

**STATE OF IOWA
IOWA UTILITIES BOARD**

In Re:

**Interstate Power and Light
Company and FPL Energy
Duane Arnold, LLC**

)
) **Docket No. SPU-05-15**
)
)

**Surrebuttal Testimony of
David A. Schlissel
Synapse Energy Economics, Inc.**

**On Behalf of the
Iowa Office of Consumer Advocate**

PUBLIC VERSION

October 25, 2005

1

2 **Q. Please state your name, position and business address.**

3 A. My name is David A. Schlissel. I am a Senior Consultant at Synapse Energy
4 Economics, Inc, 22 Pearl Street, Cambridge, MA 02139.

5 **Q. On whose behalf are you testifying in this case?**

6 A. I am testifying on behalf of the Iowa Office of Consumer Advocate (OCA).

7 **Q. Have you previously submitted testimony in this proceeding?**

8 A. Yes. I submitted Direct Testimony on September 28, 2005.

9 **Q. What is the purpose of this Surrebuttal Testimony?**

10 A. This Surrebuttal Testimony will address certain claims and comments made in the
11 Rebuttal Testimony filed by IPL witnesses Aller, Reed, Lacy, Hampsher, Stall,
12 Baumann and O'Sullivan.

13 **Q. Would ratepayers receive any immediate benefits from the revised proposal**
14 **by IPL witness Aller to transfer \$33 million to a regulatory liability**
15 **account?¹**

16 A. No. Ratepayers would not receive any immediate cash or refund benefit from
17 IPL's revised proposal. The cash benefits would be transferred to IPL's parent
18 company and shareholders.

¹ Rebuttal Testimony of Thomas Aller, at page 6, lines 10-15.

1 **Q. Do you have any comments on Mr. Aller's criticism of your conclusions that**
2 **the primary reason why IPL is seeking to sell DAEC is to benefit**
3 **shareholders and that IPL designed and implemented a sale that would**
4 **maximize the cash sales price even if that disadvantaged ratepayers?**²

5 A. Yes. There is no evidence in the rebuttal testimony of Mr. Aller or that of any
6 other IPL witness that refutes my findings that IPL is seeking to sell DAEC to
7 benefit shareholders and that IPL designed and implemented a sale that would
8 maximize the cash sales price even if that disadvantaged ratepayers.

9 At most, Mr. Aller has cited comments [REDACTED] from the
10 cursory minutes of two AEC Board meetings that were held after the decision had
11 been made to sell DAEC. Mr. Aller did not provide similar comments from any
12 Board meetings or staff presentations from the period while the decision to sell or
13 relicense was being considered. Indeed, one of the two meetings from which Mr.
14 Aller draws his quotes was a July 2, 2005 meeting which occurred long after the
15 decision to sell DAEC had been made, and after OCA began discovery regarding
16 the proposed sale.

17 More importantly, Mr. Aller did not and could not present any analyses from the
18 period prior to the date when the decision to sell was made in which IPL even
19 examined the relative costs and benefits to ratepayers of selling DAEC. He could
20 not present any such analyses because there is no evidence that the company even
21 studied a proposed sale from the perspective of ratepayers. [REDACTED]

22 [REDACTED]
23 [REDACTED]

² Rebuttal Testimony of Thomas Aller, at page 8, line 1, to page 10, line 22.

PUBLIC VERSION

1 **Q. Prior to drafting your Direct Testimony did you review the minutes of the**
2 **IPL and AEC Board of Directors meetings that were provided in response to**
3 **OCA DR No. 72?**

4 **A. Yes.**

5 **Q. Did you merely pull comments out of context from staff reports to support**
6 **your findings that IPL is seeking to sell DAEC is to benefit shareholders and**
7 **that IPL designed and implemented a sale that would maximize the cash**
8 **sales price even if that disadvantaged ratepayers, as Mr. Aller has claimed?**³

9 **A.**

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26 Similarly, IPL witness Lacy made a presentation at the October 26, 2004 joint
27 meeting of the Environmental, Nuclear, Health and Safety Committees of AEC

³ Rebuttal Testimony of Thomas Aller, at page 9, lines 21 to 24.

⁴ IPL Confidential Response to OCA DR No. 94, Attachment A, page 1 of 3 of the 07/13/04 Discussion Document.

1 and IPL Boards. The notes of this meeting show that Mr. Lacy discussed the
2 impact of various ownership options on shareholders but there is no record that
3 the impact on ratepayers was similarly addressed. In particular, the notes of this
4 meeting show that Mr. Lacy told the Board members that:

5 [REDACTED]
6 [REDACTED]
7 [REDACTED]
8 [REDACTED] ⁵

9 Indeed, the statements attributed to Mr. Aller at the December 2004 Board
10 meeting at which the sale of DAEC was authorized do not reflect concern about
11 the potential impact of the sale on ratepayers:

12 [REDACTED]
13 [REDACTED]
14 [REDACTED]
15 [REDACTED]
16 [REDACTED]
17 [REDACTED]
18 [REDACTED]
19 [REDACTED]
20 [REDACTED]
21 [REDACTED]
22 [REDACTED] ⁶

23 Finally, numerous statements of Mr. Aller in both his Direct and Rebuttal
24 Testimony support the conclusion that the proposed sale of DAEC is primarily
25 based on its impact on the company and shareholders.

⁵ Exhibit ____ TLA-1, Confidential Schedule A, page 5 of 12.

⁶ Exhibit ____ TLA-1, Confidential Schedule A, page 6 of 12.

1 **Q. Does Mr. Aller present any study to support his claim that if the proposed**
2 **sale to FPLE Duane Arnold is rejected, rates will need to be increased**
3 **dramatically to provide for the funding necessary to decommission the plant**
4 **in 2014?**⁷

5 A. No.

6 **Q. Is it necessarily true that rates would have to be increased “dramatically” to**
7 **pay for the decommissioning of DAEC in 2014 if the IUB rejects the**
8 **proposed sale?**

9 A. No. There are several options that would eliminate or reduce any need for a rate
10 increase if the IUB rejects the proposed sale. First, IPL could change its mind and
11 take the prudent course of action to relicense DAEC. Second, rates would not
12 necessarily have to be raised dramatically even if IPL pursued the imprudent
13 option of retiring the plant in 2014 at the end of its current NRC license. IPL
14 could seek to delay the start of the major decommissioning activities for several
15 years allowing more time for the accumulated trust funds to grow. This would
16 reduce the additional contributions needed from ratepayers.

17 **Q. Would the NRC allow IPL to pursue such a delay in the start of active**
18 **decommissioning?**

19 A. Yes. The NRC permits utilities to use a delayed decommissioning option. In fact,
20 a number of utilities have decided to use a SAFSTOR option in which their retired
21 plants are maintained in a cold and dark state for up to 40 years before the major
22 active decommissioning and dismantling activities are undertaken.

⁷ Rebuttal Testimony of Thomas Aller, at page 23, lines 5-7.

1 **Q. Please comment on Mr. Aller’s claim that the OCA completely ignores the**
2 **full spectrum of risks associated with relicensing.⁸**

3 A. I do not believe that the OCA has ignored any of the risks associated with
4 relicensing. Instead, it is IPL which dramatically overstates those risks, claiming
5 for example, that relicensing is a “Herculean task” when, in fact, the owners of 33
6 nuclear units already have completed their relicensing, the owners of another
7 sixteen units have submitted relicensing applications to the NRC, and the owners
8 of another 26-28 units have stated their intention to seek relicensing. Clearly, the
9 “Herculean” has become commonplace with regards to the relicensing of nuclear
10 power plants. Importantly, IPL will benefit greatly from the NRC having already
11 processed 33 relicensing applications.

12 More significantly, IPL initially ignored and now has distorted the significant
13 economic benefits from ratepayers that can be expected from the relicensing of
14 DAEC.

