

In Re:
DE 10-195
PSNH/LAIDLAW BERLIN BIOPOWER

DAY 5 - AFTERNOON SESSION ONLY
February 8, 2011

STEVEN E. PATNAUDE, LCR NO. 52

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DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER

Page 1

1 STATE OF NEW HAMPSHIRE
2 PUBLIC UTILITIES COMMISSION
3
4 February 8, 2011 - 2:08 p.m. DAY 5
5 Concord, New Hampshire AFTERNOON SESSION ONLY
6
7 RE: DE 10-195
8 PUBLIC SERVICE CO. OF NEW HAMPSHIRE:
9 Petition for Approval of Power
10 Purchase Agreement between PSNH
11 and Laidlaw Berlin BioPower, LLC.
12
13 PRESENT: Chairman Thomas B. Getz, Presiding
14 Commissioner Clifton C. Below
15 Commissioner Amy L. Ignatius
16
17 Sandy Deno, Clerk
18
19 APPEARANCES: Reptg. Public Service Co. of New Hampshire:
20 Robert A. Bersak, Esq.
21
22 Reptg. the City of Berlin:
23 Christopher Boldt, Esq. (Donahue, Tucker...)
24 Keriann Roman, Esq. (Donahue, Tucker...)
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26 Reptg. Bridgewater Power, Pinetree Power,
27 Pinetree Power-Tamworth, DG Whitefield Power,
28 Springfield Power & Indeck Energy-Alexandria:
29 David J. Shulock, Esq. (Brown, Olson & Gould)
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31 Reptg. Clean Power Development:
32 James T. Rodier, Esq.
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34 Reptg. Edrest Properties, LLC:
35 Jonathan Edwards
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37 COURT REPORTER: Steven E. Patnaude, LCR No. 52
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Page 2

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2 APPEARANCES: (C o n t i n u e d)
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4 Reptg. Residential Ratepayers:
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11 Edward N. Damon, Esq.
12 Thomas C. Frantz, Director/Electric Div.
13 George R. McCluskey, Electric Division
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Page 3

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2 I N D E X
3
4 WITNESS PANEL: THOMAS C. FRANTZ
5 GEORGE R. McCLUSKEY
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12
13 E X H I B I T S
14 EXHIBIT NO. D E S C R I P T I O N PAGE NO.
15 PSNH 19 Amended version by PSNH of 27
16 Staff Exhibit 15
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Page 4

1 PROCEEDING
2 (Hearing resumed at 2:08 p.m.)
3 CHAIRMAN GETZ: Okay. We're back on the
4 record in DE 10-195. Anything to address before we turn
5 to Mr. Bersak?
6 MS. HATFIELD: Mr. Chairman, I can
7 report that I've spoken with all of the parties about the
8 need for briefs or request for briefs. And, I think it's
9 fair to say that the parties, other than Staff, Staff, I
10 understand, is not taking a position, but I think it's
11 fair to say that the other parties agree that, in light of
12 potential time delays that a briefing schedule could
13 create, as well as the expense of briefs, that the
14 parties, other than Staff, will not be asking for briefs
15 and don't believe that they're necessary. But, of course,
16 the Commission has the discretion to request them.
17 CHAIRMAN GETZ: Okay. Then, of course,
18 the notion would be closing statements, without briefs,
19 from a substantial majority of the parties?
20 MS. HATFIELD: Yes.
21 CHAIRMAN GETZ: Okay. Which I would
22 take that the closing statements would be of some length.
23 I'm thinking to the issue of whether we're going to get
24 done today, or I think our schedule is open tomorrow, if

Page 5

1 we had to come back tomorrow.
2 But let me put all that aside for now,
3 and move ahead with cross-examination and see where we
4 are. But, Ms. Amidon?
5 MS. AMIDON: If I may, there's a
6 representative from Councilor Burton's office in the room,
7 and she did provide prior to -- right at the lunch break a
8 copy of an additional letter from Councilor Burton. So,
9 you will find that in the file. We have arranged for it
10 to be filed in the Docketbook. And, I just wanted to
11 point that out to you, that there is an additional filing
12 in there.
13 CHAIRMAN GETZ: Okay. Thank you.
14 Anything else?
15 (No verbal response)
16 CHAIRMAN GETZ: All right. Mr. Bersak.
17 MR. BERSAK: Thank you, Mr. Chairman.
18 Good afternoon, Mr. McCluskey.
19 WITNESS McCLUSKEY: Good afternoon.
20 MR. BERSAK: And, Mr. Frantz.
21 WITNESS FRANTZ: Good afternoon.
22 CROSS-EXAMINATION (resumed)
23 BY MR. BERSAK:
24 Q. I'll start with you, Mr. Frantz. Hopefully, I'll be

Page 6

1 able to get through you very quickly here. Is it
2 correct to say that your testimony was limited to a
3 discussion of the economic benefits of the Power
4 Purchase Agreement which we filed here for approval?
5 A. (Frantz) Yes.
6 Q. And, is it also true, you're not a logger, but you do
7 own a chainsaw?
8 A. (Frantz) True.
9 Q. Okay. Now that we've established that, we can move on.
10 You described the use of the NIMS II model as an
11 input/output model. Am I correct in my understanding
12 of that that you input various economic assumptions,
13 and then the model then predicts certain output
14 economic results?
15 A. (Frantz) An input/output model portrays the
16 relationships of an economy. It portrays what
17 industries purchase directly from other industries, as
18 well as what households purchase as final demand. And,
19 through the use of an input/output model, which
20 includes a lot of other actual matrices, you get
21 multiplier effects that show what an increase in
22 \$1 million worth of final demand will actually require
23 from the particular industry, as well as the other
24 industries upstream from that industry.

Page 7

1 Q. If the data that you input into the model vary, would
2 you expect that the predicted output would also likely
3 change?
4 A. (Frantz) Absolutely. As a matter of fact, the model
5 works both ways.
6 Q. You are familiar with Dr. Shapiro's update regarding a
7 new development that is dependent on the Laidlaw
8 facility being built, that would create approximately
9 65 more jobs in Berlin. Is that an example of a change
10 in input that would affect the output of such a model?
11 A. (Frantz) Yes.
12 Q. Even if you use an extremely large number of very
13 accurate inputs, isn't it quite likely that the actual
14 economic impact might vary from what the model
15 predicts?
16 A. (Frantz) Yes.
17 Q. In your testimony, on Page 6, at Line 3, you basically
18 state that you don't believe the conclusion contained
19 in Dr. Shapiro's testimony. The reason you give is,
20 "The reason is not that Dr. Shapiro's analysis is
21 seriously flawed or that the model is fundamentally
22 flawed...but rather that Dr. Shapiro makes no provision
23 for the fact that this contract's prices are above
24 market." Do you see that?

Page 8

1 A. (Frantz) Yes.
2 Q. I take it that you're not testifying that the energy
3 market price forecasts are any more accurate than an
4 economic input/output model in predicting the future?
5 A. (Frantz) Well, I wouldn't say that.
6 Q. What would you say?
7 A. (Frantz) The relationships in input/output are highly
8 dependent on how good the input data is. But the
9 actual or structural relationships based on --
10 depending on the actual model area, based on the
11 relationships of those industries that are adjusted for
12 leakages or changes to a region from the national
13 models. And, depending on the type of modeling that's
14 done, and the industry or final demand that's actually
15 changed, they can be fairly representative.
16 Q. So, what you're saying is that an input/output economic
17 model is much more accurate than an energy price
18 forecast?
19 A. (Frantz) No. I'm saying it depends a lot on, as in all
20 modeling, how good the data goes in and the
21 interpretation of the model and who the modeler is.
22 Q. Are you familiar with the New England REC market?
23 A. (Frantz) Somewhat.
24 Q. From your familiarity with that market, do you believe

Page 9

1 that from now through 2025 that there will be
2 sufficient Class I RECs produced to satisfy the RPS
3 needs throughout the region?
4 A. (Frantz) I haven't done that analysis. And, I believe
5 that's probably a question better for Mr. McCluskey.
6 Q. But is it possible that there may not be enough RECs
7 generated to satisfy the legal demands in the region?
8 A. (Frantz) Again, I think that's a question that's
9 contained in Mr. McCluskey's testimony.
10 Q. Are you familiar with any new plants actually being
11 constructed in the region that would supply Class I
12 RECs?
13 A. (Frantz) Biomass facilities or others?
14 Q. Either one.
15 A. (Frantz) Well, obviously, there's some wind projects
16 that are getting built that would qualify for Class I
17 RECs.
18 Q. Do wind projects provide a substantial number of RECs,
19 as compared to, say, a biomass plant?
20 A. (Frantz) It depends on the capacity factor. Most wind
21 facilities have a capacity factor somewhere between the
22 high 20s and very low 30s for onshore, and offshore is
23 probably in the 40s.
24 Q. You were asked this morning by Mr. Edwards about the

Page 10

1 "existing wood plants". By and large, do those plants
2 produce Class I RECs?
3 A. (Frantz) By and large, they're Class III facilities.
4 Q. With only a small piece of Alexandria I believe that's
5 qualified for Class I?
6 A. (Frantz) Correct.
7 Q. If the REC value forecast in Mr. McCluskey's testimony
8 was, for whatever reason, incorrect, wouldn't that have
9 an impact on the input/output model results that you
10 performed and enhance on your testimony?
11 A. (Frantz) Well, to the extent that the variables that go
12 into the input/output change. For example, if there's
13 less over-market costs to ratepayers in the State of
14 New Hampshire, that would affect what those multipliers
15 are for income and output and potentially jobs. And,
16 to the degree that they're higher than what I looked
17 at, likewise, they would have greater effect on loss of
18 jobs and output.
19 Q. Over again on Page 6 of your testimony, down on Line
20 20, you testified that, "Stated another way, creating a
21 subsidy for this project or any other, for that matter,
22 doesn't create wealth for the economy as a whole. It
23 simply transfers wealth. Above market payments for
24 electricity leave the total electricity-using group

Page 11

1 with less income." Do you see that?
2 A. (Frantz) I do.
3 Q. This morning, your panel mate, Mr. McCluskey, described
4 REC payments as an "additional revenue stream that
5 renewable plants need to be competitive with
6 traditional types of generation." Do you recall that?
7 A. (Frantz) I do.
8 Q. Isn't the entire RPS law founded upon subsidies?
9 A. (Frantz) It is.
10 Q. So, the RECs themselves, the payments to make a plant
11 that's not competitive to be competitive in the
12 marketplace is a subsidy?
13 A. (Frantz) Correct.
14 Q. And, Alternative Compliance Payments that are paid to
15 the Commission are used to make what the statute calls
16 "incentive payments", is that correct?
17 A. (Frantz) Yes.
18 Q. So, those incentive payments are subsidies, too, would
19 you agree?
20 A. (Frantz) Yes.
21 Q. So, if I understand your testimony, the logical
22 extension would be that, stated another way, the RPS
23 obligations don't create wealth, they simply -- it
24 simply transfers wealth, is that correct?

Page 12

1 A. (Frantz) I think there's quite a bit of literature by
2 economists on that issue.
3 Q. And, what do they say?
4 A. (Frantz) They say it's a transfer of wealth.
5 Q. Thank you. So, based, if you take the next step then,
6 the RPS laws leave consumers with less income?
7 A. (Frantz) Absolutely.
8 Q. But, notwithstanding that economic castigation, or
9 whatever you want to call it, the law is the public
10 policy of the state, and something that Public Service
11 of New Hampshire and the Commission must follow,
12 correct?
13 A. (Frantz) We are often, in economics, working with
14 constraints. And, that is an economic constraint. The
15 policy has been made, the payments will be paid, and
16 now the question becomes "what's the best way to meet
17 those policy goals?"
18 Q. So, in a nutshell, it sounds like what the Commission
19 really is dealing with here is a significant public
20 policy decision?
21 A. (Frantz) Absolutely.
22 Q. Thank you. Mr. McCluskey, near the beginning of your
23 testimony, on Page 2, at Line 17, you testify that "A
24 focal point", basically, of your public interest

Page 13

1 analysis of the PPA "is whether the PPA prices reflect
2 the lowest prices necessary for the facility to receive
3 financing and earn a reasonable return." Is that
4 correct?
5 A. (McCluskey) That's correct.
6 Q. Thank you. So, it seems that you agree that the
7 ability to receive financing is a crucial element of
8 whether a PPA meets the public interest, is that
9 correct?
10 A. (McCluskey) If a particular project cannot be financed,
11 there would be little point in spending time reviewing
12 it. So, yes, if the goal is to develop renewable
13 resources through long-term contracts, then one of the
14 issues that has to be addressed is whether the project
15 can be financed.
16 Q. And, why is it necessary for a developer to receive
17 financing?
18 A. (McCluskey) Well, there are significant capital costs
19 incurred in developing these projects. Some of which
20 will be covered by equity investors, some of which will
21 be covered by banks or other financial institutions.
22 And, so, there's a need to cover those costs.
23 Q. So, basically, if they don't get financing, the project
24 doesn't get built?

Page 14

1 A. (McCluskey) Certainly, no project that I'm familiar
2 with is financed 100 percent with equity, at least no
3 renewable project.
4 Q. I reviewed your biography or your resumé at GRM-1, and
5 I don't see any listing of experience of working for a
6 developer, such as Laidlaw. Do you have such
7 experience working for a developer?
8 A. (McCluskey) I don't. No.
9 Q. Have you ever dealt directly with investment bankers on
10 behalf of a developer to obtain financing for a new
11 project?
12 A. (McCluskey) No, I have not.
13 Q. Mr. McCluskey, you're probably aware that the
14 Commission opened a docket involving a complaint
15 against Public Service Company of New Hampshire, Docket
16 Number DE 09-067, involving Clean Power Development and
17 Concord Steam?
18 A. (McCluskey) I'm aware of it, but that's probably the
19 extent of my knowledge. I certainly have not read any
20 materials from that particular filing.
21 Q. And, both of those entities, both Concord Steam and
22 Clean Power Development, are or were full party
23 intervenors in this proceeding, is that correct?
24 A. (McCluskey) They were. That's correct.

Page 15

1 Q. Would it surprise you that a key basis of Concord -- of
2 Clean Power Development's complaint initiating that
3 docket was that, without a PPA, they cannot get
4 financing for their project?
5 A. (McCluskey) As I said, I wasn't -- I'm not familiar
6 with any of the materials that are submitted in that
7 docket.
8 Q. On Page 9, at Line 8, of your testimony you discuss
9 your view of the cost of the PPA. You answer the
10 question "Could the final price tag be higher?" And,
11 your response was "It could." Let me ask the other
12 question. Could the final price tag be lower?
13 A. (McCluskey) Yes. I believe what I was referring to
14 there, with regard to it being higher, the price tag
15 being the total cost paid by PSNH over of the term of
16 the agreement. Clearly, the more megawatt-hours
17 generated by the project, the greater will be the
18 payments by PSNH. That will depend critically on
19 capacity factor, the actual capacity factor of the
20 facility. So, to the extent that increase is relative
21 to the 87.5 that we've used in our analysis, then the
22 costs will go up. If the actual capacity factor is
23 lower, the total costs will go down over the 20-year
24 term.

Page 16

1 Q. And, if wood prices decreased?
2 A. (McCluskey) If wood prices decreased relative to the
3 \$34, again, on average, over the 20-year term, then,
4 yes, there would be a reduction in the total price tag.
5 Q. So, prices could be higher, prices could be lower,
6 correct?
7 A. (McCluskey) That's right.
8 Q. And, we really don't know where the prices are going to
9 be, do we?
10 A. (McCluskey) Well, the Company did do -- did develop the
11 indicative prices for energy from the assumption that
12 fuel prices would grow over time at a 2.5 percent per
13 annum. Now, --
14 Q. That would -- I'm sorry.
15 A. (McCluskey) If I could finish. Clearly, if they grow
16 less faster or if they decline, then, obviously, the
17 energy prices will move in the same relationship.
18 Q. And, those "if"s that you just mentioned, there are
19 certainly possibilities?
20 A. (McCluskey) It's possible that fuel costs would go
21 down. I'm not sure whether anybody's really expecting
22 or projecting that, but it's possible.
23 Q. Under the PPA, is it your understanding that the energy
24 price is composed of a Base Energy Charge and a Wood

Page 17

1 Price Adjustment?

2 A. (McCluskey) There's three components to the energy
3 price. There's the fuel component, fuel costs, which
4 I've said is assumed to start at \$34, and increase over
5 time. There's an O&M component. And, the fuel
6 component also can increase, depending on how Schiller
7 costs vary, relative to the base price. So, there's
8 essentially three components. There's the fuel
9 adjustment, the fuel, base fuel cost, and there's the
10 O&M component of the energy price.

11 Q. I believe you're talking about somewhere around Page 15
12 of your testimony, where you state your view that
13 "\$21.80 per megawatt-hour" of the energy price is a
14 constant amount that "does not change over the term and
15 appears to represent the levelized charge that will
16 collect over the 20-year term the estimated O&M costs
17 for the facility."

18 A. (McCluskey) What page was this?

19 Q. I believe it's on Page 15, Line 7.

20 A. (McCluskey) I don't believe it's there.

21 Q. Let's see. How about -- oh, Page 7, Line 15.
22 Sometimes I'm dyslexic when I write down my references.
23 Page 7, Line 15. I'm sorry, Mr. McCluskey. And,
24 you're talking about the O&M charges, that's the

Page 18

1 "\$21.80 per megawatt-hour" that's on line?

2 A. (McCluskey) That's correct, yes.

3 Q. You acknowledge on I believe it's Page 6 [33?],
4 Line 33 [6?], that Laidlaw is subject to the risk that
5 O&M costs will rise more than they expect", correct?

6 A. (McCluskey) Yes. Because there is no tracker on O&M
7 costs, like there is on fuel costs, this fixed O&M
8 component could actually turn out to be higher or lower
9 than actual O&M costs, so there's a risk to Laidlaw, to
10 the owner of the project.

11 Q. But several pages later, on Page 30, Line 20, you
12 testify that O&M costs "are effectively collected on a
13 dollar-for-dollar basis through the energy prices in
14 the PPA."

15 A. (McCluskey) Page 30?

16 Q. Yes, sir.

17 A. (McCluskey) Line?

18 Q. Line 20. Hopefully, I don't have that one reversed,
19 too. You just testified that "there is no tracker".
20 That the prices of or the costs of O&M could rise
21 differently than what was anticipated. So, is there
22 truly a dollar-for-dollar collection of O&M in the PPA?

23 A. (McCluskey) You're correct. I think the point that I
24 was trying to make was that, in developing this price

Page 19

1 of \$21.80, the parties, Laidlaw, PSNH, the both of
2 them, projected out over time over the 20 years what
3 the O&M costs would be. And, they assumed inflation,
4 and then they turned that stream of nominal costs into
5 a levelized price. And, so, I think what's been agreed
6 is a -- they have attempted to project what those costs
7 would be and reflect that in the levelized charge. I
8 accept that it's not a guarantee of full recovery, but
9 I think it's an attempt to cover reasonably estimated
10 O&M costs over the life of the project.

11 Q. But you do agree that, as you said on Page 6, that the
12 risk of O&M costs growing at a rate differently than
13 anticipated lies with the developer?

14 A. (McCluskey) That's correct. And, I think I actually
15 say that in my testimony. The risks to do with the
16 capital costs of the project and O&M is on the
17 developer.

18 Q. Let's turn to the Wood Price Adjustment. The Wood
19 Price Adjustment utilizes the price of wood paid by
20 PSNH at Schiller Station as an index, is that correct?

21 A. (McCluskey) That's correct. You're referring to a
22 particular page?

23 Q. No, just in general.

24 A. (McCluskey) Okay.

Page 20

1 Q. Just in general. It's your understanding that the Wood
2 Price Adjustment is an index based upon the price of
3 wood at Schiller?

4 A. (McCluskey) That's correct.

5 Q. No tricks on that one. Do you agree that, as an index,
6 that the Wood Price Adjustment is intended to increase
7 the payment to Laidlaw when the cost of wood in the
8 market goes up and decrease as money goes down?

9 A. (McCluskey) It's intended to track, as you said,
10 Schiller costs.

11 Q. Are you aware of any other readily available public,
12 verifiable source of wood price information that could
13 be used as an index, other than the Schiller prices?

14 A. (McCluskey) I'm not aware, but I haven't studied it.
15 And, I don't believe I take a position against the Wood
16 Price Adjustment.

17 Q. No, I don't believe you did either.

18 A. (McCluskey) Thank you.

19 Q. Appreciate that one.

20 A. (McCluskey) We're on the same page.

21 Q. Okay. At the bottom of Page 6, and continuing on Page
22 7 of your testimony, you discuss how the energy price
23 is calculated, is that correct?

24 A. (McCluskey) Yes.

Page 21

1 Q. What you referred to as the "Energy Price" is called
2 the "Adjusted Base Price" in the PPA. Are you aware of
3 that? Do you have the PPA and could look at Section
4 6.1.2?
5 A. (McCluskey) Yes. I think that's -- I agree with that,
6 yes.
7 Q. Okay. And, you recall that there is a formula in the
8 PPA to calculate the Adjusted Base Price in the PPA?
9 A. (McCluskey) Yes.
10 Q. And, is that calculation very difficult?
11 A. (McCluskey) I don't recall. Are you referring to the
12 conversion from fuel costs in dollars per ton to
13 dollars per megawatt-hour, is that what you're
14 referring to?
15 Q. Oh, what I'm talking about here is, we take a look at
16 the PPA, in Section 6.1.2, should be on Page 10, right
17 at the top of that page.
18 A. (McCluskey) Page 10?
19 Q. Yes. This is -- I'm looking at the -- I believe the
20 redacted and unredacted versions are the same, though.
21 The Page 10 I'm looking at starts at the top, it says
22 "such adjustment (the "Adjusted Base Price") shall be
23 computed as follows."
24 A. (McCluskey) It is the conversion of dollars per ton of

Page 22

1 fuel costs to a -- oh, that's the Wood Price
2 Adjustment. Is that what you're referring to?
3 Q. Yes, there's two pieces there. So, one of them, the
4 third line down, says "Adjusted Base Price [is the]
5 Base Price plus the Wood Price Adjustment", correct?
6 A. (McCluskey) Correct.
7 Q. And, the Wood Price Adjustment is above that, "1.8
8 times the actual average dollars per ton minus \$34 per
9 ton", correct?
10 A. (McCluskey) That's correct.
11 Q. Now, those look to me to be relatively simple
12 calculations to be made?
13 A. (McCluskey) I agree with that.
14 Q. And, there is actually only one variable there, is that
15 correct?
16 A. (McCluskey) The actual average price per ton.
17 Q. Correct. Thanks. I'd like you to turn to a new
18 exhibit that you provided late in the afternoon last
19 Tuesday, Staff Exhibit 15. The one that you titled
20 "Laidlaw PPA Energy Prices Compare Unfavorably to
21 Historic Wholesale Electricity Prices." Do have that
22 exhibit?
23 A. (McCluskey) If you could give me a moment.
24 Q. Sure. It's the chart, like this [indicating].

