STATE OF NEW HAMPSHIRE

PUBLIC UTILITIES COMMISSION

March 23, 2018 - 10:07 a.m.
Concord, New Hampshire

DAY 5
Morning Session ONLY

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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I N D E X

E X H I B I T S

P R O C E E D I N G

CHAIRMAN HONIGBERG: Good morning, everyone. We're here to continue EnergyNorth's rate case.

What are we doing this morning? Mr. Sheehan.

MR. SHEEHAN: As we mentioned at the close yesterday, this morning is the OCA and the Company's presentation of the decoupling portion of its Settlement Agreement. And that will be a panel of Mr. Therrien and Dr. Johnson, who are both present. And I understand that will be followed by Staff's decoupling witness, Mr. Iqbal.

CHAIRMAN HONIGBERG: Is there anything we need to do before the witnesses take the stand?

[No verbal response.]

CHAIRMAN HONIGBERG: All right. Why don't we make that happen.

(Whereupon ***Gregg H. Therrien*** and ***Ben Johnson*** were duly sworn by the Court Reporter.)

CHAIRMAN HONIGBERG: Mr. Sheehan.

MR. SHEEHAN: Thank you.

GREGG H. THERRIEN, SWORN

BEN JOHNSON, SWORN

DIRECT EXAMINATION

BY MR. SHEEHAN:

Q Mr. Therrien, could you please introduce yourself, your employer, and what you were asked to do in this docket.

A (Therrien) My name is Gregg Therrien. I'm Assistant Vice President with Concentric Energy Advisors. I've been retained by the Company on the matters of decoupling and rate design.

Q And you filed testimony in this docket?

A (Therrien) Yes, I did.

Q And two pieces of testimony, correct?

A (Therrien) Yes.

Q And I can inform you they have been marked as Exhibits "8" and "27". Do you have any changes to either your initial or your rebuttal testimony?

A (Therrien) No, I do not.

Q And if I were to ask you the questions in that testimony today, would your answers be the same?

A (Therrien) Yes, they would.
Q And do you adopt that written testimony as your sworn testimony?
A (Therrien) I do.
MR. SHEEHAN: Thank you very much. Mr. Buckley.
MR. BUCKLEY: Thank you.
BY MR. BUCKLEY:
Q Mr. Johnson, can you please state your name and business address for the record?
A (Johnson) Ben Johnson, 5600 Pimlico Drive, Tallahassee, Florida 32309.
Q Can you please provide a summary of your professional background and education?
A (Johnson) Yes. I'm an economist. I got my Ph.D from Florida State. And I've been working in the area of public utility regulation for more than 40 years. I specialize in all kinds of issues that my clients find it helpful to bring someone in, because it's kind of out of the ordinary. That's what I like to do in these years of my career.
Q Have you previously testified before this or any other public utility commission on the

subject of rate design or decoupling?
A (Johnson) Very extensive testimony concerning rate design, stretching back decades. On decoupling, I think I might have testified one other time, some years ago in Arizona, but it's been a while.
Q Thank you. Did you prepare testimony that was filed in this proceeding?
A (Johnson) Yes, I did.
Q And I can inform you that that testimony is premarked as "Exhibit 14". Do you have any corrections to make to that testimony?
A (Johnson) No.
Q And if I asked you those same questions today, would your answers be the same?
A (Johnson) Yes, they would.

MR. BUCKLEY: Thank you. As far as preliminary matters, I guess, I can note for all the parties and the Commission that -- and Staff as well, that I have placed before them three exhibits that have been premarked: First, "Exhibit 58" is an American Gas Association report; the second, "Exhibit 59", is a report from the Regulatory Assistance

Project; and the third, "Exhibit 60", is a piece of discovery from this docket.

And I'll touch upon -- and I think we'll touch upon those as we go through the direct testimony.

(The documents, as described, were herewith marked as **Exhibit 58**, **Exhibit 59**, and **Exhibit 60**, respectively, for identification.)

MR. BUCKLEY: Okay. So, I am generally just going to address the questions to the panel. And please, whoever feels best suited to do so, please feel free to answer those questions.

BY MR. BUCKLEY:

Q Can you please provide an overview of decoupling generally?

A (Johnson) Yes. Basically, it's a subtle, but fundamental change in the way the regulatory process works. Traditionally, we control prices and hold them constant between rate cases, and let revenues fluctuate. This basically reverses that, and holds the revenues constant to a benchmark that's been set by the Commission, and then prices themselves fluctuate just a little bit every month, or every year, depending on how it's set up.

Q Thank you. And what would you describe as the primary purpose of decoupling?

A (Johnson) Well, I think the primary motivation is to eliminate the financial incentive that utilities have to increase throughput on their system or to promote the sale of energy. It eliminates sort of the mixed motives they have, because, obviously, they're under pressure to encourage energy efficiency and the like, now that we've become aware of the importance of energy independence and trying to be efficient about energy. But they still have this incentive financially to move as much energy through their system as possible under traditional ratemaking.

With decoupling, that incentive is gone, because, basically, their revenues become fixed, and it doesn't really help them to have more of the commodity run through their system.

Q Thank you. And you touched on this

relationship between energy efficiency and decoupling. And I guess I just might ask, is decoupling alone sufficient to encourage energy efficiency and put investments in capital assets on sort of a similar ground with energy efficiency in the eyes of the utility?

A (Johnson) It makes a huge step. I mean, obviously, it causes -- from a pure financial point of view, they're now completely indifferent, if you have decoupling.

They may still have some psychological desire to have a bigger company or a desire to, you know, be able to have a lower price over time by having a bigger company. But that's very minor, compared to the general societal pressure to encourage energy efficiency.

So, I think, on balance, it's a very important step towards neutralizing that. And it -- decoupling goes beyond the sort of LRAM-type approach. Because, with that, the incentive is reduced in the context of very specific programs that are authorized under the current system here. Whereas this is broader, and it sweeps up everything, including things that don't cost other customers money. They're not a formal program. It's simply a matter of making customers aware of the meaning of "SEER ratings" and the benefits of choosing wisely when you choose an appliance and so on. They're just so many little, subtle things that a utility can do to potentially discourage or encourage better decisions by customers. With decoupling, unlike LRAM, all of those things become completely neutral, and they have no particular benefit in encouraging poor choices or less efficient choices.

Q Thank you.

A (Therrien) And may I add to that?

Q Certainly.

A (Therrien) I just think your question about investment is very important. Decoupling, in my view, is a threshold requirement in order to truly embrace energy efficiency. You must sever that link between sales and revenues with the utility.

Once that link is broken, the utility has "no skin in the game", if you will, as to whether sales need to go up in order to increase revenues. So, by breaking that link, they can now embrace all sorts of different programs. Whether it's the traditional programs that are funded through utility rates, or building code changes, embracing activities that customers may take on their own. Lots of different, kind of exciting ways that, really, the company and the community can rally behind without resistance from the company.

Q Thank you. Are either of you aware of previous guidance that this Commission has provided on decoupling in previously dockets?

A (Therrien) Yes. I address that in my rebuttal testimony. And my understanding is that there are really two very important dockets that have occurred prior to this instant case; one in 2009, and then, most recently, the EERS Settlement, I believe that was in 2017.

Q And perhaps it would be helpful to just address both of those dockets very briefly. The docket DE 15-137, the EERS docket, can you describe for me what -- can you summarize what that order directed, as far as decoupling?

A (Therrien) Certainly. Insofar as decoupling, in the context of the larger Settlement in the docket in total, it was actually a fairly small component of it. What the EERS Settlement said is that, one, the companies will introduce this LRAM, Lost Revenue Adjustment Mechanism. And then, after three years, or sooner if a general rate case comes up, the companies shall propose a form of decoupling.

So, EnergyNorth is here after that Settlement Agreement and is comporting to the requirements of that Settlement Agreement to propose a decoupling mechanism.

Q And would you agree that that Settlement required utilities, after the end of the first triennium, to propose a decoupling mechanism, but did not prohibit them from doing so beforehand?

A (Therrien) That is correct. That's my reading of it.

Q Okay. And just to follow up there, associated with the implementation of the Lost Revenue Adjustment Mechanism, as well as the mandate for decoupling or a decoupling proposal, was there any change to the performance incentives offered to the utilities in their energy efficiency programs? Is it possible that those were reduced significantly?

A (Therrien) I do recall that performance incentives were modified. I do not recall how that was done. There were -- let's see. There were seven actions that were taken, and this is on my rebuttal testimony, Pages 13 and 14. And I'll just read the seven: "(1) Extends Core Programs; (2) Requires implementation of a LRAM; (3) Contemplates the subsequent implementation of a decoupling mechanism to replace the LRAM; (4) Will implement the EERS commencing January 1, 2018; (5) Retains the Performance Incentive, with modifications; (6) Increases the low-income share of the overall energy efficiency budget; and (7) Includes other legal provisions."

Q Thank you, Mr. Therrien. That's a sufficient discussion of 15-137.

If I could ask you for your understanding of the Commission's order in Docket DE 07-064, which was Order Number 24,934. Can you just provide a brief summary of what the outcome was in that order?

A (Therrien) Certainly. That was, in my view, more of a procedural investigation as to how to go about issues such as decoupling. So -- and this comes from four questions that were in the initial order resolving the investigation. Number (1) Whether existing rate treatment poses an obstacle to investment in energy efficiency; (2) Whether a different rate treatment would promote such investment; (3) Whether these issues should be pursued further in this docket, through utility-specific rate cases, as part of a rulemaking; or through some other procedure; and (4th) Whether decoupling constitutes an alternative form of regulation."

So, in my view, it was a procedural type of docket. And in the order, it did not prescribe any sort of decoupling. It basically just said "when decoupling is proposed, it must be done so in a general rate case."

Q And so, while that order didn't prescribe any specific style of decoupling, it did describe two types of strategies, if you would agree with me, that could be pursued, that relate to removing the disincentive for the utilities to invest in energy efficiency. And if I'm recalling correctly, would you agree with me that those two strategies were, one, either through rates, possibly through moving towards higher customer charges, to make the utility slightly more agnostic to investing in energy efficiency and the associated lost revenues, and the second was a rate reconciling mechanism that's similar to what we see in the proposal before us today. Is that correct?

A (Therrien) Yes. That's my reconciliation.

Q Okay. Thank you very much, Mr. Therrien. So, moving on from those two orders and the historical background here, can you please discuss the difference between "full decoupling", "partial decoupling", and "limited decoupling"?

