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STATE OF NEW HAMPSHIRE
SITE EVALUATION COMMITTEE

June 9, 2017 - 9:09 a.m. DAY 14
49 Donovan Street Morning Session ONLY
Concord, New Hampshire {REDACTED for public use}

{Electronically filed with SEC on 06-23-07}

IN RE: SEC DOCKET NO. 2015-06
Joint Application of Northern
Pass Transmission, LLC, and
Public Service Company of
New Hampshire d/b/a Eversource
Energy for a Certificate
of Site and Facility.
(Hearing on the merits)

PRESENT FOR SUBCOMMITTEE/SITE EVALUATION COMMITTEE:
Chrmn. Martin P. Honigberg Public Utilities Comm.
(Presiding as Presiding Officer)

Cmsr. Kathryn M. Bailey Public Utilities Comm.
Dir. Craig Wright, Designee Dept. of Environ. Serv.
Christopher Way, Designee Dept. of Resources &
Economic Development
William Oldenburg, Designee Dept. of Transportation
Patricia Weathersby Public Member
Rachel Dandeneau Alternate Public Member

ALSO PRESENT FOR THE SEC:

Michael J. Iacopino, Esq., Counsel to the SEC
(Brennan, Caron, Lenehan & Iacopino)
Pamela G. Monroe, SEC Administrator

(No Appearances Taken)

COURT REPORTER: Susan J. Robidas, NH LCR No. 44

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I N D E X

WITNESS: JULIA FRAYER

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1 P R O C E E D I N G S

2 CHAIRMAN HONIGBERG: Mr. Pappas
3 is going to continue his questioning with
4 things that are non-confidential. So, Mr.
5 Pappas you may proceed.

6 MR. PAPPAS: Thank you, Mr.
7 Chairman.

8 CROSS-EXAMINATION (cont'd)

9 BY MR. PAPPAS:

10 Q. Good morning, Ms. Frayer.

11 A. Good morning.

12 Q. I want to start by asking you some questions
13 about the MOPR, where we left off yesterday.

14 In your April 2017 report, you performed
15 what you called an "indicative calculation"
16 to do a MOPR analysis. Do you recall that?

17 A. Yes, I do.

18 Q. And as I understand it, you went to the ISO
19 web site, downloaded their spreadsheet and
20 worked off of that.

21 A. Yes.

22 Q. Now, have you ever personally been involved
23 with an ETU that has gone through the MOPR
24 analysis to clear in the Forward Capacity

1 Auction?

2 A. I have not.

3 Q. Okay. Have you ever reviewed any documents
4 that detail the IMM's MOPR analysis for an
5 ETU seeking to clear?

6 A. Public documents, yes.

7 Q. What were those?

8 A. The IMM has actually published through the
9 ISO-New England stakeholding process
10 instructive manuals, instructions on how to
11 do this, what each aspect of the spreadsheet
12 requires.

13 Q. Have you ever reviewed any documents of an
14 actual ETU's attempt to qualify? Not the
15 instructive documents, but an actual case
16 where an ETU sought to qualify in a Forward
17 Capacity Auction?

18 A. No, those are confidential. Those are the
19 property of the Project, Project sponsor.
20 But I have reviewed similar documents and
21 actually participated in preparing such
22 documents in other jurisdictions because
23 ISO-New England isn't the only market with
24 MOPR-type analyses. I've also spent a long

1 time advising our clients when they appeal
2 those with FERC. So I'm very familiar with
3 the concepts that need to be captured in
4 order to meet the statutory requirements of
5 the MOPR.

6 Q. But you've never actually participated in the
7 analysis for ISO-New England, nor reviewed an
8 actual case that was proceeding through
9 ISO-New England for a MOPR analysis; is that
10 right?

11 A. Not of an ETU. Of other types, yes.

12 Q. Okay. Now, when the IMM performs the MOPR
13 analysis for an ETU such as Northern Pass
14 seeking to clear, that's one of the IM's
15 [sic] jobs; correct? There are rules and
16 regulations, and that's one of the things
17 that IMM is charged with doing?

18 A. Yes.

19 Q. And in performing their job, the IM makes
20 certain judgments in reviewing and
21 determining the MOPR analysis?

22 A. Yes, the IMM may pass judgment.

23 Q. Yeah. The IMM doesn't merely fill out a
24 spreadsheet and lets the computer do the

1 calculations. It actually reviews and makes
2 judgments of the material that it receives;
3 correct?

4 A. Yes. So, for example, to the extent an
5 entity says that it's anticipating these
6 types of costs and has agreements with EPC
7 contractors or other parties, the IMM will
8 review the contract information and the
9 agreements that have been submitted to it and
10 pass judgment, in that they are valid
11 documentation of the inputs that the sponsor
12 has put into their workbook.

13 Q. And the IMM's judgments could affect whether
14 or not a ETU price mitigates upward and
15 clears or doesn't clear; correct?

16 A. It could.

17 Q. Okay. Let me ask you a few questions about
18 retirements. And I'm going to speak -- I
19 believe every question I'm going to ask you
20 is public information. But by all means, if
21 I make a mistake, please correct me, okay.

22 A. Yes.

23 Q. Okay. In your February 2015 update, you
24 forecast that NPT qualifies and clears at a

1 low clearing price in the Forward --

2 CHAIRMAN HONIGBERG: Do you want
3 to clarify the question and the date associated
4 with the question? You said "February 2015
5 update," which seems unlikely.

6 MR. PAPPAS: Oh, I'm sorry.
7 Thank you. You're right.

8 BY MR. PAPPAS:

9 Q. In your February 2017 update, you forecast
10 that NPT qualifies and offers a low clearing
11 price in the Forward Capacity Auction; is
12 that correct?

13 A. In the February 2017 update analysis, we
14 continue to take the same assumptions and
15 positions that we took in our original
16 October 2016 analysis. So we continued to
17 take as a given what we were provided by the
18 client and cleared it through the Forward
19 Capacity Auction.

20 Q. Yeah. In your forecast, NPT reduces the
21 overall capacity prices over the ten years
22 you forecasted; correct?

23 A. Relative to the Base Case without NPT, NPT
24 does have an impact and reduces capacity

1 prices for six years, six auctions.

2 Q. Yeah. And you forecast that in response to
3 NPT reducing the capacity price for those
4 years that there would be no -- no generation
5 would retire; correct?

6 A. We didn't have any retirements. And it
7 wasn't an assumption. It was a result of the
8 model. There was no need for retirements.
9 But we did have what I would call "supplier
10 response" of various types --

11 Q. Yeah.

12 A. -- as described in the report.

13 Q. Correct. But one of the things you forecast
14 were no retirements in response to NPT
15 reducing the clearing capacity price;
16 correct?

17 A. That is correct.

18 Q. Now, as a result of NPT lowering the capacity
19 market clearing price, the qualified
20 resources within the Forward Capacity Market
21 would receive less revenue, correct, than
22 without NPT?

23 A. Yes, less base capacity revenue.

24 Q. So if your forecast is incorrect, that no

1 resources retire in response to NPT, and some
2 resources in fact do retire, that would
3 decrease the capacity market benefits from
4 NPT that you forecasted; correct?

5 A. It could. It would not necessarily. Depends
6 when that retirement occurs. It also depends
7 on the size of the retirement. It also
8 depends on other knock-off effects,
9 consequences of that retirement itself, too.

10 Q. Conversely, if you're incorrect and resources
11 retire in response to NPT, the capacity
12 market benefits you forecast aren't going to
13 increase, are they?

14 A. If the only difference -- if there was no
15 other difference in other assumptions and
16 inputs that we made, no. The forecast is
17 what it is.

18 Q. No, but if assuming there are no other
19 differences and the other difference is that
20 there are retirements that you didn't
21 forecast but actually occur, the capacity
22 market benefits won't increase. They can
23 only decrease; correct?

24 A. Again, I thought I did answer that. I think

1 they could decrease. It depends on the
2 timing of those retirements and so forth. As
3 an example, if the retirements come in FCA --

4 (Court Reporter inquiry)

5 A. Sorry. FCA #18 or FCA #19, it has no impact
6 on the results presented in the Updated
7 Analysis from March 2017.

8 Q. And if it comes in other Forward Capacity
9 Auctions, it would result in a decrease in
10 market benefits; correct?

11 A. It could. It depends again on knock-off
12 effects and consequences. It does not
13 necessarily have to.

14 Q. Another possible scenario is that the IMM
15 could mitigate NPT's price upward from where
16 you forecasted and NPT could still qualify.
17 But in that case, the capacity market
18 benefits would be less than you forecasted;
19 correct?

20 A. No, not correct. I believe you're asking
21 about, when you say the IMM increasing the
22 offer price, you're talking about the Minimum
23 Offer Price Rule; correct?

24 Q. Yes. But what I'm positing is that you

1 forecasted that NPT would clear at a reduced
2 price from your Base Case; correct?

3 A. No, not necessarily. I said it would clear
4 not at a specific price, but it would clear.
5 Essentially, the MOPR would not be binding on
6 its clearing. That's a very -- and that's
7 consistent with the market rules in the
8 market. I think you're asking something
9 different. So I got confused with your
10 question.

11 Q. Okay. What I'm asking is, is that you
12 forecasted clearing and my -- let me start
13 over.

14 My question is: If NPT cleared, but
15 higher than what you forecasted -- in other
16 words, if your MOPR analysis were incorrect,
17 one scenario could be that NPT could clear,
18 but clear higher than you forecasted, in
19 which case there would be market benefits,
20 but they'd be less than you forecasted.

21 A. Again, I'm going to say no, because I think,
22 unfortunately, Mr. Pappas, you're missing an
23 understanding of how the capacity auction
24 functions. Once the MOPR is set, and if we

1 make that additional assumption that the
2 capacity clears, there is no way then to go
3 back and say that you would have a higher
4 capacity price. The setting capacity price
5 is a function of the shape of the demand
6 curve. So in order to make your
7 hypothetical, you would also have to
8 hypothesize that the demand curve is somehow
9 different and that would result in a higher
10 capacity price. And then I would agree, yes,
11 if the demand curve is somehow different on
12 top of the Project clearing and this and
13 that, all these hypotheticals, you would have
14 a different capacity market benefit.

15 Q. Okay. I guess what I was positing is if your
16 MOPR analysis is incorrect and the actual
17 MOPR price were higher. But I think that
18 point is made. So let me --

19 A. The MOPR doesn't set the price. The MOPR is
20 a condition of whether the resource can or
21 cannot clear.

22 Q. I understand that.

23 A. The demand curve sets the price in the
24 market.

1 Q. I understand that. Thank you.

2 So let me ask you some questions about
3 possible benefits without NPT. Now, NPT is
4 competing with other projects to bring
5 hydropower power to New England; correct?

6 A. Possibly.

7 Q. On the screen is Counsel for the Public's
8 Exhibit 278, which is a map that shows some
9 other projects. For instance, if you look
10 under K to the far left, on the border of
11 Vermont that's the New England Clean Power
12 Link. Do you see that?

13 A. Yes.

14 Q. And A is Northern Pass. Do you see that?

15 A. Yes.

16 Q. What's not shown on here is the recently
17 announced National Grid project. Are you
18 familiar with that?

19 A. I'm familiar with the concept.

20 Q. Okay. So all three of those projects seek to
21 bring hydropower from Canada down into the
22 New England grid; correct?

23 A. That's part of their project objective.

24 Q. Yeah. And both TDIs -- New England Clean

1 Power Link and National Grid's Granite State
2 Power Link -- intend to bid into the Mass.
3 RFP; correct?

4 A. I don't know. I'm not familiar with their
5 business plans.

6 Q. Okay.

7 MR. PAPPAS: Put up the next --
8 put the first page up.

9 BY MR. PAPPAS:

10 Q. What's on the screen now in front of you is
11 Counsel for the Public's Exhibit 279, which
12 is the first page of a Granite State Power
13 Link presentation on their web site.

14 And then within that web site
15 presentation is the page that's now on your
16 screen. And if you look at the bottom bullet
17 point, it indicates that GSPL, meaning
18 Granite State Power Link, will submit a
19 proposal to Massachusetts Utilities seeking
20 bids for clean energy in July, with selection
21 due in January 2018. Do you see that?

22 A. I see that bullet.

23 Q. Yeah. Is that your understanding that that
24 is the Massachusetts RFP?

1 A. I haven't reviewed the slide yet, but, I
2 would guess, assume so. I don't know if
3 there is --

4 Q. Are you aware of any other RFP in
5 Massachusetts other than the RFP we talked
6 about yesterday for this type of clean power?

7 A. Some of the utilities from time to time have
8 RFPs for RECs. But I don't think that's what
9 they're talking about. Again, I haven't
10 reviewed this document, so I don't know.

11 Q. Understood. But as far as you know, the only
12 clean power RFP that a project such as
13 Granite State Power Link would bid into is
14 the Mass. RFP we talked about yesterday?

15 A. That's possible.

16 Q. And are you aware of whether or not TDI
17 intends to bid into the Massachusetts RFP?

18 A. I am not. They're not my client currently.

19 Q. Okay. What is on the screen in front of you
20 now is Counsel for the Public's Exhibit 280,
21 which is the 83D Bidder Conference List from
22 the web site. 83D you recognize as the Mass.
23 legislation?

24 A. I do.

1 Q. Okay. And there's a web side and they list
2 the bidder conference. And do you see TDI
3 highlighted on this?

4 A. I do.

5 Q. Okay. That indicates that TDI attended the
6 bidder conference for the Mass. RFP.

7 A. Yes, among many others.

8 Q. A lot of others. In fact, if you look on,
9 National Grid had several people at this as
10 well.

11 A. Yes, among other companies.

12 Q. Hmm-hmm. In fact, somebody from your office
13 attended.

14 A. Yes. It's a great opportunity to learn about
15 what's going on in the market. We're
16 definitely not planning to bid in the
17 Massachusetts RFP, just to clarify the
18 record.