Page 23

1 A. (McCluskey) Yes. It's just finding it in this -- yes,
2 I think I have it.
3 Q. Let me give you this one. You can have this one, which
4 is super-sized. Make it a little bit easier and I'll
5 give you a blue pen. It appears that the price of
6 energy at the Locational Marginal Price is what's
7 depicted on the left in red, is that correct?
8 A. (McCluskey) The marginal energy prices in the wholesale
9 market is on the left.
10 Q. And, it appears that over this short time frame that's
11 depicted here, about 7 years, that the Locational
12 Marginal Price varied from about \$40 up to \$80, is that
13 correct?
14 A. (McCluskey) Yes. On -- these are average annual
15 prices.
16 Q. Yes. Unfortunately, because there was not much time
17 between last Tuesday's session and today, I'm going to
18 have to ask you to do some simple calculations with me,
19 if you could please indulge me.
20 Do you recall that, on Tuesday, Mr.
21 Traum discussed data in Attachment PSNH Rebuttal 7,
22 which is at the end of PSNH's rebuttal testimony?
23 A. (McCluskey) I don't recall.
24 Q. Do you have a copy of PSNH Attachment -- or, Attachment

Page 24

1 PSNH Rebuttal 7 available to you?
2 A. (McCluskey) PSNH's rebuttal testimony?
3 Q. Yes. It should be the last page of the rebuttal
4 testimony.
5 A. (McCluskey) You're referring to Page 37?
6 Q. Let's see. Is it 37? I'll tell you here in a second.
7 Forty-five. I believe, Page Number 45. And, up in the
8 top left it should say "Attachment PSNH Rebuttal 7".
9 Do you have that, Mr. McCluskey?
10 A. (McCluskey) Yes, I do.
11 Q. Thank you. Now, Attachment PSNH Rebuttal 7 shows wood
12 prices from 2004 to 2010, is that correct?
13 A. (McCluskey) Yes.
14 Q. These prices were for Concord Steam Corporation. But,
15 during the earlier years in that period, in the 2004,
16 '05, '06, '07, those kind of years, Schiller 5 was not
17 yet converted to burn wood, was it?
18 A. (McCluskey) In the 2004 period, is that what you're
19 saying?
20 Q. Yes.
21 A. (McCluskey) I'll accept that.
22 Q. So, let's just use these prices as what Mr. Traum
23 referred to in his testimony as a "proxy" for wood
24 prices. The last column on Attachment PSNH Rebuttal 7

Page 25

1 is entitled "Average dollars per ton", is that correct?
2 A. (McCluskey) Uh-huh. Yes.
3 Q. And, for each year, do you see at the bottom of each
4 yearly grouping that there's an annual price noted, an
5 average annual price noted, such as "\$17.51" per ton
6 for the year 2004?
7 A. (McCluskey) Yes, I see that.
8 Q. If you use \$17.51 as a proxy wood price, what would the
9 resulting price of energy be using the PPA's energy
10 price formula that we just discussed on the top of
11 Page 10 of the PPA? Am I correct that you would first
12 take that wood price of 17.51, and subtract the base
13 wood price of \$34?
14 A. (McCluskey) That's correct.
15 Q. And, that would give you a negative \$16.49?
16 A. (Frantz) Correct.
17 A. (McCluskey) Correct.
18 Q. And, then, you would multiply that difference by the
19 wood price conversion factor of 1.8 to get a negative
20 \$29.68?
21 A. (McCluskey) That's correct.
22 Q. And, that amount is negative, because the wood price
23 for that year was, in fact, less than the base wood
24 price. Do you agree with that?

Page 26

1 A. (McCluskey) I agree with that.
2 Q. Okay. Then, you subtract that negative amount or,
3 basically, you subtract 26.98 from the base energy
4 price of 83, and you agree that you would get a price
5 of \$53.32 per megawatt-hour for that year?
6 A. (McCluskey) Yes.
7 Q. Can you take that blue marker I gave you and put a dot
8 on that super-sized copy of Staff Exhibit 15 I provided
9 you, and put a dot at the intersection of the year 2004
10 and \$53.32?
11 A. (McCluskey) Okay.
12 Q. Thank you. Now, the next year, on Attachment PSNH
13 Rebuttal 7, for 2005, it said that the average price of
14 wood per ton for that year was "\$20.80". Do you see
15 that?
16 A. (McCluskey) Yes.
17 Q. And, will you accept that, if you were to go through
18 that same set of calculations, that the resulting price
19 under the PPA's energy formula would be \$59.24 per
20 megawatt-hour?
21 A. (McCluskey) I'll accept that subject to check.
22 Q. Okay. If you could just put a dot there for 2005 at
23 \$59.24, I'd appreciate it.
24 A. (McCluskey) Okay.

Page 27

1 Q. We've got the same thing for the next five years. I'll
2 just give you the numbers, and I understand you'll have
3 to accept them subject to check. At 2006, can you put
4 a dot at \$63.94?
5 A. (McCluskey) 63 --
6 Q. 63.94. And, for 2007, \$64.60. 2008 would be \$72.92.
7 A. (McCluskey) 2018?
8 Q. 2008, 72.92. 2009 --
9 A. (McCluskey) I've been inserting the dots under the
10 green line. So, you want me to insert them starting
11 with 2004, I see.
12 Q. Yes.
13 A. (McCluskey) Yes.
14 Q. Well, I can tell you what. You know, to save you from
15 that, I think I've got one that is actually completed.
16 (Atty. Bersak distributing documents.)
17 MR. BERSAK: What is the next PSNH
18 exhibit number?
19 MS. DENO: Nineteen.
20 MR. BERSAK: I'd like to mark the
21 amended version of Staff Exhibit 15 as "PSNH Exhibit 19",
22 so we can refer to it from here on, Mr. Chairman.
23 CHAIRMAN GETZ: So marked.
24 (The document, as described, was

Page 28

1 herewith marked as PSNH Exhibit 19 for
2 identification.)
3 WITNESS McCLUSKEY: So, just for
4 clarification, Mr. Bersak?
5 MR. BERSAK: Yes.
6 WITNESS McCLUSKEY: These fuel prices
7 starting in 2004, these are not Schiller prices, isn't
8 that correct?
9 MR. BERSAK: That is correct. As we
10 discussed earlier, Schiller was not operating in these
11 earlier years, and so we have to use a proxy.
12 WITNESS McCLUSKEY: And, the proxy is
13 Concord Steam, is that what you're saying?
14 MR. BERSAK: Correct. So, to kind of
15 show the relative increase/decrease of wood prices using
16 the PPA's energy formula historically.
17 WITNESS McCLUSKEY: But, importantly,
18 they are not Schiller prices?
19 MR. BERSAK: That is correct. Schiller
20 did not burn wood in those early years.
21 WITNESS McCLUSKEY: That's correct.
22 MR. BERSAK: So, it wouldn't have been a
23 good idea for us to be buying wood. I'm not sure that
24 would have been a prudent decision.

Page 29

1 BY MR. BERSAK:
2 Q. If you were to connect the dots, which I read out to
3 you, you'd have a blue line intertwined in, you know,
4 amongst the red line that you had put on your chart.
5 Do you see that blue line?
6 A. (McCluskey) Yes.
7 Q. And, this is a representation of how the PPA's energy
8 price calculation would have worked historically, using
9 known wood prices for Concord Steam, versus known
10 energy prices, is that correct?
11 A. (McCluskey) For Concord Steam, yes. That appears to be
12 the case.
13 Q. Using this comparison, would the energy prices
14 determined using the PPA's energy pricing formula have
15 compared favorably to what you represented as the
16 average locational marginal price of energy?
17 A. (McCluskey) You're asking me whether the marginal
18 energy prices compare favorably with Concord Steam's
19 energy prices?
20 Q. I'm just saying, the blue line that has been graphed,
21 connecting the dots which were just put on this chart,
22 would that line represent energy prices that compare
23 favorably with the locational marginal pricing for
24 those years?

Page 30

1 A. (McCluskey) In some periods, they appear to be below.
2 In some periods, they appear to be above. But these
3 are not Laidlaw PPA energy prices as was stated in the
4 heading, in the title of the chart that you provided.
5 Q. True.
6 A. (McCluskey) That's the important difference.
7 Q. I think we realize that. I don't think -- the Laidlaw
8 plant hasn't been built yet, has it?
9 A. (McCluskey) Yes. But the title claimed that the
10 "Laidlaw PPA energy prices compared favorably" --
11 Q. Okay. Putting that aside, --
12 A. (McCluskey) If I could finish my statement. Compared
13 favorably with historic wholesale electricity prices.
14 You are now saying that these prices that were plotted
15 have nothing to do with the Laidlaw project. It's
16 based on Concord Steam fuel prices. If the Company had
17 explained that in its testimony, and had a correct
18 title in the chart, we would have saved ourselves a lot
19 of time.
20 Q. You do have the Rebuttal Testimony of Mr. Long, Mr.
21 Large, and Mr. Labrecque available?
22 A. (McCluskey) I do.
23 Q. Could you turn to Page 4. Beginning at Line 30. Isn't
24 it true that, beginning on Line 30, that that testimony

Page 31

1 you just said was not there is actually there, reading
2 "Attached hereto as Attachment PSNH Rebuttal 2 is a
3 chart showing energy pricing from 2003 to present,
4 comparing the ISO-New England wholesale energy market
5 price to the energy price that would have been
6 calculated using the PPA's pricing mechanism. This
7 chart depicts a pricing result under the PPA's pricing
8 mechanism that is more stable and less volatile than
9 the wholesale market. Furthermore based on actual
10 wholesale market prices, the PPA pricing mechanism
11 produced prices that on average would have been
12 essentially at the wholesale market." Is that the
13 testimony you said that we did not supply?
14 A. (McCluskey) You read it out correctly. There's no
15 mention of the use of Concord Steam fuel prices in the
16 development of that chart.
17 Q. As a matter of fact, if you look at the chart, we
18 didn't use Concord Steam's for this particular chart,
19 did we? It says, on the bottom of Attachment PSNH
20 Rebuttal 2, "pricing determined using average overall
21 New Hampshire wood pricing as reported by the
22 Timberland Owners Association." Do you see that?
23 A. (McCluskey) Just one moment. Yes, I see that.
24 Q. But we don't have the Timberland Owners Association's

Page 32

1 average prices as matters of record in this proceeding,
2 do we?
3 A. (McCluskey) I haven't seen them.
4 Q. Hence, the use of a proxy with prices that are in the
5 record, the prices from Concord Steam. If you compare
6 the blue line on the exhibit now marked as "PSNH
7 Exhibit 19", with the green line on Attachment PSNH
8 Rebuttal 2, don't they substantially represent an
9 identical result?
10 A. (McCluskey) Okay. Which one? What are we looking at
11 right now?
12 Q. The blue line on the left-hand side of PSNH Exhibit 19,
13 the one with the dots that you were --
14 A. (McCluskey) This is the one that you just handed me?
15 Q. Yes. And, if you compare that with the green line,
16 Attachment PSNH Rebuttal 2, aren't they substantial --
17 don't they demonstrate substantially the same pricing
18 phenomena?
19 A. (McCluskey) It's difficult to say "yes" or "no". One,
20 the market prices are showing annual averages, and the
21 chart that was provided by the Company showed monthly
22 variations. It has the same general shape, but, other
23 than that, I couldn't comment further.
24 Q. But, in general the trend of up and down prices are the

Page 33

1 same on both graphs?
2 A. (McCluskey) Yes, I think so.
3 Q. So, if a pricing mechanism, such as the one in the PPA
4 was in use during this 2003 to 2010 time frame, it
5 appears it would have provided energy pricing that was
6 less volatile, but roughly in the same average or same
7 ballpark as LMP, would you agree with that?
8 A. (McCluskey) Not necessarily. The prices that we have
9 just plotted I believe reflect the fuel cost component
10 of the energy price. Correct? Do these include the
11 \$2.80 as well? In that case, yes. That would be the
12 case.
13 Q. Thank you.
14 A. (McCluskey) Based on the Concord Steam fuel prices.
15 Q. I believe you have some awareness of the LaCapra
16 Associates consulting firm, am I correct?
17 A. (McCluskey) Yes.
18 Q. Your GRM-1 exhibit indicates that you were a Senior
19 Consultant with LaCapra for approximately six years?
20 A. (McCluskey) Correct.
21 Q. LaCapra prepared a report entitled "Analysis of a
22 Renewable Portfolio Standard for the State of North
23 Carolina." Are you familiar with that document?
24 A. (McCluskey) Was this during my period?

Page 34

1 Q. It might have been begun when you were there, perhaps.
2 But I think the final report was dated sometime in late
3 2006.
4 A. (McCluskey) In that case, I'm not aware of it.
5 Q. Would you disagree with a finding that LaCapra made
6 that "one of the bases for instituting an RPS law was
7 to hedge against price volatility or increasing fuel
8 costs"?
9 MS. AMIDON: Mr. Chairman, I object,
10 because Mr. McCluskey just said that he wasn't aware of
11 this report.
12 CHAIRMAN GETZ: Well, I think the
13 general conclusion is something that he can pursue.
14 WITNESS McCLUSKEY: If you could give me
15 the question again. Recognize that you asked me to
16 comment on a conclusion where I haven't read the --
17 MR. BERSAK: Okay.
18 BY MR. BERSAK:
19 Q. One of the conclusions in the LaCapra report, in the
20 summary, at iv in that report, was that one of the
21 reasons for instituting an RPS law was to provide a
22 "hedge against volatile or increasing fuel costs." You
23 agree that that's a reason perhaps for adopting RPS
24 requirements?

Page 35

1 A. (McCluskey) I've heard that argument. It's not the
2 most obvious one, obvious objective. But I've heard
3 that argument. Actually, I heard it at LaCapra and
4 elsewhere.
5 Q. If you look back at PSNH Exhibit 19, at that line that
6 we plotted using actual wood prices. Now, I think that
7 we agreed -- that you agreed that the energy pricing
8 formula produced a result that was less volatile than
9 the locational marginal price of energy, based on the
10 stability of energy prices under this pricing mechanism
11 in the PPA, wouldn't such a pricing mechanism be
12 consistent with such a view that RPSs could provide a
13 hedge against price volatility?
14 A. (McCluskey) Well, this particular trend that you
15 plotted just reflects the fuel prices during that
16 period. It may be that the -- there was very little
17 volatility in fuel prices at that time, which does not
18 suggest that it's always going to be that way.
19 Q. I think what you're telling me is those things I hear
20 on TV on the investment ads, --
21 A. (McCluskey) If I could finish -- if I could finish my
22 statement.
23 Q. -- that past results are not indicative of future
24 performance?

Page 36

1 A. (McCluskey) I was trying to finish the statement and
2 you just interrupted me.
3 Q. Well, I'm sorry.
4 A. (McCluskey) We've looked at a very narrow period.
5 There may have been very little volatility in the
6 prices that Concord Steam was experiencing. That does
7 not indicate that, prior to that period or after that
8 period there would be no volatility, significant
9 volatility in fuel prices. So, just pointing to this
10 trend does not demonstrate that there will always be
11 less volatility in the energy prices for a renewable
12 project, compared with the wholesale market.
13 Q. So, you're saying that renewable projects may be more
14 volatile than the market in general?
15 A. (McCluskey) In certain periods.
16 Q. So, you disagree -- you disagree with the Legislature
17 then, is that correct?
18 A. (McCluskey) I'm not sure what you're referring to.
19 Q. Isn't it true that in RSA 362-F:1, that one of the
20 purposes that the Legislature cited for enacting RPS
21 was to "stabilize future energy costs by reducing
22 exposure to rising and volatile fossil fuel prices"?
23 A. (McCluskey) That's the -- that's the Legislature's
24 opinion.

Page 37

1 Q. I'm sorry, I couldn't hear you.
2 A. (McCluskey) That's the Legislature's opinion. I'm not
3 agreeing or disagreeing with it. I haven't actually
4 done any analysis to determine whether, in fact, that's
5 the case.
6 Q. But, whether the Legislature is right or wrong, they
7 create the law that we must follow, is that correct?
8 A. (McCluskey) They do.
9 Q. Let's take a look back again one more time at PSNH
10 Exhibit 19. And, you have a green line that you
11 plotted on that original chart, which was Staff
12 Exhibit 15. And, that line is intended to represent
13 "PPA Energy Price", is that correct?
14 A. (McCluskey) That's correct. Under the assumption --
15 Q. And, so, --
16 A. (McCluskey) Under the assumption of \$34 a ton,
17 increasing at 2.5 percent annually.
18 Q. So, the 2.5 percent annual adjustment was something
19 like an inflation factor to get that upward trajectory?
20 A. (McCluskey) Correct.
21 Q. So, it's hardly a sophisticated analysis, is it?
22 A. (McCluskey) It wasn't intended to be. It was just
23 plotting the energy prices that were reflected in
24 Mr. Labrecque's Attachment RCL-1.

Page 38

1 Q. Do you recall last Tuesday that you criticized the
2 Levitan capacity prices because "at the end of the
3 period, for example, he simply adjusts it using some --
4 something like an inflation factor. So, it's hardly a
5 sophisticated analysis that resulted in the capacity
6 prices for the back-end of this forecast period", at
7 the end of the period. Do recall that testimony?
8 A. (McCluskey) I think there's a big difference between a
9 piece of work that is intended to be a capacity price
10 forecast for the ISO-New England forward capacity
11 market, and the depicting on this chart of energy
12 prices that are reflected in the Company's own exhibit.
13 Q. But you stated earlier during your testimony that we
14 really don't know what wood prices are going to be
15 going forward, do we?
16 A. (McCluskey) We don't. But the Company, in its wisdom,
17 decided to use a base of \$34, increasing that
18 2.5 percent annually. I'm not criticizing that as a
19 bad assumption. Rather than use something else, we
20 simply used the projection, forecast, whatever you want
21 to call it, that the Company had in its own exhibits.
22 Q. You stated earlier that the \$83 price was only accurate
23 if the price of wood at Schiller is \$34, correct?
24 A. (McCluskey) That's correct.

Page 39

1 Q. But you are aware, and we've discussed it many times,
2 that the wood price at Schiller today is not \$34, but
3 is \$27 per ton, correct?
4 A. (McCluskey) Well, I believe that refers to the month of
5 January of this year. Time will tell whether that's an
6 aberration. We just don't have sufficient data. And,
7 I would -- the \$34 that we are talking about as the
8 base price is based on, it's my understanding, it's
9 based on recent prices at Schiller. The last three
10 years result in an average price of \$33.75 per ton,
11 excluding the last quarter, which was unavailable, the
12 last quarter of 2010.
13 Q. But, if one were to use the present \$27 per ton price
14 for wood at Schiller, will you agree that the resulting
15 energy price would be \$70.40 per megawatt-hour under
16 the energy price formula in the PPA?
17 A. (McCluskey) If that proved -- if \$27 proved to be an
18 average annual price, say, for 2014, the first year of
19 the term, then that would be the energy price.
20 Q. Okay.
21 A. (McCluskey) If it turns out to be something closer to
22 historic prices at Schiller, then the energy price will
23 be substantially higher than that.
24 Q. I think the one thing that we agree on so far, Mr.

Page 40

1 McCluskey, is that nobody knows the future, do they?
2 A. (McCluskey) Not with certainty. But prices can be
3 forecast using reasonable methods and approaches and
4 reasonable assumptions.
5 Q. Anything can be forecast, like the weather. But it
6 doesn't mean it's going to be an accurate forecast.
7 A. (McCluskey) What's your definition of "accurate"?
8 Perfect foresight? If that's your definition, then I
9 would agree; we don't have perfect foresight. Can we
10 reasonably project where prices are going to go based
11 on reasonable inputs and reasonable methods? Then,
12 yes. I think developing a forecast is absolutely
13 necessary for PSNH to be able to demonstrate that it's
14 made prudent decisions with regard to the purchase of
15 fuels, the construction of facilities. All businesses
16 need to utilize forecasts to help them in their
17 decision-making. To throw up your hands and say "we
18 have no idea where the prices for the important
19 products that our business depends on is a recipe for
20 disaster.
21 And, I'm sure, if a utility were to say
22 that, and then come in and seek recovery of the costs
23 that resulted from that kind of decision-making, then
24 there would be some questions about the prudence of

Page 41

1 those decisions. So, utilities need forecasts, even if
2 we know that they are not accurate, meaning
3 "100 percent foresight". They need those forecasts to
4 help them make rational decisions.
5 Q. And, were similar forecasts used during the early days
6 of the implementation of PURPA, which led to myriad
7 rate orders issued by this Commission?
8 A. (McCluskey) I wasn't here at the time. I don't exactly
9 know what the process was during the PURPA period.
10 Q. But you are aware that, ultimately, those rate orders
11 created substantial over-market costs for consumers,
12 correct?
13 A. (McCluskey) I'm aware that -- they did a little bit
14 more than forecast. They actually established the
15 prices based on those forecasts. And, it was not the
16 forecasts that got them into trouble, it was the
17 pricing approach. Very few long-term contracts, the
18 acquisition of fuels are not done based on a single
19 forecast today. There are a number of ways of working
20 in indices in order to cover for movements in important
21 price inputs, in order to protect both the buyer and
22 the seller. So, I would agree that the methods used to
23 establish those prices were questionable at best. And,
24 I'm sure they wouldn't be repeated again. No one is

Page 42

1 suggesting that -- I will leave it at that.
2 Q. On Page 7, Line 3, of your testimony, you testified
3 that, "Over the 20-year [period], PSNH will pay
4 approximately \$1.6 billion to Laidlaw for the products
5 produced by the facility. About one-third of this
6 total payment will be for the production and delivery
7 of RECs to PSNH, a huge sum for a relatively small
8 project." Is the cost of --
9 A. (McCluskey) Which page?
10 Q. Page 7, Line 3.
11 A. (McCluskey) Page 7.
12 Q. Just let me know when you're with me.
13 A. (McCluskey) Yes.
14 Q. Is the cost of RECs under the PPA one of the
15 significant factors driving your ultimate
16 recommendation that the PPA does not satisfy the public
17 interest?
18 A. (McCluskey) Yes, it's the primary concern. Let me say,
19 we think the prices need to be adjusted, primarily the
20 REC prices in the PPA.
21 Q. That's consistent with what you said last Tuesday,
22 where you said "The major issues, in my opinion, are
23 the excessive REC prices, and the requirement to
24 purchase more RECs than is actually needed."

Page 43

1 A. (McCluskey) That's correct.
2 Q. You testified in your direct testimony, on Page 7, I
3 believe that was, Page 7, that "PSNH will pay
4 approximately \$1.6 billion to Laidlaw." Does that
5 \$1.6 billion that we -- that the Company will pay take
6 into account the present drop in fuel cost to \$27 per
7 ton?
8 A. (McCluskey) No. This calculation is based on the \$34 a
9 ton, increasing at 2.5 percent annually.
10 Q. So, a change in fuel -- in wood price, from \$34 per ton
11 to \$27 per ton, significantly changes the cost of the
12 PPA, doesn't it?
13 A. (McCluskey) If it were \$27 a ton over 20 years, is that
14 what you're saying?
15 Q. Over 20 years, or if the fuel prices vary from what you
16 have put into your testimony or what you've based your
17 testimony on?
18 A. (McCluskey) I've already agreed that the energy prices
19 are subject to actual fuel costs at Schiller. And,
20 hence, the actual payments by PSNH will go up and down,
21 depending on how they compared to the base price.
22 That's reflected in Mr. Labrecque's attachment, and
23 that's also reflected in this calculation.
24 Q. So, your testimony that "PSNH will pay \$1.6 billion" is

Page 44

1 not correct, is it?
2 A. (McCluskey) I agree. It's subject to the outcome of
3 the fuel costs at Schiller.
4 Q. We really don't know, do we?
5 A. (McCluskey) We don't know what?
6 Q. What PSNH will pay during the course of the PPA?
7 A. (McCluskey) We don't know to the dollar. I think this
8 is a reasonable estimate. We don't know, because we
9 don't know what the output is. If this facility
10 performs significantly better than the 87.5 capacity
11 factor that's assumed in this calculation, then the
12 dollar figure could be substantially higher than 1.6.
13 I think I've indicated in the testimony that two
14 biomass facilities that are selling to PSNH currently
15 have capacity factors substantially higher than the
16 87.5 used in this analysis. So, they have demonstrated
17 the capability of these types of plants to work at a
18 very high level. When you add to that, the significant
19 incentive that Laidlaw has to maximize its profits
20 based on the prices that are in this PPA, I would not
21 be at all surprised to find that this project was
22 operating in the mid 90s over an extended period of
23 time, mid 90s, in terms of capacity factor.
24 Q. And, if that happens, will you then know what PSNH will

Page 45

1 pay under the PPA?

