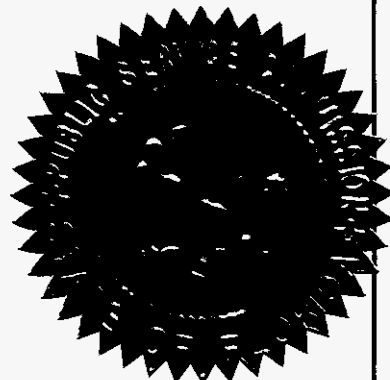


BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

PETITION FOR INCREASE IN RATES DOCKET NO. 080677-EI
BY FLORIDA POWER & LIGHT COMPANY.

2009 DEPRECIATION AND DISMANTLEMENT DOCKET NO. 090130-EI
STUDY BY FLORIDA POWER & LIGHT
COMPANY.



VOLUME 15
Pages 1789 through 1996

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PROCEEDINGS: HEARING

COMMISSIONERS
PARTICIPATING: CHAIRMAN MATTHEW M. CARTER
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Monday, August 31, 2009

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: LINDA BOLES, RPR, CRR
Official FPSC Reporter
(850) 413-6734

APPEARANCES: (As heretofore noted.)

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I N D E X

WITNESSES

NAME:	PAGE NO.
JACOB POUS	
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Prefiled Direct Testimony Inserted	1797
Cross Examination by Mr. Moyle	1986
Cross Examination by Mr. Wright	1986
Cross Examination by Mr. Butler	1988

CERTIFICATE OF REPORTER	1996
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EXHIBITS

	NUMBER:		ID.	ADMTD.
1				
2				
3	181	Pous Appendix A	1796	
4	182	JP-1	1796	
5	183	JP-2	1796	
6	184	JP-3	1796	
7	185	JP-4	1796	
8	186	JP-5	1796	
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10	188	JP-7	1796	
11	189	JP-8	1796	
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P R O C E E D I N G

1
2 (Transcript continues in sequence from Volume
3 14.)

4 **CHAIRMAN CARTER:** We're back on the record.
5 Mr. McGlothlin, you're recognized, sir.

6 **MR. MCGLOTHLIN:** OPC calls Jacob Pous. Mr.
7 Pous was not in the room when you administered the oath.

8 **CHAIRMAN CARTER:** Mr. Pous, would you please
9 stand and raise your right hand.

10 And if there are any further witnesses that
11 will be called today for the Intervenors, would you
12 please stand and raise your right hand?

13 Okay. Well, you're it.

14 (Witness sworn.)

15 Thank you. Please be seated.

16 Mr. McGlothlin.

JACOB POUS

17
18 was called as a witness on behalf of the Office of
19 Public Counsel and, having been duly sworn, testified as
20 follows:

DIRECT EXAMINATION

21 **BY MR. MCGLOTHLIN:**

22
23 **Q.** Please state your name and business address,
24 sir.

25 **A.** My name is Jacob Pous. I go by Jack. My

1 business address is 1912 West Anderson Lane, Austin,
2 Texas 78757.

3 Q. Did you prepare and submit prefiled direct
4 testimony on behalf of the Citizens in this docket?

5 A. Yes, I did.

6 Q. Do you have that document before you?

7 A. Yes, I do.

8 Q. Do you have any changes that you want to bring
9 to the attention of the Commissioners and parties?

10 A. Yes. I have a revision errata, and I'll go
11 through the various items. There's a handout, I
12 believe, of the corrected pages.

13 But the first one is Page 35, Line 10. The
14 third word from the end, "recover," is, replaces the
15 word "retire" that was in the original testimony.

16 The next change is on Page 53, and that begins
17 on Line 5. In the middle it says "initially proposed 30
18 to 35 years of operations. Moreover, with." And the
19 correction is to strike the period after "35 years of
20 operation," strike "moreover, with" and add "coupled
21 with the fact that there was." So it reads "initially
22 proposed 35 to -- 30 to 35 years of operation coupled
23 with the fact that there was no plans for retirement."

24 The next adjustment is on Page 54, Line 2,
25 continuing to Line 3, where it says at the end, settled,

1 "settlement where the Company's," initial cap on the
2 Company's. And that should change to "settlement where
3 that company's," and it's lower case on company, so it's
4 not indicating that it's FP&L.

5 Then the next change is on Page 56, Line 9.
6 At the end of the sentence it says, "operating for
7 lifespans." Between "for" and "life," need to insert
8 the word "the expected." So it reads "operating for the
9 expected lifespans."

10 The next change is on Page 57, Line 16. In
11 the middle of the line it says "27.5 years." That
12 should be "37.5 years."

13 The next change is Page 95, Line 18. In the
14 middle it says "the databased," B-A-S-E-D. That should
15 be changed with "the database." No -- one word, no D on
16 the end.

17 The next change is Page 120, Line 23. The
18 account number changes from 36776.6 to 367.6. There was
19 an extra six in the number.

20 (Telephone ringing.)

21 **CHAIRMAN CARTER:** You didn't do anything.

22 **THE WITNESS:** Okay. That's the first time I
23 haven't done anything. Should I go ahead?

24 **CHAIRMAN CARTER:** Yes, sir.

25 **THE WITNESS:** Okay. The next change is Page

1 149. All right. This one is Lines 7 through 20. At
2 the end of Line 7 it says, "The investigation reveals
3 that the Company has reacted, hyphen, not to a trend,
4 hyphen, hyphen," and then the balance of another 13
5 lines.

6 Line 7 should change, "The investigation
7 reveals that the Company does not know if it has
8 reacted," strike hyphen not, "to a trend," and then put
9 a period. Strike everything after the double hyphen on
10 Line 8 through the balance of that paragraph, which ends
11 on Line 20, and insert, "The company states it reviewed
12 all years and, quote, not any one particular year, end
13 of quote, period. Open paren, see OPC's first Depr. POD
14 No. 22, close paren, period. The Company could not
15 identify why, quote, such specific activity is
16 indicative of the entire remaining investment, end of
17 quote." And those are the errata changes.

18 **MR. McGLOTHLIN:** We have supplied parties and
19 the court reporter with the revised pages.

20 **BY MR. McGLOTHLIN:**

21 **Q.** With those revisions, Mr. Pous, do you adopt
22 the questions and answers contained in the prefiled
23 document as your testimony here today?

24 **A.** Yes, I do.

25 **MR. McGLOTHLIN:** I request that the prefiled

1 direct testimony of Mr. Pous be inserted into the
2 transcript at this point.

3 **CHAIRMAN CARTER:** The prefiled testimony of
4 the witness will be inserted into the record as though
5 read.

6 **BY MR. McGLOTHLIN:**

7 **Q.** Mr. Pous, did you prepare the exhibits to your
8 testimony that are contained in what has been marked as,
9 identified as Volume 2 of 2 to your testimony?

10 **A.** Yes, I did.

11 (Exhibits 181 through 190 marked for
12 identification.)

DIRECT TESTIMONY

OF

Jacob Pous

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket Nos. 080677-EI & 090130-EI

I. STATEMENT OF QUALIFICATIONS**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Jacob Pous. My business address is 1912 W Anderson Lane, Suite 202, Austin, Texas 78757.

Q. WHAT IS YOUR OCCUPATION?

A. I am a principal in the firm of Diversified Utility Consultants, Inc. ("DUCI"). A description of my qualifications appears as Exhibit __ (JP-Appendix A).

Q. PLEASE DESCRIBE DIVERSIFIED UTILITY CONSULTANTS, INC.

A. DUCI is a consulting firm located in Austin, Texas. DUCI has an international client base. DUCI provides engineering, accounting, and financial services to clients. DUCI provides utility consulting services to municipal governments with utility systems, to end-users of utility services and to regulatory bodies such as state public service

1 commissions. DUCI provides complete rate case analyses, expert testimony, negotiation
2 services and litigation support in electric, gas, telephone, water, and sewer utility
3 matters.

4
5 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN PUBLIC UTILITY**
6 **PROCEEDINGS?**

7 A. Yes. Exhibit___(JP-Appendix A) also includes a list of proceedings in which I have
8 previously presented testimony. In addition, I have been involved in numerous utility
9 rate proceedings that resulted in settlements before testimony was filed. In total, I have
10 participated in well over 300 utility rate proceedings in the United States and Canada. I
11 have testified on behalf of the staff of five different state regulatory commissions on
12 subjects relating to appropriate depreciation rates.

13
14 **Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?**

15 A. I am a registered professional engineer. I am registered to practice as a Professional
16 Engineer in the State of Florida, as well as numerous other states.

17
18 **Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?**

19 A. Florida's Office of Public Counsel ("OPC") engaged me to address the depreciation
20 study and the depreciation aspects of the revenue requirements request of Florida Power

1 & Light Company (“FPL” or “the Company”) pending before Florida Public Service
2 Commission (the “Commission” or “FSPC”) in these consolidated proceedings.

3
4 **II. OVERVIEW**

5 **Q. CAN YOU PROVIDE A QUICK OVERVIEW OF THE RELATIVE**
6 **SIGNIFICANCE OF DEPRECIATION-RELATED MATTERS IN THE**
7 **CONTEXT OF FPL’S REQUESTED INCREASE IN REVENUES?**

8 A. Yes. In terms of revenue impacts, the subject of depreciation is extremely significant in
9 these consolidated proceedings. In my testimony, I will report the results of my
10 account-by-account analysis of the depreciation study that FPL is sponsoring, the results
11 of which are reflected in FPL’s calculation of its revenue requirements. I will identify
12 numerous examples in which FPL’s witness overstates depreciation expense, and refute
13 FPL’s proposed treatment on the basis of the inappropriate assumptions and rationales
14 that he employed. My approach is a “from the bottom up” type of analysis, in which I
15 review the details of individual accounts and build up the individual adjustments into a
16 total dollar recommendation. In the aggregate, my adjustments amount to \$552 million
17 of reduced depreciation expense annually. Approximately \$311 million of this annual
18 amount is intended to return to current customers a *portion* of a massive reserve excess
19 that is the result of FPL’s having over collected depreciation expense over time; the
20 balance relates to my adjustments to FPL’s calculation of annual depreciation expense
21 that the utility should recognize “going forward.” When applied to FPL’s proposed
22 increase, the impact of my \$552 million recommendation is to reduce FPL’s revenue
23 requirements dollar for dollar. In other words, when FPL’s overly aggressive

1 depreciation practices and proposals, past and present, are modified to conform to
2 available data and reasonable assumptions, the result is to offset more than half of FPL's
3 billion dollar rate increase request for 2010. At first blush, the magnitude of the overall
4 recommendation may be surprising. However, as I will show, the result is the sum of
5 dozens of smaller individual adjustments, each of which is a "standalone" topic and each
6 of which I will document, discuss, and support in detail in the course of my testimony.

7

8 **Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?**

9 A. I will begin with an introductory background section, in which I will define and describe
10 the basic nature and role of depreciation in the context of a regulated electric utility.
11 Next, I will provide an "executive summary" of my analysis. I will then develop the
12 issues that I have identified and my analysis of the appropriate disposition of those
13 issues in detail.

14

15 **III. GENERAL BACKGROUND**

16 **Q. PLEASE BRIEFLY EXPLAIN THE CONCEPT OF DEPRECIATION AS IT**
17 **APPLIES TO A REGULATED ELECTRIC UTILITY.**

18 A. While the term "depreciation" is commonly used to describe a loss of value due to "wear
19 and tear," it has a precise and specialized meaning as an accounting concept.
20 Depreciation refers to the recoupment of a capital investment, less net salvage, over the
21 useful life of the asset to which the investment relates.

1

2 **Q. CAN YOU ILLUSTRATE THE MEANING OF THE TERM?**

3 A Yes. Perhaps the best way to explain the concept is to contrast an item that is
4 depreciated with one that is not depreciated. As the example of an item that is not
5 depreciated, let's use copier paper. Assume the utility purchases 1,000 reams of paper
6 for \$5,000, and consumes all of the paper within the month in which it was purchased.
7 The utility therefore "expenses" the full \$5,000 in the period of the purchase. Assume
8 the utility spends \$250,000 on copier paper annually. The annual total cost of copier
9 paper is recorded as a portion of operations and maintenance expense, which is deducted
10 from operating revenues to calculate net income for the year in which the paper was
11 purchased. Recognizing the full cost of the paper purchased in the year is appropriate
12 from a matching standpoint, because the paper was consumed completely in the period
13 in which it was purchased. Moreover, because rates are designed to recover operating
14 costs and provide a return on investment, the annual cost of copier paper is embedded in
15 the rates that the utility charges its customers, and \$250,000 of overall revenues serves
16 the purpose of recovering from customers the cost of copier paper consumed during the
17 year.

18

19 **Q. PLEASE CONTINUE.**

20 A. Now, let's compare that situation with the example of an investment in copper
21 conductor. Assume the conductor costs \$100,000 to purchase and install, and the utility
22 expects to use it in the business for forty years. At the end of forty years the utility

1 expects to sell the copper for \$30,000 but also anticipates it will incur \$10,000 of cost in
2 removing it from the system. This means that its net depreciable investment will be
3 \$80,000 ($\$100,000 - \$30,000 + \$10,000$). To recognize the full \$80,000 in a single year
4 would be to distort the manner in which that investment in copper conductor is
5 employed in the operation of the business. Said differently, the utility expects to
6 “consume” the service value of the conductor—not within a year—but over forty years.
7 Therefore, the investment is “capitalized” and added to rate base. Subsequently, each
8 year 1/40th, or \$2,000 of the capitalized cost is recognized as depreciation expense
9 associated with the conductor. Because depreciation expense is a component of the
10 utility’s overall cost of providing service, it is reflected in the design of rates that the
11 utility charges customers. The \$2,000 of annual depreciation expense associated with
12 the conductor is accumulated with other depreciation and operating expenses and netted
13 against operating revenues to determine net income for the period. Of the revenues
14 collected during the year, \$2,000 serves to recoup the portion of the capital investment
15 that is applicable to the period. Accordingly, the utility will reduce its rate base by the
16 annual amount of the \$2,000 that it recouped from customers. It does so by recording
17 \$2,000 in an account called the accumulated provision for depreciation or reserve. The
18 value of the rate base is calculated by subtracting the total of the accumulated provision
19 by depreciation from the original depreciable value of the investment. Each year the
20 utility incurs depreciation expense, it adds the amount of expense to the reserve, thereby
21 reducing rate base by that amount.

22
23 **Q. IN ADDITION TO THE BASIC DEFINITION, WHAT ELSE CAN BE**
24 **GLEANED FROM YOUR EXAMPLES?**

1 A. First, the examples illustrate a major difference between depreciation expense and other
2 operating expenses. In the case of copier paper, the utility must make a cash outlay
3 during each annual period. In the case of the conductor, there is an initial outlay of cash
4 to purchase and install the conductor; thereafter, the recognition of the annual
5 component of expense applicable to the period does not involve cash outlays. For this
6 reason, depreciation is referred to as a “non-cash” expense. However, the dollars that
7 are collected and applied to defray this non-cash expense are as real to the utility and the
8 customers who pay them through rates as the dollars that were expended to acquire the
9 capital item or pay for the copier paper.

10

11 **Q. DOES THE EXAMPLE OF THE CONDUCTOR ILLUSTRATE ANY OF THE**
12 **ISSUES TO WHICH A DEPRECIATION STUDY MAY GIVE RISE?**

13 A. Certainly. The example illustrates the determination of the appropriate useful life; the
14 assumed salvage value upon retirement; and the projected cost of removing the item
15 from service that the utility will incur to realize the salvage. While the analytical
16 techniques, which may involve statistical measurements, actuarial analyses, and review
17 of historical and comparative industry data, can become technical and involved, all of
18 the debates surrounding the establishing of appropriate depreciation rates involve the
19 interplay between and among service lives and related remaining lives, salvage values,
20 and cost of removal. If the utility assumes too short a useful life, the total depreciation
21 expense will be allocated over too few periods, and the expense recognized in a single
22 period will be higher than it should be. If a utility understates expected salvage or
23 overstates the cost of removing the item upon retirement, it will overstate the amount of

1 depreciation expense that is allocated over the life of the asset. When in my testimony I
2 observe that FPL has been overly aggressive in proposing depreciation rates, I mean that
3 it continues to attempt to overstate depreciation expense currently through one or more
4 of these means.

5
6 The example of the copper conductor also illustrates another important point.
7 Depreciation practices applicable to assets that have long useful lives very quickly give
8 rise to issues of intergenerational equity. For instance, if a utility has reason to believe
9 that the conductor will be in service for forty years, but proposes to depreciate it over
10 only five years, the utility would be calling on current customers to bear an inordinate
11 proportion of the cost of the investment, thereby subsidizing future customers, who will
12 pay none of the cost of the asset providing service to them in the future.

13
14 There is another point that belongs in this introductory section. Setting depreciation
15 rates necessarily involves the use of estimates and projections. If the estimates and
16 projections are inaccurate, or if circumstances change such that estimates that were good
17 at the time they were made are no longer valid, a utility's depreciation posture can
18 require corrective action. Earlier I mentioned the reserve or the accumulated provision
19 for depreciation, which serves to provide a "running total" of the extent to which
20 individual assets or groups of assets have been depreciated. It is useful to compare the
21 actual reserve to the "theoretical reserve," or the reserve that would be necessary to
22 enable the utility to remain "on course" to recoup its investment ratably over the current
23 estimate of life of the asset or assets in question at a given point in time. If a "reserve

1 excess” or “reserve deficiency” is discovered in the course of a periodic depreciation
2 study, corrective action can be devised. The time frame that is appropriate for
3 addressing an excess or a deficiency is in part a function of the severity of the
4 imbalance. If the degree to which the actual depreciation experience is ahead of or
5 behind schedule is slight, the typical regulatory response is to devise modified
6 depreciation rates that will cure the imbalance over the remaining life of the asset.
7 However, if the imbalance is so severe that it amounts to unfair and inequitable
8 treatment of customers or the utility, the regulators have the obligation and the means
9 with which to require remedial action that is more direct and immediate. In my
10 testimony, I will demonstrate that by over collecting depreciation expense in the past,
11 FPL has built a massive depreciation reserve excess-- so massive that the Commission
12 should require FPL to return a portion of the excess to customers over a four year period.

13
14 **Q. WHAT DO YOU MEAN BY “DEPRECIATION RATES”?**

15 A. A depreciation rate differs from the tariff rates that are applied to a customer’s usage to
16 calculate a bill for service. In the above example, I noted that 1/40th of the investment in
17 conductor cable would be quantified as depreciation expense for the annual period. This
18 translates into a “depreciation rate” of 2.5% of the investment annually. However, this
19 is only a step in the ratemaking process. The depreciation rate is applied to the original
20 gross investment to calculate the annual depreciation expense that the utility should
21 recognize on its books. When the Commission conducts a revenue requirements case,
22 the total depreciation expense is rolled into the overall revenue requirement that retail
23 rates are then designed to recover.

1

2 **Q. DO YOU HAVE ANY ADDITIONAL OBSERVATIONS OF A GENERAL**
3 **NATURE BEFORE YOU BEGIN THE PRESENTATION OF YOUR ANALYSIS**
4 **OF FPL'S DEPRECIATION STUDY?**

5 A. Yes. Generally speaking, it is in an electric utility's financial self-interest to collect
6 more dollars from customers than fewer dollars, to collect those dollars sooner than
7 later, and, once having collected dollars, to keep them rather than returning them to
8 customers. This is true of depreciation practices. Because depreciation expense results
9 in revenues that do not have a concurrent cash outlay associated with them, depreciation
10 expense is a source of cash flow, and higher depreciation expense means greater cash
11 flow. Plus, recouping more of an investment in early years than would be warranted by
12 the comparison of actual and theoretical reserves would reduce the risk of not recouping
13 the investment in later years. Accordingly, even though issues of depreciation affect the
14 timing of recoupment of capital investments rather than whether the utility should
15 recover its claimed capital costs, a utility has an incentive to favor higher depreciation
16 expense and higher depreciation reserves. The Commission therefore must scrutinize
17 the utility's practices and studies to ensure that current customers are not called on to
18 bear more than their appropriate share of the depreciation expense.

19

20

21 **IV. EXECUTIVE SUMMARY**

22

23 **Q. PLEASE PRESENT YOUR MAIN POINTS IN SUMMARY FASHION.**

1 A. As authorized by the terms of the settlement that the Commission approved in Docket
2 No. 050045, FPL's most recent rate proceeding, during each of the years 2006, 2007,
3 2008, and 2009 FPL recorded a credit to depreciation expense of \$125 million. Each
4 credit of \$125 million had the effect of reducing the accumulated provision for
5 depreciation or reserve (thereby increasing rate base), and increasing net income by that
6 amount. Over the past four years, then, FPL reduced its depreciation reserve by \$500
7 million, which had the effect of increasing rate base by that same amount. Despite
8 these credits, FPL's own depreciation study still shows a reserve excess of \$1.25 billion.
9 Had FPL not applied depreciation credits of \$125 million per year over the past four
10 years, its study would show a reserve excess of \$1.75 billion, not \$1.25 billion.
11 However, as I will show, the claimed excess of \$1.25 billion is an understatement. It
12 reflects the result of inappropriate assumptions and rationales that FPL's depreciation
13 witness employed in the course of his depreciation study. The real excess reserve is far
14 greater than the \$1.25 billion that FPL claims. My analysis, based upon data,
15 assumptions, and rationales that I develop and support in detail, reveals that FPL has a
16 current reserve excess of \$2.75 billion. The excess reserve would be even higher were I
17 to incorporate a more realistic useful life for combined cycle generators than the
18 inadequate 25 year life that FPL's witness employs, or recognize the impact of other
19 issues.

20

21 The massive reserve excess necessarily means that current and past customers have paid
22 FPL far more than would be needed to enable FPL to be on track to recoup its
23 investment in plant over the service lives of the plant. FPL proposes to correct the
24 reserve excess by modifying the amount of depreciation on a going forward basis over
25 its claimed 22 years of remaining life. In view of the size of the excess that customers

1 have paid, the size of its overall rate increase request and the resulting justification for
2 remedying the situation, FPL's proposed response is unrealistic and unacceptable.
3 FPL's proposal would be inadequate and unfair to current customers, even if the value of
4 \$1.25 billion that it assigns to the excess reserve were anywhere near the appropriate
5 amount. The corrected imbalance of \$2.75 billion has the effect of increasing the
6 impetus to return the excess to customers more rapidly.

7
8 Bearing in mind that I have demonstrated a total reserve excess of \$2.75 billion, the
9 Commission should at a minimum require FPL to amortize its identified \$1.25 billion of
10 the excess reserve to customers over a period of four years. By returning only this
11 portion to customers over a period more rapid than the remaining life, the Commission
12 conservatively will leave FPL with a substantial cushion of excess in its reserve.
13 Moreover, as OPC witness Dan Lawton testifies, requiring this more equitable treatment
14 will not adversely affect FPL's strong, robust financial condition.

15
16 When the \$1.25 billion amount is amortized over four years, \$311 million is available to
17 reduce revenue requirements in each year, including the 2010 test period. The
18 amortization should first be applied to offset the \$78 million annual accrual that FPL
19 associates with a claimed deficiency in certain accounts. The balance has the effect of
20 reducing FPL's revenue requirements.

21
22 The above measures are needed to address FPL's mammoth depreciation reserve excess,
23 which is the result of past practices and over collections. I have also examined the
24 appropriate amount of depreciation expense that FPL should be allowed to recognize
25 annually on a going forward basis. I find that FPL has overstated its need for

1 depreciation expense. The overstatement of overall depreciation expense results from
2 having employed inappropriate service lives, understating expected salvage, and
3 overstating the projected cost of removing assets upon retirement. I have described the
4 flaws in FPL's claims and have supported my proposed alternatives in the detailed
5 discussion that follows. As a result of my detailed analysis, I recommend that the
6 Commission reduce FPL's proposed annual depreciation expense by \$240.6 million
7 based on plant as of December 31, 2009 as reflected in the Company's depreciation
8 study.

9
10 The overall impact of my recommendations in the areas of correcting the massive
11 reserve excess and reducing future depreciation expense is to reduce FPL's claimed
12 revenue requirements by \$552 million. The resulting depreciation rates have been
13 provided to OPC witness Sheree Brown so they may be applied to the future test year
14 plant balances.

15
16 **Q. DOES YOUR RECOMMENDATION MEAN THAT FPL WILL NOT RECOVER**
17 **ANY PART OF ITS CAPITAL INVESTMENT?**

18 A. No, it does not mean that. In my testimony, I have not challenged or sought to disallow
19 recovery of any of the investments in plant. My proposed adjustments affect only the
20 timing of the collection. If the Commission adopts my recommendation, the portion of
21 the reserve excess that is amortized over four years will be added back to rate base at the
22 same time. Over time, FPL will recoup all of the capital investment that the
23 Commission deems prudent and reasonable.

1 V. ANALYSIS

2
3 **Q. PLEASE PROCEED WITH YOUR MORE DETAILED PRESENTATION.**

4 A. The Company retained the Gannett Fleming firm to perform a new depreciation study,
5 the results of which are sponsored by Mr. Clarke. The Company's depreciation analysis
6 is based on estimated plant levels through the end of 2009. Based on the plant in service
7 as projected through December 31, 2009 the Company proposes \$854,174,408 of
8 depreciation expense. (See Exhibit CRC-1, page 51). In addition, the Company seeks
9 \$132,892,978 of additional depreciation expense based on "Future Units" and an
10 additional \$78,555,754 of annual depreciation expense for what is identified as "Capital
11 Recovery" items. Finally, the Company seeks \$21,567,578 of proposed annual accruals
12 for terminal net salvage based on its fossil dismantlement studies. (See Exhibit K0-8,
13 page 6). The total of these components yields an annual depreciation and dismantlement
14 expense request of \$1,087,190,718. After reviewing the Company's presentation, data,
15 responses to discovery requests, and information in the public domain, I conclude that
16 the Company's request is significantly overstated. In fact, rather than a proposed
17 increase in depreciation expense as requested by the Company, a significant reduction of
18 \$240,638,975 as set forth on Exhibit_ (JP-1) is warranted, prior to an annual
19 \$311,340,104 excess reserve amortization.

20
21 At this point, it is worth noting that the Company's requested depreciation expense is
22 higher than it would otherwise had been absent the Company's decision to take
23 \$500,000,000 of depreciation credits over the last 4 year period. Had the Company not
24 taken this \$500,000,000 of additional depreciation credits, its accumulated provision for
25 depreciation or reserve would have been \$500,000,000 higher and the net depreciable
26 balance to be recovered over the remaining life of the investment would have been

1 \$500,000,000 lower. A lower level of net depreciable balance would have resulted in
2 reduced depreciation expense in this filing as well as the future. This is also significant
3 from the standpoint that the Company admits that under its calculation process and
4 assumptions its actual depreciation reserve is \$1,245,360,415 higher than its theoretical
5 reserve. Again, had it not been for the \$500,000,000 depreciation expense credit taken
6 over the last 4 years, the excess of the actual reserve over the theoretical reserve as
7 proposed by the Company would be \$1.75 billion. In other words, the Company has
8 been and continues to be in a significant excess depreciation recovery position; yet, it
9 seeks an increase in depreciation expense. The Company's request for an increase in
10 depreciation expense is inconsistent with the undisputed fact that customers have
11 significantly overpaid depreciation expense historically, even prior to recognition that
12 the depreciation parameters reflected in the Company's study are excessively aggressive
13 and inappropriate. The acceleration of depreciation expense as proposed by the
14 Company is not warranted and should be denied by the Commission. A brief discussion
15 of the various issues I will address in detail later in my testimony follows.

- 16 • **Excess Reserve:** The Company, through its depreciation study, admits to
17 a \$1.25 billion excess reserve. This level of excess reserve more than
18 doubles when one applies to FPL's production and mass property
19 accounts the different depreciation parameters I recommend and support
20 in my analysis. Consistent with the Commission's prior decisions, it is
21 appropriate to return to customers some portion of the excess reserve over
22 a period shorter than the remaining life. In order to remain conservative,
23 I recommend returning the Company-identified \$1.25 billion amount over
24 a 4-year period. Limiting the return of the excess reserve to the
25 Company's identified amount rather than the full amount that results

1 from my recommended adjustments leaves the Company with a
2 substantial cushion of remaining excess reserve, which can be addressed
3 in future depreciation studies. OPC witness Dan Lawton establishes in
4 his testimony that limiting the amount to be amortized to \$1.25 billion,
5 and accomplishing the amortization over four years, will assure that the
6 adjustment leaves FPL with very strong financial integrity. The impact
7 of my recommendation is a \$311,340,104 annual depreciation expense
8 credit for the next four years.

- 9
- 10 • **Production Plant Life Spans:** The Company proposes artificially short
11 life spans (the time frame between when a unit goes into service and
12 when it ultimately retires) for the majority of its steam generating
13 investment. The Company has also underestimated the reasonable life
14 expectancy of its investment in combined cycle generation. As a first
15 step toward correcting this situation, I recommend that the life spans for
16 coal-fired units be increased from the low 40-year range as proposed by
17 the Company to 60 years as is now being recognized by other regulators
18 and utilities. I further recommend that the minimum life span for large
19 steam oil or gas-fired generating facilities be set at a minimum of 50
20 years. The approximate impact of this recommendation is a \$32 million
21 reduction to the Company's depreciation expense based on plant as of
22 December 31, 2009.
- 23

1 ● **Interim Retirements:** Interim retirements are intended to represent
2 limited downward adjustments to the life span for generating units due to
3 items of investment that will retire and be replaced prior to the ultimate
4 retirement date for a generating facility. The Company has proposed a
5 method that is inappropriate for generation investment and which results
6 in some very unusual occurrences that overstate depreciation expense by
7 millions of dollars. Moreover, the Company's proposed approach has the
8 potential of resulting in excessive return dollars once the Company
9 claims that plant accounts have become fully accrued. The Company's
10 proposed interim retirement results are excessively aggressive, even when
11 measured against the interim retirement results that the Company's
12 depreciation consultant, Gannett Fleming, has proposed elsewhere.
13 Correcting the method and level of interim retirements results in an
14 approximate \$54 million annual reduction in depreciation expense based
15 on plant as of December 31, 2009.

16
17 ● **Interim Production Net Salvage:** There are two types of production net
18 salvage. The first is interim retirement net salvage associated with the
19 interim retirements that are estimated to transpire prior to the final
20 termination of a generating station or unit. The second type of production
21 net salvage is terminal net salvage as reflected in the Company's request
22 for dismantlement costs discussed elsewhere. Based on excessively
23 negative net salvage estimates for interim retirements, and an excessive
24 level of projected interim retirements, the Company seeks in excess of
25 \$440,000,000 of interim net salvage to be collected over the remaining

1 life of its generating facilities. Correcting the Company's excessively
2 negative levels of interim retirement related production net salvage
3 results in a \$74 million reduction to annual depreciation expense based on
4 plant as of December 31, 2009.

- 5
- 6 • **Terminal Production Net Salvage:** The Company has presented
7 dismantlement studies for its various generating facilities. These studies
8 represent a worst case scenario of the ultimate disposition of the
9 investment. In addition to assuming the worst case scenario of having to
10 completely remove each facility and restore the site, the Company's
11 assumed approach to demolition is also the most costly option available.
12 Moreover, the Company incorporates an unjustified level of
13 contingencies as well as other costs that further inflate the overall
14 demolition cost estimates artificially. It would be difficult to develop an
15 alternative demolition estimate that would be higher than the Company's
16 request. A review of the Company's proposal, as well as what has
17 actually transpired with recent demolition of generating facilities, would
18 support a reduction to the Company's request. However, rather than
19 recommend a specific adjustment in costs, I recommend the Commission
20 order the Company to develop more realistic and supportable demolition
21 studies for its next rate case. At a minimum, such studies should rely on
22 more cost effective demolition approaches than the costly "reverse
23 construction" approach that FPL presented in this case.
- 24

1 ● **Mass Property Life Analysis:** Mass property consists of transmission,
2 distribution and general plant. The Company has relied on its
3 interpretation of actuarial results to propose life characteristics for its
4 various accounts. The Company's proposals are not the best statistical
5 results obtained from its actuarial analysis and fail to recognize other
6 Company specific information which would result in longer average
7 service lives ("ASL"). After reviewing the Company's proposals on an
8 account by account basis, I recommend adjustments to 18 mass property
9 accounts which result in a \$49 million reduction to annual depreciation
10 expense, based on plant as of December 31, 2009.

11
12 ● **Mass Property Salvage Analysis:** Rather than performing an
13 appropriate evaluation of the Company's historical net salvage data to
14 determine its applicability to future net salvage for the remaining
15 investment in the Company's various plant accounts, the Company
16 basically relies on historical averages, whether they are appropriate or
17 not. By failing to investigate or explain significant changes or unusual
18 amounts or occurrences, FPL skewed its future net salvage proposals.
19 Those proposals are not appropriate because they are not indicative of
20 future expectations for the investment in each of the Company's plant
21 accounts. After my review and investigation of information that was
22 available to the Company, but which it chose not to review, I recommend
23 adjustments to the proposed net salvage level for 14 mass property
24 accounts. The standalone impact of these recommendations results in a
25 reduction of \$68 million in annual depreciation expense based,

1 on plant as of December 31, 2009.

- 2
- 3 ● **Remaining Life Calculation:** The Company proposes a remaining life
4 calculation method that is inappropriate. The Company's method
5 produces remaining life values that are different from every other utility
6 or consulting firm that I have dealt with for many decades. The
7 Company's method, based on Gannett Fleming's model, incorporates the
8 net salvage impact into the remaining life calculation. The approach also
9 assumes that many vintage additions have no remaining life, even though
10 those vintages continue to be in service. I recommend reliance on the
11 industry standard calculation approach, which actually increases the
12 Company's depreciation expense. The impact of the correct method is
13 reflected in my mass property life recommendations.

- 14
- 15 ● **Combined Impact:** Due to the interaction of life and salvage
16 parameters, life spans, and interim retirement levels, the combined impact
17 of my various recommendations is not simply the summation of each
18 standalone adjustment. As shown on Exhibit__(JP-1), the combined
19 impact of all adjustments, based on plant as of December 31, 2009, and
20 the impact of the future investment from the West County generating
21 units, results in a \$551,979,079 reduction to annual depreciation expense.

22

23 **Q. ARE YOU AWARE OF THE MAGNITUDE OF YOUR RECOMMENDED**
24 **ADJUSTMENT RELATIVE TO THE COMPANY'S REQUEST?**

1 A. Yes. My recommendation must be viewed in two distinct categories: the return of a
2 portion of excess reserve in the amount of \$311 million for the next 4 years; and, \$241
3 million in normal annual depreciation adjustments. Thus, the \$241 million of annual
4 normal depreciation adjustments represents approximately 25% of the Company's
5 request for normal depreciation expense, including the impact of "Future Unit"
6 depreciation amounts.

