

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for increase in rates) Docket No. 090079-EI
By Progress Energy Florida)
_____) FILED: August 10, 2009

**DIRECT TESTIMONY
OF
JACOB POUS
ON BEHALF OF THE CITIZENS OF THE STATE OF
FLORIDA**

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1 **DIRECT TESTIMONY**

2 **Of**

3 **JACOB POUS**

4 On Behalf of the Office of Public Counsel

5 Before the

6 Florida Public Service Commission

7 Docket No. 090079-EI

8

9 **SECTION I: INTRODUCTION**

10 **A. STATEMENT OF QUALIFICATIONS**

11
12 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

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

15
16 **Q. WHAT IS YOUR OCCUPATION?**

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

19 **Q. PLEASE DESCRIBE DIVERSIFIED UTILITY CONSULTANTS, INC.**

20 A. DUCI is a consulting firm located in Austin, Texas. DUCI has an international client
21 base. DUCI provides engineering, accounting, and financial services to clients.
22 DUCI provides utility consulting services to municipal governments with utility
23 systems, to end-users of utility services and to regulatory bodies such as state public
24 service commissions. DUCI provides complete rate case analyses, expert testimony,

1 negotiation services and litigation support in electric, gas, telephone, water, and sewer
2 utility matters.

3
4 **Q. HAVE YOU PREVIOUSLY TESTIFIED IN PUBLIC UTILITY**
5 **PROCEEDINGS?**

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

12
13 **Q. WHAT IS YOUR PROFESSIONAL BACKGROUND?**

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

16
17 **Q. ON WHOSE BEHALF ARE YOU PROVIDING THIS TESTIMONY?**

18 A. Florida's Office of Public Counsel ("OPC") engaged me to address the depreciation
19 study and the depreciation aspects of the revenue requirements request of Progress
20 Energy Florida ("PEF" or "the Company") pending before Florida Public Service
21 Commission (the "Commission" or "FSPC").

1 **B. OVERVIEW**

2 **Q. CAN YOU PROVIDE A QUICK OVERVIEW OF THE RELATIVE**
3 **SIGNIFICANCE OF DEPRECIATION-RELATED MATTERS IN THE**
4 **CONTEXT OF PEF’S REQUESTED INCREASE IN REVENUES?**

5 **A.** Yes. In terms of revenue impacts, the subject of depreciation is extremely significant
6 in this proceeding. In my testimony, I will report the results of my account-by-
7 account analysis of the depreciation study that PEF is sponsoring, the results of which
8 are reflected in PEF’s calculation of its revenue requirements. I will identify
9 numerous examples in which PEF’s witness overstates depreciation expense, and
10 refute PEF’s proposed treatment on the basis of the inappropriate assumptions and
11 rationales that he employed. My approach is a “from the bottom up” type of analysis,
12 in which I review the details of individual accounts and build up the individual
13 adjustments into a total dollar recommendation. In the aggregate, my adjustments
14 amount to \$275 million of reduced depreciation expense annually based on plant as of
15 December 31, 2009. Approximately \$161million of this annual amount is intended to
16 return to current customers a *portion* of a massive reserve excess that is the result of
17 PEF’s having over collected depreciation expense over time; the balance relates to my
18 adjustments to PEF’s calculation of annual depreciation expense that the utility
19 should recognize “going forward.” When applied to PEF’s proposed increase, the
20 impact of my \$275 million recommendation is to reduce PEF’s revenue requirements
21 dollar for dollar. In other words, when PEF’s overly aggressive depreciation practices
22 and proposals, past and present, are modified to conform to available data and
23 reasonable assumptions, the result is to offset a sizeable portion of PEF’s half billion
24 dollar rate increase request for 2010. At first blush, the magnitude of the overall

1 recommendation may be surprising. However, as I will show, the result is the sum of
2 dozens of smaller individual adjustments, each of which is a “standalone” topic and
3 each of which I will document, discuss, and support in detail in the course of my
4 testimony.