2 A. (McCluskey) We'll know that it will be higher than -- I

3 suspect it will be higher, because there are other

4 factors, fuel costs. So, if there was a drop in fuel

5 costs that offset the improving capacity factor, then

6 it could come out to be 1.6. Who knows where it's

7 going to come out? But there are a number of factors

8 that could have the figure much higher than this.

9 There are a number of factors that could have it much

10 lower than this.

11 Q. So, which is the amount that PSNH will pay?

12 A. (McCluskey) Well, I think this is a reasonable

13 estimate, based on the assumptions that we used to

14 develop it.

15 Q. So, you don't know?

16 A. (McCluskey) It's, as I said, it's based on an

17 assumption -- on assumptions. And, so, it's a valid

18 number, based on the assumptions that were used to

19 calculate it.

20 Q. If you turn to your next page on your testimony,

21 Page 8, over at Line 14. You testify that, "Over the

22 first five years, the REC price is 80 percent of the

23 Renewables Products Payment applicable to the period

24 during which the RECs were produced. During the next

Page 46

1 five years, the REC price is 75 percent of the

2 applicable Renewable Products Payment. During the

3 subsequent five years, the REC price is 70 percent of

4 the applicable Renewables Products Payment. Finally,

5 during the remaining five years of the term, the REC

6 price is 50 percent of the applicable Renewable

7 Products Payment." And, then, you continue: "The

8 Renewable Products Payments is defined in the PPA as

9 the alternative compliance payment (ACP) schedule set

10 forth in RSA 362-F." Do you see that testimony?

11 A. (McCluskey) Yes, I do.

12 Q. So, in general, as you described it, under the PPA, for

13 the first five years, the price of RECs is 80 percent

14 of the ACP, then 75 for the next five years, 70 for the

15 third set of five years, and, for the final five years,

16 PSNH would pay 50 percent of the alternative compliance

17 price for RECs?

18 A. (McCluskey) That's correct.

19 Q. So, the price over the course of the PPA drops from

20 80 percent down to 50 percent, which is a 37 and a half

21 percent decrease over the course of the 20-year term?

22 A. (McCluskey) But the ACP itself is rising. You're

23 making --

24 Q. The ACP is going up --

Page 47

1 A. (McCluskey) Let me finish. The ACP is assumed to be

2 rising. So, there's two things happening. You have a

3 rising ACP, and you have a increasing discount to the

4 ACP. And, I don't have the numbers in front of me, but

5 I believe the effect is to have the REC prices falling,

6 if that's the way you're going to go.

7 Q. The ACP rises with inflation, is that -- is that a

8 correct understanding?

9 A. (McCluskey) I think, for modeling purposes, the Company

10 used 2.5 percent.

11 Q. What does the law require this Commission to do to set

12 the ACP price?

13 A. (McCluskey) I believe it is the Consumer Price Index, I

14 believe is what the Commission has to use.

15 Q. So, if the ACP is moving up with the Consumer Price

16 Index, then, in about, in constant dollars more or

17 less, over the course of the term of the PPA, it would

18 be over a 37 percent decrease in what PSNH is paying

19 for those RECs, would you agree with that?

20 A. (McCluskey) Well, the -- I'm looking at the price

21 stream for RECs. It starts at 53.80, and the very last

22 figure is 53.76. And, there's movement up and there's

23 movement down. So, it's not a constant increase or

24 decrease.

Page 48

1 Q. Doesn't the RPS law require a load-serving entity, such

2 as PSNH, to obtain and retire more Class I RECs each

3 year of the RPS law?

4 A. (McCluskey) Yes.

5 Q. And, I think you've heard me have a discussion with

6 other witnesses that, from 2010, when the PPA was filed

7 for approval with this Commission, through 2025, that

8 the requirement for Class I RECs rose by 1,600 percent

9 under the law, from a 1 percent requirement to a

10 16 percent requirement?

11 A. (McCluskey) I don't recall you saying that, but I'll

12 accept that's what happens.

13 Q. Thank you. And, during that time period, from 2010 to

14 2025, is it your opinion that there will be increased

15 load throughout New Hampshire, increased electric load?

16 A. (McCluskey) Energy Service load or total?

17 Q. Total load, for all load-serving entities in the State

18 of New Hampshire.

19 A. (McCluskey) Well, that's going to depend on many

20 factors. Growth in the economy being a major one.

21 Again, I haven't studied that recently. I'm not sure

22 what the latest forecasts are for the state. In this

23 -- in the environment of energy efficiency programs,

24 who knows where we're going to end up. If the economy

Page 49

1 continues to be on its knees, then who knows where the
2 total load is going to go in this state.
3 Q. As we go through time, and as the legal requirement for
4 more utilization of Class I RECs grows by that
5 1,600 percent figure we talked about, under the PPA
6 PSNH would be paying, as we discussed earlier,
7 80 percent, 75 percent, 70 percent, then, ultimately,
8 50 percent of the ACP to obtain those increasing
9 numbers of RECs, is that correct?
10 A. (McCluskey) That's what the PPA says.
11 Q. Now, beside biomass generation, what else does the New
12 Hampshire RPS define as a "Class I renewable resource"?
13 A. (McCluskey) Well, I know wind is included in that.
14 What else have we got?
15 MS. AMIDON: Mr. Chairman, did you want
16 me to provide him with a statute book, so he can answer
17 these questions, which are really based on the
18 understanding --
19 CHAIRMAN GETZ: He appears to have it.
20 BY MR. BERSAK:
21 Q. Thank you. Let me just go through, I'm not asking if
22 you remember it: "Wind, geothermal energy, hydrogen
23 derived from biomass fuels or methane gas, ocean
24 thermal, wave, current or tidal energy, methane gas,

Page 50

1 solar hot water heating systems used instead of
2 electric hot water heating, and solar not used
3 elsewhere." Does that sound roughly what the law
4 defines as "Class I resources"?
5 A. (McCluskey) Yes, that's correct.
6 Q. Do you think sufficient wind generation will be built
7 in New Hampshire to fulfill Class I REC needs?
8 A. (McCluskey) I am confident of it. As the request for
9 proposals in Massachusetts demonstrated, that there is
10 an abundance of developers out there that are willing
11 to provide RECs. And, so, I think, if the -- if
12 solicitation is used, then that would be the incentive
13 for those developers to come forward and offer their
14 products.
15 Q. And, you think those will all be developed in New
16 Hampshire?
17 A. (McCluskey) It would depend on the terms of the RPF --
18 sorry, the requests for proposals.
19 Q. Do you recall a figure in Mr. Sansoucy's testimony that
20 I believe it was something like 7,500 wind turbines
21 would have to be built to satisfy the needs of the
22 Class I RECs in New Hampshire?
23 A. (McCluskey) I don't recall that testimony.
24 Q. If the demand for RECs grows by the 1,600, or perhaps

Page 51

1 even larger, depending upon load growth, if the supply
2 of RECs does not keep up with the demand created by
3 law, then would you expect the price of RECs to rise?
4 A. (McCluskey) If the supply was not able to keep up with
5 that demand growth, then supply and demand would
6 indicate that prices would rise.
7 Q. Is there any limit --
8 A. (McCluskey) But, if prices rise, it provides the
9 incentive for that supplier to come forward. And, I
10 think the Synapse study is a good example of that.
11 They used a detailed supply/demand model, and starting
12 with the potential for different types of renewable
13 resources. And, they determined that all of the RPS
14 requirements in each of the New England states could be
15 met with those potential resources, and at prices
16 significantly below the REC price that we're showing in
17 the PPA.
18 Q. And, if there are not sufficient REC generating
19 resources, do you agree that the only limit on the
20 upward price of RECs would be the alternative
21 compliance price?
22 A. (McCluskey) If the price mechanism were not to work in
23 this region, which is an enormous "if", then -- then
24 prices would rise, and the ACP would come into effect.

Page 52

1 Q. Last Tuesday, and again this morning, Mr. Edwards asked
2 a series of cross-examination questions concerning
3 constraints on the Coos transmission loop. Do you
4 recall those questions?
5 A. (McCluskey) I recall him asking one question. I don't
6 recall a series.
7 Q. His concerns appeared to be whether there was enough
8 capacity on that loop to handle all the generation that
9 might interconnect to it. Is it your understanding,
10 under Section 9.8 of the PPA, that, if the facility is
11 required to curtail deliveries of any products,
12 pursuant to the interconnection agreement or ISO-New
13 England notifications, that PSNH will have no
14 obligation to pay for any products that aren't
15 delivered due to such curtailment?
16 A. (McCluskey) I will assume that's what it says.
17 Q. So, if Mr. Edwards' concerns over limited transmission
18 capacity came to fruition, and if generation at Laidlaw
19 was, in fact, curtailed for any reason, nothing would
20 be delivered and PSNH wouldn't be paying for anything,
21 would it?
22 A. (McCluskey) Well, I understood his question to be more
23 about development, rather than constraints, after the
24 project were developed. I thought he was asking, "if

Page 53

1 there's no transmission capacity available for the
2 project, would the project get developed?" And, my
3 response was "well, if there is no transmission,
4 they're, obviously, not going to develop the project."
5 Q. And, if the Commission was to approve the PPA, and, for
6 whatever reason, the developer decided not to build the
7 facility, what would be the impact on customers?
8 A. (McCluskey) If the developer didn't proceed with the --
9 Q. Correct.
10 A. (McCluskey) -- with the project? I'm assuming there's
11 a term in the PPA that addresses that. I'm not sure
12 how that reads.
13 Q. But, presumably, if PSNH does not receive any products,
14 it doesn't make any payment, so nothing would be
15 included in the Energy Service price to be recovered
16 from customers, correct?
17 A. (McCluskey) I guess that's how it would work, yes.
18 Q. If you turn to Page 9 of your testimony, at Line 20.
19 You testify that "The stated purpose of RSA 362-F, New
20 Hampshire's RPS, is to stimulate investment in low
21 emission renewable generation technologies." Do you
22 see that?
23 A. (McCluskey) Yes, I did say that.
24 Q. And, you go on to testify that "The expectation was

Page 54

1 that this additional revenue stream would make it
2 economically feasible for renewable resources to
3 compete with conventional generating units. If the REC
4 market price is insufficient for this purpose,
5 renewable resources would not be built and the
6 resulting supply shortage would force prices to rise to
7 a level that stimulated investment." And, you see
8 that? That's on -- it continues onto the next page.
9 A. (McCluskey) I'm just trying to -- where is that?
10 Q. Page 10.
11 A. (McCluskey) Page 10.
12 Q. Line 3.
13 A. (McCluskey) Yes, that's correct.
14 Q. So, as you heard Mr. Frantz testify to earlier this
15 afternoon, would you agree that the additional revenue
16 stream provided by the RPS law was expected to
17 subsidize renewable generators to compete in the
18 competitive energy marketplace?
19 A. (McCluskey) In effect, that's what's happening. I'd
20 like to -- the REC prices I think are doing two things.
21 Certainly, in the case of the typical biomass facility
22 that --
23 (Court reporter interruption.)
24 BY THE WITNESS:

Page 55

1 A. (McCluskey) The biomass facilities tend to, on their
2 own, without subsidy, are unable to compete with
3 marginal units. So -- and that may be because of their
4 fuel prices. So, in order to have these things built,
5 in order to generate Class I RECs, you need to be able
6 to cover the uneconomic portion of their operating
7 costs. And, at the same time, you need to have the REC
8 price established, such that, overall, the investor is
9 going to achieve the targeted return that they need for
10 this particular project. So, I see the REC price as
11 achieving those two things in combination. It's
12 covering for any uneconomic costs and ensuring that
13 they get the return that they expect. And, if there
14 were no economic -- uneconomic costs, then why would
15 they be eligible for RPS payments. So, that's how I
16 view it.
17 Earlier I described the shortfall as an
18 "insufficiency". The revenue requirements of the
19 project are not sufficiently covered by their energy
20 and capacity prices. And, so, they need this
21 additional stream of revenues to cover for that
22 insufficiency and ensure that the return -- the
23 targeted return is achieved. Whether you want to call
24 that a "subsidy" or just part of making this policy

Page 56

1 work, that's up to you. But that's how I view what's
2 going on here. That's the thought process behind the
3 RPS law.
4 Q. If the alternative compliance price is set too low,
5 wouldn't that hinder the development of new renewable
6 generation?
7 A. (McCluskey) The purpose of the alternative compliance
8 price is to cap the prices that are paid. So,
9 presumably, the Legislature had the idea that, while
10 it's good to have some kind of subsidy to ensure that
11 these types of resources get built, there has to be a
12 limit to what ratepayers would pay. So, they
13 established this cap, recognizing that there's going to
14 be a market for RECs, and that there could be
15 supply/demand conditions which force prices up. Those
16 conditions would be a shortage of supply. So, the cap
17 would come into effect, if, for various reasons, there
18 was a shortage of supply, and the Legislature has said
19 "we need to cap the cost subsidy", whatever.
20 Q. But, if the ACP was set at a low level, such that the
21 price of energy that a renewable generator could make
22 is one thing, and if the REC price that it needed to
23 meet its cost of new entry into the marketplace, pushed
24 the price above the ACP, then the ACP would limit what

Page 57

1 load-serving entities were willing to pay, correct?
2 A. (McCluskey) Well, it would. But I doubt whether --
3 legislators are advised by pretty bright people, who
4 are real advocates of renewable generation. They
5 generally know what types of resources, the kind of
6 revenues that those resources need in order to make
7 them get built, to be competitive. And, so, I don't
8 think legislators, with their advisors, would set the
9 price at a level that would prevent the very thing that
10 they're looking for, which is to promote the
11 development of these resources.
12 Q. But, ultimately, it's the energy marketplace that tell
13 whether they've done a good job or not.
14 A. (McCluskey) Correct. If you find the market prices for
15 RECs substantially below that level, the market -- the
16 market is telling you that there's a sufficient supply
17 of these RECs, where we can afford to pay them less,
18 rather than more.
19 Q. Now, speaking of supply, did you have a chance to
20 review the chart that was appended to PSNH's rebuttal
21 testimony, which was labeled "Attachment PSNH Rebuttal
22 6"? That's the chart that came from the 2010 ISO-New
23 England Regional Plan?
24 A. (McCluskey) I don't believe I looked at it, but just

Page 58

1 give me a moment --
2 Q. Certainly.
3 A. (McCluskey) -- and I'll look through the testimony.
4 "Attachment 6", did you say?
5 Q. Yes.
6 A. (McCluskey) Okay. As I said, I -- this is the Concord
7 Monitor piece?
8 Q. No, the next one.
9 A. (McCluskey) Oh, that's 5.
10 Q. If you look on the bottom, it says -- I'm sorry. It's
11 Attachment PSNH Rebuttal 6, it's on Page 44, Bates
12 number.
13 A. (McCluskey) Forty-four. Yes, I see that.
14 Q. The one that says on the bottom, "Source: Page 134 of
15 the 2010 ISO-New England Regional System Plan".
16 A. (McCluskey) Yes.
17 Q. If you just take a look at that chart, just in case
18 you're not familiar with it. My question is going to
19 be, do you disagree with this ISO-New England chart,
20 what it depicts?
21 A. (McCluskey) Well, the straight line seems to be the
22 demand for RECs in the region, over time. And, you
23 seem to be showing different levels of development of
24 what's in the queue at the moment. That seems to be a

Page 59

1 very static analysis. One would think, over time, that
2 the queue is going to change, and it's presumably going
3 to change depending on what happens to prices in the
4 market. So, you know, to suggest that the limit that
5 we have is what's in the queue today I think is kind of
6 naïve.
7 Q. So, you disagree with this chart from ISO-New England?
8 A. (McCluskey) From what I can -- as I said, this is the
9 first time I've looked at it. That's my initial
10 reaction to it. I don't want it to be read that I'm
11 critical of the ISO. But that's my view of this, of
12 what this chart appears to be depicting.
13 Q. You think it's likely that there's going to be
14 substantial changes in projects that are going to be
15 developed in years 2012, 2013, 2014, from what's
16 depicted in this chart?
17 A. (McCluskey) I think what's going to be developed is
18 going to depend very much on what the REC prices are
19 going to be. If the market signal is there to develop
20 these resources, then the market will respond.
21 Developers will respond.
22 Q. But wouldn't it seem reasonable that, if a plant was
23 expected to be on line in 2014, it would be in the ISO
24 queue by this time?

Page 60

1 A. (McCluskey) Again, I don't know much about when
2 developers have to submit to the queue. But you would
3 think that they would want to get their projects in
4 early for the early years of this, of what's shown in
5 this particular exhibit.
6 Q. If you look at --
7 A. (McCluskey) That does not prevent others from coming
8 along in subsequent years and adding themselves to the
9 queue.
10 Q. Oh, absolutely. But, if you look at this chart, look
11 at 2014, the year when the Laidlaw project is expected
12 to come on line, if this Power Purchase Agreement is
13 approved. And, then, if you just take the middle
14 block, for example, let's not take the 20 percent
15 extreme low, let's not take the 60 percent number,
16 extreme high, with those percentages being the
17 percentages of projects that are in the queue getting
18 developed, let's take the middle one, the 40 percent
19 number. In 2014, doesn't this chart from ISO show that
20 there are insufficient RECs -- insufficient renewable
21 generation to supply the REC needs of the region?
22 A. (McCluskey) Correct. But it also says that -- the
23 caption says, up here, says "also can be met with
24 behind-the-meter projects, imports, new projects not in

Page 61

1 the queue, and Alternative Compliance Payments."
2 That's my point.
3 Q. Absolutely. From your familiarity with the industry in
4 your 30 years of doing this business, as you testified
5 to this morning, is it likely that behind-the-meter
6 projects are going to have a substantial impact on the
7 need for RECs?
8 A. (McCluskey) One would think they are going to be
9 incremental supply. But, again, it depends at the kind
10 of dollars that you throw at them.
11 Q. As we just discussed, is it likely for a project that
12 we hope to have on line in 2014 that is not going to be
13 in the queue and reflective in these numbers?
14 A. (McCluskey) I couldn't comment on whether it's likely
15 or unlikely.
16 Q. So, as the ISO chart states, RPSs -- RPS needs could
17 also be met by paying the alternative compliance price,
18 is that correct?
19 A. (McCluskey) It could. I mentioned the Synapse report.
20 Synapse did a -- what I'd consider to be -- they hired
21 a firm to do a sophisticated supply/demand analysis for
22 the REC market in New England. And, started with all
23 the potential resources that could be used to meet the
24 various state RPSs. And, they have determined, right

Page 62

1 throughout the period that's shown in this chart, that
2 there's more than sufficient supply to meet the
3 increasing requirements of the region, at prices that
4 are substantially below what you're showing in the PPA.
5 So, that analysis itself shows that this chart really
6 is naive. This does not replace, in my mind, a
7 sophisticated supply/demand analysis of the REC market.
8 Q. So, you're saying that "ISO is wrong and Synapse is
9 right"?
10 A. (McCluskey) I'm saying that Synapse did a supply/demand
11 analysis. And, that's the thing that you should look
12 to, in order to get some feel for whether the demands
13 can be met and at appropriate prices.
14 Q. Have you prepared your own analysis of regional RPS
15 needs and the renewable sources that are likely to be
16 available to meet those needs?
17 A. (McCluskey) No, there's no need for me. The Synapse
18 did that. And, actually, PSNH, along with other
19 electric utilities in the region, hired them to do
20 that. So, why would Staff need to spend its resources
21 doing the same work that Synapse was hired to do.
22 Q. Suppose ISO was right, and suppose, in 2014, the need
23 for RECs outpaced the supply. What would be the market
24 price that a load-serving entity would have to pay to

Page 63

1 get its marginal -- to meet its marginal RPS needs?
2 A. (McCluskey) Under that hypothetical, prices would rise
3 and potentially would be capped by the ACP.
4 Q. If you turn to Page 12 of your testimony, at Line 17.
5 A. (McCluskey) Sorry. Could you give me that again.
6 Q. Twelve, Page 12, Line 17. You were asked the question:
7 "Article 5.1 to the PPA requires PSNH to purchase all
8 of the RECs produced by the facility. Is this
9 obligation consistent with PSNH's Class I obligation
10 under the RPS?" Do you see that?
11 A. (McCluskey) Yes.
12 Q. And, you see that, underneath that, your answer was
13 "No, for two reasons." Do you see that?
14 A. (McCluskey) Yes.
15 Q. You go onto say that, "RSA 362-F:3 requires each
16 provider of electricity to obtain and retire RECs
17 sufficient in number and class type to meet or exceed
18 specified percentages of total megawatt-hours of
19 electricity supplied by the provider to its end-use
20 customers." Is that correct?
21 A. (McCluskey) Correct.
22 Q. So, is it your position that PSNH's REC purchase
23 requirement under the PPA is not sufficient to meet or
24 exceed the RPS requirement?

Page 64

1 A. (McCluskey) It's my position that the, in certain
2 years, the purchase of all RECs produced by Laidlaw
3 will exceed PSNH's obligation.
4 Q. And, didn't the law say that a load-serving entity,
5 such as PSNH, is required to either meet or exceed the
6 RPS percentages?
7 A. (McCluskey) It does say that. That's correct.
8 Q. Then, PSNH's purchase of RECs under the PPA, would, in
9 fact, comply with the RPS law, wouldn't it?
10 A. (McCluskey) PSNH would be making that at a cost in
11 excess of --
12 Q. That's not the question, Mr. McCluskey. Your testimony
13 was whether PSNH's purchase of RECs would be consistent
14 with its RPS obligation under the law, and you're
15 answer was "no." You went onto say that, "the law
16 requires that PSNH and other load-serving entities to
17 meet or exceed the requirement. And, you testified
18 that "PSNH would be exceeding the requirement, but we
19 wouldn't be complying with the law." How can that be?
20 A. (McCluskey) I stand corrected --
21 Q. Thank you.
22 A. (McCluskey) -- on that issue.
23 Q. You're aware that throughout New England there are RPS
24 laws in other states where the need for various classes

Page 65

1 of RECs, including what we call "Class I RECs", grow
2 substantially over time, is that correct?
3 A. (McCluskey) That's correct.
4 Q. If no significant new generation can be financed, where
5 would all these new RECs come from?
6 A. (McCluskey) It's hard to imagine that outcome, and I'll
7 explain why. You say that, if they "couldn't be
8 financed", then, obviously, the supply would be
9 insufficient to meet demand, and prices would rise up
10 to the ACP. And, my understanding is that the ACP
11 revenues are intended to be used for the development of
12 renewable resources. So, on the one hand, we are
13 having -- you're essentially postulating that the
14 revenues produced from an ACP, when returned back to
15 developers, are not going to be sufficient to have
16 these projects financed. And that, as I indicated
17 before, I'm sure the legislators were advised that that
18 would not be the case. The revenues generated in this
19 hypothetical through ACP payments should be sufficient
20 to entice developers to build projects and have prices
21 that will ensure that the project gets financed. So,
22 the -- I have trouble with the hypothetical that we're
23 going to have a situation that these projects do not
24 get financed throughout the region.