A (Johnson) Yes. It's a kind of jargon. But, basically, "full decoupling", as it sounds, is attempting to pin the revenues in their entirety at a fixed amount, based on a rate case, and letting the rates adjust accordingly, as necessary, to stabilize revenues.

Whereas "partial decoupling" is sort of a scaled-back version of that, that applies some percentage of it, in essence, or cuts back.

And then, "limited", which is, you know, it's easy to get the two confused, I may be doing that in a moment, but I don't think so, but "limited decoupling" is a term that's typically used, where you isolate portions of the revenues and decouple those, and other portions are not. So, for example, if you didn't decouple weather, then that would be called "limited decoupling", as an example.

Q Thank you. And can identify for me which of these types of decoupling were included in the Settlement Agreement and which was included in Staff's testimony regarding decoupling?

A (Johnson) Well, the Settlement Agreement calls for full decoupling; whereas the Staff is objecting to portions of that decoupling, I believe it's the weather component in particular. So, I would say they are advocating limited decoupling.

Q Thank you. What benefits might full decoupling have over partial decoupling?

A (Johnson) Well, basically, because it is full decoupling, you're getting the complete neutralization of the utility's incentive structure. So, again, what Mr. Therrien just alluded to, in terms of perhaps being reluctant to show up at a local town board meeting to talk about building codes, or to not being really enthused about going and meeting with the local builders and talk about the importance of, when they're talking to their customers about insulation levels and the like, these sort of soft activities that they could be engaged in, they're being part of the community, and they're viewed as an expert on energy matters.

But, without full decoupling, they really don't have a -- they have "mixed incentives", I guess would be the polite way of putting it. And perhaps the harsher way is saying "They're really going to drag their feet", they're not really going to be enthused about talking about it. Because companies in this culture, quite understandably, are growth-oriented. They like to see earnings per share grow and the like.

And they know that, if usage and throughput on the system moves more through the system, then, obviously, that helps with that growth, it helps earnings per share growth, *etcetera*, again, absent full decoupling. So, basically, by full decoupling, you're getting the full amount of that.

When it gets to limited decoupling, I think it depends, in part, on what you're limiting. In the case of weather, that's a sort of separate issue, as to why one might want to exclude weather. But that's the key debate in this proceeding right now, in terms of why the Staff appears to be objecting to the Settlement, is because it includes weather.

Q And can you describe for me, from a consumer perspective, what would the primary advantages of decoupling be over other types of Lost Revenue Adjustment Mechanisms?

A (Johnson) Well, in terms of the Lost Revenue Adjustment Mechanism that this Commission has adopted, there's a major improvement from a consumer's point of view, because it becomes a completely symmetrical mechanism. Whereas, the lost revenue is kind of a one-way escalator, that rates will tend to go up, but they don't come down, regardless of circumstances, since that's the way the mechanism is designed, maybe to -- I have no idea why the Commission chose to the adopt that. But, from a consumer's point of view, it's not optimal.

Whereas, decoupling -- full decoupling is fully symmetrical. So that there's a wide variety of circumstances, of things like changing economic conditions, if employment starts picking up, if the economy is picking up, then there's increased sales that occur, particularly on the commercial/industrial side, but to some extent on residential as well, because people can afford to cook more, do more things, and maybe adjust the thermostat a little bit to their advantage, because their paycheck is comfortable. They're not on unemployment, which otherwise they might be suffering, let's say, because of just a sheer inability to pay their bills. The point is, there's economic factors that happen that influence usage.

With the LRAM, those sorts of factors that potentially could cause the rates to come down and customers to benefit, again, like if a factory is starting to use more gas on the system, some of the costs are now being recovered by that factory, that is not picked up with the LRAM. Whereas, with the full decoupling, it is reflected. And, so, customers ultimately get a greater benefit from that type of mechanism that's included in the Settlement Agreement.

A (Therrien) And if I could add to that? One, I'll just completely agree that the symmetrical nature of decoupling is real important for consumers.

But, further, where the LRAM really falls short is that it focuses a utility's attention solely to those programs supported through rates. Consumers can benefit through broader participation by the utility, and Mr. Johnson touched on several of those areas.

So, I think that that's a big difference as well.

Q Right. And would you agree with me that it's often been evaluated that investments in things like building energy codes or appliance standards are some of the most cost-effective energy efficiency investments out there that that can be made?

A (Therrien) Yes, I would. And in my direct testimony, I touched on the importance of building codes and R-factors, and how increased efficiency in home building can have a really material impact on overall energy usage.

A (Johnson) And this is one -- when you think about it, this is one of those areas where the problem is a breakdown in understanding by consumers. The builder has an incentive to have an affordable house, with a low price tag. He's competing against other builders. And in the fine print of the spec, in terms of "well, how much insulation is in the walls?" "How much insulation is in the ceiling?", and so on, is just not something that grabs a typical consumer's interest.

But, even if they see the number, they have a real hard time grasping "well, how much is that going to save them per month, and over a 30-year or a 40-year or a 50-year period of a building, even a slight improvement in insulation can be very, very efficient from society's point of view. But, again, the typical consumer doesn't necessarily understand that or fully grasp it.

So, whether it's simply talking to the builders and trying to convince them to be more proactive about making that a selling feature, or trying to get building codes tightened, to where the minimums are moved up, and so then the selling effort is to try to say "we beat the building code and we're even more efficient."

Either way you think of it, you can sort of see why the utility, because of its expertise and because of the believability, when they go and talk to builders and they go talk to the local contractor associations, they have a credibility. But, again, currently, with an LRAM, they have no incentive to do that.

Q Thank you. Perhaps it might be helpful to direct the Commission and other stakeholders in

the room to Exhibit 14, Page 11, at this moment. And this is Ben Johnson's direct testimony.
A (Johnson) Can you give me the page reference again? Where are we?
Q I think it's Exhibit 14, Page 11, Bates 011.
A (Johnson) Page 11. Yes.
Q Now, do we know the annual projected cost of Liberty's Lost Revenue Adjustment Mechanism established in 15-137, what that cost is for ratepayers?
A (Johnson) Gregg, do you want to answer that? These numbers are in my testimony, but they're his numbers in reality.
Q Right.
A (Therrien) Yes. Insofar -- yes, the rate has been established and --

[Court reporter interruption.]

CONTINUED BY THE WITNESS:

A (Therrien) -- established and approved by the Commission, yes.

BY MR. BUCKLEY:

Q And is it possible to know exactly what surcharges and credits will result from decoupling in the future?

A (Johnson) No.

A (Therrien) No.

Q However, Mr. Therrien, in your -- or, Therrien, in your testimony, which is excerpted in Ben's direct testimony, there's an historical look-back at what those rates and surcharges -- those surcharges and credits would have been if decoupling had been established, is that correct?

A (Therrien) Yes, it is.

Q And overall, this is for either of you, can you describe the projected annual costs of the Lost Revenue Adjustment Mechanism versus the historical hypothetical average of the annual costs of decoupling in New Hampshire?

A (Johnson) I think -- I think the fair statement is that there's no predicted or expected significant change in the numbers. There's enough noise or enough variability in all these that, when you compare the two, you can see that, in this particular match-up, the decoupling actually has less impact on customers. But I wouldn't want to go too far and suggest that that necessarily means that we'll have net less effect. Again, the symmetrical nature of it is beneficial to customers. So, there's a good chance they may actually be better off, in terms of dollars in their pocket, in a particular scenario.

But the better way to think of it is that these fundamental improvements that we've been talking about are the motivation here. And I don't think you should be expecting that the Company will ultimately get significantly less money or that the customers will be paying significantly more or less money over the long haul. I think it's more a shift in -- towards encouraging energy efficiency, rather than question of taking money out of one set of pockets and giving it to the other.

A (Therrien) I would add to that, when you look at these two tables in Dr. Johnson's testimony, the LRAM is only a charge, and it will always be "a charge". While the decoupling adjustment is symmetrical.

So, for instance, if you look at the Winter of 2013-2014, that was a very cold winter. And consumers used a lot of energy. Decoupling would essentially refund a significant portion of that, related to the distribution portion of their bill.

Q And, Mr. Therrien, that is because, under the *status quo* of where we are right now with LRAM, even if the revenues that are claimed -- the lost revenues claimed by the energy efficiency program, even if those are replaced by growth or an abnormally cold winter, for example, those lost revenues would still be -- the Company would receive compensation for them.

But, under decoupling, would it be accurate to say that they would be offset by that growth, or abnormally colder winter, and then it turns into a credit, rather than a surcharge? That's the idea of "symmetry"?

A (Therrien) It is. But I would also say that, even though it may be a credit during that winter period, the Company is still receiving its fair compensation. That's the importance of the symmetry in the decoupling adjustment. It fully brings the Company's revenues back to which was allowed during the rate proceeding to support its cost of service.

Q Thank you, Mr. Therrien. Okay. So, now I'm going to move on to a description of the actual decoupling mechanism established within the Settlement Agreement. Can you please describe the decoupling mechanism agreed upon in the Settlement in one sentence?

A (Therrien) Yes. This is a full decoupling mechanism, that is based on revenue per customer, and includes a real-time component for weather.

Q Thank you. Now, how is revenue-per-customer decoupling, and this might be for Ben, how is revenue-per-customer decoupling different from what was suggested in the Office of the Consumer Advocate's original testimony?

A (Johnson) In my testimony, we talked about the pros and cons of "revenue per customer" versus "total revenue". And I recommended total revenue. But, ultimately, in the give-and-take of the Settlement, OCA has agreed to revenue per customer. It's a subtle difference. But it's just a question of whether you're locking -- again, you're stabilizing and locking down revenues to match the revenue requirement. It's a question of whether you lock it down to a aggregate total dollar number per year, or whether you have a slightly more complicated mechanism that calculates an annual revenue per customer. In the Settlement, it's two groups: You have the commercial and industrial is one group, residential is the other. And then each of those two numbers per customer are calculated times or multiplied times the number of customers.

So, to the extent there's a drop in the number of customers, if you had an exodus of people leaving the state for some reason, the Company would be protected. I assume that's one of the main reasons why they like it.

But, conversely, if there's growth in the number of customers, then they potentially -- anyway, it ties it to the number of customers.

The problem from the OCA's perspective originally was, that makes it more complicated, it makes it harder to explain to customers. You know, it has some subtle, minor disadvantages. But it obviously was not a top priority in the negotiations, because it didn't survive the settlement propose to OCA's preference for total revenues, which is easier for me to describe correctly.