7
8 To place my recommended adjustments in proper perspective, it is necessary to
9 recognize that the Company has significantly over collected depreciation expense from
10 prior and current customers. The intent underlying the concept of depreciation is that
11 the Company should recover 100% of what it is due, no more and no less. If the
12 Company over collects in earlier periods, then the remaining life approach to
13 depreciation requires that a lower level of depreciation must be charged in the future in
14 order to reach 100% recovery over the life of the investment. There can be no doubt that
15 the Company has significantly over recovered depreciation expense from customers.
16 However, as the Commission will see once it reviews the individual account and
17 generating unit discussions contained in the balance of my testimony, the Company has
18 proposed unrealistically short life spans or ASLs and excessively negative net salvage
19 values in an apparent attempt to minimize the level of excess reserve it would present in
20 its depreciation study.

21
22 To remain conservative in my level of adjustments, I have not proposed in this
23 proceeding longer life spans for almost \$7 billion of investment in new combined cycle
24 generating facilities. The Company's proposal for mid 20-year life spans for this new
25 investment is artificially short. Extending the assumption to 35-year life spans for this

1 type of generation would have resulted in substantial further reductions to the
2 Company's request. In addition, the Company's terminal demolition cost estimates for
3 its generating facilities are excessively high. Correcting the Company's request with a
4 more realistic and reasonable scenario would further reduce the level of annual
5 depreciation expense.

6
7 The Company did not reach this position of being in a significant excess reserve position
8 overnight, and should not be required to correct it overnight. However, allowing the
9 Company to correct its situation over the remaining life is simply unfair and unjust, as
10 this Commission has determined in prior proceedings. While my recommendation
11 represents a substantial reduction to the Company's depreciation expense, it is a fair and
12 reasonable first step in a process that might take several rate cases. Delaying the
13 beginning of the correction to the Company's huge over collection would only
14 exacerbate the problem and continue an unreasonable level of intergenerational inequity.

15
16
17 **VI. DEPRECIATION**

18
19 **Q. PLEASE ELABORATE ON THE BASIC DEFINITION OF DEPRECIATION**
20 **THAT YOU PROVIDED IN THE GENERAL BACKGROUND SECTION.**

21 A. There are two commonly-cited definitions of depreciation. The first, from the Federal
22 Energy Regulatory Commission ("FERC"), appears in Title 18 of the Code of Federal
23 Regulation ("CFR"), Part 101:

24 'Depreciation', as applied to depreciable plant, means the loss in
25 service value not restored by current maintenance, incurred in
26 connection with the consumption or prospective retirement of
27 electric plant in the course of service from causes which are

1 known to be in current operation and against which the utility is
 2 not protected by insurance. Among the causes to be given
 3 consideration are wear and tear, decay, action of the elements,
 4 inadequacy, obsolescence, changes in the art, changes in demand
 5 and requirements of public authorities.

6
 7 The second definition, from the American Institute of Certified Public Accountants
 8 (“AICPA”), is similar:

9 Depreciation accounting is a system of accounting which aims to
 10 distribute the cost or other basic value of tangible capital assets,
 11 less salvage (if any) over the estimated useful life of the unit
 12 (which may be a group of assets) in a systematic and rational
 13 manner. It is a process of allocation, not of valuation.
 14 Depreciation for the year is a portion of the total charge under
 15 such a system that is allocated to the year. Although the allocation
 16 may properly take into account occurrences during the year, it is
 17 not intended to be a measurement of the effect of all such
 18 occurrences.
 19

20 **Q. WHAT ARE THE TWO GENERAL FORMULAS USED IN DETERMINING**
 21 **DEPRECIATION RATES?**

22 A. The *whole life* and the *remaining life* techniques are the most commonly used formulas.

23 The whole life technique is as follows:

$$\text{Depreciation Rate (\%)} = \left[\frac{\text{Original Cost - Net Salvage}}{\text{Average Service Life}} \right] \text{Original Cost}$$

24

1 The remaining life technique is as follows:¹

$$\text{Depreciation Rate (\%)} = \frac{\frac{\text{Original Cost} - \text{Accumulated Provision for Depreciation} - \text{Net Salvage}}{\text{Average Service Life}}}{\text{Original Cost}}$$

2 The two formulas should equal each other when the difference between the
 3 theoretical reserve and the actual Accumulated Provision for Depreciation (“APFD”)
 4 is recovered over the remaining life of the investment under the whole life formula.

5

6 **Q. ARE THERE ADDITIONAL CONSIDERATIONS IN DEPRECIATION**
 7 **BEYOND THE DEFINITIONS?**

8 A. Yes. The definitions provide only a general outline of the overall utility depreciation
 9 concept. In order to arrive at a depreciation-related revenue requirement in a rate
 10 proceeding, a depreciation system must be established.

11

12 **Q. WHAT IS A DEPRECIATION SYSTEM?**

13 A. A depreciation system constitutes the method, procedure, and technique employed in the
 14 development of depreciation rates.

15

¹ A theoretical depreciation reserve calculation is developed and compared to the actual accumulated provision for depreciation in conjunction with the whole life technique. If the differential is significant, an amortization of the differential for some period of time may be recommended.

1 Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "METHOD".

2 A. Method identifies whether a straight-line, liberalized, compound interest, or other type
3 of calculation is being performed. The straight-line method is normally employed for
4 utility depreciation proceedings.

5
6 Q. BRIEFLY DESCRIBE WHAT IS MEANT BY "PROCEDURE".

7 A. "Procedure" identifies a calculation approach or grouping. For example, procedures can
8 reflect the grouping of only a single item, items by vintage (year of addition), items by
9 broad group or total grouping, and equal life groupings. The average life group ("ALG")
10 procedure is used by the vast majority of utilities.

11
12 Q. PLEASE BRIEFLY DESCRIBE WHAT IS MEANT BY "TECHNIQUES".

13 A. There are two main categories of "techniques" with various sub-groupings: the whole
14 life technique, and the remaining life technique. The whole life technique simply reflects
15 the calculation of a depreciation rate based on the whole life (e.g., a ten-year life would
16 imply a ten percent depreciation rate over the life of a plant using a straight-line
17 depreciation method). The remaining life technique recognizes that depreciation is a
18 forecast or estimation process that is never precisely accurate and requires true-ups in
19 order to recover only 100% of what a utility is entitled to over the entire life of the
20 investment. Therefore, as time passes, the remaining life technique attempts to recover
21 the remaining unrecovered balance over the remaining life or other period of time. Most
22 utilities rely on a remaining life technique in utility rate matters.

1

2 **Q. DO THE METHODS, PROCEDURES, AND TECHNIQUES INTERACT WITH**
3 **ONE ANOTHER?**

4 A. Yes. Different depreciation rates will result depending on what combination of method,
5 procedure, and technique is employed. Differences can occur even if the same average
6 service life and net salvage values are employed at the outset.

7

8 **Q. HOW ARE THE LIFE AND REMAINING LIFE DETERMINED?**

9 A. The determination of the appropriate life to associate with production plant differs from
10 the corresponding determination for mass property, which includes transmission,
11 distribution and general plant. The estimation of production plant life relies on a life
12 span method. The life span method requires an estimate of the probable future
13 retirement date and the impact of interim additions, both of which are discussed in detail
14 later in my testimony. The estimation of mass property plant life (average service life,
15 or ASL) normally relies on an actuarial analysis. This approach recognizes a dispersion
16 pattern of retirements in the life estimation process. The industry relies on a series of
17 standardized dispersion patterns identified as Iowa Survivor curves to arrive at the
18 appropriate ASL for a category of mass property. Exhibit__(JP-Appendix B) to my
19 testimony provides additional detail regarding Iowa Survivor curves.

20 Once an overall life for production plant and an ASL for mass property have been
21 determined, a remaining life can be calculated. The remaining life for mass property is
22 dependent not only on the ASL, but also on the Iowa Survivor curve selected.

1

2 **Q. WHAT IS NET SALVAGE?**

3 A. Net salvage is the value obtained from retired property (the gross salvage) less the cost
4 of removal. Net salvage can be either positive in cases where gross salvage exceeds cost
5 of removal, or negative in cases where cost of removal is greater than gross salvage.

6

7 **Q. HOW DOES NET SALVAGE IMPACT THE CALCULATION OF**
8 **DEPRECIATION?**

9 A. The intent of the depreciation process is to allow the Company to recover 100% of
10 investment less net salvage. Therefore, if net salvage is a positive 10%, then the utility
11 should only recover 90% of its investment through annual depreciation charges, under
12 the theory that it will recover the remaining 10% through net salvage at the time the
13 asset retires (e.g., $90\% + 10\% = 100\%$). Alternatively, if net salvage is a negative 10%,
14 then the utility should be allowed to recover 110% of its investment through annual
15 depreciation charges so that the negative 10% net salvage that is expected to occur at the
16 end of the property's life will still leave the utility whole (i.e., $110\% - 10\% = 100\%$).

17

18 **Q. PLEASE IDENTIFY SOME OF THE MAJOR FACTORS THAT AFFECT A**
19 **DEPRECIATION "SYSTEM."**

20 A. The concept of depreciation utilized for utility ratemaking has evolved over time.
21 Currently, there are still many different combinations of methods, procedures, and

1 techniques employed in the development of utility depreciation rates. A depreciation
2 system must, among other things, be systematic and rational. The regulator must further
3 take into the account the quality, quantity, and timeliness of data relied upon, as well as
4 the quality of the judgment employed by the depreciation analysts. Given the
5 subjectivity involved in the various estimation processes, judgment plays an important
6 role in establishing depreciation rates. While judgment is critical, that does not mean
7 that an analyst can simply refer to "judgment" as the basis for a proposal without
8 providing meaningful factual support for that "judgment," nor can "judgment" serve as
9 the basis for ignoring relevant facts.

10

11 **Q. WHAT ARE THE KEY ELEMENTS OF THE DEPRECIATION FORMULA AT**
12 **ISSUE IN THIS PROCEEDING?**

13 A. The life parameters and net salvage for the mass property accounts in the above formula
14 are at issue. Also, the treatment of the Company's excess reserve is at issue in this case.

15

16 **VII. RESERVE IMBALANCE**

17

18 **Q. WHAT IS THE FUNDAMENTAL PURPOSE OF DEPRECIATION?**

19 A. As I have stated, depreciation is the recovery of invested capital less net salvage over the
20 life of the investment. It is intended to match the recovery of the investment less net
21 salvage with the periods of time in which the related asset is employed, thereby
22 recouping the investment from all of the customers that received the benefit of the
23 investment.

24

1 **Q. IS THE RECOVERY OF CAPITAL THROUGH DEPRECIATION A PRECISE**
2 **PROCESS?**

3 A. No. The depreciation process for utility ratemaking relies on forecasting the future life
4 and net salvage of the investment. As with any forecasting process, there are inherent
5 inaccuracies that will exist whether due to inappropriate forecasts of mortality
6 characteristics or real changes in life and salvage characteristics over time. In
7 recognition of the inherent inaccuracies, depreciation studies should be performed on a
8 regular basis and should incorporate a true-up provision to address recognized excesses
9 or deficiencies that are indentified.

10
11 **Q. HOW ARE RESERVE EXCESSES OR DEFICIENCIES IDENTIFIED?**

12 A. The normal process is to calculate what is called a theoretical reserve and compare that
13 value to the actual book reserve of the utility. The theoretical reserve is the calculated
14 balance that would be in the accumulated provision for depreciation (FERC Account
15 108), sometimes called the reserve, at a point in time if current depreciation parameters
16 (i.e., current life and salvage estimates) had been applied from the outset. The
17 theoretical reserve measures the amount of depreciation expense a utility should have
18 collected in order to be "on schedule" with respect to recovering its investment over the
19 life of the depreciable asset. The book reserve reflects what *actually* has been collected
20 or incurred. One can compare the book reserve to the theoretical reserve. If the book
21 reserve is greater than the theoretical reserve, then the utility has collected more than is
22 needed as of that point in time; it is ahead of schedule. The difference is a reserve
23 excess. If the theoretical reserve is greater than the book reserve, the utility has under
24 collected as of that point, it is behind schedule and a reserve deficiency exists.

25

1 **Q. WHAT ARE THE GUIDING PRINCIPLES THAT SHOULD BE CONSIDERED**
2 **IN DETERMINING THE CAPITAL RECOVERY PATTERN THROUGH**
3 **DEPRECIATION OVER TIME?**

4 A. In my opinion, the overriding considerations of fairness and equity that govern the utility
5 ratemaking process mandate adherence to the matching principle. In other words, the
6 generation of customers that causes an expense or cost to be incurred should be the
7 generation of customers that pays for such expense or cost through the rates charged for
8 usage of the final product, in this case electricity. The matching principle attempts to
9 achieve the goal of eliminating intergenerational inequities. Intergenerational inequities
10 occur when one set or generation of customers pays too much or too little for its use of
11 the investment necessary to provide electricity, and transfers either an undue benefit or
12 undue burden to some future set of customers.

13
14 **Q. HAS THIS COMMISSION HISTORICALLY RECOGNIZED THE MATCHING**
15 **PRINCIPLE WHEN IT COMES TO CAPITAL RECOVERY THROUGH**
16 **DEPRECIATION?**

17 A. Yes. When capital recovery becomes materially imbalanced between generations of
18 customers, as measured by the difference between the theoretical and book reserve,
19 normally one of two industry options is employed. The two options for truing-up or
20 correcting the imbalance are (1) to amortize the calculated differences over a short
21 period of time, or (2) to simply implement new depreciation rates based on the
22 remaining life technique where the recovery period is the remaining life. This
23 Commission has established a long and identifiable policy of correcting material reserve
24 imbalances by (1) reserve transfers, (2) one time reserve adjustments based on changes
25 to revenue requirement areas other than depreciation, and (3) amortizing the reserve

1 differences over periods much shorter than the remaining life of the investment. In
2 addition to these practices, this Commission recently approved a settlement in FPL's last
3 rate case that allowed FPL to reduce revenue requirements by \$500 million over a four
4 year period, or \$125 million per year through credits to depreciation expense. (See
5 Exhibit CRC-1, page 69). Rigid adherence to "remaining life" concepts would not have
6 permitted this flexibility.

7
8 **Q. CAN YOU PROVIDE EXAMPLES OF THIS COMMISSION'S LONG AND**
9 **IDENTIFIABLE POLICIES TO WHICH YOU REFER?**

10 A. Yes. In the area of implementing corrective reserve transferences, some examples of
11 this Commission's previous actions are Gulf Power Company in Docket No. 880053-EI
12 and Marianna Electric Division by Florida Public Utilities Company in Docket No.
13 010669-EI. These examples occurred during the time frame of the 1980s through the
14 early 2000s. (See Order Nos.19901, PSC-01-2270-PAA-EI). An example of a
15 Commission action to change the depreciation reserve due to revenue requirements from
16 an area other than depreciation is Tampa Electric Company in Docket No. 860868-EI.
17 (See Order No. 19438). Finally, examples of depreciation reserve differences that the
18 Commission required to be amortized over periods shorter than the average remaining
19 life are General Telephone Co. in Docket No. 840049-TL, City Gas Company in Docket
20 No. 890203-GU, and FPL in Docket No. 970410-EI. (See Order Nos. 14929, 22115,
21 PSC-97-0499-FIF-EI).

22
23 **Q. WHAT HAS THE COMMISSION STATED AS ITS UNDERLYING POLICY OR**
24 **BASIS WHEN ADDRESSING THE TREATMENT OF RESERVE**
25 **DIFFERENCES OR INTERGENERATIONAL INEQUITIES?**

1 A. The Commission has adopted the position that depreciation reserve differences “*should*
2 *be recovered as fast as possible*, unless such recovery prevents the Company from
3 earning a fair and reasonable return on its investments.” (Emphasis added). (See Order
4 No. PSC-93-1839-FOF-EI). In another case, the Commission adopted a one-year write-
5 off for a portion of a utility’s reserve deficit by stating that “we believe that it [the
6 deficit] should be *written off as quickly as possible*.” (Emphasis added). (See Order No.
7 13918). In yet another case, the Commission addressed the fairness issue as it relates to
8 intergenerational inequity. In establishing a funded nuclear decommissioning reserve
9 the Commission stated “[f]airness dictates that those receiving services and imposing
10 costs be obligated to pay those costs, instead of placing the risk of recovery on other
11 ratepayers who may not get service from the nuclear units.” (Emphasis added). It went
12 on to state, “that a further delay in changing rates to recognize the responsibility of
13 current ratepayers to pay the full cost of operating the nuclear generators *simply*
14 *continued an already unfair situation*. We determined that *it was unfair that current*
15 *ratepayers were not paying their full share and could therefore properly change*
16 *FP&L’s and FPC’s rates to alleviate unfair, unjust and unreasonable rates*.” (Emphasis
17 added). (See Order No. 13427).

18

19 **Q. IN THE CASES YOU CITED, DID THE AMOUNT OF THE RESERVE**
20 **IMBALANCE THAT THE COMMISSION DECIDED TO CORRECT OVER A**
21 **PERIOD SHORTER THAN THE REMAINING LIFE APPROACH A BILLION**
22 **DOLLARS?**

23 A. No.

24

1 Q. HOW HAVE YOU NORMALLY HANDLED RESERVE MATERIAL
2 IMBALANCE SITUATIONS LIKE THIS?

3 A. Before this Commission in Docket No. 050078-EI, I recommended that Progress Energy
4 Florida's ("PEF") \$844 million of excess reserve above the \$504 million of excess
5 reserve PEF itself identified be amortized back to customers over a 4-year period. (See
6 Mr. Pous' Direct Testimony at page 34 in the PEF case). That case settled prior to the
7 scheduled evidentiary hearing. In other cases, utilities normally perform frequent
8 depreciation studies and implement corrected measures so as not to get too far out of line
9 with current depreciation expectations. In this case, FPL identifies over *\$1.2 billion*
10 dollars of excess reserve based on its proposed depreciation parameters. (See Exhibit
11 CRC-1, page 53).

12
13 Rather than acting on such a significant level of excess with an immediate and
14 meaningful response, the Company in this case proposes "business as usual." That
15 approach would attempt to correct the excess reserve situation over the average 22.31-
16 year remaining life of all its current investment. Particularly in view of the fact that, as I
17 will demonstrate later, the actual magnitude of the reserve excess is \$2.75 billion – in
18 other words, more than twice as great as the amount the Company identified-I-do not
19 believe this is an appropriate reaction to the facts and circumstance presented in this
20 case. The magnitude of the intergenerational inequity compels an immediate and
21 sizeable departure from the remaining life approach to mitigate the degree of unfairness
22 that otherwise would be imposed on current customers. It is also worth noting that the
23 Company's proposed "business as usual" approach differs from the settlement in the last
24 case. In that settlement, all parties agreed to allow FPL to, at its option, reduce
25 depreciation expense during a 4-year period at the rate \$125 million per year. Whether

1 or not it was intended as a remedial step at the time, the measure prevented FPL's
2 current reserve excess imbalance from being \$500 million greater in this case.

3
4 **Q. DOES THE EXCESS LEVEL OF RESERVE AFFECT REVENUE**
5 **REQUIREMENTS?**

6 A. Yes. The effect of the excess reserve imbalance on revenue requirements is significant,
7 no matter the approach undertaken to correct this situation. The shorter the period
8 utilized to return the excess to current customers, the greater the revenue requirement
9 impact in this case. For example, the Company-identified \$1.25 billion excess reserve is
10 already reflected in the Company's filing and is partially responsible for the Company's
11 recommended increase in depreciation expense of only \$23 million annually prior to the
12 impact of Future Units and special Capital Recovery requests. (See Exhibit CRC-1,
13 page 51). However, had the Company's calculated excess reserve been credited back to
14 current customers over a period shorter than the remaining life utilized by the Company
15 in its calculation, the overall revenue requirement impact would be a decrease in
16 depreciation expense.

17
18 **Q. SHOULD THE CORRECTIVE TREATMENT OF A RESERVE IMBALANCE**
19 **DIFFER DEPENDING ON WHETHER IT IS MATERIAL EXCESS OR A**
20 **MATERIAL DEFICIENCY?**

21 A. No. The identical rationale should be applied to either scenario.. In this regard, it is
22 important to note that under the depreciation process the utility will not be "harmd" by
23 a corrective adjustment. The matter is one of the timing of recovery. On the other hand,
24 imbalances have prejudicial impacts on certain customers.

25

Revised

1 Q. WHY DO YOU REFER TO *MATERIAL* IMBALANCES RATHER THAN
2 IMBALANCES IN GENERAL?

3 A. Any process that involves estimates will result in actual values that differ from the
4 predicted values. As previously noted, I do not believe most utilities allow identified
5 imbalances of this magnitude to be created. Generally speaking, by revisiting the reserve
6 situation with a comprehensive study every few years, one would reasonably expect the
7 variance between the theoretical reserve and the book reserve to stay within reasonable
8 bounds. When reserve imbalances occur, they are normally treated through the remaining
9 life process. Not every discrepancy between theoretical and book reserves is so large as to
10 require a departure from the method of recalculating the accrual that will recover the asset
11 over its remaining life. However, the greater the disparity in the reserve, the greater the
12 level of intergenerational inequity that exists. The greater the level of intergenerational
13 inequity, the more compelling becomes the corresponding rationale for addressing the
14 imbalance over a shorter period.

15

16 Q. IS THERE ANY REASONABLE QUESTION IN THIS CASE WHETHER A
17 SIGNIFICANT OR MATERIAL EXCESS IN THE DEPRECIATION RESERVE
18 EXISTS?

19 A. No, in my view there is no room for argument on this question. The Company identifies
20 a \$1.25 billion excess in its depreciation study. I submit that this level of excess must be
21 considered material and significant by any reasonable measuring index. Moreover, the
22 \$1.25 billion size of the reserve excess reported in FPL's depreciation study has been
23 artificially *understated* by the effect of inappropriate net salvage and life estimates.
24 When restated to adjust for the distortions created by the inappropriate net salvage and
25 life assumptions, the reserve excess is not \$1.25 billion, but well over \$2.7 billion as

1 shown on Schedule (JP-2). The magnitude of the excess is so huge, and the prejudicial
2 impact of the imbalance on current customers is so great, that fairness compels a
3 departure from FPL's "business as usual" remaining life approach so that current
4 customers do not continue to subsidize future customers to such a large extent.

5
6 **Q. ARE YOU STATING THAT THE COMPANY INTENTIONALLY**
7 **ACCELERATED THE RECOVERY OF CAPITAL BY EMPLOYING OVERLY**
8 **AGGRESSIVE DEPRECIATION PARAMETERS IN THE PAST?**

9 A. No, in part because I did not investigate the prior depreciation requests to the point
10 where I could determine if the depreciation parameters contained therein could be
11 characterized as being too aggressive at those periods in the past. For whatever reason
12 or combination of reasons, the fact is that the prior depreciation parameters and actual
13 historical events have resulted in the material excess imbalance that exists today. While
14 it would be interesting to know the cause of each component of the material imbalance
15 from an academic standpoint, the need to correct the imbalance situation now is not
16 dependent on what caused the material excess reserve position. In fact, while some
17 might feel the need to know what precisely caused the material imbalance when
18 determining the corrective option to employ (shorter amortization period or remaining
19 life), I submit that customers who have paid more than their cost of service in the past
20 care less about the factors that led to the over collection and more about the action taken
21 to correct the situation. Moreover, the matching principle is indifferent as to the cause
22 of the intergenerational inequity. The real issue, as previously recognized and acted on
23 by this Commission in the context of reserve deficiencies, is the elimination of the
24 (excess) imbalance "as fast as possible" as previously stated by the FPSC. Finally,
25 while it is easy to identify that a component of the excess reserve is due to the longer

1 expected life of the Company's nuclear units, this component does not account for the
2 very significant level of the excess reserve that exists.

3

4 **Q. YOU HAVE USED THE TERM "MATERIAL IMBALANCE" SEVERAL**
5 **TIMES. IS THERE A PRECISE POINT AT WHICH THE IMBALANCE**
6 **BECOMES MATERIAL?**

7 A. No, not really. However, I am aware of one jurisdiction that has quantified a 5%
8 difference between the theoretical and book reserve as the point at which a correction
9 process will be implemented.

10

11 **Q. WHAT PERCENTAGE LEVEL OF RESERVE IMBALANCE EXISTS FOR**
12 **FPL?**

13 A. The Company admits to a 13% excess reserve imbalance as of the end of 2009. (See
14 Exhibit CRC-1, page 53). This 13% level is prior to the additional \$1.5 billion level of
15 excess reserve based on my recommended net salvage and life adjustments. Recognition
16 of the additional \$1.5 billion amount would drive the excess to 33%, or \$2.75 billion.
17 Further additional excess reserve associated with items such as FPL's unrealistically
18 short life spans for combined cycle generation only adds to the severity of the problem.

19

20 **Q. GIVEN FPL's REMAINING LIFE APPROACH TO THE RESERVE**
21 **INBALANCE, WHAT REMAINING LIFE PERIOD IS REFLECTED IN THE**
22 **COMPANY'S DEPRECIATION STUDY?**

23 A. The Company's depreciation study reflects an overall 22.31-year remaining life for its
24 entire remaining unrecovered depreciable investment prior to recognition of Future
25 Units and its Capital Recovery request.

1

2 **Q. WHAT IS THE BASIS FOR THE COMPANY'S TREATMENT OF THIS**
3 **MATTER?**

4 A. The Company's depreciation study is silent on this matter.

5

6 **Q. DOES THIS POSITION COMPORT WITH COMMISSION PRECEDENT?**

7 A. As previously noted, the Commission often has employed the recovery of a reserve
8 imbalance over periods shorter than the remaining life.

9

10 **Q. HAS THE COMPANY'S DEPRECIATION EXPERT PREVIOUSLY TESTIFIED**
11 **IN FLORIDA?**

12 A. No.

13

14 **Q. DOES THIS POSITION TAKEN BY FPL ADEQUATELY ADDRESS THE**
15 **INTERGENERATIONAL INEQUITY THAT EXISTS FOR CURRENT**
16 **CUSTOMERS?**

17 A. No. For example, the 20-year change in the number of residential customers on an actual
18 and forecasted basis is 39%, as set forth on page 42 of the Company's Ten-Year Site
19 Plan dated April 1, 2009. While this is a sizeable change in the customer base, it tells
20 only part of the story. The 39% growth is a net number and does not identify how many
21 customers left or will leave the system. Thus, the change in customers corresponding to
22 the remaining life period employed by FPL for the return to customers of its prior
23 acceleration of depreciation expense, at least for the residential class, could easily be
24 over 50%. I submit that the current intergenerational inequity that exists due to the
25 current excess of the depreciation reserve created by prior accelerated levels of

1 depreciation (whether intentional or not) cannot reasonably be addressed or rectified by
2 relying on a 22.31-year remaining life period.

3
4 **Q. DOES MR. CLARKE'S RELIANCE ON THE REMAINING LIFE APPROACH**
5 **TO ADDRESS RESERVE IMBALANCES IN OTHER JURISDICTIONS**
6 **DIMINISH THE NEED TO FOLLOW FPSC'S LONG AND IDENTIFIABLE**
7 **PRECEDENT?**

8 A. No. In my opinion it would be unfair to customers to deny them the *same treatment*
9 *afforded utilities* by the FPSC when the situation was reversed. Inconsistent application
10 of concepts in the rate setting process causes uncertainty. Needless uncertainty in the
11 ratemaking process is not in the public interest and can result in higher rate case
12 expenses and other higher costs in the future.

13
14 **Q. IS THERE A VALID CONCERN REGARDING A POTENTIAL TURNAROUND**
15 **OF THE EXCESS RESERVE IN THE NEAR TERM FUTURE?**

16 A. No. While the excess reserve level identified by the Company is sizeable, I am confident
17 that it will increase if the Company's proposed depreciation rates are adopted. Even with
18 my recommended excess reserve amortization, which would amortize only \$1.25 billion of
19 a \$2.75 billion excess more rapidly than the remaining life, the Company is well protected
20 until the next depreciation study. Because I have purposely tempered my recommendation
21 to be conservative, under the circumstances I believe there is no realistic scenario under
22 which FPL could swing to a reserve deficiency prior to the next study. Certainly, that
23 extremely remote prospect is more than outweighed by the prejudice to current customers if
24 the Commission were to take no action to address the severe imbalance more rapidly than
25 the remaining lives of the assets. My position is that there is no realistic basis or possibility

1 that the excess reserve would turnaround and become a deficiency by the time of the next
2 depreciation study is completed in four years.

3
4 **Q. WHAT IS YOUR SPECIFIC PROPOSAL REGARDING THE TREATMENT OF**
5 **THE RESERVE EXCESS?**

6 **Q.** I recommend an approach that should satisfy all concerns if all or even a portion of my
7 recommended adjustments to net salvage and life parameters are adopted. I recommend
8 (1) that \$44,906,153 of unrecovered costs due to the early retirement of the Cape
9 Canaveral and the Riviera stations be offset out of the \$410 million of Company
10 identified excess reserve for steam production investment (See Exhibit CRC-1, pages 53,
11 55 and 56), (2) \$168,234,989 of unrecovered costs due to the nuclear uprates be offset
12 out of the \$377.5 million of Company identified excessive reserve for nuclear
13 production investment (See Exhibit CRC-1, pages 53 and 57), (3) that \$101,081,858 of
14 unrecovered costs due to relating to Meters – Obsolete by AMI be offset out of the \$340
15 million of Company identified excess reserve for the distribution function, (Id.), and (4)
16 the remaining \$931,137,415 of the Company identified excess reserves be returned to
17 customers over the next 4-years. The excess reserve associated with my significant
18 adjustments to net salvage and life parameters can be returned to customers over the
19 remaining life of the assets in this case. This latter aspect provides a safety cushion for
20 those that may believe that one is necessary, while providing the most representative
21 generation of customers available the return of a significant portion of their prior
22 overpaid depreciation expense. This approach addresses the matching principle as it
23 relates to the intergenerational inequity problem, but not to the degree that this
24 Commission has previously found appropriate in other cases. This approach also takes
25 into account the need to gauge the impact of a shorter amortization period so as to

1 protect the financial integrity of the Company. I have discussed the impact of my
2 recommended adjustment with OPC's financial, policy and accounting witnesses, who
3 confirmed that FPL can implement my recommendation *and* maintain the healthy
4 coverage ratios adequate to access the capital markets on reasonable terms. Dan Lawton
5 addresses this subject in detail.

6

7 **Q. WHY DID YOU CHOOSE A 4-YEAR AMORTIZATION PERIOD?**

8 A. The 4-year period is not only within the range of periods previously adopted by this
9 Commission for other cases where a reserve deficiency was present, it also corrects the
10 intergenerational equity situation in an effective but manageable manner. Further, the 4-
11 year period provides sufficient time for the Company to gain additional experience and
12 perform and present a new, complete and well-documented depreciation study within the
13 normal cycle required by the Commission's rule on the matter. The 4-year time frame is
14 also equal to the short amortization period the Company proposes for its Capital
15 Recovery schedule request. (See Exhibit CRC-1, page 55). Finally, one must always
16 recognize that the ratemaking process already disadvantages current customers in the
17 intergenerational inequity scenario. Remember, those generations of customers nearer
18 to the end of the useful life of an investment pay much less for service than do customers
19 at the beginning of the useful life. While future customers will not see a difference in
20 the actual product (i.e., a kwh of energy or a Kw of capacity), a different price will be
21 paid for specific assets. Payment for electricity near the end of the useful life of an
22 investment is associated with heavily depreciated investment. Recognition of heavily
23 depreciated investment results in a much smaller return on investment being required for
24 that asset. Therefore, it is inappropriate to violate the strong and identifiable precedent

1 employed by this Commission in the past by penalizing current customers for the benefit
2 of future customers.

3

4 **Q. WHAT IS THE IMPACT ON REVENUE REQUIREMENTS IF YOUR**
5 **BIFURCATED APPROACH TO THE MULTI BILLION RESERVE EXCESS IS**
6 **ADOPTED?**

7 R. Amortizing the \$1,245,360,415 excess reserve FPL has identified as of December 31,
8 2009 over a 4-year period result in a \$311,340,104 reduction in depreciation expense,
9 and a corresponding reduction to that amount in the Company's overall revenue
10 requirements prior to the impact of jurisdictional allocation.

11

12 **VIII. REMAINING LIFE CALCULATION**

13

14 **Q. WHAT ISSUE DO YOU ADDRESS IN THIS PORTION OF YOUR**
15 **TESTIMONY?**

16 A. Normally the actual quantification of the remaining life for an account is not an issue.
17 However, the presentation by the Company in this case relies on an inappropriate and
18 inaccurate calculation.

19

20 **Q. HAS GANNETT FLEMING CALCULATED THE REMAINING LIFE FOR THE**
21 **COMPANY'S INVESTMENT CORRECTLY?**

22 A. No. Based on my extensive experience dealing with numerous consultants and utilities,
23 Gannett Fleming's calculation of remaining life is unique and incorrect.

24

25 **Q. HOW DOES GANNETT FLEMING CALCULATE THE REMAINING LIFE**
26 **FOR THE COMPANY'S INVESTMENT?**

1 A. The Company's process allocates the actual book reserve to the individual surviving
2 balances for each account based on the theoretical or calculated reserve. However, in
3 the process of performing such allocation Gannett Fleming incorporates two unique
4 aspects to the remaining life calculation.

5
6 **Q. WHAT IS THE FIRST UNIQUE ASPECT OF GANNETT FLEMING'S**
7 **REMAINING LIFE CALCULATIONS?**

8 A. Gannett Fleming incorrectly limits the allocated book reserve to the surviving balance of
9 an individual vintage, adjusted for proposed net salvage. As shown on Exhibit CRC-1,
10 page 720 for Account 397.8 – Communications Equipment – Fiber Optics, the Company
11 has limited column 4, allocated book reserve for the years 1994 through 2003 to the
12 original cost as set forth in column 2. Gannett Fleming incorporates this artificial
13 limitation in spite of the fact that the investment from 2003 back through 1994 still is in
14 service and is still part of the original cost to which the Company applies its approved
15 depreciation rate. In other words, the Company did not actually stop calculating and
16 booking depreciation expense for the investments made between 1994 and 2003, since
17 those investments are still in service and the account is not fully accrued. Therefore, the
18 Company's artificial limitation is inconsistent with actual practice of the Company for
19 the calculation and booking of depreciation expense.

20
21 **Q. IS GANNETT FLEMING'S APPROACH CONSISTENT WITH STANDARD**
22 **GROUP OR MASS PROPERTY DEPRECIATION CONCEPTS?**

23 A. No. When performing mass property or group depreciation analysis, the individual
24 items should not be segregated for individual treatment. Some items of plant will retire
25 before the average service life while others will retire after the average service life, but

1 as the name implies, on average the accruals over the life will equal the total investment
2 adjusted for salvage. Simply put, one item of plant may actually accrue 150% of its
3 original cost while another equivalent dollar level investment may actually only last half
4 the average life and under accrue its recovery. However, the average of the two items
5 still recovers 100% of the combined investment for the Company. This is standard
6 depreciation theory which has been violated by Gannett Fleming's remaining life
7 calculation approach.