5
6 **Q. HOW HAVE YOU ORGANIZED YOUR TESTIMONY?**

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

12
13 **C. GENERAL BACKGROUND**

14
15 **Q. PLEASE BRIEFLY EXPLAIN THE CONCEPT OF DEPRECIATION AS IT**
16 **APPLIES TO A REGULATED ELECTRIC UTILITY.**

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

21
22 **Q. CAN YOU ILLUSTRATE THE MEANING OF THE TERM?**

23 A. Yes. Perhaps the best way to explain the concept is to contrast an item that is
24 depreciated with one that is not depreciated. As the example of an item that is not
25 depreciated, let’s use copier paper. Assume the utility purchases 1,000 reams of paper

1 for \$5,000, and consumes all of the paper within the month in which it was
2 purchased. The utility therefore “expenses” the full \$5,000 in the period of the
3 purchase. Assume the utility spends \$250,000 on copier paper annually. The annual
4 total cost of copier paper is recorded as a portion of operations and maintenance
5 expense, which is deducted from operating revenues to calculate net income for the
6 year in which the paper was purchased. Recognizing the full cost of the paper
7 purchased in the year is appropriate from a matching standpoint, because the paper
8 was consumed completely in the period in which it was purchased. Moreover,
9 because rates are designed to recover operating costs and provide a return on
10 investment, the annual cost of copier paper is embedded in the rates that the utility
11 charges its customers, and \$250,000 of overall revenues serves the purpose of
12 recovering from customers the cost of copier paper consumed during the year.

13
14 **Q. PLEASE CONTINUE.**

15 **A.** Now, let’s compare that situation with the example of an investment in copper
16 conductor. Assume the conductor costs \$100,000 to purchase and install, and the
17 utility expects to use it in the business for forty years. At the end of forty years the
18 utility expects to sell the copper for \$30,000 but also anticipates it will incur \$10,000
19 of cost in removing it from the system. This means that its net depreciable
20 investment will be \$80,000 ($\$100,000 - \$30,000 + \$10,000$). To recognize the full
21 \$80,000 in a single year would be to distort the manner in which that investment in
22 copper conductor is employed in the operation of the business. Said differently, the
23 utility expects to “consume” the service value of the conductor—not within a year—
24 but over forty years. Therefore, the investment is “capitalized” and added to rate
25 base. Subsequently, each year 1/40th, or \$2,000 of the capitalized cost is recognized

1 as depreciation expense associated with the conductor. Because depreciation expense
2 is a component of the utility's overall cost of providing service, it is reflected in the
3 design of rates that the utility charges customers. The \$2,000 of annual depreciation
4 expense associated with the conductor is accumulated with other depreciation and
5 operating expenses and netted against operating revenues to determine net income for
6 the period. Of the revenues collected during the year, \$2,000 serves to recoup the
7 portion of the capital investment that is applicable to the period. Accordingly, the
8 utility will reduce its rate base by the annual amount of the \$2,000 that it recouped
9 from customers. It does so by recording \$2,000 in an account called the accumulated
10 provision for depreciation or reserve. The value of the rate base is calculated by
11 subtracting the total of the accumulated provision by depreciation from the original
12 depreciable value of the investment. Each year the utility incurs depreciation
13 expense, it adds the amount of expense to the reserve, thereby reducing rate base by
14 that amount.

15
16 **Q. IN ADDITION TO THE BASIC DEFINITION, WHAT ELSE CAN BE**
17 **GLEANED FROM YOUR EXAMPLES?**

18 A. First, the examples illustrate a major difference between depreciation expense and
19 other operating expenses. In the case of copier paper, the utility must make a cash
20 outlay during each annual period. In the case of the conductor, there is an initial
21 outlay of cash to purchase and install the conductor; thereafter, the recognition of the
22 annual component of expense applicable to the period does not involve cash outlays.
23 For this reason, depreciation is referred to as a "non-cash" expense. However, the
24 dollars that are collected and applied to defray this non-cash expense are as real to the

1 utility and the customers who pay them through rates as the dollars that were
2 expended to acquire the capital item or pay for the copier paper.

