summarize this.

In that proceeding there was responses in four sets of discovery related to some background for the prior period adjustment in the cost of gas reconciliation that had to do with production cost. There are a number of questions related to the rationale 24-hour/7-day-a-week staffing. There was information about some other blower failures at the plant. There was some more information about plans to convert to CNG, without getting into the details of every single one of these.
Q. But there are dozens of questions just in that series; correct?
A. Yes.
Q. Is there another source of authority under which the Company could be entitled to recover these production costs?
A. Yes.
Q. And what is that?
A. That stems from the DG 14-155 proceeding where Liberty acquired New Hampshire Gas.
Q. I marked as Exhibit 76 the first page and the fourth page of that settlement agreement.

And is that what you're referring to on that second page, which is Page 4 of the settlement agreement?
A. Yes.
Q. And where should we look?
A. In Section 5, right in the middle of the page.
Q. That section generally talks about the $\mathbf{\$ 2 0 0 , 0 0 0}$ that EnergyNorth would charge Keene for general administrative expenses; correct?
A. Yes.
Q. And what is relevant to this topic?
A. The second sentence in that section discusses what's included in that $\$ 200,000$. Actually, I'm going to read the sentence. It says, "This charge shall include all costs for management services provided to the Keene Division, such as legal, regulatory, finance and human resources, but shall not include the cost of any mutual aid for emergency services or services for other events outside of normal business operations, which shall be billed separately by EnergyNorth to the Keene Division."
Q. I mentioned a minute ago that the issue of recovering these costs was initially raised, as you were talking about, in the 16-812 cost of gas proceeding which resulted in a settlement that went before the Commission at a hearing in the spring of 2017. Do you recall that?
A. Yes.
Q. Were you present at that hearing?
A. I don't believe $I$ was.
Q. Okay. Then I will stop there. I have only one copy of the transcript and order, and I'll save that for closing.

In Staff's case on the issue of these costs, they introduced a data response by Mr. Brouillard, in which he -- again, I'm paraphrasing -- said we've made many improvements to the Keene system, but there's still an element of risk, and that Company believes that that element of risk should be satisfied by continuing the $24 / 7$ coverage.

Do you recall that?
A. Yes.
Q. Do you recall Mr. Frink's testimony basically
disagreeing with that assessment, that the risk was so small, it was unreasonable to continue the $24 / 7$ coverage?
A. Yes, I recall that.
Q. I've marked as Exhibit 77 another data response of Mr . Brouillard in the context of that cost of gas proceeding. Do you have that in front of you?
A. Yes. You're referring to Request to Staff 3-4 in 16-312.
Q. Correct. And the question is about were there any blower system failures after the large December 2015 event; correct?
A. Yes.
Q. And there are two listed. The first is February of 2016, and the second is October of 2016. Do you see that?
A. I do.
Q. Again, the Commission can read this for themselves. But the October '16 event was a failure of the blower system that did not recover automatically; is that correct? And if you look at, in particular, the first large paragraph on Page 2 of 3 --
A. Excuse me while $I$ just read the paragraph here.
(Witness reviews document.)
A. The answer to your question is yes.
Q. And this was in October of 2016 as the '16-'17 heating season was ramping up; correct?
A. Yes.
Q. Next topic. I asked, I think it was Mr. Frink, to compare the rates proposed in the settlement agreement to Northern's existing rates. And Mr. Frink thought that was an inappropriate comparison. Do you recall that?
A. I do.
Q. Do you have any comments on that?
A. I think that it's -- while I can certainly understand Mr. Frink's comment about having different cost of service, $I$ think that comparisons like that are done all the time. Particularly, I think Mr. Clark would probably be, you know, the one to be able to really speak to this. But when businesses are looking to locate somewhere or looking at
their available options, whether it be for natural gas, whether it be for alternative fuels, one of the questions they will go through is: How much will it cost me here if I use this? How much will it cost me here if I use that? Or how much will it cost me in this area of the state versus that area of the state?
Q. And the exchange with counsel and Mr. Frink then suggests -- well, he said the proposed settlement rate increase would not result in just and reasonable rates; is that correct?
A. Yes.
Q. And yet, they would be rates that were still lower, but comparable to Northern's rates.
A. Correct.
Q. If the Commission were to approve the rates proposed by Staff, do you think those would result in just and reasonable rates?
A. I do not.
Q. What do you think the impact would be if the Staff's proposed rates were approved?
A. Well, given that Staff's proposed revenue deficiency is below temporary rates, that
would first, you know, require the Company to refund money. Second, what would happen is the capital budget would have to be reassessed, and there would have to be some costs come out of that. And undoubtedly what would also have to happen is that it would impact staffing.