8
9 **Q. WHAT IS THE SECOND PROBLEM WITH GANNETT FLEMING'S**
10 **REMAINING LIFE CALCULATION?**

11 A. Gannett Fleming also recognizes the impact of net salvage parameters in the remaining
12 life calculation rather than after the remaining life calculation.

13
14 **Q. ARE YOU STATING THAT UNDER GANNETT FLEMING'S APPROACH A**
15 **CHANGE IN NET SALVAGE WOULD CHANGE THE REMAINING LIFE**
16 **CALCULATION FOR AN ACCOUNT?**

17 A. Yes. By incorporating the impact of net salvage into the allocation of reserve and
18 limiting the allocation of reserve in those years where the recovery of the full investment
19 and the net salvage are assumed to be completed, Gannett Fleming has presented a
20 scenario where net salvage changes impact the calculation of remaining life. This is
21 illogical and inappropriate.

22
23 **Q. CAN YOU PROVIDE A SPECIFIC EXAMPLE OF GANNETT FLEMING'S**
24 **REMAINING LIFE CALCULATION ERROR?**

1 A. Yes. Exhibit (JP-3) is an example of the difference between the proper remaining life
2 calculation and Gannett Fleming's approach for an account with a zero level of net
3 salvage. In other words, net salvage is not a factor in this example. As can be seen in
4 the example and Exhibit CRC-1, page 720, the Company's remaining life calculation
5 totally ignores all investments from 2003 back through 1994. While the same overall
6 dollars will be recovered the remaining life for each vintage surviving plant is different
7 and the allocation of the actual reserve to each vintage will be different if Gannett
8 Fleming's artificial limitation for the years 2003 back to 1994 is permitted. In fact, for
9 2009 Gannett Fleming's approach takes the theoretical \$78,150 of reserve and increases
10 it to \$278,425. The \$278,425 is subtracted from original cost before dividing by that
11 vintages specific remaining life. If that amount has been excessively increased due to
12 Gannett Fleming's artificial limitation of accrued reserve for older vintages, it modifies
13 the impact of the 9.61 remaining life that is associated with 2009 additions. As can be
14 seen on Exhibit __ (JP-3), the corrected calculation assigns only \$223,526 to the reserve
15 in 2009, or \$54,899 less than Gannett Fleming's approach. This means the dollar level
16 of recovery associated with the longest remaining life value is increased due to the
17 additional \$54,899 of allocated reserve under Gannet Fleming's approach.

18

19 **Q. IS YOUR APPROACH FOR CALCULATING REMAINING LIFE THE**
20 **STANDARD IN THE INDUSTRY?**

21 A. Yes. Over the past 35 plus years of performing hundreds of depreciation studies across
22 the country and in Canada, I have duplicated the remaining life calculation performed by
23 every major consulting firm dealing in the area of depreciation and for many of the
24 largest utilities in the nation, some of which perform their studies in house. It is only

1 Gannett Fleming that calculates the remaining life in a manner that is different from
2 every other entity I have dealt with in the past 35 years.

3

4 **Q. ARE YOU CURRENTLY PERFORMING A DEPRECIATION REVIEW OF**
5 **PROGRESS ENERGY FLORIDA?**

6 A. Yes. I am performing the depreciation review in Docket No. 09-007-EI, the current PEF
7 case before this Commission.

8

9 **Q. HAVE YOU TESTED THE REMAINING LIFE CALCULATION PROGRESS**
10 **ENERGY FLORIDA HAS RELIED UPON?**

11 A. Yes. PEF performs the same remaining life calculation that I recommend in this
12 proceeding. Thus, if the Commission were to adopt Gannett Fleming's approach for
13 FPL it would then be faced with the dilemma of approving an uncontested remaining life
14 calculation in PEF which is different, but correct.

15

16 **Q. WHAT DO YOU RECOMMEND?**

17 A. I recommend the Commission reject Gannet Fleming's remaining life and related
18 impacts. The Commission should order the Company to correct and update its
19 remaining life calculations. It should be noted that my recommended depreciation
20 values rely on the correct remaining life calculations.

21

22 **Q. DOES THE CORRECTION OF THE REMAINING LIFE CALCULATION**
23 **HAVE OTHER IMPACTS?**

1 A. Yes. Since the remaining life calculation addresses the allocation and level of
2 theoretical reserve it also has an impact on the level of excess reserve the Company
3 claims in this proceeding.

4

5 **Q. WHY IS THIS IMPORTANT?**

6 A. As noted elsewhere in my testimony I am recommending a significant adjustment to the
7 Company's annual revenue requirements due to partial amortization of the Company's
8 excess reserve over a 4-year period. The total level of excess reserve experienced by the
9 Company differs depending on the remaining life approach utilized by the Company.

10

11

12 **IX. PRODUCTION PLANT**

13

14

A. Introduction

15 **Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S PRODUCTION**
16 **PLANT RELATED DEPRECIATION REQUEST.**

17 A. The Company has approximately \$11.5 billion of existing generating investment plus an
18 additional \$2.75 billion of future units investment reflected in its depreciation request.
19 (See Exhibit CRC-1, page 51). Associated with this level of investment the Company
20 seeks in excess of \$600 million of annual depreciation expense.

21

22 **Q. IS DEPRECIATION EXPENSE CALCULATED THE SAME FOR**
23 **PRODUCTION PLANT AS IT IS FOR TRANSMISSION, DISTRIBUTION OR**
24 **GENERAL PLANT?**

1 A. No. For production plant the Company relies on a life span approach to depreciation. In
2 addition, the Company seeks additional recovery of costs associated with terminal
3 dismantlement studies that estimate the cost to totally demolish existing generating
4 facilities.

5
6 **Q. ARE THESE THE ONLY DIFFERENCES?**

7 A. No. For production plant, the Company has proposed the recognition of interim
8 retirements. As discussed later, those interim retirements simply reflect individual items
9 at a power station that are projected to retire before the final plant is retired. For
10 transmission, distribution and general plant analyses, mass property, the concept of
11 interim retirements does not exist.

12
13 **Q. IS THERE ANOTHER DIFFERENCE BETWEEN PRODUCTION PLANT AND
14 MASS PROPERTY DEPRECIATION?**

15 A. Yes. For production plant, the Company must estimate a future expected retirement year
16 in conjunction with the life span method. Thus, if a generating unit was placed in
17 service in the middle of 2000 with a 60-year life it would be expected to retire in the
18 middle of 2060. Again, the need to forecast a specific future retirement date is not an
19 issue for mass property accounts.

20
21 **Q. HAVE YOU REVIEWED THE VARIOUS COMPONENTS OF THE
22 COMPANY'S PROPOSED PRODUCTION DEPRECIATION EXPENSE?**

23 A. Yes. After a detailed review, I find that the Company's proposed production plant
24 depreciation request is excessive and must be modified. The Company's proposed life
25 and net salvage parameters can only be characterized as aggressive. In other words,

1 based on available information, the Company's proposed life spans are artificially short,
2 it proposed interim retirement method and results excessively reduce the remaining life
3 for its generating units, its proposed interim net salvage is excessively negative, and its
4 proposed terminal net salvage represents a high-side estimate of a worst case scenario.

5
6 **Q. IS THE COMPANY'S NEED FOR AN INCREASE IN DEPRECIATION**
7 **EXPENSE QUESTIONABLE GIVEN THE EXCESS RESERVE POSITION?**

8 A. Yes. The Company proposes a remaining life technique for depreciation. The
9 remaining life technique adjusts the depreciation expense for the future, taking into
10 account whether the existing reserve is excessive or understated. If the existing reserve
11 is excessive in comparison to the theoretical reserve based on the Company-proposed
12 mortality characteristics, then the remaining life technique forces a reduction in annual
13 depreciation expense. In other words, if depreciation expense has been collected on an
14 accelerated basis historically, whether intentionally or not, the rate of recovering the
15 remaining level of expense must be decelerated over the remaining life so that only
16 100% of cost is recovered.

17
18 **Q. DOES THE COMPANY ADMIT TO AN EXCESS RESERVE POSITION FOR**
19 **ITS GENERATION-RELATED DEPRECIATION?**

20 A. Yes. The Company claims an \$842 million excess reserve position for production plant.
21 (See Exhibit CRC-1, page 53). However, the true magnitude of the prior accelerated
22 cost recovery is masked in FPL's study by several factors. A proper recognition of the
23 longer life spans, more realistic interim retirement impacts, and less negative net salvage
24 estimates that the data warrant would cause the Company's claimed level of excess
25 reserve to increase significantly. In addition, the Company has returned approximately

1 \$500 million of production plant related excess reserve during the last 4 years. Had it
2 not been for the approximate \$500 million depreciation expense credit over the last 4
3 years, the Company's admitted production plant excess reserve position would stand at
4 \$1.3 billion.

5
6 **Q. WHAT ARE THE MAJOR AREAS OF THE COMPANY'S PRODUCTION
7 PLANT DEPRECIATION REQUEST THAT YOU WILL BE ADDRESSING?**

8 A. I will address the Company's life span estimates for many of its generating facilities, the
9 Company's method and results for interim retirements, and the Company's over
10 statement of negative net salvage.

11
12 **B. Production Plant Life**

13 **Q. WHAT IS THE ISSUE IN THIS PORTION OF YOUR TESTIMONY?**

14 A. This portion of my testimony will deal with limited modifications to the Company's
15 proposed retirement dates for its steam-fired generating facilities.

16
17 **Q. WHAT LIFE SPANS HAS THE COMPANY PROPOSED FOR ITS VARIOUS
18 STEAM FIRED GENERATORS AT THE EIGHT GENERATING STATIONS
19 ACCOUNTED FOR IN STEAM PLANT ACCOUNTS 311 THROUGH 316?**

20 A. The Company has proposed three future retirement dates for the Company's investment.
21 For the Scherer coal-fired plant, the Company proposes a retirement date in the middle
22 of 2029. For the St. John's River Power Park ("SJRPP"), another coal fired generating
23 facility, the Company proposes a mid 2028 retirement date, and for the remaining 6

1 steam fired generating stations the Company proposes a mid 2020 retirement date, or
2 only 10 ½ years beyond the end of the depreciation study period of 2009.

3
4 **Q. WHAT ARE THE OVERALL LIFE SPANS THAT CORRESPOND TO THESE**
5 **RETIRMENT DATES?**

6 A. The Company's mid 2029 retirement date for its investment in the Scherer plant equates
7 to a 40-year life span for this major coal fired facility. The Company's mid 2028
8 retirement date for the SJRPP yields a 40 or 41-year life for the two units at that coal-
9 fired facility. The Company's proposed mid 2020 retirement date for the remainder of
10 its steam-fired generating facilities results in the two newer stations, Martin and
11 Manatee, having life spans ranging from 39 to 44 years, and low 50-year to mid 60-year
12 life spans for the remaining stations.

13
14 **Q. DO ANY OF THE COMPANY'S PROPOSED RETIREMENT DATES FALL**
15 **WITHIN THE PLANNING HORIZON OF THE COMPANY'S 10-YEAR SITE**
16 **PLAN?**

17 A. No. Thus, the 10-year site plan for the Company does not support the Company's
18 proposed retirement dates.

19
20 **Q. ARE THE COMPANY'S PROPOSED RETIREMENT DATES FOR ITS STEAM**
21 **FIRE GENERATING FACILITIES REASONABLE?**

22 A. No. The Company's proposed life spans for its large coal-fired and large oil and gas-
23 fired generating facilities are conspicuously inadequate or short.

24

1 **Q. ON WHAT DO YOU BASE YOUR STATEMENT THAT THE LIFE SPANS FOR**
2 **THE COMPANY'S COAL AND LARGE OIL AND GAS-FIRE GENERATING**
3 **FACILITIES ARE CONSPICUOUSLY SHORT?**

4 A. There are various reasons, but the most compelling is the fact that the Company has
5 demonstrated through actual operation that it can operate its other oil and gas fired
6 generating facilities for more than 50 years. Moreover, the Company's expectation is
7 that such facilities can operate in excess of 60 years. (See Exhibit CRC-1 at table 14). If
8 the Company has or expects to operate smaller less efficient generating facilities for 60
9 years or longer, estimated life spans for its much larger and costly generating facilities
10 should not be limited to the low 40-year range. The Company's proposal is contrary to
11 standard economic theory which dictates that large capital intensive investments should
12 be operated to maximum levels in order to deliver the economic worth that such
13 facilities are capable of obtaining.

14
15 **Q. ARE THERE OTHER REASONS WHY THE COMPANY'S PROPOSED LIFE**
16 **SPANS APPEAR TO BE UNREASONABLY SHORT?**

17 A. Yes. I have been performing utility depreciation analyses for over 35 years. At the
18 beginning of my career I did experience utilities proposing life spans for steam-fired
19 generating facilities in the low to mid thirty year range. Those expectations were based
20 on claims of typical design life and concerns about higher temperature and pressure
21 operating characteristics of units being placed into service in the 1960s and early 1970s.
22 At that time no empirical data existed to demonstrate that 30 to 35-year life spans were
23 unreasonably short, even though older units operating at lower temperatures and
24 pressures had operated for longer life spans.

25

Revised

1 As time progressed and more empirical data became available the life span issue
2 changed from one where utilities would propose 30 to 35-year lives to where the utilities
3 were proposing upper 30 to low 40-year lives. In other words, as time progressed and it
4 became obvious that units were operating for time periods approaching or exceeding the
5 initially proposed 30 to 35 years of operation coupled with the fact that there were no
6 plans for retirement, utilities could no longer support the initial artificially short life
7 spans. As additional years passed the life span discussion for steam-fired generation
8 continued to change. Utilities began proposing 45 and 50-year life spans, again in
9 recognition of reality. The process continues through today. In the last several years
10 utilities and regulators are recognizing that 50 and 60-year life spans are more
11 appropriate for steam-fired generating facilities.

12
13 **Q. HAVE THERE BEEN RECENT CASES TO WHICH 60-YEAR LIFE SPANS**
14 **HAVE BEEN ADOPTED FOR STEAM GENERATING FACILITIES?**

15 A. Yes. For example, in a 2007 Oklahoma Corporation Commission (“OCC”) ordered
16 Public Service Company of Oklahoma (“PSO”), a member of the very large American
17 Electric Power Company group, was ordered to rely on a 60-year life span for its coal-
18 fired generating facilities. (See OCC Cause No. 200600285). In PSO’s most recent
19 case decided in early 2009, PSO did not challenge and even relied on a 60-year life span
20 for its coal generating facilities. (See OCC Cause No. 200800144). In fact, the head of
21 generation production for American Electric Power Corporation stated that based on its
22 experience and expectation there was no reason why it could not operate generating
23 facilities for a minimum of 60 years. PSO’s life spans for its gas-fired generating
24 facilities were not at issue as PSO was proposing 60-plus years for such facilities.

25

Revised

1 **Q. CAN YOU PROVIDE OTHER EXAMPLES?**

2 A. Yes. Another example is a recent Rocky Mountain Power Company case in the state of
3 Utah. In that case, the regulatory staff of five states negotiated a settlement where that
4 Company's proposed life span for its coal-fired generating facilities was reduced to 61
5 years. (See Utah Public Service Commission Docket No. 07-035-13). In that case, the
6 Company had actually proposed a longer life span for its coal-fired generating facilities.
7 Yet another very recent example is the settlement in the Southwestern Public Service
8 Company ("SPS") case in Texas. (See Public Utility Commission of Texas Docket No.
9 35763). It should further be noted that SPS is part of the large Xcel holding company
10 which has operations in numerous states across the country. In that case, SPS had
11 proposed a 55-year life span for its coal-fired generating facilities, but settled and
12 accepted a 60-year life span. It is worth noting that SPS is one of the utilities that for
13 decades argued in rate cases that anything in excess of a 35-year life span was unrealistic
14 and would not occur. Yet, in only a period of a decade or so SPS is now not only
15 proposing 55-year life spans, but accepting 60-year life spans for its coal-fired
16 generating facilities.

17

18 **Q. DOES THE FEDERAL GOVERNMENT MAINTAIN INFORMATION THAT**
19 **WOULD FURTHER SUPPORT LONGER LIFE SPANS FOR COMPANY'S**
20 **GENERATING FACILITIES THAN THOSE THE COMPANY PROPOSES IN**
21 **THIS PROCEEDING?**

22 A. Yes. The Energy Information Administration of the Department of Energy maintains a
23 listing of all generating facilities. I have reviewed such information numerous times in
24 the past. The government's database clearly demonstrates that there is more than

1 adequate empirical data to support life spans decades longer than what the Company
2 proposes in this case for its coal-fired generation.

3
4 **Q. IS THERE ANY QUESTION THAT FROM A PHYSICAL STANDPOINT THE**
5 **COMPANY'S GENERATING FACILITIES CAN LAST FOR 50 TO 60 YEARS,**
6 **OR LONGER?**

7 A. No. From a physical standpoint there is nothing presented by the Company or the
8 industry which can refute that coal, oil and gas-fired generating facilities can and have
9 operated for longer periods of time.

10
11 **Q. HAS THE COMPANY PRESENTED ANY ECONOMIC ANALYSIS WHICH**
12 **CLEARLY DEMONSTRATES THAT THE ECONOMIC OPERATION OF ITS**
13 **LARGE COAL, GAS OR OIL-FIRED FACILITIES CANNOT OPERATE FOR**
14 **MUCH LONGER PERIODS THAN IT PROPOSES?**

15 A. No. Not only am I not aware of any, I would question the validity of any assumptions
16 which would support a life expectancy for such facilities being as short as 40 years as
17 proposed by the Company.

18
19 **Q. IS THERE CONCERN REGARDING THE CARBON EMISSIONS FOR THE**
20 **COMPANY'S VARIOUS GENERATING FACILITIES?**

21 A. Yes. I think everyone is concerned regarding the carbon emissions of all fossil-fired
22 generating facilities. However, that does not change the fact that based on what we
23 know today, these large and efficient operating units can be expected to operate beyond
24 the Company's proposed retirement dates. Moreover, other utilities and regulators

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1 across the country are recognizing the longer realistic life spans for such units with full
2 knowledge and concerns regarding carbon emissions.

3

4 **Q. IS THERE ANY BASIS TO DENY LONGER LIFE SPANS ASSOCIATED WITH**
5 **ANY POTENTIAL ARGUMENT ASSOCIATED WITH INTERIM ADDITIONS?**

6 A. No. First, it must be noted that some utilities have claimed that longer life spans cannot
7 be recognized for ratemaking purposes absent the recognition of interim additions.
8 Interim additions simply mean certain unknown levels and timing of capital additions in
9 the future to keep generating facilities operating for the expected life spans.

10

11 **Q. WHY WOULD SUCH AN ARGUMENT NOT BE APPROPRIATE?**

12 A. The interim addition issue has been an issue before regulators for an extended period of
13 time. The FERC and other state jurisdictions have ruled, consistent with the National
14 Association of Regulatory Utility Commissioners' ("NARUC") publication entitled
15 "Public Utility Depreciation Practices," that interim additions are not appropriate for
16 inclusion in depreciation analyses. Interim additions represent significant unknown
17 timing and quantities. They should be recognized after the fact once they have occurred.
18 Thus, any argument raised by the Company associated with interim additions should be
19 dismissed as having no merit.

20

21 **Q. WHAT DO YOU SPECIFICALLY RECOMMEND?**

22 A. I recommend the lengthening of life spans for the Company's two coal-fired generating
23 stations, as well as the Company's large Manatee and Martin oil or gas-fired generating
24 facilities. Specifically, I am recommending a 60-year life span for coal-fired generating

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1 stations and a minimum 50-year life span for the Company's two large oil or gas-fired
2 generating stations.

3
4 With respect to the Company's investment in the Scherer generating facility, I relied on
5 the 1989 in service date for determining the 60-year life span for that facility. The
6 Company did not purchase an ownership share in that facility until 1991. However, for
7 life span purposes it should be the initial in service date for the facility even prior to
8 when the Company took ownership. Therefore, I have increased the projected
9 retirement date from mid 2029 to mid 2049. That extension results in a 39 ½-year
10 remaining life compared to the Company's proposed 19 ½-year unadjusted remaining
11 life.

12
13 For the Company's investment in the SJRPP plant, I relied on the 1988 in service date
14 for SJRPP Unit 2. A future retirement date of mid 2047 corresponds to a 60-year life
15 span for that unit and approximately the same for the station. The SJRPP remaining life
16 associated with my recommendation increases to 37 ½ years compared to the
17 Company's proposed 18 ½-year remaining life.

18
19 For the investment in the Manatee Station I am proposing a mid 2027 future retirement
20 date. This compares to the Company's mid 2020 date. My date corresponds to a 50-
21 year life span for Manatee Unit 2, which was placed in service in 1977. The resulting
22 remaining life increases from 10 ½ years as proposed by the Company to 17 ½ years.

23
24 Finally, for the Martin plant I recommend a mid-2031 retirement date. That date
25 corresponds to a 50-year life span for the Martin Unit 2, which was placed in service in

1 1981. The remaining life for this station increases to 21 ½ years from the Company's
2 proposed 10 ½-year remaining life.

3
4 **Q. DO YOU BELIEVE THE PROPOSED LIFE SPANS FOR THE COMPANY'S**
5 **REMAINING GENERATING FACILITIES ARE APPROPRIATE?**

6 A. No. In particular, the Company's proposal for approximate 25-year life spans for
7 combined cycle generating units is also understated. Other utilities and regulators are
8 recommending longer life spans for combined cycle generating facilities. In this case, I
9 recommend that the Commission order the Company to perform a detailed analysis
10 demonstrating why its substantial investment in combined cycle generating facilities
11 cannot be expected to reasonably operate for 35 years or longer, and present the study in
12 its next depreciation filing. However, if the Commission were so inclined, it would be
13 more than reasonable to increase the life span to 30 or 35 years as initial steps in this
14 case. It is no longer reasonable to expect customers to overpay for decades for the use
15 of generating facilities that realistically should and can be expected to last longer than
16 the Company's unsubstantiated mid 20-year life expectations.

17
18 **Q. WHAT IS THE IMPACT OF YOUR ADJUSTMENT?**

19 A. I have not made a precise quantification of the standalone impact of this adjustment due
20 to the manner in which the Company has presented its data. However, a reasonable
21 estimate of the impact on a standalone basis is a reduction to depreciation expense of
22 \$32 million annually.

23
24 **C. Interim Retirements**

1 **Q. WHAT ISSUE DO YOU ADDRESS IN THIS PORTION OF YOUR**
2 **TESTIMONY?**

3 A. The issue in this portion of my testimony addresses the Company's choice for estimation
4 of interim retirements and the ultimate interim retirement life-curve combinations
5 proposed for production plant accounts.
6

7 **Q. WHAT ARE INTERIM RETIREMENTS?**

8 A. Interim retirements have been characterized as a fine tuning adjustment to the life span
9 analysis. The life span method is used in estimating the retirement date for any large
10 unit of property such as an entire generating unit. The theory behind interim retirement
11 rates is that even though a large unit of property such as a generating unit might retire in
12 60 years, in the interim period many components have to be replaced in order to
13 maintain the overall generating facility in operating condition. An analogy to this would
14 be a car which might be anticipated to have a service life of 10 years. During the 10-
15 year life of the car, the owner might have to replace the battery, tires, alternator and
16 other components in order to maintain the automobile in a safe and operable condition.
17 Therefore, even though the automobile may have an overall 10-year life span, its dollar
18 weighted adjusted life span may be 9.8 years due to the averaging of the automobile's
19 overall life span with the average of the individual replaced components. In other
20 words, the interim retirement rate would be a fine tuning factor used to reduce the
21 service life from 10 years to 9.8 years.
22

23 **Q. HAS THE COMPANY INCORPORATED THE IMPACT OF INTERIM**
24 **RETIREMENTS IN ITS DEPRECIATION ANALYSIS?**

1 A. Yes. The Company proposes to implement a calculation procedure for interim
2 retirements based on an "estimated" interim retirement survivor curve. (See Mr.
3 Clarke's Direct Testimony at page 20).

4

5 **Q. DO YOU AGREE WITH THE COMPANY'S POSITION?**

6 A. While I agree with the Company that interim retirements should be included in the
7 calculation of production plant depreciation rates, I do not agree with the Company's
8 proposed process or results. I find the Company's proposal inappropriate and
9 cumbersome for application in this proceeding.

10

11 **Q. PLEASE EXPLAIN THE PROBLEMS WITH THE COMPANY'S PROPOSED**
12 **METHOD.**

13 A. The Company's approach relies on an actuarial analysis of the historical data to
14 determine an interim retirement life-curve combination. Actuarial analyses are normally
15 performed on more homogeneous-type investments that are not generally dependent on
16 one another, such as poles or wires. In particular, the varying types of investments
17 within each of the major production plant accounts do not reasonably lend themselves to
18 actuarial analyses. In other words, the retirement forces experienced by electric motor
19 drives booked in Account 312 are noticeably different than the retirement forces on
20 smoke stacks, also booked in Account 312. However, the Company's actuarial approach
21 treats all items in the same account as one type of item for life estimation purposes.

22

23 Moreover, the results of the Company's actuarial analysis in general do not provide
24 reasonable matches between the Observed Life Table ("OLT") (actual historical data
25 pattern) and the assumed Iowa Survivor curve the Company proposes as its best match.

1 For example, the Company's assumed "40R3" life-curve combination for Account 321
2 is *not* a good fit of the data. (See Exhibit CRC-1, page 420). As can be seen in the
3 depreciation study, the Company's proposal, developed through its actuarial approach,
4 clearly begins to deviate from the OLT after 20 years of age and continues that deviation
5 through the remainder of the data. I discuss "survivor curves" in greater detail later in
6 my testimony.

7
8 **Q. DOES THE COMPANY'S APPROACH PRODUCE UNUSUAL AND**
9 **UNREALISTIC RESULTS IN CERTAIN CASES?**

10 A. Yes. The Company's actuarial approach yields unrealistic results for certain combined
11 cycle conversion situations and even for gas turbine investments, as can be demonstrated
12 with a few examples. The first example corresponds to Account 341 – Structures and
13 Improvements for the Putnam combined cycle plant. (See Exhibit CRC-1, page 98).
14 Since the Putnam station is being reused for combined cycle units, a large portion of the
15 investment in Account 341 is more than 30 years old. (*Id.*, at page 347). The Company
16 has proposed a 25R5 life-curve combination for its truncated actuarial approach for
17 interim retirement purposes. Given the older vintage additions are subjected to the same
18 25R5 life-curve combination as are all the newer investments in this account, the
19 Company's approach reduces its proposed 10.5 year unadjusted remaining life all the
20 way down to only 2 *years*, or an equivalent retirement at the end of 2011. At that point
21 the Company believes it can arbitrarily change the depreciation rate to zero and cease
22 booking depreciation expense to the reserve. That means the \$2,414,572 of annual
23 depreciation expense it is requesting in this case for that investment becomes additional
24 return to the Company's shareholders until the next base rate case. This situation occurs
25 due in part to the Company's proposed approach for interim retirements.

1
2 The second example reflects another multi-million dollar situation. That example
3 corresponds to Account 344 – Generators for Lauderdale GTs. (Id., at page 100). Since
4 almost all the investment at issue was placed into service in 1970 and 1972 the
5 Company’s proposed approach yields a *1.3 year* remaining life. That remaining life
6 corresponds to March of 2010. At that point the Company will again attempt to
7 arbitrary convert the \$2,744,747 of annual depreciation expense into additional return
8 for its shareholders. Just these two examples total to more than \$5 million annually.
9 Under any situation, the Commission must deny such inappropriate proposals.

10
11 **Q. IS THERE ANOTHER ASPECT TO THE COMPANY’S INTERIM**
12 **RETIREMENT PROPOSAL THAT HIGHLIGHTS THE UNREASONABLE**
13 **RESULTS PROPOSED BY THE COMPANY?**

14 A. Yes. In this case the Company proposes two types of net salvage for production plant:
15 interim retirement net salvage, and terminal net salvage. The interim retirement net
16 salvage is associated only with the retirements that are “estimated” by employing the
17 Company’s proposed interim retirement life-curve combinations approach. For steam
18 production plant the Company calculated the total interim retirements as a percent of
19 total retirements, individually for all production plant accounts. (See OPC’s First Depr.
20 POD No. 12, Attachment 5 of 5). The Company performed this analysis for interim net
21 salvage in order to determine how to adjust its total proposed plant account net salvage
22 values, so that the adjusted value applied to total plant in service would be the equivalent
23 of applying the net salvage only to interim retirements. For example, for Account 311
24 the Company proposes a total account negative 15% net salvage estimate. However, the
25 Company realized that it should not apply the negative 15% to the entire plant balance

1 since the entire plant balance does not correspond to the level of “estimated” interim
2 retirements prior to the final retirement of each generating unit. Therefore, the Company
3 presented an approach which reduces its proposed total account net salvage level to a
4 negative 5% in an attempt to make it equivalent to only the level of interim retirements.
5 The significance of this is that the Company’s proposed interim retirement approach,
6 which relies on truncated Iowa Survivor Curves, projected that *\$1.1 billion* of steam
7 production plant would retire between January 1, 2010 and the projected retirement
8 dates for its various generating units. Given that the vast majority of the Company’s
9 investment in steam production units is projected to retire as of June 30, 2020, that
10 implies that the \$1.1 billion of interim retirements are projected to occur in less than 12
11 years after the end of the depreciation test year.

12
13 **Q. CAN YOU PLACE THE \$1.1 BILLION OF PROJECTED INTERIM**
14 **RETIREMENT ACTIVITY INTO PROPER PERSPECTIVE?**

15 A. Yes. The Company has provided the annual historical steam plant retirement activity for
16 the period 1986 through 2007. (See Exhibit CRC-1, pages 438 through 447). This time
17 frame represents a 22-year period or approximately twice the time frame the Company
18 projects for the remaining life of the existing steam production plant. During the
19 historical 22-year period the Company reports normal retirements of approximately
20 \$460 million. Thus, on a per year basis the Company’s projected interim retirement
21 values are approximately *4.5 times* the historical annual retirement levels experienced by
22 the Company for the same plant. There is no evidence that demonstrates that such a
23 proposed expansion of interim retirements is reasonable or realistic.

24

1 **Q. DOES INDUSTRY DATA CONFIRM THE REASONABLENESS OF THE**
2 **COMPANY'S PROPOSAL?**

3 A. No. A review of the electric industry data provided by the Company's depreciation
4 consultant identifies significantly longer lives than the proposals in this case. For
5 example, the industry interim retirement values range from a low of 65-years to a high
6 of 125-years for Account 311 Structures and Improvements, with an average of 102
7 years. (See OPC's First Depr. POD No. 12, 1 of 5). This range represents a minimum of
8 an 18% and a maximum of 127% increase above the value proposed by the Company in
9 this proceeding. Thus, based on the experience of the Company's depreciation
10 consulting firm, it is clear that the method and results it proposed produced results that
11 are out of line with industry values. They artificially reduce the remaining life of the
12 production facilities. An artificially low remaining life results in an artificially high
13 depreciation expense.

14
15 **Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO THE LEVEL OF INTERIM**
16 **RETIREMENTS REQUESTED BY THE COMPANY?**

17 A. Yes. Given (1) the excessive level of interim retirements that are produced by the
18 Company's approach, (2) the level of variance between what the Company proposed
19 compared to what the Company's consultants have proposed in other proceeding for the
20 same accounts, and (3) the unrealistic results that are a direct fallout of the Company's
21 process, I recommend an alternative approach and values for interim retirements.

22
23 **Q. WHAT DO YOU RECOMMEND?**

24 A. I propose an interim retirement adjustment that is not based on truncated Iowa Survivor
25 Curves. In other words, I have replaced the actuarial component of the analysis, given

1 that the plant analyzed is neither reasonably homogeneous nor independent from the life
2 of the overall generating unit. The method I rely upon is one sponsored by the
3 California Public Utilities Commission in its publication entitled "Determination of
4 Straight – Line Remaining Life Depreciation Accruals Standard Practice U-4", and also
5 recognized by the NARUC in its publication entitled "Public Utility Depreciation
6 Practices." Indeed, this is a method that Mr. Clarke supported in previous cases before
7 he joined Gannett Fleming. Thus, there can be no doubt that the method I recommend
8 has been employed and adopted historically and currently by utilities and utility
9 regulators.

10
11 Next, I developed interim retirement ratios for each of the plant accounts based on actual
12 Company specific information. In other words, the interim retirement ratios utilized in
13 my approach were developed from the historical reported levels of retirement activity by
14 account for each of the steam, nuclear and other production accounts as also relied upon
15 by the Company. (See Exhibit CRC-1, page 406 through 429 and OPC's First Depr.
16 POD No. 13, 2008 ServiceLifeFile.xls). The resulting interim retirement ratios and the
17 corresponding impact on remaining lives are set forth on Exhibit (JP-4).

18
19 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDED MODIFICATIONS TO**
20 **THE APPROACH AND LEVEL OF INTERIM RETIREMENTS?**

21 A. The adoption of my recommended approach for interim retirement ratios on a standalone
22 basis result in a \$54,916,074 reduction to depreciation expense on a total Company
23 basis.

24
25 **D. Interim Net Salvage**

1. Introduction

1

2 Q. WHAT IS THE ISSUE IN THIS PORTION OF YOUR TESTIMONY?

3 A. This portion of my testimony addresses the Company's proposal for net salvage
4 associated with interim retirements. The Company has proposed a wide array of values
5 ranging from zero to a negative 100% for various production plant accounts.

6

7 Q. HOW DID THE COMPANY ARRIVE AT ITS PROPOSALS?

8 A. Mr. Clarke reviewed historical data for each plant account beginning with Account 311
9 and continuing through Account 346 for the period 1986 through 2007. (See Exhibit
10 CRC-1, pages 438 through 470). The Company's selection of overall net salvage for
11 each account appears to be based on varying, unidentified considerations. (See OPC's
12 First Depr. POD No. 14). Once the Company established what it believed to be the
13 appropriate net salvage value for an account, it reduced the net salvage percent to reflect
14 the percent of interim retirements to total plant retirements for each account. (See
15 OPC's First Depr. POD No. 12, Attachment 5 of 5).

16

17 Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

18 A. No. Most of the Company's proposals are excessively negative, as will be discussed in
19 more detail under the account specific discussions that follow. The Company's failure
20 to investigate the underlying data other than in total amounts has caused it to
21 inappropriately select excessively negative values which are not representative of the
22 remaining investment in the account.

23

1 Q. WAS THE COMPANY REQUESTED TO SPECIFICALLY IDENTIFY
2 WHETHER A VALUE THAT WAS SIGNIFICANTLY DIFFERENT FROM
3 MANY OTHER VALUES IN ITS NET SALVAGE ANALYSIS WAS
4 REPRESENTATIVE OF THE REMAINING INVESTMENT IN THE
5 ACCOUNT?