15 **Q. Mr. Aller has claimed that IPL personnel “would have no incentive to**
16 **increase the projected O&M and capital costs” and that “It would hardly be**
17 **in IPL’s best interest to strategically increase the prices it would have to pay**
18 **under either the PPA or continued NMC operation.⁹ Do you agree?**

19 A. No. IPL clearly had an incentive to increase the prices that its ratepayers would
20 have to pay under the PPA. The higher the proposed PPA prices, the more cash
21 bidders could be expected to offer to pay for DAEC. In other words, maximizing
22 the cash sales price was an incentive for increasing the proposed PPA prices.

⁸ Rebuttal Testimony of Thomas Aller, at page 25, lines 1-11.

⁹ Rebuttal Testimony of Thomas Aller, at page 29, lines 1-11.

1 **Q. Does your observation that the proposed PPA energy charges in the years**
2 **2006 through 2011 decreased between IPL's March Offering Memorandum**
3 **and the June revised PPA terms contradict this conclusion, as Mr. Aller**
4 **claims?**¹⁰

5 A. No. The relatively minor decrease in the proposed PPA energy charges between
6 the March Offering Memorandum and the June revised PPA terms was far more
7 than offset by the increases in the proposed PPA capacity charges between March
8 and June.

9 **Q. Mr. Aller claims that IPL increased the PPA pricing in June to reflect one-**
10 **half of the increase reflected in NMC's Draft 2005-2009 Business Plan**
11 **because the Draft Business Plan "provided more realistic estimates of**
12 **DAEC's O&M and capital costs going forward."**¹¹ **Is there any evidence**
13 **supporting this claim?**

14 A. No. The evidence that IPL provided to the OCA indicates quite clearly that IPL
15 rushed to modify the proposed PPA charges without conducting any meaningful
16 review of the reasonableness of the new O&M and capital costs in the Draft 2005-
17 2009 Business Plan.¹²

18 **Q. Has IPL presented any quantitative evidence to support Mr. Aller's claim**
19 **that the O&M increases projected by NMC are consistent with industry**
20 **standards and may even be low?**¹³

21 A. No. Neither Mr. Aller nor FPPE Duane Arnold witness Stall, who makes the same
22 claim, presented any quantitative evidence supporting this claim. If correct, this

¹⁰ Rebuttal Testimony of Thomas Aller, at page 29, lines 16-22.

¹¹ Rebuttal Testimony of Thomas Aller, at page 30, lines 1-4.

¹² See the Direct Testimony of David A. Schlissel, at page 11, line 12, to page 12, line 10, at page 24, line 13, to page 25, line 2, and at page 30, lines 13-19.

¹³ Rebuttal Testimony of Thomas Aller, at page 30, lines 12-17.

1 would represent a marked change from the trends in nuclear power plant O&M
2 and production costs since the late 1990s.¹⁴

3 **Q. Have you testified in this proceeding that if a forecast is inconsistent with**
4 **past trends at DAEC, it should not be used, as Mr. Aller claims?**¹⁵

5 A. No. In fact, I testified to exactly the opposite point in my Direct Testimony where
6 I said that "It is reasonable to expect that O&M and capital expenditure estimates
7 will be revised over time to reflect cost control programs or any number of
8 changed circumstances. Such changed circumstances could include emerging
9 equipment problems, evolving technical or regulatory issues, or new labor
10 agreements, to name a few."¹⁶

11 What is significant with regard to both the Preliminary and the Final 2005-2009
12 Business Plans for DAEC is that the projected O&M and capital expenditures
13 have been increased so substantially without any evidence of such significantly
14 changed circumstances. Indeed, as I explained in my Direct Testimony, the
15 revised O&M and capital costs in the Business Plans reflect the costs of the new
16 NMC fleet initiatives but do not appear to reflect the projected savings from those
17 initiatives.¹⁷

¹⁴ See the Direct Testimony of David A. Schlissel, at page 32, lines 3-9, and OCA witness Fuhrman's Exhibit ____ CEF-1, Schedule H.

¹⁵ Rebuttal Testimony of Thomas Aller, at page 33, lines 14-15.

¹⁶ Direct Testimony of David A. Schlissel, at page 23, line 16, to page 24, line 2.

¹⁷ Direct Testimony of David A. Schlissel, at page 25, line 3, to page 27, line 22.

1 **Q. Mr. Aller testifies that it is disingenuous of you to claim at one point in your**
2 **Direct Testimony that the PPA is above market price and at another point**
3 **that the cap in the PPA is a detriment to customers.¹⁸ Does he fairly**
4 **represent your testimony on this point?**

5 A. No. My testimony is not that ratepayers should be required to buy more
6 overpriced power. My point is that the rates in the PPA should be lower starting in
7 2009 to reflect the implementation of the next phase of a power uprate at DAEC.
8 In other words, the price of the power provided to IPL's ratepayers should be
9 based on the expected future capacity of DAEC, including the power uprate.

10 **Q. Do you have any comment on Mr. Aller's testimony that the Boards of**
11 **Directors of both IPL and AEC have concluded that the risks of continued**
12 **nuclear ownership (post February 2014) to customers and shareholders**
13 **outweighs any potential benefit?¹⁹**

14 A. I don't see how the Boards of Directors of either IPL or AEC could have
15 reasonably reached a decision not to relicense because the Company never
16 prepared any analysis for management or the Board which examined the costs,
17 benefits, and risks for ratepayers of relicensing DAEC with the costs, benefits,
18 and risks for ratepayers of retiring the plant in 2014 and building an alternative
19 coal-fired facility.

20 **Q. Mr. Aller criticizes OCA witness Dr. Habr for assuming an "imaginary up-**
21 **rate of DAEC of 24 MWs in 2009."²⁰ Does IPL actually have a license for the**
22 **potential uprate of DAEC in 2009?**

23 A. Yes. In November 2001, the U.S. NRC approved a request by NMC to increase
24 the generating capacity of DAEC by approximately 15.3 percent. This would

¹⁸ Rebuttal Testimony of Thomas Aller, at page 39, lines 8-15.

¹⁹ Rebuttal Testimony of Thomas Aller, at page 43, lines 6-10.

²⁰ Rebuttal Testimony of Thomas Aller, at page 52, lines 3-5.

PUBLIC VERSION

1 increase DAEC's thermal power level to 1912 MWth. NMC has already
2 implemented two power rates which bring the power level of DAEC to 1840
3 MWth.²¹ The 24 MWe that Dr. Habr assumes in his analyses, which I
4 recommended, represents the additional electrical output that could be achieved
5 by uprating DAEC to the 1912 MWth power level at which the plant already has
6 been licensed by the NRC. The rationale for this recommendation is fully
7 discussed in my Direct Testimony, pages 39-40.

8 **Q. Did you testify in this proceeding, or "insinuate" as Mr. Reed has claimed,**
9 **that the risks of owning coal-fired generation exceed that of a nuclear power**
10 **plant?²²**

11 A. No. The point I made in my Direct Testimony is that IPL repeatedly discusses the
12 potential risks associated with continued ownership of DAEC but failed entirely
13 to address the potential risks associated with ownership of a coal-fired unit.²³

14 **Q. Did you criticize IPL for not presenting a reasonable and balanced**
15 **assessment of the risks associated with continued ownership of DAEC, as Mr.**
16 **Reed has claimed?²⁴**

17 A. Not precisely. Although I have disagreed with certain of the claims made by IPL
18 concerning the risks associated with continued ownership, Mr. Reed misstates the
19 following statement in my testimony:

20 Q. Has IPL presented a reasonable and balanced assessment of
21 the risks associated with the continued ownership of DAEC
22 and the risks associated with selling the plant?