Those are all the questions I have. Thank you.

CHAIRMAN HONIGBERG: Just before you give up the microphone, Mr. Sheehan, you asked Mr. Mullen about a number of data requests and responses from another docket. You said there was a pile. You had him summarize what was in them. I just want to make sure you're satisfied with the state of the record on that. MR. SHEEHAN: Yes, and the reason is they're not in the record here, but the point was the information is available. Staff had a lot of it in this proceeding. They had every opportunity to make an assessment of prudence, and they took the --

CHAIRMAN HONIGBERG: Are those
data --
(Court Reporter interrupts.)
CHAIRMAN HONIGBERG: I'm sorry. That's my fault.

MR. SHEEHAN: And they took the steps that they chose to.

CHAIRMAN HONIGBERG: Are any of those data responses exhibits in any other docket?

MR. SHEEHAN: Oh, exhibits.
CHAIRMAN HONIGBERG: I was just reminding you that --

MR. SHEEHAN: Yes. Fair enough.
CHAIRMAN HONIGBERG: -- if they're just data requests and responses, they're not part of a record.

MR. SHEEHAN: And it's... yes, I think I will go through those and pull an appropriate selection to show the evidence that supports the prudence of those costs and make that an exhibit that $I$ can have ready for the Commission tomorrow morning.

CHAIRMAN HONIGBERG: I think you should -- if you want to make some of those an exhibit, why don't you have Mr. Mullen do what
it is you want to do with them now.
MR. SHEEHAN: Okay.
BY MR. SHEEHAN:
Q. Mr. Mullen, let's begin with $D R$ set 2 in 16-812 in that binder, Page 11.
A. Okay.
Q. Turn to Page 13. What data request is that?
A. That is the response to Staff 2-1.
Q. What information does that provide related to 24/7 staffing?
A. The request was for a schedule that details the monthly cost of operating the Keene production plant under the new policy (manned presence, 7 days a week, 24 hours a day) versus the cost of operating the plant prior to that change in policy.
Q. And did the Company provide that data?
A. Yes.
Q. The next data request is at 2-2. What is that request?
A. Requested a schedule that details the estimated monthly cost of operating the Keene production plant under the new policy versus the prior policy for the months of