Page 66

1 Q. But you testified earlier that, ultimately, it's going
2 to be the marketplace that determines whether that ACP
3 was set at the correct level or not?
4 A. (McCluskey) Correct. The marketplace, the prices in
5 the marketplace will adjust if there's insufficient
6 supply coming forward. And, if the -- somehow the ACP
7 prevents that from happening, because it was set too
8 low, I'm sure the advocates of the RPS policies would
9 have the legislation changed in order to increase the
10 ACP, in order to make sure that didn't happen.
11 Q. If prices did, for whatever reason, for RECs hit the
12 ACP, wouldn't it be more economic to pay a fraction of
13 the ACP price, instead of the full ACP price, in order
14 to meet an RPS obligation?
15 A. (McCluskey) If there were just two alternatives, should
16 we pay the ACP or a fraction of it?
17 Q. It is an obvious question.
18 A. (McCluskey) Yes, it kind of is.
19 Q. Okay. You are listening, I appreciate that.
20 A. (McCluskey) Sometimes.
21 Q. So, under that scenario, if PSNH was able to purchase
22 these RECs at a fraction of the ACP price, any excess
23 RECs could easily be resold into the market at a
24 profit, correct?

Page 67

1 A. (McCluskey) I am not understanding the hypothetical.
2 You're going to have to give that to me again.
3 Q. Okay. Let me start again. If the price in the
4 marketplace of RECs went up to the alternative
5 compliance price, and if PSNH, under the PPA, was able
6 to purchase RECs at, say, 75 percent of the ACP, but we
7 had too many, as you postulate. Wouldn't we be able to
8 remarket the excess RECs and make a profit on it?
9 A. (McCluskey) I've testified that it's sound business
10 behavior for PSNH to sell RECs at a price exceeding the
11 PPA prices. It's not a sound policy to sell them at a
12 price below that.
13 Q. Notwithstanding the ISO's view on the future
14 availability of RECs, you go on, on Page 14, to testify
15 about \$125 million above-market cost of RECs under the
16 PPA. That's on Line 14 of Page 14. I don't think my
17 dyslexia messed that one up.
18 A. (McCluskey) Line 15, is that what you're saying?
19 Q. It starts on 14, on 14. Or 15.
20 A. (McCluskey) Page 14 or 15?
21 Q. Page 14, Line 15, "the above-market cost of \$125
22 million." To arrive at that number, is it correct that
23 you used the current REC price as a benchmark?
24 A. (McCluskey) It's either that, or Synapse. Did you ask

Page 68

1 me a discovery question on that?
2 Q. No, but I'm just reading your testimony. It says,
3 "using the current price -- market price as a
4 benchmark". So, I suppose you used the current market
5 as a benchmark. That's on Line 14. Do you see that,
6 Mr. McCluskey?
7 A. (McCluskey) Yes.
8 Q. Okay. Thanks. For that benchmark price to remain
9 stable, your testimony necessarily implies, it's your
10 opinion a supply of Class I RECs will grow with market
11 need, and that hence, within the next 14 years there
12 will be at least a 1,600 percent increase in Class I
13 renewable generation. Do you really think that's a
14 reasonable assumption, given the marketplace today?
15 A. (McCluskey) Okay. Could you just go through that
16 again.
17 Q. Surely. You used --
18 A. (McCluskey) I apologize.
19 Q. You used the current market price of RECs as a
20 benchmark to arrive at your \$125 million above-market
21 cost of RECs under the PPA.
22 A. (McCluskey) Okay.
23 Q. For that benchmark price to remain stable, your
24 testimony implies that the supply of Class I RECs will

Page 69

1 grow with the market need. And that, hence, within the
2 next 14 years, there will be a 1,600 percent increase
3 in Class I renewable generation. My question is, do
4 you believe that's a reasonable assumption?
5 A. (McCluskey) It's possible. If the --
6 Q. It's possible, but is it reasonable?
7 A. (McCluskey) If I could finish? If the -- if the supply
8 keeps track with the increasing demand, then it's quite
9 possible that we have REC prices that stay reasonably
10 flat.
11 Q. That's a big "if", isn't it?
12 A. (McCluskey) It can go many ways. Almost certain, we're
13 going to have ups and downs, where there's more supply
14 and less supply and prices are responding accordingly.
15 But we appear to be in a downward trend at the moment
16 for Class I. Whether that continues, it's difficult,
17 certainly difficult for me, not having done the
18 supply/demand analysis that has been done by Synapse,
19 and they believe that prices will rise, and then will
20 fall significantly. An important component of that
21 analysis, I have to say, is the assumed market price of
22 energy at that time. In fact, Synapse is projecting
23 that wholesale energy prices will rise to such a level,
24 which will reduce the pressure on REC prices, in fact,

Page 70

1 it will force REC prices down. And, so, it's not just
2 -- it's not just this relationship between supply and
3 demand. There are other factors, important factors,
4 like the market price of energy, which have a
5 significant impact on what a developer needs in order
6 to achieve the targeted return that they're looking
7 for.
8 Q. If, as you recommend, the Laidlaw Power Purchase
9 Agreement is not approved, do you really reasonably
10 think that there is likely to be any significant
11 increase in Class I generation in New Hampshire, to
12 keep up with the legislatively mandated 1,600 percent
13 increase in Class I REC needs?
14 A. (McCluskey) Let's get it clear that I think you chose
15 your word carefully. Staff is not recommending
16 rejection of the PPA. We are recommending approval of
17 the PPA, with conditions. We are fully behind a
18 renewable project in Berlin and having the Company
19 having the ability to purchase the facility at the end
20 of the term. We are not recommending -- Staff is not
21 recommending rejection. And, we just feel that it's
22 overpriced. And, also, there's this issue of the
23 quantity that has to be purchased. We feel that, with
24 conditions imposed, that this project will survive.

Page 71

1 Q. Thank you for that clarification, Mr. McCluskey. On
2 Page 13, Line 2. You testify -- you can skip there.
3 That "suppliers of RECs will be paid for energy
4 delivered to PSNH's end-use customers rather than to
5 PSNH's distribution system. The cost associated with
6 the difference (i.e., distribution system losses) is to
7 be shouldered by the REC supplier. Under the PPA,
8 however, PSNH's REC payment obligation is based on the
9 number of RECs delivered to its distribution system,
10 which means that the cost of the lost RECs will be
11 shouldered by PSNH customers. The net result is that
12 PSNH retail customers will face REC prices that are
13 higher than indicated in the PPA." Okay?
14 A. (McCluskey) That's correct.
15 Q. Under the RPS law, isn't it true that the number of
16 RECs required by a load-serving entity is based on
17 specified "percentages of total megawatt-hours of
18 electricity supplied by the provider to its end-use
19 customers"?
20 A. (McCluskey) To its end-use customers, that's correct.
21 Q. And, doesn't the RPS law define a "renewable energy
22 certificate" to be "the record that identifies and
23 represents each megawatt-hour generated by a renewable
24 energy generating source"?

Page 72

1 A. (McCluskey) I'll accept that it says that.
2 Q. And, that's at 362-F:2, III, in case you would like to
3 look it up. So, under the RPS law, the need for RECs
4 is based upon retail megawatt-hours delivered, is that
5 correct?
6 A. (McCluskey) That's how I interpret the law, yes.
7 Q. But the law measures the actual RECs based on
8 megawatt-hours generated?
9 A. (McCluskey) As I said, I accept that it says that.
10 Q. But, in your testimony, you say, "instead of basing a
11 REC on a megawatt-hour generated by a renewable source,
12 it should be measured by a megawatt-hour delivered to
13 the retail customer by a renewable source." It appears
14 your testimony varies from the definitions contained in
15 the law?
16 A. (McCluskey) No. My testimony is saying that the need
17 for PSNH to purchase RECs should be based on a certain
18 percentage of their retail load, not the -- what is
19 delivered at wholesale.
20 Q. So, where are these "lost RECs" you're talking about?
21 A. (McCluskey) The lost RECs -- the prices that are
22 charged by Laidlaw to PSNH are based on energy
23 delivered to --
24 Q. We're talking about REC -- energy or RECs now?

Page 73

1 A. (McCluskey) Well, a REC is a megawatt-hour.
2 Q. No. A REC is a REC. A REC is a certificate. A REC is
3 a subsidy, it's a transfer of wealth.
4 A. (McCluskey) Uh-huh.
5 Q. A REC is a REC. So, we're talking about the price of
6 RECs right now, correct, because you're talking about
7 "lost RECs"?
8 A. (McCluskey) Correct.
9 MS. AMIDON: Perhaps Mr. Bersak could
10 restate the question, just for my clarity.
11 MR. BERSAK: I'm just asking that there
12 -- okay. I will try that.
13 BY MR. BERSAK:
14 Q. I'm just asking you to tell me what you mean by "lost
15 RECs"?
16 A. (McCluskey) The REC cost incurred by PSNH should be the
17 product of a REC price and the RECs delivered to retail
18 customers. That should determine the REC cost. And,
19 to the extent that the price charged by Laidlaw to PSNH
20 refers to "REC delivered", then there's a mismatch
21 between the RECs consumed or megawatt-hours consumed by
22 retail customers and what is delivered. And, the loss
23 is a cost that is borne by PSNH customers under the
24 structure of the PPA.

Page 74

1 Q. So, you're suggesting the Legislature needs to change
2 the law?
3 A. (McCluskey) No. I'm suggesting that PSNH should be
4 purchasing sufficient RECs to meet its retail load
5 times some percentage. It shouldn't be purchasing any
6 more than that, because, in doing so, it's increasing
7 the costs.
8 Q. Since the RPS law defines a "renewable energy
9 certificate" to be "the record that identifies and
10 represents each megawatt-hour generated by a renewable
11 energy generating source." By statute, isn't it true
12 that a REC is determined at the source, not at the
13 retail customer level?
14 A. (McCluskey) Well, I'm reading the statute, RSA 362-F:3.
15 And, it says that they must -- the minimum requirement
16 is to acquire "megawatt-hours of electricity supplied
17 by the provider to its end-use customers."
18 Q. Correct. So, how many RECs you need under the statute,
19 if I'm not mistaken, is determined by what is
20 delivered. So, you determine the percentage of your
21 load that's required for that year and you determine
22 how many megawatt-hours' worth of RECs you need. But,
23 when you actually purchase the RECs, it is not true
24 that under the law the computation of what constitutes

Page 75

1 a "REC" is done at the generating source.
2 Otherwise, Mr. McCluskey, depending upon
3 where a generator is ultimately selling their RECs, the
4 number of RECs it produces are going to vary. If it
5 sells its RECs right in town, there might be less
6 losses than if it sold them from a plant in New
7 Hampshire to a REC consumer in Connecticut. How would
8 you keep track of how many RECs were produced when you
9 don't have any idea where, you know, that there's
10 differences in line losses based upon geographic
11 delivered ones?
12 MS. AMIDON: Well, objection. I think
13 there's a lot of questions buried in that, with a lot of
14 assumptions. And, frankly, Mr. Chairman, I think that the
15 witnesses could use a break, if the court stenographer
16 also could use a break at this point, it might be a good
17 time.
18 CHAIRMAN GETZ: Well, I actually am very
19 concerned about the court reporter, because if he can't go
20 any longer, then there's no transcript and none of this
21 ever happened. But --
22 (Laughter.)
23 CHAIRMAN GETZ: Well, off the record for
24 a second.

Page 76

1 (Brief off-the-record discussion
2 ensued.)
3 CHAIRMAN GETZ: Well, let's take ten
4 minutes, and then come in and we'll just do as much as we
5 can with the remainder of the cross. All right. So,
6 let's just take a brief recess.
7 (Whereupon a recess was taken at 3:54
8 p.m. and the hearing resumed at 4:15
9 p.m.)
10 CHAIRMAN GETZ: Okay. Mr. Bersak.
11 MR. BERSAK: Thank you, Mr. Chairman.
12 BY MR. BERSAK:
13 Q. I think where we left off was, we were trying to figure
14 out where we could find the "lost RECs".
15 A. (McCluskey) Yes. All I'm saying in this response that
16 starts on Page 12 is that the RECs are priced based on
17 megawatt-hours or RECs delivered to PSNH's distribution
18 system, not to PSNH's end-use customers. PSNH has an
19 obligation to purchase so many RECs, certain percentage
20 of the retail load. So, there's, in effect,
21 megawatt-hours lost in the distribution system. And,
22 so, on a per megawatt-hour delivered to retail
23 customers, the price in effect is higher than what's
24 indicated in the PPA. That's simply my point. That

Page 77

1 the price in the PPA is based on what's delivered,
2 whereas the obligation is to the retail end-use
3 customer. There's losses of megawatt-hours in the
4 distribution system. That, in essence, means that the
5 price per megawatt-hour delivered to end-use customers
6 is higher than what's specified in the PPA. That's
7 simply my point.
8 Q. And, isn't that what is called for in the statute and
9 isn't that the methodology that's used by every over
10 load-serving entity for every other retail -- renewable
11 energy certificate that's produced in the State of New
12 Hampshire?
13 A. (McCluskey) My understanding is, with regard to Granite
14 State and Unitil that I've been involved in regulating
15 with regard to Default Service, is that the prices are
16 based on megawatt-hours delivered at retail, not at
17 wholesale.
18 Q. But that's megawatt-hours, which is a form of energy.
19 Retail [renewable?] energy certificates are just that,
20 certificates.
21 A. (McCluskey) A REC is a megawatt-hour, delivered at
22 retail.
23 Q. I don't believe so, Mr. McCluskey.
24 A. (McCluskey) Well, --

Page 78

1 Q. I believe a REC is a certificate that represents a
2 megawatt-hour of generation.
3 A. (McCluskey) Well, you can argue in your brief.
4 Q. You're right. Well, hopefully, we don't have one.
5 What's the difference between a "benchmark" and a
6 "forecast"?
7 A. (McCluskey) If you're using a forecast of energy prices
8 as a benchmark to determine whether the price is above
9 or below, there is no difference. The use of the term
10 "benchmark" is the, essentially, the same as the
11 "forecast" that you're using in that calculation.
12 Q. Do you recall earlier we talked about how you used the
13 current REC market price as a benchmark to calculate
14 your \$125 million above-market cost of RECs, do you
15 recall that?
16 A. (McCluskey) I do. And, I think I said I wasn't sure
17 what was used in that \$125 million figure. I'd have to
18 refer to my exhibits.
19 Q. Well, whatever it was that was included, it was a
20 benchmark?
21 A. (McCluskey) It was -- some benchmark was used, yes.
22 Q. On your next page of testimony, when discussing
23 "migration", you say that the current migration rate
24 "does not represent a forecast for the future but

Page 79

1 simply the current level of migration."
2 A. (McCluskey) What page was it? What page?
3 Q. That's on Page 15, Line 4. Then, you continue and
4 testify about the risk if the migration rate increased.
5 A. (McCluskey) Okay.
6 Q. My question is, why did you not testify that the
7 current REC price "does not represent the forecast for
8 the future, but is simply the current level of REC
9 price, and then point out the significant cost risk if
10 developers are unable to build new generation to
11 satisfy REC needs.
12 A. (McCluskey) Are you referring to what I said? I
13 thought we were talking about "migration", on Page 15?
14 Q. Well, I'm talking about, when you talked about
15 "migration", you used the current level, but then said
16 "it doesn't represent a forecast for the future." But,
17 when you used the benchmark for REC pricing, you didn't
18 qualify it by saying "it doesn't represent a forecast
19 with significant cost risks into the future."
20 A. (McCluskey) Cost risks? We use -- I've just said, we
21 use a forecast to determine whether the PPA prices,
22 whether we're talking about energy or RECs, is above or
23 below. But I'm not understanding where the cost risk
24 is. It's simply an estimate of how cost-effective the

Page 80

1 PPA prices are.
2 Q. Wouldn't your calculation of the cost of RECs likely be
3 more accurate to be using the forecast prices, rather
4 than today's price as a benchmark?
5 A. (McCluskey) I think that's correct. I should be using
6 the long-term forecasts, as developed by Synapse, in
7 order to determine what the above-market price is. If
8 you're saying that I used the current price, that would
9 surprise me. But I will certainly check that.
10 Q. All I can do is read what you testified to, Mr.
11 McCluskey, saying "using the current market price as a
12 benchmark", on Page 14, Line 14.
13 Let's turn to the Cumulative Reduction
14 Fund. Mr. Long described this aspect of the PPA as an
15 "innovative mechanism designed to protect customers
16 over the long term from excessively enriching the
17 developer." Are you familiar with that description by
18 Mr. Long?
19 A. (McCluskey) Sorry, I was thinking about the prior --
20 Q. Okay, let me ask you again.
21 A. (McCluskey) -- the prior discussion.
22 Q. Mr. Long described the Cumulative Reduction fund as an
23 "innovative mechanism designed to protect customers
24 over the long-term from excessively enriching the

Page 81

1 developer." Do you recall his description?
2 A. (McCluskey) I do.
3 Q. And, in a nutshell, you would agree that the Cumulative
4 Reduction Fund accumulates over or under-market cost of
5 energy from the PPA on a nominal basis?
6 A. (McCluskey) Correct. It does.
7 Q. Suppose we had the identical PPA, but it did not have a
8 Cumulative Reduction Fund. Would customers gain value
9 by the elimination of that Cumulative Reduction Fund
10 aspect?
11 A. (McCluskey) I would hope they would. So, I think what
12 you're postulating is, in these negotiations, if there
13 wasn't a cumulative reduction account, then there would
14 be a less of an obligation on Laidlaw. And, one would
15 hope that PSNH, as a result of that, would be able to
16 negotiate lower prices through the PPA.
17 Q. But, if PSNH wasn't able to negotiate lower prices
18 through the PPA, for, say, reasons of financeability,
19 would the elimination of the CRF add any value to
20 customers?
21 A. (McCluskey) Well, you seem to be -- if we weren't able
22 to renegotiate the prices, would it provide any value
23 to customers? Well, of course, it wouldn't. I've
24 argued that, if you eliminate a particular provision,

Page 82

1 which you think has little value, but it is an
2 obligation on Laidlaw to take whatever value is there
3 and apply it against the purchase price for the
4 facility, then they would look at that as something
5 that they have to meet. And, presumably, they would
6 want to cover that through higher prices for the other
7 products, for the three products.
8 Q. Potentially. But, if you're a investment banker
9 looking at the PPA, wouldn't you be more concerned with
10 having some certainty and understanding of what the
11 cash flows were going to be over the term of your
12 financing?
13 A. (McCluskey) Yes. I'm not sure what the connection is
14 between that and what we've just been discussing. But,
15 yes, if there's certainty in the prices for the
16 products, that's -- and the level of the prices are
17 such that the costs of the project can be met, along
18 with a return, then the investment bank is going to be
19 very happy.
20 Q. One of your criticisms about the Cumulative Reduction
21 Fund on Page 19 of your testimony is that it "does not
22 earn interest", is that correct?
23 A. (McCluskey) We have two criticisms, that both --
24 Q. Right. But one of them --

Page 83

1 A. (McCluskey) One is the interest and the other one is
2 the capping of the amounts that can be repaid to
3 customers.
4 Q. And, your testimony states, "Not accumulating interest
5 is a detriment to customers, and a benefit to PSNH,
6 because it requires PSNH to make a larger investment to
7 acquire the facility and a consequent higher return on
8 rate base."
9 A. (McCluskey) That's correct.
10 Q. Are you implying that PSNH purposefully designed a CRF
11 to benefit itself, rather than its customers?
12 A. (McCluskey) No, I'm not implying anything. I'm just
13 stating the fact how it works. That, if there's a
14 lower balance in the Cumulative Reduction Account, then
15 the remaining investment that is needed in order to
16 acquire the facility goes into PSNH's rate base, and it
17 earns a return on that rate base. So, to the extent
18 it's got to make a larger capital investment in order
19 to acquire the facility, it benefits from that by a
20 higher return. That's what it's in business to do, to
21 earn a return.
22 Q. Is there a certainty that, at the end of the 20-year
23 period of the PPA, that PSNH will acquire the facility
24 and put it into a cost-of-service rate base?

Page 84

1 A. (McCluskey) There's not a certainty.
2 Q. If it's not a certainty, how does that benefit PSNH?
3 A. (McCluskey) PSNH has the option to acquire the
4 facility. And, I guess the price that it has to pay,
5 less the balance in the Cumulative Reduction Account,
6 it will make a determination at that time as to whether
7 it's worthwhile making that investment, based on its
8 determination of the market value of the facility going
9 forward.
10 Q. If PSNH does not acquire the facility and put it into
11 rate base, how does it benefit from the lack of
12 interest?
13 A. (McCluskey) Well, I think the answer is obvious. If it
14 doesn't acquire the facility, there's no investment to
15 go into rate base. So, it doesn't earn a return.
16 Which leaves the question "what happens to the
17 Cumulative Reduction Account?"
18 Q. You are aware, Mr. McCluskey, that the purchase option
19 is transferable to a third party?
20 A. (McCluskey) That's correct.
21 Q. And that, likewise, the amount in the Cumulative
22 Reduction Fund are transferable to a third party?
23 A. (McCluskey) Correct.
24 Q. So, presumably, one of the answers to your question of

Page 85

1 "what happens to the Cumulative Reduction Fund?" could
2 potentially be "it gets sold, with the proceeds going
3 back to customers"?

4 A. (McCluskey) That's correct.

5 Q. In your testimony, you spent nearly the entirety of
6 Page 19, and continuing onto 20, complaining about the
7 lack of interest on the Cumulative Reduction Fund. In
8 PSNH Exhibit 9, the revised version, Item 2, Laidlaw
9 offered to accumulate interest on the Cumulative
10 Reduction amount. Last Tuesday, when you were
11 discussing this item during your direct testimony, you
12 didn't endorse that change, did you?

13 A. (McCluskey) That's correct.

14 Q. Instead, you seem to say that "the accumulation of
15 interest was not particularly of value, because the
16 benefit of the CRF is ultimately limited to the fair
17 market value of the facility at the end of the PPA."
18 Is that correct?

19 A. (McCluskey) I believe I said something to that order.

20 Q. So, after spending an entire page of your testimony
21 criticizing the PPA for not accumulating interest, and
22 insinuating that PSNH failed to negotiate such interest
23 in order to benefit itself, now that the accumulation
24 of interest has been offered by Laidlaw, you say it's a

Page 86

1 "no, never mind"?

2 A. (McCluskey) No. I'm saying that the critical factor is
3 the capping of the -- of what can be returned to
4 ratepayers. This interest that you're now willing to
5 offer customers may not be returned at all. It's
6 possible that the market value of the facility is so
7 low that it doesn't even cover the Cumulative Reduction
8 Account balance without interest. So, there's no
9 guarantee that customers would actually receive any of
10 this interest payments that the Company and Laidlaw are
11 now willing to accumulate.

12 Q. So, this gets to your testimony on Page 20, at Line 14,
13 where you testify, "I think there is a good chance that
14 the facility will have little value after the PPA
15 ends."