23 A. No. It is true that IPL could reduce or eliminate qualitative
24 risks if it ended its ownership of DAEC. However, IPL's
25 witnesses overstate the benefits of the sale in reducing risks

21 IPL's Response to OCA DR No. 33 (Exhibit __ DAS-2, Schedule C).

22 Rebuttal Testimony of John J. Reed, at page 24, line 21, to page 25, line 7.

23 Direct Testimony of David A. Schlissel, at page 56, lines 15-19, and page 73, lines 13-17.

24 Rebuttal Testimony of John J. Reed, at page 25, line 8, to page 26, line 20.

1 for ratepayers. At the same time, the company does not
2 address the risks to which ratepayers would be exposed if
3 DAEC is sold and a replacement coal-fired unit is built.²⁵

4 **Q. Has IPL now presented any assessment in its Rebuttal Testimony of the risks**
5 **to which ratepayers would be exposed if DAEC is sold and a replacement**
6 **coal-fired unit is built?**

7 A. No.

8 **Q. Has IPL considered the risks associated with the sale of DAEC and the**
9 **construction of a new coal-fired unit in the relicensing study discussed in the**
10 **company's rebuttal testimony?**

11 A. No. The Company does not address or consider in its relicensing study the risks
12 associated with the sale of DAEC and the construction of an alternative coal-fired
13 unit. This failure, along with the significant weaknesses in the market price
14 forecast used by the company in its relicensing study (as identified in Dr.
15 Hausman's Rebuttal Testimony), renders the results of that study not credible.

16 **Q. Have other utilities similarly ignored in their relicensing studies the risks**
17 **associated with selling their nuclear plants and building replacement fossil-**
18 **fired facilities?**

19 A. No. Other utilities have specifically considered the potential risks associated with
20 building replacement fossil-fired facilities as part of their evaluation of whether to
21 relicense their nuclear plants.

22 For example, among the variables that the Nebraska Public Power District
23 ("NPPD") considered in its study of whether to relicense the Cooper Nuclear
24 Station were:

- 25 ■ Future air emission allowance/offset limits and costs
- 26 ■ Multi-pollutant control (MPC) compliance equipment costs

²⁵ Direct Testimony of David A. Schlissel, at page 56, lines 12-19.

1 ▪ Cost of replacement baseload generating station.

2 ▪ Market and fossil fuel price scenarios²⁶

3 I have confirmed these considerations in my review of NPPD's Cooper Nuclear
4 Station *CNS Options Analysis Phase II Project Findings*. This study documents
5 NPPD's evaluation of the potential risks associated with building a replacement
6 fossil-fired facility.

7 Similarly, Xcel Energy specifically considered the risks associated with building
8 and operating replacement coal-fired facilities and reflected these risks in a range
9 of low, mid and high externalities prices in its relicensing studies.²⁷

10 **Q. What were the findings of these relicensing studies?**

11 A. The NPPD study found that, in general, the possible future environmental impacts
12 on its coal-fired generating units was a major cost driver favoring continued
13 operation of the Cooper Nuclear Station. The study also found that the expected
14 benefit of proceeding with license renewal is greater than \$1 billion, depending on
15 the power uprate and fuel cycle length assumed.²⁸

16 The Xcel relicensing study found that the present value revenue requirement
17 benefit of relicensing the Monticello plant ranged from \$395 million in 2004
18 dollars to approximately \$700 million, depending on the assumed costs of fossil
19 fuels and the prices assumed for the externalities examined in the study.²⁹

²⁶ Exhibit ____ DAS-1, Schedule C, at pages 14 and 15.

²⁷ See Exhibit ____ DAS-1, Schedule D.

²⁸ Exhibit ____ DAS-1, Schedule C, at page 19.

²⁹ Exhibit ____ DAS-1, Schedule D, at pages 5-5 and 5-6.

1 **Q. Are the Cooper and Monticello plants similar in design and vintage to**
2 **DAEC?**

3 A. Yes. Cooper and Monticello are relatively small boiling water reactor design
4 plants of the same approximate vintage as DAEC. Both plants also are located in
5 the same approximate geographic area as DAEC.

6 **Q. IPL witness Reed has testified that there have been 31 utilities that have sold**
7 **nuclear plants, or ownership shares in plants, since 1999. He has further**
8 **testified that “The reasons why these companies sold are virtually identical to**
9 **the reasons why IPL is selling its share of DAEC.”³⁰ Is this correct?**

10 A. No. Mr. Reed lists 20 nuclear power plants sales transactions in his
11 Exhibit____JJR-2, Schedule A. All but two of the plants that have been sold,
12 Vermont Yankee and Kewaunee, are located in states that have deregulated their
13 electricity markets. The sale of the nuclear plants in these states has been
14 mandated or strongly encouraged by legislative or regulatory actions. Therefore,
15 relicensing was not an option for the plant owners.

16 At the same time, a review of Exhibit____JJR-2, Schedule A reveals that many
17 of the utilities sold small ownership shares of the nuclear plants. Unlike IPL,
18 these utilities were not majority owners and, therefore, did not have the power to
19 relicense the plants instead of selling them. So, again, relicensing was not an
20 option for these minority owners.

21 Finally, some of the nuclear sales listed by Mr. Reed involved the sale of
22 ownership shares by a minority owner to the majority owner(s) of the plants. For
23 example, Conectiv’s sale of its ownership shares of the Salem, Peach Bottom, and
24 Hope Creek plants to PSEG and PECO and Duquesne’s sale of its shares of
25 Beaver Valley Units 1 and 2 to FirstEnergy. Again, relicensing was not an option
26 for these sellers.

³⁰ Rebuttal Testimony of John J. Reed, at page 2, lines 12-15.

1 **Q. Did Mr. Reed indicate how many of the nuclear plant sales since 1999 were**
2 **mandated or encouraged by state restructuring efforts?**

3 A. No. Even though that specific question was presented to Mr. Reed in his Rebuttal
4 Testimony, he did not provide any answer.³¹

5 **Q. Mr. Reed also testifies that no regulator, state or federal, has rejected any of**
6 **these prior nuclear plant sales.³² Is that an accurate statement?**

7 A. Not really. Mr. Reed is correct that state and federal regulators did approve the
8 sales that are listed in Exhibit ____JJR-2, Schedule A. However, his testimony is
9 misleading because he ignores the fact that the Vermont Public Service Board
10 rejected the proposed sale of the Vermont Yankee Nuclear Plant to AmerGen in
11 2001. In addition, the proposed sale of the Nine Mile Point Unit 1 and 2 nuclear
12 plants to AmerGen was withdrawn after several of the joint owners and the staff
13 of the New York State Public Service Commission complained that the proposed
14 purchase price was not providing sufficient benefits for ratepayers.

15 **Q. Do you have any comment on Mr. Reed's claim that you completely ignore**
16 **the fact that 30 companies have chosen to sell their nuclear interests and not**
17 **relicense their plants before the sale?³³**

18 A. Yes. As I noted above, relicensing was not an option for many of the utilities that
19 have sold their ownership interests in nuclear plants. As Mr. Reed has
20 acknowledged the sale of those ownership interests was mandated or strongly
21 encouraged by state deregulation efforts. Therefore, there was no reason for the
22 owners to consider the potential for relicensing before they sold the plants.

³¹ See the Rebuttal Testimony of John J. Reed, at page 6, line 28, to page 7, line 5.

³² Rebuttal Testimony of John J. Reed, at page 2, lines 17-18.

³³ Rebuttal Testimony of John J. Reed, at page 18, lines 3-5.

1 Moreover, I am not here recommending that IPL relicense DAEC and then sell
2 the plant. Based on my analyses and those of the other OCA witnesses, I believe
3 that IPL should relicense and retain ownership of DAEC.

4 **Q. In how many other proceedings have you filed testimony concerning**
5 **proposed nuclear power plant sales?**

6 A. As indicated in Exhibit ____ DAS-1, Schedule A, I have filed testimony
7 concerning proposed nuclear power plants sales in the following four state
8 regulatory proceedings:

- 9 ▪ Vermont Public Service Board Docket No. 6300 in April 2000 on the
10 issue of whether the proposed sale of the Vermont Yankee nuclear plant to
11 AmerGen Vermont was in the public interest.
- 12 ▪ Connecticut Department of Public Utility Control Docket No. 99-09-
13 12RE01 in November 2000 concerning the proposed sale of the Millstone
14 Nuclear Station.
- 15 ▪ Vermont Public Service Board Docket No. 6545 in January 2002 on the
16 issue of whether the proposed sale of the Vermont Yankee Nuclear Plant
17 to Entergy was in the public interest of the State of Vermont and Vermont
18 ratepayers.
- 19 ▪ Public Service Commission of Wisconsin Docket No. 05-EI-136 on the
20 issue of whether the proposed sale of the Kewaunee Nuclear Power Plant
21 to a subsidiary of an out-of-state holding company was in the public
22 interest.