October '16 through April of 2018.
Q. Did the Company provide that information?
A. Yes, it was provided -- referred to in response to the prior question.
Q. Turn to Data Request 2-3. What information does that seek?
A. This a request for the rationale for the change in policy, when the change was implemented and who determined the change was necessary.
Q. Could you summarize that response for the record?
A. Yes. In summary form, the Company explains that the decision to temporarily staff the plant $24 / 7$ was made shortly following the December 19, 2015 incident. And during the subsequent two weeks following the incident, the Company initiated permanent steps to place the operation of the plant under the director of gas production. There's some further information saying that this decision was discussed and jointly agreed to during a meeting in early January, which included the president of Liberty Utilities New Hampshire,
the Director of Gas Production, the Director of Gas Operations, Director of Engineering and the Manager of Keene Operations.
Q. The data request that begins on Page 19 of that package, what number is that?
A. Staff 2-7.
Q. And what information does that seek?
A. The question was: "Since the December 2015 operational event at the plant, please explain in detail each change and enhancement to the control systems at the plant. And for each change and enhancement, please provide the date implemented, the cost, both capital and operational, and the expected benefits."
Q. And was that information provided?
A. Yes.
Q. Next page, what data request is that?
A. Staff 2-8.
Q. And what is that request?
A. Said, "Given the changes and enhancements to the control systems since the 2015 operational event, please explain why Liberty continues to man the plant seven hours" -"7/24 [sic]."
Q. And is that the response of Mr. Brouillard that was referred to later in this docket, or similar to that?
A. Yes, I believe it is.
Q. Next set is Set 3. Turn to Page 25 of that package. What number is that and what does it request?
A. This is response to Staff 3-1, and this requested a risk assessment that describes each of the specific risks, both public safety and financial, that the new policy, (around-the-clock manning of the production facility) is intended to address.
Q. And that was responded to as well?
A. Yes.
Q. The question on Page 26, what does it ask?
A. It references some 12 enhancements to the production facility since implementing the new policy, and explain why these measures do not adequately address the risks identified in the response to Staff 3-1, and to explain, with those new enhancements, to explain what the protocols would be for addressing the risks under both the old and new policy and
what the difference in response time and cost exposure would be under old and new policies.
Q. On Page 36 I believe is the data request that we just introduced into the evidence about the October 2015 event; is that correct?
A. Yes, that's Staff 3-4.
Q. Page 41, what information does that seek?
A. This seeks identification of the production costs included in the cost of gas
reconciliation for the 2014-2015 and 2015-2016 winter periods, and to identify the additional costs related to the new policy of around-the-clock manning of the production facility.
Q. And the next two pages request what type of information?
A. Referring to the next two requests?
Q. Yes.
A. Staff 3-6 requested identification of the gas production cost for gas mixing and miscellaneous production that are included in base rates and explain the difference between those costs and the production costs included in the cost of gas reconciliation for the

2015-2016 winter period.
And Staff 3-7 requested an updated cost estimate of the production cost for the '16-'17 winter period and identification of the additional costs related to the new policy of around-the-clock manning of the production facility.
Q. Jumping ahead, I'm going to skip one section to what you have as Bates 143 , Staff 3-8 in this case. Can you tell us what that requested?
A. Yes. This referenced the $\$ 148,410$ that $I$ previously identified on the attachment to Mr. Simek and Mr. Dane's testimony for Keene's 2016 production costs. And it was a three-part question, asked for a narrative explaining the circumstances under which these costs were incurred, as well as the reasoning as to why the amortization of these costs should be included in customer rates. And it asked for copies of all documentation in support of the proposed deferred costs and an explanation of reasoning for the Company's proposed amortization period of three years.
Q. And was that information provided?
A. It was.
Q. And what documents were provided along with that response?
A. There was a copy of a final audit report prepared by Commission's Audit Staff. There was a copy of a Staff memorandum -- I say copy. There was a link to a couple of these documents. There's also a link to the settlement agreement in DG 16-812. There's some further explanation of the 148,000 , some detail as to that. And there's link to the 2016-2017 winter period cost of gas reconciliation that was filed on June 15th of 2017. That's all in Part A.

In response to Part B that asked for documentation in support of those costs, there was a reference to saying that these costs had all already been audited. So, since they were audited, we said supporting documentation has already been provided to Staff.

And in response to Part C, the three-year amortization period was selected

118 it was the estimated time between rate cases.
Q. Staff 3-9 at Page 157, what did that seek?
A. That seeked details related to the $\$ 201,000$ of emergency response costs related to the December 2015 Keene incident.
Q. And the response to that said what?
A. Again, it was a three-part question. It asked for a detailed narrative explaining the circumstances, as well as the reasoning as to why the amortization should be included in customer rates. Asked for copies of all documentation and explaining the reasoning for the amortization period of three years.

In Part A, there was a response to -there was a link to the Commission's investigation docket, as well as references to particular tabs that are found on the Commission's web site for the Safety Division's investigation report. And EnergyNorth -- in Tab 7. In Tab 8, EnergyNorth's response to that report, there was a link to the settlement agreement in DG 14-155 that we previously discussed.