3
4 **Q. DOES THE EXAMPLE OF THE CONDUCTOR ILLUSTRATE ANY OF THE**
5 **ISSUES TO WHICH A DEPRECIATION STUDY MAY GIVE RISE?**

6 A. Certainly. The example illustrates the determination of the appropriate useful life; the
7 assumed salvage value upon retirement; and the projected cost of removing the item
8 from service that the utility may incur to realize the salvage. While the analytical
9 techniques, which may involve statistical measurements, actuarial analyses, and
10 review of historical and comparative industry data, can become technical and
11 involved, all of the debates surrounding the establishing of appropriate depreciation
12 rates involve the interplay between and among service lives and related remaining
13 lives, salvage values, and cost of removal. If the utility assumes too short a useful
14 life, the total depreciation expense will be allocated over too few periods, and the
15 expense recognized in a single period will be higher than it should be. If a utility
16 understates expected salvage or overstates the cost of removing the item upon
17 retirement, it will overstate the amount of depreciation expense that is allocated over
18 the life of the asset. When in my testimony I observe that PEF has been overly
19 aggressive in proposing depreciation rates, I mean that it continues to attempt to
20 overstate depreciation expense currently through one or more of these means.

21 The example of the copper conductor also illustrates another important point.
22 Depreciation practices applicable to assets that have long useful lives very quickly
23 give rise to issues of intergenerational equity. For instance, if a utility has reason to
24 believe that the conductor will be in service for forty years, but proposes to depreciate
25 it over only five years, the utility would be calling on current customers to bear an

1 inordinate proportion of the cost of the investment, thereby subsidizing future
2 customers, who will pay none of the depreciation cost of the asset providing service
3 to them in the future.

4
5 There is another point that belongs in this introductory section. Setting depreciation
6 rates necessarily involves the use of estimates and projections. If the estimates and
7 projections are inaccurate, or if circumstances change such that estimates that were
8 good at the time they were made are no longer valid, a utility's depreciation posture
9 can require corrective action. Earlier I mentioned the reserve or the accumulated
10 provision for depreciation, which serves to provide a "running total" of the extent to
11 which individual assets or groups of assets have been depreciated. It is useful to
12 compare the actual reserve to the "theoretical reserve," or the reserve that would be
13 necessary to enable the utility to remain "on course" to recoup its investment ratably
14 over the current estimate of life of the asset or assets in question at a given point in
15 time. If a "reserve excess" or "reserve deficiency" is discovered in the course of a
16 periodic depreciation study, corrective action can be devised. The time frame that is
17 appropriate for addressing an excess or a deficiency is in part a function of the
18 severity of the imbalance. If the degree to which the actual depreciation experience is
19 ahead of or behind schedule is slight, the typical regulatory response is to devise
20 modified depreciation rates that will cure the imbalance over the remaining life of the
21 asset. However, if the imbalance is so severe that it amounts to unfair and inequitable
22 treatment of customers or the utility, the regulators have the obligation and the means
23 with which to require remedial action that is more direct and immediate. In my
24 testimony, I will demonstrate that by over collecting depreciation expense in the past,
25 PEF has built a massive depreciation reserve excess-- so massive that the

1 Commission should require PEF to return a portion of the excess to customers over a
2 four year period.

3
4 **Q. WHAT DO YOU MEAN BY “DEPRECIATION RATES”?**

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

14
15 **Q. DO YOU HAVE ANY ADDITIONAL OBSERVATIONS OF A GENERAL**
16 **NATURE BEFORE YOU BEGIN THE PRESENTATION OF YOUR**
17 **ANALYSIS OF PEF’S DEPRECIATION STUDY?**

18 A. Yes. Generally speaking, it is in an electric utility’s financial self-interest to collect
19 more dollars from customers than fewer dollars, to collect those dollars sooner than
20 later, and, once having collected dollars, to keep them rather than returning them to
21 customers. This is true of depreciation practices. Because depreciation expense
22 results in revenues that do not have a concurrent cash outlay associated with them,
23 depreciation expense is a source of cash flow, and higher depreciation expense means
24 greater cash flow. Plus, recouping more of an investment in early years than would
25 be warranted by the comparison of actual and theoretical reserves would reduce the

1 risk of not recouping the investment in later years. Accordingly, even though issues
2 of depreciation affect the timing of recoupment of capital investments rather than
3 whether the utility should recover its claimed capital costs, a utility has an incentive
4 to favor higher depreciation expense and higher depreciation reserves. The
5 Commission therefore must scrutinize the utility's practices and studies to ensure that
6 current customers are not called on to bear more than their appropriate share of the
7 depreciation expense.