Q Thank you. And in that context of the revenue-per-customer decoupling mechanism, can you just give me some idea of why the Settlement Agreement might include a requirement that the Company file their next rate case within a certain amount of time?

A (Johnson) Sure. I was not privy to the detailed settlement discussions. I was kind of on the periphery of them. But, in the abstract, I can see why OCA might ask for and obtain a commitment to have a rate case after a few years. That the primary one, first and foremost, is really simple, which is we're looking at something that's somewhat new for New Hampshire. It's been around for quite a while in other states. So, it creates sort of an insurance mechanism, to make sure, if they've made a mistake, they did something wrong by bringing to this, in a couple of years they can see what happens in an actual rate case, and change their mind and ask to tweak it or, you know, recommend some changes to the adjustment mechanism, if they felt it was needed.

But I think, more generally, the problem with rate cases, the Company always has the option of coming in for a rate case. So, as circumstances change, they can come in once every couple years, or they can wait 10 or 15 years. I've known utilities that have done that.

OCA doesn't have that option to require a rate case, if the circumstances move in that direction. So, getting a commitment, at least out of the gate, to come in after a couple of years is beneficial to OCA, from their perspective.

Q Thank you. Does the proposed decoupling mechanism change the mechanics of a rate case in any manner?

A (Johnson) I'd say, no. And I don't put together rate cases, Gregg might be able to answer this a little better. But, in my mind, the basic mechanics are the same. There's some

details that are presented a little bit differently.
A (Therrien) I would say it really does not change the mechanics of a rate case. Rate cases are premised on normal weather, and known and measurable adjustments are made in order to normalize the rate year. That does not change with decoupling. Decoupling is a reconciling mechanism after those base rates are established. So, all of the discovery and investigation that the Commission would typically do in a rate case will still continue.
Q And may have already touched upon this, but does the proposed decoupling mechanism change what happens to rates in between rate cases in any manner?
A (Therrien) It does. Annually, rates will be adjusted based on -- well, it really creates a new line item on a bill, I guess is the easiest way for me to describe it. So, you have your base rates, which will remain the same. But every year you would calculate this reconciliation, and it would either be a

positive change or a negative change, and that would create a rate, and that rate would be applied to customers' bills.

Q Thank you. Now, does the proposed decoupling mechanism include a cap on how much an adjustment can occur during any given period?

A (Johnson) I don't think so.

A (Therrien) Actually, my understanding is it retained the 5 percent cap. That may have --

A (Johnson) I know that the Company proposed a cap. But I'm not so sure I saw it in there.

A (Therrien) You may be correct.

Q Yes. So, --

A (Johnson) Assuming it's not there, and, in my mind, the reason it would not be is because we're talking about so much smaller adjustments potentially under this mechanism than the Company's original proposal. The Company's original proposal had weather being handled on an annual basis. And weather is the biggest thing that moves around, as we all know, if you ever watch your bill, how it changes when you have an unusually cold month.

So, the potential for building up credits or debits in this mechanism is much more severe if you do the weather once every year. Because the Settlement calls for continual changes, very, very small changes constantly in the weather element, there's just not so much risk or need to put a cap on it. And so that complexity can go away, and I think it did in the Settlement.

A (Therrien) I would agree. I apologize. I want to amend my testimony to say, in the Settlement Agreement, the cap is not in the Settlement Agreement.

Q And that was for the reasons identified by Mr. Johnson, is that correct?

A (Therrien) That was -- that's my understanding. It's a very logical argument, yes.

Q Thank you. Can you please describe the so-called "real-time weather normalization mechanism", sometimes called to or referred to as "current decoupling"?

A (Johnson) Why don't I start on kind of a conceptual level, and then, if Gregg wants to add some details of the mechanics, he can.

But the idea is pretty straightforward,

which is that bills are rendered on billing cycles. Every customer -- not all customers get a bill on the same day. It's not efficient to mail it, you know, all those bills on a single day. So, they're spread out over the course of a month. But each time a bill is calculated, it comes shortly after they have -- the meter has been read, they know how much usage there is. Inside the billing system, you simply added a little bit of extra code to check what the actual temperatures were during that billing cycle, compared to a normal weather for that period. And you make a slight little arithmetic adjustment to the rate to compensate for the discrepancy between normal weather and the actual weather that occurred during that billing cycle.

That particular adjustment is one this Commission has been familiar with and has accepted and endorsed for many, many years. It's what we do in a rate case for weather normalization. All that's happening is we're taking that calculation and we're doing it every single billing cycle. So, it's essentially a daily 30-day look-back for that particular customer's billing cycle.

Then, the next customer, one day later, gets a very similar calculation, but, because the weather is slightly different one day later, there's a very, very tiny difference in the way their particular bill is calculated.

What ends up happening is it's beautifully aligned. Each customer -- it's basically what I would call "real-time". It's each customer receives a bill that already figured out how much more or less the rate per therm should be for their delivery, in order to undue the impact of unusual or unexpectedly weather, the abnormal weather.

Q Thank you.

A (Therrien) And I would add to that, this is not a new concept. This has been referred to as a "WNA". WNAs were around for at least 20 years. And I can recall one that I worked with personally that started in 1993.

And as Dr. Johnson described, the beauty of it is it is very personal. Every single customer's bill is adjusted for the weather

that they experienced during that billing cycle.
Q So, would it be accurate to say that real-time decoupling better matches the timing of cash flows for both the Company and the consumers?
A (Johnson) Yes.
A (Therrien) Exactly.
A (Johnson) It's a win/win, it really is. From the customer's point of view, they're still going to see the delivery -- they're still going to see the commodity charges surge when they have a cold billing cycle. And they recognize in their mind "Wow, it sure seemed cold last month. It seems even colder than a normal January." And they're going to see that in the gas element. But then the delivery element will actually be more like a normal January. That there won't be an extra charge for the use of the pipes merely because they had a lot more gas come to their house that January than a normal January.
So, from their point of view, it tends to stabilize the bill. They still have a little bit of a problem of predicting from month to

month what any one bill will be, because it can't know how cold it's going to be. They're going to end up using more gas.

But this delivery element, if they had a -- if it was, you know, if you think about it as being completely separate, their gas portion of their bill will still be unusually high, because it was unusually cold. But the delivery element will be right where a normal January would have been anyway.

So, in terms of the need to be worried about having extra cash in the bank to deal with the unexpectedly cold weather that might occasionally happen, they don't have to have that extra cash in the bank for the delivery part. So, from their point of view, it's less risky. It helps them manage their cash flows. There's less risk that they're going to have to not pay down their credit cards and start incurring high interest on the credit cards or the other things that ordinary customers have to do when their cash flows aren't what they expected them to be.

From the Company's point of view, there's a very similar benefit. And it's not real intuitive that both would benefit, but they do. From the Company's point of view, they don't need to have -- maintain these larger cash balances, they don't have to negotiate this large line of credit to deal with cash flow problems. But, in their point of view, the cash flow problems are in the reverse. It's not when they have an usually cold winter, all of a sudden they get lots of extra cash and they can go, you know, pay down the line of credit or try to park the money temporarily at 1 percent.

But their problem is the reverse. When you have an unusually mild winter, from their point of view, all of a sudden they would not get their normal amount of revenue. So, they have a problem that's very similar to the customers, it's just symmetrical. And from a cash management point of view, it's just a problem. That they end up having to, again, arrange lines of credit, they've got to keep cash in the bank, they've got to do various things to deal with fluctuations in their cash flow. That, when that cash flow smooths out, they don't have to go through all that effort. It's less costly for them and ultimately less costly for customers who pay the cost of running the business.

Q And can you just for a moment describe for me, and maybe contrast with the mechanism set forward here, Liberty's current balanced billing product that they offer to customers?

A (Johnson) Yes. That's a very different concept. But it has some overlap in similarity. So, some customers really don't like the idea of having to have their bills fluctuate. So, they can volunteer for and choose to get a bill that is, in essence, stabilized. And Gregg may be able to describe in better detail, but the idea is that every month starts looking the same to them.

From a public policy point of view, that's not a very good rate design to offer. It's unfortunate. We do it, because some customers just can't handle the fluctuations in their gas bill, and so we give them an out. But it's not a very good out, because they become desensitized to the importance of insulation. They become desensitized to the fact that, you know, if they had more insulation, that their gas bill in the winter would be more like the one in the summer. Well, if it's literally the same regardless, because everything's been averaged out through budget billing, you know, they lose that connection.

Whereas a typical customer, again, from a cash flow point of view, if every winter were normal and predictable and had normal weather, then they can predict the cash flows. They see the movement up and down as you go through the seasons.

That movement of seasons is retained under decoupling. This real-time weather is simply dealing with the spikes of the unusual weather, the abnormal weather. Whereas, the typical weather that's already built into the natural seasonal pattern, based over 30 years' worth of data, is still reflected in their bill. They still have to budget for that cash flow. But that's a very predictable cash flow that both the Company and the customer can accommodate more easily than the extreme weathers that -- weather events that sometimes happen.

Q Thank you.

A (Therrien) Can I just add something simple to that? Budget billing doesn't change the amount of the total obligation a customer has to pay over a year. Decoupling will actually adjust that, that amount. So, budget billing just says "This is what the rates are. Here's what actually happened, and divide by 12, and pay us that same amount every single month."

Decoupling, on the other hand, actually changes the obligation that the customer has. It will either adjust it upward or downward.

Q Thank you. And as far as decoupling revenues from volatility associated with weather, can you tell me, of those utilities with decoupling mechanisms, how many include weather or decouple their revenues from weather?

And I think maybe perhaps it would be helpful to turn to Exhibit 27, which is your rebuttal testimony, at Bates Page 182 through 183.

A (Therrien) Yes. Thank you. There's Table 1 of my testimony, on Bates 183, shows that there are only three out of 67 companies that do not include weather as part of their decoupling mechanism.

Q Thank you. And that chart that's on Page 183, I believe, that is derived from research that was completed by your company?

A (Therrien) That's correct.

Q And is some, or at least if not all, some of that research included in what has been placed before you and premarked as "Exhibit 60"? Exhibit 60 contains a number of different dockets that have been identified as places where decoupling has been adopted, and some different information related to who has what types of decoupling mechanisms.

A (Therrien) Yes. That's the source of my research, yes.

Q Okay. Thank you. I just thought that would be helpful to note for the record.

So, a question about heating degree days. Has there been a warming trend in New Hampshire relative to heating degree days? And if so, is there an increased risk of losses for utility shareholders associated with the warming trend? Does this represent a shift of that type of risk to customers under this mechanism?