6 A. Yes. The Company responded as follows:

7 “*No specific individual year was analyzed*, but rather all years and bands of years. Years
8 that looked abnormal were given less weight in the analysis. The information derived
9 from examining all years and bands was used to determine estimated future net salvage
10 not any one particular year. The estimate is *based on the best information* available and
11 because it is based on 22 years of actual history *we believe* the resulting net salvage
12 estimate obtained is indicative of the future until new recorded information is available.”
13 (Emphasis added). (See OPC’s First Depr. Interrogatories No. 39 d).
14

15 In other words, the Company says that it did not determine whether any activity in any
16 particular year of its analysis was representative of the remaining investment, looked at
17 abnormal values without identifying what an abnormal value is, and then gave it less
18 weight in its analysis. The Company further failed to investigate the underlying data
19 because it believed it was relying on the best information available. As will be shown,
20 this is not the case.

21
22 Q. WHAT DO YOU RECOMMEND?

23 A. I recommend adjustments to the interim net salvage for 2 steam production accounts, 2
24 nuclear accounts, and 5 other production accounts. A discussion for each of the 9
25 accounts that are adjusted follows.

26
27 2. Account Specific

28 Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 311?

1 A. The Company proposes an overall negative 15% net salvage, which it reduces to a
2 negative 5% in recognition of the percent applicable to interim retirements.

3
4 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

5 A. The Company identifies the following factors as the basis for its proposal: (1) industry
6 data shows negative net salvage, (2) the current approved net salvage is negative 9%, (3)
7 some large salvage has been recorded in the past few years, (4) cost of removal has been
8 increasing, and (5) the overall history for the account is negative 16%. (See OPC's First
9 Depr. POD No. 12).

10
11 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

12 A. No. The Company's proposal is excessively negative. Therefore, I recommend a
13 negative 5% level of net salvage for interim retirements. That value is reduced to
14 negative 0.47% due to interim retirements.

15
16 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

17 A. First, unlike the Company I did not place the same level of weight on the full level of
18 history compared to more recent activity. In addition, I investigated the underlying
19 actual activity reflected in the Company's data to determine if it was reasonable and
20 appropriate.

21
22 For this account Mr. Clarke was inconsistent compared to his approach to other
23 accounts, in that here he chose to ignore recent activity. Recent activity indicates at best
24 an approximate negative 10% to a positive 3% or 4%, but definitely nothing
25 approaching a negative 15%. (See Exhibit CRC-1, page 438 and 439). In particular,

1 during the past 9 years the Company has not experienced a value as negative as negative
2 15%. The most negative value in recent periods corresponds to the largest retirement
3 reflected in the Company's database, which occurred in 2007. Had the Company
4 investigated what was reflected in its most recent values it would have most likely
5 chosen a different net salvage value.

6
7 A review of the actual retirement activity yields the fact that approximately 88% of the
8 retirements were associated with piping. Piping comprises only 16% of the investment
9 in the account. In other words, 2007 represents a significant mismatch between the type
10 of investment and future expected retirements on an interim basis. One can reasonably
11 anticipate that the removal of pipe is going to be more costly than many other types of
12 retirement activity. A further review of the relationship between retirement of piping
13 and the investment level by year indicates that those years in which there are larger
14 negative net salvage values correspond to the years where more significant levels of
15 piping were retired. In addition, the vast majority of the cost of removal reflected in
16 2007 was associated with two events. Those two events were the replacement of a
17 retaining wall and a cooling pond underdrain system. There is no indication that this
18 type of activity is representative of what will transpire for most of the Company's
19 investment during the next 10 years, the period in which the Company forecasts the
20 retirement of the vast majority of its steam generating facilities will retire.

21
22 In addition, dikes, ponds, foundations and structures comprise approximately 45% of the
23 investment in the account. These categories of investment represented a very small
24 percentage of the retirement activity that has transpired during the past 10 years. These
25 types of investments are more indicative of the type of retirement activity that will occur

1 when a unit is ultimately retired, which is identified as terminal net salvage reflected in
2 demolition cost estimates rather than interim retirements. In summary, the Company has
3 not provided any evidentiary basis which would support its proposal, while the actual
4 underlying available data supports a zero to possibly even a small positive value.
5 However, I am recommending a negative 5% net salvage level.

6
7 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 314 – TURBO**
8 **GENERATOR UNITS?**

9 A. The Company proposes a zero level of interim net salvage.

10
11 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

12 A. The Company states that while there have been considerable interim retirements there
13 has also been high cost of removal and high salvage associated with these retirements.
14 (See OPC's First Depr. POD No. 12). The Company states that, until it "can establish a
15 pattern for net salvage," it proposes to use a zero net salvage.

16
17 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

18 A. No. The Company's proposal is inconsistent with its approach to Account 311. It fails
19 to recognize the fact that the Company does receive positive salvage for components
20 reflected in Account 314. Therefore, I recommend a positive 10%. It is necessary to
21 adjust this level down to only a positive 1.67% to correspond to the level of expected
22 interim retirements.

23
24 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

1 A. First, the overall average net salvage reported in the Company's database is a positive
2 8%. In addition, the five year average is a positive 9%. (See Exhibit CRC-1, pages 442
3 and 443). Further, a review of the types of investments and the corresponding dollar
4 value for such investments within the account, as well as of the type of retirements that
5 have occurred, indicates that many types of retirements will either be associated with
6 terminal net salvage reflected in the overall dismantlement studies or are of a type that
7 may produce significant types of positive salvage.

8

9 While one would not expect that major rotors or stators will retire each year, when such
10 major items do retire it appears that there are substantial levels of positive salvage -- as
11 is reflected in the Company's own database. The intermittent occurrence of major
12 retirement items appears to be more of the cause for the varying pattern in the historical
13 data. It explains away the Company's decision to wait until a pattern can be established.
14 When minor items of equipment are retired in a given year, one would expect higher per
15 unit cost of removal and lower gross salvage. However, the Company's failure to
16 recognize the overall net salvage level pattern because major items of equipment may
17 not retire in every year is inappropriate. Therefore, at this time a positive 10% net
18 salvage is supported by both the overall history and recent history.

19

20 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 322 – REACTOR**
21 **PLANT EQUIPMENT?**

22 A. The Company proposes an overall negative 5% net salvage, reduced to a negative 4% to
23 be applicable to interim retirements. This compares to the existing negative 2%. (See
24 OPC's First Depr. POD No. 12).

25

1 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

2 A. The Company admits that the current negative 2% "appears justified" absent the recent
3 few years, in which there were some large retirements that "distorted the historical
4 pattern." However, the Company elected to make the net salvage more negative until it
5 can "get more years of data."
6

7 **Q. DO YOU AGREE WITH THE COMPANY PROPOSAL?**

8 A. No. The decision to propose a more negative value in this case is inconsistent with the
9 Company's approach to other accounts. For example, for Account 321 the Company
10 chose not to propose a positive level of net salvage "until there is a pattern in recorded
11 amounts." Similarly, for Account 314, the Company stated that it was proposing a zero
12 level of net salvage until it "can establish a pattern for net salvage." However, for this
13 account, where only one event in 2005 distorted the historical patterns, the Company
14 chose a more negative net salvage. The distortion caused by the single year can be seen
15 in the Company's rolling 3-year band analyses. A review of data establishes that the net
16 salvage for the 3-year band including the unusual 2005 event was a negative 83%, while
17 the next 3-year band without such event reflected only a negative 4%. (See Exhibit
18 CRC-1, page 451). Absent this event there is a reasonable pattern indicative of a
19 minimal level of negative net salvage. Therefore, consistent with the Company's
20 practice for other accounts, retaining the current negative 2% is appropriate until the
21 Company can explain why the unusual activity in 2005 is indicative of what can be
22 expected in the future for all investment, or until a more discernible pattern can be
23 identified. Moreover, for Account 323 the Company inconsistently ignored positive
24 levels of net salvage for the overall band, for many of the most recent 3-year rolling
25 bands, and for the 5-year band. For that account it elected to ignore those positive values

1 until "it is determined if these large retirements will continue and a pattern of removal
2 and salvage is established." (See OPC's First Depr. POD No. 12). For that account it
3 chose to recommend a zero level rather than a positive level until more appropriate data
4 is obtained. My recommendation to retain the existing negative 2% overall is therefore
5 both conservative and more consistent than the Company's proposal. The overall level
6 must be reduced to a negative 0.25% to recognize the level of interim retirements.

7
8 **Q. WHAT HAS THE COMPANY PROPOSED FOR ACCOUNT 324 – ACCESSORY**
9 **ELECTRIC EQUIPMENT?**

10 A. The Company proposes a significant change in interim retirement net salvage. The
11 Company proposes to modify the existing negative 2% to a negative 20%. (See OPC's
12 First Depr. POD No.12).

13
14 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

15 A. The Company states that retirements have been fairly constant for this account compared
16 to some other nuclear accounts. The Company further states that the cost of removal
17 always exceeds salvage. It then states that the entire historical database equals a
18 negative 19%. However, Mr. Clarke chose to react to events during the past 5 years,
19 which had indicated a negative 41%, and proposed a negative 20%.

20
21 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

22 A. No. The Company's proposal to change from the existing negative 2% is unwarranted.
23 Therefore, I recommend retaining the negative 2% overall net salvage, which is adjusted
24 to a negative 0.06% for interim retirement purposes.

25

1 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

2 A. As previously noted, the Company elects not to make changes when to change would
3 reflect positive or less negative levels of net salvage. The Company claims its practice
4 is due to no pattern being established, or similar other considerations. In this instance, it
5 must be recognized that the retirement activity for this account is small in comparison to
6 the balance for the account. In fact, the total recent 5-year database the Company
7 reacted to reflects less than 7/10 of 1% retirement activity on an accumulated basis
8 compared to the existing balance. This is far from a robust sample or database, and one
9 that may not be indicative of what may actually transpire.

10

11 Given the low level of historical retirements, I inquired and determined that the large
12 levels of negative net salvage that the Company reacted to during the past few years are
13 associated with what it has identified as “plant data network – phase 1” and “plant data
14 network – ddps/soer.” (See OPC’s First Depr. POD No. 18, Attachment 2). The cost of
15 removal for these two items comprise 97% of the entire cost of removal experienced
16 during the 5-year period relied on by the Company for its proposed change. There is no
17 indication that the “plant data network” cost of removal is indicative of what can be
18 expected in association with interim retirements over a much longer period of time
19 where a much greater dollar level of retirement activity will occur. Moreover, the
20 Company does not identify any investment category for Account 324 that corresponds to
21 the “plant data network” that drives the significant levels of negative net salvage to
22 which the Company has reacted. Therefore, consistent with the Company’s approach in
23 other categories, the more prudent course of action at this point in time is to retain the
24 existing negative 2% net salvage. The Company should be ordered to perform a more
25 detailed analysis of the actual activity underlying significant changes in net salvage in its

1 next depreciation study, so as to properly support and justify any proposed modifications
2 of this magnitude.

3
4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 341 – OTHER
5 PRODUCTION STRUCTURES AND IMPROVEMENTS?**

6 A. The Company proposes a significant modification from the existing negative 2% net
7 salvage. The Company proposes a negative 25% net salvage. (See OPC's First Depr.
8 POD No. 12).

9
10 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

11 A. The Company states that there have been large removal costs recorded in the account
12 and one extremely large salvage recorded in 2007. The Company states, without any
13 supporting basis, that the 2007 positive level of net salvage "appears to be anomaly."
14 The Company then references much higher negative net salvage in the past few years,
15 but can do so only by "ignoring 2007" data. Based on these limited and questionable
16 items of information, the Company proposed the significant change from a negative 2%
17 to a negative 25% net salvage.

18
19 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

20 A. No. The Company's proposal is incorrect and unreasonable. I recommend a zero level
21 of net salvage.

22
23 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

24 A. First, it is necessary to place the Company's actions for this account in proper
25 perspective. Recall that at the beginning of this section I quoted a Company data

1 response that admitted that Mr. Clarke did not look at any single year of activity; rather,
2 he relied on the overall information provided within the database. However, for this
3 account the Company chose to ignore a significant positive level of net salvage that
4 occurred in 2007 without any investigation. This is contrary to its actions in other
5 accounts where it has incurred significant and unusual levels of cost of removal, yet
6 unquestionably accepted such activity. As noted throughout my testimony for each
7 account, I have attempted to investigate the underlying causes of events and determine if
8 they are representative of what can be anticipated in the future.

9
10 For this account, the most telling item of information occurred in 2005, where the
11 Company reported a negative 459% negative net salvage. (See Exhibit CRC-1, page
12 458). When one investigates what drove the cost of removal to such a high level in
13 comparison to the retirements, it is easy to identify that 99% of the cost is associated
14 with a project to convert a combined cycle process at the Martin Power plant. (See
15 OPC's First Depr. POD No. 19, Attachment 2). Claimed cost of removal activity for the
16 conversion to a combined cycle generating facility should have been accounted for as
17 part of the capital cost of the new combined cycle investment rather than cost of
18 removal. Moreover, any such activities in the future should be assigned to the cost of
19 the new addition and not allowed to artificially inflate cost of removal. In addition, a
20 review of the Company's retirements indicates that over 50% of the retirement activities
21 are associated with the replacement of heating and air conditioning investment. (See
22 OPC's First Depr. POD No. 19, Attachment 1). This is significant, given the
23 Company's reliance on the past 5 years of activity for its excessive movement in
24 negative net salvage for this account. Upon further review it can be identified that the
25 heating and air conditioning system investment in this account comprises less than 2%

1 of the total. Thus, the Company's replacement of an air conditioning system has been
2 relied upon to propose a substantial change to the entire account when air conditioning
3 system investment is a very minor component of the account. In other words, the 2007
4 anomaly that the Company didn't investigate, but eliminated, is more appropriate than
5 the data on which the Company did rely. Therefore, I recommend complying with the
6 Company's general practice of recommending a zero level of net salvage in situations
7 where no clear pattern is identifiable and the data is reasonably in the zero range.
8 Following this practice, I recommend a zero net salvage level. I note that there are
9 substantial amounts of investment in this account that are more indicative of final
10 retirement activity than the interim retirement activity.

11
12 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 342 – OTHER**
13 **PRODUCTION FUEL HOLDERS, PRODUCERS AND ACCESSORIES?**

14 A. The Company proposes a negative 5% net salvage versus the existing zero level of net
15 salvage. (See OPC's First Depr. POD No. 12).

16
17 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSED CHANGE?**

18 A. While the Company recognizes that there have been a number of years with no
19 retirements, it states that when retirements do occur there is cost of removal and little
20 salvage recorded. It proposes a movement to a negative 5% net salvage.

21
22 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

23 A. No. The Company's proposed change is unwarranted. Therefore, I recommend
24 retention of the existing zero net salvage.

25

1 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

2 A. This is yet another account for which minimal investigation into the underlying
3 historical data would have indicated that no change from the existing zero level of net
4 salvage is warranted. While the majority of the investment in this account is reflected in
5 piping and tanks, those categories of investment only comprise 11% of the retirement
6 activity. Moreover, when tanks and piping were retired during 2001 and 2002, the
7 resulting net salvage was zero. (See OPC's First IR Nos. 31 and 32). In addition, the
8 years with the appreciable levels of negative net salvage are associated with the
9 retirement of liners and heating systems, which comprise only 18% of the investment in
10 the account, but 56% of the retirement activity during the last 9 years. A minimal
11 investigation into the underlying data would have clearly demonstrated to FPL that
12 retention of a zero level of net salvage is warranted until a more appropriate pattern
13 develops. This is especially true for an account with erratic patterns of retirement
14 activity.

15

16 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 343 – OTHER**
17 **PRODUCTION PRIME MOVERS – GENERAL?**

18 A. The Company proposes to change from the existing zero percent net salvage to a
19 negative 10%. (See OPC's First Depr. POD No. 12).

20

21 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

22 A. The Company's basis is that it reviewed historical data and identified "some large
23 retirements with high cost of removal and high salvage in some years." The Company
24 further noted that the overall historical database yielded a negative 24%, but that the last

1 5 years showed a negative 14%. From these observations, the Company concluded a
2 negative 10% is appropriate.

3
4 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

5 A. No. The items of information identified by the Company, and the recognition that the
6 historical annual pattern of net salvage has been inconsistent, do not support the
7 modification proposed by FPL. In fact, as discussed for Account 341, the Company has
8 incorporated as cost of removal costs associated with conversion to combine cycle
9 facilities. The significant level of retirement activity associated with the conversion of
10 facilities to combined cycle operations calls into question the credibility of the database
11 presented by the Company.

12
13 Another major consideration is that the Company's database includes two large *negative*
14 *gross salvage* amounts for 2002 and 2003. (See Exhibit CRC-1, page 462). In theory,
15 negative gross salvage amounts, which by definition mean the asset while in place is
16 worth less than zero, are impossible; yet, they cause the historical database to be
17 excessively negative and produce illogical results. In fact, if the two negative gross
18 salvage amounts are removed from the overall historic database, the negative 24%
19 historical figure referenced by the Company as part of the basis for its proposal drops to
20 only a negative 4%. These are the types of anomalies the Company should have
21 investigated, not ignored. I submit that negative gross salvage is truly an anomaly.
22 Therefore, there is no basis for modifying the existing zero level of net salvage at this
23 time. Only when net salvage patterns become more identifiable, and based on well
24 investigated activity to demonstrate that they are truly indicative of future expectations,
25 then, and only then, should the amount be modified.

1

2 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 344 -- OTHER**
3 **PRODUCTION GENERATORS?**

4 A. The Company proposes a dramatic change from the existing negative 1% net salvage.
5 The Company proposes a negative 100% net salvage. (See OPC's First Depr. POD No.
6 12).

7

8 **Q. WHAT IS THE COMPANY'S BASIS FOR SUCH A DRAMATIC CHANGE?**

9 A. The Company states that the historical data shows "some large retirements over the past
10 few years but extremely high removal costs." It goes on to state that the 5-year average
11 is a negative 136% and that the overall historical database is a negative 99%. Based on
12 these few items of information, the Company proposes a 100 fold increase in the level of
13 negative net salvage.

14

15 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

16 A. No. The Company's proposal is not adequately explained or supported. I recommend a
17 zero level of net salvage for the investment in this account.

18

19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. Again, this is an account where the vast majority of retirement activity and
21 corresponding cost of removal occurred during the period when the Company converted
22 existing generating facilities to combined cycle generating facilities. As previously
23 noted, the Company has inappropriately included as cost of removal costs associated
24 with the conversion to combined cycle operation. The Company has not demonstrated
25 the validity of its position; nor do I believe that under close scrutiny any such position

1 can be justified as being indicative of proper depreciation theory relating to interim
2 retirements.

3
4 In addition, the remaining retirement activity not associated with units that had just been
5 converted to combined cycle operation is associated with the "wedge system"
6 investment. "Wedge system"-related retirements during the period 2003 through 2006
7 comprised over 21% of all retirements, which is significantly disproportionate to the 4%
8 level of investment in "wedge systems". Thus, the Company's underlying data does not
9 support the Company's proposed significant increase to a negative 100% net salvage.
10 (See OPC's First Depr. POD No. 20).

11
12 Another consideration is the position the Company has taken on other accounts, for
13 which it has proposed a zero level of net salvage when a realistic pattern has not been
14 exhibited by the historical data. Along those lines, it must be noted that the most recent
15 historical year of data was a positive value. Prior years ranged from negative 129%, to a
16 negative 3%, to a negative 241%. In other word, during the period relied upon by the
17 Company to propose its dramatic change in net salvage there was no stable pattern
18 associated with net salvage. (See Exhibit CRC-1, page 465).

19
20 In addition, the scrap or resale value of investment in this account can reasonably be
21 expected to increase. This again is contrary to the Company's proposed negative 100%
22 net salvage. In summary, there is no reasonable basis to adopt the Company's dramatic
23 change to a negative 100% net salvage. Consistent with the Company's presentation for
24 other accounts where a positive net salvage might have been warranted absent a clear

1 and distinct pattern of historical activity, a zero net salvage level is the most appropriate
2 value at this time.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 345 – OTHER**
5 **PRODUCTION ACCESSORY ELECTRIC EQUIPMENT?**

6 A. The Company proposes a negative 10% net salvage. This represents a significant
7 change from the existing negative 1%. (See OPC's First Depr. POD No. 12).

8

9 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

10 A. The Company states that this account has been fairly stable over the years, but there has
11 been cost of removal recorded for each retirement and very little salvage. The Company
12 then identifies the overall historic level at a negative 7% and states that the last 5 years
13 yield a negative 14% net salvage. Therefore, it elected to propose a negative 10% net
14 salvage.

15

16 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

17 A. No. The Company's proposal is again inappropriate and unsubstantiated. I recommend
18 a zero level of net salvage.

19

20 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

21 A. First, the retirement activity during the last 5 years, which helps form the basis for the
22 Company's proposal, represents less than 4/10 of 1% of the current investment in the
23 account. In other words, the retirement activity is not robust. Next, the retirement
24 activity during the last 5 years is severely skewed to the Company's investment in
25 battery equipment, battery chargers, and batteries. In fact, 79% of the retirement activity

1 during the last 5 years is associated with these subcomponents to Account 345.
2 However, the level of investment in batteries, other station batteries and battery chargers
3 is less than 5% of the investment in the account. (See OPC's First Depr. Interrogatories
4 No. 31 and 32). In other words, even a cursory investigation into the underlying data by
5 the Company should have caused it to modify its proposal.

6
7 This is another account for which the Company chose to ignore the erratic historical
8 pattern and rely on the average value of the past 5 years and the overall historical value.
9 However, while the most recent year reflected a negative 25%, the second most recent
10 year reflected a positive 21%, and then the third most recent year swung back to a
11 negative 3%. Had the Company followed its practice for other accounts, for which it
12 relied on a zero level due to concerns relating to "pattern," then the Company would
13 have also proposed a zero level of net salvage for this account. Given the relatively
14 small level of retirement activity in comparison to the plant investment, the significant
15 skewing of the data to battery related investment, as well as substantial levels of
16 investment in categories that are more indicative of terminal retirement activity rather
17 than interim retirement activity, my recommendation of a zero level net salvage is more
18 appropriate.

19
20 **Q. ARE THE ADJUSTMENTS NOTED ABOVE THE ONLY ADJUSTMENTS TO**
21 **INTERIM NET SALVAGE?**

22 **A.** No. The interactive relationship between the level of interim retirements and the
23 adjusted interim net salvage requires that the adjusted interim net salvage also be
24 adjusted, even though I have recommended no adjustment to the overall production net
25 salvage value for an account.

1

2

E. Terminal Net Salvage

3

Q. WHAT ISSUE DO YOU ADDRESS IN THIS PORTION OF YOUR TESTIMONY?

4

5

A. This portion of my testimony will address the Company's dismantlement study for its various generating facilities.

6

7

8

Q. HAVE YOU REVIEWED THE COMPANY'S DISMANTLEMENT STUDY?

9

A. Yes. I have reviewed the study, as well as the information provided by the Company in support of such study.

10

11

12

Q. DOES THE COMPANY'S PRESENTATION JUSTIFY ITS REQUEST?

13

A. No. There are two separate levels from which to review the Company's request. The first level of review relates to how the Company's request compares to the various options available to the Company associated with final retirement of the generating facilities under utility regulation. The second level of review for the Company's presentation occurs once the option associated with the final retirement from utility operation is selected. The review addresses the quantification of the cost of removal within the retirement process selected.

18

19

20

21

Q. WHAT OPTIONS ASSOCIATED WITH THE RETIREMENT OF A GENERATING FACILITY ARE AVAILABLE TO A UTILITY?

22

23

A. The range of options available to a utility range from total dismantlement and site restoration to the sale of the facility. The cost to the utility and thus the cost to the

24

1 customers varies dramatically, depending on the option selected. For example, if any
2 form of sale of the facility occurs, substantial levels of gross salvage can be expected to
3 be obtained and positive net salvage is a realistic result. Positive net salvage means that
4 the Company needs to recover less than 100% of its costs through depreciation, as the
5 balance of the cost is obtained through sale proceeds. On the other end of the spectrum
6 is the full dismantlement and site restoration approach. This approach normally results
7 in cost of removal exceeding gross salvage, and thus an overall negative net salvage is
8 required.

9
10 Basically, the options available to the Company range from the worst case scenario of
11 total dismantlement and site restoration, to the best case scenario corresponding to the
12 sale of facility at an amount significantly above net book value. Since ratemaking is an
13 attempt to charge average expected costs, some weighting of future probabilities
14 associated with each potential option should be recognized.

15
16 **Q. HAS THE COMPANY RECOGNIZED ANY WEIGHTING OF DIFFERENT**
17 **OPTIONS ASSOCIATED WITH THE RETIREMENT COSTS FOR ITS**
18 **GENERATING FACILITIES?**

19 A. No. The Company has assumed a 100% probability of the worst case scenario, that
20 being full demolition and site restoration. This assumption by the Company is
21 unreasonable and inappropriate for ratemaking purposes.

22
23 **Q. ARE YOU AWARE OF GENERATING FACILITIES THAT HAVE BEEN SOLD**
24 **RATHER THAN DEMOLISHED AT THE TIME THEY WERE RETIRED**
25 **FROM UTILITY OPERATIONS?**

1 A. Yes. Approximately 1,000 generating units have sold in the United States since the late
2 1990s. The vast majority of such sales are associated with areas that became
3 deregulated for electric generation purposes. In those instances even very old, small,
4 and inefficient generating facilities sold at prices substantially above net book value.

5
6 **Q. IS FP&L SUBJECT TO ELECTRIC DEREGULATION?**

7 A. No, not at this time. However, the possibility always exists that the situation could
8 occur in the future.

9
10 **Q. ABSENT DEREGULATION, DO ELECTRIC UTILITIES EVER SELL**
11 **GENERATING FACILITIES?**

12 A. Yes. While such situations are far less frequent, there have been sales of generating
13 facilities that were still in operation at price levels above net book value. Thus, the
14 Company's total exclusion of any possible approach to cost recovery other than
15 assuming full facility dismantlement and site restoration is unreasonable and results in
16 excessive costs to customers.

17
18 **Q. DID THE COMPANY PROPOSE ANY LESSER COST FORM OF**
19 **DISMANTLEMENT?**

20 A. No. Even though the Company is not legally required to dismantle and restore the site to
21 a greenfield condition, it has elected to charge customers for that scenario.

22
23 **Q. IS THIS APPROACH REASONABLE?**

24 A. No. First, generating sites and facilities are valuable resources. The plant normally will
25 have access to water, adequate zoning for industrial usage, if applicable, and most

1 important, access to transmission corridors necessary to connect to the transmission grid.
2 In fact, the Company is reusing many of its existing generating plant sites for new
3 generation. The need to charge customers for returning such sites to a greenfield status
4 is unrealistic and quite excessive.

5
6 **Q. HOW WOULD YOU CHARACTERIZE THE COMPANY'S REQUEST AS IT**
7 **PERTAINS TO THE FIRST LEVEL OF REVIEW YOU HAVE ADDRESSED?**

8 A. The Company's demolition approach must be categorized as a worst case scenario.
9 Charges to customers should not be set on presentations associated with worst case
10 scenario revenue requirements, especially when other, less expensive options are more
11 realistic.

12
13 **Q. PLEASE TURN TO THE SECOND LEVEL OF REVIEW ASSOCIATED WITH**
14 **DEMOLITION COST ESTIMATES.**

15 A. The second level of review comes into play after the approach to generation retirement
16 has been established. As previously noted, the Company has proposed a worst case site
17 demolition and greenfielding of the location. Once this decision is made, the second
18 level of review addresses how such activities are to be performed.

19
20 **Q. WHAT APPROACH HAS THE COMPANY PROPOSED?**

21 A. The Company's approach is in effect what the industry identifies as "reverse
22 construction." The Company's approach assumes that it will take down the generating
23 facility piece by piece, then break up foundations and remove underground piping.

24
25 **Q. WHY IS THIS SIGNIFICANT?**

1 A. The approach proposed by the Company is again the worst case scenario for the
2 dismantlement option. A good example to depict what is at issue is the dismantlement
3 of a tall smoke stack at a power plant. In a recent case in Oklahoma, the demolition cost
4 estimator projected a cost of \$2 million to demolish a 600 foot tall smoke stack. The
5 estimate was predicated on a process that began at the top of the smoke stack and
6 knocked off sections of the smoke stack, tumbling the debris into the stack. This process
7 was to continue from the 600 foot elevation down to the base. Once the rubble had been
8 accumulated in a large cone at the bottom of the base, the utility would remove it and
9 dispose of it. This approach is very costly in comparison to the available alternative of
10 demolition, which involves exploding the smoke stack base and allowing the stack to
11 topple and break apart along a predefined "fall line". Once the stack has been broken
12 apart by gravity as it falls and smashes to the ground, the rubble can be gathered and
13 disposed of more easily-and more cheaply.

14
15 **Q. ARE YOU AWARE OF SIGNIFICANT COST DIFFERENCES IN THE TWO**
16 **DIFFERENT TYPES OF APPROACHES?**

17 A. Yes. In another recent case in Nevada, another major engineering estimator projected
18 the cost of performing a reverse construction approach for generating facilities. Shortly
19 thereafter, Nevada Power Company actually entered into a contract with a demolition
20 firm to demolish the plant. The contractor employed explosive demolition and
21 controlled toppling of the facilities rather than the reverse construction approach. The
22 cost differential between the engineering firm's cost estimate based on a reverse
23 construction approach and the actual demolition based on explosive charges and
24 toppling the facility to the ground was about 30 cents on the dollar. In other words, the

1 estimate for reverse construction approach was approximately 3 times greater than the
2 cost that the utility incurred to employ the explosive demolition method.

3
4 **Q. TURNING TO THE COMPANY'S COST ESTIMATES, CAN YOU PROVIDE A**
5 **BRIEF OVERVIEW OF THE CRITICAL COMPONENTS OF A DEMOLITION**
6 **STUDY?**

7 A. Yes. To make a "reverse construction" demolition cost estimate, it is necessary to have
8 three key items of information. Those three key items are (1) the quantity of material to
9 be removed by type of materials (2) the labor rates and corresponding crew sizes and
10 mix (i.e., how many laborers, welders, supervisors, etc.), and (3) the productivity factors
11 or the rate at which the labor crew can perform activities.

12
13 **Q. HAVE YOU REVIEWED NUMEROUS DEMOLITION COST ESTIMATES?**

14 A. Yes.

15
16 **Q. WHAT IS THE GENERAL PROBLEM YOU FIND WITH SUCH ESTIMATES?**

17 A. Of the three main categories of variables, the quantity of material to be removed is
18 generally not a major issue. However, the labor costs and productivity factors are
19 normally major issues.

20
21 **Q. IN THIS CASE WAS THE COMPANY ABLE TO PROVIDE THE**
22 **UNDERLYING PRODUCTIVITY FACTORS?**

23 A. No. The Company relied on very old and unsubstantiated crew mix and associated
24 productivity factors that had been reviewed and deemed appropriate by NUS
25 Corporation. (See OPC's First Depr. Interrogatories No. 11). Thus, the Company does

1 not have an adequate underlying basis for the productivity factors that it employs in its
2 demolition cost estimates.

3
4 **Q. IS THIS REASONABLE?**

5 A. No. In fact, I have testified regarding a NUS demolition cost estimate corresponding to
6 the general time frame when the Company's factors were developed.

7
8 **Q. DO YOU RECALL ANY PROBLEMS WITH NUS PRODUCTIVITY FACTORS
9 AND COSTS FOR ITS DEMOLITION ESTIMATES?**

10 A. Yes. In a Southern California Edison Company ("SCE") case before the FERC, an NUS
11 demolition cost estimate was the subject of litigation. The FERC found that the NUS-
12 based study produced excessive costs. It denied SCE's requested revenue requirements.
13 One of the examples that helped point out the excessive nature of the NUS study at that
14 time was its estimate of \$10,000 (in 1980 dollars) to remove a flag pole at a power plant.
15 Thus, any claimed reliance on productivity factors, crew sizes or any other information
16 that cannot be provided and tested for reasonableness as to the basis for demolition cost
17 estimates today should be rejected.

18
19 **Q. HAS THE COMPANY ALSO INCLUDED A CONTINGENCY FACTOR ON
20 TOP OF WHAT APPEARS TO BE A HIGH SIDE COST ESTIMATE FOR
21 DEMOLISHING POWER PLANTS?**

22 A. Yes. The Company states that the "contingency factor of 16% was calculated using a
23 weighting of assigned estimates on a side by side basis." (See Exhibit KO-8, page 5).

24

1 **Q. IS THE COMPANY'S USE OF A 16% CONTIGENCY FACTOR REASONABLE**
2 **AND NECESSARY?**

3 A. No. The 16% contingency factor is based on an Atomic Industrial Forum study
4 developed in the late 1970s. Those contingency factors were predicated on estimates
5 that did not reflect the activity of full demolition of a power plant. The factors
6 corresponded to the very limited experience of utilities associated with replacement of
7 steam generators at nuclear power plants. In other words, the contingency factors were
8 associated with estimates of *repair* work, not demolition work. In addition, the
9 publication relied upon by the Company notes that before contingency factors can be
10 realistically assessed, one has to know whether the underlying cost estimates for the
11 activities performed are high side or low side cost estimates. In other words, if an
12 estimate is based on a low side cost estimates --one that assumes very efficient
13 operation, no weather related delays, etc. -- then a positive contingency most likely is
14 warranted. However, if the cost estimate is based on a "reverse construction" approach
15 that "involves pre-cutting key members, lowering them carefully to the ground, where
16 they can be cut for sale or scrap," then a *negative* contingency may be warranted.

17

18 **Q. WHAT TYPE OF APPROACH HAS THE COMPANY PROPOSED?**

19 A. As previously noted, the Company has proposed a very high side cost estimate, one that
20 reflects the pre-cutting of members and lowering them "carefully to the ground." This is
21 precisely the type of situation that I referenced earlier when discussing the situation in
22 Nevada. The cost to pre-cut members, beams, piping etc., high above the ground and
23 carefully lowering them, rather than blowing the support beams and toppling the facility,
24 produces an excessively high cost estimate. Therefore, to the extent any contingency
25 should be considered in this case, it should be a negative contingency. In fact, under the

1 right circumstances demolition contractors will actually pay a positive value for the right
2 to demolish a power plant.

3
4 **Q. ARE YOU SAYING THAT IT IS POSSIBLE THAT, EVEN WITHOUT**
5 **SELLING THE GENERATING FACILITIES AS ONGOING OPERATING**
6 **STATIONS, THE COMPANY COULD POSSIBLY OBTAIN POSITIVE**
7 **SALVAGE?**

8 A. Yes. In fact, recently the Fort Pierce Florida Utilities Authority employed a contractor
9 to demolish the King generating plant. The demolition contractor actually paid Fort
10 Pierce approximately \$1 million for the right to demolish the plant and sell the resulting
11 scrap.