In Part $B$ there was a summary of the breakdown of the types of costs that were included in the $\$ 201,000$, as well as an explanation saying that the supporting documentation was voluminous and consisted of invoices from many fire departments, other agencies, vendors and payroll records. And considering the voluminous nature and that some of the information was confidential 118 of payroll records, the Company said they would make the information available for review at its offices. And the Audit Staff did come and review that information. And as mentioned earlier, a write-up of that was included in their final audit report on this rate case.
Q. So Audit Staff traveled to our offices and reviewed all that information.
A. Yes, they did.

And finally, just to close the loop on that, again, the three-year amortization period was chosen because it was the estimated time between rate cases.
Q. Staff 8-12 on Page 177, what does that ask?
(Witness reviews document.)
A. This is asking for an explanation of a \$46,752 adjustment to Keene production costs. I believe this is similar to what I said. I believe the schedule was updated during the course of that proceeding -- this proceeding. I believe that this is what that $\$ 46,000$ is in reference to.

And the response there was a reference to Audit Staff's recommendation in their final audit report on Keene's 2016 summer cost of gas reconciliation. So what was provided was a final copy of that audit report.
Q. Do you believe Staff had sufficient information about the response costs and the 24/7 costs on which it could make a determination as to whether it would recommend prudence or imprudence?
A. I do.
Q. Thank you. I have nothing further.

CHAIRMAN HONIGBERG: Mr. Kreis,
do you have questions?
MR. KREIS: I do not, Mr.

Chairman.
CHAIRMAN HONIGBERG: Mr. Dexter.
REBUTTAL CROSS-EXAMINATION
BY MR. DEXTER:
Q. Mr. Mullen, I guess we'll start with Exhibit 75. You have that in front of you?
A. I do.
Q. So as I understand Exhibit 75, if one excludes AFUDC from the iNATGAS analysis, that after 15 years discounted, the Company's investment under the minimum take-or-pay assumption would yield $\$ 213,000$ in value. Is that your understanding of the schedule?
A. That's what the calculations on this spreadsheet show.
Q. Do you have any reason to doubt the calculation on the spreadsheet?
A. No. But $I$ say that 118 , again, those are based on numbers, some of which can change over time. But based on the results of this analysis, that is correct.
Q. Would you recommend to your Company's management that they spend $\$ 4.3$ million to receive a net present value of $\$ 213$ million
[sic] over a 15-period? Do you think that's a -- would you make that recommendation based on the information on this sheet?
A. I would, based on the information on this sheet. I would say that the 15-year discounted cash flow resulted in a positive benefit, which was the intent at the time that the Special Contract was entered into.
Q. That wasn't my question. My question is: Would you go in to senior management and recommend they spend $\$ 4.3$ million, with the analysis showing that after 15 years under the guaranty, quote, unquote, guaranteed take-or-pay assumption, that they would receive a net present value benefit of $\$ 213,000$ ? Do you think that would be a wise recommendation?
A. I think where it shows a positive result and the fact that there are plenty of personal guarantees, there's corporate guarantees, there are other protections in the contractual documents associated -- I'm assuming that you're talking about the same sort of scenario that surrounds the rest of
the details for this investment.
Q. I'm not making any assumption. I'm just asking for your assessment.
A. You have my answer.
Q. So your answer is, yes, you would recommend it.
A. Subject to the rest of my response, yes.
Q. So if we took that $\$ 213$ million [sic] net present value and divided it by 15 years, could you give me an idea of what that would be?
A. I would love for a $\$ 213$ million net present value.
Q. Two hundred thirteen thousand net present value.
A. And divide by?
Q. Fifteen years.
(Pause)
A. A little over $\$ 14,000$.
Q. And if we were to divide that by $\$ 4.3$ million, what would that be?
(Pause)
A. Comes to a number of .33 percent.
Q. So that would be . 33 percent return on the