19 Q. Okay. Now, would you agree with me that it
20 is possible that a project other than NPT
21 could be awarded a long-term contract as part
22 of the Mass. RFP?

23 A. It's possible.

24 Q. It's possible that TDI or Granite State Power

1 Link or somebody else could get the award and
2 NPT could not; correct?

3 A. Very possible.

4 Q. That happens.

5 A. Yes.

6 Q. All right. And would you agree with me, in
7 that instance, it's possible that New
8 Hampshire could realize wholesale market
9 benefits and electricity rate benefits from
10 one of these other projects winning the Mass.
11 RFP in lieu of NPT winning the Mass. RFP?

12 A. Those benefits would not necessarily be the
13 same. And actually, it's quite possible with
14 the Mass. RFP that multiple projects could be
15 awarded a contract.

16 Q. Sure. But would you agree with me that
17 it's -- if another project was awarded the
18 Mass. RFP and NPT was not, that project could
19 result in wholesale market benefits and
20 electric rate benefits?

21 A. It could. But it would be an empirical
22 exercise to see which project it is and what
23 kind of benefits it would create. And of
24 course, if that project isn't in New

1 Hampshire, there wouldn't be any construction
2 period-related benefits either. So,
3 hypothetically, a lot of things are possible.

4 Q. Sure.

5 A. Practically, if you look at the Mass. RFP
6 goals and Massachusetts Clean Energy Goals, I
7 would argue that multiple projects will
8 eventually be awarded contracts to meet the
9 Clean Energy Goals, not just one.

10 Q. It's possible one could win and it's possible
11 multiple could win; correct?

12 A. It's possible.

13 Q. Okay. In your analysis, you didn't forecast
14 or assume the possibility that another
15 project in lieu of NPT would be built;
16 correct?

17 A. I did not assume that.

18 Q. Okay. Now let me ask you some questions on
19 my last topic, and that is to review some of
20 the possible benefits that you have
21 forecasted for electric customers.

22 (Pause in proceedings)

23 Q. What's on the screen in front of you now is
24 Counsel for the Public's Exhibit 263 which

1 you saw yesterday. And it comes out of the
2 Updated Analysis; correct?

3 A. Yes, that is correct.

4 Q. And it shows that the wholesale market
5 benefits that your Updated Analysis forecasts
6 for New Hampshire are \$61.6 million. Do you
7 see that?

8 A. That is correct.

9 Q. Okay. Now, your forecasted -- your
10 forecasted wholesale market benefits you
11 forecasted over an 11-year period; correct?

12 A. Yes.

13 Q. And we saw yesterday that you have forecasted
14 some benefits in 5 or 6 of those 11 years,
15 but not in each of the 11 years; correct?

16 A. When talking about the capacity market
17 benefits, that is the case. I think the
18 energy market benefits last longer, so...

19 Q. Yeah, yeah. And we spoke yesterday about
20 benefits New Hampshire customers would have
21 an effect on prices for a period of time
22 within that 11-year span; correct?

23 A. When we're looking at specifically wholesale
24 energy and wholesale capacity market

1 benefits, yes.

2 Q. Okay. And --

3 A. And I should add, if I can --

4 Q. Sure.

5 A. -- that's under expected or what we call
6 "normal" conditions. If down the road
7 anomalous weather conditions occur outside of
8 the first 11, 10 years, those benefits would
9 accrue to consumers. And in our Original
10 Report, we studied -- we created estimates
11 for these types of events. We didn't predict
12 when such an event could happen in the next
13 10 years. But it's very likely it will
14 happen at some point over the foreseeable
15 future. These are hot weather, heat waves in
16 the summer, cold weather spells in the
17 winter. We've seen even historically these
18 repeat themselves, not necessarily on a very
19 predictable basis, but they do repeat
20 themselves. So, to the extent those would
21 occur, there would be additional benefits to
22 ratepayers directly flowing through and
23 showing in their utility bill from the
24 presence of Northern Pass.

1 Q. All right. But outside of those
2 extraordinary events, what your forecast
3 essentially showed, particularly for the
4 wholesale capacity market, that there's
5 really a period of about five years when the
6 benefits are really realized; correct?

7 A. That sounds -- subject to check, I don't
8 remember if it's five or six. I'm getting
9 confused now, five or six years. But that's
10 about right.

11 Q. Yeah, it's in one of the confidential charts,
12 but we're not going to put that up.

13 A. It's actually six years. So, yeah.

14 Q. Okay. Now what's on the screen in front of
15 you is Counsel for the Public's Exhibit 282,
16 which shows New England retail electricity
17 cost savings by state. Do you see that?

18 A. I do. And this is from our Original Report.

19 Q. Hmm-hmm. And it shows on a comparative basis
20 the amount each of the six New England states
21 would receive. For instance, what it shows
22 is Massachusetts would receive the largest
23 amount of electric cost savings benefits,
24 followed by Connecticut and followed by New

1 Hampshire and then the other New England
2 states; correct?

3 A. Yes. And that's consistent with the
4 distribution of load in the region.

5 Q. Yeah. Okay. And then we saw yesterday a
6 sample Eversource bill, and we talked about
7 the supplier energy charge and it currently
8 being a little under 11.2 cents. Do you see
9 that?

10 A. Yes, for this bill, I do see it.

11 Q. And we talked about the fact that any
12 electric savings for customers would come
13 from savings in that energy charge; correct?

14 A. Through the supply component of the bill,
15 yes.

16 Q. Okay. What's on the screen in front of you
17 is Counsel for the Public's Exhibit 283. And
18 this comes from Brattle's report. Do you
19 recognize it?

20 A. I do.

21 Q. Okay. And it shows Brattle's forecasted
22 savings under the four scenarios they looked
23 at. Do you recognize that?

24 A. I do.

1 Q. And if you look at the far right side, it has
2 the total market savings in dollar amounts
3 under the four scenarios. And it has, for
4 instance, under Scenario 1, \$34 million;
5 under Scenario 2, \$21 million; under
6 Scenario 3, \$8 million per year; and under
7 Scenario 4, no savings. Do you see that?

8 A. I see their chart, yes.

9 Q. And this is what Brattle forecast for total
10 market savings under the four scenarios they
11 reviewed; correct?

12 A. Yes. And in my Supplemental Testimony I
13 described why I disagreed with this quite
14 extensively.

15 Q. Okay. On the screen in front of you is
16 Counsel for the Public's Exhibit 285. And
17 this is a chart of an average monthly bill,
18 residential, for 2015. Do you see that?

19 A. Yes, I do.

20 Q. And I've highlighted New Hampshire. And if
21 you look under New Hampshire, the average
22 monthly consumption in kilowatt hours is 621.
23 Do you see that?

24 A. Yes, I do.

1 Q. Okay. Now, that's substantially more than
2 that sample bill that we saw.

3 A. And interestingly the price is much higher,
4 too, because the price is essentially 18
5 cents rather than the 11 you showed.

6 Q. Yeah, this is back in 2015. But this shows
7 that in 2015 the average monthly consumption
8 was 621 kilowatt hours. Do you see that?

9 A. I see the consumption number.

10 Q. Okay. What's on the screen in front of you
11 now is Counsel for the Public's Exhibit 286.
12 And what this exhibit does is it takes --
13 starts with your annual -- your 11-year
14 average savings of rounded up to \$61.7
15 million and converts that to cents per
16 kilowatt. And then, in order to compare your
17 savings with Brattle's savings, it converted
18 your savings to a 13-year period and then
19 made the conversion for cents per kilowatt.
20 And so under your forecast, if you follow the
21 top line, and if you use your forecast
22 period, it will result -- and this uses the
23 621, average New Hampshire residential
24 consumer consumption of 621-kilowatt per

1 month. So if you look at the top line, it
2 has your \$61.7 million average annual savings
3 for the 11-year period at 51 cents per
4 kilowatt. And carry across, that would
5 equate to a savings of \$3.14 per month for
6 this amount of usage, which is the average
7 residential usage in New Hampshire in 2015,
8 and then has a yearly savings of \$37.67. Do
9 you see that?

10 A. I see the top row and I recognize my number
11 in the top row. Not sure I recognize the
12 other numbers.

13 Q. Yeah.

14 A. And I appreciate that for every household in
15 New Hampshire that this chart is suggesting
16 it's about a \$38 of savings on electricity
17 over a number of years. What we have to keep
18 in mind is we have many households in New
19 Hampshire --

20 Q. Ms. Frayer, the question was do you see it?

21 A. I do see it.

22 Q. Thank you. So the top number is your
23 forecast; correct?

24 A. Yes. I recognize the starting point.

1 Q. Okay. And then the chart shows Brattle's
2 forecast. Do you see that?

3 A. I do see those rows labeled as "Brattle
4 Scenarios."

5 Q. Okay. And do you see where the range of
6 potential savings is on your forecast of
7 annual savings of \$37.67 per year? Do you
8 see that?

9 A. I see the top row, yes.

10 Q. Yeah. And those are your -- that is
11 consistent with your forecast; correct?

12 A. Yes, the top row.

13 Q. Yeah. And then it ranges based on whether
14 we're looking at your forecast or looking at
15 the Brattle forecast from a high of \$37.67
16 per year down to zero. Do you see that?

17 A. I see those ranges. But again, I've already
18 described in my supplemental why I completely
19 disagree with the Brattle analysis.

20 Q. And you've made that point abundantly clear,
21 but that wasn't my question.

22 And so would you agree with me that,
23 depending on which forecast actually turns
24 out, if you will, which forecast becomes

1 reality, the potential savings under the
2 forecasts in front of this Committee range
3 from a high of \$37.67 per year down to zero;
4 correct?

5 A. I disagree with that. Because, again, if
6 you're actually thinking about household
7 savings and you're starting with my
8 weather-normalized forecast, you're excluding
9 what I just talked about a few minutes ago,
10 that there's opportunities for uncertain
11 events where Northern Pass provides extremely
12 valuable insurance to consumers in New
13 England, including in New Hampshire, which
14 could significantly increase the \$37.67 in
15 some years.

16 Q. Thank you.

17 MR. PAPPAS: I have no other
18 questions.

19 CHAIRMAN HONIGBERG: I believe
20 next up is counsel for NEPGA, Mr. Anderson.
21 And Mr. Anderson, are you going to start with
22 confidential or start with non-confidential?

23 MR. ANDERSON: Confidential.

24 CHAIRMAN HONIGBERG: All right.

1 So then, if there's people in the room who are
2 not allowed to see confidential information and
3 hear confidential information, we're going to
4 have to ask them to leave. And we'll be --
5 we'll ask to shut off the speaker in the public
6 area. According to Mr. Anderson's estimates,
7 he believes he's got about 30 minutes in
8 confidential session and then an hour and a
9 half public. So when he's done with
10 confidential, we will come out and get you.

11
12 Pages 29through 52 of the transcript
13 are contained under separate cover
14 designated as "Confidential and
15 Proprietary.")

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PAGES 29 THRU 52 FILED UNDER SEPARATE COVER

1 PUBLIC SESSION RESUMES

2 CHAIRMAN HONIGBERG: All right,
3 Mr. Anderson, you may proceed.

4 MR. ANDERSON: Thank you, Mr.
5 Chairman.

6 BY MR. ANDERSON:

7 Q. Ms. Frayer, revisiting a little bit some
8 discussion you had yesterday about the
9 transmission line that runs from Franklin,
10 New Hampshire, to Des Cantan -- my French is
11 non-existent. So, Des Cantan --

12 A. I have only tried to pronounce it. But Des
13 Cantons.

14 CHAIRMAN HONIGBERG: We're going
15 to go with Des Cantons.

16 MR. ANDERSON: Des Cantons.
17 Perfect. There's my first French lesson.
18 Thank you.

19 BY MR. ANDERSON:

20 Q. So the line from Des Cantons to Franklin, New
21 Hampshire, you said yesterday you don't
22 believe that the costs of that portion of the
23 line should be included in your offer floor
24 price analysis because it's not incremental.

1 And I'm paraphrasing. It's not an
2 incremental cost above any export sale. In
3 other words, whether the energy will be
4 delivered to New England or whether it'll be
5 delivered to Ontario, that line would carry
6 either way, and in that sense it's not
7 incremental to this specific Northern Pass
8 Project. Is that a correct summation or --
9 you're looking to me like you'd like to
10 amend --

11 A. I think it's almost getting there, but if I
12 can just correct a little bit. The line
13 itself is incremental to the system,
14 Hydro-Quebec TransÉnergie System. And what I
15 was trying to say yesterday, and perhaps I
16 wasn't very clear, is that Hydro-Quebec
17 Production, who would be as we've discussed
18 earlier, the shipper, the entity that would
19 be qualifying for the capacity market and
20 then providing the energy that flows on the
21 line to sell into the New England market,
22 Hydro-Quebec Production would have to sell
23 that surplus energy into another market if it
24 couldn't use Northern Pass. And when

1 Hydro-Quebec Production sells exports, it
2 needs to make reservations on the
3 Hydro-Quebec TransÉnergie System for
4 point-to-point service, and it pays a
5 standard, publicly available tariff. In
6 fact, there are a number of public documents
7 that we didn't go through yesterday that
8 described the arrangements around this new
9 "Quebec line." Let's call it that because I
10 think the TSA referred to or defined it as
11 the "Quebec line." I believe Counsel for the
12 Public actually had an exhibit that
13 memorialized the actual agreement between
14 Hydro-Quebec TransÉnergie and Hydro-Quebec
15 Production with respect to this investment.