12
13 **Q. CAN SUCH SITUATIONS REASONABLY BE ANTICIPATED TO OCCUR IN**
14 **ALL INSTANCES?**

15 A. No, not necessarily. At the time of the Fort Pierce transaction, scrap metal prices had
16 reached their all time high. Since that time, prices have fallen noticeably. However, it is
17 reasonable to expect that the economies of China and India will again begin to grow at
18 substantial rates. At that time the scrap metal market will experience higher prices. The
19 key point to be taken from this is that the theory that the Company operates under is
20 neither accurate nor economically efficient. Customers should not be subject to worst
21 case scenarios and inappropriate procedures, approaches and cost estimates.

22
23 **Q. GIVEN THE VARIOUS PROBLEMS YOU HAVE IDENTIFIED, WHAT DO**
24 **YOU RECOMMEND?**

1 A. Given the significant level of adjustments that I recommending elsewhere in the area of
2 depreciation, I have elected not to propose an additional adjustment to the Company's
3 requested level of demolition cost revenue requirements. However, I do recommend
4 that the Commission order the Company to perform detailed and well documented
5 analyses of the different approaches and probabilities of end of life termination for
6 generating facilities. I further recommend that the Commission also order the Company
7 to develop and fully justify the most cost efficient manner for any actual demolition cost
8 approach that it determines to be appropriate. This study, with all analyses, work
9 papers, etc., should be provided to the Commission no later than the Company's next
10 depreciation or rate proceeding. However, if the Commission finds that it is appropriate
11 to modify or adjust the Company's request in this proceeding, I would recommend that it
12 reduce the Company's requested costs by 60%.

13

14 **Q. WHAT IS YOUR BASIS FOR A 60% REDUCTION?**

15 A. The 60% reduction is based on the approximate relationship experienced by Nevada
16 Power Company between the cost estimate approach to demolishing power plants and
17 what an actual demolition contractor charged to tear down the facilities. The actual
18 differential was greater than 60%, so the 60% estimate is conservative. Moreover, when
19 one recognizes the likelihood of reusing generating sites for future generation, and the
20 fact that substantial costs are included in the Company's estimate for site restoration, a
21 reduction of only 60% of the Company's cost estimate would be very conservative in
22 favor of the Company.

23

24

25

1 **X. MASS LIFE**

2
3 **A. Introduction**

4 **Q. WHAT IS THE PURPOSE OF THE LIFE PORTION OF A DEPRECIATION**
5 **ANALYSIS?**

6 A. The purpose of a life analysis is to determine the “average service life” or ASL, the
7 dispersion pattern and remaining life for each account or subaccount. This information
8 is necessary to properly perform the depreciation calculation. A longer ASL results in a
9 longer remaining life and therefore a lower depreciation expense. Alternatively, a shorter
10 ASL will reduce the remaining life and increase depreciation expense. The dispersion
11 pattern is important, as it is critical in the overall selection process of the best fitting
12 results. The same ASL with different Iowa Survivor curves also results in different
13 remaining lives, due to the remaining expected pattern of retirements.

14
15 **Q. WHAT ARE THE MAIN TOOLS UTILIZED IN PERFORMING LIFE**
16 **ANALYSIS?**

17 A. Life analysis is normally performed through the use of actuarial or semi-actuarial
18 analyses. Actuarial analyses rely on aged data. In other words, when an item of
19 property is retired, the age at retirement is known. This is the type of analysis performed
20 by insurance companies when developing life tables in order to establish premiums.
21 Semi-actuarial analyses are performed in instances in which the age of retired plant is
22 not known.

Revised

1 **Q. PLEASE PROVIDE MORE INFORMATION REGARDING HOW A**
2 **DEPRECIATION ANALYST PERFORMS SUCH A LIFE ANALYSIS THAT RELIES**
3 **ON AN ACTUARIAL APPROACH.**

4
5 A. Aged data is gathered and analyzed. Aged data means that when an asset retires in 2007 we
6 know that it originally went in service in 1967, and was 40 years old at the time of retirement.
7 When all the aged data in a group is statistically analyzed by actuarial techniques, a resulting
8 Observed Life Table or OLT is developed that depicts the rate of retirement over the life of the
9 group. The OLT starts at 100% surviving and declines from there as each year of age is
10 obtained and retirements occur. Naturally, not all units retire at once; instead, the retirement
11 dates are dispersed through time, creating a "dispersion pattern." In order to permit testing of
12 the results some standard or index must be used. The principal tool that a depreciation analyst
13 uses for this aspect of the study is a set of "survivor curves." The industry standard and most
14 extensively used curves are called the Iowa Survivor Curves. The name is derived from the fact
15 that they were developed at Iowa State College in the 1930s.

16
17

18 Most often, and as is the case for many of FPL accounts, the database analyzed does not yield a
19 complete OLT, one that fully declines to 0% surviving. This means that the data set will
20 produce an incomplete OLT or a "stub curve." Also, the limited data base may include atypical
21 or abnormal events not reasonably anticipated to occur again during the remaining life.

22
23 The Iowa Survivor Curves are based on empirical studies of retirement "behavior" of physical
24 property. They are designed to predict the retirement patterns of the property under study based
25 on detailed past observations. The Iowa Survivor Curves make the calculation of the average
26 service life far more manageable and comparable; instead of making and weighting a myriad of

1 individual calculations that include each data point in the universe, the analyst measures the area
2 below the curve and uses an established equation or standard curve to “solve” for the average
3 service life. And, even if the data set is incomplete—which is often the case —by properly
4 choosing a closely fitting curve to the known data, the analyst can better predict the behavior of
5 the entire universe and calculate the average service life with reasonable statistical accuracy, if a
6 meaningful “stub curve” exists. The results of any estimation is more reliable if 70% of an OLT
7 is known and only 30% must be assumed, than if only 10% of the OLT is know and 90% must
8 be assumed.

9
10 Not surprisingly, choosing the survivor curve that provides the best fit to the data is critical to
11 the accuracy of the analysis. When fitting the curves to the OLT the analyst must bear in mind
12 that some data points—those that occur on the points of the graph that reflect the most
13 significant level of plant exposed to retirement events-- are more important to the determination
14 of the ASL and dispersion pattern than others. Further, the analyst cannot use the curves in
15 isolation of other considerations. The analyst must incorporate such things as knowledge of the
16 nature of the property being studied, an understanding of the causes of unusual events,
17 recognition of changes or trends, and judgment when using the curves. Also, the nature of
18 survivor curves limits their usefulness. For instance, they are best suited to studies of
19 homogeneous items that, because of their physical similarity and common exposure to
20 retirement forces, can be expected to share common retirement characteristics. (By analogy:
21 When an insurance actuary performs a mortality/longevity study for life insurance purposes, the
22 actuary does not combine people and horses in the universe of data.) It is for that reason that I
23 criticized FPL’s analyst for inappropriately applying the Iowa Survivor Curves to interim
24 retirements for generation plant. The items of generation plant involved in interim retirements
25 frequently are far from homogeneous.

1

2 **Q. HAVE YOU REVIEWED THE COMPANY'S LIFE ANALYSES?**

3 A. Yes, I have reviewed the Company's life analyses. The main problem with the analyses
4 is that Mr. Clarke proposes ASLs with corresponding Iowa Survivor curves that are not
5 the best fitting results for the actuarial analyses, even when the final proposal is based on
6 actuarial results. Mr. Clarke's selections for most accounts reflect a bias toward
7 artificially short ASLs. It is unreasonable and inappropriate to ignore the best fitting life
8 analyses without detailed and credible explanations. Mr. Clarke fails to provide support
9 for his questionable practice.

10

11 **Q. BASED ON YOUR REVIEW OF THE COMPANY'S LIFE ANALYSES, ARE**
12 **YOU RECOMMENDING ADJUSTMENTS?**

13 A. Yes. I recommend adjustments to 18 accounts or subaccounts. The recommendations,
14 as well as the Company's proposals for each of the accounts where a change is
15 recommended, are set forth on Exhibit_(JP-5).

16

17 The combined impact of the various adjustments I recommend result in a standalone
18 impact of a \$49,408,852 reduction to annual depreciation expense, based on plant as of
19 December 31, 2009.

20

21 **Q. WHAT IS THE RESULT OR OUTPUT OF AN ACTUARIAL ANALYSIS?**

1 A. The output of an actuarial analysis is called an observed life table ("OLT"). This OLT
2 output includes a graphical depiction of the remaining surviving level at each
3 progressive age of the plant. In other words, all plant additions start at "100%
4 surviving" when first placed into service. As plant ages and item of plant begin to retire,
5 the initial 100% survivor level decreases until it reaches zero, if it has completed a full
6 life cycle.

7

8 **Q. DO MOST OF THE COMPANY'S OBSERVED LIFE TABLES REFLECT A**
9 **COMPLETE LIFE CYCLE?**

10 A. No. Many of the OLTs decline to 20% or 30% surviving, while others decline to only
11 40%, 50%, or higher values.

12

13 **Q. HOW ARE THE ULTIMATE LIFE-CURVE SELECTIONS MADE?**

14 A. The best fitting life-curve selections are made by visually matching the OLT to
15 standardized Iowa Survivor Curves.

16

17 **Q. IN THE VISUAL MATCH PROCESS, ARE ALL POINTS OF COMPARISON**
18 **EQUAL?**

19 A. No. Many of the points of comparison for an OLT may reflect dollar levels of exposures
20 that differ by *a factor of 10,000 or more.*

1

2 **Q. IN THE CURVE FITTING PROCESS, IS IT MORE IMPORTANT TO MATCH**
3 **THE POINTS ON THE OLT THAT REFLECT LARGER DOLLAR LEVELS OF**
4 **EXPOSURES THAN THOSE POINTS WHERE THE DOLLAR LEVEL IS**
5 **MUCH LOWER?**

6 A. Yes. It would be foolish to accept the results of a standardized life-curve that better fits
7 the results of the end or "tail" of the OLT rather than a life-curve combination that is a
8 better fit near the "head" or top of the OLT. While it is desirable to have close fitting
9 results all along the OLT, this unfortunately does not occur for many accounts.
10 Therefore, recognition of the dollar level of exposures at different points of the OLT is
11 critical.

12

13 This is significant, since as each new year of plant activity transpires, the OLT can and
14 usually does change. However, the future changes will not occur equally to all portions
15 of the OLT. In fact, it is highly unlikely, given the level of exposures near the "head" or
16 top of the OLT, that the few years between depreciation studies would result in any
17 appreciable movement of that portion of the OLT. The same cannot be said of the "tail"
18 portion of the OLT, and potentially even the mid portion of the curve. If larger
19 retirements transpire in older age intervals, or more dollars of exposures filter further
20 down in the OLT without corresponding retirements, the mid portion or tail of the OLT
21 can move significantly, based on only a few years of additional data. That is precisely
22 why matching the "head" of the observed life table is more important than matching the
23 "tail."

1

2 **Q. DID MR. CLARKE FOLLOW THIS PRACTICE IN HIS CURVE FITTING**
3 **PROCESS?**

4 A. No, not to the extent he should have. As will be discussed in the Account Specific
5 portion of my testimony, Mr. Clarke did not perform appropriate curve fitting practices.
6 As a result, he understated the appropriate ASL or chosen an Iowa Survivor Curve that
7 is not the best fit to the OLT.

8

9 **B. Account Specific**

10 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 350.2 –**
11 **TRANSMISSION EASEMENTS?**

12 A. The Company proposes to retain the current authorized 50-year ASL and S4 Iowa
13 Survivor curve. (See Exhibit CRC-1, page 481).

14

15 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

16 A. The Company states that the results of its life analyses were "poor," as there were very
17 few retirements. The Company then goes on to state that industry data "suggests" a
18 service life between 40 and 60 years. From these items of information it concludes that
19 the current curve and ASL are consistent with industry values.

20

21 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

22 A. No. Easements for new transmission lines are difficult to obtain. The "not in my back
23 yard" ("NIMB") syndrome is stronger than ever in most locations. Therefore, existing

1 utilities will continue to rely on existing transmission easements in the future, absent
2 unusual circumstances. Moreover, the Company's proposal has a shorter maximum life
3 span for easements than it does for some of the equipment that resides upon the
4 easements. This is illogical on its face.

5
6 **Q. WHAT DO YOU RECOMMEND?**

7 A. I recommend a 95 S4 life-curve combination as a conservative estimate of the mortality
8 characteristics of easements. I base my recommendation on the conservative approach
9 of establishing the minimum ASL for easements equal to the maximum life cycle of the
10 equipment that resides upon it. In other words, if the maximum life for Overhead
11 Conductors and Devices (Account 356) that are located on such easements is over 95
12 years, then logic dictates that the easement must be in place for that period of time at a
13 minimum. This is a very conservative assumption, given that the Company will be
14 replacing or upgrading transmission investment as time passes, while still utilizing the
15 same easements that it currently has in place, just as it has done historically. (See OPC's
16 First Depr. Interrogatories No. 48). In fact, the Company admits that its policy is "to
17 obtain perpetual rights easements" where available. (See OPC's First Depr.
18 Interrogatories No. 46). Indeed, the Company also admits that it has no plans to retire
19 any easements. (See OPC's First Depr. Interrogatories No. 48). With no planned
20 retirements, the Company will begin exceeding the maximum life for easements that
21 correspond to its proposed life-curve combination in the next several years. (OPC's
22 First Depr. Interrogatories No. 47).

23
24 Even Mr. Clarke recognized longer service lives when he testified in the recent past. In
25 fact, in his most recent testimony in Nevada, he recommended a 60-year ASL with an

1 R5 Iowa Survivor Curve. (PUCN Docket No. 06-11023 at Statement A). In addition,
2 other utilities recommend longer lives. Oncor Delivery Company (“Oncor”), the largest
3 utility in Texas, proposed a 70-year ASL with a R3 dispersion in its current rate case.
4 The reality is that the industry historically has established artificially short ASLs for this
5 account, and given the normally low dollar level of investment generally associated with
6 this account for many utilities such proposals have received very limited attention.
7 Moreover, while the 95-year ASL that I recommend appears to be high from an industry
8 standpoint, the reason is as explained above and correlates to identifiable, Company-
9 specific facts.

10
11 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

12 A. The standalone impact of my recommendation results in a \$2,437,236 reduction to
13 annual depreciation expense.

14
15 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353 –**
16 **TRANSMISSION STATION EQUIPMENT?**

17 A. The Company proposed a 38 R1.5 life-curve combination. (See Exhibit CRC-1, page
18 495).

19
20 **Q. WHAT IS THE COMPANY’S BASIS FOR ITS PROPOSAL?**

21 A. The Company performed an actuarial analysis and asserts that its interpretation of the
22 results shows a 38 to 39-year ASL. The Company then claims that the 38 to 39-year life
23 estimate was “typical for this account in the industry.” It concludes by stating that the
24 curve types for this account are low mode “R” type Iowa Survivor Curves, but failed to
25 provide any basis for that assertion.

1

2 **Q. DO YOU AGREE WITH THE COMPANY PROPOSAL?**

3 A. No. After the review of the actuarial analyses and industry data it is clear that the
4 Company's proposal is inaccurate and inadequate. Therefore, I recommend a 43-year
5 ASL with a corresponding L1 Iowa Survivor Curve.

6

7 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

8 A. The Company has misinterpreted the results of its actuarial analysis. On an initial
9 review, the Company's interpretation of the actuarial analysis might appear to the lay
10 person be a good statistical fit. However, the Company's interpretation is erroneous, in
11 that it places greater significance on the "tail" end of the survivor curve where the
12 exposures are but a small fraction of the exposures that occur near the top or "head" of
13 the survivor curve. This misplaced emphasis represents a lack of understanding of the
14 proper matching process to be employed when interpreting the results of actuarial
15 analyses. As shown on Exhibit__(JP-6) page 1 of 15, my recommended 43 L1 life-
16 curve combination is a better fitting curve match through the first 16 ½ years of age and
17 is a comparable curve fit to the Company's proposal from 16½ years through
18 approximately 23 ½ years of age. Only at that point does the Company's proposal
19 become a better fitting curve fit through approximately 36 years of age. What is
20 significant regarding this comparison is that the top or "head" portion of the curve is
21 based on plant exposures of approximately \$1.3 billion. (See Exhibit CRC-1, page 498).
22 That level of exposures drops to approximately \$500 million or 40% as of 16 ½ years of
23 age. The Company's proposed curve fit does not begin to represent a closer fit to the
24 historical data until 23 ½ years of age, where the exposures are approximately \$271
25 million, or only 21% of the original exposures.

1

2 **Q. WHAT SPECIFIC OTHER FACTORS SUPPORT YOUR**
3 **RECOMMENDATION?**

4 A. The Company recognizes the importance of two other factors for the life-curve selection
5 process in this account: (1) industry information for confirmational purposes, and (2)
6 trends in the data. With respect to industry information that Mr. Clarke relied upon, it is
7 clear that his statement that a 38 or 39-year life is typical for the account in the industry
8 is *incorrect*. A review of the industry comparative database relied upon by Mr. Clarke
9 clearly demonstrates that the 38 or 39-year ASL would be at the *low end of the industry*.
10 (See OPCs First Depr. POD No. 12, 1 of 5). In fact, based on the industry comparative
11 data provided by Mr. Clarke, the typical ASL for investment in this account would more
12 appropriately be set at 45 or 50 years, rather than the 38 or 39 years claimed by the
13 Company.

14

15 In addition, the Company claimed to recognize the significance of trends, but did not
16 follow through. Even though the industry and the Company have experienced
17 lengthening of ASLs for investment over time, Mr. Clarke has limited the increase in
18 ASL to 2 years, a movement from the existing 36-year ASL to a 38-year ASL. It is
19 worth noting that the existing 36-year ASL is *lower than all other utility companies*
20 reflected in the Company's industry database, with one exception. In fact, Mr. Clarke
21 recently testified in a case to a 50-year ASL for the investment in this account. (See
22 PUCN Docket No. 06-11023).

23

24 **Q. DID MR. CLARKE ALSO FAIL TO PROPERLY RECOGNIZE THE MIX OF**
25 **INVESTMENT IN THE ACCOUNT?**

1 A. Yes. Normally, a large component of investment in this account is related to
2 transformers, structures, and foundations. If transformers have not been retired in
3 proportion to their investment level, then one would expect a shorter ASL to be derived
4 from actuarial analyses than would be the situation if transformers, structures, and
5 foundations were proportionately represented in the historical retirement activity. In
6 other words, if circuit breakers, switches and lightning arrestors represent a
7 disproportionate amount of the historical retirement activity, they can skew the results
8 for the account and provide a false indication. The Company's investment in this
9 account for transformers structures and foundations is 33%; the relative level of
10 retirements provided by the Company was 15%. (See OPC's First Depr. Interrogatories
11 Nos. 31 and 32). Mr. Clarke's general knowledge of the investment in Account 353
12 should have caused him to recognize that the life indications he is proposing are out of
13 line with the overall type of investment reflected in this account.

14

15 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

16 A. The standalone impact of my recommendation results in a reduction of \$6,128,005 to
17 annual depreciation expense.

18

19 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353.1 -**
20 **TRANSMISSION STATION EQUIPMENT - STEP-UP TRANSFORMERS?**

21 A. The Company has segregated its investment in transmission station equipment into an
22 additional category to reflect only step-up transformers. The investment in this sub
23 category dates back to 1958. (See Exhibit CRC-1, page 504). For this subaccount the
24 Company proposes a 33 R2 life-curve combination. (See Exhibit CRC-1, page 504).

25

1 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

2 A. The Company performed actuarial analyses on its step-up transformer investment, but
3 admitted that the "retirement activity is relatively minor." (See Exhibit CRC-1, page
4 504). Based on the activity associated with the relatively minor level of retirements, Mr.
5 Clarke concluded that "this account showed a life similar to the one currently approved
6 of 35 years. The study shows that a 33-year was a good average service life for this
7 account." (See Exhibit CRC-1, page 504).

8

9 **Q. DO YOU AGREE WITH THE COMPANY'S ANALYSES?**

10 A. No. The Company's analyses are flawed and produce unrealistic results. Therefore, I
11 recommend a conservative value of a 44 S0.5 life-curve combination.

12

13 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

14 A. First, as shown on Exhibit __ (JP-6) page 2 of 15, the Company's analysis again attempts
15 to force the shape of the survivor curve to capture data points that are insignificant or
16 less significant, while failing to properly treat or recognize the more meaningful portion
17 of the OLT. In particular, the Company's selection attempts to match exposures that are
18 approximately 1/30th of the level of exposures at the "head" of the curve, which results
19 in the Company placing less significance in its curve fitting process on the more
20 important portions of the OLT. Even if one were to rely solely on the data as presented
21 by the Company, without consideration of the type of asset involved for life
22 interpretation purposes, the ASL would still need to be increased to 38 years from the
23 Company's proposed 33-year level in order to obtain a better fitting relationship.

24

1 Recognition of the type of asset at issue is especially important for this subaccount. The
2 type of asset involved is transformers. It is illogical and inconsistent with the historical
3 practices for the industry to assume an ASL for step-up transformers shorter than the
4 realistic life expectation for most of the Company's generation to which they are directly
5 tied. This simply has not been the case historically in the industry.

6
7 **Q. IS THERE A PARTICULAR HISTORICAL EVENT THAT INAPPROPRIATELY**
8 **SKEDS THE ACUTUARIAL RESULTS?**

9 A. Yes. A review of the Company's historical data indicates a very unusual or atypical
10 event. As set forth in Exhibit CRC-1, page 506, the Company identifies a \$3.5 million
11 retirement at *age 0*. In other words, the Company installed a significant item of
12 investment that failed immediately and had to be retired. While such a situation is not
13 impossible, it is *not* indicative of the remaining investment in this sub account. A family
14 of Iowa Survivor Curves exists that represents patterns associated with infant mortality
15 characteristics as the Company has recognized in this case. However, neither the
16 Company's consultant nor the rest of the utility industry normally relies on the infant
17 mortality-related family of survivor curves, because they are not considered to be
18 representative of appropriate mortality characteristics for utility-related property. In
19 other words, the Company failed to normalize the data for an obvious and significant
20 outlier.

21
22 **Q. DOES THE COMPANY BELIEVE THAT THIS INFANT MORTALITY**
23 **IMPACTED ITS PROPOSAL?**

24 A. Surprisingly, no. (See OPC's First Depr. Interrogatories No. 54).
25

1 **Q. DOES YOUR RECOMMENDATION PROPERLY RECOGNIZE THE**
2 **OUTLIER RETIREMENT?**

3 A. Yes. I recalculated the Company's OLT to remove the \$3.5 million retirement at age
4 zero. That infant mortality represents approximately 25% of the entire retirement
5 activity for this sub account. Since the purpose of a depreciation study is to estimate the
6 life characteristics of the surviving plant investment, the incorporation of an infant
7 mortality that represents approximately 25% of all retirement activity yields illogical and
8 inappropriate results. As shown on Exhibit__(JP-6) page 3 of 15, a 44 S0.5 life-curve
9 combination is a far superior fit to the corrected OLT than is the Company's proposal
10 through the most meaningful portion of the OLT.

11

12 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

13 A. The standalone impact of my recommendation results in a reduction of \$2,281,178 to
14 annual depreciation expense.

15

16 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 354 -**
17 **TRANSMISSION TOWERS AND FIXTURES?**

18 A. The Company initially proposed to move to a 40-year R5 life-curve combination. (See
19 Exhibit CRC-1, page 510). However, in response to an interrogatory, it admitted an
20 error and modified its proposal to reflect a 45 R5 life-curve combination. (See OPC's
21 First Depr. Interrogatories No. 55). FPL's modification would reduce depreciation
22 expense by \$1.5 million.

23

24 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

1 A. The Company admits that this account exhibits very few retirements, which caused the
2 results of the actuarial analyses to be considered "poor". (See Exhibit CRC-1, page
3 510). It then states that industry data "suggests" a 40 to 70-year life and a high mode
4 curve. The Company further states that towers are replaced due to foundation decay and
5 other factors that influence service life, or demand for transmission, and willingness of
6 society to permit the use of overhead transmission facilities (i.e., NIMB). The Company
7 initially stated that the currently authorized service life of 45 years is high compared to
8 the industry, and concluded that the life should be reduced to 40-years while retaining
9 the R5 curve. It revised the estimate to now reflect 45 years.

10

11 **Q. DO YOU AGREE WITH THE COMPANYS PROPOSAL?**

12 A. No. The Company's initial reduction in ASL and its updated proposal to retain a 45-
13 year ASL are contrary to industry information and Company-specific data. I
14 recommend a 60-year R4 life-curve combination. My recommendation is logically
15 derived from Company specific data, and is also reflective of what Mr. Clarke and his
16 firm have recommended in other depreciation studies.

17

18 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

19 A. First, the Company has surviving plant that already approaches the *maximum* life
20 expectancy that would be derived from the Company's proposal. The Company has not
21 demonstrated that it plans to retire such investments. (See Exhibit CRC-1, page 574).
22 Moreover, the fact that the Company has substantial investment that is already
23 approximately 35 years old or older, and that plant has experienced few retirements,
24 would normally indicate a longer life expectancy than the one proposed by the
25 Company.

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11 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

12 A. The standalone impact of my recommendation results in a reduction of \$3,192,653 to
13 annual depreciation expense.

14

15 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 356 –**
16 **TRANSMISSION, OVERHEAD CONDUCTORS AND DEVICES?**

17 A. The Company proposes to increase the existing 44-year ASL to 47 years and retain the
18 existing R1.5 Iowa Survivor Curve. (See Exhibit CRC-1, page 523).

19

20 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

21 A. The Company states that its actuarial analyses indicate lives of 44 years to 50 years, with
22 low mode-type survivor curves. The Company further states that typical lives for the
23 industry are between 35 years and 65 years. The Company adds that reconductoring is
24 done primarily for electrical load changes. Thus, retirements have not been due to
25 deterioration. Wind loading and related metal fatigue also affect life estimation.

1 Finally, the Company states that there may be certain life effects due to electric magnetic
2 fields ("EMF").

3
4 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

5 A. No. While the Company recognizes that an increase in ASL is warranted at this time, its
6 increase is insufficient. Therefore, I recommend a 51-year ASL with a corresponding S0
7 Iowa Survivor Curve.

8
9 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

10 A. As shown on Exhibit __ (JP-6), page 4 of 15, a 51 S0 life-curve combination is a similar
11 but somewhat better overall fit to the Company's proposed 47 R1.5 life-curve
12 combination. The 51 S0 life-curve combination does match the OLT at the very top or
13 "head" of the OLT, where the plant exposures range from about \$450 million to about
14 \$670 million. (Id., at page 525).

15
16 Given that the curve matching results for a 51 S0 life-curve combination and the
17 Company's proposal are similar, the longer ASL is warranted since the Company admits
18 that it had to retire plant prior to the end of the investment's physical life due to
19 reconductoring concerns. In other words, because of the load growth and the lack of
20 availability of new transmission lines, lower voltage transmission lines have been
21 upgraded to higher voltage transmission lines. This process artificially shortened the
22 overall life expectancy of the previously retired investment. The majority of the
23 Company's investment is in 500KVA transmission facilities. Therefore, it is reasonable
24 to anticipate that any further reconductoring will not be of the same magnitude that has

1 transpired historically on a relative dollar basis. This indicates a longer ASL for the
2 remaining investment that is at issue in this case.

3
4 In addition, due in part to the "NIMB" syndrome, utilities all across the country have
5 been increasing the life expectancy of investment in transmission overhead conductors
6 and devices. For example, Oncor, the largest electric utility in Texas, just increased its
7 proposed ASL for this account to 50 years (with the staff of the PUCT proposing an
8 increase to 60 years). In addition, Pacific Gas and Electric Company proposed to
9 increase its existing 52-year ASL to a 55-year ASL in its 2007 general rate case.
10 Finally, Mr. Clarke recently testified in Nevada regarding the investment in this account
11 associated with NPC and Sierra Pacific Power Company ("SPPC"). For NPC, Mr.
12 Clarke's firm recommended increasing the existing 40-year ASL to 50 years. He
13 proposed a 55-year ASL for SPPC. Another factor that goes to the credibility of the
14 Company's presentation is the fact that Mr. Clarke, when presenting the same backup
15 information for SPPC in PUCN Docket No. 05-10004, added a significant additional
16 item of information that he failed to present in this case. In the SPPC case, Mr. Clarke,
17 after giving the industry range for ASLs, went on to state that the average for the
18 industry is "around 52 years." (See PUCN Docket No. 05-10004 response to DR BCP
19 2-2). In other words, ranges, especially as broad as Mr. Clarke has presented, can be
20 somewhat misleading. A range becomes more meaningful when the range is better
21 defined with an average. In this case, the 52-year average helps to demonstrate that Mr.
22 Clarke's proposed movement from 44 years to 47 years still leaves his proposal
23 significantly short of the industry average he has previously identified. Moreover, the
24 industry average information provides more support for my recommended 51-year ASL,
25 which is based on Company specific data.

1

2 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

3 A. The standalone impact of my recommendation results in a \$1,618,285 reduction in
4 annual depreciation expense.

5

6 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 359 –**
7 **TRANSMISSION ROADS AND TRAILS?**

8 A. The Company proposes to retain the current authorized 50-year ASL with an SQ curve.
9 (See Exhibit CRC-1, page 547).

10

11 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

12 A. The Company states that there is very little retirement activity; therefore, its actuarial
13 analyses do not produce "very good results." It then identifies the industry range as
14 falling between 40 and 75 years. Thus, based on industry information, Mr. Clarke
15 selected a value near the low end of the industry range.

16

17 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

18 A. No. Again, the Company's proposal is biased towards an artificially short ASL. I
19 recommend a 65-year ASL with a corresponding SQ curve.

20

21 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

22 A. My recommendation takes into account the type of investment in Account 359 and a
23 more realistic review of industry information. The Company's investments in roadways,
24 bridges, culverts and trails can and do last longer than 50 years. The limited level of
25 retirement activity, as recognized by the Company, is indicative of longer life spans for

1 such investments. Moreover, prior recommendations and documentation from Mr.
2 Clarke call into question the credibility of Mr. Clarke's current proposal in this case.
3 For example, in an SCE proceeding, Mr. Clarke stated that the industry average was "60
4 years." (See California Public Utilities Commission Application 02-05-004; Results On
5 Operation, Chapter XI workpapers). In other recent cases where Mr. Clarke testified on
6 the topic he supported a 65-year and 70-year ASL for NPC and SPPC, respectively.
7 (See PUCN Docket Nos. 06-11023 and 05-10006, respectively). Mr. Clarke relied on
8 the same industry range in the Nevada cases where there was no retirement activity, thus
9 clearly demonstrating his reliance on industry information, and there he elected 65 and
10 70-year ASLs.

11
12 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

13 A. The standalone impact of my recommendation results in a reduction of \$699,372 to
14 annual depreciation expense.

15
16 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 362 -**
17 **DISTRIBUTION STATION EQUIPMENT?**

18 A. The Company proposes to increase the existing ASL from 38 years to 41 years, but
19 retain the R1.5 Iowa Survivor Curve. (See Exhibit CRC-1, page 560).

20
21 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

22 A. The Company recognizes that there is considerable retirement activity for this account
23 and claims that the actuarial analysis "showed lives between 40-50 years." The
24 Company further states that the industry average for this account is 45 years. Therefore,
25 based on "these life indications" the Company proposed a nominal increase in ASL.

1

2 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

3 A. No. The Company's proposal is again artificially short and must be increased. I
4 recommend a 48-year S0 life-curve combination.

5

6 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

7 A. As shown on Exhibit__(JP-6) page 5 of 15, a 48 S0 life-curve combination better
8 matches the Company's actual OLT through about 30 to 31 years of age. This age
9 bracket of the OLT represents the most significant and substantial portion of the OLT.
10 In fact, my recommended life-curve combination better fits the OLT for all points
11 corresponding to 90% of the initial dollar level of exposures. (See Exhibit CRC-1, page
12 563). Even though my recommendation begins to deviate from the OLT past
13 approximately 33 or 34 years of age, the importance of this area of the curve fitting
14 process is greatly diminished and cannot overcome the better matching portion of the
15 curve form ages 0 through the low 30-year range. Additionally, this is an account that
16 contains a wide array of investments. For most utilities and FP&L, transformers
17 comprise the largest single component within this account and are normally expected to
18 have longer ASLs. Thus, the "tail" or end of the OLT, which is where my
19 recommendation begins to deviate from the OLT, most likely reflects the retirement
20 activity associated with the smaller and shorter lived components of the account. It is
21 anticipated that, as additional time passes and additional plant exposures work down
22 through the OLT, there will be further increases in ASL.

23

24 From an industry standpoint, it is worth noting that Mr. Clarke recently recommended a
25 50-year ASL in both the previously noted NPC and SPPC cases. Further, in its current

1 case Oncor proposed increasing its ASL to 48 years, while the staff of the PUCT
2 recommended further increases up to 50 years. (See PUCT Docket No. 35717 Exhibit
3 DAW-S-1 page 141 and Staff witness Srinivasa Direct Testimony at page 24). In
4 addition, Mr. Clarke's industry average is actually 46 years, not 45 years. (See OPC's
5 First Depr. Interrogatories No. 75). Finally, when outliers are removed from the
6 database, the industry average increases to 48 years. Thus, as time passes the industry is
7 moving toward longer ASLs, which confirms the reasonableness of my
8 recommendation.

9
10 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

11 A. The standalone impact of my recommendation results in a reduction of \$5,860,004 to
12 annual depreciation expense.

13
14 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364 –**
15 **DISTRIBUTION POLES, TOWERS AND FIXTURES?**

16 A. The Company proposes to increase the current 34-year ASL to 37 years and change the
17 dispersion pattern from a R1.5 to an R2 Iowa Survivor Curve. (See Exhibit CRC-1,
18 page 569).

19
20 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

21 A. First, the Company states that most poles in the system are concrete, and those wood
22 poles that remain in the system that are not being replaced are subject to life extension
23 programs. The Company then states it performed various actuarial analyses and, based
24 on its interpretation of the results, identified ASLs from 38 to 40 years. The Company
25 next noted that the industry range is 35 to 55 years, with an average for the industry of

1 42 years. Based on these various items of information, the Company proposed its 37-
2 year ASL.

3
4 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

5 A. No. The Company's proposal results in an artificially short ASL. Therefore, I
6 recommend a minimal increase in ASL to 41 years with a corresponding R1.5 Iowa
7 Survivor Curve.

8
9 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

10 A. As on Exhibit__(JP-6), page 6 of 15, the 41 R1.5 life-curve combination is a superior fit
11 to the OLT than is the Company's proposed 37 R2 life-curve combination. Thus, from a
12 purely statistical standpoint, Mr. Clarke has significantly underestimated the reasonable
13 ASL for this account.