23 **Q. Did your testimony in each of these proceedings reach the ultimate issue of**
24 **whether the proposed nuclear power plant sale should be approved by the**
25 **state regulatory commission?**

26 A. No. I only testified on the ultimate question of whether the nuclear power plant
27 sale should be approved or rejected in Vermont Public Service Docket No. 6300
28 and Public Service Commission of Wisconsin Docket No. 05-EI-136.

29 There was no issue in the Connecticut Department of Public Utility Control
30 Docket No. 99-12-RE01 concerning whether the Millstone Nuclear Station should
31 be sold. That facility was being sold pursuant to the state's restructuring law. At
32 the same time, although my client in Vermont Public Service Board Docket No.

1 6545 opposed the proposed sale, at least initially, my testimony addressed a
2 limited number of points concerning the engineering/economic analyses that
3 needed to be performed in order to evaluate the reasonableness of the proposed
4 sale. I did not address the ultimate question of whether the proposed plant sale
5 should be approved.

6 **Q. Have you seen any evidence that you are “well known in the industry for**
7 **[your] opposition to nuclear plant sales?”³⁴**

8 A. No. Although IPL witness Reed has made that claim I have seen no such
9 evidence. Nor would I expect that there really might be such evidence because I
10 have only testified concerning these four proposed nuclear power plant sales.

11 **Q. When you have testified regarding proposed nuclear power plant sales have**
12 **you had any financial interest in the outcome of the proceedings?**

13 A. No. We were paid by my clients for our analyses and testimony regardless of
14 whether the state regulatory commission approved or rejected the proposed sale.
15 This is quite different from Mr. Reed who has a significant financial interest both
16 in the cash value obtained by his client selling DAEC in the proposed sale and
17 whether the state and federal regulatory approvals for the sale are obtained.

18 **Q. Mr. Reed has claimed that “every other time” you have opposed a nuclear**
19 **power plant sale, the state regulators have rejected your testimony and**
20 **approved the sale.³⁵ Is that true?**

21 A. No. Even though Mr. Reed underlined that claim in his testimony, it is patently
22 false. In fact, in three of the four cases in which I have filed testimony concerning
23 a proposed nuclear power plant sale, the state regulatory commission did not
24 reject each of the positions I presented.

³⁴ Rebuttal Testimony of John J. Reed, at page 3, lines 2-4.

³⁵ Rebuttal Testimony of John J. Reed, at page 3, lines 4-9.

PUBLIC VERSION

1 First, in Connecticut Department of Public Utility Control No. 99-09-RE01 I did
2 not oppose the sale, and, indeed, could not because it was mandated by state law.
3 We did initially express concern about the timing of the auction through which
4 the plant was sold. Then we later discussed how the proceeds from the sale were
5 being used.

6 Second, in Vermont Public Service Board Docket No. 6300 I did oppose the
7 proposed sale of the Vermont Yankee Nuclear Power Plant to AmerGen Vermont,
8 in part, because I believed that another sale might provide more significant
9 economic benefits for ratepayers.³⁶ Far from rejecting this position, the Vermont
10 Public Service Board rejected the proposed sale to AmerGen Vermont in an Order
11 dated February 14, 2001 because the proposed purchase price did not reflect the
12 fair market value of the plant.³⁷

13 Third, I presented testimony in Vermont Public Service Board Docket No. 6545
14 concerning the proposed sale of the Vermont Yankee Nuclear Plant to Entergy.
15 That testimony addressed a number of engineering issues related to the proposed
16 sale of Vermont Yankee and provided the basis for nuclear performance and cost-
17 related input assumptions used in analyses of the proposed sale presented by
18 another witness from Synapse.

19 Synapse's client in that proceeding, the Vermont Department of Public Service
20 ("the Department") initially opposed the proposed sale. However, after the
21 proponents modified the proposed transaction to provide substantial additional
22 benefits for ratepayers, the Department concluded that the sale would promote the
23 general good and, therefore, joined the Petitioners in supporting the proposed
24 sale.³⁸

³⁶ Direct Testimony of David A. Schlissel in Vermont PSB Docket No. 6300, dated April 14, 2000, at pages 5 and 8.

³⁷ Order in Docket No. 6300, dated February 14, 2001, at page 5.

³⁸ Order in Docket No. 6545, dated June 13, 2002, at page 16.

1 Fourth, I presented testimony in Public Service Commission of Wisconsin Docket
2 No. 05-EI-136 which addressed three specific issues:

- 3 1. Whether it was in the public interest to sell Kewaunee to an indirect
4 subsidiary of an out-of-state multi-tiered holding company.
- 5 2. Whether WPS and WPL's proposed use of the Kewaunee
6 decommissioning trust funds was reasonable and in the public interest.
- 7 3. Whether the price that WPS and WPL would receive from Dominion
8 Energy Kewaunee represented Kewaunee's fair market value.

9 **Q. Did the Wisconsin Commission reject your testimony on each of these issues?**

10 A. No. In fact, the Wisconsin Commission initially rejected the proposed sale to
11 Dominion Energy Kewaunee based, in substantial part, on its concerns over the
12 loss of regulatory oversight as a result of the sale.³⁹ This was an issue I had
13 addressed at length in my testimony.

14 **Q. Did the Wisconsin Commission subsequently approve the proposed sale of**
15 **Kewaunee?**

16 A. Yes. In an Order dated April 21, 2005, the Wisconsin Commission approved the
17 sale based on twelve additional conditions that had been proposed by the
18 purchaser to address concerns that had been raised at the hearings and in briefs.

19 **Q. Does Mr. Reed accurately cite your testimony in Vermont Public Service**
20 **Board Docket No. 6545 concerning the proposed sale of the Vermont Yankee**
21 **Nuclear Plant to Entergy?**⁴⁰

22 A. No. Mr. Reed misrepresents my testimony. I was asked by the client to evaluate
23 whether the original owners of Vermont Yankee had reasonably considered all
24 alternatives to the sale. My answer, as presented in my testimony, was that the
25 original owners had not considered the possibility of bringing in an experienced
26 firm like the Nuclear Management Company to manage Vermont Yankee as an

³⁹ Order in Docket No. 05-EI-136, dated December 16, 2004, at pages 10, 11, 12, 15, and 18.

⁴⁰ Rebuttal Testimony of John J. Reed, at page 9, line 18, to page 10, line 4.

1 alternative to the sale. I did not claim that bringing in NMC would produce 25
2 percent savings in power production costs. I noted that NMC itself had claimed
3 that it would be able to reduce the power production costs at each plant it
4 manages by about 25 percent.

5 **Q. In its Order in Docket No. 6545, did the Vermont Public Service Board reject**
6 **your recommendations concerning the future plant performance that should**
7 **be considered when evaluating the economic costs and benefits of the**
8 **proposed sale versus continued ownership by the current owners?**

9 A. No. The studies on which my client ultimately decided to support, and the Public
10 Service Board approved the proposed sale, reflected my recommendations
11 concerning expected future plant performance, the possibility of a significant
12 power uprate and the possibility of extending Vermont Yankee's operating life by
13 an additional twenty years.

14 **Q. Earlier you mentioned that the Vermont Public Service Board rejected the**
15 **proposed sale of Vermont Yankee to AmerGen in June 2001 but then**
16 **subsequently approved the sale of the plant to Entergy in March 2002. Was**
17 **the actual sales price to Entergy higher than the proposed sales price to**
18 **AmerGen in the rejected transaction?**

19 A. Yes. The original cash sales price that AmerGen proposed to pay for Vermont
20 Yankee in the rejected sale was \$23,800,000.⁴¹ This price was subsequently
21 raised to \$40 million. As shown in Mr. Reed's Exhibit ___JJR-2, Schedule A,
22 Vermont Yankee ultimately was sold to Entergy for \$180 million.

⁴¹ Vermont Public Service Board Order in Docket No. 6300, at page 15.