16 Q. Yes, and I think you're correct on that. I
17 guess, you know, the question I'm trying to
18 get at is: Do you know if HQ TransÉnergie
19 will build the line, this new line, if it's
20 not going to be connected to Northern Pass?
21 In other words, if Northern Pass doesn't go
22 through, is it going to build that line?

23 A. I'm not familiar with Hydro-Quebec
24 TransÉnergie's strategies around this line,

1 but I would assume it is somehow connected
2 with the Northern Pass Project so --

3 Q. Well, it certainly seemed that way, wouldn't
4 it, given that it links directly into
5 Northern Pass and runs from the Des Cantons
6 substation -- I need more lessons -- from
7 that substation directly into the Northern
8 Pass line. It would stand to reason that
9 absent Northern Pass, there would be no need
10 to build that line. Would you agree?

11 A. I would generally agree.

12 Q. Okay. And will HQP, Hydro-Quebec Production,
13 will that pay for that line if it isn't built
14 and if Northern Pass isn't built?

15 A. The agreement that I reviewed -- and
16 unfortunately it's in French, but I have
17 colleagues that are native French speakers
18 that have helped me review it -- specifically
19 says the responsibility of Hydro-Quebec
20 Production is to continue to take normal
21 transmission service as it does for 15 years
22 using the publicly available point-to-point
23 transmission tariff. And Hydro-Quebec
24 TransÉnergie has calculated that in doing so,

1 Hydro-Quebec Production will pay for almost
2 the entire -- those transmission tariffs that
3 it would have to pay either way would have
4 covered, funded almost the entire project
5 costs. So, Hydro-Quebec Production's
6 responsibility is just a small, tiny amount
7 of contributed capital that I think is going
8 to be less than \$6 million.

9 Q. Well, let me put it simpler. Will they pay
10 for something that's not built?

11 A. I would assume no.

12 Q. Okay. So, in other words, if in fact the
13 line from Franklin to the substation in Des
14 Cantons is not built, they won't pay for it;
15 correct?

16 A. I would assume so.

17 Q. But if it is built, they will pay something
18 for that. That will be an incremental cost
19 to HQP; correct?

20 A. Just that \$6 million, not the \$600 million,
21 because Hydro-Quebec Production still has to
22 pay the export tariff regardless of that line
23 to ship surplus power to export markets.

24 Q. Wait. Let me get this straight. You're

1 saying that if the line is not built -- and
2 the line has been, you know, somewhat agreed
3 to as approximately a \$460 million capital
4 cost --

5 A. Yes. You're asking me about the capital
6 cost?

7 Q. No, no. What I'm asking is will they avoid
8 that \$460 million cost if the line isn't
9 built. And I think your answer was no.

10 A. Hydro-Quebec TransÉnergie, of course, would
11 not have the cost if the line is not built.

12 Q. Nor will HQP; correct?

13 A. No, and this is the problem. And I apologize
14 if I'm being confused here. HQP is not
15 responsible for any transmission investments
16 in Quebec, nor does it collect revenues
17 across --

18 Q. But they're under a contract with HQ
19 TransÉnergie, and presumably HQ TransÉnergie
20 will recover the capital costs of that
21 project via that contract with HQP; isn't
22 that correct?

23 A. HQP buys transmission service from HQT, just
24 like we do here in the U.S., and pays a

1 standard tariff, a publicly published tariff.
2 And what I'm saying is HQP is going to have
3 to take the energy that it would have shipped
4 on Northern Pass and ship it to another
5 destination market because there's no need
6 for it in Quebec. And in doing so, it will
7 incur the same exact export tariff that it
8 would have otherwise paid by shipping to
9 Northern Pass.

10 Q. Will HQ TransÉnergie incur that \$460 million
11 capital cost if it doesn't build the line?

12 A. No, it won't add that to rate base.

13 Q. Okay. Turning a little bit to -- oh, one
14 other point on the \$460 million capital cost.
15 If indeed those costs were to be included in
16 your offer price analysis -- and you have
17 testified that you don't believe they should
18 be -- but if they were included, and if you
19 can bear with the hypothetical, would the
20 capital cost be the only cost that you would
21 include in your analysis relative to that
22 transmission project? In other words, would
23 there be other costs above the \$460 million,
24 like property taxes, insurance costs, other

1 costs that might be associated with that,
2 that you would want to include in your DCF
3 analysis, much the way you included property
4 taxes and other costs with respect to the
5 Northern Pass line?

6 A. No, because, again, HQP would have to take
7 service from HQT regardless of Northern Pass
8 and would have to pay a standard tariff
9 regardless of Northern Pass to ship that
10 energy to another market.

11 Q. Okay.

12 A. So the tariff charges are essentially a net
13 zero.

14 Q. Turning a little bit to some of the
15 discussion around your variable O & M costs.
16 As you testified, you developed those
17 essentially as a foregone value, or perhaps
18 better put, opportunity cost. In other
19 words, you found that opportunity cost of not
20 selling into Ontario is a variable operating
21 O & M cost that you've included in your DCF;
22 is that correct?

23 A. Just to make sure I understood, you're
24 talking about the MOPR analysis still.

1 Q. Yes.

2 A. Okay. Yes, we've incorporated the
3 opportunity cost of energy sales based on our
4 forecast for the Ontario market.

5 Q. And your forecast was for off-peak sales
6 only; is that correct?

7 A. Yes.

8 Q. And I think you said yesterday near the end
9 of the hearing that you used off-peak rather
10 than on-peak, or rather than a blended rate,
11 which would in each case produce higher
12 prices, as you testified yesterday, because
13 something to the effect of that energy
14 couldn't be delivered at any time other than
15 off-peak without the Northern Pass Project?
16 Is that correct? Is that what you testified
17 to yesterday, and that's the basis for using
18 the off-peak prices rather than on-peak or
19 blend?

20 A. So I think what you're capturing is
21 essentially correct. I'm just going to
22 rephrase it a little bit.

23 What I was saying yesterday is that, but
24 for Northern Pass, so in a world without

1 Northern Pass, knowing that Hydro-Quebec
2 Production has surplus energy that it wants
3 to sell to export markets, it will seek to
4 sell to the highest market that export
5 energy. But we have to account for the fact
6 that it's already exporting energy on-peak to
7 Ontario, to New York, to New England on
8 existing interties. So when we did our
9 analysis, we actually looked at what is the
10 next best available opportunity to send that
11 surplus energy in a world without Northern
12 Pass, and in our analysis of all those
13 destination markets, it was Ontario off-peak.

14 Q. So by using only off-peak prices, you're
15 essentially saying that they'll only be able
16 to sell in off-peak or just using this as
17 some kind of proxy. But you would
18 acknowledge that they would have opportunity
19 to sell at other times, right,
20 on-peak/off-peak? In other words, if there
21 was a contingency in Ontario and they needed
22 to export energy from Quebec, that seems like
23 an on-peak opportunity; does it not?

24 A. No. And I apologize again that I'm not

1 describing it --

2 Q. Well, why is -- let me stop you for a
3 second.

4 Why is a contingency where typically
5 power prices go high in a region when there's
6 a contingency, when you're going to reserve,
7 whatever the case may be, why would that not
8 be an opportunity? In fact, neighboring
9 regions often export power into areas that
10 are experiencing contingencies. We've had
11 that same thing happen here in New England,
12 and New England has provided that service to
13 Quebec. Outside of some kind of special
14 service agreement between the RTOs, I would
15 think that would be an opportunity to sell at
16 off-peak times. And I'm asking you: Do you
17 think that opportunity could arise for HQP to
18 sell into Ontario at on-peak times?

19 A. And my answer to specifically your question
20 is Hydro-Quebec Production is already selling
21 it. So the energy we are concerned about,
22 the surplus energy that's being covered in
23 the MOPR, can't go if Hydro-Quebec is already
24 selling maximum energy into those markets,

1 subject to the transmission capacity. Each
2 of the interties -- think of it as a hose.
3 So if you've already got the hose full of
4 water going to Ontario during the
5 contingency, you can't put more water through
6 that hose. And that's the analysis you need
7 to do when you think about this. There's a
8 bucket of surplus water. We've already
9 filled the hoses -- historically, that's
10 pretty evident from the data -- to all these
11 markets when prices are highest on-peak. So
12 now where do they do the next hose if it's
13 not on Northern Pass? Well, put the next
14 hose into Western New York off-peak or
15 Ontario off-peak.

16 Q. So you're saying that at every on-peak time
17 in Ontario, the ties, the transmission
18 between Quebec and Ontario are at their
19 maximum capacity and there's no opportunity
20 to sell any incremental energy into Ontario
21 during any of those times during the year?

22 A. I'm saying that, generally speaking, if you
23 look at the actual trade, the flow of energy
24 from Quebec, the best opportunity is most

1 likely for the placement of this
2 significant -- we're talking eight terawatt
3 hours of energy is unfortunately going to be
4 off-peak unless you build more
5 infrastructure. And Hydro-Quebec has
6 recognized that. If you go to their annual
7 report, they actually write that, that they
8 love to export. But they are constrained
9 right now. They need new transmission in
10 order to export more.

11 Q. Do you have any evidence in the record that
12 establishes that?

13 A. That hydro-Quebec likes --

14 Q. No, establishes the conclusion you just drew,
15 that there's little to no opportunity to sell
16 power from Quebec into Ontario during on-peak
17 times. Is there any evidence here that
18 establishes that?

19 A. I think we discussed it at length during the
20 technical conferences. But I don't -- I've
21 described my thinking about it in the MOPR.
22 But I don't know what else you'd need.

23 Q. ISO-New England and IMM, as we've talked
24 about, developed ORTP, offer review trigger

1 prices, and net CONE values. As part of
2 those analyses, they do use assumed energy
3 prices -- do they not -- to develop assumed
4 energy margins, which then feeds into the DCF
5 analysis? Is that correct? They make
6 assumptions about energy prices?

7 A. They hire consultants to do some modeling,
8 yeah.

9 Q. Yes. And are you aware in ISO-New England
10 whether they use a blended energy rate, a
11 on-peak energy rate or an off-peak energy
12 rate, for example, in their most recent reset
13 of the net CONE and offer review trigger
14 prices?

15 A. I can't recall, off the top of my head.

16 Q. Okay. Another question I have about the
17 transmission in Quebec. So we have talked
18 about the Franklin to Des Cantons substation
19 as a distinct transmission line that connects
20 to Northern Pass. But that's not the only
21 transmission that is necessary to deliver the
22 capacity, the energy that is going to attempt
23 to bid in as capacity in the ISO market.
24 That's not the only transmission that is

1 necessary to deliver that energy into New
2 England, is it? And when I say the only
3 lines, the Franklin -- I'll just call it the
4 "Franklin line" for now -- the Franklin line
5 in Quebec and the Northern Pass line, those
6 aren't the other two lines; right? You've
7 described that this is system power. It's
8 coming from all over the system, and
9 therefore there has to be a lot of feeder
10 transmission into that substation which then
11 goes to Franklin and then goes into Northern
12 Pass. Would you say that's fair to say?

13 A. I agree that these are system-backed imports
14 and that they would be using the Quebec
15 system to gather the energy to then feed into
16 Northern Pass.

17 Q. Okay. And HQP presumably has to pay HQ
18 TransÉnergie to use this extra transmission,
19 if you will, if that's clear what I'm
20 referring to?

21 A. Exactly. That's what I had talked about ten
22 minutes go. They have to pay a standard
23 tariff for any export sales.

24 Q. But you don't include those costs in your DCF

1 analysis, do you?

2 A. Because they net out to zero. HQP would be
3 paying that same tariff number regardless if
4 it's sending the power to Ontario, to New
5 York or down Northern Pass.

6 Q. Well, let's say without the -- you know, what
7 eventually may become a dedicated delivery of
8 energy into New England if this all happens,
9 right, I mean, it's supposed to be firm
10 energy. They'll have a capacity supply
11 obligation. They'll have certain performance
12 obligations, delivery obligations. Let's say
13 a scenario in which that causes incremental
14 delivery of energy from these gathering areas
15 to the substation, to the line down in
16 Franklin into New Hampshire. That would be a
17 cost to HQP that they wouldn't otherwise
18 incur; correct? I mean, we're talking about
19 incremental energy delivery into New England.
20 And as discussed yesterday, the Mass. RFP
21 either requires new generation or new exports
22 into New England. In that sense, they would
23 be incurring -- they would be using that
24 transmission system more than they would

1 otherwise; would you agree?

2 A. I don't agree that there is anything above
3 and beyond the standard tariff. If you're
4 familiar with how the Hydro-Quebec system
5 works and the tariffs that are publicly
6 available for TransÉnergie, the hypothetical
7 you're creating is outside the four corners
8 of that reality.

9 Q. So do they pay -- I mean, do they only pay a
10 firm rate? Do they pay a volumetric rate for
11 use of those transmission facilities?

12 A. They pay a rate and --

13 Q. Is it volumetric?

14 A. They can pay an annual rate, they can pay
15 daily rate, a monthly rate or an hourly rate,
16 and it's all the same number, just divided by
17 the number of, how should I say, time
18 increments.

19 Q. Okay. So you're saying that increased use of
20 transmission lines under that contract does
21 not cause any incremental cost to NHP [sic],
22 is that correct, regardless of the volume of
23 energy delivered in those lines?

24 A. I am saying that the energy that Hydro-Quebec

1 Production would sell down Northern Pass is
2 basically displacing energy they would
3 otherwise sell to other markets, and because
4 of that they don't pay any incremental
5 transmission in Quebec for that.

6 Q. Okay. I'm going to turn to a different
7 topic, capacity deliverability and the
8 deliverability of the resource to actually
9 deliver capacity into New England. And I'll
10 start by referring to a criticism that you
11 had of William Fowler, NEPGA's witness, of
12 some of the testimony that he submitted. And
13 particularly, you criticized his reference in
14 discussion of a 2013 System Impact Study
15 conducted by Eversource; is that correct? If
16 I could turn your attention to Page 27.