A (Johnson) If you look at my exhibit that's my original prefiled testimony, at Pages 20 and 21, I believe this data suggests a slight warming trend. But it may be less dramatic of a trend than some people might think, given all the rhetoric and all the concern and the political intensity of the issues related to climate changes over time. The reality is that the changes are very small, compared to the volatility of any day-to-day or year-to-year weather events.

So, you can see it here, that the 40-year average was "1,131". Whereas, if you go all the way down to the 5-year average, it's only "1,103". So, yes, that's a slightly different number. The 10-year average was "1,111". So, yes, there's a very slight reduction in the number of heating degree days. But it is quite modest, compared to the volatility of weather and the things that we're actually dealing with here in this proceeding.

I think I may have missed part of your question, but I wanted to start with the part of "is there a warming trend?" I think it suggests there is one, but maybe not as dramatic as most people intuitively expect it to be.

Q Right. And, yes, apologies --

[Court reporter interruption.]

BY MR. BUCKLEY:

Q -- apologies, I asked somewhat of a complex question there.

But the latter piece of it was "is there an increased risk of losses for utility shareholders associated with that warming trend?"

A (Johnson) I think it would be fair to say that, in between rate cases, if there is a trend down, then volumes will tend to be a little bit less after the rate case than what were shown in the test year. So, there is some attrition that takes place. And I suspect the Commission ultimately is compensating for that to some degree, directly or indirectly, because the Commission keeps an eye on making sure that the

Company has a fair opportunity to earn its return to maintain bond ratings and the like.

So, it's an element of attrition of erosions that would either cause more frequent rate cases or a need to have step adjustments, things of that sort. So, it is present. To the extent you have a weather normalization adjustment, as we do in this Settlement, that will go away, and the need for rate cases may become less frequent. You may not see them as often as you're used to, because this one particular element of earnings erosion will go away.

Q But, even in the face of declining therm sales, the revenue requirement that is presented at various rate cases, there would be -- there wouldn't be change necessarily associated with that. Is that correct?

A (Johnson) Well, the revenue requirement is, basically, the revenues that are required to pay what it costs to operate the Company. And, so, the cost of operating the Company is the investment and the operating expenses, and those are independent of the question of whether there's a warming trend or not. So, it's not as though the Company is going to overearn or something as a result of this. What we're talking about is a very small reduction in the frequency with which their earnings erode, their coverages -- or, bond coverages and the like erode and they feel pressure to come back in for another rate case. So, again, instead of every three or four years, it might be every 4.2 years that they would come in.

So, again, I'm trying to concede that technically there is a slight difference, but it's very small. And it's not, I don't think, what is primarily motivating the Company to propose this mechanism. It's certainly not what was motivating OCA or myself to recommend the treatment of weather that we recommend in our testimony. I think that is these cash flow fluctuations are far more important and significant to choosing whether this is a good settlement or not.

Q Thank you.

A (Therrien) Can I --

Q Mr. Therrien.
A (Therrien) Yes. Just to add to that. I also address this in my direct testimony. There is a declining trend in normal weather. Meaning, if you were to just plot a 30-year normal weather, it declines over time. And that's shown on Bates 316.
Now, I would also agree with Dr. Johnson that, in the scheme of things, it's not a big dollar risk for the Company. But, if it does decline over time, then, in between rate cases, there will be, all else being equal, less revenues for the Company to cover its cost of service.
So, in my view, this is just yet another reason why decoupling makes sense. Because it's just another component of sales that the Company may feel it needs to offset through some other type of program to increase usage.
So, as I step through in my direct testimony, there are several factors that can affect sales, and a declining normal degree day trend is one of them.
Q Thank you very much. The Settlement Agreement

limits recovery on any investment beyond $50,000 in a billing system upgrade to accommodate decoupling. Is that correct?
A (Therrien) Yes.
A (Johnson) Yes.
Q And can you describe why this might be the case?
A (Johnson) Well, I think I can do it from a customer's point of view. From OCA's perspective, it just reassures OCA and the Commission and customers that this concept that may sound a little complicated, there's a maximum of what it can cost customers to implement the billing system in order to put it into effect. This, you know, very precise customer-specific mechanism we were describing earlier.
It also ensures that the Company has maximum incentive to negotiate with the billing vendor and the software -- for the software development fees for upgrading the billing system, because if they have no skin in the game, it's not a just straight passthrough.
We were given assurances of estimates from

the Company that they had inquired from the billing vendor that they thought it would be $50,000, or perhaps a little bit more. And they ultimately apparently agreed to cap it at that.

I honestly think, if they're tough negotiators, there's no reason they shouldn't be able to get it for that amount, because the upgrade will potentially then be available to be sold to other utilities around the company -- country that the billing vendor works with.

So, and whatever, in my mind, $50,000 is a very realistic figure. And in any event, from the customer's point of view, we're guaranteed it can't exceed that.

Q Thank you. Moving on. Can you please describe for me, and this is for either of the panelists, "straight fixed variable rate design", and whether or not it is sometimes viewed as an alternative to decoupling?

A (Johnson) The term is used for more than one -- there's sort of a range of possibilities as to exactly how that term is used. I'm going to take the most extreme version, because it's what it sounds like when I hear the name. Which would be that one version of a "straight fixed variable" would be all of the costs of the pipes, the distribution mains, the whole system, all that is fixed cost, because it's in the rate base and it's, you know, it's relatively fixed. It doesn't vary. It's not what an economist would call a "variable cost" in the short run. All of those, so, basically, all your delivery charges would be fixed. And the only thing that's really varying is essentially the commodity cost.

So, taken to the extreme, the delivery portion of the bill would be the same every month. Every customer would pay the same no matter how small or how large they are. It's all fixed, and how much they used in that particular month. So, therefore, it, you know, totally stabilizes revenues, because everything just becomes a function of the number of customers and usage has no impact.

Sometimes the term is used for something not quite as extreme as that, but moving in that direction, and it's kind of a moving target, depending on whose testimony, where you see it, and in what proceeding, how far they want to go towards that extreme.

But the idea is that utilities again prefer stable cash flows. They see some real benefits to stabilizing and reducing the fluctuation on their cash flow. So, they start advocating rate designs that move the rate elements towards the fixed monthly charge and reduce the amount per therm. So, that's the general idea.

It's also -- plus, the pipeline industry, it's very common in pipeline contracts. That a pipeline will negotiate, find a bunch of distribution utilities that are willing to sign up for chunks of the capacity. And then an interstate pipeline gets a very assured, stabilized revenue stream based on recovery of their fixed costs, and a relatively small part is fluctuating in a variable element. But it's a term that's used in a variety of different contexts for similar concepts.

Q And would it be a fair characterization to say that SFV, straight fixed variable, rate design, or something very similar to it, was one of those two prescriptions that we discussed near the beginning of this panel's testimony from the original DE 07-064 order?

A (Therrien) Yes.

A (Johnson) Yes. And that order quite correctly recognized that, in terms of, you know, the broad array of options available to the Commission, and the way different commissions have handled it, the way different groups and utilities have advocated options. This is a major alternative. That some utilities have pushed very hard to say "why don't we increase the fixed element of the monthly bill and reduce the per therm rate". And it's something that, in my mind, is fundamentally the wrong solution. It's 180-degree opposite of what we want to do in terms of encouraging energy independence, encouraging energy efficiency, encouraging reduced greenhouse gasses. And there's all these public policy reasons we want to make people -- we don't want to prohibit them from using energy, but we want to give them a strong incentive to use it wisely, and to try to avoid it where they -- wasting it where they can.

A fixed rate, with no price tag associated with decisions to use more therms, is 180-degree opposite from all those public policy goals. Now, it does a nice job of solving the cash flow fluctuation problems of the company, but it does a very poor job, in my mind, of sending good, appropriate price signals to customers. And I believe that concern that is pressure for constantly higher fixed monthly charges is one of the reasons OCA became comfortable with decoupling, and certainly one of the reasons -- one of the major advantages I see from my perspective of this Settlement.

A (Therrien) Maybe I can just put it a little bit in practical terms. What straight fixed variable pricing would do, as Mr. Johnson described, is essentially force all customers to sign up for budget billing for their distribution portion of their bill. So, whether you want it or not, your bill is $60 a month. And there are plenty of people who, in the middle of July, do not want to pay $60 for the distribution portion of their bill.

So, straight fixed variable, in concept, is nice, because then you would not need a reconciling mechanism. But it's a very difficult rate design to, from a practical standpoint, to put in place in many, many jurisdictions. To the best of my knowledge, Georgia does it, and they had a lot of push-back from their contingency. And they modified it. So, now they have what's called a "modified straight fixed variable", where they have kind of load-shaped this fixed charge.

And I think, at least in my view, a lot of what Dr. Johnson said about price signals is true. In my view, it's a fixed cost system, primarily a fixed cost system. But, from a practical standpoint, it just makes a lot of sense to include a variable component in the price signal.

Q Thank you. Now, perhaps it might make sense to direct the Commission and the panelists to Exhibit 14, which is Dr. Johnson's testimony, and Bates Page 029 through 030 of that testimony, I believe.

A (Johnson) Yes.

Q Can you describe for me -- there's a chart in your testimony. Can you describe for me what's in the chart?

A (Johnson) Yes. These two pages are describing what I believe you marked this morning as "Exhibit 58", which is a detailed analysis of rate designs around the country by different gas companies. It was published in May of 2015, and I don't think there's been a lot of change since then. The results, if you could -- if there were a report available, which there isn't up to the minute, I think you would see a very similar pattern.

Basically, it shows what different utilities are doing with regard to this question of "how large the fixed monthly charge should be?" and "how much of the revenue requirement should be recovered in the price associated with using gas?" And the essence of it is it shows that the Company's current approved fixed charge, which is about, as I recall, $22 for a typical heating customer, is about double the national average, which is about $11.25. And you have that on my testimony at Page 29, Line 8.

So, the Company is already not the most extreme towards high fixed customer charges, but they're up there in the upper part of the range of the industry. There's a few out there that are even higher. But there's plenty of places out there that have seen the merits of the opposite, of trying to give a strong encouragement to people to be sensitive to how much electricity or gas they use. And in those jurisdictions, they have been moving customer charges down or holding them down to levels like $4.00, $5.00, $8.00. So, when you get this average of 11, it's kind of a mixture.

You get some sense of it in the chart on Page 30, which is by region. In particular, because you can see the Pacific Region, there's only a few states in that region, and they all have a pro-energy efficiency approach to their rate design. So, that's a $5.00 average. You can see the South Atlantic is about 10.