1 **Q. Mr. Reed discusses testimony you presented concerning the Oyster Creek**
2 **Nuclear Plant.⁴² Did this testimony concern the proposed sale of the plant?**

3 A. No. Although Mr. Reed does not mention the fact, this testimony was presented in
4 the fall of 1990, approximately fifteen years ago. In this testimony, I examined the
5 relative economics of continued operation versus early retirement of Oyster
6 Creek. As Mr. Reed notes, I did find that early retirement would have been the
7 more economic option, based on that unit's troubled operating history, that is, its
8 high operating costs and poor capacity factors. Unfortunately, the plant's owner
9 did not agree with my recommendation in 1990 and refused to retire the facility.
10 However, seven years later, the owner announced that if no buyer could be found,
11 the plant would be retired early because of its high operating costs. Ultimately the
12 plant was sold to AmerGen for only \$10 million. Given that the utility's
13 ratepayers have been paying for the several hundred dollars of stranded costs
14 related to Oyster Creek, it is reasonable to expect that they would have been better
15 off had the utility accepted my recommendation and retired the plant back in
16 1990.

17 **Q. Can you cite any instances in which utilities have relied on your estimates**
18 **concerning projected future plant operating performance?**

19 A. Yes. I was retained in 1992 to examine the likely future operating performance of
20 the Trojan Nuclear Plant. The results of my examination formed the basis for
21 several scenarios that were analyzed to evaluate whether continued operation was
22 the more economic option. The plant owner's Board of Directors decided to retire
23 the plant, in part, based on the results of the scenarios that I had proposed as
24 reasonable forecasts of future plant operation.

⁴² Rebuttal Testimony of John J. Reed, at page 12, lines 13-19.

1 **Q. Mr. Reed also cites your testimony in a proceeding regarding Wisconsin**
2 **Electric Power Company's proposal to replace the Point Beach Unit 2 steam**
3 **generators.⁴³ When did you present this testimony.**

4 A. This testimony was presented to the Public Service Commission of Wisconsin in
5 the fall of 1994.

6 **Q. Are the assertions in that testimony contradictory to the positions you have**
7 **taken in this proceeding?**

8 A. Absolutely not. Mr. Reed has misrepresented my 1994 testimony by taking some
9 of my statements out of context.

10 In fact, my recommendations concerning the projected future Point Beach
11 operating performance and costs that should be considered in the analyses of the
12 economic costs and benefits of replacing the unit's steam generators were based
13 on that unit's recent operating experience and on the operating performance of
14 comparable nuclear power plants. I used the exact same approach in this
15 proceeding. However, much more operating experience has been gained in the
16 nuclear industry since 1994, plant capacity factors have increased substantially,
17 and O&M and capital cost expenditures have been controlled to a much greater
18 degree than they were back in the early 1990s. Therefore, the same
19 recommendations that applied to a study of Point Beach Unit 2 in 1994 do not
20 apply to a study of DAEC in 2005.

21 For example, given the actual high rates of escalation of nuclear O&M and capital
22 expenditures in the late 1980s and early 1990s, it was reasonable to expect that
23 future costs would continue to increase at about two to four percent above the
24 expected overall rate of inflation. However, given the recent industry experience
25 with flat or declining O&M and capital expenditures, it is reasonable to expect

⁴³ Rebuttal Testimony of John J. Reed, at page 12, line 20, to page 13, line 15.

1 that any future growth will not be at the same two to four percent annual rates that
2 appeared reasonable back 1994.

3 **Q. Mr. Reed has claimed that your conclusion that prudent management would**
4 **seek to extend the operating life of a substantially depreciated nuclear unit**
5 **like DAEC is “so far out of step with industry norms that it is incredible to**
6 **me that they have been embraced by the OCA.”⁴⁴ Do you find this claim to**
7 **be credible?**

8 A. No. As I discussed in my Direct Testimony, IPL could not name a single nuclear
9 owner, other than itself, that has announced that it will not seek to relicense its
10 plant.⁴⁵ I don’t understand how my statement can then be out of step with
11 industry norms when the industry norm clearly is to relicense currently operating
12 nuclear power plants.

13 **Q. Does the claim by Mr. Reed that you fail to recognize that gaining NRC**
14 **approval of a relicensing application in no way assures the plant will run for**
15 **additional 20 years contradict any other statements in his Rebuttal**
16 **Testimony?**⁴⁶

17 A. Yes. While Mr. Reed claims that IPL could not be assured of operating DAEC for
18 an additional twenty years if it obtained NRC approval for relicensing, he accuses
19 me of largely ignoring “the fact that FPLE Duane Arnold will be working to re-
20 license the plant and, if successful, that power will remain available to customers
21 in Iowa and throughout MISO through 2034.”⁴⁷ Apparently, Mr. Reed and the
22 other IPL witnesses would have the IUB believe that relicensing of DAEC and its
23 continued operation through 2034 would be a major risk if IPL continues to own

⁴⁴ Rebuttal Testimony of John J. Reed, at page 4, lines 9-17.

⁴⁵ Direct Testimony of David A. Schlissel, at page 42, lines 8-21.

⁴⁶ Rebuttal Testimony of John J. Reed, at page 18, lines 1-2.

⁴⁷ Rebuttal Testimony of John J. Reed, at page 24, lines 10-12.

1 the plant but would be a reasonable certainty if FPLE Duane Arnold purchases the
2 unit.

3 **Q. Mr. Reed discusses the relative terms of the Ginna and Kewaunee sales and**
4 **the proposed DAEC sales transaction.⁴⁸ Does he ignore any factors which**
5 **may account for the relatively high sales price that FPLE Duane Arnold is**
6 **willing to pay for DAEC compared to these two relatively recent sales?**

7 A. Yes. Mr. Reed ignores the increases in current and projected natural gas prices
8 during 2005. These increases make owning a low cost nuclear power plant like
9 DAEC a far more profitable investment than would have been the case even a
10 year ago. Certainly that is one of the reasons why FPLE Duane Arnold and the
11 other bidders were willing to pay so much for DAEC and it is one compelling
12 reason that retaining and relicensing DAEC would be the prudent course of action
13 for the benefit of IPL's ratepayers.

14 **Q. Do you have any comments on Mr. Reed's criticism of your "peer group" of**
15 **nuclear power plants?⁴⁹**

16 A. First, it is not my peer group. It is the peer group of those plants that the U.S.
17 Nuclear Regulatory Commission has concluded are comparable in design and
18 vintage.

19 Second, I examined the recent operating performance of the peer group during the
20 past six years. There is no recent operating performance for two members of the
21 peer group, i.e., Millstone 1 and Big Rock Point, that were permanently retired in
22 1997 and 1998. Nor was there any recent operating experience for Browns Ferry
23 1, a unit that has been shut down since 1985 because of mismanagement by the
24 owner, TVA. Therefore, these units were not relevant and Mr. Reed's inclusion
25 of them in the calculation of the peer group performance makes no sense.

⁴⁸ Rebuttal Testimony of John J. Reed, at page 18, lines 8-17, and at page 28, lines 7-24.

⁴⁹ Rebuttal Testimony of John J. Reed, at page 21, line 4, to page 23, line 2.

1 Third, as Mr. Reed repeatedly glosses over, DAEC currently is part of a fleet, i.e.,
2 the fleet of plants that are operated by NMC. Indeed, the American Nuclear
3 Society publication from which I drew the data used in my capacity factor
4 analyses includes all of the NMC operated plants as a group, just as it includes the
5 Exelon plants or the Entergy plants or the FPL plants as part of a group.⁵⁰

6 **Q. Have other nuclear fleet operators achieved average plant capacity factors**
7 **higher than 90 percent in recent years?**

8 A. Yes. Entergy achieved an average 94.1 percent annual capacity factor at all of its
9 nuclear units during the years 2002-2004.⁵¹ Exelon achieved an average 92.5
10 percent capacity factor during the same three year period and an average 93.4
11 percent capacity factor during the five year period 2000-2004. Florida Power &
12 Light achieved a 91.7 percent capacity factor during the three year period 2000-
13 2004.