17 A. Thank you for that page reference.

18 Q. You're welcome, you're welcome.

19 MR. IACOPINO: Page 27 of which?

20 MR. ANDERSON: Oh, I'm sorry.

21 The testimony -- I'm sorry. The testimony of
22 William Fowler on behalf of NEPGA.

23 A. It's actually Page 27 -- I assumed you were
24 saying it's Page 27 of our April 17, 2017

1 report.

2 BY MR. ANDERSON:

3 Q. No, I'm sorry. I'm not being clear. I'm
4 referring to Page 27 of Mr. Fowler's
5 testimony.

6 A. I don't have a copy of Mr. Fowler's
7 testimony. But I do talk about these issues
8 in my Rebuttal Report. So that's Page 27 as
9 well.

10 MR. ANDERSON: If I could
11 approach the witness? And you'd like to see
12 that or --

13 BY MR. ANDERSON:

14 Q. I think for purposes of the question, I don't
15 think you really need to. That's my opinion,
16 but --

17 CHAIRMAN HONIGBERG: It's up to
18 you. If you want to show it to her, you can
19 show it to her. If you feel you can ask the
20 question without showing it to her, it's
21 entirely up to you.

22 MR. ANDERSON: Thank you, Mr.
23 Chair.

24 A. I do agree that I criticize the reference to

1 the 2013 --

2 BY MR. ANDERSON:

3 Q. And do you recall why you criticized his
4 reference to the 2013 System Impact Study?

5 A. As stated on Page 27 of my Supplemental, I
6 noted that there has been changes to the
7 Project itself. The Project size went down
8 from 1200 to 1090. The technology changed.
9 And I believe also changes to the system have
10 occurred subsequent to that initial System
11 Impact Study.

12 Q. And is it correct that you went on to say
13 that it would have been more appropriate for
14 him to use a more recent System Impact Study,
15 in particular, a 2016 System Impact Study
16 conducted by Eversource and reviewed by
17 ISO-New England?

18 (Witness reviews document.)

19 A. I don't recall if I myself made the -- well,
20 no. I did make the point that an updated
21 version of the System Impact Study was
22 available. So, yes, I would say that I did
23 make the reference that one could go and look
24 at the updated System Impact Study.

1 Q. Okay. And did you have an opportunity to
2 review those, the 2013 and the 2016 System
3 Impact Studies?

4 A. I have seen them. But I am not an engineer,
5 so I can't interpret all of the information
6 in there. So, also as part of my
7 Supplemental, I did suggest that some of the
8 more detailed questions are to be found in
9 the Supplemental Testimony of another
10 witness, another expert that Eversource has
11 that is more familiar with these issues.

12 Q. If I may refer to Page 12 of your Rebuttal
13 Report. And I can quote the passage I want
14 to refer to directly. So I quote: LEI does
15 not expect deliverability of Northern Pass's
16 capacity to be an issue since ISO-New England
17 and the Applicant have already performed
18 studies to identify required transmission
19 upgrades, if any.

20 I see you looking at -- do you want to
21 read it yourself as well?

22 A. I am in agreement --

23 Q. That you wrote that in your Rebuttal Report?

24 (Witness reviews document.)

1 A. Yes.

2 Q. Okay. And are you referring to the System
3 Impact Studies when you say that it
4 "performed studies to identify the required
5 transmission upgrades"? Those are the
6 studies you're referring to?

7 A. I am.

8 Q. But are you aware that those studies relate
9 to interconnection for energy only and they
10 have no bearing on whether or not the Project
11 can interconnect for capacity?

12 A. I am aware.

13 Q. So in what sense do those studies support, as
14 you say, or give you comfort that the Project
15 will be able to connect for capacity rather
16 than energy?

17 A. In addition to those studies, I'm also aware
18 that the Project as a new supply resource in
19 the capacity market will also have to undergo
20 other ISO-New England studies and --

21 Q. Do you know what those studies are?

22 A. The name of those studies generically are
23 referred to as "overlapping impact analyses"
24 that are performed once the ISO receives all

1 new qualifications packages from resources.

2 Q. So as you've written, though, in your
3 Rebuttal Report, the support that you give
4 for your belief that they won't have any
5 problem interconnecting for capacity is
6 referenced to studies that refer to
7 interconnection for energy, which is a
8 different test; is that correct?

9 A. For energy. And I also have asked Eversource
10 whether there were any concerns, and I have
11 been told that there aren't concerns that
12 would jeopardize Northern Pass's
13 deliverability.

14 Q. For?

15 A. For capacity.

16 Q. And that's based on, I'm sorry, talks you've
17 had with Eversource?

18 A. Well, yes, and my understanding. So the
19 overlapping impact test, what that does --
20 let me step back perhaps for a second.

21 System Impact Studies are absolutely
22 necessary for interconnecting new resources.
23 And the System Impact Studies, although
24 they're looking at what we call "minimum

1 interconnection," which is whether the energy
2 is deliverable as a starting point, because
3 they do identify transmission upgrades that
4 are necessary to get the project
5 interconnected into the system on a reliable
6 basis.

7 Q. From an energy basis you'd say. Yes.

8 Could you give any more specificity as
9 to how ISO-New England, or, rather,
10 Eversource actually conducts the I39.
11 There's a standard procedure for that. Can
12 you give any specifics as to how that test is
13 conducted with respect to hypothetically
14 turning on units, turning off units to see if
15 the line will create thermal overloads or
16 voltage issues or anything to that effect?
17 Do you have any specifics around that study,
18 the System Impact Study?

19 A. Again, this is where I would probably refer
20 you to the other expert that is more
21 qualified than I to speak as to those types
22 of transmission planning study details.

23 MR. ANDERSON: Well, I did refer
24 to that witness's testimony. And perhaps the

1 Committee is aware of this, that apparently
2 Eversource or Northern Pass substituted one
3 witness for another, and the new witness merely
4 adopted the testimony of the prior witness
5 which had been filed a long time ago and makes
6 no reference to any of this, and in fact
7 doesn't respond or criticize Mr. Fowler's
8 testimony on the System Impact Study.

9 BY MR. ANDERSON:

10 Q. So it would seem fair to me that you are the
11 only witness that has provided any
12 information with respect to these issues and,
13 you know, you are the witness that has been
14 presented as having knowledge of this. So
15 your reference to another witness will not be
16 helpful to me. There's nothing in that
17 witness's testimony that speaks to any of
18 these issues that you've raised.

19 A. And again, I specifically on Page 27 of my
20 Rebuttal Testimony, if we go there... I
21 apologize. It's actually the top of Page 28.
22 When talking about system stability and
23 reliability, I relied on the testimony of
24 Robert D. Andrew, which was filed --

1 Q. Yeah, and if anyone was to go to that
2 testimony, you will find nothing with respect
3 to these issues; yet, in your Rebuttal, you
4 criticize Mr. Fowler's discussion of the
5 System Impact Study. You also opine that
6 studies have been -- the studies have
7 established that there shouldn't be a problem
8 with the Project interconnecting for
9 capacity; yet, at the same time, the studies
10 you refer to have to do with energy. The
11 capacity interconnection test hasn't been
12 done yet. So I'm trying to understand if you
13 understand that difference, in that the
14 System Impact Studies do not bear on whether
15 this project will be able to interconnect for
16 capacity. Do you understand that?

17 MR. NEEDLEMAN: I'm going to
18 object to Mr. Anderson's characterization.
19 When you look at Ms. Frayer's Supplemental
20 Report, what you see on Page 27, in
21 Section 3.1, is a statement that says, "While
22 an updated version of the Northern Pass SIS
23 from 2016 was available at the time of Mr.
24 Fowler's testimony, he based his evaluation on

1 his review of the 2013 version." And then at
2 the bottom of the page she quotes from Mr.
3 Anderson's -- from Mr. Andrew's testimony and
4 then references the quote. I think what Mr.
5 Anderson is doing is combining the two in a way
6 that is inaccurate.

7 CHAIRMAN HONIGBERG: Mr.
8 Anderson.

9 MR. ANDERSON: First of all, I
10 don't know what his reference to -- the
11 Supplemental Testimony you're referring to?

12 CHAIRMAN HONIGBERG: I think,
13 Mr. Needleman, you're referring to a report.
14 Is that what you said?

15 MR. ANDERSON: You're referring
16 to a report or --

17 MR. NEEDLEMAN: I'm looking at
18 Page 27 of Ms. Frayer's April 17, 2017
19 Supplemental Report, the Rebuttal Report.

20 MR. ANDERSON: The Rebuttal
21 Report. Okay. Thank you. And I'm sorry.
22 Where on Page 27?

23 MR. NEEDLEMAN: On Page 27, the
24 first full paragraph in Section 3.1 makes

1 reference to Mr. Fowler's testimony. And then
2 further down, at the bottom of Page 27, going
3 over to 28, she actually ends the paragraph by
4 quoting the supplemental and the initial
5 testimony of Mr. Andrew, and then she credits
6 Mr. Andrew with that quote.

7 MR. ANDERSON: Well, to respond
8 to that, number one, without more from that
9 quote -- and again, this is on my recollection
10 that Mr. Andrew did not discuss the System
11 Impact Studies. That seems like a rather
12 benign statement, that we'll be able to
13 interconnect, without any basis to it.

14 Secondly, Ms. Frayer herself
15 in her testimony discusses these issues. I
16 quoted from her Rebuttal Report where she
17 testifies that there should be no
18 interconnection issues, that it shouldn't
19 have a problem interconnecting for capacity
20 because it has satisfied the System Impact
21 Studies. I'm trying to establish her
22 knowledge of the System Impact Study, that
23 that does not bear on capacity
24 interconnection.

1 CHAIRMAN HONIGBERG: I think
2 it's pretty clear you can ask her what her
3 testimony is and how her testimony affects
4 the -- is responsive about the particular types
5 of studies you're asking about. If she says
6 she doesn't know, that someone else does, you
7 ask her who that is. And if that is a person
8 who is no longer -- who is not a witness, you
9 may be able to use that. I'm not sure how
10 else, what else you can do. I agree with Mr.
11 Needleman in one respect with respect to his
12 objection, that it was a very long question
13 with a lot of premises referring to a bunch of
14 different documents, none of which I think
15 anybody could find quickly. Mr. Needleman
16 found one of them quickly and identified some
17 things that I think were inconsistent with the
18 premise of your question. So what I would
19 suggest is you come back and try some shorter,
20 more direct questions and see what Ms. Frayer
21 does or doesn't know or is or isn't willing to
22 opine about while she's sitting here.

23 MR. ANDERSON: Thank you, Mr.
24 Chair, and I will make that effort. Thank you.

1 CHAIRMAN HONIGBERG: And
2 actually, Mr. Anderson, given the time, why
3 don't we take a break and you can prepare that
4 series of --

5 MR. ANDERSON: I'll write a lot
6 of short questions.

7 CHAIRMAN HONIGBERG: -- that
8 series of incisive questions in about 15
9 minutes.

10 MR. ANDERSON: All right. Thank
11 you.

12 (Recess taken at 10:43 a.m., and the
13 hearing resumed at 11:04 a.m.)

14 CHAIRMAN HONIGBERG: All right.
15 Mr. Anderson, you may continue.

16 MR. ANDERSON: Great. Thank
17 you, Mr. Chairman.

18 BY MS. ANDERSON:

19 Q. So, Ms. Frayer, before we took the break, we
20 were talking about System Impact Studies and
21 their relevance to whether or not the Project
22 is likely to qualify for the capacity market.
23 And in a way, just to kind of sum up your
24 understanding of a System Impact Study, would

1 you agree that a System Impact Study that
2 identifies transmission upgrades necessary to
3 connect for energy delivery does not answer
4 the question of whether a resource will
5 qualify for the capacity market?

6 A. I agree that there are additional studies
7 that are necessary to get to the final line,
8 if you will, on qualifications.

9 Q. And would you then agree that in your
10 Rebuttal Report, when you cite to the System
11 Impact Studies for your belief that there
12 will be no problem with interconnecting for
13 capacity, that that is -- doesn't in fact
14 provide support for that belief?

15 A. The way that I view this is that it provides
16 the first step in that element, because if a
17 project can't get interconnected under the
18 System Impact Study, there is no way it's
19 going to get interconnected for capacity in
20 the overlapping impact tests that are
21 necessary.

22 Q. I'm sorry.

23 A. No, no, please go ahead.

24 Q. But you would agree that there are many

1 resources in New England that pass the System
2 Impact Study or put into place transmission
3 upgrades necessary to deliver energy that in
4 fact fail the Capacity Deliverability Study.
5 Are you aware of that?

6 A. I'm aware of some resources. I wouldn't
7 qualify it as "many." There are a few wind
8 projects that have passed their System Impact
9 Study but have not passed the overlapping
10 impact test. And in saying they haven't
11 passed, they haven't willingly committed to
12 potential costs that came out of the
13 overlapping impact test.

14 Q. Do you have a magnitude and from a megawatt
15 basis across New England of resources that
16 have passed the energy deliverability
17 standard but not the capacity deliverability
18 standard?

19 A. No, I'm not aware of a number, off the top of
20 my head.

21 Q. Okay. Do you know any of, even at a
22 high-level, what ISO-New England does in
23 order to conduct the Capacity Interconnection
24 Study? In other words, turning units on

1 turning units off? I mean, do you have some
2 general knowledge of how these studies are
3 done that ISO-New England will look at the
4 entire system and will maybe turn generation
5 off here and, you know, create a line
6 contingency here in order to see how the
7 system will operate with new inputs in
8 stressed conditions? Do you know that
9 general kind of rubric for how these studies
10 are done?