But, again, at $22, the Company's rates are already quite high. And, so, if you look at my testimony, I spent a lot of testimony explaining OCA's perspective and my recommendation as to why we should actually be moving those rates back down, rather than increasing them, as the Company originally proposed.

Q Thank you. And you mentioned that Exhibit 58 was the basis for those charts. And I would ask you, Exhibit 58 contains an appendix. It has all of the fixed charges -- or, the customer charges, rather, for 133 natural gas distribution utilities, given this is 2015 data.

But would you agree with me that, if you were to take all of these figures and put them in a spreadsheet, and organize them from highest to lowest, that EnergyNorth's fixed charge would be the twelfth highest of 133 gas distribution utilities in this chart, in this appendix?

A (Johnson) I'm not confident that it's the twelfth. But, if you calculated it, I would guess it's got to be extremely close, because you can just eyeball it, and you hardly see any numbers that are as high as this Company. There are a few out there that are right up in this vicinity. I'm noticing "Madison Gas & Electric", in Wisconsin, at "21.60".

But, no. You can just eyeball the data and you can sense that the Company's current rates are already some of the highest. But then there are a few exceptions. There's one in New York City, in New York, that's "$45.00" so, there are some exceptions. And, so, if they were the twelfth out of the whole country, in the top 10 percent, that sounds about right.

And, again, we put a lot of effort and a lot of testimony in trying to explain to the Commission why "Please don't do fixed variable as your solution." Please don't think "oh, the solution here is just make the fixed charge even higher in order to stabilize cash flows", because that completely undermines the benefits of giving customers a strong price signal and encouragement to pay attention to things like the R-value of the insulation in their home, to

pay closer attention, when they're choosing between two different appliances, a different furnace or water heater, how efficient it is.
Q And if you could just turn to Page 10 of that document very quickly, I think it shows Liberty Utilities New Hampshire natural gas customer charge in 2015, is that correct? At about the middle of Page 10?
A (Johnson) Yes. I see it now.
Q And what was that charge?
A (Johnson) Well, I think I see it.
A (Therrien) I see it at $19 --

[Court reporter interruption.]

BY THE WITNESS:

A (Therrien) I'm sorry. I see as "$19.85".
A (Johnson) Yes. So, it's slightly lower in 2015, and/or the way it's presented and calculated for consistency with the other utilities, it's slightly lower than the $22 I've been citing. But still that would explain why they're twelfth out of this list, rather than the absolute highest. But they're clearly one of the highest.

BY MR. BUCKLEY:

Q Thank you. Does this Settlement Agreement tie approval of full decoupling to any rate design changes? And can you tell me why that might be?

A (Johnson) Yes. Well, it's a package deal. But I think it's pretty explicit, and there's no secrets here. That part of the give-and-take in the settlement process is the Company backed off. There was a fundamental difference of viewpoint on this rate design issue. The Company had more of an across-the-board sort of approach. If anything, they were favoring increasing the fixed charge.

Whereas I recommended decreasing the fixed charge, while recovering the revenue requirement needs from the rate case elsewhere in the per therm.

The Settlement is a compromise. It doesn't lower the fixed charge as much as we originally recommended, but it does significantly lower them. And it also flattens the tail -- the declining block rate structure for residential customers. So, it definitely moves in the direction of what OCA was originally advocating. And that's clearly part of the benefit of bargaining, in my mind, when I look at this Settlement, it's something significant that OCA was able to accomplish in the final give-and-take.

Q And would it be accurate to say that, on Page 10 of the Settlement Agreement, the Parties -- the second full paragraph, it states -- well, actually, can you read that into the record for me, the first sentence in the second full paragraph?

A (Johnson) Do you mean the "For residential rate" sentence?

Q Yes.

A (Johnson) "For residential rate design, the R-3 customer charge and the R-1 customer charge will both be set at $14.88 per month, which is $2.00 per month lower than the currently effective customer charge for Rate R-1."

Q And would it be an accurate characterization to say that is significantly lower than the current customer charge for R-3 customers, and even lower than that, lower than the proposed customer charge originally filed in the

Petition?

A (Johnson) Yes. Particularly for the R-3 customers, which is very large, the heating class. It's understated here, because you focus on the $2.00. But the reality is, it's rolling those back even more, because the R-3 customer charges are higher than the R-1. As I said, I think they're more on the order of 20 some dollars, and this is lowering them to 14.88.

Q And can you tell me additionally why the move to declining -- move from declining to flat blocks might accompany decoupling and what the benefits might be?

A (Johnson) They're very intimately related. They're basically trying to provide a stronger incentive for even the larger customers to invest in insulation, better furnaces, better water heaters, better appliances. So, the problem with -- you know, there's logic behind declining block rates. It's understandable why the industry has continued to have them, some companies still have them, in that it -- that there is an "equitable" argument that, you know, very large customers shouldn't be paying that much more than the small customers for the system, since they're both, you know, hooking into the system, using similar equipment.

But, from a policy point of view, giving a stronger price signal to those large customers is important. So, this Settlement kind of sets a compromise. It moves up the tail block a little bit, compared to the past rate design. But it doesn't do it to such an extreme degree that there will be rate shock or major problems for the large customers.

Q Thank you. And I think maybe this question is for Mr. Therrien. How does the Company plan to communicate with its customers about revenue decoupling?

A (Therrien) Well, that -- frankly, that might be a better question for the Company. I do understand that, when I put together my rebuttal testimony, we had discussions about that. And we're willing -- my understanding is the Company is willing to work with the OCA to come up with a robust communication plan, particularly to help explain the real-time component of decoupling, and what the benefits are.

So, my understanding is that it will be a joint effort, and it will be a significant -- a significant effort.

Q A joint effort, with input from the OCA, the Company, and Staff as well, is that correct?

A (Therrien) That's my understanding, yes.

MR. BUCKLEY: Thank you. I have just a few more questions where I will be addressing some of the common misconceptions about decoupling. But I'm wondering if maybe now might be time for a quick break in between, or should I just continue moving on?

CHAIRMAN HONIGBERG: Let's go off the record.

[Brief off-the-record discussion ensued.]

CHAIRMAN HONIGBERG: All right. Then, let's take a short break now.

(Recess taken at 11:20 a.m. and the hearing resumed at 11:43 a.m.)

CHAIRMAN HONIGBERG: Mr. Buckley.

MR. BUCKLEY: Thank you, Mr. Chairman.

BY MR. BUCKLEY:

Q So, the rest of our discussion I think is going to focus on addressing some common misconceptions about decoupling. But, first, I want to follow up on a Commissioner question that was asked in one of the first days, I think it was the first day of the hearing. And it was about "Tucson model decoupling", I believe.

Can one of you describe what "Tucson model decoupling" is?

A (Johnson) Yes. I believe it's named after Tucson, a company in Tucson, Arizona, that adopted that approach, or offered it. And basically, it was the idea that, when you had a annual true-up, the increases and decreases, depending on the direction, would determine whether you were calculating the amount of the credit or the increase, the surcharge, based on either the tail block or the block with slightly higher rates, than if you have a declining block. And it was basically designed to be -- always favor the customer. So, if the rate were going up, then you would use the tail block rate. But, if you're giving them a credit, you know, sending them money back, then you would use the higher number from the interior block. That's the concept behind it.

Q And you mentioned "designed to always favor the customer", but did you possibly mean "designed to favor lower usage customers"?

A (Johnson) I believe it might do that as well, because some customers -- in any event, the mechanism tends to be asymmetrical, and that asymmetry tends to work to the advantage of customers more often than not, compared to a more neutral approach.

Q And just to clarify, is that anything that has been adopted within the present Settlement Agreement?

A (Johnson) No. And I don't think it's very widespread. To be honest with you, it's hard to come up with a rationale to justify it. If you want to advocate it, I'm sure some people can, and I'm sure they have some kind of argument for it. But, to me, the asymmetry is a little hard to articulate a sound economic principle for it.

But, in any event, in this Settlement, it's kind of moot, because the effort was made towards flattening the difference between the tail block and the interior blocks. So, it kind of moots the whole question of whether that would have been helpful or appropriate.

And again, the problem was, even if it slightly helps customers, then it's eroding a little bit of the revenue benefit from the Company's point of view. So, you get push-back, they're not going to be very happy about signing onto it. So, if there were -- again, I wasn't part of the direct settlement negotiations, but I can easily see where the Company wouldn't have been happy about it. And to me, it not being a priority for OCA, having the priority be flattening the rate design makes a lot of sense to me, is a much better improvement.

If there's going to be give-and-take between something that potentially hurts the Company, like the Tucson method, giving that up in return for something that helps customers and helps public policy by flattening the rate design, to me is a very good trade-off.

Q Thank you, Dr. Johnson. Moving on, we'll now address a couple of the common misconceptions about decoupling.

Question: Does decoupling diminish the utility's incentive to control costs between rate cases?

A (Johnson) No. The incentives remain the same. They still have the incentive that, if they keep their operating costs down or as they have to replace plant that's, you know, getting old and has to be upgraded or make other investments, getting the best possible price for that, because between rate cases, the money flows to their bottom line, earnings per share, if they are more efficient, if they control costs.

So, that mechanism of incentive that rate base regulation has stays the same.

A (Therrien) Yes. And I would add emphatically that decoupling is not an "earnings" mechanism; it is a "revenue" mechanism. Big difference.

So, the utility must still continue to control its costs.

Q So, another, I think, somewhat related question is, does decoupling eliminate the incentive for the utility to invest in capital projects? And if so, would that have adverse consequences?

A (Johnson) Again, no. You still have -- you're basically locking in revenues. So, to the extent they're investing between rate cases, they have to both be careful about how much they invest and where they spend it, but they have to look at sort of a cost/benefit analysis, just as a competitive firm would, trying to conclude "is this investment going to either save me operating costs to help pay for itself?" Or, "Is it going to be, you know, increase safety? Is there a real benefit to making this investment?"

To the extent, without decoupling, they had this mixed incentive to maybe kind of want to favor growth, because it does benefit their bottom line absent decoupling. Then, investments that potentially incentivize growth within the system by existing customers, perhaps there's less of an incentive.