16 A. (McCluskey) I did testify to that, yes.

17 Q. Do you know who owns the state's existing wood-fired
18 IPPs?

19 A. (McCluskey) The names of the owners?

20 Q. Yes.

21 A. (McCluskey) No, I don't.

22 Q. Do you know if they're owned by their original owners?

23 A. (McCluskey) I don't believe so.

24 Q. Do you know if any of them were bought or sold after

Page 87

1 the plants were 20 or more years old?

2 A. (McCluskey) I know many of the IPPs were bought or
3 sold. I couldn't comment on situations regarding the
4 biomass facilities.

5 Q. Do you know how much they were sold for?

6 A. (McCluskey) I don't. I know there was a proceeding.
7 No, I don't know.

8 Q. If you don't know this information on the existing
9 wood-fired plants, how can you testify that "there's a
10 good chance the facility will have little value after
11 the PPA ends"?

12 A. (McCluskey) Because the value of the facility at the
13 end of the PPA has nothing to do with what these
14 facilities were sold for in years past. The value will
15 be determined by the market conditions in the energy
16 and capacity markets and by the RPS laws. And, it's
17 quite possible that the RPS laws may not be as
18 beneficial in the future as they are today. And, it's
19 highly likely that the wood-fired facilities will not
20 be able to compete with natural gas. So, they're
21 probably totally dependent for their value on the REC
22 stream at that time. And, we simply don't know how
23 generous the state is going to be with regard to those
24 payments.

Page 88

1 CHAIRMAN GETZ: Mr. Bersak, I think we
2 need to, at this juncture, talk about tomorrow. I'm
3 presuming you have another hour or so?

4 MR. BERSAK: Probably "or so", yes.

5 CHAIRMAN GETZ: Or so. Because we can
6 resume tomorrow morning at 9:00. We've got to finish with
7 cross, questions from the Bench, opportunity for redirect.
8 Where are you on rebuttal?

9 MR. BERSAK: I'm hoping we don't have to
10 call our witnesses back, but they will be with me just in
11 case.

12 CHAIRMAN GETZ: We'll have to deal with
13 evidentiary issues, motions -- well, striking
14 identifications, admitting evidence, and closings. You
15 are raising your hand, is there something else,
16 Ms. Amidon?

17 MS. AMIDON: Well, Mr. Chairman, given
18 the late time and the need to prepare for redirect and
19 closings, I wanted to request that we resume tomorrow at
20 10:00 a.m., instead of 9:00.

21 CHAIRMAN GETZ: Well, we have some other
22 things going on, where we would like to -- I think what we
23 would need to do is go from like 9:00 to noon. We're
24 going to need at least a couple hour break in the middle

1 of the day to attend to other things. And, so, -- and,
2 that's what we were discussing during the break, is how
3 we're going to wrap up this hearing and take care of a
4 number of other things that have to be done. So, I don't
5 know if three hours is going to take care of all of this.
6 But what we're inclined to do is start at 9:00 and work
7 our way through it. But, just letting you -- putting you
8 on notice, there may be a couple hour break, if we have to
9 come back sometime in the range of 2:00 to 3:00, depending
10 on how far we get in the 9:00 to 12:00 period.

11 So, is there anything we need to address
12 before we recess for the day?

13 (No verbal response)

14 CHAIRMAN GETZ: Okay. Hearing nothing,
15 then we'll see you at 9:00 tomorrow morning. Thank you,
16 everyone.

17 MR. BERSAK: Thank you.

18 (Whereupon the hearing adjourned at 4:33
19 p.m. and the hearing to reconvene on
20 February 9, 2011, commencing at 9:00
21 a.m.)
22
23
24

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

		2.5 (6) 16:12;37:17,18;38:18; 43:9;47:10	33 (1) 18:4	17:19,21,23;20:22; 23:11,21;24:1,8,11,24; 26:13;42:2,10,11;43:2,3
\$	0		362-F (2) 46:10;53:19	7,500 (1) 50:20
\$1 (1) 6:22	05 (1) 24:16	2:00 (1) 89:9	362-F1 (1) 36:19	70 (3) 46:3,14;49:7
\$1.6 (4) 42:4;43:4,5,24	06 (1) 24:16	2:08 (1) 4:2	362-F2 (1) 72:2	72.92 (1) 27:8
\$125 (5) 67:15,21;68:20;78:14, 17	07 (1) 24:16	20 (11) 10:20;18:11,18;19:2; 43:13,15;53:18;60:14; 85:6;86:12;87:1	362-F3 (2) 63:15;74:14	75 (4) 46:1,14;49:7;67:6
\$16.49 (1) 25:15	09-067 (1) 14:16	2003 (2) 31:3;33:4	37 (4) 24:5,6;46:20;47:18	8
\$17.51 (2) 25:5,8	1	2004 (7) 24:12,15,18;25:6; 26:9;27:11;28:7	4	8 (2) 15:8;45:21
\$2.80 (1) 33:11	1 (1) 48:9	2005 (2) 26:13,22	4 (2) 30:23;79:3	80 (4) 45:22;46:13,20;49:7
\$20.80 (1) 26:14	1,600 (6) 48:8;49:5;50:24; 68:12;69:2;70:12	2006 (2) 27:3;34:3	4:15 (1) 76:8	83 (1) 26:4
\$21.80 (3) 17:13;18:1;19:1	1.6 (2) 44:12;45:6	2007 (1) 27:6	4:33 (1) 89:18	87.5 (3) 15:21;44:10,16
\$27 (6) 39:3,13,17;43:6,11,13	1.8 (2) 22:7;25:19	2008 (2) 27:6,8	40 (1) 60:18	9
\$29.68 (1) 25:20	10 (6) 21:16,18,21;25:11; 54:10,11	2009 (1) 27:8	40s (1) 9:23	9 (4) 15:8;53:18;85:8;89:20
\$33.75 (1) 39:10	10:00 (1) 88:20	2010 (7) 24:12;33:4;39:12; 48:6,13;57:22;58:15	44 (1) 58:11	9.8 (1) 52:10
\$34 (11) 16:3;17:4;22:8;25:13; 37:16;38:17,23;39:2,7; 43:8,10	100 (2) 14:2;41:3	2011 (1) 89:20	45 (1) 24:7	9:00 (7) 88:6,20,23;89:6,10,15, 20
\$40 (1) 23:12	10-195 (1) 4:4	2012 (1) 59:15	5	90s (2) 44:22,23
\$53.32 (2) 26:5,10	12 (3) 63:4,6;76:16	2013 (1) 59:15	5 (2) 24:16;58:9	A
\$59.24 (2) 26:19,23	12:00 (1) 89:10	2014 (7) 39:18;59:15,23;60:11, 19;61:12;62:22	5.1 (1) 63:7	aberration (1) 39:6
\$63.94 (1) 27:4	13 (1) 71:2	2018 (1) 27:7	50 (4) 46:6,16,20;49:8	ability (2) 13:7;70:19
\$64.60 (1) 27:6	134 (1) 58:14	2025 (3) 9:1;48:7,14	53.76 (1) 47:22	able (11) 6:1;40:13;51:4;55:5; 66:21;67:5,7;81:15,17, 21;87:20
\$70.40 (1) 39:15	14 (14) 45:21;67:14,16,16,19, 19,20,21;68:5,11;69:2; 80:12,12;86:12	20s (1) 9:22	53.80 (1) 47:21	above (7) 7:23;10:23;22:7;30:2; 56:24;78:8;79:22
\$72.92 (1) 27:6	15 (14) 17:11,19,21,23;22:19; 26:8;27:21;37:12;67:18, 19,20,21;79:3,13	20-year (6) 15:23;16:3;17:16; 42:3;46:21;83:22	6	above-market (5) 67:15,21;68:20;78:14; 80:7
\$80 (1) 23:12	16 (1) 48:10	26.98 (1) 26:3	6 (8) 7:17;10:19;18:3; 19:11;20:21;57:22;58:4, 11	Absolutely (6) 7:4;12:7,21;40:12; 60:10;61:3
\$83 (1) 38:22	16 (1) 48:10	3	6.1.2 (2) 21:4,16	abundance (1) 50:10
[17 (3) 12:23;63:4,6	3 (4) 7:17;42:2,10;54:12	60 (1) 60:15	accept (8) 19:8;24:21;26:17,21; 27:3;48:12;72:1,9
[33] (1) 18:3	17.51 (1) 25:12	3:00 (1) 89:9	63 (1) 27:5	accordingly (1) 69:14
[6] (1) 18:4	19 (8) 27:21;28:1;32:7,12; 35:5;37:10;82:21;85:6	3:54 (1) 76:7	63.94 (1) 27:6	account (6) 43:6;81:13;83:14;
[indicating] (1) 22:24	2	30 (5) 18:11,15;30:23,24; 61:4	65 (1) 7:9	
[is (1) 22:4	2 (7) 12:23;31:2,20;32:8, 16;71:2;85:8	30s (1) 9:22	7	
[period] (1) 42:3			7 (16)	
[renewable] (1) 77:19				

DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER

84:5,17;86:8 accumulate (2) 85:9;86:11 accumulates (1) 81:4 accumulating (2) 83:4;85:21 accumulation (2) 85:14,23 accurate (8) 7:13;8:3,17;38:22; 40:6,7;41:2;80:3 achieve (2) 55:9;70:6 achieved (1) 55:23 achieving (1) 55:11 acknowledge (1) 18:3 ACP (29) 46:9,14,22,24;47:1,3, 4,7,12,15;49:8;51:24; 56:20,24,24;63:3;65:10, 10,14,19;66:2,6,10,12, 13,13,16,22;67:6 acquire (8) 74:16;83:7,16,19,23; 84:3,10,14 acquisition (1) 41:18 actual (14) 6:20;7:13;8:9,10; 15:19,22;18:9;22:8,16; 31:9;35:6;43:19,20;72:7 actually (16) 6:22;8:14;9:10;18:8; 19:14;22:14;27:15;31:1; 35:3;37:3;41:14;42:24; 62:18;74:23;75:18;86:9 add (2) 44:18;81:19 adding (1) 60:8 additional (6) 5:8,11;11:4;54:1,15; 55:21 address (2) 4:4;89:11 addressed (1) 13:14 addresses (1) 53:11 adjourned (1) 89:18 adjust (1) 66:5 adjusted (6) 8:11;21:2,8,22;22:4; 42:19 Adjustment (12) 17:1,9;19:18,19;20:2, 6,16;21:22;22:2,5,7;	37:18 adjusts (1) 38:3 admitting (1) 88:14 adopting (1) 34:23 ads (1) 35:20 advised (2) 57:3;65:17 advisors (1) 57:8 advocates (2) 57:4;66:8 affect (2) 7:10;10:14 afford (1) 57:17 afternoon (5) 5:18,19,21;22:18; 54:15 Again (15) 9:8;10:19;16:3;34:15; 37:9;41:24;48:21;52:1; 60:1;61:9;63:5;67:2,3; 68:16;80:20 against (6) 14:15;20:15;34:7,22; 35:13;82:3 agree (21) 4:11;11:19;13:6; 19:11;20:5;21:5;22:13; 25:24;26:1,4;33:7; 34:23;39:14,24;40:9; 41:22;44:2;47:19;51:19; 54:15;81:3 agreed (4) 19:5;35:7,7;43:18 agreeing (1) 37:3 Agreement (5) 6:4;15:16;52:12; 60:12;70:9 ahead (1) 5:3 Alexandria (1) 10:4 Almost (1) 69:12 along (3) 60:8;62:18;82:17 Alternative (9) 11:14;46:9,16;51:20; 56:4,7;61:1,17;67:4 alternatives (1) 66:15 always (2) 35:18;36:10 amended (1) 27:21 Amidon (8) 5:4,5;34:9;49:15;73:9;	75:12;88:16,17 amongst (1) 29:4 amount (6) 17:14;25:22;26:2; 45:11;84:21;85:10 amounts (1) 83:2 analysis (17) 7:20;9:4;13:1;15:21; 33:21;37:4,21;38:5; 44:16;59:1;61:21;62:5, 7,11,14;69:18,21 annual (6) 23:14;25:4,5;32:20; 37:18;39:18 annually (3) 37:17;38:18;43:9 annum (1) 16:13 anticipated (2) 18:21;19:13 apologize (1) 68:18 appear (3) 30:1,2;69:15 appeared (1) 52:7 appears (8) 17:15;23:5,10;29:11; 33:5;49:19;59:12;72:13 appended (1) 57:20 applicable (4) 45:23;46:2,4,6 apply (1) 82:3 Appreciate (3) 20:19;26:23;66:19 approach (1) 41:17 approaches (1) 40:3 appropriate (1) 62:13 approval (3) 6:4;48:7;70:16 approve (1) 53:5 approved (2) 60:13;70:9 approximately (4) 7:8;33:19;42:4;43:4 area (1) 8:10 argue (1) 78:3 argued (1) 81:24 argument (2) 35:1,3 around (1) 17:11	arranged (1) 5:9 arrive (2) 67:22;68:20 Article (1) 63:7 aside (2) 5:2;30:11 aspect (2) 80:14;81:10 associated (1) 71:5 Associates (1) 33:16 Association (1) 31:22 Association's (1) 31:24 assume (1) 52:16 assumed (5) 17:4;19:3;44:11;47:1; 69:21 assuming (1) 53:10 assumption (7) 16:11;37:14,16;38:19; 45:17;68:14;69:4 assumptions (6) 6:12;40:4;45:13,17, 18;75:14 Attached (1) 31:2 Attachment (16) 23:21,24,24;24:8,11, 24;26:12;31:2,19;32:7, 16;37:24;43:22;57:21; 58:4,11 attempt (1) 19:9 attempted (1) 19:6 attend (1) 89:1 Atty (1) 27:16 availability (1) 67:14 available (5) 20:11;24:1;30:21; 53:1;62:16 average (14) 16:3;22:8,16;23:14; 25:1,5;26:13;29:16; 31:11,20;32:1;33:6; 39:10,18 averages (1) 32:20 aware (12) 14:13,18;20:11,14; 21:2;34:4,10;39:1; 41:10,13;64:23;84:18 awareness (1)	33:15 <hr/> B <hr/> back (8) 4:3;5:1;35:5;37:9; 65:14;85:3;88:10;89:9 back-end (1) 38:6 bad (1) 38:19 balance (3) 83:14;84:5;86:8 ballpark (1) 33:7 bank (1) 82:18 banker (1) 82:8 bankers (1) 14:9 banks (1) 13:21 Base (20) 16:24;17:7,9;21:2,8, 22;22:4,5;25:12,23; 26:3;38:17;39:8;43:21; 83:8,16,17,24;84:11,15 based (31) 8:9,10;12:5;20:2; 30:16;31:9;33:14;35:9; 39:8,9;40:10;41:15,18; 43:8,16;44:20;45:13,16, 18;49:17;71:8,16;72:4,7, 17,22;75:10;76:16;77:1, 16;84:7 bases (1) 34:6 basically (4) 7:17;12:24;13:23;26:3 basing (1) 72:10 basis (3) 15:1;18:13;81:5 Bates (1) 58:11 becomes (1) 12:16 beginning (3) 12:22;30:23,24 begun (1) 34:1 behalf (1) 14:10 behavior (1) 67:10 behind (2) 56:2;70:17 behind-the-meter (2) 60:24;61:5 below (7) 30:1;51:16;57:15; 62:4;67:12;78:9;79:23
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**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

Bench (1) 88:7	4:8,8,13,14,18	55:20;87:16	32:21;37:11;38:11; 57:20,22;58:17,19;59:7, 12,16;60:10,19;61:16; 62:1,5	Compare (5) 22:20;29:18,22;32:5, 15
benchmark (15) 67:23;68:4,5,8,20,23; 78:5,8,10,13,20,21; 79:17;80:4,12	bright (1) 57:3	capital (3) 13:18;19:16;83:18	check (3) 26:21;27:3;80:9	compared (6) 9:19;29:15;30:10,12; 36:12;43:21
beneficial (1) 87:18	build (3) 53:6;65:20;79:10	capped (1) 63:3	chose (1) 70:14	comparing (1) 31:4
benefit (6) 83:5,11;84:2,11; 85:16,23	built (10) 7:8;9:16;13:24;30:8; 50:6,21;54:5;55:4; 56:11;57:7	capping (2) 83:2;86:3	cited (1) 36:20	comparison (1) 29:13
benefits (2) 6:3;83:19	buried (1) 75:13	care (2) 89:3,5	claimed (1) 30:9	compete (4) 54:3,17;55:2;87:20
Berlin (2) 7:9;70:18	burn (2) 24:17;28:20	carefully (1) 70:15	clarification (2) 28:4;71:1	competitive (5) 11:5,11,11;54:18;57:7
Bersak (28) 4:5;5:16,17,20,23; 27:16,17,20;28:4,5,9,14, 19,22;29:1;34:17,18; 49:20;73:9,11,13;76:10, 11,12;88:1,4,9;89:17	Burton (1) 5:8	Carolina (1) 33:23	clarity (1) 73:10	complaining (1) 85:6
beside (1) 49:11	Burton's (1) 5:6	case (10) 29:12;33:11,12;34:4; 37:5;54:21;58:17;65:18; 72:2;88:11	Class (24) 9:2,11,16;10:2,3,5; 48:2,8;49:4,12;50:4,7, 22;55:5;63:9,17;65:1; 68:10,12,24;69:3,16; 70:11,13	complaint (2) 14:14;15:2
best (2) 12:16;41:23	business (4) 40:19;61:4;67:9;83:20	cash (1) 82:11	classes (1) 64:24	completed (1) 27:15
better (2) 9:5;44:10	businesses (1) 40:15	castigation (1) 12:8	Clean (3) 14:16,22;15:2	Compliance (9) 11:14;46:9,16;51:21; 56:4,7;61:1,17;67:5
big (2) 38:8;69:11	buyer (1) 41:21	certain (6) 6:13;36:15;64:1; 69:12;72:17;76:19	clear (1) 70:14	comply (1) 64:9
billion (4) 42:4;43:4,5,24	buying (1) 28:23	Certainly (7) 14:1,19;16:19;54:21; 58:2;69:17;80:9	Clearly (2) 15:16;16:15	complying (1) 64:19
biography (1) 14:4	C	certainty (6) 40:2;82:10,15;83:22; 84:1,2	clearer (1) 39:21	component (7) 17:3,5,6,10;18:8;33:9; 69:20
Biomass (8) 9:13,19;44:14;49:11, 23;54:21;55:1;87:4	calculate (3) 21:8;45:19;78:13	certificate (5) 71:22;73:2;74:9; 77:11;78:1	closing (2) 4:18,22	components (2) 17:2,8
bit (3) 12:1;23:4;41:13	calculated (2) 20:23;31:6	certificates (2) 77:19,20	closings (2) 88:14,19	composed (1) 16:24
block (1) 60:14	calculation (7) 21:10;29:8;43:8,23; 44:11;78:11;80:2	certificator (1) 6:7	collect (1) 17:16	computation (1) 74:24
blue (7) 23:5;26:7;29:3,5,20; 32:6,12	calculations (3) 22:12;23:18;26:18	CHAIRMAN (25) 4:3,6,17,21;5:13,16, 17;27:22,23;34:9,12; 49:15,19;75:14,18,23; 76:3,10,11;88:1,5,12,17, 21;89:14	collected (1) 18:12	computed (1) 21:23
book (1) 49:16	call (5) 12:9;38:21;55:23; 65:1;88:10	chance (3) 57:19;86:13;87:10	collection (1) 18:22	concern (1) 42:18
borne (1) 73:23	called (2) 21:1;77:8	change (9) 7:3,9;10:12;17:14; 43:10;59:2,3;74:1;85:12	column (1) 24:24	concerned (2) 75:19;82:9
both (7) 7:5;14:21,21;19:1; 33:1;41:21;82:23	came (2) 52:18;57:22	changed (2) 8:15;66:9	combination (1) 55:11	concerning (1) 52:2
bottom (5) 20:21;25:3;31:19; 58:10,14	can (31) 4:6;6:9;8:15;13:15; 17:6;23:3;26:7;27:3,14, 22;34:13;40:2,5,9; 49:16;57:17;59:8;60:23; 62:13;64:19;65:4;69:12; 71:2;76:5;78:3;80:10; 82:17;83:2;86:3;87:9; 88:5	changes (3) 8:12;43:11;59:14	coming (2) 60:7;66:6	concerns (2) 52:7,17
bought (2) 86:24;87:2	cap (4) 56:8,13,16,19	Charge (3) 16:24;17:15;19:7	commencing (1) 89:20	conclusion (3) 7:18;34:13,16
break (6) 5:7;75:15,16;88:24; 89:2,8	capability (1) 44:17	charged (2) 72:22;73:19	comment (4) 32:23;34:16;61:14; 87:3	conclusions (1) 34:19
Brief (3) 76:1,6;78:3	capacity (18) 9:20,21;15:19,19,22; 38:2,5,9,10;44:10,15,23; 45:5,52:8,18;53:1;	charges (1) 17:24	Commission (10) 4:16;11:15;12:11,18; 14:14;41:7;47:11,14; 48:7;53:5	Concord (15) 14:17,21;15:1;24:14; 28:13;29:9,11,18;30:16; 31:15,18;32:5;33:14; 36:6;58:6
briefing (1) 4:12		chart (25) 22:24;29:4,21;30:4, 18;31:3,7,16,17,18;	Company (10) 14:15;16:10;30:16; 32:21;38:16,21;43:5; 47:9;70:18;86:10	conditions (5) 56:15,16;70:17,24; 87:15
briefs (5)			Company's (1) 38:12	confident (1) 50:8
				connect (1) 29:2
				Connecticut (1)