11 A. I understand a higher-level description of
12 the study. But the descriptions you're
13 giving are probably beyond my expertise.

14 Q. Do you have an understanding that the
15 Capacity Deliverability Study is a so-called
16 "more stressful test," in that it creates
17 greater stress on the system than an Energy
18 Deliverability Study?

19 A. I'm not sure I would have used the word
20 "stress." But my understanding is that it's
21 testing the deliverability of all interested
22 parties that came in to show interest and
23 their ability to deliver capacity. So maybe
24 that's what you're referring to in terms of

1 "stress." But my understanding is that it
2 needs to look at the delivery of capacity
3 differently than what the process is for a
4 System Impact Study.

5 Q. Okay. So you're not aware that in order to
6 test whether Northern Pass can pass the
7 capacity deliverability test, that ISO-New
8 England would turn on all generation in New
9 Hampshire, on a fictional basis, of course,
10 all generation in New England and Northern
11 New England and then determine whether or not
12 1,000 megawatts coming in would have any
13 adverse impact on the transmission system or
14 on other generators?

15 A. I don't know the specifics, but what you're
16 describing seems reasonable. But I'm not
17 familiar with the specifics of the actual
18 transmission simulations.

19 Q. I think you testified you're aware that with
20 respect to the System Impact Studies that
21 have been conducted for Northern Pass, that
22 they identified a series of transmission
23 upgrades that would be necessary in order for
24 that resource to interconnect for energy; is

1 that correct?

2 A. That's my understanding.

3 Q. And did you -- and I think you have testified
4 that you included any costs associated with
5 those transmission upgrades in your capital
6 cost in your MOPR analysis; is that correct?

7 A. That's my understanding, that the figure I
8 used incorporates all of those upgrade costs.

9 Q. So with respect to the capacity
10 deliverability test, do you know when a new
11 resource that's newly trying to enter the
12 capacity markets, do you know when they begin
13 that process at ISO-New England? Is there a
14 series of steps at ISO-New England that that
15 resource must take, beginning with a show of
16 interest? Are you aware of that process?

17 A. Yes.

18 Q. And do you know what month, approximately,
19 they must submit the Show of Interest form?

20 A. I think it's in March for the following
21 year's auction.

22 Q. So, March for the next February's capacity
23 auction. And are you aware that ISO-New
24 England will provide a preliminary report to

1 that project proponent at some time in the
2 months thereafter?

3 A. I believe so.

4 Q. And are you aware that at that time the
5 Project proponent may withdraw its show of
6 interest based at least in part on the
7 capacity deliverability test?

8 A. I'm aware of that aspect of the rule.

9 Q. And do you know if either Hydro-Quebec
10 Production or Northern Pass -- presumably it
11 would be Hydro-Quebec Production as the
12 shipper, the entity trying to interconnect
13 its capacity resources -- do you know if in
14 fact they did submit a show of interest for
15 FCA #11 or FCA #12?

16 A. I don't know.

17 Q. Okay. And therefore, if in that Capacity
18 Deliverability Study ISO-New England
19 identified transmission upgrades that were
20 necessary in addition to those that were
21 identified in the System Impact Study, you
22 don't know the cost of those?

23 A. I don't know if there would be any costs, no.
24 And I don't know if they've done the study to

1 know if there's any costs.

2 Q. Okay. And you don't know certainly then -- I
3 guess it follows that you wouldn't know the
4 timing of the in-service date of any
5 transmission upgrades that might be necessary
6 via the Capacity Deliverability Study.

7 A. I don't know any specifics.

8 Q. Okay. If I could turn my attention to the
9 issue of price separation in the Northern New
10 England Capacity Zone. You testified that,
11 in your opinion, the Northern New England
12 Capacity Zone will not price-separate in FCA
13 #12, even with Northern Pass qualifying for
14 the market and interconnecting into Northern
15 New England; correct?

16 A. Yes.

17 Q. And as you explained, there is an established
18 formula for how something called the "maximum
19 capacity limit" is determined; is that
20 correct? And that formula is the installed
21 capacity requirement minus what's something
22 known as the "local resource adequacy value";
23 is that correct?

24 A. Yes, there is an established formula for the

1 MCL.

2 Q. And even with that formula, would you agree
3 that what really the maximum capacity limit
4 represents, so the MCL represents, is the
5 amount of capacity that can be exported out
6 of Northern New England to Southern New
7 England due to the existing transmission
8 topography in New England? Is that correct?

9 A. In simple words, yes. It's a little bit more
10 complicated once applied to the MRIs. But
11 yes.

12 Q. Yes. And the line that separates the
13 Northern New England Capacity Zone from
14 Southern New England, and the line that also
15 roughly approximate these transmission
16 constraints precluding capacity and energy
17 from leaving Northern New England, that line
18 is roughly at the Massachusetts border; you
19 would agree? Massachusetts border with New
20 Hampshire. And I should be more specific.
21 The Massachusetts border with New Hampshire
22 and Vermont.

23 A. I guess, geographically. But it's more
24 important where it is electrically on the

1 system.

2 Q. But from a very rough standpoint, that's --
3 in fact, that is the line that creates the
4 Northern New England Capacity Zone and other
5 zones in the south of New England; is that
6 correct?

7 A. Yes, it contributes to that distinction and
8 definition of "zones."

9 Q. Okay. So as we just -- or you just testified
10 the formula for the MCL, or maximum capacity
11 limit, is the installed capacity requirement
12 for all of New England minus the local
13 resource adequacy requirement for all of New
14 England that doesn't include Northern New
15 England.

16 A. Yes. And in fact, if it helps the Committee,
17 we provided a very detailed response
18 describing this in data discovery after the
19 technical sessions. I have it labeled as
20 "Technical Session 11 1-6 Response." That
21 goes through the formula and all the details
22 with our forecast of that MCL value.

23 Q. Yes, duly noted and read. Thank you.

24 So, given this formula, there's really

1 kind of one of two ways, or maybe potentially
2 three ways that the maximum capacity limit
3 could actually increase. One could be that
4 the installed capacity requirement increases;
5 correct? Another could be that the local
6 resource adequacy value could decrease, or
7 both.

8 A. Yes.

9 Q. In each of those scenarios, the maximum
10 capacity limit will increase; is that
11 correct?

12 A. Yes.

13 Q. Now, in your analysis, you testified that the
14 maximum capacity limit will increase by
15 approximately 500 megawatts from FCA #11 to
16 FCA #12; is that correct?

17 (Witness reviews document.)

18 A. To be clear, maximum capacity limit for
19 Northern New England.

20 Q. Well, isn't that the only one relevant in New
21 England?

22 A. Well, currently, yes. The zones can also
23 change in the future.

24 Q. The only one relevant for MCL 12 -- I'm sorry

1 FCA #12.

2 A. Well, and the only one I guess you would say
3 relevant for Northern Pass because --

4 Q. All the above, yes.

5 A. Yes. And yes, the answer to your original
6 question, that increase by about
7 500 megawatts. It's Figure 7 in that data
8 response.

9 Q. Have you been following ISO-New England's
10 predictions on the maximum capacity limit
11 over time? Are you aware that ISO-New
12 England continually reviews updates and makes
13 predictions about all kinds of important
14 market data, including the maximum capacity
15 limit? And are you aware of what ISO-New
16 England's most recent prediction is for the
17 maximum capacity limit for FCA #12?

18 A. I am aware that the ISO goes through and does
19 an annual update and, in fact, presents it to
20 the PAC Advisory Committee that I'm part of.
21 I am not aware of any recent submissions that
22 they may have made or predictions, though. I
23 reviewed all materials that were available to
24 us back in early spring, and they hadn't had

1 any updates at that time. But I haven't
2 reviewed any newer updates of ICR value or
3 MCL since probably February.

4 Q. Okay. So then you're not aware that more
5 recently, ISO-New England has predicted that
6 there will actually be a decrease in the MCL
7 out into FCA #13?

8 A. I'm not aware of it.

9 Q. Okay. So, going back to the formula we were
10 talking about, the MCL equals installed
11 capacity requirement minus the local resource
12 adequacy value -- excuse me for a moment.

13 If I may refer to Footnote 16 in your
14 Rebuttal Report. Do you have that in front
15 of you, Ms. Frayer? Can you see that?

16 A. Yes.

17 Q. And if I may just paraphrase from it,
18 essentially you say that you have
19 incorporated indirect impacts on the Northern
20 New England export capability itself. When
21 you say "Northern New England export
22 capability itself," what you're referring to
23 is the ability of Northern New England to
24 export energy or capacity, this maximum

1 capacity limit that we've been talking about;
2 is that correct?

3 A. I'm sorry. I'm looking for this because it
4 doesn't match my pagination. So give me a
5 second. On my Page 17 I don't have that
6 footnote. You said this is the April 2017
7 Rebuttal Report?

8 Q. I did not say the date. I'm going to go
9 back. This is the April 17th Rebuttal
10 Report, yes.

11 A. Bear with me. I probably was looking at the
12 wrong document. Getting tired. Sorry.

13 Q. Understood.

14 (Witness reviews document.)

15 A. If you could maybe ask your question again.
16 I have it now in front of me. So I
17 apologize.

18 Q. Okay. No worries. So you report that you
19 have made some change to the export
20 capability, the Northern New England export
21 capability -- in other words, some change to
22 the maximum capacity limit value
23 presumably -- and part of my question is
24 based on the transmission upgrades identified

1 in the System Impact Study, I believe that's
2 what I draw from this -- so I guess my
3 question is twofold.

4 Number one, is that in fact true? Are
5 you referring here to transmission upgrades
6 that will be compelled by the findings in the
7 System Impact Study; and if so, can you
8 report on the value? What, you know,
9 numerical value did you change the maximum
10 capacity limit to reflect what you say will
11 be an increased ability to export capacity
12 out of Northern New England?

13 A. So this footnote is referring to -- again, I
14 think you said it correctly. It's talking
15 about analyses that we've done. Those
16 analyses are referring to zonal price
17 separation. This is in the Forward Capacity
18 Market. So it's our simulations of how the
19 ISO-New England's Forward Capacity Auctions
20 incorporate zonal price separation. And I
21 don't think the interpretation here is that
22 we made a change. We always had this since
23 the Updated Analysis. Since we changed to
24 model the MRI curves, we've always had the

1 same methodology. The MRI curves require you
2 to consider zonal price separation
3 explicitly. And the MCL value is an
4 important component of that because it allows
5 for the zonal demand curves, which is the
6 zonal MRI curves, to shift.

7 Q. All right. I'm not quite sure you're
8 answering the question, so I'll try to ask it
9 in a different way. And I'll quote here.
10 "LEI's analysis incorporated Northern Pass's
11 indirect impacts on the NNE export capability
12 itself." I read that to say that you have
13 made some adjustment to the export
14 capability, the maximum capacity limit, based
15 on Northern Pass's indirect impacts. Can you
16 explain to me what you mean by "Northern
17 Pass's indirect impacts" and how that bears
18 on the MCL value, and not discuss price
19 separation? That's not what my question is
20 about. Just that first sentence, can you
21 explain that? What are the indirect impacts?
22 Where do you get them from? And how did that
23 affect your MCL value?

24 A. So the indirect impacts are inputs that we

1 have incorporated into our transmission
2 topology that reflect changes in the
3 north/south limit after other known projects
4 like the Greater Boston AC transmission
5 upgrades are put into place. They were
6 referred to even in our Original Report. I
7 can't say the values because I believe the
8 values are actually confidential. They were
9 provided to us by Eversource. And there's an
10 interplay here between Northern Pass and the
11 north/south interface, which I think you were
12 referring to -- I call them "north/south
13 interface." That's the name for that
14 electrical interface. You were
15 geographically placing it between
16 Massachusetts and Vermont earlier in the
17 discussions. So that is an input to our
18 modeling of the electricity markets. It
19 affects the energy market modeling. And to
20 make it consistent, it flows through to the
21 calculations of the MCL, which then flow
22 through to the calculations on estimates
23 around the MRI.

24 Q. So if I hear you correctly, you have made

1 some adjustment to the MCL based on
2 information that you received from Eversource
3 that is confidential and you cannot provide
4 to the Committee or to any intervenors?

5 A. Well, it is in our prior reports. It's
6 documented in my Original Report; it's just
7 in the confidential version.

8 Q. It's in the confidential materials.

9 A. Yes.

10 Q. I see. And in that Original Report, you
11 identified exactly by how much you changed
12 the maximum capacity limit based on what you
13 refer to as "indirect impacts" of Northern
14 Pass?

15 A. Yes.

16 Q. And I'm still not sure I've gotten quite the
17 answer. These indirect impacts, again, are
18 these -- when you think of indirect impacts
19 of Northern Pass, you think of other
20 transmission upgrades that are necessary that
21 may have been identified in the System Impact
22 Study. Is that what you mean by -- are the
23 indirect impacts, are those a result of these
24 other transmission upgrades, or do you

1 believe that the Northern Pass Project itself
2 will in some way increase the MCL?

3 A. I don't think I can definitively answer your
4 question, but I believe Robert Andrew or
5 others at Eversource would be able to answer
6 those.

7 Q. Okay. Let's see. Now, as a general
8 matter -- actually, let's, yeah, go to this.

9 So as a general matter, to the extent
10 supply into Northern New England increases
11 and there are no retirements -- so a net
12 increase in supply into Northern New England,
13 and again with no retirements -- would that
14 tend to increase the chances of price
15 separation in Northern New England?

16 A. Generically it would move us closer to the
17 point where we might have price separation.
18 But in terms of whether it causes price
19 separation, that's an empirical question.