But, conversely, what they still have a desire for, earnings per share growth, companies, again, the natural corporate culture of our country, the stock market rewards companies that are growing. We have to recognize that reality. But that reality basically forces them to focus, in the context of this decoupling settlement, focusing on expanding into new franchise areas, adding new customers. And I believe, ultimately, targeting their growth interest in that direction is better for New Hampshire, because it's looking for places where the investment and return on investment, the cost of investing to help people get off of very costly fuel oil or other alternatives, they're also not as environmentally benign as natural gas, not to say that natural gas isn't -- is perfectly benign, I understand there's a movement in the direction that's good for public policy, if they can do it in ways that customers benefit from, you know, even though, with the cost of a new system, it's cheaper than what they're paying currently.

So, all that's a long way of saying that they're still going to have a desire to grow. But they're going to be looking for other ways to grow, either in other states or within this state, into other franchise areas that they might be able to expand into.

A (Therrien) And if I could add to the question about investment. Remind everybody that decoupling really brings your revenues back to what that is allowed in your rate case.

So, with decoupling or without decoupling, the Company is always motivated to manage their investment portfolio wisely. One could argue that, with decoupling, it actually helps that management of capital investment, because you don't run into a situation where you had an abnormally warm winter, you did not recover enough revenue requirement, and now you have to make the tough choices: Do I cut operating costs or do I delay an investment?

So, in my view, it actually -- decoupling can help with investment management.

Q Thank you. Does decoupling result in an automatic bill increase for customers every year?

A (Johnson) I wouldn't word it that way. I mean, you could say that, yes, there is going to be -- if there's a trend towards less usage per customer, then perhaps over time the rate will go up slightly.

But I think it will be very misleading to describe it that way. Because when people talk about a "rate increase", they're thinking of something like what will come out of this rate case, whether it's a 5 percent or 10 percent increase. And in that sense, no, not at all.

Q And would it be accurate to say that the word "ratepayers" is somewhat misleading, in that customers -- customers pay bills, and they are what -- that is what customers are concerned about is their bill. Would that be an accurate assessment?

A (Johnson) Yes. In fact, that's a good point. Because, again, it's stabilizing the Company's cash flows, it's also stabilizing the customers bills. And so, from a customer's perspective, a stable, more predictable bill I think is better.

And the other thing to keep in mind, again, if we're going back to this trend over time, it's going to get picked up in rate cases. So, all we're really talking about at most is a slight difference in timing, between having to have slightly more frequent rate cases without decoupling or slightly rarer rate cases with decoupling.

And back to the incentive to operate the Company efficiently, a regime where you're not constantly having to come in for rate cases is a situation in which that normal incentive to operate the business efficiently is at its maximum.

If you're constantly coming in, if you had a rate case every single year, over time the corporate culture could deteriorate. A lot of people in the company might start getting the attitude "Well, it's all going to get passed through to customers anyway. We've got a rate case pending." You know, they don't like to talk about that. But that's the reality. You don't want to get in a situation where you're having a rate case every six months or every single year, which is exactly why cost of gas adjustment clauses, purchase power adjustment clauses for electric utilities, were adopted in the '70s and '80s. Because you don't want to have -- it's not good for the Commission and it's not good for efficiency to have a built-in constant flow of rate cases.

Q Thank you. So, are you familiar with -- are you familiar with the argument that "decoupling shifts risks associated with revenue stability/instability away from the company and onto customers"?

A (Johnson) I've heard that argument. There are -- I think it's somewhat misleading, and it's especially misleading in the context of this Settlement, where the main point in controversy is the weather. So, I want to first respond, as far as weather, there is no shifting from one party to the other. It's a win/win; the stockholders have lower risk, customers have lower risks.

Now, as to say the risk of a warming trend, perhaps you could argue that there is a slightly lower risk for the Company. But I don't think it's a significantly increased risk for customers. Again, it's just very, very subtle. It's just the difference between the timing of rate cases, because something like a warming trend will cause a rate case eventually. If it's severe enough, the volumes are low enough, the Company has to come back. So, and then there's risk for customers of, when they come back, that, you know, again, they didn't have a strong inefficiency. That's why I went into that long digression about "you don't want constant rate cases."

So, I'm trying to show you that, even though, theoretically, you might say there's slightly more risk of global warming impacting customers, I would argue that is outweighed by the risk of more frequent rate cases diminishing incentives. And so, therefore, if they are just a little bit less vigilant in how they control their operating expenses, and a little bit less vigilant in making those investment decisions, because they're constantly coming in for rate cases, that would more than swamp any, you know, more than outweigh any slight shift of adding risk of global warming onto customers.

So, again, I don't really think it's fair to say that it's been moved from one or the other. I truly believe risks are reduced for both.

A (Therrien) And I would just add that, and again I will parse out weather as well, weather is a symmetrical risk. It could be warmer or colder than normal. Period. It will be one or the other. I don't remember a year that was perfectly normal.

And insofar as what the rest of decoupling captures, I agree with Dr. Johnson, it's a matter of timing. So, customers will ultimately either pay or be rewarded for the change in the cost of service.

Q Thank you. And so, following up on this discussion of "risk", are their approaches that other commissions have taken to maybe revise the outcome of a rate case in some way, shape, or form, relative to risk when decoupling has been adopted?

A (Johnson) I think that there's been discussion of whether the return on equity is slightly lower or should be slightly lower, because the cost of equity is slightly lower. And if that's what you're alluding to, I'd be happy to comment further on that?
Q Sure.
A (Johnson) Okay. So, it is a debate. And the problem is, it's kind of a standoff. From a purely theoretical point of view, I think it's indisputable that, if your cash flow management are diminished, and the risk of earnings fluctuating from year to year because of strange movements in the weather, there is a reduction in risk, which should logically flow through to a reduction in the return on equity and the cost of equity. But it's a standoff, because you can't find it in the data very easily. And the studies that have been done on it are all showing it's either a very, very small difference that's just within the noise of any attempt to tweak it out of the data.
So, it becomes very speculative and hard to quantify how much of an adjustment should it

be. And there's no theoretical basis that I know of for being able to say "Well, it ought to be one basis point" or "three basis points". And many times return on equity is rounded to the nearest 50 basis points. So, it's very hard to deal with, even though, on purely theoretical grounds, it makes sense that, if there's slightly lower risk, there should be a slightly lower cost of equity. So, very rare that you actually see it in a commission order actually making an adjustment.

For this particular case, this Settlement has an agreed upon cost of equity/return on equity. And it undoubtedly captured that give-and-take between OCA and the Company. You know, the OCA probably thought the return should be a little lower. I'm confident the Company wanted it higher. They compromised. I think that compromise would have reflected the reality that, again, on purely theoretical grounds, you could argue for a lowering. But, on a practical, you know, quantitative basis, it's very hard to show a specific number. I think the best you can get is to finally reach a judgment, and that is what's reflected in the Settlement.

A (Therrien) And I would add that decoupling really is not new. It has been around for a couple of decades now. Early on, there was a lot of discussion around whether ROE should be adjusted in concert with implementing decoupling. And there were some specific adjustments made 15, 20 years ago, and you see them -- as a matter of fact, I haven't seen one in years. Which implies a couple of things. As Dr. Johnson said, it's somewhere in the noise of the process of developing ROE. And two, because decoupling is so prevalent across the country, it's almost inescapable that companies in the proxy group will have decoupling. So, you don't see many adjustments on that.

Q And are either of you aware of -- so, we mentioned this discussion of possible effect on ROE. But are either of you aware of either settlements or guidance that prescribes maybe another approach related to capitalization structure when decoupling is adopted?

A (Johnson) I know you're trying not to lead us, but, unfortunately, I'm not quite sure what you're referring to. Maybe you can hint a little more at what you want to talk about.

Q So, I can -- would you agree with me that, in some states, the decreasing of volatility in revenues associated with decoupling has been a justification for including slightly more debt in a company's overall capital structure?

A (Johnson) I think that -- I can't recall specifically how often that happens. But, again, it goes right back to the pure logic that, if there is, in fact, some improvement in the cash flow management, then you should be able to take on a little bit more debt, without having coverage problems and without having problems with your bond ratings coming down.

So, that is another potential way the customers over the long haul can benefit. If you can get a few years of experience with a more stable revenue stream, which translates into more, you know, stable cash flows, and therefore better ratios that are used by the rating agencies to evaluate bond ratings, you may see either an upgrade in the rating, or it won't deteriorate under circumstances where it otherwise would. So, ultimately, that will, I think, flow through to customers' benefit in a very natural way, without it being particularly controversial. You simply have the ability to maintain a higher rating, which, in turn, would potentially either lower interest rates on the bonds and/or be able to justify a little bit more debt, where there's less pressure to increase the equity ratio from the investment community and from the company in a rate case.

Q And the effect of both of those approaches, just to be clear, would be to reduce the overall revenue requirement, is that correct? The total sum package, after both capitalization structure and/or ROE are considered?

A (Johnson) Yes. And again, that's -- those are benefits particularly for this weather component, that is where the bulk of the stabilization and the calming down of cash flows is coming from. That benefit will start showing up over time. And, you know, if you take the long view of representing the interests of residential and commercial and other customers over the long haul, the next five, ten, twenty, thirty years, there's no doubt in my mind that putting in place an appropriate real-time weather mechanism is going to benefit customers in a very real way over time, even though it may be hard to quantify it and say "well, that's why we are where we are." But, again, the slowing down of rate cases, the strengthening of bond ratings, all those benefits will show up over time.

Q Thank you. And, Ben, I think that you mentioned this a few moments ago. But would both of you agree with me that, while the Settlement has not explicitly adopted either approach here, risk reduction was a factor considered in the compromise reached by the Parties, along with all of the other factors considered in the compromise reached by the Parties?

A (Johnson) I believe so. I certainly know that I've discussed it with you folks on the phone, as you were going into settlement negotiations, that there were -- that to be aware of and be sensitive to the long-term benefits to customers, and not be overly concerned with what you could show up -- show was happening in the next month or two.

So, with that awareness, I do believe that it was considered by OCA, and certainly the Company would be very aware of the long-term benefits from a company perspective.

A (Therrien) So, I personally was not involved in the negotiations, *per se*. But I have been in other cases. And I guess my response to you is that all components of a settlement agreement have value.

Q Thank you. So, there was some discussion earlier about the move away from the higher fixed customer charges in the residential class, and how the assurances -- the assurances related to revenues that are associated with decoupling could help precipitate that move and provide some justification for that move.

We only talked about the residential customer class, is that correct?

A (Johnson) In the Settlement -- in our

discussion, yes. Yes. Correct.

Q And can you tell me, does that same justification exist for the commercial and industrial customers?

A (Johnson) Yes. And in my testimony, I talked extensively about recommending reducing fixed customer charges for commercial customers as well.