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

75:7 connecting (1) 29:21 connection (1) 82:13 consequent (1) 83:7 consider (1) 61:20 consistent (4) 35:12;42:21;63:9; 64:13 constant (3) 17:14;47:16,23 constitutes (1) 74:24 constraint (1) 12:14 constraints (3) 12:14;52:3,23 constructed (1) 9:11 construction (1) 40:15 Consultant (1) 33:19 consulting (1) 33:16 consumed (2) 73:21,21 Consumer (3) 47:13,15;75:7 consumers (2) 12:6;41:11 contained (3) 7:18;9:9;72:14 continue (2) 46:7;79:3 continues (3) 49:1;54:8;69:16 continuing (2) 20:21;85:6 contracts (2) 13:13;41:17 contract's (1) 7:23 conventional (1) 54:3 conversion (3) 21:12,24;25:19 converted (1) 24:17 Coos (1) 52:3 copy (3) 5:8;23:24;26:8 Corporation (1) 24:14 corrected (1) 64:20 correctly (1) 31:14 cost (27)	15:9,15;17:9;20:7; 33:9;42:8,14;43:6,11; 56:19,23;64:10;67:15, 21;68:21;71:5,10;73:16, 18,23;78:14;79:9,19,20, 23;80:2;81:4 cost-effective (1) 79:24 cost-of-service (1) 83:24 costs (38) 10:13;13:18,22;15:22, 23;16:20;17:3,7,16;18:5, 7,7,9,12,20;19:3,4,6,10, 12,16;20:10;21:12;22:1; 34:8,22;36:21;40:22; 41:11;43:19;44:3;45:4, 5;55:7,12,14;74:7;82:17 Councilor (2) 5:6,8 couple (2) 88:24;89:8 course (7) 4:15,17;44:6;46:19, 21;47:17;81:23 Court (3) 54:23;75:15,19 cover (7) 13:22;19:9;41:20; 55:6,21;82:6;86:7 covered (3) 13:20,21;55:19 covering (1) 55:12 create (5) 4:13;7:8;10:22;11:23; 37:7 created (2) 41:11;51:2 creating (1) 10:20 CRF (3) 81:19;83:10;85:16 critical (2) 59:11;86:2 critically (1) 15:18 criticisms (2) 82:20,23 criticized (1) 38:1 criticizing (2) 38:18;85:21 cross (2) 76:5;88:7 cross-examination (3) 5:3,22;52:2 crucial (1) 13:7 Cumulative (15) 80:13,22;81:3,8,9,13; 82:20;83:14;84:5,17,21; 85:1,7,9;86:7	current (13) 49:24;67:23;68:3,4, 19;78:13,23;79:1,7,8,15; 80:8,11 currently (1) 44:14 curtail (1) 52:11 curtailed (1) 52:19 curtailment (1) 52:15 customer (3) 72:13;74:13;77:3 customers (26) 53:7,16;63:20;71:4, 11,12,19,20;73:18,22, 23;74:17;76:18,23;77:5; 80:15,23;81:8,20,23; 83:3,5,11;85:3;86:5,9	definitions (1) 72:14 degree (1) 10:16 delays (1) 4:12 delivered (19) 52:15,20;71:4,9;72:4, 12,19,23;73:17,20,22; 74:20;75:11;76:17,22; 77:1,5,16,21 deliveries (1) 52:11 delivery (1) 42:6 demand (11) 6:18,22;8:14;50:24; 51:2,5,5;58:22;65:9; 69:8;70:3 demands (2) 9:7;62:12 demonstrate (3) 32:17;36:10;40:13 demonstrated (2) 44:16;50:9 DENO (1) 27:19 depend (4) 15:18;48:19;50:17; 59:18 dependent (3) 7:7;8:8;87:21 depending (8) 8:10,13;17:6;43:21; 51:1;59:3;75:2;89:9 depends (4) 8:19;9:20;40:19;61:9 depicted (3) 23:7,11;59:16 depicting (2) 38:11;59:12 depicts (2) 31:7;58:20 derived (1) 49:23 described (7) 6:10;11:3;27:24; 46:12;55:17;80:14,22 description (2) 80:17;81:1 designed (3) 80:15,23;83:10 detailed (1) 51:11 determination (2) 84:6,8 determine (7) 37:4;73:18;74:20,21; 78:8;79:21;80:7 determined (7) 29:14;31:20;51:13; 61:24;74:12,19;87:15 determines (1)	66:2 detriment (1) 83:5 develop (5) 13:12;16:10;45:14; 53:4;59:19 developed (7) 50:15;52:24;53:2; 59:15,17;60:18;80:6 developer (11) 13:16;14:6,7,10; 19:13,17;53:6,8;70:5; 80:17;81:1 developers (7) 50:10,13;59:21;60:2; 65:15,20;79:10 developing (3) 13:19;18:24;40:12 development (9) 7:7;14:16,22;31:16; 52:23;56:5;57:11;58:23; 65:11 Development's (1) 15:2 difference (6) 25:18;30:6;38:8;71:6; 78:5,9 differences (1) 75:10 different (2) 51:12;58:23 differently (2) 18:21;19:12 difficult (4) 21:10;32:19;69:16,17 direct (2) 43:2;85:11 directly (2) 6:17;14:9 disagree (5) 34:5;36:16,16;58:19; 59:7 disagreeing (1) 37:3 disaster (1) 40:20 discount (1) 47:3 discovery (1) 68:1 discretion (1) 4:16 discuss (2) 15:8;20:22 discussed (6) 23:21;25:10;28:10; 39:1;49:6;61:11 discussing (4) 78:22;82:14;85:11; 89:2 discussion (4) 6:3;48:5;76:1;80:21 distributing (1)
		D		
		data (5) 7:1;8:8,20;23:21;39:6 dated (1) 34:2 day (2) 89:1,12 days (1) 41:5 DE (2) 4:4;14:16 deal (1) 88:12 dealing (1) 12:19 dealt (1) 14:9 decided (2) 38:17;53:6 decision (2) 12:20;28:24 decision-making (2) 40:17,23 decisions (3) 40:14;41:1,4 decline (1) 16:16 decrease (4) 20:8;46:21;47:18,24 decreased (2) 16:1,2 Default (1) 77:15 define (2) 49:12;71:21 defined (1) 46:8 defines (2) 50:4;74:8 definition (2) 40:7,8		

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

27:16 distribution (6) 71:5,6,9;76:17,21; 77:4 docket (4) 14:14,15;15:3,7 Docketbook (1) 5:10 document (2) 27:24;33:23 documents (1) 27:16 dollar (2) 44:7,12 dollar-for-dollar (2) 18:13,22 dollars (7) 21:12,13,24;22:8; 25:1;47:16;61:10 done (10) 4:24;8:14;9:4;37:4; 41:18;57:13;69:17,18; 75:1;89:4 dot (4) 26:7,9,22;27:4 dots (4) 27:9;29:2,21;32:13 doubt (1) 57:2 down (11) 10:19;15:23;16:21; 17:22;20:8;22:4;32:24; 43:20;46:20;47:23;70:1 downs (1) 69:13 downward (1) 69:15 Dr (4) 7:6,19,20,22 driving (1) 42:15 drop (2) 43:6;45:4 drops (1) 46:19 due (1) 52:15 during (15) 24:15;33:4,24;35:15; 38:13;41:5,9;44:6; 45:24,24;46:2,5;48:13; 85:11;89:2 dyslexia (1) 67:17 dyslexic (1) 17:22	early (4) 28:20;41:5;60:4,4 earn (4) 13:3;82:22;83:21; 84:15 earns (1) 83:17 easier (1) 23:4 easily (1) 66:23 economic (10) 6:3,12,14;7:14;8:4,16; 12:8,14;55:14;66:12 economically (1) 54:2 economics (1) 12:13 economists (1) 12:2 economy (4) 6:16;10:22;48:20,24 Edwards (2) 9:24;52:1 Edwards' (1) 52:17 effect (7) 10:17;47:5;51:24; 54:19;56:17;76:20,23 effectively (1) 18:12 effects (1) 6:21 efficiency (1) 48:23 Either (4) 9:14;20:17;64:5;67:24 electric (3) 48:15;50:2;62:19 electricity (7) 10:24;22:21;30:13; 63:16,19;71:18;74:16 electricity-using (1) 10:24 element (1) 13:7 eligible (1) 55:15 eliminate (1) 81:24 elimination (2) 81:9,19 else (5) 5:14;38:19;49:11,14; 88:15 elsewhere (2) 35:4;50:3 emission (1) 53:21 enacting (1) 36:20 end (8) 23:22;38:2,7;48:24;	70:19;83:22;85:17; 87:13 endorse (1) 85:12 ends (2) 86:15;87:11 end-use (8) 63:19;71:4,18,20; 74:17;76:18;77:2,5 energy (74) 8:2,17;16:11,17,23,24; 17:2,10,13;18:13;20:22; 21:1;22:20;23:6,8;25:9, 9;26:3,19;28:16;29:7,10, 13,14,16,18,19,22;30:3, 10;31:3,4,5;33:5,10; 35:7,9,10;36:11,21; 37:13,23;38:11;39:15, 16,19,22;43:18;48:16, 23;49:22,24;53:15; 54:18;55:19;56:21; 57:12;69:22,23;70:4; 71:3,21,24;72:22,24; 74:8,11;77:11,18,19; 78:7;79:22;81:5;87:15 England (11) 8:22;31:4;38:10; 51:14;52:13;57:23; 58:15,19;59:7;61:22; 64:23 enhance (1) 10:10 enormous (1) 51:23 enough (2) 9:6;52:7 enriching (2) 80:16,24 ensued (1) 76:2 ensure (3) 55:22;56:10;65:21 ensuring (1) 55:12 entice (1) 65:20 entire (2) 11:8;85:20 entirety (1) 85:5 entities (4) 14:21;48:17;57:1; 64:16 entitled (2) 25:1;33:21 entity (5) 48:1;62:24;64:4; 71:16;77:10 entry (1) 56:23 environment (1) 48:23 equity (2)	13:20;14:2 essence (1) 77:4 essentially (4) 17:8;31:12;65:13; 78:10 establish (1) 41:23 established (4) 6:9;41:14;55:8;56:13 estimate (3) 44:8;45:13;79:24 estimated (2) 17:16;19:9 Even (4) 7:12;41:1;51:1;86:7 everyone (1) 89:16 evidence (1) 88:14 evidentiary (1) 88:13 exactly (1) 41:8 example (5) 7:9;10:12;38:3;51:10; 60:14 exceed (5) 63:17,24;64:3,5,17 exceeding (2) 64:18;67:10 excess (3) 64:11;66:22;67:8 excessive (1) 42:23 excessively (2) 80:16,24 excluding (1) 39:11 exhibit (18) 22:18,19,22;26:8; 27:18,21,21;28:1;32:6,7, 12;33:18;35:5;37:10,12; 38:12;60:5;85:8 exhibits (2) 38:21;78:18 existing (3) 10:1;86:17;87:8 expect (4) 7:2;18:5;51:3;55:13 expectation (1) 53:24 expected (3) 54:16;59:23;60:11 expecting (1) 16:21 expense (1) 4:13 experience (2) 14:5,7 experiencing (1) 36:6 explain (1)	65:7 explained (1) 30:17 exposure (1) 36:22 extended (1) 44:22 extension (1) 11:22 extent (5) 10:11;14:19;15:20; 73:19;83:17 extreme (2) 60:15,16 extremely (1) 7:12
E			F	
earlier (10) 24:15;28:10,11;38:13, 22;49:6;54:14;55:17; 66:1;78:12	face (1) 71:12 facilities (9) 9:13,21;10:3;40:15; 44:14;55:1;87:4,14,19 facility (25) 7:8;13:2;15:20;17:17; 42:5;44:9;52:10;53:7; 54:21;63:8;70:19;82:4; 83:7,16,19,23;84:4,8,10, 14;85:17;86:6,14;87:10, 12 fact (10) 7:4,23;25:23;31:17; 37:4;52:19;64:9;69:22, 24;83:13 factor (12) 9:20,21;15:19,19,22; 25:19;37:19;38:4;44:11, 23;45:5;86:2 factors (8) 42:15;44:15;45:4,7,9; 48:20;70:3,3 failed (1) 85:22 fair (3) 4:9,11;85:16 fairly (1) 8:15 fall (1) 69:20 falling (1) 47:5 familiar (8) 7:6;8:22;9:10;14:1; 15:5;33:23;58:18;80:17 familiarity (2) 8:24;61:3 far (2) 39:24;89:10 faster (1) 16:16 favorably (5) 29:15,18,23;30:10,13			

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

feasible (1) 54:2	force (3) 54:6;56:15;70:1	80:14,22;81:4,8,9; 82:21;84:22;85:1,7	8:20;20:8,8;83:16	84:16;85:1
February (1) 89:20	forecast (20) 8:18;10:7;38:6,10,20; 40:3,5,6,12;41:14,19; 78:6,7,11,24;79:7,16,18, 21;80:3	fundamentally (1) 7:21	Good (12) 5:18,19,21;8:8,20; 28:23;51:10;56:10; 57:13;75:16;86:13; 87:10	happy (1) 82:19
feel (3) 62:12;70:21,23	forecasts (9) 8:3;40:16;41:1,3,5,15, 16;48:22;80:6	further (1) 32:23	Granite (1) 77:13	hard (1) 65:6
few (1) 41:17	foresight (3) 40:8,9;41:3	Furthermore (1) 31:9	graphed (1) 29:20	hardly (2) 37:21;38:4
figure (7) 44:12;45:8;47:22; 49:5;50:19;76:13;78:17	form (1) 77:18	future (10) 8:4;35:23;36:21;40:1; 67:13;78:24;79:8,16,19; 87:18	graphs (1) 33:1	HATFIELD (2) 4:6,20
file (1) 5:9	formula (7) 21:7;25:10;26:19; 28:16;29:14;35:8;39:16	G	greater (2) 10:17;15:17	heading (1) 30:4
filed (3) 5:10;6:4;48:6	forth (1) 46:10	gain (1) 81:8	green (4) 27:10;32:7,15;37:10	hear (2) 35:19;37:1
filing (2) 5:11;14:20	Forty-five (1) 24:7	gas (3) 49:23,24;87:20	GRM-1 (2) 14:4;33:18	heard (5) 35:1,2,3;48:5;54:14
final (7) 6:18,22;8:14;15:10, 12;34:2;46:15	Forty-four (1) 58:13	gave (1) 26:7	group (1) 10:24	Hearing (6) 4:2;76:8;89:3,14,18, 19
Finally (1) 46:4	forward (6) 38:10,15;50:13;51:9; 66:6;84:9	general (7) 19:23;20:1;32:22,24; 34:13;36:14;46:12	grouping (1) 25:4	heating (2) 50:1,2
financeability (1) 81:18	fossil (1) 36:22	generally (1) 57:5	grow (5) 16:12,15;65:1;68:10; 69:1	hedge (3) 34:7,22;35:13
financed (8) 13:10,15;14:2;65:4,8, 16,21,24	founded (1) 11:8	generate (1) 55:5	growing (1) 19:12	help (2) 40:16;41:4
financial (1) 13:21	fraction (3) 66:12,16,22	generated (7) 9:7;15:17;65:18; 71:23;72:8,11;74:10	grows (2) 49:4;50:24	Hence (4) 32:4;43:20;68:11;69:1
financing (7) 13:3,7,17,23;14:10; 15:4;82:12	frame (2) 23:10;33:4	generating (5) 51:18;54:3;71:24; 74:11;75:1	Growth (3) 48:20;51:1,5	hereto (1) 31:2
find (4) 5:9;44:21;57:14;76:14	frankly (1) 75:14	generation (15) 11:6;49:11;50:6;52:8, 18;53:21;56:6;57:4; 60:21;65:4;68:13;69:3; 70:11;78:2;79:10	guarantee (2) 19:8;86:9	herewith (1) 28:1
finding (2) 23:1;34:5	Frantz (35) 5:20,21,24;6:5,8,15; 7:4,11,16;8:1,5,7,19,23; 9:4,8,13,15,20;10:3,6, 11;11:2,7,9,13,17,20; 12:1,4,7,13,21;25:16; 54:14	generator (2) 56:21;75:3	guess (2) 53:17;84:4	high (3) 9:22;44:18;60:16
finish (8) 16:15;30:12;35:21,21; 36:1;47:1;69:7;88:6	front (1) 47:4	generators (1) 54:17	H	higher (17) 10:16;15:10,14;16:5; 18:8;39:23;44:12,15; 45:2,3,8;71:13;76:23; 77:6;82:6;83:7,20
firm (2) 33:16;61:21	fruition (1) 52:18	generous (1) 87:23	half (1) 46:20	highly (2) 8:7;87:19
first (5) 25:11;39:18;45:22; 46:13;59:9	fuel (30) 16:12,20;17:3,3,5,8,9, 9;18:7;21:12;22:1;28:6; 30:16;31:15;33:9,14; 34:7,22;35:15,17;36:9, 22;43:6,10,15,19;44:3; 45:4,4;55:4	geographic (1) 75:10	Hampshire (13) 10:14;12:11;14:15; 31:21;48:15,18;49:12; 50:7,16,22;70:11;75:7; 77:12	hinder (1) 56:5
five (9) 27:1;45:22;46:1,3,5, 13,14,15,15	fuels (3) 40:15;41:18;49:23	geothermal (1) 49:22	Hampshire's (1) 53:20	hired (3) 61:20;62:19,21
fixed (1) 18:7	fulfill (1) 50:7	gets (3) 65:21;85:2;86:12	hand (2) 65:12;88:15	Historic (3) 22:21;30:13;39:22
flat (1) 69:10	full (3) 14:22;19:8;66:13	GETZ (17) 4:3,17,21;5:13,16; 27:23;34:12;49:19; 75:18,23;76:3,10;88:1,5, 12,21;89:14	handed (1) 32:14	historically (2) 28:16;29:8
flawed (1) 7:21	fully (1) 70:17	given (2) 68:14;88:17	handle (1) 52:8	hit (1) 66:11
flawedbut (1) 7:22	Fund (9)	goal (1) 13:12	hands (1) 40:17	hope (3) 61:12;81:11,15
flows (1) 82:11		goals (1) 12:17	happen (1) 66:10	Hopefully (3) 5:24;18:18;78:4
focal (1) 12:24		goes (4)	happened (1) 75:21	hoping (1) 88:9
follow (2) 12:11;37:7			happening (3) 47:2;54:19;66:7	hot (2) 50:1,2
follows (1) 21:23			happens (5) 44:24;48:12;59:3;	hour (3) 88:3,24;89:8
				hours (1) 89:5
				households (1) 6:18

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

huge (1) 42:7	10:15;11:1;12:6	50:1;66:13;72:10; 85:14;88:20	67:13	24;86:10
hydrogen (1) 49:22	incorrect (1) 10:8	instituting (2) 34:6,21	issue (4) 4:23;12:2;64:22;70:22	lane (1) 18:1
hypothetical (4) 63:2;65:19,22;67:1	6:21;15:20;17:4,6; 20:6;47:23;66:9;68:12; 69:2;70:11,13	institutions (1) 13:21	issued (1) 41:7	large (4) 7:12;10:1,3;30:21
I	increase/decrease (1) 28:15	insufficiency (2) 55:18,22	issues (3) 13:14;42:22;88:13	larger (3) 51:1;83:6,18
idea (4) 28:23;40:18;56:9;75:9	increased (3) 48:14,15;79:4	insufficient (5) 54:4;60:20,20;65:9; 66:5	Item (2) 85:8,11	last (12) 22:18;23:17;24:3,24; 38:1;39:9,11,12;42:21; 47:21;52:1;85:10
identical (2) 32:9;81:7	increasing (10) 34:7,22;37:17;38:17; 43:9;47:3;49:8;62:3; 69:8;74:6	intended (6) 20:6,9;37:12,22;38:9; 65:11	iv (1) 34:20	late (3) 22:18;34:2;88:18
identification (1) 28:2	incremental (1) 61:9	interconnect (1) 52:9	J	later (1) 18:11
identifications (1) 88:14	incurred (2) 13:19;73:16	interconnection (1) 52:12	January (1) 39:5	latest (1) 48:22
identifies (2) 71:22;74:9	index (6) 19:20;20:2,5,13; 47:13,16	interest (16) 12:24;13:8;42:17; 82:22;83:1,4;84:12; 85:7,9,15,21,22,24;86:4, 8,10	job (1) 57:13	Laughter (1) 75:22
ie (1) 71:6	indicate (2) 36:7;51:6	interpret (1) 72:6	jobs (3) 7:9;10:15,18	law (27) 11:8;12:9;34:6,21; 37:7;47:11;48:1,3,9; 50:3;51:3;54:16;56:3; 64:4,9,14,15,19;71:15, 21;72:3,6,7,15;74:2,8,24
ifs (1) 16:18	indicated (4) 44:13;65:16;71:13; 76:24	interpretation (1) 8:21	juncture (1) 88:2	laws (4) 12:6;64:24;87:16,17
II (1) 6:10	indicates (1) 33:18	interrupted (1) 36:2	K	leakages (1) 8:12
III (2) 10:3;72:2	indicative (2) 16:11;35:23	interruption (1) 54:23	keep (4) 51:2,4;70:12;75:8	least (3) 14:2;68:12;88:24
imagine (1) 65:6	indices (1) 41:20	intersection (1) 26:9	keeps (1) 69:8	leave (3) 10:24;12:6;42:1
impact (5) 7:14;10:9;53:7;61:6; 70:5	indulge (1) 23:19	intertwined (1) 29:3	key (1) 15:1	leaves (1) 84:16
implementation (1) 41:6	industries (4) 6:17,17,24;8:11	intervenors (1) 14:23	kind (8) 24:16;28:14;40:23; 56:10;57:5;59:5;61:9; 66:18	led (1) 41:6
implies (2) 68:9,24	industry (4) 6:23,24;8:14;61:3	into (15) 7:1;10:12;19:4;41:16; 43:6,16;51:24;56:17,23; 66:23;79:19;83:16,24; 84:10,15	knees (1) 49:1	left (4) 23:7,9;24:8;76:13
implying (2) 83:10,12	inflation (4) 19:3;37:19;38:4;47:7	investment (11) 14:9;35:20;53:20; 54:7;82:8,18;83:6,15,18; 84:7,14	knowledge (1) 14:19	left-hand (1) 32:12
important (5) 30:6;40:18;41:20; 69:20;70:3	information (2) 20:12;87:8	investor (1) 55:8	known (2) 29:9,9	legal (2) 9:7;49:3
importantly (1) 28:17	initial (1) 59:9	investors (1) 13:20	knows (4) 40:1;45:6;48:24;49:1	legislation (1) 66:9
imports (1) 60:24	initiating (1) 15:2	involved (1) 77:14	L	legislatively (1) 70:12
imposed (1) 70:24	innovative (2) 80:15,23	involving (2) 14:14,16	labeled (1) 57:21	legislators (3) 57:3,8;65:17
improving (1) 45:5	input (4) 6:12;7:1,10;8:8	IPPs (2) 86:18;87:2	Labrecque (1) 30:21	Legislature (6) 36:16,20;37:6;56:9, 18;74:1
incentive (5) 11:16,18;44:19;50:12; 51:9	input/output (8) 6:11,15,19;8:4,7,16; 10:9,12	ISO (6) 59:11,23;60:19;61:16; 62:8,22	Labrecque's (2) 37:24;43:22	Legislature's (2) 36:23;37:2
inclined (1) 89:6	inputs (3) 7:13;40:11;41:21	ISO-New (7) 31:4;38:10;52:12; 57:22;58:15,19;59:7	LaCapra (6) 33:15,19,21;34:5,19; 35:3	length (1) 4:22
include (1) 33:10	insert (1) 27:10	ISO's (1)	lack (2) 84:11;85:7	less (15) 10:13;11:1;12:6; 16:16;25:23;31:8;33:6; 35:8;36:11;47:17;57:17; 69:14;75:5;81:14;84:5
included (3) 49:13;53:15;78:19	inserting (1) 27:9		Laidlaw (25) 7:7;14:6;18:4,9;19:1; 20:7;22:20;30:3,7,10,15; 42:4;43:4;44:19;52:18; 60:11;64:2;70:8;72:22; 73:19;81:14;82:2;85:8,	letter (1) 5:8
includes (1) 6:20	insinuating (1) 85:22			
including (1) 65:1	instead (5)			
income (3)				