20 Q. Now, in trying to assess the impact on supply
21 into New England if Northern Pass Project in
22 fact delivered capacity into Northern New
23 England, you would agree at least that the
24 capacity value you're attributing to Northern

1 Pass is 1,000 megawatts; is that correct?

2 A. Yes, we are modeling 1,000 megawatts. Yes.

3 Q. But you arrive at a net increase in supply by
4 adding Northern Pass's 500 megawatts;
5 correct?

6 A. I'm confused.

7 Q. Well, why don't you refer to your Rebuttal
8 Report. If I may, refer to your Rebuttal
9 Report at Pages 12 and 13. Sorry. If I may
10 have a moment. I have the wrong page cite.

11 (Pause in proceedings)

12 Q. Excuse me. I had to find the right page
13 cite. If I could refer you to Pages 17 and
14 18 of your Rebuttal Report. And for the
15 benefit of the Committee and those in the
16 room, I will read just the three words that
17 precede the top of this page. So, beginning
18 on Page 17, what you're seeing on screen is
19 Page 18. But at the beginning on 17 it says,
20 "After accounting for retirements and new
21 wind additions in Northern New England,
22 Northern Pass results in a net increase of
23 approximately 496 megawatts in Northern New
24 England..." So I have two questions on that.

1 How many megawatts of new wind additions
2 did you add to Northern New England in that
3 scenario?

4 A. We would have to take a look at the data
5 requests. If you bear with me, I can try to
6 find the answer for you. I know we provided
7 that in data responses.

8 Q. That's okay. I think the answer is probably
9 relatively de minimus. I imagine it would be
10 somewhere in the 20 to 30 megawatt range.

11 More importantly, I want to you ask you
12 about the retirements you refer to there. As
13 I see it, and let me ask you if could agree
14 with it, if you were to add 1,000 megawatts
15 for Northern Pass, and let's say you added
16 30 megawatts of wind and you have a net of
17 496, and then you put retirements into the
18 equation, I get a value of approximately
19 530 megawatts of retirements. Does sound
20 right?

21 (Witness reviews document.)

22 A. I'd have to think about this. I agree with
23 your math, but I don't think we had any
24 retirements as a result of, how should I say

1 it -- to be clear, these aren't retirements
2 as a result of Northern Pass. They're
3 retirements that are occurring
4 contemporaneously with Northern Pass. But
5 you're right in terms of the megawatt
6 magnitude. But just because I think there's
7 a potential to misread that the retirements
8 are happening as a consequence of Northern
9 Pass, that's not it.

10 Q. No, that's not the question I asked and was
11 not suggesting that.

12 A. Okay.

13 Q. I'm trying to understand how you arrived at,
14 when you input 1,000 megawatts of Northern
15 Pass and you arrive at a net addition of
16 500 megawatts, that's what I'm trying to
17 understand, of supply into Northern New
18 England.

19 A. And again, I think we do talk elsewhere in
20 the report that there are contemporaneous
21 retirements even in the Base Case that are
22 happening in Northern New England.

23 Q. Indeed. I am not entirely clear if the
24 yellow highlight on your data request

1 responses indicates confidential material. I
2 believe it does not, and it's not marked as
3 confidential. But I'm going to present this
4 for the screen, for everybody to see, if I
5 may. I can check with counsel --

6 A. That might be a good idea.

7 MR. ANDERSON: If I may, Mr.
8 Chair?

9 CHAIRMAN HONIGBERG: Sure.

10 MR. ANDERSON: Okay. Thank you.

11 (Off-the-record discussion between
12 Atty. Anderson and Atty. Iacopino.)

13 CHAIRMAN HONIGBERG: Ms. Frayer,
14 do you have some information that might be
15 helpful as folks try to figure out whether it's
16 confidential?

17 WITNESS FRAYER: I apologize. I
18 was talking out of order. So I have a copy of
19 all my data responses. And when they're in
20 yellow, that specific data response is
21 confidential. And I believe each individual
22 pages are marked as confidential. But when the
23 data response was submitted, it was noted that
24 the yellow or highlighted areas, consistent

1 with how we also marked up our reports, would
2 be redacted for the public version.

3 MR. ANDERSON: Okay. Thank you.
4 It would be a very natural and opportune time,
5 I think for the benefit of everybody, for me to
6 be able to introduce this confidential material
7 now. It goes directly to the question of the
8 retirements that Ms. Frayer uses in her netting
9 of supply into Northern New England. I
10 apologize to the Chair and the Committee for
11 not recognizing that sooner, and I'm happy to
12 accommodate the Committee to introduce this in
13 any way you see fit.

14 CHAIRMAN HONIGBERG: All right.
15 Why don't we ask the people who aren't entitled
16 to see confidential information to step out for
17 a few minutes while Mr. Anderson does this
18 business. And we apologize for making people
19 do this.

20 (Pages 106 through 112 of the
21 transcript are contained under separate
22 cover designated as "Confidential and
23 Proprietary.")
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PAGES 106 THRU 112 FILED UNDER SEPARATE COVER

1 PUBLIC SESSION RESUMES
2 (Exhibit NEPGA 4 marked for
3 identification.)

4 CHAIRMAN HONIGBERG: Mr.
5 Anderson, you may proceed.

6 MR. ANDERSON: Thank you, Mr.
7 Chair.

8 BY MR. ANDERSON:

9 Q. If I may turn your attention to Page 18 of
10 your Rebuttal Report, now marked as NEPGA
11 Exhibit 4.

12 MR. ANDERSON: For the record,
13 I'll note at the outset that what is on the
14 screen is not a completely unmarked version of
15 Ms. Frayer's Rebuttal Report. I have added
16 what you'll see is a black line going from a
17 horizontal line marked as zero dollars down to
18 a horizontal line marked as negative \$5. I
19 just want to note that at the outset. I will
20 refer to that in a bit.

21 BY MR. ANDERSON:

22 Q. So, Ms. Frayer, would you agree that the red
23 line represents what the Northern New England
24 demand curve would look like if your

1 prediction for the MCL in FCA #12, the
2 500-megawatt increase in MCL in fact went
3 through? In other words, you drew that red
4 line based on where that MCL for FCA #12 line
5 exists. And that's consistent with the
6 design, that the demand curve in that zone is
7 supposed to essentially start to drop down at
8 the MCL line; is that correct?

9 A. Yes.

10 Q. Okay. And if you look back at FCA #11 MCL,
11 that represents the actual MCL value for
12 FCA #11; is that correct?

13 A. Yes.

14 Q. And therefore, the blue curve represents the
15 actual demand curve in Northern New England
16 for FCA #11; is that correct?

17 A. Correct.

18 Q. Okay. Now, as we discussed, ISO-New England
19 is not predicting an increase in MCL from #11
20 to #12. In fact, it's predicting a decrease
21 in the MCL from FCA #11 to FCA #13.

22 So my question for you is: If we were
23 to -- if in fact the MCL -- rather, the MCL
24 line for FCA #12 is much closer to where you

1 have the MCL line for FCA #11, or in fact if
2 it's the same, would you agree that the
3 demand curve for FCA #12 would look more like
4 the blue line rather than the red line if the
5 MCL for FCA #12 is much closer to the MCL for
6 FCA #11? Would you agree that it would look
7 more like the blue line than the red line?

8 A. I would have to think a little bit about
9 that. I think the MCL values import in the
10 starting point, but the curvature also
11 changes. So I'd have to look at the entire
12 MRI formula to fit the new zonal demand curve
13 for Northern New England.

14 Q. Fair enough. And the curve may change --
15 some of the shape of the curve may change.
16 You wouldn't expect it to be to a great
17 extent, but I suppose you'd reserve judgment
18 for that. But importantly, the positioning
19 of the curve, would you agree that the curve
20 would be positioned quite similarly to the
21 blue curve we see here on this figure?

22 A. With your hypothetical that the MCL value
23 would be similar to the FCA #11 value, the
24 curve would start to move away from the zero

1 access. But again, I think the curvature
2 might be different.

3 Q. And do you have any sense if the curve might
4 be steeper, more shallow?

5 A. I'd have to go back and take a look at the
6 full formula. So they actually fit a
7 polynomial type of formula to it.

8 Q. But you would agree that, you know, changes
9 from one year to the next in the system,
10 other things may go into the MRI calculation.
11 You wouldn't expect to see a fundamentally
12 different shape on the curve, would you?

13 A. Well, I don't think you would expect the
14 curve to, like, invert itself. Excuse me.
15 But as you can see, even between the red and
16 blue, although they're starting different
17 zero points, they have different what I'm
18 going to call "Y value" positions, and that's
19 what I was referring to in terms of shape.

20 Q. Sorry. Do you need a break for water?

21 A. No, I have some. Thank you.

22 Q. Okay. Take a moment.

23 (Pause in proceedings)

24 Q. Are you okay? You want another --

1 A. No, no, I'm good. Thank you.

2 Q. Okay. So, just sticking with this kind of
3 line of discussion. So, again, if we were to
4 assume that the MCL for 12, FCA #12, is the
5 same as for FCA #11, and that the blue curve,
6 more or less there may be some change to the
7 actual slope of the curve, but at least where
8 it starts to drop in price would be the same,
9 if you were to take that blue curve and then
10 add back in the 530 megawatts that you
11 modeled as retiring, but which we now know
12 will not retire in FCA #12, if we were to add
13 that back into the supply stack, which you
14 said was 9,050 megawatts, that would get us
15 up to roughly 9,580 megawatts. If you were
16 to look at 9,580 megawatts, which is the line
17 that I drew in, this black line, and look at
18 where it intersects with the curve, what kind
19 of price impact would you say that would
20 have? In the order of, say, \$5?

21 A. I think it would be in that range, but not
22 fully \$5, but again, because I think the
23 shape is changing, but it wouldn't be zero.
24 I would agree with the hypothetical you're

1 presenting, that it would no longer be
2 crossing at the zero-dollar mark.

3 Q. Okay. And what that value represents, let's
4 say it's \$5, means that resources in Northern
5 New England would be paid \$5 less than
6 resources in the rest of the system; is that
7 correct?

8 A. It is representing the congestion price
9 difference between the rest of New England
10 and Northern New England.

11 Q. Now, you testified elsewhere that 60 cents of
12 price suppression -- or 60 cents of a reduced
13 price for Northern New England assets would
14 probably not compel retirements.

15 My question for you is: Would something
16 in the order of a \$5 decrease in capacity
17 prices for resources in Northern New England,
18 in your opinion, would that more likely
19 compel retirements, one or more retirements?

20 A. I think we need to take a look at the details
21 to see whether -- well, let's put it this
22 way: What this is representing is the price
23 difference. So what we would need to take a
24 look at is the price paid. So, if under your

1 changes to the MCL, which are driven over
2 changes to the ICR or the LRA and other
3 changes in the market, we would want to see
4 what the full base capacity price is. Five
5 dollars is just the difference between what
6 generators in Southern Massachusetts are
7 getting paid versus Northern New England.
8 The economics are really about the price
9 levels and the revenues collected. So I
10 would agree with you that Northern New
11 England generators, under this hypothetical,
12 would be paid less than their peers in other
13 parts of New England. Whether it's enough to
14 force a retirement depends on the price
15 level, which I don't know what it would be.
16 We'd need to actually study it.

17 Q. Well, let's take your prediction on FCA #12
18 of a \$6.30 clearing price. That would
19 result -- a price differential of \$5 would
20 cause \$1.30 clearing price for Northern New
21 England assets. In your opinion, would \$1.30
22 price for assets in Northern New England
23 compel retirements in Northern New England?

24 A. In your hypothetical, \$1.30 might compel

1 retirements anywhere. But I don't accept the
2 six -- I don't expect -- I'm not willing to
3 accept the way that you've created, built up
4 that hypothetical to the \$1.30. I agree that
5 \$1.30 level is a very low price. It would
6 start to cause folks to delist in the market
7 and not willingly take on a capacity supply
8 obligation. But I don't believe the math
9 behind the hypothetical with your choice of
10 starting point is correct.

11 Q. Understood. You're saying if Northern New
12 England did price-separate, then perhaps we
13 wouldn't have \$6.30 as a system-wide clearing
14 price. Understood. I guess the point being,
15 and the question I ask is: If we had
16 clearing prices, say in the order of six,
17 seven, the clearing prices we've seen in the
18 last couple auctions, a \$5 price differential
19 is a pretty major price differential and in
20 fact causes capacity prices for Northern New
21 England resources, including, of course,
22 resources in New Hampshire, to be faced with
23 perhaps the retirement decision, given those
24 very low capacity prices. Would you agree?

1 A. I would, again, not agree to, again, the
2 build-up of the hypothetical. You were
3 saying the reason you're starting with six is
4 because those are in the range of prices
5 we've seen in the last few Forward Capacity
6 Auctions. We have to keep in mind that in
7 the last few Forward Capacity Auctions we
8 have not had price separation. So I don't
9 believe that's a reason to again create that
10 hypothetical with a starting six.

11 Q. We also haven't had 1,000 megawatts of new
12 input into Northern New England in the last
13 couple auctions either, so that might bear on
14 price separation in Northern New England?

15 A. Well, we've had quite a bit, actually, of new
16 resources. Not new imports, but new
17 resources. We've added significant amounts
18 of new generating resources in the last few
19 auctions.

20 Q. In Northern New England?

21 A. Across New England, without price separation.
22 So if there's no price separation, it doesn't
23 matter. We've added new resource --

24 Q. Well, the price separation would matter

1 because we're talking about Northern New
2 England price separation. So whether they,
3 new resources came in to Northern New England
4 or elsewhere I think would bear on whether or
5 not Northern New England would more likely
6 price-separate; correct?

7 A. To that question I would say correct, but not
8 to the original question that you asked in
9 setting your hypothetical.

10 Q. Okay. I'm going to turn my attention to
11 another issue, if I may. If I could turn
12 your attention to Page 9 and 10 of your
13 Rebuttal Report.