A (Therrien) Right. And I would agree that it also applies to commercial/industrial. And my understanding of the Settlement is that those rates were held flat with current rates.

Q That's correct.

A (Therrien) Which is contrary to my original recommendation to increase them.

Q Thank you. So, I think I have one final question here. And it relates to the idea of inclusion of weather within the -- under the umbrella of the decoupling mechanism.

Can you just summarize again for me why it might be prudent to include weather, and why that is not a shifting of risk associated with volatility?

A (Johnson) When weather is included the way it is in the Settlement Agreement, it reduces risks for residential customers and commercial customers. It also reduces risks for the Company. So, there is simply no shifting going on, for both the person sending the bill and the one paying the bill. The cash flows become more predictable and will -- can be anticipated to follow the pattern of normal weather that follows normal, seasonal fluctuations over time. And, so, from both points of view, they can plan better, their cash flows are more stable and more predictable.

A (Therrien) And in my view, for a system that -- for a delivery system that, in my view, is primarily fixed cost, by including weather in the decoupling, it recognizes that neither the customer should overpay for the use of that system, nor should the Company under earn, frankly, because they have under collected for the cost of that system.

Q Thank you. And if I could just ask you to very quickly turn to Exhibit 59, which is the Regulatory Assistance Project's "Revenue Regulation and Decoupling: A Guide to Theory

and Application".
A (Johnson) Okay.
Q If you could please turn to Page 45 in that guide.
A (Johnson) Okay.
Q Ben, can you please read the paragraph that begins with "Full decoupling means"?
A (Johnson) Yes. It's in the middle of the page.
"Full decoupling means that utility profits are no longer adversely affected by weather condition that reduce sales volumes, and some critics consider this a shift of weather risk to consumers. This is a fundamentally flawed argument. First, decoupling also removes the profit enhancement that occurs under traditional regulation when weather conditions cause sales increases. Second, with current decoupling, although prices go up when sales go down, they do so simultaneously, so that customer bill volatility is reduced, a benefit to consumers attempting to live within a budget. In addition, when sales go up, prices come down,

thereby mitigating the bill's impacts. In this sense, 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."

MR. BUCKLEY: Thank you very much. No further questions.

CHAIRMAN HONIGBERG: Mr. Sheehan, do you have any further questions for the panel?

MR. SHEEHAN: I do not.

CHAIRMAN HONIGBERG: Mr. Dexter.

MR. DEXTER: Thank you, Mr. Chairman. Good morning.

WITNESS THERRIEN: Good morning.

WITNESS JOHNSON: Good morning.

CROSS-EXAMINATION

BY MR. DEXTER:

Q I would like to start with some questions that I think will be directed to Mr. Therrien. And I'd like you to turn to your initial testimony in this case, and in particular, to Bates Page -- I'm going to look at Bates Pages 280 to

287.
A (Therrien) I have that.
Q So, on Page 280, you're answering a question that's actually on Page 279, that says -- that asks you to summarize the scope of your testimony on decoupling. Could you read Item Number 5 please, on Page 280.
A (Therrien) Yes. "Describe and explain" -- Number 5, "describe and explain the Company's proposed RDM, which will allow EnergyNorth to continue to be a forceful and active advocate for energy conservation efforts, without harming its ability to earn a reasonable return."
Q Thank you. And if we go to Page 280 -- 281, which is the next page, would you agree that -- could you read Lines 1 and 2 into the record please.
A (Therrien) "In recent years, there has been a heightened focus on energy conservation efforts and policies that encourage conservation. This interest in energy conservation has been attributed to environmental considerations and to a dramatic spike in energy prices that

occurred in 2005 to 2006, and again in 2009."
Q And then would you agree that there's a footnote that goes with those sentences that goes on to talk about some of the history of energy efficiency orders and the like in the State of New Hampshire?
A (Therrien) Yes.
Q So, when we get to Page 282, would you agree -- well, why don't you read what begins at Page 8, in response to what the decoupling -- I'm sorry, Line 8, in response to what the decoupling measure is intended to do.
A (Therrien) Line 8, the Company is proposing -- "will allow the Company to remain an effective champion of energy efficiency initiatives without the financial disincentives that currently exist".
Q And then moving onto Page 283, would you agree that at the top of Page 283 again reinforces the point that decoupling will allow the Company to pursue energy efficiency?
A (Therrien) Yes.
Q And I could go on. But would you agree that that's essentially the theme of the next two or

three pages of your testimony, and as you stated today that --

A (Therrien) Yes.

Q -- that a primary, or the primary -- well, let me ask you. Was it the primary reason for the Company proposing decoupling in this case to remove any disincentive that exists with respect to energy efficiency programs?

A (Therrien) Well, I would say that the overarching reason for the proposal was to sever the link between sales and Company revenues.

Q Right. And what was the primary reason for severing that link, as expressed in your testimony?

A (Therrien) To enforce and champion energy efficiency.

Q Thank you. So, you're familiar with the EERS standards that have been adopted in the state, I believe, is that correct?

A (Therrien) Yes, at a high level.

Q Right. So, would you agree that the Company is obligated to meet those Energy Efficiency Resource -- the EERS standards that were set

out in the Settlement -- I'm sorry, in the order that you referenced earlier?
A (Therrien) My understanding is that that is true for the specific programs that are included in the programs, in the rate structure.
Q I'm not sure I understand that answer. So, let me try it again. So, isn't it correct that the EERS standard set forth standards that have to be met?
A (Therrien) Yes.
Q And those standards are related to utility-sponsored energy efficiency programs?
A (Therrien) Yes.
Q Okay. And along with those, as part of that EERS docket, I think it was 15-137, there were -- was a lost base revenue mechanism adopted as well, would you agree with that?
A (Therrien) Yes.
Q And there was a Performance Incentive that was altered, but continued. I think you stated that earlier today as well?
A (Therrien) That's correct.
Q Okay. So, I think it was Dr. Johnson that

stated earlier that one of the reasons for decoupling is to avoid a situation where utilities might -- I think the term you used was "drag their feet" with respect to energy efficiency. Do you recall that, Dr. Johnson?
A (Johnson) The "dragging of feet"? The dragging of feet, if it occurs, would be with respect to energy efficiency that's not encompassed by mandates or requirements or customer-funded programs. That's why I gave examples like going and meeting with local builders trying to educate them, you know, go to a Kiwanis Club and maybe talk about the benefits to society, and teaching people, when they're buying an appliance, what numbers mean and what they look like and so on. All of that goes outside the scope of a traditional program, specifically because that's the type of area where the feet dragging, if it exists, would be likely to happen right now in the context of an LRAM. The LRAM solves part of the problem, but not the entirety of the problem.
Q But there's no evidence then, if I understand what you're saying, or it's not even your

suggestion that EnergyNorth has been dragging its feet with respect to meeting its energy -- with EERS requirements?

A (Johnson) I would expect them to fulfill the requirements that are mandated. But the decoupling is not designed to solve that problem, which is already dealt with in the LRAM. It's designed to go beyond that and deal with the problems that would be very hard to quantify and very hard to programmatically solve.

But, by removing this financial disincentive for encouraging energy efficiency, the way I've seen it written in testimony is, in essence, they could become "wholehearted champions", rather than "half-hearted champions" of energy efficiency.

Q And, Mr. Therrien, I see you're nodding. Do you agree then that the purpose of your proposal was to foster energy efficiency beyond what was required in the EERS?

A (Therrien) Yes. In fact, in my rebuttal testimony, I lifted a passage that Dr. Johnson wrote, which is a pretty unusual thing for me to do, frankly, and agree with it. And that is contained on Bates 181. And I'll paraphrase, but Dr. Johnson goes through the heightened awareness of greenhouse gas emissions, improvements to energy efficiency from building codes. All of these things that are beyond the prescribed programs, I believe you called them "mandated programs" that are currently in existence.

I think the LRAM in and of itself actually constrains the Company from being full champions, because that's the only thing that they feel that they have responsibility for.

Q So that adoption of decoupling then could lead to even greater energy efficiency?

A (Therrien) I think so, yes.

Q Okay. There are some charts in your testimony, this is Mr. Therrien, and again I'm referring to your original filing that I'd like to look at for a moment. I'd like to look at Bates Page 334 and 335 and 336.

Could you describe what these charts are intended to show?

A (Therrien) Yes. These are intended to show, on

a 12-month rolling total basis a trend of normalized usage. So, that's a lot of words. But, if you look at the chart -- the second chart down on Bates 334, it's the "Residential Heating Rolling 12 Months Normalized Use per Customer". This basically says, on a normalized basis, a full year's worth of consumption, in December -- the 12 months ending December 2005 was somewhere around 920 therms. And that has declined to somewhere about 760 therms for the 12 months ended December 2016.
Q And in that title and in your response you mentioned the word "normal". Could you explain what that means?
A (Therrien) Yes. It means "adjusting for the impacts of weather".
Q Those these are weather normalized?
A (Therrien) Yes, they are.
Q Okay. Was it difficult or unusual for you to get information that was weather normalized to put into this chart?
A (Therrien) No.
Q It's fairly standard, would you agree, --

A (Therrien) It is.

Q -- to present information like this on a weather-normalized basis?

A (Therrien) Yes. Excuse me.

Q And if you could turn to Bates Page 339, there's one more chart I'd just like to ask you about. Do you have that in front of you?

A (Therrien) I do.

Q So could you explain what this chart shows?

A (Therrien) This is simply the annual average number of customers on EnergyNorth's system.

Q And what does it show in terms of trend?

A (Therrien) It shows a modest increase over the ten-year period.

Q And in the box there is an acronym "CAGR: 1.0%". Could you explain what that is?

A (Therrien) Yes. That stands for "Compound Annual Growth Rate". So, that, you know, it's akin to like interest on your bank account. If you had 1 percent, and you had $100, at the end of the year you'd have 101. And then, if your next year's interest was 1 percent, it would be $101 times 1 percent would be added, so on and so forth.

So, this chart, over this period of time, point-to-point growth was 11.2 percent. But, on an annual basis, it was 1 percent.

Q So, is it fair to summarize this as roughly that EnergyNorth is adding 1 percent of customers per year over this period?

A (Therrien) Yes.

Q I want to -- now, I know that your proposal is not what was adopted in the Settlement, and I understand that. But there's no example that I see in the Settlement as to how the mechanisms would work. So, I wanted to explore for a few minutes on how a weather normalization -- I'm sorry, how a decoupling mechanism would work. And I think your charts on Bates 043 through -- 343 through 347 will help do that. So, I'm going to ask you to turn to those. And again, I understand that this is not what's in the Settlement.