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

letting (1) 89:7	11:21	27:23;28:1;32:6	13,19;55:1;56:7;57:2,14, 24;58:3,6,9,13,16,21; 59:8,17;60:1,7,22;61:8, 14,19;62:10,17;63:2,5, 11,14,21;64:1,7,10,12, 20,22;65:3,6;66:4,15,18, 20;67:1,9,18,20,24;68:6, 7,15,18,22;69:5,7,12; 70:14;71:1,14,20;72:1,6, 9,16,21;73:1,4,8,16; 74:3,14;75:2;76:15; 77:13,21,23,24;78:3,7, 16,21;79:2,5,12,20;80:5, 11,19,21;81:2,6,11,21; 82:13,23;83:1,9,12;84:1, 3,13,18,20,23;85:4,13, 19;86:2,16,19,21,23; 87:2,6,12	methods (3) 40:3,11;41:22
level (12) 44:18;54:7;56:20; 57:9,15;66:3;69:23; 74:13;79:1,8,15;82:16	Long (5) 30:20;80:14,16,18,22	marker (1) 26:7	mid (2) 44:22,23	
levelized (3) 17:15;19:5,7	longer (1) 75:20	market (40) 7:24;8:3,22,24;10:23; 20:8;23:9;31:4,9,10,12; 32:20;36:12,14;38:11; 54:4;56:14;57:14,15,16; 59:4,19,20;61:22;62:7, 23;66:23;68:3,4,10,19; 69:1,21;70:4;78:13; 80:11;84:8;85:17;86:6; 87:15	middle (3) 60:13,18;88:24	
levels (1) 58:23	long-term (4) 13:13;41:17;80:6,24	marketplace (9) 11:12;54:18;56:23; 57:12;66:2,4,5;67:4; 68:14	might (5) 7:14;34:1;52:9;75:5, 16	
Levitan (1) 38:2	look (15) 21:3,15;22:11;31:17; 35:5;37:9;58:3,10,17; 60:6,10,10;62:11;72:3; 82:4	markets (1) 87:16	migration (6) 78:23,23;79:1,4,13,15	
lies (1) 19:13	looked (4) 10:16;36:4;57:24;59:9	Massachusetts (1) 50:9	million (6) 6:22;67:15,22;68:20; 78:14,17	
life (1) 19:10	looking (7) 21:19,21;32:10;47:20; 57:10;70:6;82:9	mate (1) 11:3	mind (2) 62:6;86:1	
light (1) 4:11	loop (2) 52:3,8	materials (2) 14:20;15:6	minimum (1) 74:15	
likely (10) 7:2,13;59:13;61:5,11, 14;62:15;70:10;80:2; 87:19	loss (2) 10:17;73:22	matrices (1) 6:20	minus (1) 22:8	
likewise (2) 10:17;84:21	losses (4) 71:6;75:6,10;77:3	matter (3) 7:4;10:21;31:17	minutes (1) 76:4	
limit (5) 51:7,19;56:12,24;59:4	lost (7) 71:10;72:20,21;73:7, 14;76:14,21	matters (1) 32:1	mismatch (1) 73:20	
limited (3) 6:2;52:17;85:16	lot (5) 6:20;8:19;30:18; 75:13,13	maximize (1) 44:19	mistaken (1) 74:19	
Line (47) 7:17;10:19;12:23; 15:8;17:19,21,23;18:4, 11,17,18;22:4;27:10; 29:3,4,5,20,22;30:23,24; 32:6,7,12,15;35:5;37:10, 12;42:2,10;45:21;53:18; 54:12;58:21;59:23; 60:12;61:12;63:4,6; 67:16,18,21;68:5;71:2; 75:10;79:3;80:12;86:12	low (7) 9:22;53:20;56:4,20; 60:15;66:8;86:7	may (9) 5:5;9:6;35:16;36:5,13; 55:3;86:5;87:17;89:8	model (16) 6:10,11,13,15,19;7:1, 4,10,14,21;8:4,10,17,21; 10:9;51:11	
listening (1) 66:19	lowest (1) 13:2	McCluskey (283) 5:18,19;9:5;11:3; 12:22;13:5,10,18;14:1,8, 12,13,18,24;15:5,13; 16:2,7,10,15,20;17:2,18, 20,23;18:2,6,15,17,23; 19:14,21,24;20:4,9,14, 18,20,24;21:5,9,11,18, 24;22:6,10,13,16,23; 23:1,8,14,23;24:2,5,9,10, 13,18,21;25:2,7,14,17, 21;26:1,6,11,16,21,24; 27:5,7,9,13;28:3,6,12,17, 21;29:6,11,17;30:1,6,9, 12,22;31:14,23;32:3,10, 14,19;33:2,8,14,17,20, 24;34:4,10,14;35:1,14, 21;36:1,4,15,18,23;37:2, 8,14,16,20,22;38:8,16, 24;39:4,17,21;40:1,2,7, 41:8,13;42:9,11,13,18; 43:1,8,13,18;44:2,5,7; 45:2,12,16;46:11,18,22; 47:1,9,13,20;48:4,11,16, 19;49:10,13;50:5,8,17, 23;51:4,8,22;52:5,16,22; 53:8,10,17,23;54:9,11,	measured (1) 72:12	
listing (1) 14:5	M		measures (1) 72:7	
literature (1) 12:1	major (2) 42:22;48:20		mechanism (9) 31:6,8,10;33:3;35:10, 11;51:22;80:15,23	
little (8) 13:11;23:4;35:16; 36:5;41:13;82:1;86:14; 87:10	majority (1) 4:19		meet (14) 12:16;56:23;61:23; 62:2,16;63:1,17,23;64:5, 17;65:9;66:14;74:4;82:5	
LMP (1) 33:7	makes (1) 7:22		meets (1) 13:8	
load (10) 48:15,15,16,17;49:2; 51:1;72:18;74:4,21; 76:20	making (4) 46:23;55:24;64:10; 84:7		megawatt-hour (15) 17:13;18:1;21:13; 26:5,20;39:15;71:23; 72:11,12;73:1;74:10; 76:22;77:5,21;78:2	
load-serving (8) 48:1,17;57:1;62:24; 64:4,16;71:16;77:10	mandated (1) 70:12		megawatt-hours (12) 15:16;63:18;71:17; 72:4,8;73:21;74:16; 76:17,21;77:3,16,18	
Locational (5) 23:6,11;29:16,23;35:9	many (9) 39:1;48:19;67:7; 69:12;74:18,22;75:8; 76:19;87:2		megawatt-hours' (1) 74:22	
logger (1) 6:6	Marginal (10) 23:6,8,12;29:16,17,23; 35:9;55:3;63:1,1		mention (1) 31:15	
logical (1)	mark (1) 27:20		mentioned (2) 16:18;61:19	
	marked (3)		messed (1) 67:17	
			met (5) 51:15;60:23;61:17; 62:13;82:17	
			methane (2) 49:23,24	
			methodology (1) 77:9	
			move (3) 5:3;6:9;16:17	

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

movement (2) 47:22,23	7:7;8:22;9:10;10:14; 12:11;14:10,15;22:17; 31:21;48:15,18;49:11; 50:7,15,22;51:14;53:19; 56:5,23;60:24;61:22; 64:23;65:4,5;70:11; 75:6;77:11;79:10	obtain (4) 14:10;48:2;49:8;63:16	62:12;66:9,10,13;70:5; 80:7;83:15,18;85:19,23	86:12
movements (1) 41:20		obvious (4) 35:2,2;66:17;84:13	orders (2) 41:7,10	pages (1) 18:11
moving (1) 47:15		obviously (4) 9:15;16:16;53:4;65:8	original (2) 37:11;86:22	paid (6) 11:14;12:15;15:15; 19:19;56:8;71:3
much (8) 8:17;23:16;45:8,9; 59:18;60:1;76:4;87:5	next (12) 12:5;26:12;27:1,17; 45:20,24;46:14;54:8; 58:8;68:11;69:2;78:22	ocean (1) 49:23	others (2) 9:13;60:7	panel (1) 11:3
multiplier (1) 6:21		off (2) 75:23;76:13	Otherwise (1) 75:2	part (1) 55:24
multipliers (1) 10:14	NIMS (1) 6:10	offer (2) 50:13;86:5	ourselves (1) 30:18	particular (9) 6:23;13:10;14:20; 19:22;31:18;35:14; 55:10;60:5;81:24
multiply (1) 25:18	Nineteen (1) 27:19	offered (2) 85:9,24	out (11) 5:11;18:8;19:2;29:2; 31:14;39:21;45:6,7; 50:10;76:14;79:9	particularly (1) 85:15
must (3) 12:11;37:7;74:15	nobody (1) 40:1	office (1) 5:6	outcome (2) 44:2;65:6	parties (6) 4:7,9,11,14,19;19:1
myriad (1) 41:6	nominal (2) 19:4;81:5	offset (1) 45:5	outpaced (1) 62:23	party (3) 14:22;84:19,22
N	none (1) 75:20	offshore (1) 9:22	output (6) 6:13;7:2,10;10:15,18; 44:9	past (2) 35:23;87:14
naive (2) 59:6;62:6	noon (1) 88:23	off-the-record (1) 76:1	output (6) 6:13;7:2,10;10:15,18; 44:9	pay (16) 42:3;43:3,5,24;44:6; 45:1,11;46:16;52:14; 56:12;57:1,17;62:24; 66:12,16;84:4
names (1) 86:19	North (1) 33:22	often (1) 12:13	Over (31) 10:19;15:15,23;16:3, 12;17:4,14,16;19:2,2,10; 23:10;42:3;43:13,15; 44:22;45:21,21;46:19, 21;47:17,18;52:17; 58:22;59:1;65:2;77:9; 80:16,24;81:4;82:11	paying (4) 47:18;49:6;52:20; 61:17
narrow (1) 36:4	noted (2) 25:4,5	old (1) 87:1	overall (2) 31:20;55:8	payment (9) 20:7;42:6;45:23;46:2, 4,7,9;53:14;71:8
national (1) 8:12	notice (1) 89:8	one (44) 9:14;13:13;18:18; 20:5,19;22:3,14,19;23:3, 3;27:15;31:23;32:10,13, 14,19;33:3;34:6,19,20; 35:2;36:19;37:9;39:13, 24;41:24;42:14;48:20; 52:5;56:22;58:8,14; 59:1;60:18;61:8;65:12; 67:17;78:4;81:14;82:20, 24;83:1,1;84:24	over-market (2) 10:13;41:11	payments (15) 10:23;11:4,10,14,16, 18;12:15;15:18;43:20; 46:8;55:15;61:1;65:19; 86:10;87:24
natural (1) 87:20	notifications (1) 52:13	ones (1) 75:11	overpriced (1) 70:22	pen (1) 23:5
near (1) 12:22	notion (1) 4:18	one-third (1) 42:5	own (5) 6:7;38:12,21;55:2; 62:14	people (1) 57:3
nearly (1) 85:5	notwithstanding (2) 12:8;67:13	only (4) 10:4;22:14;38:22; 51:19	owned (1) 86:22	per (23) 16:12;17:13;18:1; 21:12,13,24;22:8,8,16; 25:1,5;26:5,14,19;39:3, 10,13,15;43:6,10,11; 76:22;77:5
necessarily (2) 33:8;68:9	number (18) 7:12,9;18;14:16;24:7; 27:18;41:19;45:7,9,18; 58:12;60:15,19;63:17; 67:22;71:9,15;75:4;89:4	onshore (1) 9:22	owner (1) 18:10	percent (33) 14:2;16:12;37:17,18; 38:18;41:3;43:9;45:22; 46:1,3,6,13,16,20,20,21; 47:10,18;48:8,9,10;49:5, 7,7,8;60:14,15,18; 67:6;68:12;69:2;70:12
necessary (4) 4:15;13:2,16;40:13	numbers (4) 27:2;47:4;49:9;61:13	onto (4) 54:8;63:15;64:15;85:6	Owners (4) 31:22,24;86:19,22	percentage (4) 72:18;74:5,20;76:19
need (29) 4:8;11:5;13:22;40:16; 41:1,3;42:19;55:5,7,9, 20;56:19;57:6;61:7; 62:17,20,22;64:24; 68:11;69:1;72:3,16; 74:18,22;88:2,18,23,24; 89:11	nutshell (2) 12:18;81:3	open (1) 4:24	owns (1) 86:17	percentages (5) 60:16,17;63:18;64:6; 71:17
needed (3) 42:24;56:22;83:15	O	opened (1) 14:14	P	Perfect (2) 40:8,9
needs (12) 9:3;50:7,21;60:21; 61:16;62:15,16;63:1; 70:5,13;74:1;79:11	O&M (15) 17:5,10,16,24;18:5,6, 7,9,12,20,22;19:3,10,12, 16	operating (3) 28:10;44:22;55:6	Page (58) 7:17;10:19;12:23; 15:8;17:11,18,19,21,23; 18:3,11,15;19:11,22; 20:20,21,21;21:16,17, 18,21;24:3,5,7;25:11; 30:23;42:2,9,10,11;43:2, 3;45:20,21;53:18;54:8, 10,11;58:11,14;63:4,6; 67:14,16,20,21;71:2; 76:16;78:22;79:2,2,3,13; 80:12;82:21;85:6,20;	performance (1)
negative (4) 25:15,19,22;26:2	object (1) 34:9	opinion (5) 36:24;37:2;42:22; 48:14;68:10		
negotiate (3) 81:16,17;85:22	objection (1) 75:12	opportunity (1) 88:7		
negotiations (1) 81:12	objective (1) 35:2	option (2) 84:3,18		
net (1) 71:11	obligation (11) 52:14;63:9,9;64:3,14; 66:14;71:8;76:19;77:2; 81:14;82:2	order (15) 41:20,21;55:4,5;57:6;		
new (28)	obligations (1) 11:23			

DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER

<p>35:24 performed (1) 10:10 performs (1) 44:10 perhaps (4) 34:1,23;50:24;73:9 period (17) 24:15,18;33:24;35:16; 36:4,7,8;38:3,6,7;41:9; 44:22;45:23;48:13;62:1; 83:23;89:10 periods (3) 30:1,2;36:15 phenomena (1) 32:18 piece (3) 10:4;38:9;58:7 pieces (1) 22:3 Plan (2) 57:23;58:15 plant (5) 9:19;11:10;30:8; 59:22;75:6 plants (7) 9:10;10:1,1;11:5; 44:17;87:1,9 please (1) 23:19 plotted (5) 30:14;33:9;35:6,15; 37:11 plotting (1) 37:23 plus (1) 22:5 pm (4) 4:2;76:8,9;89:19 point (9) 5:11;12:24;13:11; 18:23;61:2;75:16;76:24; 77:7;79:9 pointing (1) 36:9 policies (1) 66:8 policy (6) 12:10,15,17,20;55:24; 67:11 Portfolio (1) 33:22 portion (1) 55:6 portrays (2) 6:15,16 position (4) 4:10;20:15;63:22;64:1 possibilities (1) 16:19 possible (8) 9:6;16:20,22;69:5,6,9; 86:6;87:17</p>	<p>postulate (1) 67:7 postulating (2) 65:13;81:12 potential (4) 4:12;51:12,15;61:23 potentially (4) 10:15;63:3;82:8;85:2 Power (6) 6:3;14:16,22;15:2; 60:12;70:8 PPA (70) 13:1,1,8;15:3,9;16:23; 18:14,22;21:2,3,8,16; 22:20;25:11;30:3,10; 31:10;33:3;35:11;37:13; 39:16;42:14,16,20; 43:12;44:6,20;45:1; 46:8,12,19;47:17;48:6; 49:5,10;51:17;52:10; 53:5,11;62:4;63:7,23; 64:8;67:5,11,16;68:21; 70:16,17;71:7,13;73:24; 76:24;77:1,6;79:21; 80:1,14;81:5,7,16,18; 82:9;83:23;85:17,21; 86:14;87:11,13 PPA's (7) 25:9;26:19;28:16; 29:7,14;31:6,7 predicted (1) 7:2 predicting (1) 8:4 predicts (2) 6:13;7:15 prepare (1) 88:18 prepared (2) 33:21;62:14 present (3) 31:3;39:13;43:6 pressure (1) 69:24 presumably (5) 53:13;56:9;59:2;82:5; 84:24 presuming (1) 88:3 pretty (1) 57:3 prevent (2) 57:9;60:7 prevents (1) 66:7 price (133) 8:3,17;15:10,12,14; 16:4,24;17:1,3,7,10,13; 18:24;19:5,18,19,19; 20:2,2,6,12,16,22;21:1,2, 8,22;22:1,4,5,5,7,16; 23:5,6,12;25:4,5,8,9,10, 12,13,19,22,24;26:4,4,</p>	<p>13,18;29:8,16;31:5,5; 33:10;34:7;35:9,13; 37:13;38:9,22,23;39:2,8, 10,13,15,16,18,19,22; 41:21;43:10,21;45:22; 46:1,3,6,13,17,19;47:12, 13,15,20;51:3,16,20,21, 22;53:15;54:4;55:8,10; 56:4,8,21,22,24;57:9; 61:17;62:24;66:13,13, 22;67:3,5,10,12,23;68:3, 3,8,19,23;69:21;70:4; 73:5,17,19;76:23;77:1,5; 78:8,13;79:7,9;80:4,7,8, 11;82:3;84:4 priced (1) 76:16 prices (114) 7:23;13:1,2;16:1,2,5,5, 8,11,12,17;18:13,20; 20:13;22:20,21;23:8,15; 24:12,14,22,24;28:6,7, 15,18;29:9,10,13,18,19, 22;30:3,10,13,14,16; 31:10,11,15;32:1,4,5,20, 24;33:8,14;35:6,10,15, 17;36:6,9,11,22;37:23; 38:2,6,12,14;39:9,22; 40:2,10,18;41:15,23; 42:19,20,23;43:15,18; 44:20;47:5;51:6,8,15,24; 54:6,20;55:4,20;56:8,15; 57:14;59:3,18;62:3,13; 63:2;65:9,20;66:4,11; 67:11;69:9,14,19,23,24; 70:1;71:12;72:21;77:15; 78:7;79:21;80:1,3; 81:16,17,22;82:6,15,16 pricing (17) 29:14,23;31:3,6,7,7, 10,20,21;32:17;33:3,5; 35:7,10,11;41:17;79:17 primarily (1) 42:19 primary (1) 42:18 prior (4) 5:7;36:7;80:19,21 probably (6) 9:5,23;14:13,18; 87:21;88:4 proceed (1) 53:8 proceeding (3) 14:23;32:1;87:6 proceeds (1) 85:2 process (2) 41:9;56:2 produce (1) 10:2 produced (10) 9:2;31:11;35:8;42:5;</p>	<p>45:24;63:8;64:2;65:14; 75:8;77:11 produces (1) 75:4 product (1) 73:17 production (1) 42:6 products (14) 40:19;42:4;45:23; 46:2,4,7,8;50:14;52:11, 14;53:13;82:7,7,16 profit (2) 66:24;67:8 profits (1) 44:19 programs (1) 48:23 project (31) 10:21;13:10,14,23; 14:1,3,11;15:4,17;18:10; 19:6,10,16;30:15;36:12; 40:10;42:8;44:21;52:24; 53:2,2,4,10;55:10,19; 60:11;61:11;65:21; 70:18,24;82:17 projected (1) 19:2 projecting (2) 16:22;69:22 projection (1) 38:20 projects (13) 9:15,18;13:19;36:13; 59:14;60:3,17,24,24; 61:6;65:16,20,23 promote (1) 57:10 proposals (2) 50:9,18 protect (3) 41:21;80:15,23 proved (2) 39:17,17 provide (7) 5:7;9:18;34:21;35:12; 49:16;50:11;81:22 provided (6) 22:18;26:8;30:4; 32:21;33:5;54:16 provider (4) 63:16,19;71:18;74:17 provides (1) 51:8 provision (2) 7:22;81:24 proxy (5) 24:23;25:8;28:11,12; 32:4 prudence (1) 40:24 prudent (2) 28:24;40:14</p>	<p>PSNH (70) 15:15,18;19:1,20; 23:21,24;24:1,8,11,24; 26:12;27:17,21;28:1; 31:2,19;32:6,7,12,16; 35:5;37:9;40:13;42:3,7; 43:3,20,24;44:6,14,24; 45:11;46:16;47:18;48:2; 49:6;52:13,20;53:13; 57:21;58:11;62:18;63:7; 64:5,10,16,18;66:21; 67:5,10,71:11,12;72:17, 22;73:16,19,23;74:3; 76:18;81:15,17;83:5,6, 10,23;84:2,3,10;85:8,22 PSNH's (14) 23:22;24:2;57:20; 63:9,22;64:3,8,13;71:4, 5,8;76:17,18;83:16 public (8) 12:9,10,19,24;13:8; 14:15;20:11;42:16 Purchase (20) 6:4,17,18;40:14; 42:24;60:12;63:7,22; 64:2,8,13;66:21;67:6; 70:8,19;72:17;74:23; 76:19;82:3;84:18 purchased (1) 70:23 projecting (2) 74:4,5 PURPA (2) 41:6,9 purpose (3) 53:19;54:4;56:7 purposefully (1) 83:10 purposes (2) 36:20;47:9 pursuant (1) 52:12 pursue (1) 34:13 pushed (1) 56:23 put (10) 5:2;26:7,9,22;27:3; 29:4,21;43:16;83:24; 84:10 Putting (2) 30:11;89:7</p>
Q				
			<p>qualified (1) 10:5 qualify (2) 9:16;79:18 quantity (1) 70:23 quarter (2) 39:11,12</p>	