14 Ms. Frayer, referring to Page 10...

15 (Discussion off the record.)

16 A. That chart is public. So that chart is
17 public.

18 BY MR. ANDERSON:

19 Q. So if I may refer to a public chart on
20 Page 10 of your Rebuttal Report, I'd like to
21 mark that as NEPGA Exhibit 5, please.

22 (Exhibit NEPGA 5 marked for
23 identification.)

24 Q. And you refer to this chart as providing

1 support for your assertion that ISO-New
2 England is forecasting growing capacity
3 market revenues; is that correct?

4 A. I've referred to this chart, I believe on the
5 prior page, to make the point that capacity
6 markets will grow with imports over time.
7 That's actually the exact sentence of the
8 quote.

9 Q. Actually, if I may quote from Page 10 [sic],
10 it says, "It is clear that ISO-New England
11 forecasts growing capacity market revenues in
12 the future."

13 (Witness reviews document.)

14 A. Sorry. Where are you quoting from?

15 Q. I'm quoting from the bottom of Page 9 in your
16 Rebuttal Report. The sentence begins, "If
17 the size of each segment is compared" -- and
18 you're referring to the Figure 2 --

19 A. Okay. Yup.

20 Q. -- on the screen -- "it is clear that ISO-New
21 England forecasts growing capacity market
22 revenues in the future."

23 A. Growing capacity market revenues in the
24 future for these types of resources, again,

1 because of the reference to this chart.

2 Q. Sure. And, actually, the resources you're
3 referring to are gas-fired resources,
4 specifically combined cycles; is that
5 correct?

6 A. I believe there's two in this chart:
7 Combined cycle, the green color bars, and CT,
8 which is a peaker, that's the red.

9 Q. And are you implying by that, that ISO-New
10 England is predicting that capacity market
11 revenues will continue to increase?

12 A. What I'm applying, again, is the original
13 sentence that precedes the introduction of
14 this figure on Page 9, where I said -- where
15 I talk even in this entire section about the
16 natural integration or relationship between
17 energy and capacity markets, where if energy
18 market prices are coming down, capacity
19 market prices have to rise. And this is not
20 just limited to this chart. Executives from
21 ISO-New England have been talking about
22 this -- and I can find you multiple
23 references to this idea -- repeatedly in
24 recent years. So that's what I'm saying.

1 It's not an absolute that capacity market
2 revenues are going up. It's about the
3 relationship between energy and capacity.

4 Q. Okay. So you would agree, then, that ISO-New
5 England -- or at least you're not citing or
6 reporting that ISO-New England is predicting
7 increasing capacity prices out into the
8 future.

9 A. What they're predicting --

10 Q. That's a "Yes" or "No."

11 A. I don't think ISO-New England does specific
12 predictions in isolation of capacity prices,
13 so I wouldn't be able to say that. But they
14 do do analyses like this and in other veins
15 as part of their own economic studies where
16 they're looking at the relationship between
17 energy capacity markets.

18 Q. Sure. But I just want to establish that what
19 you're talking about as a relationship
20 between energy and capacity, it could be read
21 to say that ISO-New England is predicting,
22 and again I'll quote, "forecasts growing
23 capacity market revenues in the future." I
24 understand now, and I think I understood

1 then, that what you're talking about is
2 revenues for particular types of resources.
3 CCs and TTs may need greater capacity market
4 revenues due to energy prices. But certainly
5 ISO-New England itself is not predicting,
6 forecasting growing capacity market revenues
7 and clearing prices in the future, are they?

8 A. Well, they would need to have a prediction of
9 a capacity market price behind these bars. I
10 don't know what the exact numbers are, but
11 there is a capacity market price forecast
12 implicit in this.

13 Q. Do these bars represent predictions? Or are
14 these -- because these bars, you're looking
15 at 2016, 2017, 2018. These are auctions that
16 have already cleared. In fact, the capacity
17 revenues represented in this figure are set;
18 correct?

19 A. I agree with you there. But they are making
20 other -- as part of their economic studies,
21 they are making longer-term predictions about
22 the future capacity market, as they are
23 required, because those studies go out much
24 further than the annual markets report does.

1 Q. And one last point on this. I'm sorry. If
2 you were to add 2019 and 2020 to that chart,
3 and we do have those values, would the
4 capacity bars be smaller than they are in
5 2018? In other words, have the markets
6 cleared lower --

7 A. At the lower price --

8 Q. -- in subsequent years since 2018?

9 A. Yes, although I don't know what the energy
10 bars would look like because that is a
11 prediction.

12 Q. Hmm-hmm. Okay. But at least with respect to
13 capacity, 2018 really represents kind of the
14 high mark for system-wide clearing prices in
15 New England, I believe, as it refers to the
16 2018 year, half of which -- or, you know,
17 more than half of which is in the FCA #9
18 capacity commitment period, and that was the
19 highest system-wide clearing price New
20 England's ever seen; isn't that right?

21 A. That is correct.

22 Q. Okay. Thanks.

23 If I could talk a little bit about your
24 prediction of the clearing price in FCA #11.

1 Now, you predicted that FCA #11 would clear
2 at \$6.30 system-wide; correct?

3 A. Are you speaking about our Updated Analysis?
4 I think so.

5 Q. Yes, in your Updated Analysis.

6 A. Yes, that -- well, that is correct. I want
7 to make sure that we're not going into
8 confidential information again.

9 (Witness reviews document.)

10 Q. You have a chart that or a figure that
11 represents your predicted clearing price for
12 all the auctions over time, both in the Base
13 and in the Project Case. Is that --

14 A. It's confidential.

15 MR. ANDERSON: I can hold off on
16 that for now if that would be convenient for
17 the Committee. Yes, it will be. Okay. Let me
18 see.

19 CHAIRMAN HONIGBERG: I think
20 what we'll do, Mr. Anderson, is when the next
21 questioner is going to do a confidential
22 portion, we'll have you do it then.

23 MR. ANDERSON: Okay. Fair
24 enough. I'm just parsing through to be sure

1 that I have a section that may not require
2 confidential treatment.

3 (Pause in proceedings)

4 MR. ANDERSON: I do have one
5 more series of questions that I am certain does
6 not refer to confidential material, and I'll
7 reserve the rest of my questions for that
8 period of the confidential material. So this
9 will be my last for now.

10 BY MR. ANDERSON:

11 Q. I just want to refer back to some comments
12 you made yesterday when you were testifying.

13 You testified at one point that ISO-New
14 England wants this type of resource, the
15 import capacity resource coming over Northern
16 Pass. Do you recall saying that, "ISO wants
17 this kind of resource"?

18 A. I believe I said something like that, yes.

19 Q. And it struck me as odd because, you know,
20 I'd asked your opinion: Do you believe that
21 ISO-New England is either a policy maker or
22 makes decisions or in fact in any way designs
23 the market in order to favor one type of
24 resource over another?

1 A. The answer to the question is that ISO-New
2 England does not want to design market rules
3 that are favoring specific resources --

4 Q. Okay. So by saying --

5 A. -- to my knowledge. I'm speaking to my
6 knowledge. I'm not speaking for ISO-New
7 England.

8 Q. Well, by saying that ISO-New England, quote,
9 Wants this type of resource, it certainly
10 gives off the impression that it's got ISO's
11 backing, so to speak, and perhaps encouraging
12 the Project to come in and be approved. And
13 you would agree, though, that ISO-New England
14 does not take opinions on specific resources
15 in that way. In fact, their mandate, their
16 only obligation is to design and administer
17 markets in a resource-neutral way that
18 procures resources at the lowest possible
19 cost to meet the resource adequacy needs of
20 the region; is that correct?

21 A. I don't know if that's word-for-word correct,
22 but I wouldn't argue with the general
23 description there of their mandate.

24 Q. So does that sound like an organization that

1 expresses its want for a particular resource?

2 A. Well, I don't know -- I can't speak for their
3 organization. But what I can do is explain
4 my statement about "want" if you'd like,
5 because there are lots of public documents
6 and speeches done by executives at ISO-New
7 England that speak about "the fit" within
8 their market for a variety of different
9 infrastructure resources. Gas pipelines
10 they've talked about. They've talked about
11 transmission that brings new clean energy.
12 Multiple projects. In fact, I think Counsel
13 for the Public had an exhibit earlier that
14 showed multiple transmission concepts.
15 That's taken from an ISO-New England
16 document.

17 Q. Well, everything you've listed are
18 reliability projects. And certainly
19 reliability, maintaining system reliability
20 is part of ISO-New England's mandate. We've
21 discussed and testified that Northern Pass is
22 not a reliability project. It's a merchant
23 project. So my question, perhaps more
24 pointed is: Does ISO-New England express a

1 preference for one merchant project over
2 another?

3 A. They don't express project-specific
4 preferences, but they have talked about those
5 clean energy imports and that there's a
6 number of non-reliability projects for
7 transmission being proposed that they view as
8 favorable for the resource adequacy of their
9 market. Doesn't mean that they express a
10 preference for those projects over, let's say
11 a combined cycle plant in a particular part.
12 But it's part of their own presentation where
13 they've talked about the merchant -- the
14 various merchant transmission projects that
15 have been proposed.

16 Q. Well, reference to a project is not
17 expressing a preference for a project, is it?

18 A. No. And I've said they don't express
19 preference for any specific project. I've
20 never seen them say, "I want Northern Pass."
21 And I think my point was that they want a
22 project like Northern Pass. They would like
23 projects that bring additional energy and
24 capacity to the market.

1 Q. So when you say "like Northern Pass," you
2 mean any project that brings energy or
3 provides energy to New England at the lowest
4 possible cost. Is that --

5 A. You could say that has the characteristics
6 and features of a project like this. Because
7 all they care about energy capacity; right?

8 Q. All they care about is meeting their resource
9 adequacy requirement at the lowest possible
10 cost and markets that achieve that goal. You
11 keep talking about "a project like Northern
12 Pass," and that's ambiguous to me. I'm
13 trying to be clear if you're saying a project
14 that is a hydro project and an import into
15 New England or if you're really simply
16 referring to ISO-New England, what they want
17 is the least-cost solution to their resource
18 adequacy needs, and if a particular project
19 fits into that, and the market procures that
20 product, ISO is happy with that.

21 A. I would agree with that part of your
22 question.

23 Q. Okay. Thank you.

24 MR. ANDERSON: I do think the

1 remainder of my questions would go into
2 confidential material. So at this point I
3 should cede the mic.

4 CHAIRMAN HONIGBERG: All right.
5 Next on the list is Municipal Groups. Is
6 there -- but before turning to them, is there
7 anybody who has something that would take, 15
8 to 30 minutes of non-confidential and we could
9 get that person or that group started and
10 finished?

11 MS. FILLMORE: Mr. Chair.

12 CHAIRMAN HONIGBERG: That's Ms.
13 Fillmore.

14 MS. FILLMORE: I have about 15
15 minutes. Mine is not confidential.

16 CHAIRMAN HONIGBERG: And you
17 said you have about 15 minutes?

18 MS. FILLMORE: Yes.

19 CHAIRMAN HONIGBERG: And you're
20 part of the Municipal Groups anyway, Ms.
21 Fillmore.

22 MS. FILLMORE: Yes.

23 CHAIRMAN HONIGBERG: So that
24 works out perfectly.

1 MS. FILLMORE: It does.

2 CHAIRMAN HONIGBERG: Are you
3 going to be questioning from there, as is your
4 wont?

5 MS. FILLMORE: I will.

6 CROSS-EXAMINATION

7 BY MS. FILLMORE:

8 Q. Ms. Frayer, I'm over here. Hello. My name
9 is Christine Fillmore. I'm representing
10 several municipalities in this matter, and
11 I'm a spokesperson for Municipal Group 2.

12 I would like to start by talking a
13 little bit about your October 2015 report.

14 MS. FILLMORE: Dawn, can you
15 turn on the Apple TV, please?

16 Q. Just generally, this is the section, the next
17 14 pages or so of this, Section 7, this is
18 the section --

19 A. I don't see anything on my screen. Oh,
20 sorry.

21 Q. Okay. And here's where you present your
22 predictions of how many jobs will be created
23 if the Project were approved and how much you
24 estimate GDP would increase if the Project

1 were approved; is that correct?

2 A. Yes.

3 Q. And that includes both the planning and
4 construction phase and the operations phase;
5 is that correct?

6 A. Yes.

7 Q. To develop those predictions, I think you
8 told Attorney Pappas yesterday that you had a
9 choice of which factors to select in the REMI
10 PI+ model, which ones to turn on?

11 A. In order to simulate these expenditures and
12 impacts they have, there is some flexibility
13 in REMI to do it one way or another way, yes.

14 Q. Okay. If the Project were to be approved and
15 get built and begin operations, would you
16 then analyze how close your predictions in
17 your reports were to what actually happens?

18 A. If I could just confirm I understood the
19 question, Ms. Fillmore. You're asking if I
20 would do a backcast once the Project is
21 operating to see if my predictions in 2016
22 were accurate?

23 Q. That's right.

24 A. We could try to do that, but it wouldn't be a

1 REMI modeling tool to do that.

2 Q. Do you plan to do that?

3 A. I have not been hired to do that.

4 Q. You've provided predictions of a similar
5 nature for several other projects in the
6 past, haven't you?

7 A. "Predictions," I assume you're speaking about
8 the REMI PI+ model, local economic benefit
9 modeling?

10 Q. Yes.

11 A. Yes, I have provided predictions like this in
12 other projects.

13 Q. And is one of those projects the Greater
14 Springfield Reliability Project?

15 A. I did not provide local economic benefit
16 analysis for the GSRP project, as far as I
17 recall.

18 Q. You did analyze the economic benefits of the
19 Project.

20 A. I looked at the economic benefits through the
21 lens of the electricity market benefits,
22 which are discussed in earlier chapters of
23 this report.