A (Therrien) Understood. I have that.

Q Okay. And I want to look at Page 343 first. And would you agree that this is intended to be an example of how the mechanism would work?

A (Therrien) Yes.

Q Okay. And this covers all rate classes, does it not? This is the entire company, this chart?

A (Therrien) Yes. Firm customers, yes.

Q Firm customers. Fair enough. So, would you just explain how this chart works. And then the result, I think, shows up in the bottom right-hand corner of about $4 million. Would you just explain for the Commission, in this example, how the revenue decoupling mechanism would work?

A (Therrien) Certainly. So, starting left to right, there's the individual rate classes, and then you'll see a "Winter" and "Summer", in Column (A) and (B), which is the "Target Revenue per Customer". That target revenue per customer will be determined in this instant case. So, whatever is allowed, revenues that are allocated, for instance, to the Residential Heating class, when you divide by the number of customers included in this instant case, you would get "$347.12" for an average revenue per customer in winter, and "$184.96" for an average residential heating customer in the summer. That becomes your baseline.

Then, as you march through this exhibit, it starts to calculate that same revenue per customer number for each class based on what actually happened. So, let's take "Summer 2011". Again, I'll stick with the Residential Heating class. The actual revenues were "12,793,077", customers were "70,289", resulting in a revenue per customer of "$182.01".

So, now that $182.01 is compared to the baseline, which was $184.96. So, moving over to the "Shortfall (Surplus)" column, you'll see that there was a shortfall of "$2.96" per Residential Heating customer.

Q And because you're looking at summer, Residential Heat customers, is it -- can one conclude from this that weather plays a minor impact in that $2.96 figure that you gave?

A (Therrien) Yes.

Q And so, could you continue then to the right and discuss the same numbers for the winter please.

A (Therrien) Certainly. Using that same logic, the actual revenue per customer, for the Residential Heating class, was "$315.86". That is compared to the winter benchmark, in Column (A), of "$347.12". That results in a shortfall shown in Column (K) of "$31.26".

Q And then what happens with the -- I'm sorry, go ahead.

A (Therrien) And to complete the exhibit, that $31.26 is multiplied times Column (D), which is the actual number of customers, to yield a dollar value of "2,233,390", which represents the shortfall for that class in the winter period.

Q And because, again, we're dealing with the Residential Heating class, and we were just talking about the winter, is it safe to conclude that that shortfall resulted -- a large portion of that shortfall resulted from warmer-than-normal weather?

A (Therrien) A large portion of it, yes.

Q And do you know how much?

A (Therrien) Well, we could look at the -- it is a number that can be calculated. I'm not sure if it's in the record. But, as you stated before, the data is available in order to calculate the weather impact of warmer or colder-than-normal weather.

Q Okay. No, that's fine. I think your answer that it was "largely based on warmer-than-normal weather" is sufficient.

So, if we could jump to Page 345, and I don't want to take too much time on this, but could you explain what's on Page 345 then? And I believe it's the same as 343, but it's a different year, correct?

A (Therrien) That's correct. Instead of it being 2011 and 2012, it is the Summer of '13 and the Winter of 2013-2014. The exhibit is exactly the same. Again, using the Residential Heating class, and comparing the two sheets, Page 343 and 345, you'll see that the target revenue per customer is identical. So, again, the target is the target. It's established in the case, and it never changes until the next rate case.

However, in 2013, we had different revenues and sales than we did in 2012, and it was also different than the target.

If I may continue, using the Residential

Heating example, in the summer, the actual summer data revenue per customer was "$180.93", which represented a "$4.03" shortfall. In the wintertime, the actual revenue per customer was "$367.19", which represented a "$20.07" surplus per customer, or "$1,469,303" surplus.

Q And this, I believe, was the winter that everyone refers to as the "polar vortex winter". Is that correct?

A (Therrien) Clearly, the weather was colder than normal. I believe it was one of -- one, if not the polar vortex winters.

Q Sure. Now, again, understanding this is not the Settlement, this was your proposal. What would have happened under your proposal with this $3,479,000 surplus that shows in the bottom right-hand corner of this sheet?

A (Therrien) There's an exhibit that shows what would happen there. Let me see if I can find it easily for you.

So, if you move to Bates Page 327, there's a table that shows the same values that we talked about. So, you could tie back that, if you look at the "Winter 2013-2014", somewhat in the middle of the table, for class "R-3, R-4", you'll see that "negative 1,469,303" is the same number.

So, the way that this works is that we have accruals in one year, and then it's billed out the next, the next year. So, summer lines up with summer and winter lines up with winter. So, for purposes of an example, I'll use the "Winter 2013-2014", total value of "negative 3,479,131". That would be returned to customers through a rate over the Winter of 2014-2015.

Now, under the Company's original proposal, both the amount of the credit or amount of a charge, you look back at the Winter of 2011-2012, it would have been a charge of "3,969,815". Those would be mitigated by a 5 percent cap. So, to the extent that these dollars exceed that cap, that amount would be deferred, and added to that next appropriate winter or summer period's accrual, which would then result in a new rate the following year.

So, the idea behind this is to go through an entire season, come up with the decoupling amount, and then charge a return of that dollar amount in the subsequent matching season, subject to a plus or minus 5 percent limit.

Q And now, if we could, again, just using these numbers that you have on 327, explain under the Settlement proposal how that, again, I'll use the Winter 2013-2014, roughly $3 million -- three and a half million dollar surplus, how would that surplus be treated under the Settlement mechanism?

A (Therrien) The weather portion of that amount would be included in customers' bills throughout the Winter 2013-2014 season. So, effectively, the majority of that money would be credited to customers on a real-time basis on their bills. The residual, that is not related to weather, which I haven't quantified, but, for discussion purposes, let's say it's $479,131. That smaller amount would then be -- it's accrued and held, and turned into a billing determinant, and billed that following Winter Period of 2014-2015.

So, the concept of accruing, and then billing a year later, it survives in the

Settlement, understanding that the majority of the variance, which is attributable to weather, has already been billed.

So, therefore, in comparing the Company's original proposal to the Settlement. The decoupling rate will be much smaller.

Q I was with you until the very last phrase. You said "the decoupling rate will be much smaller". What did you mean by that?

A (Therrien) Well, under the Company's proposal, the rate would have been, for the Winter of 2013 and '14 accrual, which would have been billed out in the Winter of '14 and '15, it would have been the 3,479,131, divided by some level of sales, okay, the allowed sales in the instant case.

Under the Settlement Agreement, because the weather portion of this variance has already been billed real-time on customers' bills, and the only portion that has yet to be returned to customers is 491,000, that would yield a smaller rate.

A (Johnson) I think you meant to say "479,000".

A (Therrien) Oh, I'm sorry. Correct.

Q   But that was just a made-up number you made for example purposes?
A   (Johnson) Right.
A   (Therrien) Correct.
Q   And that's intended to, again, it's made up, but it's intended to represent the non-weather component of decoupling?
A   (Therrien) That's correct.
Q   Okay. So, then, with the larger piece, and if you're saying "479,131", now I see where you got the number, so, the residual you're saying, hypothetically, 3 million is weather-related. How does that get, under the Settlement, how does that get returned to customers?
A   (Therrien) That gets returned to customers through a new line item on their bill that --
A   (Johnson) Hold on. Did you ask about the 3 million or the other number? Which one are you asking about?
Q   I asked about the -- well, again, I'm going to go back to Bates 327, and we're talking about the Winter of 2013-2014. And due to the cold weather, in large part, there was a surplus of "3,479,131". And Mr. Therrien just described

what would happen to the "479,131", --
A (Johnson) Exactly.
Q -- leaving $3 million left over as weather-related. And my question was "how would that $3 million get returned to customers?"
A (Johnson) It doesn't need to return, because it was never received from in the first place.
Q Okay.
A (Johnson) The bills were correctly calculated in each billing cycle. So, there was no need to overcharge them initially, and then give them the money back a year later.
Q So, there was no rate -- Mr. Therrien started to talk about a rate on the customer's bill that they would see. There is no rate, is that -- maybe you could explain that for us.
A (Johnson) Effectively, correct. In other words, the billed amount is stabilized based on normal weather. They don't get overbilled due to the polar vortex, and then need to give them a -- have a complicated accounting accrual and give them the money back a year later. All that goes away, because the Settlement adopts

OCA's recommendation to change the handling of weather, to avoid billing the customers too much in the first place. So, there's no need to refund the money a year later, because you never bill it in the first place. The original bill is basically consistent with normal weather.

Q And I think I heard testimony this morning say that there would be an adjustment on the bill to account for this hypothetical $3 million we're talking about. Did I hear that right?

A (Johnson) Well, I think the bill is calculated in a way to avoid overcharging them. I don't think -- the word "adjustment" didn't mean to imply there necessarily would be a line item. I don't believe there will be a line item, *per se*, nor one needed. The actual billed amount for the delivery element will reflect normal therms, rather than the extremely high therms that the commodity portion of the bill reflects.

Q Okay. So, again, we're only talking about the delivery portion. So, as I understand it, I don't have a bill in front of me, but a typical residential customer would see a customer charge and maybe two volumetric charges, is that true?

A (Johnson) Well, I think they already see various elements on their bill. And there's typically some disclosure of the difference between "delivery" and the "commodity". But I'm definitely not the one to talk about precisely how the billing is being handled or will be handled.

Q Okay. All I'm trying to ask is --

CHAIRMAN HONIGBERG: Mr. Dexter, I'm going to -- you are doing something that I was hoping to be able to do. And you don't have a bill in front of you and I don't have a bill in front of me. I'm going to suggest, since it's time to take a break anyway, that someone with access to excellent technology come up with a sample bill, so that these witnesses, if they're the correct witnesses, or somebody else, can walk us all through what one of these bills would look like under the Settlement.

Would that be -- I know it would be helpful to me, Mr. Dexter.

MR. DEXTER: It would.

CHAIRMAN HONIGBERG: And I think, given the questions you're asking, it would be helpful to you as well.

MR. DEXTER: I think it would, yes.

CHAIRMAN HONIGBERG: All right. So, I think, let's take our lunch break now, and we'll try to come back at 1:45.

*(Whereupon the lunch recess was taken at 12:40 p.m. and ends the Morning Session of Day 5. The hearing continues under separate cover in the transcript noted as "***DAY 5 Afternoon Session ONLY***".)*