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

<p>questionable (1) 41:23</p> <p>queue (9) 58:24;59:2,5,24;60:2, 9,17;61:1,13</p> <p>quickly (1) 6:1</p> <p>quite (4) 7:13;12:1;69:8;87:17</p> <hr/> <p align="center">R</p> <hr/> <p>raising (1) 88:15</p> <p>range (1) 89:9</p> <p>rate (11) 19:12;41:7,10;78:23; 79:4;83:8,16,17,24; 84:11,15</p> <p>ratepayers (3) 10:13;56:12;86:4</p> <p>rather (7) 7:22;38:19;52:23; 57:18;71:4;80:3;83:11</p> <p>rational (1) 41:4</p> <p>RCL-1 (1) 37:24</p> <p>reaction (1) 59:10</p> <p>read (6) 14:19;29:2;31:14; 34:16;59:10;80:10</p> <p>readily (1) 20:11</p> <p>reading (3) 31:1;68:2;74:14</p> <p>reads (1) 53:12</p> <p>real (1) 57:4</p> <p>realize (1) 30:7</p> <p>really (9) 12:19;16:8,21;38:14; 44:4;49:17;62:5;68:13; 70:9</p> <p>reason (7) 7:19,20;10:8;34:23; 52:19;53:6;66:11</p> <p>reasonable (11) 13:3;40:3,4,11,11; 44:8;45:12;59:22;68:14; 69:4,6</p> <p>reasonably (4) 19:9;40:10;69:9;70:9</p> <p>reasons (4) 34:21;56:17;63:13; 81:18</p> <p>Rebuttal (18) 23:21,22;24:1,2,3,8, 11,24;26:13;30:20;31:2,</p>	<p>20;32:8,16;57:20,21; 58:11;88:8</p> <p>REC (55) 8:22;10:7;11:4;42:20, 23;45:22;46:1,3,5;47:5; 50:7;51:16,18;54:3,20; 55:7,10;56:22;59:18; 60:21;61:22;62:7;63:22; 67:23;69:9,24;70:1,13; 71:7,8,12;72:11,24;73:1, 2,2,2,2,5,5,16,17,18,20; 74:12;75:1,7;77:21; 78:1,13;79:7,8,11,17; 87:21</p> <p>recall (16) 11:6;21:7,11;23:20, 23;38:1,7;48:11;50:19, 23;52:4,5,6;78:12,15; 81:1</p> <p>receive (5) 13:2,7,16;53:13;86:9</p> <p>recent (1) 39:9</p> <p>recently (1) 48:21</p> <p>recess (3) 76:6,7;89:12</p> <p>recipe (1) 40:19</p> <p>Recognize (1) 34:15</p> <p>recognizing (1) 56:13</p> <p>recommend (1) 70:8</p> <p>recommendation (1) 42:16</p> <p>recommending (4) 70:15,16,20,21</p> <p>reconvene (1) 89:19</p> <p>record (6) 4:4;32:1,5;71:22;74:9; 75:23</p> <p>recovered (1) 53:15</p> <p>recovery (2) 19:8;40:22</p> <p>RECs (84) 9:2,6,12,17,18;10:2; 11:10;42:7,14,24;45:24; 46:13,17;47:19,21;48:2, 8;49:4,9;50:11,22,24; 51:2,3,20;55:5;56:14; 57:15,17;58:22;60:20; 61:7;62:23;63:8,16; 64:2,8,13;65:1,1,5; 66:11,22,23;67:4,6,8,10, 14,15;68:10,19,21,24; 71:3,9,10,16;72:3,7,17, 20,21,24;73:6,7,15,17, 21;74:4,18,22,23;75:3,4, 5,8;76:14,16,17,19;</p>	<p>78:14;79:22;80:2</p> <p>red (2) 23:7;29:4</p> <p>redacted (1) 21:20</p> <p>redirect (2) 88:7,18</p> <p>reduce (1) 69:24</p> <p>reducing (1) 36:21</p> <p>reduction (16) 16:4;80:13,22;81:4,8, 9,13;82:20;83:14;84:5, 17,22;85:1,7,10;86:7</p> <p>refer (2) 27:22;78:18</p> <p>references (1) 17:22</p> <p>referred (2) 21:1;24:23</p> <p>referring (8) 15:13;19:21;21:11,14; 22:2;24:5;36:18;79:12</p> <p>refers (2) 39:4;73:20</p> <p>reflect (3) 13:1;19:7;33:9</p> <p>reflected (4) 37:23;38:12;43:22,23</p> <p>reflective (1) 61:13</p> <p>reflects (1) 35:15</p> <p>regard (5) 15:14;40:14;77:13,15; 87:23</p> <p>regarding (2) 7:6;87:3</p> <p>region (10) 8:12;9:3,7,11;51:23; 58:22;60:21;62:3,19; 65:24</p> <p>Regional (3) 57:23;58:15;62:14</p> <p>regulating (1) 77:14</p> <p>rejection (2) 70:16,21</p> <p>relationship (2) 16:17;70:2</p> <p>relationships (4) 6:16;8:7,9,11</p> <p>relative (4) 15:20;16:2;17:7;28:15</p> <p>relatively (2) 22:11;42:7</p> <p>remain (2) 68:8,23</p> <p>remainder (1) 76:5</p> <p>remaining (2) 46:5;83:15</p>	<p>remarket (1) 67:8</p> <p>remember (1) 49:22</p> <p>renegotiate (1) 81:22</p> <p>renewable (31) 11:5;13:12;14:3; 33:22;36:11,13;46:2,6,8; 49:12;51:12;53:21;54:2, 5,17;56:5,21;57:4; 60:20;62:15;65:12; 68:13;69:3;70:18;71:21, 23;72:11,13;74:8,10; 77:10</p> <p>Renewables (2) 45:23;46:4</p> <p>repaid (1) 83:2</p> <p>repeated (1) 41:24</p> <p>replace (1) 62:6</p> <p>report (7) 4:7;33:21;34:2,11,19, 20;61:19</p> <p>reported (1) 31:21</p> <p>reporter (2) 54:23;75:19</p> <p>represent (8) 17:15;29:22;32:8; 37:12;78:24;79:7,16,18</p> <p>representation (1) 29:7</p> <p>representative (2) 5:6;8:15</p> <p>represented (1) 29:15</p> <p>represents (3) 71:23;74:10;78:1</p> <p>request (4) 4:8,16;50:8;88:19</p> <p>requests (1) 50:18</p> <p>require (3) 6:22;47:11;48:1</p> <p>required (4) 52:11;64:5;71:16; 74:21</p> <p>requirement (10) 42:23;48:8,9,10;49:3; 63:23,24;64:17,18;74:15</p> <p>requirements (4) 34:24;51:14;55:18; 62:3</p> <p>requires (4) 63:7,15;64:16;83:6</p> <p>resold (1) 66:23</p> <p>resource (1) 49:12</p> <p>resources (15)</p>	<p>13:13;50:4;51:13,15, 19;54:2,5;56:11;57:5,6, 11;59:20;61:23;62:20; 65:12</p> <p>respond (2) 59:20,21</p> <p>responding (1) 69:14</p> <p>response (5) 5:15;15:11;53:3; 76:15;89:13</p> <p>restate (1) 73:10</p> <p>result (6) 31:7;32:9;35:8;39:10; 71:11;81:15</p> <p>resulted (2) 38:5;40:23</p> <p>resulting (4) 25:9;26:18;39:14;54:6</p> <p>results (3) 6:14;10:9;35:23</p> <p>resume (2) 88:6,19</p> <p>resumé (1) 14:4</p> <p>resumed (3) 4:2;5:22;76:8</p> <p>retail (15) 71:12;72:4,13,18; 73:17,22;74:4,13;76:20, 22;77:2,10,16,19,22</p> <p>retire (2) 48:2;63:16</p> <p>return (12) 13:3;55:9,13,22,23; 70:6;82:18;83:7,17,20, 21;84:15</p> <p>returned (3) 65:14;86:3,5</p> <p>revenue (4) 11:4;54:1,15;55:18</p> <p>revenues (5) 55:21;57:6;65:11,14, 18</p> <p>reversed (1) 18:18</p> <p>review (1) 57:20</p> <p>reviewed (1) 14:4</p> <p>reviewing (1) 13:11</p> <p>revised (1) 85:8</p> <p>right (14) 5:7,16;16:7;21:16; 32:11;37:6;61:24;62:9, 22;73:6;75:5;76:5;78:4; 82:24</p> <p>rise (11) 18:5,20;51:3,6,8,24; 54:6;63:2;65:9;69:19,23</p>
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**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

rises (1) 47:7	24:6;75:24	signal (1) 59:19	specified (3) 63:18;71:17;77:6	29:9,11;30:16;31:15; 32:5;33:14;36:6
rising (4) 36:22;46:22;47:2,3	Section (3) 21:3,16;52:10	significant (10) 12:19;13:18;36:8; 42:15;44:18;65:4;70:5, 10;79:9,19	spend (1) 62:20	Steam's (2) 29:18;31:18
risk (6) 18:4,9;19:12;79:4,9, 23	seek (1) 40:22	significantly (4) 43:11;44:10;51:16; 69:20	spending (2) 13:11;85:20	stenographer (1) 75:15
risks (3) 19:15;79:19,20	seem (4) 58:23;59:22;81:21; 85:14	similar (1) 41:5	spent (1) 85:5	step (1) 12:5
room (1) 5:6	seems (3) 13:6;58:21,24	simple (2) 22:11;23:18	spoken (1) 4:7	stimulate (1) 53:20
rose (1) 48:8	sell (2) 67:10,11	simply (11) 10:23;11:23,24;38:3, 20;76:24;77:7;79:1,8, 24;87:22	stability (1) 35:10	stimulated (1) 54:7
roughly (2) 33:6;50:3	seller (1) 41:22	single (1) 41:18	stabilize (1) 36:21	straight (1) 58:21
RPF (1) 50:17	selling (2) 44:14;75:3	situation (1) 65:23	stable (3) 31:8;68:9,23	stream (7) 11:4;19:4;47:21;54:1, 16;55:21;87:22
RPS (33) 9:2;11:8,22;12:6;34:6, 21,23;36:20;48:1,3; 49:12;51:13;53:20; 54:16;55:15;56:3;61:16; 62:14;63:1,10,24;64:6,9, 14,23;66:8,14;71:15,21; 72:3;74:8;87:16,17	sells (1) 75:5	situations (1) 87:3	Staff (10) 4:9,9,14;22:19;26:8; 27:21;37:11;62:20; 70:15,20	striking (1) 88:13
RPSs (3) 35:12;61:16,24	Senior (1) 33:18	six (1) 33:19	stand (1) 64:20	structural (1) 8:9
RSA (5) 36:19;46:10;53:19; 63:15;74:14	series (2) 52:2,6	skip (1) 71:2	Standard (1) 33:22	structure (1) 73:24
S	seriously (1) 7:21	small (2) 10:4;42:7	start (4) 5:24;17:4;67:3;89:6	studied (2) 20:14;48:21
	Service (5) 12:10;14:15;48:16; 53:15;77:15	solar (2) 50:1,2	started (1) 61:22	study (1) 51:10
	session (1) 23:17	sold (6) 75:6;85:2;86:24;87:3, 5,14	starting (3) 27:10;28:7;51:11	subject (5) 18:4;26:21;27:3; 43:19;44:2
	set (9) 26:18;46:9,15;47:11; 56:4,20;57:8;66:3,7	sol (1) 5:14	starts (4) 21:21;47:21;67:19; 76:16	submit (1) 60:2
same (13) 16:17;20:20;21:20; 26:18;27:1;32:17,22; 33:1,6,6;55:7;62:21; 78:10	several (1) 18:11	solicitation (1) 50:12	state (12) 7:18;10:13;12:10; 17:12;33:22;48:17,22; 49:2;61:24;77:11,14; 87:23	submitted (1) 15:6
Sansoucy's (1) 50:19	shall (1) 21:22	somehow (1) 66:6	Stated (6) 10:20;11:22;30:3; 38:13,22;53:19	subsequent (2) 46:3;60:8
satisfy (5) 9:2,7;42:16;50:21; 79:11	shape (1) 32:22	sometime (2) 34:2;89:9	statement (3) 30:12;35:22;36:1	subsidies (2) 11:8,18
save (1) 27:14	Shapiro (1) 7:22	Sometimes (2) 17:22;66:20	statements (2) 4:18,22	subsidize (1) 54:17
saved (1) 30:18	Shapiro's (3) 7:6,19,20	Somewhat (1) 8:23	states (4) 51:14;61:16;64:24; 83:4	subsidy (7) 10:21;11:12;55:2,24; 56:10,19;73:3
saying (18) 8:16,19;24:19;28:13; 29:20;30:14;36:13; 43:14;48:11;62:8,10; 67:18;72:16;76:15; 79:18;80:8,11;86:2	short (1) 23:10	somewhere (2) 9:21;17:11	state's (1) 86:17	substantial (6) 4:19;9:18;32:16; 41:11;59:14;61:6
scenario (1) 66:21	shortage (3) 54:6;56:16,18	sophisticated (4) 37:21;38:5;61:21;62:7	static (1) 59:1	substantially (8) 32:8,17;39:23;44:12, 15;57:15;62:4;65:2
schedule (3) 4:12,24;46:9	shortfall (1) 55:17	sorry (8) 16:14;17:23;36:3; 37:1;50:18;58:10;63:5; 80:19	stating (1) 83:13	subtract (3) 25:12;26:2,3
Schiller (17) 17:6;19:20;20:3,10, 13;24:16;28:7,10,18,19; 38:23;39:2,9,14,22; 43:19;44:3	shouldered (2) 71:7,11	sound (3) 50:3;67:9,11	Station (1) 19:20	sufficient (11) 9:2;39:6;50:6;51:18; 57:16;62:2;63:17,23; 65:15,19;74:4
second (2)	show (3) 6:21;28:15;60:19	sounds (1) 12:18	statute (6) 11:15;49:16;74:11,14, 18;77:8	sufficiently (1) 55:19
	showed (1) 32:21	source (8) 20:12;58:14;71:24; 72:11,13;74:11,12;75:1	stay (1) 69:9	suggest (2) 35:18;59:4
	showing (5) 31:3;32:20;51:16; 58:23;62:4	sources (1) 62:15	Steam (11) 14:17,21;24:14;28:13;	suggesting (3) 42:1;74:1,3
	shown (2) 60:4;62:1	speaking (1) 57:19		sum (1) 42:7
	shows (2) 24:11;62:5			
	side (1) 32:12			

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

<p>summary (1) 34:20</p> <p>super-sized (2) 23:4;26:8</p> <p>supplied (3) 63:19;71:18;74:16</p> <p>supplier (2) 51:9;71:7</p> <p>suppliers (1) 71:3</p> <p>supply (22) 9:11;31:13;51:1,4,5; 54:6;56:16,18;57:16,19; 60:21;61:9;62:2,23; 65:8;66:6;68:10,24; 69:7,13,14;70:2</p> <p>supply/demand (6) 51:11;56:15;61:21; 62:7,10;69:18</p> <p>suppose (4) 62:22,22;68:4;81:7</p> <p>sure (13) 16:21;22:24;28:23; 36:18;40:21;41:24; 48:21;53:11;65:17;66:8, 10;78:16;82:13</p> <p>Surely (1) 68:17</p> <p>surprise (2) 15:1;80:9</p> <p>surprised (1) 44:21</p> <p>survive (1) 70:24</p> <p>suspect (1) 45:3</p> <p>Synapse (11) 51:10;61:19,20;62:8, 10,17,21;67:24;69:18, 22;80:6</p> <p>System (7) 58:15;71:5,6,9;76:18, 21;77:4</p> <p>systems (1) 50:1</p>	<p>35:19;57:16</p> <p>ten (1) 76:3</p> <p>tend (1) 55:1</p> <p>term (14) 15:15,24;16:3;17:14, 16;39:19;46:5,21;47:17; 53:11;70:20;78:9;80:16; 82:11</p> <p>terms (2) 44:23;50:17</p> <p>testified (9) 10:20;18:19;42:2; 43:2;61:4;64:17;66:1; 67:9;80:10</p> <p>testify (13) 12:23;18:12;45:21; 53:19,24;54:14;67:14; 71:2;79:4,6;86:13,16; 87:9</p> <p>testifying (1) 8:2</p> <p>testimony (51) 6:2;7:17,19;9:9;10:7, 10,19;11:21;12:23;15:8; 17:12;19:15;20:22; 23:22;24:2,4,23;30:17, 20,24;31:13;38:7,13; 42:2;43:2,16,17,24; 44:13;45:20;46:10; 50:19,23;53:18;57:21; 58:3;63:4;64:12;68:2,9, 24;72:10,14,16;78:22; 82:21;83:4;85:5,11,20; 86:12</p> <p>Thanks (2) 22:17;68:8</p> <p>the] (1) 22:4</p> <p>thermal (1) 49:24</p> <p>thinking (2) 4:23;80:19</p> <p>third (4) 22:4;46:15;84:19,22</p> <p>though (1) 21:20</p> <p>thought (3) 52:24;56:2;79:13</p> <p>three (5) 17:2,8;39:9;82:7;89:5</p> <p>throughout (5) 9:3;48:15;62:1;64:23; 65:24</p> <p>throw (2) 40:17;61:10</p> <p>tidal (1) 49:24</p> <p>Timberland (2) 31:22,24</p> <p>times (3) 22:8;39:1;74:5</p>	<p>title (3) 30:4,9,18</p> <p>titled (1) 22:19</p> <p>today (7) 4:24;23:17;39:2; 41:19;59:5;68:14;87:18</p> <p>today's (1) 80:4</p> <p>tomorrow (6) 4:24;5:1;88:2,6,19; 89:15</p> <p>ton (17) 21:12,24;22:8,9,16; 25:1,5;26:14;37:16; 39:3,10,13;43:7,9,10,11, 13</p> <p>top (4) 21:17,21;24:8;25:10</p> <p>total (10) 10:24;15:15,23;16:4; 42:6;48:16,17;49:2; 63:18;71:17</p> <p>totally (1) 87:21</p> <p>town (1) 75:5</p> <p>track (3) 20:9;69:8;75:8</p> <p>tracker (2) 18:6,19</p> <p>traditional (1) 11:6</p> <p>trajectory (1) 37:19</p> <p>transcript (1) 75:20</p> <p>transfer (2) 12:4;73:3</p> <p>transferable (2) 84:19,22</p> <p>transfers (2) 10:23;11:24</p> <p>transmission (4) 52:3,17;53:1,3</p> <p>Traum (2) 23:21;24:22</p> <p>trend (4) 32:24;35:14;36:10; 69:15</p> <p>tricks (1) 20:5</p> <p>trouble (2) 41:16;65:22</p> <p>true (8) 6:6,8;30:5,24;36:19; 71:15;74:11,23</p> <p>truly (1) 18:22</p> <p>try (1) 73:12</p> <p>trying (4) 18:24;36:1;54:9;76:13</p>	<p>Tuesday (6) 22:19;23:20;38:1; 42:21;52:1;85:10</p> <p>Tuesday's (1) 23:17</p> <p>turbines (1) 50:20</p> <p>turn (9) 4:4;18:8;19:18;22:17; 30:23;45:20;53:18;63:4; 80:13</p> <p>turned (1) 19:4</p> <p>turns (1) 39:21</p> <p>TV (1) 35:20</p> <p>Twelve (1) 63:6</p> <p>two (8) 22:3;44:13;47:2; 54:20;55:11;63:13; 66:15;82:23</p> <p>type (2) 8:13;63:17</p> <p>types (5) 11:6;44:17;51:12; 56:11;57:5</p> <p>typical (1) 54:21</p>	<p>77:14</p> <p>units (2) 54:3;55:3</p> <p>unlikely (1) 61:15</p> <p>unredacted (1) 21:20</p> <p>up (22) 15:22;20:8;23:12; 24:7;32:24;40:17;43:20; 46:24;47:15,22;48:24; 51:2,4;56:1,15;60:23; 65:9;67:4,17;70:12; 72:3;89:3</p> <p>update (1) 7:6</p> <p>upon (6) 11:8;20:2;51:1;72:4; 75:2,10</p> <p>ups (1) 69:13</p> <p>upstream (1) 6:24</p> <p>upward (2) 37:19;51:20</p> <p>use (19) 6:10,19;7:12;24:22; 25:8;28:11;31:15,18; 32:4;33:4;38:17,19; 39:13;47:14;75:15,16; 78:9;79:20,21</p> <p>used (27) 11:15;15:21;20:13; 38:20;41:5,22;44:16; 45:13,18;47:10;50:1,2, 12;51:11;61:23;65:11; 67:23;68:4,17,19;77:9; 78:12,17,21;79:15,17; 80:8</p> <p>using (16) 25:9;28:15;29:8,13, 14;31:6,20;35:6,38;3; 40:3;68:3;78:7,11;80:3, 5,11</p> <p>utilities (2) 41:1;62:19</p> <p>utility (1) 40:21</p> <p>utilization (1) 49:4</p> <p>utilize (1) 40:16</p> <p>utilizes (1) 19:19</p>
T			U	
<p>tag (4) 15:10,12,14;16:4</p> <p>talk (1) 88:2</p> <p>talked (3) 49:5;78:12;79:14</p> <p>talking (11) 17:11,24;21:15;39:7; 72:20,24;73:5,6;79:13, 14,22</p> <p>targeted (3) 55:9,23;70:6</p> <p>technologies (1) 53:21</p> <p>telling (2)</p>	<p>thought (3) 52:24;56:2;79:13</p> <p>three (5) 17:2,8;39:9;82:7;89:5</p> <p>throughout (5) 9:3;48:15;62:1;64:23; 65:24</p> <p>throw (2) 40:17;61:10</p> <p>tidal (1) 49:24</p> <p>Timberland (2) 31:22,24</p> <p>times (3) 22:8;39:1;74:5</p>	<p>truly (1) 18:22</p> <p>try (1) 73:12</p> <p>trying (4) 18:24;36:1;54:9;76:13</p>	<p>ultimate (1) 42:15</p> <p>ultimately (6) 41:10;49:7;57:12; 66:1;75:3;85:16</p> <p>unable (2) 55:2;79:10</p> <p>unavailable (1) 39:11</p> <p>Under (29) 16:23;26:19;27:9; 31:7;35:10;37:14,16; 39:15;42:14;45:1;46:12; 48:9;49:5;52:10;63:2, 10,23;64:8,14;66:21; 67:5,15;68:21;71:7,15; 72:3;73:23;74:18,24</p> <p>under-market (1) 81:4</p> <p>underneath (1) 63:12</p> <p>understood (1) 52:22</p> <p>uneconomic (3) 55:6,12,14</p> <p>Unfavorably (1) 22:20</p> <p>Unfortunately (1) 23:16</p> <p>Unutil (1)</p>	<p align="center">V</p> <p>valid (1) 45:17</p> <p>value (15) 10:7;81:8,19,22;82:1, 2;84:8;85:15,17;86:6, 14;87:10,12,14,21</p>

**DAY 5 - AFTERNOON SESSION ONLY - February 8, 2011
DE 10-195 PSNH/LAIDLAW BERLIN BIOPOWER**

<p>variable (1) 22:14</p> <p>variables (1) 10:11</p> <p>variations (1) 32:22</p> <p>varied (1) 23:12</p> <p>varies (1) 72:14</p> <p>various (4) 6:12;56:17;61:24; 64:24</p> <p>vary (5) 7:1,14;17:7;43:15; 75:4</p> <p>verbal (2) 5:15;89:13</p> <p>verifiable (1) 20:12</p> <p>version (2) 27:21;85:8</p> <p>versions (1) 21:20</p> <p>versus (1) 29:9</p> <p>view (7) 15:9;17:12;35:12; 55:16;56:1;59:11;67:13</p> <p>volatile (6) 31:8;33:6;34:22;35:8; 36:14,22</p> <p>volatility (7) 34:7;35:13,17;36:5,8, 9,11</p>	<p>whole (1) 10:22</p> <p>Wholesale (11) 22:21;23:8;30:13; 31:4,9,10,12;36:12; 69:23;72:19;77:17</p> <p>willing (4) 50:10;57:1;86:4,11</p> <p>wind (7) 9:15,18,20;49:13,22; 50:6,20</p> <p>wisdom (1) 38:16</p> <p>within (2) 68:11;69:1</p> <p>without (4) 4:18;15:3;55:2;86:8</p> <p>WITNESS (9) 5:19,21;28:3,6,12,17, 21;34:14;54:24</p> <p>witnesses (3) 48:6;75:15;88:10</p> <p>wood (37) 10:1;16:1,2,24;19:18, 18,19;20:1,3,6,7,12,15; 22:1,5,7;24:11,17,23; 25:8,12,13,19,22,23; 26:14;28:15,20,23;29:9; 31:21;35:6;38:14,23; 39:2,14;43:10</p> <p>wood-fired (3) 86:17;87:9,19</p> <p>word (1) 70:15</p> <p>work (7) 38:9;44:17;51:22; 53:17;56:1;62:21;89:6</p>	<p>19:2;23:11;24:15,16; 27:1;28:11,20;29:24; 33:19;39:10;43:13,15; 45:22;46:1,3,5,13,14,15, 15;59:15;60:4,8;61:4; 64:2;68:11;69:2;87:1,14</p>				
<p>W</p>						
<p>water (2) 50:1,2</p> <p>wave (1) 49:24</p> <p>way (6) 10:20;11:22;12:16; 35:18;47:6;89:7</p> <p>ways (3) 7:5;41:19;69:12</p> <p>wealth (6) 10:22,23;11:23,24; 12:4;73:3</p> <p>weather (1) 40:5</p> <p>weren't (1) 81:21</p>	<p>worked (1) 29:8</p> <p>working (4) 12:13;14:5,7;41:19</p> <p>works (2) 7:5;83:13</p> <p>worth (2) 6:22;74:22</p> <p>worthwhile (1) 84:7</p> <p>wrap (1) 89:3</p> <p>write (1) 17:22</p> <p>wrong (2) 37:6;62:8</p>					
<p>what's (15)</p>		<p>Y</p>				
<p>12:16;19:5;23:6;40:7; 54:19;56:1;58:24;59:5, 15,17;60:4;76:23;77:1, 6;78:5</p> <p>whereas (1) 77:2</p> <p>Whereupon (2) 76:7;89:18</p>	<p>year (12) 25:3,6,23;26:5,9,12, 14;39:5,18;48:3;60:11; 74:21</p> <p>yearly (1) 25:4</p> <p>years (29)</p>					