24 Q. Okay. Did you provide a local economic

1 benefit analysis for the Champlain-Hudson
2 Power Express Project?

3 A. I did as part of their article -- they're
4 siting procedures in New York.

5 Q. And has that project begun construction?

6 A. No, it has not, to my knowledge, no.

7 Q. Have you provided analysis of local economic
8 benefits for any project that has
9 subsequently been approved, constructed and
10 begun operations?

11 A. Great question. I'm just thinking. I don't
12 think I could come up with a project right
13 now, off the top of my head. Infrastructure
14 projects like this sometimes take many years
15 to develop. So I don't know if I have done
16 this analysis -- I don't think I've done this
17 analysis for projects that have actually
18 reached the fruition of operations.

19 Q. So would it be fair to say that there is at
20 this point no empirical evidence of how
21 accurate your predictions for this or any
22 project of local economic benefits have been?

23 A. There isn't any studies that I have done that
24 showed as to the nature of the empirical

1 evidence. But the REMI model is used by
2 many, many professionals. And there may be
3 quite a bit of empirical evidence as to the
4 forecasting accuracy of that modeling tool.
5 I just don't have it on the tip of my fingers
6 right now.

7 Q. You are the only expert in this proceeding
8 who's used the REMI model. You are the only
9 expert presenting for the Applicant.

10 A. I am the only expert presenting for the
11 Applicant on this modeling piece.

12 Q. You've also provided projections of other
13 economic benefits, the ones you were just
14 discussing with Mr. Anderson. And have you
15 provided those predictions for any project
16 that has subsequently been constructed and
17 begun operations?

18 A. Probably. I'd have to go back and take a
19 look through my corporate CV and find a
20 project, because some infrastructure projects
21 other than transmission, we have done
22 analyses forecasts of electricity markets for
23 some of those that are in operation.

24 Q. And have you gone back for any of those

1 projects and looked at the comparison of what
2 your projection was and what actually
3 happened?

4 A. I have never been asked by a project to do
5 that. But I do routinely go back and look at
6 my model's forecasting accuracy, independent
7 of specific project engagements. And I
8 actually think we presented some of that at
9 one point through the technical sessions. So
10 we do do backcasting of our models
11 independent of specific project engagements.
12 We do that routinely, probably once every
13 year or year and a half.

14 Q. But you don't look specifically at any
15 predictions that you've made.

16 A. Well, it's actually looking at forecast
17 accuracy, so it's comparing a prediction to
18 what actually happened.

19 Q. Is any of that information before this
20 Committee?

21 A. I'd have to check and see if it's part of a
22 data discovery we provided. I don't recall
23 if it was a data discovery formally provided
24 or informally provided. Can I get back to

1 you after the break?

2 Q. No, I think you've answered my question
3 enough. Well, was any of that backcasting
4 done for a specific project?

5 A. No. As I've said, I don't have clients who
6 come back and ask me to do a backcast. But
7 we take it upon ourselves to do our own
8 backcasts.

9 Q. Okay. Also in that same section in your
10 Original Report, and in your Rebuttal Report,
11 can you tell me if your report includes an
12 estimate of the number of jobs that would be
13 lost if the Project were to be approved?

14 A. Can you clarify your question? What do you
15 mean by "number of jobs lost"? In what
16 context?

17 Q. I think you might characterize it as a
18 "negative benefit."

19 A. So the model does predict there may be some
20 negative impacts in the longer term, what we
21 call a "rebound effect" in the model, where
22 if you're going -- if the economy is going
23 through a boom, once that boom ends, the
24 economy has to kind of shrink back to the

1 more normal size and therefore rebalance
2 itself. So those are presented in some of my
3 figures in this report.

4 Q. Do those figures reflect impacts during the
5 construction phase or just the operations
6 phase?

7 A. The operations phase.

8 Q. So, for the construction phase, does your
9 report include any information on any
10 potential negative effects on jobs?

11 A. No, we didn't project any negative effects on
12 jobs.

13 Q. So you're saying there would be no negative
14 impacts on jobs during construction.

15 A. Based on my analysis in the Original Report,
16 yes.

17 Q. And what is the basis of that analysis?

18 A. I'm confused by your question. Can you ask
19 it in a bit more specific -- the basis is
20 documented in my report.

21 Q. Can you tell me where?

22 A. Well, Section 7 describes all of the findings
23 from the local economic benefit analysis.

24 And it's doing so and describes all the

1 inputs and the assumptions. That's what I
2 assume you mean by "basis"?

3 Q. Yes. Can you show me where exactly in
4 Section 7 you refer to negative impacts on
5 jobs during construction?

6 A. Well, I don't. That's what I thought I just
7 said.

8 Q. Can you show me where you give the reason
9 that there are no negative impacts to jobs?

10 A. I don't have to give a reason. The analysis
11 begins with what are the impacts. It doesn't
12 begin with a question, "What are the positive
13 impacts?" If the model predicted negative
14 impacts, it would have presented itself in
15 the findings.

16 Q. I see. Bear with me just one moment.

17 (Pause in proceedings)

18 Q. I'm looking now at Applicant's Exhibit 102.
19 This is your Rebuttal Report. And
20 Section 5.2 is the section on KRA, Counsel
21 for the Public's experts, and you talk about
22 their report.

23 A. That's correct.

24 Q. And I'm looking at the second paragraph and

1 this sentence which I am highlighting. Do
2 you see that?

3 A. Yes.

4 Q. And it says, "For example, for the negative
5 externalities projected to be experienced for
6 the Town of Plymouth during construction due
7 to traffic delays, there may have been
8 offsetting temporary positive economic
9 impacts for surrounding communities with
10 similar business." Did I read that
11 correctly?

12 A. Yes, you did.

13 Q. So if business is lost in downtown Plymouth
14 during construction and people go elsewhere
15 to shop or eat or see a show, it's a wash,
16 essentially -- is that what you're saying?
17 -- because they'll do those things somewhere
18 else?

19 A. I'm only saying it's a wash -- I appreciate
20 it's not a wash from the perspective of the
21 unique business. But from a REMI modeling
22 perspective, which is what we did at a state
23 level, and which is what KRA also did at a
24 state level, it could be a wash. That's what

1 I'm saying. Our analysis isn't granular
2 enough, neither mine nor Mr. Kavet's and
3 Mr. Rockler's, to go down to that individual
4 business level within the REMI model we're
5 using. You can ask REMI to develop another
6 type of model that is more granular, but it's
7 not the tool that either one of us had access
8 to in this instance.

9 Q. So would you agree with me that your analysis
10 does not present as detailed a picture as it
11 might?

12 A. I would agree that our analysis is looking at
13 a state-by-state perspective. I would also
14 agree that there are differences of opinion
15 as to, which is what this paragraph goes, as
16 to certain aspects of the impact that may be
17 more granular than what is represented by the
18 model.

19 Q. Would you agree with me that business that
20 shifts from Plymouth to a nearby town doesn't
21 help Plymouth?

22 A. I would agree with that statement in general.

23 Q. And does the REMI model take into account
24 permanent impacts that might result from loss

1 of business from one town that shifts to
2 another town and does not come back after
3 construction is completed?

4 A. If there was empirical evidence of that and
5 there was a net effect, the model could do it
6 on a state level. But it doesn't report
7 results on a town-by-town level.

8 Q. Are you saying that the town-by-town level is
9 not important enough for the Committee to
10 consider it?

11 A. No, I'm not saying that. I'm just saying
12 that was outside the scope of my analysis.

13 Q. Why?

14 A. My analysis was to look at the benefits to
15 New Hampshire as a whole, not to individual
16 constituents.

17 Q. I'd like to refer now to Counsel for the
18 Public's Exhibit 148, which is also Joint
19 Muni 200. And I am looking at Page 63. I
20 will represent to you that this and the next
21 20 or so pages include e-mails and letters
22 from 22 businesses, owners or operators of
23 businesses in downtown Plymouth with their
24 concerns about the impact that construction

1 may have on those businesses. I'm not going
2 to go through them all. But I'd like to ask
3 you, are you familiar with these letters and
4 e-mails?

5 A. No, I haven't reviewed them.

6 Q. And you told Attorney Pappas yesterday that
7 you relied on the Applicant's other experts
8 regarding construction impacts, as far as
9 jobs go; is that correct?

10 A. Well, I relied on the other evidence
11 regarding construction impacts in order to
12 then do the forecasts that I did around jobs.
13 They themselves didn't look at jobs. I'm the
14 witness responsible for looking at job
15 impacts, GDP impacts.

16 Q. I thought you told Attorney Pappas yesterday
17 that you did not look at the specifics of how
18 jobs would be impacted by the construction,
19 that you had relied on other experts.

20 A. That's true. Yes, I relied on other experts,
21 for example, for opinions on implications of
22 the aesthetics and so forth. That's an
23 example. But that other expert didn't tell
24 me a specific -- didn't conclude with a

1 specific job number.

2 Q. Right.

3 A. Okay.

4 Q. Do you know if those experts talked with
5 these business owners or any others in
6 reaching those conclusions?

7 A. I don't know. You'd have to ask those other
8 experts.

9 Q. Do you know what kind of research or study
10 they did to come to those conclusions?

11 A. I'm not familiar with the details of their
12 work.

13 Q. Which experts are you talking about here?

14 A. I'd have to go back through my notes to find
15 the names. I apologize. I'm not very good
16 at recalling all the names. There's a big
17 pool of experts that have been retained. But
18 I do believe they may have been referenced in
19 footnotes throughout my rebuttal.

20 Q. Thank you.

21 A. For example, just as an aside, Appendix C of
22 my rebuttal, starting on Page 69, does
23 document all the background information in
24 our rebuttal's economic impact analysis. And

1 I think there is reference there, topic by
2 topic, to specific experts we discussed the
3 details with.

4 Q. I seem to have lost my exhibit. Hold on one
5 moment, please.

6 (Pause in proceedings)

7 Q. Do you have your April 2017 Rebuttal Report
8 in front of you?

9 A. I do, yeah.

10 Q. And now I do, too. So I would like to go to
11 Page 47. Looking at Footnote 95, which is
12 now on the screen, would it be accurate to
13 summarize this footnote criticizes KRA's
14 assumptions which were based in part on
15 information about an underground construction
16 project in Massachusetts?

17 A. Yes.

18 Q. And in particular, I'd like to draw your
19 attention to the last sentence, which I will
20 highlight now. It says, "KRA has also
21 mistaken the loss in 'foot traffic' as
22 'sales,' ignoring the fact that the lost foot
23 traffic could be made up for in higher sales
24 per customer." Do you see that?

1 A. Yes.

2 Q. So you're saying here that -- do I understand
3 correctly, you're saying that if businesses
4 lose foot traffic during construction, that
5 those businesses, say in Plymouth or
6 Franconia, would be able to make up for it by
7 selling more goods or services to the
8 customers who manage to get there?

9 A. This is a critique of a specific aspect of
10 KRA's input. It's a critique more of the
11 math. So if I had to answer your question,
12 can I provide you with a simple illustrative
13 example?

14 Q. Yes, please.

15 A. So the idea or understanding is that, instead
16 of assuming that a 30 percent loss in foot
17 traffic is perfectly equal to 30 percent loss
18 in sales, what you're suggesting is that more
19 detailed analysis could be done where a loss
20 of foot traffic means a loss of customers.
21 But then part of that could be offset, let's
22 say the 30 percent loss of foot traffic, with
23 some increase in sales per customer. It's
24 not one to one. That is our question: Why

1 would it be one to one? There is no
2 foundation for it being one to one. No
3 evidence provided that it's one to one. And
4 the loss in sales is not solely a function of
5 foot traffic.

6 Q. Does this sentence in the footnote say that
7 part of the loss could be made up for?

8 A. Well, it says "could be made up." So it
9 doesn't say it will be made up a hundred
10 percent. So it's positing that there is
11 additional factors that should be considered
12 that could change the outcome.

13 Q. Is there any data in your report or that you
14 used in developing this Rebuttal Report that
15 shows how likely that scenario is, that loss
16 of sales from foot traffic could be made up
17 for with increased sales to customers?

18 A. I have no additional data beyond what's in
19 the report.

20 Q. So you haven't conducted any studies or
21 modeling on that particular issue.

22 A. No, I have not. This is a critique of KRA's
23 assumptions.

24 Q. I understand that. I'm trying to understand

1 the factual basis behind that critique.

2 A. The factual basis is that sales is not just a
3 function of the number of customers that come
4 through the door. Sales is a function of the
5 type of customer you get through the door and
6 a lot of other considerations and factors.

7 Q. Are you familiar with the Flying Monkey
8 Performance Center in Plymouth?

9 A. No, sadly I am not.

10 Q. Are you aware -- I guess you're not, then --
11 that they present live music and
12 performances?

13 A. I am not aware of that.

14 Q. Well, I'll posit to you that they're there
15 and that's what they do.

16 Can you explain to me how a business
17 like that could make up for a loss in
18 customers through additional sales to the
19 ones who do get there? Would a person buy
20 two tickets?

21 A. No. I'm not familiar with what their
22 specific business revenue streams are. Do
23 they have a bar or restaurant on site?

24 Q. They do.

1 A. So, sales per customer is definitely a very
2 important driver for restaurants and drinking
3 establishments.

4 Q. Thank you. That's all I have.

5 CHAIRMAN HONIGBERG: All right.
6 We will take our lunch break and come back in
7 about an hour.

8
9 (Lunch recess taken at 12:32 p.m. and
10 concludes the DAY 14 Morning Session.
11 The hearing continues under separate
12 cover in the transcript noted as DAY 14
13 Afternoon session.)

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C E R T I F I C A T E

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

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

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

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