Company's investment? Is that, again, "rough justice," as I heard you use the term before?
A. That's what this calculation comes to.
Q. Concerning the training center and the 4,000 hours that counsel asked you about, are we now to understand that the 4,000 hours that's been talked about, of which 1900 hours could be allocated to gas employees, is training that was different from what was included in the analysis that Mr. Iqbal provided on Page 25 of his exhibit?
A. Yes. I've already gone through that.
Q. Okay. Is it a fair assessment to say the numbers that are included in Mr. Iqbal's chart had to do with the training that was done before the facility was built, and it was the type of training that was sent out to National Grid to be done?
A. In the prior years, yes.
Q. Prior years. That had to do with things like mandatory training for operational employees?
A. Correct.
Q. And in contrast, the 4,000 hours is related to different employees.
A. The 4,000 hours was, in my testimony, was described as the amount of hours of training that was performed at the training center during 2016.
Q. So it's not all incremental to what was -it's not all incremental to what was included in Mr. Iqbal's --
A. Yes. I can't tell you how much, just looking at total dollars. You'd have to go through employee by employee, course by course, to find out what was included in one versus what was included in the other. Again, it's a matter of how the questions come. And you try to answer the questions as fully as you can based on the questions as posed.
Q. And this additional training is not mandatory training; is it not?
A. Depends on what you're talking about.
Q. Is it -- I understand that your operational employees have mandatory training that they have to do to be licensed to perform their duties.
A. That's correct.
Q. And the 4, 000 hours that you talked about,
does it include some of that mandatory training?
A. It very well may. I'd have to look again at the details of the courses and the people that were listed in the response to, I think it was Staff 4-34, that provided that information. A lot of that was not the same. A lot of it was for Gas 101, Electric 101, some other courses. And when I see the names of people who were assigned to those courses and the types of courses that they were, those were obviously not anything that would have been included in mandatory technical training.
Q. And therefore wouldn't have been included in the information that was -- in the training that was done down at National Grid.
A. In the years prior?
Q. In the years prior.
A. Correct.
Q. Right. Because you're not sending anybody to National Grid anymore. I think we established that months ago; correct?
A. That's correct.
Q. And you don't have any idea as to how much of this 4,000 hours was related to mandatory training versus what you just described as Gas 101 and Electric 101. You don't have a breakdown for us, do you?
A. I don't, offhand. And again, you'd have to look at other facilities. For instance, in Manchester, there's a conference room. Sometimes there will be training on safety or other things there that wouldn't have been included in either one of those spreadsheets.

So as I said when I first got back up here today, there's a lot of different ways you can slice training. And, you know, we try to be as responsive as we can to the questions that are asked. But I tried to explain this during the course of the proceedings, that there's a lot of information if you want to just talk technical training, overall training, if you want to cut it by facility. There's a lot of different ways to look at it.
Q. How much training goes on in 2016 outside the training center?
A. I couldn't tell you, offhand.
Q. Is it significant?
A. Yes.
Q. And what kind of training is that?
A. All sorts of training. We have a program called Safe Start that so far we've been -- I think last year we went through five different modules. Everybody in the Company is supposed to go through that training. That can happen at any facility. Some of it happens at the training center, some of it happens in Londonderry, some of it happens at the various yards. It's a matter of when people can go and what is the various availability. Some of that's in smaller classes, class sizes, to accommodate people's schedules.
Q. And that would have happened in prior years as well. That's not something new.
A. No, it is fairly new.
Q. It is fairly new?

Mr. Iqbal's done a calculation of the various hours that were included in Staff 4-34 and has concluded that the customer
service training for EnergyNorth consisted of 152 hours based on that spreadsheet. Would you accept that, subject to check?
A. I'd have to go back and check. My recollection from looking at that spreadsheet was that it had about 11 or 1200 lines to it. And I believe a lot of them -- and I'm not sure what he's calling customer service training. So I'd say I don't accept that 118 I think it's low. What he might call customer service training and what I might refer to as customer service training might be two different things, depending on who's receiving the training.
Q. Can you estimate the average hourly cost of a customer rep that would go through this training?
A. You mean payroll cost?
Q. Yes.
A. Off the top of my head, I don't know their salary.
Q. How about the average cost for a management employee? Would that be higher, do you think?