14 **Q. Do you have any comment on the nuclear plant “death march” described by**
15 **Mr. Reed?**⁵²

16 A. Yes. I have several comments.

17 First, Mr. Reed does not cite any nuclear plant shutdown since the end of 1998. In
18 the same period of time, as I noted in my Direct Testimony, the NRC has issued
19 extended operating licenses for 33 nuclear units. All of these extended licenses
20 have been issued since 1999. At the same time, the NRC currently is considering
21 applications for license renewal for another sixteen nuclear units. In addition, the
22 owners of another 26-28 units have submitted letters to the NRC indicating their
23 intent to apply for license renewal.⁵³

⁵⁰ Exhibit___DAS-2, Schedule A.

⁵¹ Ibid.

⁵² Rebuttal Testimony of John J. Reed, at page 23, line 3, to page 24, line 7.

⁵³ Direct Testimony of David A. Schlissel, at page 41, lines 19-23.

1 Second, the fact that eleven other nuclear plants were permanently retired by 1998
2 does not prove Mr. Reed's claim that "at some point, typically long before the
3 license is scheduled to expire, these investments can't be justified, and the plant is
4 shut down."⁵⁴ Each of the plants that Mr. Reed has listed was retired for very
5 plant-specific reasons. Some of these plant-specific reasons were plant design,
6 owner mismanagement or unexpected steam generator defects. As a BWR plant,
7 DAEC does not have a steam generator. Therefore, the experience of the Maine
8 Yankee and Trojan plants which were shut down due to steam generator defects is
9 not applicable.

10 In fact, a number of plants that have already been relicensed by the NRC or that
11 are currently undergoing NRC relicensing review are older than those plants listed
12 by Mr. Reed on page 23 of his Rebuttal Testimony were when they were retired.
13 For example, the Oconee, Turkey Point, Ginna, and Dresden nuclear units were
14 approximately 30 years old when they were relicensed by the NRC. That is older
15 than the age of almost all of the units listed by Mr. Reed when they were
16 permanently retired.

17 Third, as I've noted earlier, neither IPL nor Mr. Reed could identify even a single
18 nuclear owner who has announced that it would not seek to relicense its plant.
19 Clearly, other nuclear plant owners do not subscribe to the inevitability of Mr.
20 Reed's "death march" metaphor.

21 **Q. Please comment on Mr. Reed's claim that the risk and exposure to**
22 **unplanned outages is far greater at a nuclear plant?**

23 A. I have three comments on Mr. Reed's claim that the risk and exposure to
24 unplanned outages is far greater at a nuclear plant. First, the forced outage rates
25 for many fossil-fired plants are greater than recent nuclear plant forced outage
26 rates. For example, the 2000-2004 Generating Unit Statistical Brochure published
27 by the North American Electric Reliability Council reported that coal plants sized

⁵⁴ Rebuttal Testimony of John J. Reed, at page 24, lines 3-5.

1 between 400 and 599 MW experienced a 4.99 percent forced outage rate during
2 the five year period 2000-2004. During the same five year period, BWRs in the
3 400-799 MW size range, such as DAEC, experienced a 2.52 percent forced
4 outage rate.

5 Second, the actual experience of one outage of one nuclear power plant does not
6 prove anything about the risks associated with unplanned outages of other nuclear
7 power plants. Third, the fact that nuclear power outages lead to higher costs for
8 customers is due to the much lower fuel costs of nuclear plants as compared to
9 fossil fuel prices. Thus, a nuclear power plant outage only serves to reduce, for a
10 period of time, the benefits of nuclear plant ownership in terms of the availability
11 of inexpensive electricity. In contrast to a forced outage which might take DAEC
12 out of service for a limited period of time, IPL's proposed sale would deprive its
13 customers among other things of the benefits of DAEC's lower fuel costs for the
14 entire extended life period, 2014 through 2034.

15 **Q. Do you disagree with Mr. Reed's statement that "IPL recognized that**
16 **seeking a [right-of-first-refusal] and/or rights to future uprates would**
17 **adversely affect the other terms of the transactions?"⁵⁵**

18 **A.** No. I believe that IPL was not interested in any right-of-first-refusal or right to
19 future uprates because the inclusion of those terms would reduce the cash price
20 that a potential buyer would be willing to pay for DAEC. Because it wanted to
21 maximize the cash price it received for DAEC, IPL was not concerned about
22 including a right-of-first-refusal or a right to future uprates even if those terms
23 would greatly benefit the company's ratepayers.

⁵⁵ Rebuttal Testimony of John J. Reed, at page 31, lines 9-10.

1 **Q. Did you testify that IPL agreed to transfer an excessive amount of**
2 **decommissioning funds?**⁵⁶

3 A. No. Contrary to the claim of Mr. Reed, I did not so testify.

4 **Q. Mr. Reed and other IPL rebuttal witnesses have criticized your testimony on**
5 **the benefit for ratepayers of the transaction terms concerning the sharing of**
6 **cash recoveries from the spent nuclear fuel litigation with the U.S.**
7 **Department of Energy.**⁵⁷ **Do the points raised by Mr. Reed and the other**
8 **IPL rebuttal witnesses resolve the concerns you expressed in your Direct**
9 **Testimony?**

10 A. No. For example, as proposed by IPL, ratepayers would not receive their share of
11 any recoveries in a refund. Instead, their share of the recoveries would be placed
12 in a regulatory liability account. The cash monetary damages recovered from the
13 DOE would remain with IPL and its shareholders.⁵⁸

14 **Q. Does FPLE Duane Arnold witness Stall's Exhibit___JAS-2, Schedule A show**
15 **that DAEC's historic average is "well below 90%" as Mr. Stall claims?**⁵⁹

16 A. No. Mr. Stall's Schedule A shows that DAEC's most recent five year average
17 capacity factor was 89.4 percent, which is hardly "well below 90%." DAEC's six
18 year capacity factor, i.e., 1999-2004, was still 88.0 percent, which I would not
19 describe as "well below 90%." At the same time, Mr. Stall's Schedule A shows
20 that DAEC's peer plants achieved an average 91.9 percent capacity factor during
21 the most recent five years and an average 91.7 percent capacity factor during the
22 six year period, 1999-2004.

⁵⁶ Rebuttal Testimony of John J. Reed, at page 33, lines 15-17.

⁵⁷ For example, see the Rebuttal Testimony of John J. Reed, at page 34, line 22, to page 35, line 16 and the Rebuttal Testimony of Thomas Aller, at page 19, lines 4-11, and page 23, line 20, to page 24, line 9.

⁵⁸ Direct Testimony of Thomas Aller, at page 23, lines 13-22.

⁵⁹ Rebuttal Testimony of John A. Stall, at page 2, lines 7-9.

1 Therefore, instead of refuting my conclusion that DAEC could achieve a 90
2 percent average annual capacity factor if IPL continued to own and NMC
3 continued to operate the plant, Mr. Stall's analysis supports that conclusion.

4 **Q. Mr. Stall criticizes your capacity factor analysis, claiming that the numbers**
5 **you used reflected lower plant "maximum dependable capacities."⁶⁰ Is this**
6 **criticism correct?**

7 A. No. The numbers I used in my capacity factor analyses were taken from an
8 American Nuclear Society publication which used the higher "Design Electric
9 Ratings" for each nuclear power plant.⁶¹ For example, the comparable capacity
10 factors for DAEC would be based on a 581.4 MW rating which is higher than the
11 565 MWe figure that Mr. Stall says is the MAIN rating for the plant.

12 This means that Mr. Stall's criticisms of my capacity factor analyses are
13 completely misplaced.

14 **Q. Mr. Stall has said that "to the extent" that you are using the NRC's data, had**
15 **you included DAEC in your Figures 1 and 2, DAEC would not have stacked**
16 **up favorably against the peer group.⁶² Just to be clear, did you use capacity**
17 **factors based on each plant's maximum dependable capacity?**

18 A. No. As I indicated above, the source for my capacity factor data clearly indicates
19 that each capacity factor is based on the plant's higher Design Electric Rating.