14
15 Turning to other factors or considerations, Mr. Clarke's proposal can further be
16 demonstrated to be artificially short. First, that his statement that most poles in the
17 system are concrete poles is incorrect. The vast majority of poles in the Company's
18 system are wood poles. (See OPC's First Depr. Interrogatories No. 61). Next, the
19 Company recognizes, but does not appear to incorporate, the expected impact of its
20 programs to extend the life of wood poles that are not being replaced. In other words,
21 the historical statistical analysis is more representative of the life expectancy of poles
22 that do not have the benefit of the program in place to extend the life of existing poles.
23 Thus, a longer future expected ASL would be appropriate in comparison to the best
24 statistical fit of historical data. In addition, approximately 18% of the current investment
25 in this account is associated with concrete poles. (See OPC's First Depr. Interrogatories

1 No. 61). Concrete poles can be expected to have a longer ASL than wood poles. This
2 situation requires further recognition that the future expected ASL for the investment in
3 this account should be longer than the best statistical results based on historical analyses.

4
5 Industry information also reaffirms a longer ASL than proposed by the Company. In his
6 two recent testimonies on behalf of Nevada utilities, Mr. Clarke proposed increases in
7 ASLs up to 50 years for NPC and 45-years for SPPC. (See PUCN Docket No. 06-11023
8 and 05-10006 for NPC and SPPC, respectively). In addition, Mr. Clarke recognizes that
9 the low end of the industry range is 35 years, which means his proposal for a 37-year
10 ASL is minimally above the low end of the industry range. This is significant given that
11 the industry average, as recognized by Mr. Clarke, is 42 years--or 5 years longer than he
12 proposes for the Company. These additional facts relating to industry information
13 support and confirm that a higher ASL is appropriate. In fact, the information
14 demonstrates that my recommendation is conservative and that an even higher ASL is
15 appropriate. Thus, based on (1) historical data, (2) recognition of the types of
16 investment, (3) the life extension program, and (4) industry data, a longer ASL is
17 warranted.

18
19 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

20 A. The standalone impact of my recommendation results in a reduction of \$13,188,572 to
21 annual depreciation expense.

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 365 -**
24 **DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?**

1 A. The Company proposes to increase the ASL from 35 to 40 years and change the
2 dispersion pattern from a S0.5 to a S0 Iowa Survivor Curve. (See Exhibit CRC-1, page
3 577).

4

5 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

6 A. The Company performed an actuarial analysis and based, on its interpretation, asserts
7 that the analysis indicated ASLs falling between 35 and 45 years. The Company also
8 reviewed industry data and noted a range from 25 to 55 years, with an average around 44
9 years. Based on these items of information, the Company then selected the 40-year
10 ASL.

11

12 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

13 A. No. The Company's proposal understates the appropriate level of ASL for this account.
14 Therefore, I recommend a minimal increase of 3 years to a 43-year ASL, with the same
15 S0 Iowa Survivor Curve.

16

17 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

18 A. First, as shown on Exhibit__(JP-6) page 7 of 15, the 42-year ASL is a better fit of
19 Company specific historical data than is Mr. Clarke's proposed 40-year ASL. Thus,
20 based on the actuarial analyses that constitute the Company's main basis for its proposal,
21 a longer ASL is warranted.

22

23 Moreover, if the 20-year experience band actuarial results were relied upon, the ASL
24 would have to be increased to 46 years, as shown on Exhibit__(JP-6) page 8 of 15. The
25 20-year experience band for this account yields an increasing ASL. This result affirms

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1 that an increase above the Company's proposed 40-year ASL is warranted, and that my
2 recommended 43-year ASL is very conservative.

3
4 Industry information confirms that an even longer ASL than the 43-year level I
5 recommend would be warranted. First, Mr. Clarke notes that the industry average is 44
6 years or appreciable longer than his proposed 40-year ASL. Further, when the industry
7 data is reviewed one finds: (1) that the medium is 46 years, (2) the mode is 48 years, and
8 (3) that all but one of the ASL values based on studies during the past 5 years were 40
9 years or longer with an average of 45 years. In other words, a mid 40s ASL is more
10 indicative of industry averages.

11
12 The lengthening of life expectation by the industry is captured by Mr. Clarke's own
13 testimony in Nevada. In two recent Nevada cases, Mr. Clarke recommended increasing
14 the ASL for NPC from 45 years to 50 years. Mr. Clarke also testified to a 55-year ASL
15 in his recent testimony on behalf of SPPC. (See PUCN Docket No. 06-11023 at
16 Statement A (1) (d) page 5 of 5, and PUCN Docket No. 05-10006 at Statement A (1) (a)
17 page 2 of 4, respectively).

18
19 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

20 A. The standalone impact of my recommendation results in a reduction of \$5,026,679 to
21 annual depreciation expense.

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367.6 –**
24 **UNDERGROUND CONDUCTORS AND DEVICES – DUCT SYSTEM?**

1 A. The Company proposes to retain the existing 38-year ASL along with a S0 Iowa
2 Survivor Curve.

3
4 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

5 A. The Company states that the actuarial results "were good and indicated the currently
6 authorized service life of 38 looks about right." (See Exhibit CRC-1, page 599). The
7 Company also stated that industry data suggested a 28 to 53-year ASL with an average
8 around 39 years.

9
10 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

11 A. No. While the Company was satisfied with its 38-year ASL selection because it "looks
12 about right," a better fitting result is a 40 L1, as shown on Exhibit (JP-6), page 9 of 15.
13 This is the life-curve combination that I recommend.

14
15 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

16 A. As previously noted, a 40 L1 life-curve combination is a better fit to the OLT. In
17 particular, it is the superior fit to the OLT through the first 12 to 13 years of age, and
18 corresponds to exposures ranging from approximately \$400 million up to \$1.4 billion.
19 For the next handful of ages, the Company's proposal is a better fit to the OLT with
20 exposures ranging from approximately \$159 million up to approximately \$370 million--
21 or substantially less than the level of exposures at the top or head of the OLT.
22 Thereafter, the Company's proposal and my recommended life-curve combinations are
23 approximately equal through the balance of any meaningful level of exposures. Thus, a
24 longer ASL is warranted by an analysis of historical data.

25

1 Turning to industry data, the Company's presentation reflects a combination of all types
2 of investment in Account 367, while its analysis segregates the investment between Duct
3 Systems and Direct Buried Underground Conductors and Devices. A review of the
4 Company's industry data shows a wide dispersion indicative of the type of investment in
5 Account 367, and the problems that have plagued early Underground Buried Cable that
6 had to be replaced long before the initial anticipated service life. Thus, it appears
7 recognition of the more current plant vintages for Account 367 would indicate an
8 average ASL around 50 years, while those utilities that may have a disproportionate
9 level of older problematic investment in this account have an average ASL around 32
10 years. The longer average ASL is indicative of the type of investment that should be at
11 issue in this proceeding.

12
13 Considering that tree retardant cable now comprises over 22% of the investment in the
14 account, some recognition of additional ASL for the future is appropriate. The 40-year
15 ASL I recommend is the better statistical fit and gives some additional recognition to
16 the higher level of tree retardant underground cable reflected in plant and service.

17
18 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

19 **A.** My recommendation results in a \$2,238,822 reduction to annual depreciation expense.

20
21 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367.7 –**
22 **DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES – DIRECT**
23 **BURIED?**

1 A. The Company proposes to slightly increase the ASL from the current level of 34 years to
2 35 years. The Company further proposes to modify the dispersion pattern from an R2.5
3 to a R2 Iowa Survivor Curve. (See Exhibit CRC-1, page 605).

4

5 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

6 A. The Company states that the life of direct buried cable will be limited by the corrosion
7 of the concentric neutral on the outside of the cable that was not always jacketed. The
8 Company further performed actuarial analyses which indicated an ASL greater than the
9 existing 34-year level. Finally, the Company references industry data ranging from 29
10 to 53 years, with the average for the industry being around 39 years. (*Id.*).

11

12 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

13 A. No. The Company's proposal is short on information. It reflects an artificially short
14 ASL. I recommend a minimal increase in the ASL to 43 years with a corresponding S0.5
15 Iowa Survivor Curve.

16

17 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

18 A. First, as shown on Exhibit __ (JP-6) page 10 of 15, the Company's proposed 35 R2 life-
19 curve combination is *not* the best fitting curve. The 43 S0.5 life-curve combination that
20 I recommend is a superior fit to the Company's proposal at all but a handful of ages.
21 Those exceptions correspond to ages from about 13 ½ years to 18 ½ years of age. Thus,
22 during the initial 12 ½ years of age and all ages beyond approximately 18 1/2 years, the
23 43 S0.5 life-curve combination is a better fitting curve. Significantly, the 43 S0.5 is
24 superior during the most meaningful portion of the OLT, where exposures range from
25 approximately \$313 million up to \$494 million. Finally, even in the handful of years

1 where the Company's proposal is a better match than my recommendation, it can be
2 seen that the differential is not that great and does not overcome the remaining poorly
3 fitting portions of the curve.

4
5 Another view of historical data also supports a longer ASL. That different point of view
6 is from the actual annual level of retirement activity experienced by the Company. From
7 1999 through 2002, the Company experienced \$2.5 million to \$6.1 million of annual
8 retirement activity. (See OPC's First Depr. Interrogatories No. 64 at Attachment 1).
9 However, from 2003 through 2008 the retirement level declined dramatically, ranging
10 from a low of \$10,000 to a high of \$213,000 annually. (*Id.*). Given that the investment
11 in this account as of the end of 2009 is projected to be \$427 million, even the higher
12 level of retirement activity experienced from 1999 through 2002 would not necessarily
13 be indicative of a life as short as the 35 years proposed by the Company. However, with
14 the slowing trend in retirement activity exhibited during the past 6 years, the level of
15 ASL expectations should be increased farther.

16
17 The Company asserts that industry information indicates an average ASL of around 39
18 years, or 4 years greater than the Company's proposal. However, when testifying in
19 Nevada, Mr. Clarke recently recommended an ASL as high as 50 years for this account.
20 (See PUCN Docket No. 05-10006 SPPC). Further, when data for the most recent 5
21 years is analyzed, the industry average increases to 42 years. (See OPC's First Depr.
22 Interrogatories No. 75). Thus, industry information confirms my recommendation.

23
24 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

1 A. The standalone impact of my recommendation is a reduction of \$1,613,351 to annual
2 depreciation expense.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 368 -**
5 **DISTRIBUTION LINE TRANSFORMERS?**

6 A. The Company proposes to increase the current 31-year ASL to 32 years and change the
7 dispersion pattern from a L2 to a L1.5 Iowa Survivor Curve. (See Exhibit CRC-1 page
8 613).

9

10 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

11 A. The Company relied on the results of its actuarial analysis, which it interpreted to be
12 "around 32 years." The Company also referred to industry data and stated that the
13 industry range was "between 26 and 45 years, with an average around 36 years."

14

15 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

16 A. No. The Company's proposal again is artificially short. I recommend a very
17 conservative but limited increase in ASL to 34 years with the same L1.5 Iowa Survivor
18 Curve as proposed by the Company.

19

20 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

21 A. My recommendation is based on a review of the actuarial analyses, and industry
22 information for confirmational purposes. In addition, while my recommendation does
23 not incorporate a further upward movement in ASL due to several large infant mortality
24 occurrences, such occurrences do raise the specter that the events have artificially
25 distorted the historical actuarial results and resulted in an artificially low ASL.

1
2 As can be seen on Exhibit ___ (JP-6) page 11 of 15, the Company's proposal is based on
3 an interpretation of actuarial results that sacrifices better fitting results for ages generally
4 less than 24 ½ years for better fitting results thereafter. As previously discussed, it is
5 more important to match the significant level of exposures that have occurred in the
6 mid-to-upper portions of the OLT than it is to do so at the "tail" portion of the OLT. In
7 this particular instance, the 34-year ASL that I recommend is a better fitting or
8 comparable fitting curve for exposures of approximately \$305 million up to \$2 billion.
9 (See Exhibit CRC-1, page 615). Only beginning at the approximate age of 24 ½ years,
10 where the exposures dropped to \$261 million, does the Company's proposal represents a
11 better statistical fit.

12
13 The historical data includes several data points that appear to be atypical and
14 representative of infant mortality. For example, at 1 ½ years of age the historical
15 database includes a \$15.7 million level of retirement activity. The remaining historical
16 data does not indicate a level that high until the age of 18 ½ years, a significant
17 difference in age given the proposed ASL. In other words, a \$15.7 million retirement
18 occurred at an age of less than 5% of the proposed ASL, and this dollar level of
19 retirement was not exceeded in magnitude until approximately 58% of the proposed
20 ASL (18.5/32). In addition, at age 2 ½ the Company reported \$10.9 million of
21 retirements. This value is not exceeded until age 11 ½ is reached. This is precisely the
22 type of data that a depreciation analyst should investigate before making final
23 predictions of the future.

24

1 Given this situation, the Company was requested to explain the underlying causes for
2 such unusual infant mortalities and why it believed that this level of retirements at such
3 early ages was indicative of future retirements. (See OPC's First Depr. Interrogatories
4 No. 65). The Company admitted that no specific analysis had been performed on the
5 data, as all data points were utilized. In other words, the Company assumed that the
6 future would be a match of historical data, without performing any analysis to determine
7 if this assumption was appropriate or valid in this particular instance. While I did not
8 rely on a modified historical database for my recommendation, the normalization of such
9 infant mortalities would cause the entire OLT to shift upward and result in a longer ASL
10 than the 34-year level I recommend. This demonstrates the conservative nature of my
11 recommendation.

12
13 Turning to industry data for confirmation, it is clear that the 34-year ASL I recommend
14 is closer to the industry average than is the Company's proposed 32-year level.
15 Moreover, when Mr. Clarke testified in Nevada in two recent rate proceedings he
16 recommended a 38-year ASL for NPC and a 45-year ASL for SPPC. (See PUCN
17 Docket No. 06-11023 and 05-10006 for NPC and SPPC, respectively). Thus, Mr.
18 Clarke's recent experience supports substantially longer ASLs than he proposes in this
19 proceeding. In addition, when the results of studies performed in the last 5 years are
20 reviewed, the industry average increases to 40 years. (See OPC's First Depr.
21 Interrogatories No. 75). Thus, there can be little doubt from an industry standpoint that
22 Mr. Clarke's interpretation of Company-specific data understates reasonable
23 expectations for investment in this account.

24

25 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

1 A. The standalone impact of my recommendation is a reduction of \$3,808,140 to annual
2 depreciation expense.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.7 –**
5 **DISTRIBUTION SERVICES – UNDERGROUND?**

6 A. The Company proposes to retain the current 34 R2 life-curve combination. (See Exhibit
7 CRC – 1, page 629).

8

9 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

10 A. The Company identified what it believes are common causes of retirements, such as
11 third party damage, breakdown of insulation, conditions during installation, customer
12 requirements, and soil conditions. The Company then states that while it performed an
13 actuarial life analysis, it believes the results of the analysis “show very long lives.” The
14 Company also indicates that the industry range is from 30 to 45 years. The Company
15 concludes by stating that it elects to “this time, *ignore the extremely long lives* from the
16 analysis.” (Emphasis added).

17

18 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

19 A. No. The Company's proposal is flawed and results in an artificially low ASL. I
20 recommend a 41 S0.5 life-curve combination.

21

22 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

23 A. As shown on Exhibit__(JP-6), page 12 of 15, the best fitting curve through the
24 meaningful portion of the OLT does not result in a “very long” ASL, as the Company
25 asserts. My recommendation is an excellent fit through the first 13 ½ years of age of the

1 OLT. At that point, both the Company's proposal and my recommendation deviate from
2 the OLT. The deviation is not significant, given that the magnitudes of many of the
3 data points approaching the end of the OLT are based on limited levels of exposures. As
4 additional activity occurs in the future, the lower or tail portion of the OLT will have a
5 significant propensity to deviate from its current position and at that time may better
6 match my recommendation for that portion of OLT. The key information to be obtained
7 from the OLT is that realistic *life* expectations can be obtained from the actuarial
8 analysis. The results of the actuarial analyses and the appropriate curve fitting exercise
9 should not have led the Company to "ignore" the information.

10
11 In an effort to test the validity of my recommendation, I reviewed industry information.
12 The Company says it believes the industry range for ASLs is from 30 to 45 years. What
13 the Company did not state is that the average for its industry database is 39 years. My
14 recommended 41-year ASL is only two years higher than the Company's industry
15 average level, while the Company's proposal is 5 years lower than the industry average.
16 My 41-year recommended ASL is reasonable and appropriate given Company specific
17 data. There is no reason not to increase the ASL at this time.

18
19 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

20 A. My recommendation on a standalone basis results in a \$4,160,079 reduction in annual
21 depreciation expense.

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 370 -**
24 **DISTRIBUTION METERS?**

1 A. The Company proposes to increase the existing ASL from 34 to 36 years and change the
2 dispersion pattern from a S2 to a R2.5 Iowa Survivor Curve. (See Exhibit CRC-1, page
3 635).

4
5 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

6 A. The Company states that the results of its actuarial analyses indicate lives of 35 to 39
7 years, and that industry values range from 20 to 43 years, with an average of 30 years.
8 The Company then concludes that based on actuarial analyses a slight increase in ASL is
9 warranted.

10

11 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

12 A. No. Based on actuarial analyses, a longer ASL is warranted. I recommend a 38 S1.5
13 life-curve combination.

14

15 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

16 A. The life-curve combination proposed by the Company is not the best fit to the OLT. As
17 shown on Exhibit__(JP-6) page 13 of 15, a 38 S1.5 life-curve combination through the
18 first 22 ½ years of age is a better fit. From approximately 23 ½ years of age through
19 about 34 ½ years of age, both the Company's proposal and my recommendation are very
20 similar. From 35 ½ years of age and thereafter, my recommendation again becomes a
21 better fitting curve; however, the level of plant exposures drops to a less meaningful
22 level. No weight should be assigned to this area in the selection process. Based on
23 Company-specific data, an increase in ASL to 38 years is warranted.

24

1 From an industry standpoint, both the Company's proposal and my recommendation fall
2 within the range of other utilities. However, for this particular account, given the types
3 of meters and the different meter replacement programs and maintenance practices of
4 other utilities, only limited weight should be assigned to industry comparative data. The
5 result of actuarial analyses should be the driving factor.

6
7 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

8 A. The standalone impact of my recommendation is a reduction of \$1,504,782 to annual
9 depreciation expense.

10
11 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 373 -**
12 **DISTRIBUTION STREET LIGHTING AND SIGNAL SYSTEMS?**

13 A. The Company proposes to increase the currently authorized 20-year ASL to 30 years and
14 to change the dispersion pattern from a S-0.5 to a R0.5 Iowa Survivor Curve. (See
15 Exhibit CRC-1, page 653).

16
17 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

18 A. The Company asserts that its actuarial analyses produced ASLs between 30 and 35
19 years. In addition, the Company refers to other utilities and identifies an ASL range of
20 22 to 45 years. From these items of information the Company concludes that the life
21 analysis clearly supports an increase in ASL.

22
23 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

24 A. No. The Company's proposal again results in an artificially short ASL. I recommend
25 increasing the ASL to 35 years with a corresponding L0 Iowa Survivor Curve.

1

2 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

3 A. My recommendation is based upon my analysis of Company-specific data. As shown on
4 Exhibit__ (JP-6), page 14 of 15, the 35 L0 life-curve combination that I recommend is a
5 better fitting curve selection through the first 10 ½ years of age. From that point through
6 approximately 28 ½ years of age, the Company's proposal and my recommendation are
7 basically the same. From that point onward, my recommendation fits the data much
8 better. However, the levels of retirement exposures at that point are much less
9 significant than in earlier periods. In addition, the 20-year experience band (1988-2007)
10 actuarial results produce an OLT that indicates an even longer ASL. The indication of a
11 longer ASL, based on the more current experience band, is significant given the
12 changing technologies and types of lighting associated with street lights (e.g.,
13 incandescent to mercury vapor to sodium vapor). The changes in technology have
14 resulted in shorter ASLs due to technologically driven replacement activity. The more
15 current experience bands place less significance on some of the initial changeouts in
16 types of lights. Absent new technology again causing accelerated change outs in the
17 near term future, the results of the 20-year OLT should be recognized. Given that the
18 Company has not identified any new technologies, , the 35 L0 life-curve combination
19 that I recommend is a conservative estimate at this point in time.

20

21 From an industry standpoint, a review of the Company's data indicates that more current
22 depreciation studies indicate ASLs in the mid-30-year range. Thus, industry average
23 information indicative of more current studies further confirms the reasonable and
24 conservative nature of my 35-year ASL recommendation.

25

1 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

2 A. The standalone impact of my recommendation is a reduction of \$751,011 to annual
3 depreciation expense.

4

5

6 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 390 – GENERAL
7 PLANT STRUCTURES AND IMPROVEMENTS?**

8 A. The Company proposes to increase the existing ASL from 38 years to 50 years and to
9 modify the dispersion pattern from an S1 to a R1.5 Iowa Survivor Curve. (See Exhibit
10 CRC-1, page 661).

11

12 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

13 A. The Company references actuarial analyses which yield ASLs "around 50 years," and
14 then refers to industry information as being between 40 and 50 years.

15

16 **Q. DO YOU AGREE WITH THE COMPANY'S RECOMMENDATION?**

17 A. No. The Company's proposal again understates the realistic and reasonable ASL for this
18 account. I recommend a minimal increase in the ASL to 56 years, along with an S0
19 Iowa Survivor Curve.

20

21 **Q. WHAT IS THE BASIS FOR YOUR PROPOSAL?**

22 A. As shown on Exhibit__ (JP-6) page 15 of 15, the 56 S0 life-curve combination I
23 recommend is a better fit than the Company's proposal. In fact, through the first 10 ½
24 years of age my recommendation is clearly a better fitting curve. From 11 ½ years
25 through most of the rest of the curve, the Company's proposal and my recommendation

1 are reasonably similar. Thus, from an analysis of Company-specific data, my
2 recommendation is superior.

3
4 In addition, one has to consider the underlying investment which comprises this account.
5 The Company notes that the investment in this account ranges from buildings to yard
6 lights. However, while buildings represent the majority of investment in this account,
7 buildings do not appear to be reflected in the historical retirement activity. The
8 historical retirement activity is comprised mostly of ancillary building components, such
9 as roofs, air conditioning systems, lighting systems, etc. In fact, 10 buildings reflected
10 in this account comprise approximately 64% of the investment. (See OPC's First Depr.
11 Interrogatories No. 33 corrected). The two largest buildings, from a dollar and size
12 standpoint, are concrete buildings and as such can be expected to last much longer than
13 the Company's proposed 50-year ASL. Accordingly, from an investment mix
14 standpoint, a longer ASL than the Company's proposed 50-year level is well warranted.

15
16 Moreover, the OLT based on the most recent 20-year time frame further indicates that an
17 even longer ASL is warranted. Reliance on the more recent experience band gives
18 greater weight to the largest and newest office buildings in this account, which by
19 themselves comprise over 40% of the investment. This analysis confirms that my
20 recommendation is conservative.

21
22 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

23 A. The standalone impact of my recommendation is a reduction of \$1,022,803 to annual
24 depreciation expense.

1 Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 392.01 – GENERAL
2 PLANT AIRCRAFT – FIXED WING?

3 A. The Company proposes to continue the existing 7-year SQ life-curve combination. (See
4 Exhibit CRC-1, page 669).

5

6 Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?

7 A. Mr. Clarke simply states that the 7-year life the Company is currently using "appears
8 reasonable after discussions with Company personnel." Further, in response to a
9 specific interrogatory seeking "all support and justification" for the Company's
10 proposal, the Company stated that its proposed 7-year ASL is "based on FPL's
11 experience with such aircraft." (See OPC's First Depr. Interrogatories No .72).

12

13 Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

14 A. No. The Company's proposal is inadequate on its face, based on the Company's actual
15 experience. I recommend increasing the ASL to 9 years with a corresponding R5 Iowa
16 Survivor Curve.

17

18 Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

19 A. I agree with the Company that a meaningful actuarial life analysis is not possible, given
20 the information provided. However, review of the historical data clearly identifies only
21 three vintages of plant associated with this account, with approximately 50% of the
22 investment being associated with the 1999 addition. (See Exhibit CRC-1, page 671).
23 The Company admits that there have been no retirements in this account subsequent to
24 2007. This fact clearly establishes that the life of the oldest and largest vintage *already*
25 *exceeds* the Company's ASL proposal. In other words, if the Company's presentation

1 and support were reasonable, the 1999 plant addition should have been retired during
2 2006. That implied or expected retirement did not take place. A longer ASL is
3 warranted.

4
5 Moreover, if the Company's proposal was accurate or reasonable, the Company's
6 second year of additions (there are only three) would have to be retired by the time this
7 case goes to hearing. The Company has provided no indication that it has or intends to
8 retire that fixed wing aircraft. Therefore, two out of three years of additions have
9 exceeded the Company's proposal. Here, an ASL longer than 7 years not only is
10 realistic; it is mandatory in order to match reality. The Company's statement that the 7-
11 year life "is based on FPL's experience with such aircraft" is simply *wrong*. Therefore,
12 based on the information available, I recommend a 9-year R5 life-curve combination.
13 This recommended life-curve combination is conservative, in favor of the Company.

14
15 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

16 A. The standalone impact of my recommendation results in a reduction of \$372,741 to
17 annual depreciation expense. In fact, given that the Company has proposed a *zero* level
18 of depreciation expense for this account, due to the fact that it is already fully accrued,
19 my recommendation results in a negative depreciation expense. Negative depreciation
20 expense is not uncommon and simply represents the return to customers of prior over
21 collection.

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 392.02 -- GENERAL**
24 **PLANT AIRCRAFT -- ROTARY WING?**

25 A. The Company proposes a 7 SQ life-curve combination. (See Exhibit CRC-1, page 672).

1

2 Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?

3 A. The Company did not perform an analysis. It held discussions with Company personnel
4 who asserted that a 7 SQ life-curve combination "appears reasonable." In addition, the
5 Company responded to an interrogatory seeking "all support and justification" for its
6 proposed life-curve combination by stating that its entire basis rests on discussions with
7 Company personnel and their belief that the proposal is "proper".. "based on
8 experience." (See OPC's First Depr. Interrogatories No. 73).

9

10 Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?

11 A. No. Just as the Company's proposal was artificially short for fixed wing aircraft, it is
12 equally inadequate for this account. I recommend the same 9 R5 life-curve combination
13 as I did for the fixed wing aircraft subaccount.

14

15 Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?

16 A. The "experience" to which the Company refers does not match a 7 SQ life-curve
17 combination. The "experience" to which the Company refers to for its last retirement of
18 a rotary wing aircraft yields a 10-year life span. (*Id.*, at e). The actual "experience" of
19 the Company supports my recommendation and is contrary to the Company's proposal.

20

21 Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?

22 A. The standalone impact of my recommendation results in a reduction of \$178,336 to
23 depreciation expense.

24

25

1 XI. MASS NET SALVAGE

2
3 A. Introduction

4 **Q. WHAT IS NET SALVAGE?**

5 A. FERC's Uniform System of Accounts ("USOA") defines various salvage related terms
6 as follows:

7 "Salvage value" means the amount received for property retired, less any expenses
8 incurred in connection with the sale or in preparing the property for sale; or, if retained,
9 the amount at which the material is recoverable is chargeable to Materials and Supplies,
10 or other appropriate amount.

11
12 "Cost of removal" means the cost of demolishing, dismantling, tearing down or
13 otherwise removing gas plant including the cost of transportation and handling
14 incidental thereto.

15
16 One additional definition is required order to properly follow the USOA Electric Plant
17 Instructions. That definition is for "Replacing" or "replacement," and is as follows:

18 "Replacing" or "replacement," when not otherwise indicated in the
19 context, means the *construction or installation* of electric plant in place
20 of property retired, *together with the removal of the property retired.*
21 (Emphasis added).

22
23 In other words, "net salvage" is simply the value received for the sale, reuse, or
24 reimbursement of retired property (gross salvage), less the cost of retiring such property
25 (cost of removal), whether the retirement reflects demolition of the item of plant or only
26 the accounting transaction for retiring an item of property in place (abandonment).
27 Limited or no costs of removal should occur with replacement activity. This situation
28 conforms to USOA Electric Plant Instructions 10B(2). That instruction recognizes cost

1 of removal being "appropriate" when not accompanied by replacement activity.
2 However, the crediting of the plant account for the retirement shall occur, with or
3 without replacement.

4
5 **Q. CAN YOU ILLUSTRATE "NET SALVAGE" USING AN ACTUAL FPL**
6 **EXAMPLE?**

7 A. Yes. For Account 364, Distribution Poles and Fixtures, the Company has requested a
8 negative 125% net salvage. This means FPL assumes that removing a pole will impose
9 a net cost on FPL that exceeds by 25% the original cost of buying and installing the
10 pole! Given the plant balance of \$878 million, the Company's proposed net salvage
11 figure would result in approximately \$1.1 billion of depreciation expense over the life of
12 the investment *above* the recovery of the original \$878 million investment. (See Exhibit
13 CRC-1, page 473.) The proposed annual depreciation rate for this account to recover all
14 proposed amounts, both investment and net salvage, is 7.35%. If one assumes the scrap
15 value of the pole at retirement is exactly offset by the cost of removing it, in other
16 words, a zero level of net salvage, the annual depreciation rate falls to only 2.21%. The
17 difference in rates that would be applied to the \$878 million plant balance corresponding
18 to the different net salvage assumption results in over \$45 million of additional annual
19 revenue requirements for this account alone.

20
21 **Q. WHAT PERIOD HAS THE COMPANY CHOSEN TO ANALYZE TO DERIVE**
22 **ITS NET SALVAGEVALUES?**

1 A. The Company has analyzed a 22-year period, 1986 through 2007.

2

3 **Q. HAVE YOU REVIEWED ALL OF THE INFORMATION PRESENTED BY THE**
4 **COMPANY IN SUPPORT OF ITS NET SALVAGE REQUEST?**

5 A. Yes. The information provided is inadequate to support or demonstrate the
6 appropriateness of its request for an overall *negative 31%* net salvage for electric
7 transmission, distribution and general property. (See Exhibit CRC-1, page 473). FPL's
8 2007 Study includes \$4.3 billion for negative net salvage related to electric mass
9 property over the life of the investment. FPL's requested negative net salvage requires
10 approximately \$151 million of annual revenue requirements as compared to a zero (0)
11 level of net salvage.

12

13 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION CONCERNING**
14 **PROPOSED NET SALVAGE VALUES FOR MASS PROPERTY.**

15 A. FPL's proposed net salvage reflected in the 2007 Study is flawed and insufficiently
16 substantiated. As a result, it proposes excessive levels of negative net salvage. I
17 recommend a reduction to FPL's depreciation expense based on adjustments to its
18 proposed net salvage level for 14 accounts as summarized on Exhibit__ (JP-7). The
19 standalone impact of my net salvage recommendations is a reduction of \$68,146,207 in
20 annual depreciation expense.

21

1 Q. WHY DO YOU BELIEVE FPL'S PROPOSED NET SALVAGE LEVELS ARE
2 INAPPROPRIATE?

3 A. There are numerous problems with FPL's proposals. For example, (the following is not
4 intended to be a comprehensive listing):

5 • Mr. Clarke's analysis generally boils down to nothing more than acceptance of simple
6 arithmetic averages of historical data. The Company and Mr. Clarke have made no
7 meaningful effort to actually identify and understand what is reflected in FPL's
8 historical retirement database from a net salvage standpoint.

9 • Mr. Clarke fails to investigate the reasonableness of unusually high levels of cost of
10 removal or theoretically impossible negative gross salvage values.

11 • Mr. Clarke fails to investigate or explain significant changes in net salvage values
12 between the existing and proposed levels. The failure to reasonably explain the
13 underlying reasons for changes that cause revenue requirements to increase by tens of
14 millions of dollars annually for individual accounts is unacceptable.

15 • Mr. Clarke inconsistently relies on the full 22-year band analyses and 5-year band
16 analyses for some accounts, but only on 5-year or recent 3-year rolling band results from
17 other accounts. This unexplained and inconsistent picking and choosing consistently
18 results in more negative net salvage levels than would otherwise be the case.

19 • Mr. Clarke has removed the impact of reimbursed retirements from the analyses, even
20 though such events occur on an annual basis throughout the entire 22-year database.
21 They cannot legitimately be considered outliers.

- 1 • Mr. Clarke fails to adequately recognize, or recognize at all, the impact that economies
2 of scale will have in the future.

- 3 • Mr. Clarke makes no attempt to explain why the historical values relied upon sometimes
4 produce negative net salvage values that are the most negative or among the most
5 negative in the industry. Mr. Clarke chooses to ignore even the possibility that the
6 Company's historical data could be inappropriately skewed simply because it is
7 Company specific.

8

9 In summary, when net salvage proposals seek over *\$150 million of annual revenue*
10 *requirements*, the Commission and customers are entitled to a *qualitative* presentation of
11 the basis for net salvage proposals adequate to support the request. FPL has not met this
12 standard with its study. I recommend that the Commission order the Company to
13 develop and present --not just a depreciation study supported by substantial *quantities of*
14 *paper* -- but a study that is substantiated by *meaningful levels of explanations and*
15 *analyses* of what caused the retirement, and to determine whether such historical causes
16 are indicative of future expectations. Mr. Clarke's approach of simply claiming that
17 costs have increased can no longer be an acceptable basis for seeking such dramatic
18 increases in annual revenue requirements. The concern I raise is the same concern that
19 was raised at the Annual NARUC meeting this year. I submit that if it is reasonable for
20 the Commission to have previously required substantial documentation and support for
21 assumptions when reviewing forecasts for future resources and loads, then it should
22 demand no less for projections of future net salvage when such net salvage requests seek
23 over \$4 billion from customers over the life of the assets. The Company's presentation

1 in this case, even though backed by significant quantities of paper, does not meet the
2 standard. It is important to distinguish quantity from quality of information. Mr.
3 Clarke's meager few-line references to reliance on historical averages and industry
4 information do not constitute a reasonable and appropriate basis upon which to set such
5 substantial levels of revenue requirements.

6
7 **B. Reliance on Historical Averages**

8 **Q. HAS THE COMPANY RELIED ON HISTORICAL AVERAGES EXTENSIVELY**
9 **FOR ITS NET SALVAGE PROPOSALS?**

10 A. Yes. As can be seen in Exhibit CRC-1, Mr. Clarke's support and justification for his net
11 salvage proposals basically refers to full band and 5-year averages, and in some cases 3-
12 year rolling averages, of the historical data. Mr. Clarke has failed to examine what is
13 reflected in the historical data in order to establish whether relying on such historical
14 data as the basis for his future proposals is reasonable.

15
16 **Q. WHY IS A REVIEW OF THE UNDERLYING DATA IMPORTANT?**

17 A. For the underlying historical data to be a potentially valid tool for providing indications
18 for the future, it is necessary to determine if it is representative of the current investment.
19 For example, if the historical database reflects an excessive level of retirement activity
20 for breakers, switches, lighting arrestors, etc. for account 353 – Transmission Station
21 Equipment, but understates the net salvage associated with large transformers, then the

1 historical results will yield false or misleading indications of what will transpire in the
2 future.