A. Yes, typically.
Q. And again, could you explain what type of training these customer reps and management employees receive at the center?
A. Sometimes it's something called Electric 101, sometimes it's Gas 101. Other times it's more technical, hands-on training, so they actually get to see and work with some of the equipment and some of the electric and gas equipment that actually gets used in the field. It helps customer service reps better be informed when they're talking to customers. Rather than just learning about something on a PowerPoint presentation, they actually get to see and feel it.
Q. And this is some of the non-quantifiable benefits that you talked about in connection with some of the other data responses concerning this area of training; is that right?
A. Well, I talked about a lot of non-quantifiable benefits, some of which were the ability to have a number of people trained in a controlled environment and in
one place with one instructor at the same time, rather than variations that you'd have from job site to job site and being able to train one or two people at one time.
Q. Let me ask the question a little bit differently. Do you consider it a non-quantifiable benefit to have what I'll call "office employees" go through this operational training at the training center?
A. Yes. I'm not sure how I'd put a dollar amount on somebody being able to be better educated to speak to a customer on the other end of the phone.
Q. So if we could look at Exhibit 77 for a moment having to do with the two incidents of blower malfunctions that occurred after December 2016.
A. I have it.
Q. On Page 2 there's a paragraph that's entitled "How the Company was alerted." It's just two sentences. Could you read those two sentences into the record?
A. "The plant technician performing the standard monthly lead/lag swap of the blower operation
witnessed the failure of the adjustable speed drive controller for the new lead blower.

Also, Liberty's Londonderry control room detected a drop in output pressure levels on the high-pressure (3.5-pound) system."
Q. So, in fact, the Liberty Londonderry control room detected this situation; did it not?
A. I think it says two things. First sentence I read said the plant technician, who would have been part of the $24 / 7$ staffing, he was performing the standard monthly lead/lag swap of the blower operation, witnessed the failure of the adjustable speed drive controller for the new lead blower. And in addition to that, yes, the control room detected the drop in output.
Q. Can the Keene plant be set off -- shut off from the control center in Londonderry?
A. I can't answer that. I'm not sure.
Q. Do you know if that's what happened in this case?
A. I do not.
Q. Mr. Mullen, when you made the assessment that EnergyNorth rates were lower than Northern

Utilities' rates, what was that based on?
A. That was based on the discussion that was had at the hearing the other day.
Q. No. I mean what was your conclusion based on, that EnergyNorth's rates were lower than Northern's rates? Did you do an analysis of the two rates?
A. That was done the other day when we were questioning Mr. Frink. And that was the existing Northern rates to the rates that would result from the settlement agreement, as shown as attached to the settlement agreement.
Q. And were you looking at commercial or industrial or all rates?
A. I believe that was residential rates.
Q. Did you look at the commercial or industrial rates?
A. No.
Q. Do you know if the rate classes are comparable between EnergyNorth and Northern?
A. When you say "comparable," in what way?
Q. Well, on the commercial side there are different breaks of usage generally for rate
classes. Do you know if they line up the same for EnergyNorth and Northern?
A. I'm not familiar, offhand, with Northern's commercial rates. I can't answer that.
Q. And with respect to the residential rates, do you know, again, if the rate structure is the same?
A. Well, structure is one thing. I think the blocks are different.
Q. The block. That's what $I$ was getting at with "structure." So there's a customer charge and then there's a couple blocks for both companies.
A. Correct.
Q. Do you know if the blocks are different?
A. They are.
Q. How many customers does EnergyNorth have?
A. In total? A little over 90,000.
Q. Do you know how many customers Northern Utilities has in New Hampshire?
A. Offhand, I don't. I'm more familiar with the electric side.
Q. Would you accept, subject to check, in their annual report in 2016 , it was about 32,000
customers?
A. Subject to check, sure.
Q. With regard to the implications of the Commission approving Staff's approval in this case, you indicated that there would have to be staffing reductions at EnergyNorth. Do you recall that?
A. I do.
Q. Would you agree that both payroll -- that both recommended revenue requirements in this case contained funding for a full compliment of employees and that the only distinction between the two of them is that Staff adjusted for three and a half expected vacancies?
A. I think if you focus solely on that adjustment, then $I$ understand your question. However, when you look at the totality of the recommendation, then that one particular adjustment may not have that impact, but the rest of the adjustments would.
Q. So where would the -- what is it about