⁶⁰ Rebuttal Testimony of John A. Stall, at page 2, lines 9-14.

⁶¹ Exhibit ___ DAS-2, Schedule A.

⁶² Rebuttal Testimony of John A. Stall, at page 2, lines 16-19.

1 **Q. Do you agree with Mr. Stall that the O&M and capital cost increases**
2 **proposed by NMC and FPLE Duane Arnold would help bring DAEC in line**
3 **with the peer group performance?⁶³**

4 A. Yes. I have no complaint about an analysis which reflects higher plant O&M and
5 capital costs leading to improved plant performance. However, I have concerns
6 about analyses, such as those presented by IPL, which reflect higher costs without
7 any resultant improvement in plant output or performance.

8 **Q. Do you need to correct your Direct Testimony in response to IPL Rebuttal**
9 **Witness O'Sullivan's observation that you compared FPLE's 70 percent**
10 **share of DAEC's online O&M to the 100 percent figures used by IPL to**
11 **develop the proposed PPA?⁶⁴**

12 A. Yes. The portion of my Direct Testimony at page 34, lines 7-19, should be
13 deleted.

14 **Q. Does this correction change or affect any of the conclusions presented at page**
15 **2, line12, to page 5, line 15, of your Direct Testimony?**

16 A. No. The conclusions of my Direct Testimony remain the same.

17 **Q. IPL Rebuttal Witness O'Sullivan has said that your conclusion that DAEC**
18 **has and would continue to operate at a 90 percent capacity factor under IPL**
19 **ownership is misleading and speculative.⁶⁵ Is this an accurate**
20 **characterization of your testimony?**

21 A. No. Mr. O'Sullivan bases his claim that my testimony about DAEC's expected
22 future capacity factor is misleading on IPL witness Stall's Rebuttal Testimony. As
23 I indicated above, Mr. Stall was simply wrong concerning the underlying data for
24 the plants in the DAEC peer group that I had used in my capacity factor analyses.

⁶³ Rebuttal Testimony of John A. Stall, at page 2, line 22, to page 3, line 3.

⁶⁴ Rebuttal Testimony of Michael O'Sullivan, at page 7, lines 5-15.

⁶⁵ Rebuttal Testimony of Michael O'Sullivan, at page 7, line 16, to page 8, line 3.

1 Moreover, I did not base my conclusion that DAEC could reasonably be expected
2 to achieve an average annual 90 percent capacity factor under IPL ownership
3 simply on the fact that DAEC had achieved a 96.6 percent capacity factor in 2004,
4 as Mr. O'Sullivan claims. Instead, I cited a number of factors in my Direct
5 Testimony for this conclusion.⁶⁶ I agree with Mr. O'Sullivan that basing a plant's
6 expected long-term operating performance solely on a single year's capacity
7 factor would be speculative.

8 **Q, Please comment on Mr. O'Sullivan's statement that you are incorrect in your**
9 **observation that the PPA pricing reflects only a 15 MWe power uprate and**
10 **not an 18 MWe uprate.⁶⁷**

11 A. My observation was based on the clear statement in IPL's response to OCA DR
12 No. 167(a) that the PPA charges reflect only fifteen MWe of increased power
13 from the recent Phase 2 power uprate as compared to the Proposed 2005-2009
14 Business Plan which reflects all 18 MWe of increased power from that uprate.

15 **Q. Do you "complain" in your Direct Testimony that the PPA does not require**
16 **FPLE Duane Arnold to provide replacement energy to IPL in the event that**
17 **it cannot provide that energy from DAEC, as Mr. O'Sullivan testifies?⁶⁸**

18 A. No. Mr. O'Sullivan mischaracterizes my testimony.

19 **Q. Did you suggest, as Mr. O'Sullivan testifies, that the PPA is deficient in not**
20 **providing for liquidated damages in the event that FPLE Duane Arnold fails**
21 **to deliver energy to IPL?⁶⁹**

22 A. No. Mr. O'Sullivan again mischaracterizes my testimony. I did not address the
23 issue of liquidated damages in the PPA.

⁶⁶ See the Direct Testimony of David A. Schlissel, at page 35, line 15, to page 38, line 8.

⁶⁷ Rebuttal Testimony of Michael O'Sullivan, at page 8, lines 4-9.

⁶⁸ Rebuttal Testimony of Michael O'Sullivan, at page 9, lines 4-6.

⁶⁹ Rebuttal Testimony of Michael O'Sullivan, at page 9, lines 12-20.

1 **Q. Did you testify, as Mr. O’Sullivan claims, that the PPA pricing and terms**
2 **should be modified as a condition to the Board’s allowing the proposed**
3 **reorganization to proceed?**⁷⁰

4 A. No. This is yet another instance in which Mr. O’Sullivan mischaracterizes my
5 testimony. I never testified, implied or suggested in any way that the PPA pricing
6 and terms should be modified as a condition to the Board’s allowing the proposed
7 reorganization to proceed.

8 **Q. Do you have any comment on IPL witness Boston’s criticism of your use of a**
9 **five year average capacity factor for DAEC?**⁷¹

10 A. Yes. The use of the 86.79% four year average capacity factor that Duane Arnold
11 has achieved from 2001-2004 would not change my opinion that it could achieve
12 an average 90 percent capacity factor in the future if it remained under IPL
13 ownership and NMC management. This conclusion is supported by the evidence
14 I presented in my Direct Testimony.⁷² I also would point out that FPLE Duane
15 Arnold witness Stall’s Schedule A shows that DAEC achieved an 88.0 percent
16 capacity factor during the six year period 1999-2004. Moreover, FPLE Duane
17 Arnold must believe that the plant can be operated at a 90 percent average annual
18 capacity factor or it would not have committed to doing so in the proposed PPA.
19 Although FPLE Duane Arnold’s parent company has a reputation for being an
20 excellent nuclear power plant operator, I believe that NMC could achieve the
21 same improvements in performance at DAEC as FPLE Duane Arnold.

⁷⁰ Rebuttal Testimony of Michael O’Sullivan, at page 12, lines 13-20.

⁷¹ Rebuttal Testimony of John S. Boston, at page 14, lines 4 – 18.

⁷² Direct Testimony of David A. Schlissel, at page 35, line 14, to page 38, line 8.

1 **Q. Is there other information relevant to this issue?**

2 A. Yes. See page 13 of the June 2, 2005 document provided in FPLE Duane
3 Arnold's Supplemental Response to OCA DR No. 125 (Special Confidential Ex.
4 p. 746).

5 **Q. Do you have any comments on IPL witness Hampsher's discussion of**
6 **decommissioning funding?**⁷³

7 A. Yes. Mr. Hampsher posits that as the decommissioning funds near a fully funded
8 status, it is likely that they would be shifted from equity to fixed income
9 investments to lower market risk. It does seem a reasonable strategy to me to
10 shift a greater share of the decommissioning funds into fixed investments over
11 time as the decommissioning funds approached fully funded status. However, Mr.
12 Hampsher's modeling, on which he bases his conclusion that it would take until
13 2011 to fully fund the decommissioning trusts assumes that all of the trust's
14 equity investments are shifted into fixed income funds at one time at the start of
15 2013. This would not be a reasonable strategy and certainly would not be
16 necessary if the plant were going to be operated until 2034. A longer term
17 strategy to gradually shift from equity to fixed income investments would be more
18 realistic and appropriate.

19 **Q. IPL witness Lacy discusses at length in his Rebuttal Testimony the**
20 **communications between IPL and NMC concerning the projected 2005-2009**
21 **budgets for DAEC. Does this discussion cause you to change your Direct**
22 **Testimony?**

23 A. No. At best, Mr. Lacy appears to have conducted several discussions with several
24 people at the DAEC site and NMC headquarters before IPL used the higher O&M
25 and capital figures in the Draft 2005-2009 Budget to revise upward the proposed

⁷³ Rebuttal Testimony of Christopher A. Hampsher, at page 23, lines 1-8, and page 38, line 18, to
page 39, line 3.