3
4 **Q. CAN YOU PROVIDE A SPECIFIC EXAMPLE OF SUCH A SITUATION?**

5 A. Yes. As discussed in more detail later, Mr. Clarke overreacted to a “trend” in the data
6 for Account 353. The “trend” was driven significantly by the cost of removal associated
7 with the retirement of an old *building* filled with asbestos. This type of historical data
8 yielded a severely skewed result for 2007 data. Had Mr. Clarke taken the time to
9 perform even a cursory review of what caused the highest cost of removal percentage in
10 the past 20 years, he may have changed his proposal. This single event is an outlier and
11 should have been excluded from the analysis.

12
13 **C. Reimbursed Retirements**

14 **Q. WHAT ARE REIMBURSED RETIREMENTS?**

15 A. I define reimbursed retirements as a situation in which a third party reimburses the
16 Company for the retirement of plant. For whatever reason, Mr. Clarke specifically
17 refers to reimbursed retirements when dealing with reimbursable relocations. (See
18 OPCs First Depr. POD No. 12, “2008 Salvage File.xls.”).

19
20 **Q. HOW DID MR. CLARKE TREAT REIMBURSED RETIREMENTS?**

1 A. Mr. Clarke removed reimbursable relocation retirements from the Company's database.

2 **Q. IS THERE A PROBLEM WITH THE COMPANY'S DATA ASIDE FROM MR.**
3 **CLARKE'S MODIFICATION OF THE HISTORICAL DATABASE FOR**
4 **REIMBURSED RELOCATIONS?**

5 A. Yes. The Company states that all contributions in aid of construction are "allocated
6 between the cost of removal and additions based on the labor estimate for the job." (See
7 OPCs First Depr. Interrogatories No. 28). In other words, the Company contends that
8 amounts received from third parties must be categorized as a contribution in aid of
9 construction, with the intention of not booking such amounts as salvage.

10

11 **Q. HAS THE COMPANY SUPPORTED ITS HISTORICAL PRACTICES?**

12 A. No. In NARUC Interpretation No. 67, NARUC has identified how such amounts are to
13 be treated. In particular, for any amount received from a third party to be considered as
14 a contribution in aid of construction, it must specifically be designated as such on a
15 *contractual basis*. The Company has failed to demonstrate that its election to allocate all
16 amounts received from third parties as contributions in aid of construction complies with
17 the NARUC Interpretation. In addition, it should be recognized that some companies
18 have begun modifying contracts in order to change the character of the amounts received
19 in association with reimbursement retirement activity. Such artificial modifications
20 should not be allowed.

21

22 **Q. WHAT DOES NARUC INTERPERATION NO. 67 SPECIFICALLY STATE?**

1 A. NARUC Interpretation No. 67 states the following:

2 The cost of plant retirements should be accounted for in
3 accordance with the rules applicable thereto. The cost of new
4 plant should include in the appropriate plant accounts at actual
5 cost of construction. The reimbursement received shall be
6 accounted for (a) by crediting operation and maintenance
7 expenses to the extent of actual expenses occasioned by the plant
8 changes and (b) crediting the remainder to the reserve for
9 depreciation, unless contractual terms definitely characterize
10 residual or specific amounts as applicable to the cost of
11 replacement. In the latter event, appropriate credits should be
12 entered in the plant accounts.

13

14 **Q. WHAT IS THE IMPACT OF THE PROPER TREATMENT OF REIMBURSED**
15 **RETIREMENTS?**

16 A. If amounts received from third parties are classified as gross salvage rather than
17 contributions in aid of construction, it will result in a less negative level of net salvage
18 and a reduction in annual depreciation expense. Such treatment does not change net
19 plant or rate base currently.

20

21 **D. Economies of Scale**

22 **Q. IS FPL'S HISTORICAL NET SALVAGE DATABASE REPRESENTATIVE OF**
23 **WHAT CAN REASONABLY BE ANTICIPATED IN THE FUTURE?**

24 A. No. The Company's historical database, as it applies to net salvage, reflects a situation
25 in which relatively few retirement dollars have occurred compared to the level of
26 retirement activity that will occur in the future on an annual basis. In other words, in
27 future years, as a greater level of the Company's investment approaches its ASL, a

1 larger numbers of investments will retire on an annual basis. The greater level of annual
2 retirements should result in a reduction to the per unit cost of removal as economies of
3 scale are realized. Recognition of this concept belongs in the proper technique to be
4 utilized in any depreciation analysis. By contrast, the Company's approach is more
5 reflective of an analysis of historical data without proper evaluation of future
6 expectations.

7
8 **Q. ARE YOU AWARE OF ANY SOURCES WHICH CONCUR WITH YOUR**
9 **CONCEPT OF ECONOMIES OF SCALE?**

10 A. Yes. In its publication "*Public Utility Depreciation Practices*" NARUC indicates,
11 among other things, that while future cost of removal logically may be higher than past
12 costs, this premise does not necessarily indicate that the percentage cost of removal will
13 increase over time. Moreover, the publication acknowledges that as labor costs increase
14 over time, so do the number of items to be removed, thus making it more economical in
15 many cases to invest in special tools, which may actually result in an overall decrease in
16 cost of removal per item removed. This rationale reflects the appropriate depreciation
17 rates to be utilized in the future better than does FPL's blind reliance on history.

18
19 **E. Account Specific**

20 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353 --**
21 **TRANSMISSION STATION EQUIPMENT?**

22 A. The Company proposes a major shift from the existing *positive* 5% net salvage to a
23 proposed *negative* 10% net salvage. (See Exhibit CRC - 1, page 496). Given the size of

1 the account, the Company's proposal increases net salvage costs by over \$150 million
2 over the life of the account.

3
4 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

5 A. The Company asserts that there is a "definite *trend* of increasing cost of removal and
6 decreasing gross salvage rates *in recent years*." (Emphasis added). The Company then
7 refers to the results of historical analyses which range from a negative 1% to a negative
8 20%. The Company completes its presentation by stating that the industry range is
9 positive 5% to a negative 20%.

10
11 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

12 A. No. The Company's proposal to move from a positive 5% net salvage to a negative 10%
13 net salvage is excessive and unjustified. Therefore, I recommend a zero level of net
14 salvage.

15
16 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

17 A. I reviewed the Company's historical database upon which the Company predicates its
18 proposal. The database contains several unusual values in recent years that skew the
19 results to an excessively negative net salvage level. These atypical values drive the
20 Company's initial basis for its significant movement from the existing positive value to
21 its proposed negative net salvage. Further, the Company's proposal fails to analyze the
22 relationship of investment mix versus retirement mix, especially those reflected "in
23 recent years" upon which it based its proposal.

24

Revised

1 Next, the “trend” of increases in cost of removal, as identified by the Company, is
2 significantly driven by retirements during 2007. (See Exhibit CRC – 1, page 500). The
3 Company failed to investigate why this particular level, which is more than three times
4 the level that has transpired during the prior ten years, is reasonable or typical for
5 estimating future net salvage values. Unlike the Company, I have attempted to
6 investigate the more unusual values set forth in the recent Company database upon
7 which Mr. Clarke relied. The investigation reveals that the Company does not know if it
8 has reacted to a “trend.” The Company states it reviewed all years and “not any one
9 particular year.” (See OPC’s First Depr. POD No. 22). The Company could not
10 identify why “such specific activity” is indicative of the entire remaining investment.

11
12
13
14
15
16
17
18
19
20
21
22 Next, further investigation of the remaining identifiable retirements in 2007 and 2005,
23 the years in which there were unusual levels of cost of removal or gross salvage, yields
24 more indications that the information is atypical. First, the retirement activity in both
25 years is significantly overweighted with the retirement of breakers and switches, and

1 underweighted in the retirement of large transformers. (See OPC's First Depr.
2 Interrogatories No. 32). In fact, the retirement level of breakers and panels during those
3 years is double its investment relationship, while transformer retirements are 1/3rd of its
4 investment relationship. The retirement of breakers and switches normally would not be
5 anticipated to provide any appreciable level of gross salvage, if any, and should result in
6 higher per unit cost of removal compared to transformers. On the other hand, given their
7 copper content, transformers would normally be anticipated to produce possibly positive
8 levels of gross salvage. Thus, the specific information relied upon by the Company to
9 make its significant movement in net salvage for the existing positive level is precisely
10 what should not be relied upon, and I anticipate would not have been relied upon had the
11 Company performed any form of detailed investigation of these atypical events.

12
13 I observe also that the Company's presentation in its depreciation study and its responses
14 to discovery requests are inconsistent. In particular, the Company begins its basis for its
15 proposal by referencing the "trend" in recent years, which clearly establishes the process
16 it selected for its study. However, when specifically questioned regarding why certain
17 recent events appear to be atypical, the Company responded by stating that information
18 derived from "all years and bands was used to determine future net salvage for the
19 account." (See OPCs First Depr. Interrogatories No. 51 (b)). The Company continues in
20 its response by stating "years that looked abnormal were given less weight in the
21 analysis." Yet, the year with the highest level of cost of removal in the last 15 years was
22 actually given greater, not less, weight, and the gross salvage during 2005, which is part
23 of the recent activity relied upon by the Company reflects a *negative gross salvage*.
24 (See Exhibit CRC - 1, page 500). A "negative gross salvage" means an item is worth
25 less than zero, before any consideration of removal costs. Under accurate record

1 keeping negative gross salvage is, in theory, impossible. (Try to visualize a person who
2 weighs minus forty pounds, or a glass that contains minus six ounces of water.) If the
3 Company accounted for its transactions inaccurately, then obviously the negative gross
4 salvage value represents correction of multiple years of inaccurate prior accounting
5 transactions. However, there can be no question but that a negative gross salvage of \$3
6 million must be considered "abnormal." A failure to investigate unusual values should
7 not be allowed to default to a conclusion that relying on such values will still produce a
8 valid result.

9
10 Finally, from the industry information presented by the Company, the industry average
11 is approximately a negative 5%. However, most of the industry data relied upon
12 corresponds to studies performed during periods when copper and other scraps of metal
13 prices were much lower than they are today. It must be noted that copper prices today
14 are one half the level they were last year before the world wide economic downturn. At
15 some point, the economies of China and India will return to prior growth levels that
16 resulted in the appreciable increase in copper and other scrap metal prices. When the
17 industry average is viewed on a more normalized basis, my recommended zero level of
18 net salvage is a realistic and appropriate value at this point in time.

19
20 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

21 A. The standalone impact of my recommendation results in a reduction of \$3,731,047 to
22 annual depreciation expense.

23
24 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 354 –**
25 **TRANSMISSION TOWERS AND FIXTURES?**

1 A. The Company proposes to retain the existing 15% negative net salvage. (See Exhibit
2 CRC – 1, page 510).

3

4 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

5 A. The Company claims that *towers* are usually disassembled and palletized, then shipped
6 to the nearest metal facility as scrap. The Company also states that there has been a
7 general decline in gross salvage percentages and a general increase in cost of removal.
8 However, it does recognize that the data is "sporadic." Next, the Company says that the
9 industry range is from zero to a negative 50%. Finally, the Company states that the
10 overall net salvage experienced during the past 21 years is a negative 17%, which is
11 close to the current authorized negative 15%.

12

13 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

14 A. No. The Company's proposal yields an excessive level of negative net salvage.
15 Therefore, I recommend a zero level.

16

17 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

18 A. The Company's historical database is significantly affected by the reported values in
19 2006. (See Exhibit CRC – 1, page 512). In fact, this one year represents 79% of the
20 entire 22-year net salvage total. Yet, when the 2006 values are investigated, one finds
21 unusual and unexplained data manipulation. First, the Company's 2007 Study identifies
22 only \$114,809 of retirement activity in 2006. (See Exhibit CRC – 1, page 512).
23 However, the Company also identifies \$5,267,642 of actual retirements for this account
24 in 2006. (See OPC's First Depr. Interrogatories No. 3, Attachment 7, file
25 "Stat206f.xls"). Upon investigating the input data to the Company's depreciation

1 model, one finds that the Company inexplicably coded the vast majority of the \$5
2 million plus retirement in 2006 as outliers. (See OPC's First Depr. POD No. 12, 2 of 5).
3 Thus, the Company removed \$5,152,833 of retirement activity which would have
4 reduced the reported negative 192% net salvage to only a negative 4% net salvage had
5 the amount been included. I also investigated the \$220,453 of cost of removal reported
6 for 2006. It conflicts with other provided data. In fact, the Company reports the cost of
7 removal in 2006 for this account as a negative \$267,296. (See OPC's First Depr.
8 Interrogatories No. 3, Attachment 7, file "Stat206f.xls"). Thus, when the underlying
9 component of the database that the Company relied upon to retain its negative 15% net
10 salvage is investigated, both the retirement and the cost of removal are inconsistent with
11 other reported data -- without any explanation. Eliminating this one year of questionable
12 data would result in an overall negative 4% net salvage rather than the Company's
13 reported negative 17%.

14
15 Turning to the Company's response to an inquiry regarding why the cost of removal in
16 2006 was incurred, the Company said that the vast majority of the claimed cost of
17 removal was associated with the replacement of 12 *cross braces on 500 KV structures*.
18 (See OPC's First Depr. Interrogatories No. 57). Here, the Company attempts to portray
19 the removal of 12 cross braces at possibly a single tower that may have resulted in an
20 unusually high level of negative net salvage as being representative of what will
21 transpire to the entire investment in this account in the future. The assumption is
22 unsubstantiated and inappropriate, given the additional care that undoubtedly must be
23 taken to replace portions of towers while not denigrating the integrity of the entire
24 structure during the replacement process. Moreover, the cross braces represent only 8%
25 of the investment in the account, but represented 33% of the retirements reflected in the

1 Company's modified database, thus skewing the results. (See OPC's First Depr.
2 Interrogatories No. 32).

3
4 Another consideration is the Company's failure to recognize any gross salvage
5 associated with the removal of the 12 cross braces. Given the Company's admission that
6 it "usually disassembled and palletized" material in order to turn over the metal to scrap
7 dealers, some level of gross salvage should have been recorded; however, there is none.

8
9 Turning to industry comparative data, the Company identification of a zero to a negative
10 50% net salvage range is questionable given the timing of the studies. The industry
11 database relied upon is prior to the significant increase in scrap metal prices that peaked
12 during the summer of 2008. While those prices have declined in association with the
13 world wide economic downturn, they are anticipated to increase again as the world
14 economy recovers. Therefore, based on all the above, a zero level of net salvage for
15 this account is appropriate at this time.

16
17 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

18 A. The standalone impact of my recommendation results in a reduction of \$1,281,044 to
19 annual depreciation expense.

20
21 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 355 -**
22 **TRANSMISSION, POLES AND FIXTURES?**

23 A. The Company proposes to retain the existing negative 50% net salvage. (See Exhibit
24 CRC - 1, page 515).

25

1 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

2 A. The Company states that removal costs for poles are "expected" to increase due to
3 changes in regulations. The Company also states that the 20-year and 5-year salvage
4 band analyses yield approximately negative 50% results, and that disposal methods
5 usually depend on where each material facility is located, because regulations vary
6 among locations.

7

8 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

9 A. No. The Company's proposal yields excessive levels of negative net salvage.
10 Therefore, I recommend a negative 30% net salvage.

11

12 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

13 A. The Company's manipulation of its actual historical data is suspect. First, it must be
14 noted that the Company's actual experience during its 22-year historical database
15 yielded a *positive 4%* net salvage. (See OPC's First Depr. POD No. 12 "2008 Salvage
16 File.xls"). Upon further investigation, the reason for the dramatic difference between
17 what the Company claims in historical data and what actually transpired is that the
18 Company removed what it asserts are "hurricane/major storm" related retirements,
19 "sales/exchange" related retirements, and reimbursed retirements. The reimbursed
20 retirements yielded a significant positive net salvage while the hurricane related
21 retirement yielded approximately a negative 26% net salvage.

22

23 The Company's exclusion of reimbursed retirements artificially results in an excessively
24 high negative net salvage and helps explain in part why the Company finds itself in such
25 an over accrued reserve position. Reimbursed retirements realistically could be removed

1 from the analyses if they occurred infrequently and could not be expected to have some
2 meaningful level of reoccurrence in the future. However, my review of the Company's
3 database clearly establishes that the Company annually incurs significant levels of
4 reimbursed retirements. Therefore, to eliminate these values as a predictive tool for
5 future events entirely would be inappropriate. While there is always the problem of
6 predicting the annual level of reimbursed retirements, and the corresponding dollar level
7 of reimbursement that will be provided, this situation is no different the prediction of
8 regular retirements in the future.

9
10 Turning to the Company's reliance on the results of its 5-year and 20-year historical
11 bands for its basis, further review calls the reliance into question. First, for this account
12 the Company ignores the recent "trend" in the data. That is inconsistent with its
13 proposal dealing with Account 353 – Transmission Station Equipment. For this account,
14 the Company's analysis demonstrates the 3-year band (2005 through 2007) yields only a
15 negative 10% net salvage. (See Exhibit CRC – 1, page 520). However, the Company
16 refers to a 5-year band in this instance with full knowledge that (1) the fifth oldest year
17 in the band yielded the highest negative net salvage percentage during the entire 22-year
18 period and (2) the fourth oldest year in the band reflects a large *negative gross salvage*, a
19 theoretically impossible value. Moreover, limiting the comparison to a 5-year band
20 distorts the fact that had a seven year band been relied upon instead, it would yield an
21 approximate 32% negative net salvage, significantly different from the implied
22 consistent negative 50% level wrongfully implied by FPL's approach.

23
24 Another consideration lacking in FPL's approach is the concept of economies of scale.
25 A review of the actual retirement activity in the most recent three years, where there is a

1 trend towards less negative net salvage, reveals that the Company retired 48% more
2 poles on an annual basis than it had in 3 years prior to 2005. (See OPC's First Depr.
3 Interrogatories No. 58). The negative net salvage for the most recent 3 years is 10%,
4 compared to a negative 84% for the 3-year band prior to 2005. The level of poles retired
5 during the most three recent years is more indicative of the type of activity that would be
6 expected given the Company's proposed life-curve combination for this account.

7
8 Yet another consideration is the fact that, in contrast to the 2007 Study's claim that
9 typical transmission poles are made of wood (See Exhibit CRC-1, page 515), the
10 Company admits that the majority of its transmission poles are concrete. (See OPC's
11 First Depr. Interrogatories No. 58). Thus, the concern for higher cost of removal
12 associated with retirement of wood poles that had been treated with preservatives is not
13 as great for this utility as it may be for others. One would expect the net salvage level
14 for FPL to be less negative than industry values relied upon by Mr. Clarke, even though
15 his industry database yields an approximate negative 42% net salvage. Thus, from an
16 industry standpoint one would expect a less negative (closer to zero) value for FP&L
17 than the industry average.

18
19 In summary, my recommendation is conservative given the data manipulation by the
20 Company, the inappropriate exclusion of any impact associated with reimbursed
21 retirements, the concept of economies of scale, the trend in the data given the magnitude
22 of poles retired, as well as the overall problem the Company has historically experienced
23 by over accruing depreciation expense, which is no different for this account.

24
25 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

1 A. The standalone impact of my recommendation results in a reduction of \$4,329,923 to
2 annual depreciation expense.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 356 –**
5 **TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?**

6 A. The Company proposes to decrease (make more negative) the existing negative 45% net
7 salvage to a negative 50%. (See Exhibit CRC-1, page 523).

8

9 **Q. WHAT IS THE BASIS FOR THE COMPANY'S PROPOSAL?**

10 A. The Company relies on its historical data, both the full 22-year band and the most recent
11 5-year band, each averaging approximately a negative 50%. In addition, the Company
12 refers to industry data ranging being between a zero level and negative 80% net salvage.

13

14 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

15 A. No. The Company's proposal results in an excessive level of negative net salvage.
16 Therefore, I recommend increasing (making less negative) the existing level of net
17 salvage to a negative 40%.

18

19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. The Company again has significantly manipulated the historical database. The
21 Company has removed reimbursed retirements, sales and exchanges, and hurricane
22 related retirements. (See OPC's First Depr. POD No. 12, "2008 Salvage.xls"). The
23 critical issue here is the removal of all aspects of reimbursed retirement activity. A
24 review of the historical data clearly indicates that reimbursed retirements have *occurred*
25 *every single year* in the historical database. Therefore, the exclusion of such amounts in

1 total is inappropriate and helps explain why the Company has significantly overaccrued
2 depreciation expense historically. The retention of reimbursed retirements in the
3 historical database would decrease the resulting net salvage to a negative 32% level, if
4 fully reflected.

5
6 Another consideration is the fact that the Company still has approximately 3% of its
7 conductor associated with copper conductor. (See OPC's First Depr. Interrogatories No.
8 59, Attachment 1). Thus, given the significantly higher level of scrap metal prices for
9 copper, the future retirement of almost 5 million linear feet of copper conductor should
10 produce significant levels of gross salvage. The percentage level of copper conductor on
11 a linear foot basis is greater than the percentage level of copper conductor on a dollar
12 investment basis. This relationship reaffirms that a disproportionately higher gross
13 salvage per future dollar of retirement should occur.

14
15 Another consideration is economies of scale. Given the Company's proposed life-curve
16 combination and the linear feet of overhead conductor in service, one would expect an
17 approximate doubling of the annual level of linear feet to be retired compared to the
18 average for the last 10 years as the conductor approaches the Company proposed ASL.

19
20 Finally, turning to industry comparative data for confirmational purposes, the
21 Company's identified range from zero to a negative 80% is less than informative. A
22 review of the Company's information demonstrates that the average associated with this
23 range is a negative 27%. The Company's proposal in this case is approximately double
24 the average negative level that the industry exhibits.

25

1 In summary, a less negative net salvage value is appropriate for this account. The
2 reasonable range appears to be from a negative 25% to an approximate negative 40%,
3 based on industry data, the amount of copper wire still in service, partial recognition of
4 reimbursed retirements, and the concept of economies of scale. To remain conservative,
5 I have recommended a minimal change to a negative 40% net salvage.

6
7 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

8 A. The standalone impact of my recommendation is a reduction of \$1,506,549 to annual
9 depreciation expense.

10
11 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364 –**
12 **DISTRIBUTION POLES, TOWER AND FIXTURES?**

13 A. The Company proposes a negative 125% net salvage. (See Exhibit CRC-1, page 569).
14 While the Company did not identify the existing level of net salvage in the 2007 Study, a
15 review of the FERC Form 1 identifies the existing net salvage at a negative 40%. The
16 Company's proposed change to a negative 125% net salvage represents a negative level
17 more than 3 times greater than the current level.

18
19 **Q. WHAT IS THE COMPANY'S BASIS FOR SUCH A DRAMATIC CHANGE IN**
20 **NET SALVAGE?**

21 A. Surprisingly, very little. The Company relied on the results of its 5-year and 20-year
22 averages from its historical net salvage database, further indicating that in some years
23 the cost of removal was as high as a negative 200%, and that gross salvage has
24 diminished to approximately zero. The Company also says that many utilities are

1 experiencing high cost of removal and that the industry range is a negative 10% to a
2 negative 135%. (See Exhibit CRC-1, page 569).

3
4 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

5 A. No. The Company's proposal seeks approximately \$1.1 *billion* of negative net salvage
6 from customers over the life of the investment. In support of a \$1.1 billion request,
7 which represents a three quarter of a billion dollar increase from existing rates, the
8 Company has blindly relied upon the results of simple historical averages and the
9 assertion that its proposal falls within its industry range of values. I submit that the
10 Commission and customers are entitled to significantly greater justification for a three
11 quarter of billion dollar increase in costs since the last depreciation study. Therefore, I
12 recommend changing the existing negative 40% net salvage to a negative 60% level.

13
14 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

15 A. First, it is necessary to place the issue into proper perspective. The Company's request
16 seeks an average of \$45.2 million of negative net salvage in annual revenue
17 requirements. ($\$878,000,000 \times \$125\% / 24.3$ year remaining life). This level represents
18 *15 times* the average level the Company has incurred over its entire net salvage database.
19 It also represents approximately *3 times the highest* net salvage value experienced by the
20 Company during the past 22 years. Requests by the Company for such significant
21 deviations from both industry averages and Company experience must be supported by
22 substantial evidence and explanations, which are missing in this proceeding.

23
24 Turning to a review of the underlying data, one finds that the Company has significantly
25 manipulated the historical results within its own database. In particular, the Company

1 has removed reimbursed retirements. Such reimbursements, if included rather than
2 excluded from the historical analysis, would reduce the historical results to a negative
3 62%. (See OPC's First Depr. POD No. 12, "2008 Salvage.xls"). This is significant.
4 The exclusion of data from the historical database should be permitted if it is atypical or
5 nonrecurring. However, my review of the reimbursed retirements indicates it occurs
6 *every single year* within the Company's historical net salvage database. In addition,
7 there is concern regarding the Company's actual accounting practices, as they apply to
8 the booking of costs to cost of removal rather than as additional cost of new replacement
9 additions. To the extent the Company performed such activities, they distort the
10 historical database and lead to inappropriate future expectations.

11
12 Another consideration that supports moderating the Company's proposal is the fact that
13 the Company has raised concerns regarding the disposal of wood poles treated with
14 preservatives. What the Company fails to note is that while it has a substantial number
15 of wood poles, the investment in this account is approximately 18% associated with
16 concrete poles that do not contain preservatives. (See OPC's First Depr. Interrogatories
17 No. 61). Moreover, the Company is adding concrete poles at a faster pace on a
18 percentage basis than it is adding wood poles. In the future, concrete-related retirements
19 and investments will comprise a larger component of the Company's activity. Given the
20 Company's stated concern regarding the high cost of removal associated with
21 preservative treated wood poles, the Company's reliance on historical results
22 inappropriately fails to properly capture future expectations for the investment at issue in
23 this proceeding.

24

1 Comparative industry data also indicate the Company's proposal is excessive. The
2 Company stated only that the range for the industry is a negative 10% to a negative
3 135%. The average is only negative 42%, and only one utility in the database has a
4 value in excess of negative 95%. (See OPC's First Depr. POD No. 12, 1 of 5). The
5 most common value reflected in the industry average is negative 45%. Thus, from an
6 industry comparative standpoint, the Company's dramatic change in negative net
7 salvage is unjustified. The significant deviation from the industry average raises further
8 concerns regarding the appropriateness of Company's underlying accounting methods
9 and treatment of data.

10
11 Finally, it is only during the past 5 years that the Company has experienced a significant
12 increase in the level of negative net salvage. This period corresponds with the time
13 frame associated with a significant increase in hurricane-related events, which may
14 partially explain what appears to be excessively high negative net salvage levels.

15
16 In summary, while my recommendation of a negative 60% is justified based on the
17 presentation provided by the Company as well as industry comparative information, I
18 believe my recommendation is conservative. In fact, the recommended negative 60%
19 net salvage still provides the Company with approximately 7 times the average level of
20 negative net salvage it has experienced over the past 22 years and 138% of the highest
21 level the Company has ever experienced. Thus, the Company is well protected from any
22 underrecovery that it might claim it could experience during the next several years until
23 the Company's next depreciation study. In the next depreciation study, the Company
24 should provide extensive and detailed support and justification for all its proposals, but

1 especially those that result in hundreds of millions of dollars in increased costs between
2 depreciation studies.

3
4 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

5 A. The standalone impact of my recommendation results in a reduction of \$23,451,436 to
6 annual depreciation expense.

7
8 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 365 -**
9 **DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?**

10 A. The Company has proposed doubling the existing negative 50% net salvage to a
11 negative 100% net salvage. (See Exhibit CRC-1, page 577).

12
13 **Q. WHAT IS THE COMPANY'S BASIS FOR THIS INCREASE?**

14 A. The Company first states that the results of a 5 and 20-year band historical analysis are a
15 negative 99% and negative 59%, respectively. The Company continues by stating that
16 recent "3-year rolling band net salvage rates have increased close to (100) percent and
17 are becoming increasingly negative." The Company then states that the industry data
18 shows a wide variation ranging from positive 5% to a negative 75%. The Company then
19 concludes that the last 10-year data band analysis indicated a high cost of removal that
20 "appropriately approximates the trend of increasing negative net salvage for this
21 account."

22
23 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

24 A. No. The Company's proposal is again exceedingly excessive. It represents a dramatic
25 increase in cost for one of the Company's largest accounts without adequate or

1 reasonable justification for its position. I recommend retaining the existing negative
2 50% net salvage as a conservative value until such time as the Company can present
3 meaningful information which would substantiate deviating from the existing level.

4
5 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

6 A. Again, it is necessary to place the Company's proposal for this account into proper
7 perspective. The Company seeks a negative 100% net salvage level for an account with
8 \$1.16 billion of investment. A 100% negative net salvage on a standalone basis for this
9 account, with its corresponding 29.3-year proposed remaining life, yields an annual
10 revenue requirement of over \$39 million. Thus, the Company's proposed change from a
11 negative 50% to a negative 100% negative net salvage represents an approximate \$20
12 million increase in annual depreciation expense. Given the inadequacy of the underlying
13 supporting data and basis presented by the Company, this level is unreasonable and
14 unrealistic. In fact, it represents the most negative net salvage reflected in the
15 Company's industry database, and not by a small amount. The Company's 2007 Study
16 identifies a negative 75% as the most negative industry value. The Company's proposal
17 is 33% higher than the highest industry value identified by the Company's depreciation
18 consultant. A change of this magnitude, which results in the highest reported value in
19 the industry and corresponds to over a \$1 billion of costs, demands significantly more
20 justification and support than the Company provided. .

21
22 Turning to the underlying data that the Company cites in support of its position, one
23 finds a significant anomaly. In particular, the gross salvage for 2006 is not only the
24 largest gross salvage reported in the Company's history, but it is *negative*. (See Exhibit
25 CRC-1, page 581). As previously noted, under accurate accounting such a negative

1 gross salvage is theoretically impossible. Yet, the Company did not investigate or
2 explain why such an unusual and large value was not investigated or revised. Moreover,
3 given the placement in 2006 in the Company's database, this atypical result has a
4 heightened impact in the decision making process. Specifically, both the Company's 5-
5 year and recent 3-year rolling bands would encompass this atypical result. A valid
6 depreciation projection should not rely on such information to any meaningful extent,
7 much less accentuate it.

8
9 Another problem with the Company's basis is the fact that it the Company has
10 manipulated its historic data significantly from what is actually recorded on its books.
11 Had the Company relied solely on its historic database without manipulation, it would
12 have resulted in a negative 42% net salvage. The largest component of data excluded
13 from the analysis consists of those events associated with reimbursed retirements.
14 Again, the Company incurred reimbursed retirements in each and every year in its
15 historical database. The exclusion of the category of reimbursed retirements in its
16 entirety from the Company's analysis for future expectations is simply wrong and helps
17 explain why the Company is in such an overaccrued position on depreciation.

18
19 The relationship of the type of retirements to the investment mix also raises concerns.
20 While the investment in switches represents 10% of the investment in the account, the
21 retirement levels have consistently exceeded that level. (See OPC's First Depr.
22 Interrogatories Nos. 31 and 32). In fact, the two years since 1998 that reflected the
23 highest percentage of retirement activity relating to switches corresponded to a
24 Company-reported negative 178% net salvage, while the two year period since 1998 that
25 reflected the lowest percentage of retirement activity relating to switches corresponded

1 to a Company-reported negative 99% net salvage. (*Id.*, for 2004 and 2007, and 1999 and
2 2002, respectively). It appears that the disproportionate retirement level of switches in
3 the historical database is skewing the Company's proposal to excessively negative
4 results.

5
6 Comparative industry information clearly identifies the Company's proposal as an
7 outlier. The Company's own industry database has a negative 27% mean, a medium of
8 negative 20% and dual modes of negative 10% and negative 20%. The Company's
9 proposed negative 100% negative net salvage is quite excessive when compared to these
10 values. The proposed value is higher than the highest values that the Company can
11 identify and upon which it relied on for industry comparative purposes. Even the
12 retention of the existing 50% negative net salvage is a value well above any midpoint for
13 the industry and represents a high negative net salvage value.

14
15 Another concern with the Company's historical data is the fact that the Company retired
16 over 800,000 linear feet of copper conductor in 2006, yet, as previously noted, reported
17 a negative gross salvage. (See OPC's First Depr. Interrogatories No. 62). Again, a
18 "negative gross salvage" means the asset has a value less than zero – a theoretical
19 impossibility – before any consideration of the cost of removing it. Copper has a
20 significant value in the scrap metal market. This fact further calls into question the
21 validity of the Company's historical database, and in particular, the specific portion of
22 the historic database heavily relied upon by the Company for its proposal.

23
24 In summary, the data do not support the Company's position. The Company's proposal
25 represents a dramatic increase in costs both on a total life basis and on an annual basis.

1 The Company's historical database reflects theoretically impossible values that
2 significantly distort the relationship as reported. The Company has manipulated the data
3 to remove those components that would result in a lesser negative net salvage level,
4 which is particularly true for reimbursed retirements that have occurred annually during
5 the entire historical database relied on by the Company. Therefore, retaining the
6 existing negative 50% net salvage would still result in a very conservative estimate in
7 favor of the Company. In fact, a negative 50% net salvage still provides the Company
8 with 5 times the average level of negative net salvage it experienced over its entire
9 database, and about 50% more than the highest negative net salvage. I recommend that
10 the Commission order the Company to perform a detailed analysis of the cause of
11 retirements and specifically present and defend why values are removed or why unusual
12 values are considered appropriate for predicting the future in the Company's next
13 depreciation study.

14
15 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

16 A. The standalone impact of my recommendation results in a reduction of \$19,714,964 to
17 annual depreciation expense.

18

19 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT -- 366.6**
20 **DISTRIBUTION UNDERGROUND CONDUIT -- DUCT SYSTEM?**

21 A. The Company proposes to reduce (make less negative) the existing negative 10% to a
22 negative 5% net salvage level. (See Exhibit CRC-1, page 585).

23

24 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

1 A. For this account the Company again relies on a 5-year and 20-year average of historical
2 data, which resulted in a zero and negative 3% level, respectively. The Company also
3 noted that the 3-year rolling band results are “going down” and that industry indicates
4 values between zero and negative 50%.

5

6 **Q. DO YOU AGREE WITH THE COMPANY’S PROPOSAL?**

7 A. No. The Company’s proposal, while a movement in the right direction, is still
8 excessively negative. Therefore, I recommend a zero level of net salvage for this
9 account.

10

11 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

12 A. From an analysis of historical data standpoint, a zero net salvage level corresponds to the
13 5-year band results, while the more recent 3-year bands are *positive*. This is especially
14 significant given the Company’s manipulation of the historical database. If reimbursed
15 retirements are recognized, the historical database turns *positive* overall. This is not
16 surprising, given the fact that most utilities abandon those underground facilities in
17 Account 366 in place when it is not economical to remove the plant at retirement.
18 Obviously, where it is economical to remove the plant, a positive salvage should be
19 obtained. Thus, from a historical standpoint, and consistent with the Company’s process
20 in other accounts where it relies on more recent data, a positive value would be
21 appropriate.