Staff's adjustment that would require
EnergyNorth not to fill positions?
A. Well, I think, as $I$ went through, the reduction in dollars, especially first where you're below temporary rates, so that is already refunding dollars to customers, as well as looking at, you know, each year the Company has to plan its budgets for capital and for OEM based on certain assumptions. Now, if you -- and now I can certainly say that the assumption going into the year was not that we would get less than temporary rates coming out of the rate case. So when you start looking at lower dollars coming in, obviously something's got to give.
Q. But you would agree that the Company would have the opportunity to earn 9.4 percent on all the investments it makes, with the exception of the training center and a portion of the iNATGAS facility under Staff's proposal; would you not?
A. I don't agree.
Q. Why is that?
A. 118 a lot of the other adjustments have impacts to the earnings and cash flow of the Company. So I don't agree that Staff's
proposal gives a reasonable opportunity to earn 9.4 percent ROE coming out of this proceeding.

MR. DEXTER: That's all the questions we have.

CHAIRMAN HONIGBERG: Commissioner Bailey.

QUESTIONS BY COMMISSIONERS:
BY COMMISSIONER BAILEY:
Q. We all agree now that if the Commission
approves the settlement agreement, we are making a finding on the prudency of the Keene -- the costs of Keene for the $24 / 7$ operations at the blower and the recovery of the response costs, that we're making a finding those are prudent.
A. Yes.
Q. Okay. And based on what you just went through with Attorney Sheehan, I was sitting here wondering what the point of that was. Is it your position that Staff should have proved, based on the information that it had, that those things were imprudent?
A. The Company was directed to deal with the
costs in this proceeding. We submitted the costs. We included them in our rate case filing, just like we include all our other costs. They're subject to review. There was extensive discovery that was done on them. Our understanding was that this was the proceeding where there was going to be a determination on that. However, Staff's position in the case was that essentially that Keene shouldn't be included and shouldn't be included in the distribution rates. And Mr. Frink's testimony mentioned these costs. He said they may or may not be prudent, but that's as far as he went. So we're left -- you know, we were left with, just like any other costs we sought recovery of, they were included in our filing, subject to review and recommendations and -- I'm sorry. I lost my train of thought at the end of that response.
Q. Well, you knew from the order that we issued that we were going to review the prudency of these costs in this rate case --
A. Correct.
Q. -- didn't you? So where is the evidence that you put in your petition that shows that the costs were prudent?
A. We submitted all the costs for review. They've been reviewed. They've been audited. We included them in this proceeding. A lot of that information was also provided in other dockets or other proceedings. I guess it's a matter of how many times do we have to submit the same information for review.
Q. You understand that the Commission has to make the decision.
A. Perfectly.
Q. Okay. And so do we have that information?
A. You will.
Q. Okay. Thank you. That's all I have. CHAIRMAN HONIGBERG: Commissioner Giaimo.

QUESTIONS BY COMMISSIONER GIAIMO:
Q. Good evening.
A. Good evening.
Q. Just one real quick question with respect to the training center. At what number would you have thrown in the towel and said it just
doesn't make sense to do it? Is there a number?
A. I can't answer that. I wasn't managing the project. I came in later in the process. I can't give you a number.
Q. All right. Thanks.

QUESTIONS BY CHAIRMAN HONIGBERG:
Q. I just want to follow up on a question Mr . Dexter asked you a few different times in a few different ways related to the DCF analysis that you talked about this afternoon, Exhibit 75. He wanted to know if you would be comfortable bringing that to upper management, and you ultimately said yes, with a lot of other answers. I just want to make sure I understand.

Isn't part of why you would be willing to bring this to upper management is that you would be able to say, Well, it can't be worse than that minimum number, and we're telling you we think it will be better?
A. Yes.
Q. That's what I thought. That's all I have. CHAIRMAN HONIGBERG: Mr. Sheehan,
do you have any redirect?
MR. SHEEHAN: Just two short topics.