1 PPA charges.⁷⁴ My conclusion remains that IPL's review of the higher O&M and
2 capital figures in the Draft 2005-2009 Budget, used to revise the proposed PPA
3 charges, was of a very limited and extremely cursory nature.⁷⁵

4 **Q. Mr. Lacy discusses a previous evaluation of a phase 3 uprate at DAEC.⁷⁶**
5 **Does this study show that another power uprate at DAEC would be**
6 **uneconomical?**

7 A. Not at all. The study to which Mr. Lacy is referring was performed back in 2002.
8 It examined the economics of a 9MWe uprate, at a projected cost of \$9.927
9 million.⁷⁷ As I discussed in my Direct Testimony, the figures provided by IPL in
10 response to OCA data requests in this proceeding indicated it would cost
11 approximately \$13 million to achieve about a 24 MWe uprate. This would suggest
12 a much lower \$/Kw cost for the uprate than the 2002 study.⁷⁸

13 Moreover, the incremental cost of achieving the power uprate, that is, the cost
14 assuming that the supplemental feed pump will be purchased and the main
15 transformer refurbished whether or not DAEC is uprated, would be only \$6
16 million. Clearly, the economics would favor the addition of this extra capacity
17 especially when the very low nuclear fuel costs are compared to the high costs of
18 fossil fuels. These relative economics would improve significantly if it is assumed
19 that DAEC is relicensed as well as uprated.

20 Finally, current and projected fossil fuel costs have increased dramatically since
21 2002, when the previous Phase 3 power uprate study was performed. The relative

⁷⁴ Rebuttal Testimony of Bruce A. Lacy, at page 15, lines 9-16.

⁷⁵ See the Direct Testimony of David A. Schlissel, at page 11, line 12, to page 12, line 10, at page 24, line 13, to page 25, line 2, and at page 30, lines 13-19.

⁷⁶ Rebuttal Testimony of Bruce A. Lacy, at page 20, line 1, to page 21, line 7.

⁷⁷ IPL's Response to OCA DR No. 146, at page 11 of 14.

⁷⁸ Direct Testimony of David A. Schlissel, at page 40, line 17, to page 41, line 10.

1 economics costs and benefits of a Phase 3 uprate are much more favorable given
2 the much higher fossil fuel prices being forecast today.

3 **Q. Did you testify that IPL's customers are being unfairly charged for the**
4 **amortization of fuel bundles at the end of DAEC's life, as Mr. Lacy has**
5 **claimed?**⁷⁹

6 A. No. I said that the fact that ratepayers were paying for this amortization through
7 their PPA charges provided a significant benefit for FPLE Duane Arnold.

8 **Q. Is FPLE Duane Arnold getting a "windfall" from receiving these partially**
9 **spent fuel bundles at the beginning of the re-licensed operating term?**

10 A. No. But that's not the problem. In fact, FPLE Duane Arnold is paying cash to IPL
11 for DAEC including nuclear fuel. At the same time, ratepayers are being asked to
12 pay through the PPA for the shorter amortization of the last fuel placed in DAEC
13 before February 2014.

14 In other words, FPLE Duane Arnold is paying IPL for the fuel but IPL's
15 ratepayers in 2013 and 2014 then will reimburse FPLE Duane Arnold for a certain
16 amount of fuel that actually will not be used to supply power to those ratepayers.
17 In this way, IPL was able to increase the cash sales price it would receive for
18 DAEC while transferring to ratepayers the liability for paying in 2013 and 2014
19 for fuel that won't be used for the ratepayers' benefit.

⁷⁹ Rebuttal Testimony of Bruce A. Lacy, at page 22, lines 5-13.

1 **Q. Do you agree with Mr. Lacy's claims that there are only limited**
2 **opportunities for synergies by a common operator in decommissioning**
3 **nuclear power plants and that there has been very little real sharing of**
4 **decommissioning experience?**⁸⁰

5 A. No. I believe that there are significant opportunities to reduce decommissioning
6 costs through the synergies and economies of scale available to a common
7 operator such as NMC. I also do not agree with Mr. Lacy that there has been very
8 little real sharing of decommissioning experience. For example, the nuclear
9 industry literature has had numerous articles about actual decommissioning
10 experience and the industry, through organizations such as the American Nuclear
11 Society, has sponsored conferences and workshops designed to share information.
12 I'm also aware that some of the companies and individuals who have participated
13 in actual decommissioning projects remain available to work on future projects.
14 This is another way in which the aggregate industry experience in
15 decommissioning nuclear power plants can be shared.

16 **Q. What preparations did NMC's plan for relicensing DAEC recommend**
17 **should be initiated in the years 2004 and 2005?**

18 A. The June 25, 2004 NMC License Renewal Study for DAEC set forth three project
19 phases that would be begun in 2004 and 2005. Phase 1, "Preserve the Option"
20 Plan Development, cost \$40,000, and appears to have been essentially completed
21 with the preparation of NMC's June 25, 2004 Study. Phase 2, which was
22 projected to cost \$295,000, involved the development of a DAEC project plan that
23 would direct all License Renewal project activities.⁸¹ Phase 2 was expected to
24 last from October 15, 2004 through July 15, 2005.

25 Phase 3 of the NMC License Renewal Plan, which was expected to cost
26 \$1,147,000, involved a number of tasks: "Owner approval of a Project Plan.

⁸⁰ Rebuttal Testimony of Bruce A. Lacy, at page 23, lines 12-22.

⁸¹ IPL Response to OCA DR No. 8, at page 7 of 24.

1 Secure project team resources. Provide training to project team and complete task
2 qualification for project team. Notify NRC of intent to submit License Renewal
3 application.”⁸² Phase 3 was expected to last from October 15, 2005 through
4 February 15, 2006.

5 **Q. Does Mr. Lacy provide persuasive evidence that IPL’s failure to begin these**
6 **three phases of the preparations for the relicensing of DAEC in 2004 would**
7 **mean a two year delay in obtaining the NRC’s approval?**⁸³

8 A. No. IPL’s failure to begin preparations for the relicensing of DAEC in 2004 may
9 be expected to lead to some delay beyond the end of 2010 in obtaining NRC
10 approval. However, Mr. Lacy has not provided any evidence showing that the
11 overall delay from not starting Phases 2 and 3 of NMC’s Plan in 2004 and 2005
12 would be two years or, indeed, would result in any significant delay in obtaining
13 NRC approval beyond the end of 2010.

14 **Q. Was IPL’s failure to fund Phase 2 of the NMC Plan, that is, development of**
15 **the project plan document that would direct all future License Renewal**
16 **project activities, reasonable?**

17 A. No. I cannot understand why IPL did not fund the relatively low cost (\$295,000)
18 of developing a project team. After all, back in October 2004, IPL had not
19 decided that it would sell DAEC. Nor, I believe, had the Company decided that it
20 would not relicense the plant.

⁸² Ibid.

⁸³ Rebuttal Testimony of Bruce A. Lacy, at page 27, line 21, to page 29, line 7.

1 **Q. Is obtaining NRC approval of a renewed license for DAEC by the end of 2010**
2 **a key assumption in the OCA's studies of the benefits of relicensing?**⁸⁴

3 A. No. I believe that the OCA's analyses would continue to show significant
4 benefits for relicensing even if the NRC approval date were delayed beyond the
5 end of 2010.

6 **Q. Have you seen any recent estimates of future uranium prices in addition to**
7 **the projections presented by NMC witness Baumann in this proceeding?**

8 A. Yes. In early August of this year, Exelon made a presentation to investors in New
9 York City on its proposed merger with PSEG, Inc. The President of Exelon
10 Generation, noted the following during this presentation:

- 11 ■ Uranium is a small component of total nuclear production cost
- 12 ■ Exelon expects long-term fundamentals in the uranium market to produce
13 prices in the range of \$20-\$25 [per pound] due to new uranium
14 production.⁸⁵

15 **Q. Does this complete your Surrebuttal Testimony?**

16 A. Yes.

⁸⁴ Rebuttal Testimony of Bruce A. Lacy, at page 28, line 1.

⁸⁵ Exhibit ___ DAS-2, Schedule B.