22

23 Next, turning to industry data for confirmational purposes, I note that the Company’s
24 underlying data yields a *positive* 40%, not a zero value as the low end of the data range
25 reported in the 2007 Study. (See OPC’s First Depr. POD No. 12). The Company’s

1 presentation from a industry comparative data standpoint is artificially skewed in favor
2 of a negative net salvage level.

3
4 In summary, the type of plant, the type of activity (i.e., abandonment in place for the
5 most part), and recognition of even minimal levels of reimbursed retirements would
6 produce a zero to a positive level of net salvage. Therefore, a zero level of net salvage is
7 a conservative and appropriate estimate for this account at this time.

8
9 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

10 A. The standalone impact of my recommendation results in a reduction of \$1,073,994 to
11 annual depreciation expense.

12
13 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT – 367.6**
14 **DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES – DUCT**
15 **SYSTEM?**

16 A. The Company proposes to retain the existing negative 5% net salvage. (See Exhibit
17 CRC-1, page 599).

18
19 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

20 A. The Company begins by referring to industry information and identifies the range from a
21 positive 25% to a negative 40%. The Company then states cost of removal is
22 decreasing, causing the net salvage to become less negative. The Company concludes
23 that recent trends in the data suggest net salvage is similar to the current authorized 5%
24 level.

1 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

2 A. No. The Company's proposal is excessive, given the data and information for this
3 account. I recommend a zero level of net salvage.

4
5 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

6 A. My recommendation first relies on the Company's modified historical database. My
7 review of that information yields a negative 2% overall net salvage. The Company's
8 modified database also yields a negative 2% for the most recent 5-year period. The
9 Company has relied upon these criteria for several other accounts in making its proposal,
10 but has not done so for this account. In addition, not a single one of the first nine 3-year
11 rolling bands yielded a value less negative than a negative 3%. Therefore, even under
12 the Company's modified database and the general practice of rounding to the nearest 5%
13 salvage level, the Company should have proposed a zero level.

14

15 Next, referring the actual database prior to the Company's modifications, I note that the
16 Company removed a substantial level of reimbursed retirements. Had reimbursed
17 retirements been included in the database, the analysis would have yielded a positive
18 level of net salvage. Given that reimbursed retirements have occurred on annual basis
19 throughout the entire historical database, there is no basis for excluding them.
20 Therefore, my recommended zero level of net salvage is very conservative in favor of
21 the Company.

22

23 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

24 A. The standalone impact of my recommendation results in a reduction of \$2,225,291 to
25 annual depreciation expense.

1

2 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 368 --**
3 **DISTRIBUTION LINE TRANSFORMERS?**

4 A. The Company proposes to move from the existing negative 35% net salvage to a
5 negative 25%. (See Exhibit CRC - 1, page 613).

6

7 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

8 A. The Company again refers to the 22-year and 5 historical averages, which result in
9 negative 25% and negative 23%, respectively. The Company then identifies the industry
10 range of values for this account as falling between a positive 5% and negative 20%. The
11 Company concludes by recognizing that the current net salvage percentage is more
12 negative than the industry and states that "the analysis shows the net salvage decreasing
13 [becoming less negative]."

14

15 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

16 A. No. While the Company's proposal moves in the right direction, it does not go far
17 enough. Therefore, I recommend a negative 20% net salvage.

18

19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. Given the generally decreasing (less negative) trends in negative net salvage, a negative
21 20% would be appropriate based on the modified data the Company presented.
22 Recognizing the Company's manipulation of historic data further supports moving to a
23 negative 20% net salvage. In addition, the trend to less negative values in the historical
24 database is diminished due to the inclusion of several negative gross salvage values, the
25 theoretically impossible values. (See Exhibit CRC-1, page 617). Finally, the

1 recommended level of negative net salvage is conservative, given that it equals the most
2 negative value the Company has identified for industry comparative purposes.
3 Therefore, a negative 20% is a reasonable and conservative value.

4
5 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

6 A. The standalone impact of my recommendation results in a reduction of \$3,952,437 to
7 annual depreciation expense.

8
9 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.1 –**
10 **DISTRIBUTION SERVICES – OVERHEAD?**

11 A. The Company proposes to change the current negative 60% net salvage to a negative
12 125%. (Exhibit CRC – 1, page 621).

13
14 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

15 A. The Company begins its basis by stating that the industry range falls between a negative
16 10% and negative 85%. The Company then says that its own data since 1998 has
17 resulted in a decrease in gross salvage and an increase in cost of removal; its overall
18 database is a negative 125%. The Company concludes by noting that cost of removal
19 has increased in the past 8 years to over 200%. It apparently selected the overall
20 historical database average of a negative 125%.

21
22 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

23 A. No. The Company's proposal would more than double the negative net salvage level
24 currently in effect. This significant change in negative net salvage is underpinned by an
25 admission that there was "no analysis performed to determine why the net salvage

1 percentages for this account are higher at Florida Power & Light than the industry
2 statistics used in this study.” (See OPC’s First Depr. Interrogatories No. 67). In other
3 words, the Company has no qualms about more than doubling the level of negative net
4 salvage based on unexplained historical accounting transactions that have resulted in
5 significant increases in cost of removal over the past several years, on the one hand,
6 while for Distribution Underground Services, the Company elects to “ignore” its
7 historical data activity because it would result in “long lives” for that account. (See
8 Exhibit CRC – 1, page 629). The inconsistent treatment of rejecting long service lives
9 but accepting dramatic changes in negative net salvage values that exceed industry
10 values reflects an unacceptable bias in depreciation estimation. Moreover, it appears
11 that this practice on an historical basis has contributed to the Company being
12 significantly over accrued as it relates to depreciation recovery. Therefore, I recommend
13 a negative 85% net salvage as a conservative level in favor of the Company. This value
14 should apply until the Company can demonstrate why its accounting practices and
15 procedures or other unusual events lead it to propose negative net salvage values that are
16 more negative than industry averages, and even more negative than the highest values in
17 the industry, as reported by the Company in its 2007 Study.

18
19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. While I also reviewed the Company’s historic data, I at least attempted to inquire as to
21 what changed in the Company’s operation or accounting practices from historical
22 periods which reflected significantly more negative net salvage levels, as well as what
23 might distinguish the Company from the industry. The Commission and customers are
24 entitled to a reasonable explanation supporting why a change from a negative 60% to
25 negative 125% is warranted.

1
2 A review of industry information shows that the industry average is less negative than a
3 negative 40%. In other words, the Company's existing level of negative net salvage is
4 already more negative than the industry average by a significant level. Yet, the
5 Company proposes to more than double the negative level of net salvage.

6
7 The Company's accounting practices are suspect. The Company creates a holding
8 account for any given particular work order project. The amounts reflected in such work
9 order projects are allocated "based on proportions established by the detail estimate."
10 (See OPC's First Depr. Interrogatories No. 66). In other words, some unidentified
11 Company individual has made an unsupported estimate as to what constitutes cost of
12 removal versus cost of a replacement installation. The Company has failed to
13 demonstrate that its "estimation" process is not distorted and may in fact be the cause of
14 why it deviates so significantly from the rest of the industry. It is worth reviewing again
15 the FERC definition of "replacement" or "replacing" of plant. Recall that that FERC
16 definition includes the cost *together with the removal of the properly retired* when
17 replacement activity occurs. Proper compliance with this definition should help solve the
18 dilemma faced by any internal accountant or cost engineer as to what constitutes actual
19 replacement activity versus the cost of removal of the retired plant until the Company
20 can demonstrate the validity of its estimates and allocation process.

21
22 Another basis for my recommendation is the fact that a negative 85% net salvage would
23 produce an annual \$4.2 million of negative net salvage expense at current plant in
24 service levels. That amount is almost *four times* the average level of negative net
25 salvage the Company has experienced throughout its historical database and is *80%*

1 *higher than the highest level* of negative net salvage reported in any given year. (See
2 Exhibit CRC – 1, page 625). Thus, my proposal is more than adequate to provide the
3 Company with protection against any significant level of negative net salvage that it
4 might experience until its next depreciation study. I believe it would also be reasonable
5 to limit the level of negative net salvage for this account to the existing level of a
6 negative 60%. The existing level is still significantly higher than the industry average
7 and would also produce a higher annual level of negative net salvage dollars than the
8 Company has ever experienced.

9
10 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

11 A. The standalone impact of my recommendation results in a reduction of \$1,968,596 to
12 annual depreciation expense.

13
14 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.7 –**
15 **DISTRIBUTION SERVICES – UNDERGROUND?**

16 A. The Company has proposed to retain the existing negative 10% net salvage. (See
17 Exhibit CRC -1, page 629).

18
19 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

20 A. The Company references the results from its 5 to 20-year historical analysis which are
21 negative 7% and negative 30%, respectively. The Company maintains that both cost of
22 removal and salvage vary significantly from year to year but that most recent data shows
23 higher cost of removal. Therefore, it would appear that the Company's basis relies on its
24 interpretation of the trend in cost of removal, while placing less importance on the
25 overall historical data, the recent rolling bands, or the 5-year band.

1

2 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

3 A. No. The Company's proposal is excessive both from a review of historical data
4 standpoint or its own policy of abandoning direct buried cable in place. Therefore, I
5 recommend a negative 5% net salvage.

6

7 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

8 A. First, it must be noted that the Company's overall historical data yields a negative 3%.
9 (See Exhibit CRC-1, page 631). Further, the Company's 5-year historical data indicates
10 a negative 7%, but also includes a *negative* gross salvage value. As previously noted,
11 under accurate accounting such a situation could not occur. This theoretically
12 impossible event skewed the 5-year average to a more negative value than is
13 appropriate. Further, from a historical standpoint it should be noted that 18 of the 22
14 years of data yielded a value less negative than the Company's proposed negative 10%,
15 and 17 of the years yield a value less negative than the negative 5% I recommend. Thus,
16 a negative 5% net salvage is conservative in favor of the Company.

17

18 The Company claims that the negative gross salvage was associated with the reversal of
19 other recoveries recorded in association with Hurricane Jeanne. (See OPC's First Depr.
20 Interrogatories No. 68 (c)). However, when the Company's file that contains the data
21 manipulation from historical data is reviewed, one finds that there was no adjustment to
22 gross salvage during 2005 for hurricane related activity. (See OPC's First Depr. POD
23 No. 12 "2008 Salvage.xls"). Thus, the Company has incorrectly attempted to explain
24 why its theoretically impossible negative gross salvage exists.

25

1 Another pertinent consideration, based on my review of the Company's historical
2 activity, is the concept of economies of scale. The Company says that part of its basis
3 for retaining the negative 10% salvage is the recent trend toward higher cost of removal.
4 Those recent trends correspond to the period 2004 through 2007. (See Exhibit CRC-1,
5 page 631). My review of the retirement activity during those 4 years clearly
6 demonstrates minimal levels of retirements of underground buried services. (See OPC's
7 First Depr. Interrogatories No. 68 (e)). During prior periods, when cost of removal was
8 basically under 10%, the Company retired significantly more underground buried
9 services. In fact, the Company retired over *27 times* the annual level of underground
10 services during the 4-year period 2000 to 2003 than the levels experienced during the 4-
11 year period 2004 through 2007. There appears to be a correlation between the quantity
12 of services retired in any given year and the level of cost of removal on a per unit basis.

13
14 Turning to the actual type of investment at issue, the Company acknowledges that its
15 policy is to abandon in place its previously installed direct buried cable. (See OPC's
16 First Depr. Interrogatories No. 68 (d)). For that portion of the investment, the Company
17 should incur zero to nominal levels of negative net salvage, supporting a value less
18 negative than a negative 10%. While the Company does replace some cable in conduit,
19 the retired cable is recycled and should yield gross salvage. Therefore, even in
20 situations where cable is removed, minimal levels of negative net salvage should be
21 expected. In summary, from the standpoint of the type of investment, and considering
22 Company policy and practices, the Company's proposed negative 10% level is
23 excessive. A negative 5% is more realistic.

24
25 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

1 A. The standalone impact of my recommendation results in a reduction of \$1,314,643 to
2 annual depreciation expense.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 370 –**
5 **DISTRIBUTION METERS?**

6 A. The Company proposes to change from the existing negative 30% net salvage to a
7 negative 55% net salvage. (See Exhibit CRC-1, page 635).

8

9 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

10 A. The Company states that it based its proposed negative 55% net salvage on the past 5
11 years of activity.

12

13 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

14 A. No. The Company's proposal would be excessively negative, even if the Company were
15 not planning to replace 4.3 million meters within the next 5 years. However, given the
16 planned massive and concentrated retirement of meters, the Company's proposal is
17 significantly excessive. Therefore, I recommend a negative 10% net salvage.

18

19 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

20 A. First, the Company failed to note any reference to industry comparative data when
21 discussing its proposed negative net salvage. Had the Company referenced the same
22 industry database that it used for other accounts, it would have become patently clear
23 that the Company's proposal falls so far outside reasonable bounds as to lack credibility.
24 The industry database on which the Company relies on for other accounts yields a
25 negative 3% average, with the most negative value reported at a negative 25%. (See

1 OPC's First Depr. POD No. 12, 1 of 5). That the comparative data is predicated on
2 historical activity that is absent significant or concentrated removal of meters makes this
3 comparison even more dramatic.

4
5 The historical data is precisely that: historical data associated with historical transactions
6 under historical practices. Recall that depreciation is the projection of realistic and
7 appropriate mortality characteristics for the remaining plant in service that is anticipated
8 to be retired in the future. We know that the Company plans on retiring approximately
9 4.3 million meters in the next 5 years. This plan in no way compares to the historical
10 activity experienced by the Company or others in the industry database. This
11 concentrated activity, or the resulting economies of scale that will transpire, will produce
12 dramatically different results on a per unit cost basis.

13
14 This is precisely the situation that transpired in a current case in Texas. In PUCT
15 Docket No. 35717, the utility initially filed for an 18% negative net salvage for meters
16 based on historical practices. As part of an agreement, Oncor performed an analysis to
17 determine what the average cost of removal per meter would be under a concentrated
18 basis associated with retiring approximately 3.2 million meters in a short period of time.
19 Oncor's revised cost of removal dropped by more than 2/3 due to this concentrated
20 approach, which recognized economies of scale. In fact, based on an analysis equivalent
21 to a time and motion study, Oncor estimated that it would cost only \$5.63 in cost of
22 removal to remove a conventional meter. (See PUCT Docket No. 35717, Supplemental
23 Direct Testimony of Mr. Pruett, Exhibit RKP-S-1). If that same \$5.63 cost of removal
24 per meter were applied to the Company's 4.3 million meters that will be retired in the
25 next 5 years, it would yield an approximate negative 10% net salvage. This calculation

1 forms the basis of my recommendation in this proceeding. Moreover, my
2 recommendation is much more reasonable in terms of being confirmed by the industry
3 average, while the Company's proposal is quite excessive.

4
5 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

6 A. The standalone impact of my recommendation results in a reduction of \$4,306,357 to
7 annual depreciation expense.

8
9 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 370.1 --**
10 **DISTRIBUTION METERS – AMI?**

11 A. The Company proposes to use the same 55% negative net salvage that it proposed for
12 Account 370 – Conventional Meters. (See Exhibit CRC-1, page 642).

13
14 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

15 A. The Company states that it's AMI are new and no historical information is available.
16 Therefore, it appears the Company elected to rely on its proposal for conventional
17 meters.

18
19 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

20 A. No. The Company's proposal is excessively negative. Therefore, I recommend a
21 negative 10%.

22
23 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

24 A. My recommendation also recognizes that the investment in this account is too new to
25 have any predictive value. However, there are strong indications from the industry

1 comparative data supplied by the Company that a value of negative 10% would still be
2 very conservative in favor of the Company. In addition, my recommendation relies on
3 the value for conventional meters until more useful data specific to the new meters is
4 obtained. The negative 10% recommendation provides the Company with more than
5 adequate level of net salvage until its next depreciation study.

6
7 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

8 A. The standalone impact of my recommendation results in a reduction \$711,992 to annual
9 depreciation expense.

10
11 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 390 – GENERAL
12 PLANT STRUCTURES AND IMPROVEMENTS?**

13 A. The Company proposes to move from the current 0% net salvage to a negative 10% net
14 salvage. (See Exhibit CRC-1, page 661).

15
16 **Q. WHAT IS THE COMPANY'S BASIS FOR ITS PROPOSAL?**

17 A. The Company simply states that cost of removal has been increasing in recent years,
18 which is typical for buildings. The Company also indicates that the industry shows a
19 negative 5% to a negative 15% net salvage.

20
21 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

22 A. No. I dispute the Company's claim that its proposal is based on "the best information
23 available." (See OPC's First Depr. Interrogatories No. 71 (b)). In fact, the Company's
24 proposal demonstrates an approach which is geared towards acceptance of historical
25 results with little thought as to the underlying assets. Therefore, I recommend a positive

1 25% net salvage as the first step towards proper recognition of the significant value
2 associated with the Company's holdings in major office buildings or service centers.

3
4 **Q. WHAT IS THE BASIS FOR YOUR RECOMMENDATION?**

5 A. It is important to understand what is reflected in the underlying assets as well as the
6 underlying recent retirements. In just the top ten largest general plant structures and
7 improvements, the Company has almost 2/3rds of the entire investment in Account 390.
8 (See OPC's First Depr. Interrogatories No. 33 Corrected). In fact, over 40% of the
9 entire investment is reflected in the Company's two largest office complexes. These
10 office buildings contain over a million and half square feet of space and are constructed
11 of precast concrete with window ribbing. The trend in commercial real-estate in highly,
12 and even not so highly, desired areas over time has been toward substantial capital
13 *appreciation* rather than depreciation.

14
15 The Company's retirement activity that produced the negative net salvage values is not
16 associated with the sale of major office building or service centers, but rather with
17 replacement of roofs, air conditioning systems, security systems, etc. (OPC's First Depr.
18 Interrogatories No. 71). Thus, Mr. Clarke's proposal is predicated on retirement activity
19 that is not reflective of the majority of the investment in the account. The Company's
20 proposal simply fails to take into account that after 50 years, the ASL of the investment
21 in this account, one would expect to see well over 100% positive salvage for the
22 investment in major concrete structures located in desirable areas. In fact, the Company
23 has had an appraisal performed on its Juno Beach headquarters which supports my
24 position. (See OPC's First Depr. Interrogatories No. 33, Corrected). This appraisal
25 demonstrates the Company's approach and proposal for this account is fatally flawed.

1 In fact, my recommendation of a positive 25% is very conservative given the type of
2 structures and locations that comprise substantial levels of investment in this account.

3
4 To demonstrate just how fatally flawed the Company's proposal is, I am prepared to
5 make an offer that will save it and customers money. If the Company will sign over its
6 Juno Beach headquarters and Miami general office sites to me for \$1, I will let them use
7 the facilities free of rent after actual costs (e.g., property tax, repairs, utilities, etc.) until
8 the facilities reach 120% of the Company's proposed ASL. The Company can then
9 vacate my facilities without incurring the \$16.4 million of estimated cost of removal.
10 While such an offer would be a "win-win" situation for both parties under the
11 Company's presentation, I am confident it will decline my offer because it knows there
12 is real value to these facilities.

13
14 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

15 A. The standalone impact of my recommendation results in a reduction of \$3,828,186 to
16 annual depreciation expense.

17
18 **Q. IS THERE OTHER INFORMATION YOU ARE PROVIDING?**

19 A. Yes. For the convenience of the Commission, Exhibit __ (JP-8) provides copies of many
20 of the documents that are referenced throughout my testimony.

21
22 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

23 A. Yes; however, to the extent I have not addressed a method, value, issue, etc., it should
24 not be assumed that I am accepting or endorsing that method, value, or issue.

25

1 **BY MR. McGLOTHLIN:**

2 Q. Mr. Pous, have you prepared a summary of your
3 testimony?

4 A. Yes, I have.

5 Q. Please provide the summary to --

6 **CHAIRMAN CARTER:** Hang on, hang on a second.
7 Did Mr. Pous -- was he here when I explained the lights?
8 Mr. Pous, were you here this morning when I explained
9 how the lights worked?

10 **THE WITNESS:** No. But I believe I do
11 understand. I've got 30 seconds when the red light
12 comes on.

13 **CHAIRMAN CARTER:** You've got it. Yes, sir.

14 **THE WITNESS:** And then you've got a trigger
15 finger.

16 (Laughter.)

17 **CHAIRMAN CARTER:** Yes, sir.

18 **THE WITNESS:** Okay.

19 **CHAIRMAN CARTER:** Thank you, sir. I just
20 wanted to be fair to everyone. Yes, sir.

21 **BY MR. McGLOTHLIN:**

22 Q. If you're ready, Mr. Pous, please proceed.

23 A. Okay. Of the 4 plus billion dollars total
24 cost of service that FP&L wants to collect through
25 retail rates, more than 1 billion consists of

1 depreciation expense. FP&L's very aggressive
2 depreciation proposal explains why depreciation is one
3 of the biggest issues in this case. FP&L's aggressive
4 depreciation proposal reflects consistently short
5 estimated service lives and consistently low projections
6 of net salvage. Collecting the cost of a plant over too
7 short a period of time and underestimating the net
8 salvage value has the effect of increasing annual
9 depreciation expense above the appropriate amount.

10 In my testimony and exhibits I identify FP&L's
11 inappropriate service life and net salvage parameters,
12 explain with specificity why they are inappropriate, and
13 then develop and support my recommended alternatives in
14 detail on an account-by-account basis. While the
15 resulting total adjustments are very large, they are the
16 result of a detailed approach that examines and adjusts
17 numerous individual accounts.

18 My adjustments to FP&L's overall aggressive
19 depreciation parameters has two effects. First they
20 reduce the amount of annual depreciation expense by
21 241 million, thereby reducing test year expense and
22 reducing FP&L's claimed revenue deficiencies.

23 Second, a periodic depreciation study is also
24 used to compare the annual amount, the amount of
25 depreciation that would have been collected using the

1 updated parameters, the theoretical reserve, with what
2 actually was collected, the book reserve.

3 The existence of a reserve and balance, either
4 positive or negative, indicates that past customers have
5 paid either too much or too little. Once the surplus or
6 deficiency in the reserve is quantified, a decision can
7 be made as to whether to simply roll the difference into
8 the amount to be collected over the remaining life of
9 the plant or whether the discrepancy is so material and
10 the inequity so great that another option for
11 eliminating the surplus or reserve -- surplus of reserve
12 should be adopted.

13 In the area of reserve and balance, the
14 company admits to a \$1.25 billion excess. Its own
15 calculation of the excess would have been greater by
16 \$500 million had it not credited depreciation by
17 \$125 million annually under the terms of the 2005 rate
18 settlement. Based on more appropriate life and salvage
19 parameters than those developed in the company's
20 depreciation study, I calculated the company's reserve
21 excess to be 2.75 billion.

22 Under either calculation of excess reserve,
23 the surplus level is massive and imposes an unreasonable
24 and unacceptable level of intergenerational inequity on
25 current customers who have paid far more for their use

1 of the plant to date than was either appropriate or
2 equitable. The magnitude of the imbalance calls for a
3 departure from the business as usual approach of
4 remaining life to cure the imbalance..

5 A reserve surplus is an inequitable -- a
6 reserve surplus is as inequitable as a reserve
7 deficiency. I contend that equity requires that the
8 approach to rectify material imbalances, positive or
9 negative, to be symmetrical. FP&L disagrees. Just how
10 it disagrees is revealing.

11 In an FP&L study, it identifies 314 million of
12 investment that would be underdepreciated when certain
13 approaching plant retirements occur. FP&L proposes to
14 collect this deficiency amount over four years. At the
15 same time, FP&L proposes to simply roll the reserve
16 surplus, which is set at \$1.25 billion, and I calculated
17 2.75 billion over the remaining life of 22 years.

18 The disparity between the proposals to reverse
19 the surplus over 22 years and to collect the much
20 smaller deficiency over four years is an example of
21 FP&L's aggressiveness and its willingness to ignore the
22 issue of intergenerational inequity.

23 I recognize that it is not possible to rectify
24 FP&L's 2.75 billion surplus overnight. I recommend that
25 1.25 billion of the 2.75 billion surplus be amortized

1 back to customers over four years. The result is an
2 annual amortization in the amount of 311 million.

3 The first effect of my proposal will be to
4 offset FP&L's proposed \$78 million annual capital
5 recovery proposal. The balance of the amortization will
6 reduce depreciation expense. OPC's witness Dan Lawton
7 has examined the impact of the proposal on FP&L's
8 financial conditions. He will testify that FP&L can
9 accomplish the four-year amortization that I have
10 recommended and continue to possess strong financial
11 integrity.

12 In summary, my adjustment to FP&L's
13 depreciation parameters would reduce annual depreciation
14 by \$241 million. Adopting my proposal to amortize the
15 \$1.25 billion over two -- over four years would lower
16 depreciation expense by 311 million per year. When
17 combined, my proposal to amortize the portion of FPL's
18 huge reserve surplus over four years and to reduce its
19 proposed depreciation rates would be to reduce expense
20 by over \$500 million.

21 **CHAIRMAN CARTER:** Outstanding.

22 **THE WITNESS:** You're welcome.

23 **MR. McGLOTHLIN:** Mr. Pous is available for
24 cross-examination.

25 **CHAIRMAN CARTER:** Ms. Bradley. Ms. Bradley?

1 **MS. BRADLEY:** No questions.

2 **CHAIRMAN CARTER:** Mr. Moyle.

3 **CROSS EXAMINATION**

4 **BY MR. MOYLE:**

5 **Q.** I just had, had one, and I just wanted to make
6 sure that the record is clear and I understand.

7 The difference between your view and FPL's
8 view with respect to the impact on the 2010 rate
9 increase is how much?

10 **A.** Over 500 million.

11 **Q.** Thank you.

12 **CHAIRMAN CARTER:** Mr. Wright?

13 **MR. WRIGHT:** Mr. Chairman, if I may, we are
14 not adverse to Mr. Pous. This is a clarifying question.
15 It's a proffer. I'd like to just ask him --

16 **CHAIRMAN CARTER:** Okay.

17 **MR. WRIGHT:** -- about the numbers he just
18 stated and the numbers on, on the table.

19 **CHAIRMAN CARTER:** You may proceed.

20 **CROSS EXAMINATION**

21 **BY MR. WRIGHT:**

22 **Q.** Good morning, Mr. Pous.

23 **A.** Good morning.

24 **Q.** My name is Schef Wright and I represent the
25 Florida Retail Federation in this case.

1 As I was taking notes during your summary, I
2 thought that I understood you to say that your -- can
3 you, you used two numbers. One I think was
4 \$234 million.

5 **A.** 241.

6 **Q.** Pardon?

7 **A.** 241.

8 **Q.** 241. And for what was that?

9 **A.** That was the normal adjustments to
10 depreciation expense. Now the difference between the
11 poster, which you're undoubtedly going to ask about, is
12 the depreciation study was based on a depreciation test
13 year of 2009. We had to move the results of the rates
14 that fell out of the depreciation study based on 2009
15 balances and values into 2010.

16 The amount obviously changed. The rates
17 stayed the same, but the amounts in 2010 are different
18 than 2009. And in addition, some of the categories
19 changed between 2009 and 2010, so they're not going to
20 be dollar for dollar.

21 I have to do my analysis on the same basis the
22 company did it, performed its study, which was a 2009
23 test year.

24 **Q.** Thank you. And the other number I wrote down
25 was \$311 million.

1 **A.** Yes.

2 **Q.** Did that have to do with amortizing the
3 depreciation surplus?

4 **A.** Hopefully that's 1,245,000,000 divided by four
5 years.

6 **Q.** Thank you. And so I got \$552 million
7 combined. Is that --

8 **A.** Based on 2009 plant-in-service, that would be
9 the adjustment.

10 **Q.** And do you have a number for 2010? Is that,
11 is that it?

12 **A.** It should be hopefully 554 million.

13 **Q.** Thank you for that clarification and
14 explanation.

15 **MR. WRIGHT:** Thank you, Mr. Chairman.

16 **CHAIRMAN CARTER:** Thank you, Mr. Wright.

17 Any further Intervenors? Did I overlook
18 anyone?

19 Okay. Mr. Butler.

20 **MR. BUTLER:** Thank you, Mr. Chairman.

21 **CROSS EXAMINATION**

22 **BY MR. BUTLER:**

23 **Q.** And good morning, Mr. Pous.

24 **A.** Good morning.

25 **Q.** Your resumé says that you worked for a short

1 time at a power plant; is that correct?

2 **A.** Yes.

3 **Q.** And what did you do there?

4 **A.** Quite a bit. I worked in the fuel area on a
5 coal-powered power plant. I assisted in the boiler
6 operations. I got to do lots of dirty things such as go
7 into coal cyclones, coal tumbling machines and other
8 items such as that.

9 **Q.** Did you have overall responsibility for the
10 operation of that power plant?

11 **A.** No.

12 **Q.** Did you have overall responsibility for the
13 maintenance of it?

14 **A.** No.

15 **Q.** Did you have any responsibility for
16 authorizing capital expenditures that might be required
17 for refurbishing the plant?

18 **A.** No.

19 **Q.** Or for operating it?

20 **A.** No.

21 **Q.** Or for adding environmental compliance
22 equipment?

23 **A.** No.

24 **Q.** Okay. Have you visited any of FPL's power
25 plants?

1 **A.** I have viewed a number of power plants. I'm
2 trying to remember if I reviewed any of FP&L's. And if
3 I did, it would have been over 30 years ago.

4 **Q.** Okay. Have you reviewed the design
5 specifications for any of FPL's power plants?

6 **A.** No, not specifically.

7 **Q.** Uh-huh. Have you reviewed the need
8 determination filings for any of FPL's power plants?

9 **A.** Can you repeat the question?

10 **Q.** Have you reviewed any of the need
11 determination filings with this Commission for any of
12 FPL's power plants?

13 **A.** No.

14 **Q.** Okay. And have you reviewed any of the
15 Commission's orders granting determinations of need for
16 FPL power plants?

17 **A.** No.

18 **Q.** Okay. Would you agree that when a utility
19 must make a large investment in capital additions for a
20 power plant, it has to evaluate the cost of that
21 investment against the future benefits that it would
22 expect from the plant?

23 **A.** I would hope so.

24 **Q.** And you'd agree that capital additions could
25 be required for various reasons; correct?

1 **A.** They do occur on a continuous basis.

2 **Q.** And you could have large capital requirements
3 or capital additions required because of environmental
4 compliance changes; correct?

5 **A.** Yes. And they're normally called interim
6 additions.

7 **Q.** And similarly you could have large capital
8 addition requirements to replace major components of the
9 plant that don't last as long as the plant as a whole?

10 **A.** Yes. And those are interim additions that are
11 not permitted for calculation of depreciation purposes
12 in current rates.

13 **Q.** Is it correct that you don't know at this
14 point what, if any, major capital additions would be
15 required for any of FPL's power plants specifically?

16 **A.** Nothing beyond 2009 when the company updated
17 on an estimated basis from the end of test year 2007
18 actual database.

19 **Q.** Okay. And, similarly, you wouldn't know what
20 reasons that any such capital additions might be
21 required; correct?

22 **A.** Not specifically. But there are always
23 continuous operational problems that have to be cured
24 with capital additions in order to keep a generating
25 unit operating for longer periods of time. And, again,

1 those are the concepts of interim additions that are to
2 be taken into account when and if they do occur in the
3 future. These are decisions by the FERC and other state
4 regulatory agencies. Including NARUC's publication on
5 depreciation also says, when developing depreciation
6 rates currently, you do not recognize for purposes of
7 calculating the depreciation rate interim additions.
8 This is exactly the area that's being addressed at this
9 point.

10 Q. And you wouldn't know at this point what the
11 future benefits might be or might not be with respect to
12 making those additions and continuing to operate any of
13 FPL's plants specifically versus deciding that the
14 investments aren't worth it in view of the future
15 benefits; correct?

16 A. You're going to have to repeat that question.

17 Q. I'll try to simplify it. Sorry.

18 You're not aware sitting here today of what
19 the benefits might be with respect to any particular
20 capital additions that may be required for FPL's plants
21 in the future; correct?

22 A. To keep the generating unit operating
23 producing electricity on a cost-efficient basis.

24 Q. Right. But you don't know how much of an
25 economic benefit that would be or not be to the utility;

1 correct?

2 **A.** I have not made specific quantifications, but
3 the normal process is that a company does not make
4 capital outlays on investment that it cannot justify the
5 economic benefit for.

6 **Q.** On Page 55 of your testimony, you state that
7 based on what we know today, regulation of carbon
8 emissions won't keep fossil generating units from
9 operating beyond proposed retirement dates; correct?

10 **A.** Can you direct me? Bottom of Page 55? And
11 repeat your question, please.

12 **Q.** Your point there is that based on what we know
13 today, you don't believe that regulation of carbon
14 emissions would keep fossil jet-fired generating units
15 from operating beyond their proposed retirement dates;
16 correct?

17 **A.** Correct.

18 **Q.** Okay. And on Page 51 of your testimony you
19 identify what you understand to be the retirement dates
20 for FPL's coal plants, which you, this is, I'm sorry,
21 looking on the question and answer starting on Line 4.
22 You state a mid 2029 retirement date for Scherer and a
23 mid 2028 retirement date for SJRPP; correct?

24 **A.** Correct.

25 **Q.** And then similarly you have a reference to a

1 mid 2020 retirement date for the remainder of FPL's
2 steam-fired generating facilities?

3 **A.** Correct.

4 **Q.** And am I correct that, sort of putting those
5 two pieces of testimony together, you would not believe
6 that carbon emission regulation would result in a need
7 to take any of those units out of service by those
8 retirement dates?

9 **A.** What we know today, absolutely not.

10 **Q.** Okay.

11 **MR. BUTLER:** I'd like to pass out an exhibit,
12 Mr. Chairman, that is a, is a presentation that EPA has
13 made on the impacts of H.R. 2454, the Waxman-Markey
14 bill.

15 **CHAIRMAN CARTER:** Is this for
16 cross-examination purposes or --

17 **MR. BUTLER:** It is.

18 **CHAIRMAN CARTER:** Only?

19 **MR. BUTLER:** It is.

20 **CHAIRMAN CARTER:** Okay. So we don't need a
21 number then.

22 **MR. MOYLE:** I just, I guess the point, he can
23 look at the exhibit, but it calls for speculation to
24 hand somebody a piece of legislation that one piece
25 of -- the House of Representatives passed, the Senate

1 hasn't passed and, you know, speculate on it.

2 **CHAIRMAN CARTER:** If he's not familiar, he can
3 say I'm not familiar. The witness can answer.

4 (Transcript continues in sequence with Volume
5 16.)

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STATE OF FLORIDA)
 :
COUNTY OF LEON)

CERTIFICATE OF REPORTER

I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 3rd day of September, 2009.

Linda Boles
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