REBUTTAL REDIRECT EXAMINATION
BY MR. SHEEHAN :
Q. On that DCF analysis, Mr. Mullen, isn't it true that one element of the analysis, that the analysis includes the Company's authorized rate of return as a discount rate in the DCF?
A. Yes.
Q. And so if you have a positive present value, that is telling you that the Company is investing the money, getting all of it back, plus all of its rate of return, plus the positive value?
A. That's correct.
Q. So in this case, if our rate of return was 10 percent, we would earn 10.33 percent on that project.
A. That's correct.
Q. So you would enthusiastically recommend this to senior management; would you not?
A. Yes.
Q. Second topic. Commissioner Bailey asked about the presence of evidence on the Keene topic. Isn't there a presumption of prudence when a Company makes a rate case filing that literally contains thousands of decisions that comprise all the costs involved in the requested rates?
A. That sounds like a legal question.
Q. Fair enough.

For example, we are asking the
Commission for recovery of a $\$ 10$ million investment in the Tilton high line; correct?
A. Correct.
Q. We put that in -- that is included somewhere in all the schedules and line items in our filing; correct?
A. Correct.
Q. We did not submit one invoice related to the high line in this case; did we not?
A. That's correct. Nor would we request any.
Q. Exactly. So when we file a case with thousands of elements in it, including dozens of million-dollar projects, including a $\$ 10$ million project, it's really the Staff that
will focus on issues we think are imprudent and elevate them to a point of dispute;
correct?
A. The Staff or --
Q. Or whoever.
A. Yes.
Q. And otherwise, if we had to affirmatively prove every element in this rate case, we would be in trial for a year.
A. Correct.
Q. So there -- thank you.

CHAIRMAN HONIGBERG: Thank You,
Mr. Mullen. I think you can return to your seat.

I believe that's all we're going to do this afternoon. We're going to return tomorrow morning when you're going to discuss exhibits and do closings.

It seems to me, given the way you're lined up at this point, the order of closings would be Staff, then OCA, then the Company, 118 the OCA and the Company are essentially taking the same position, and Staff is taking a different position.

Everyone agree with that?
MR. KREIS: Yes.
CHAIRMAN HONIGBERG: Okay. Is there anything else we need to take care of before we adjourn for the day?

MR. DEXTER: What time will we reconvene?

CHAIRMAN HONIGBERG: Were you asking the same question, Mr . Dexter, before or after the --

MR. DEXTER: What time are we going to reconvene?

CHAIRMAN HONIGBERG: I think we're reconvening at 10:00. The only question is whether we're going to do the electric hearing first or this.

MR. DEXTER: My recommendation would be to do this first. But that's just my recommendation. I haven't spoken to -- are we off the record?

CHAIRMAN HONIGBERG: Actually, we're on the record right now. Do you want to go off the record?

MR. DEXTER: Sure.
[WITNESS: MULLEN]
(Discussion off the record)
CHAIRMAN HONIGBERG: So we'll go back on the record. So we had an off-the-record discussion and agree that the first order of businesses tomorrow at 10:00 will be to finish this proceeding and then open up the other proceeding that is noticed for 10:00 tomorrow morning.

With that, we'll adjourn for the day. Thank you.
(Whereupon the Day 6 hearing was adjourned at 5:37 p.m.)
[WITNESS: MULLEN]

C ERTITICATE
I, Susan J. Robidas, a Licensed Shorthand Court Reporter and Notary Public of the State of New Hampshire, do hereby certify that the foregoing is a true and accurate transcript of my stenographic notes of these proceedings taken at the place and on the date hereinbefore set forth, to the best of my skill and ability under the conditions present at the time.

I further certify that I am neither attorney or counsel for, nor related to or employed by any of the parties to the action; and further, that $I$ am not a relative or employee of any attorney or counsel employed in this case, nor am I financially interested in this action.

Susan J. Robidas, LCR/RPR Licensed Shorthand Court Reporter Registered Professional Reporter N.H. LCR No. 44 (RSA 310-A:173)

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