8
9 **D. EXECUTIVE SUMMARY**

10
11 **Q. PLEASE PRESENT YOUR MAIN POINTS IN SUMMARY FASHION.**

12 A. PEF's own depreciation study shows a reserve excess of \$646 million. However, as
13 I will show, the claimed excess of \$646 million is an understatement. It reflects the
14 result of inappropriate assumptions and rationales that PEF's depreciation witness
15 Mr. Robinson employed in the course of his depreciation study. The real excess
16 reserve is far greater than the \$646 million that PEF claims. My analysis, based upon
17 data, assumptions, and rationales that I develop and support in detail, reveals that PEF
18 has a current reserve excess of \$858 million. The excess reserve would be even
19 higher were I to incorporate a more realistic useful life for combined cycle generators
20 than the inadequate 30 year life that PEF's witness employs, or recognize the impact
21 of other issues.

22
23 The massive reserve excess necessarily means that current and past customers have
24 paid PEF far more than would be needed to enable PEF to be on track to recoup its
25 investment in plant over the service lives of the plant. PEF proposes to correct the

1 reserve excess by modifying the amount of depreciation on a going forward basis
2 over its claimed 21 years of remaining life. In view of the size of the excess that
3 customers have paid, the size of its overall rate increase request and the resulting
4 justification for remedying the situation, PEF's proposed response is unrealistic and
5 unacceptable. PEF's proposal would be inadequate and unfair to current customers,
6 even if the value of \$646 million that it assigns to the excess reserve were near the
7 appropriate amount. The corrected imbalance of \$858 million has the effect of
8 increasing the impetus to return the excess to customers more rapidly.

9
10 Bearing in mind that I have demonstrated a total reserve excess of at least \$858
11 million, the Commission should at a minimum require PEF to amortize its identified
12 \$646 million of the excess reserve to customers over a period of four years. By
13 returning only this portion to customers over a period more rapid than the remaining
14 life, the Commission conservatively will leave PEF with a substantial cushion of
15 excess in its reserve. Moreover, as OPC witness Dan Lawton testifies, requiring this
16 more equitable treatment will not adversely affect PEF's strong, robust financial
17 condition.

18
19 When the \$646 million amount is amortized over four years, \$161 million is available
20 to reduce revenue requirements in each year, including the 2010 test period. The
21 above measure is needed to address PEF's sizeable depreciation reserve excess,
22 which is the result of past practices and over collections. I have also examined the
23 appropriate amount of depreciation expense that PEF should be allowed to recognize
24 annually on a going forward basis. I find that PEF has overstated its need for
25 depreciation expense. The overstatement of overall depreciation expense results from

1 having employed inappropriate service lives, understating expected salvage, and
2 overstating the projected cost of removing assets upon retirement. I have described
3 the flaws in PEF's claims and have supported my proposed alternatives in the detailed
4 discussion that follows. As a result of my detailed analysis, I recommend that the
5 Commission reduce PEF's proposed annual depreciation expense by \$113 million
6 based on plant as of December 31, 2009 as reflected in the Company's depreciation
7 study.

8
9 The overall impact of my recommendations in the areas of correcting the massive
10 reserve excess and reducing future depreciation expense is to reduce PEF's claimed
11 revenue requirements by \$227 million for the 2010 test year. The resulting
12 depreciation expense adjustment has been provided to OPC witness Bill Schultz.

13
14 **Q. DOES YOUR RECOMMENDATION MEAN THAT PEF WILL NOT**
15 **RECOVER ANY PART OF ITS CAPITAL INVESTMENT?**

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

22
23 **E. ANALYSIS**

24
25 **Q. PLEASE PROCEED WITH YOUR MORE DETAILED PRESENTATION.**

1 A. The Company retained AUS Consultants to perform a new depreciation study, the
2 results of which are sponsored by Mr. Robinson. The Company's depreciation
3 analysis is based on estimated plant levels through the end of 2009. Based on the
4 plant in service as projected through December 31, 2009 the Company proposes
5 \$445,613,594 of depreciation expense, which represents a \$97,355,430 or 22%
6 increase. (See Exhibit No. __ (EMR-2) page 2-8). After reviewing the Company's
7 presentation, data, responses to discovery requests, and information in the public
8 domain, I conclude that the Company's request is significantly overstated. In fact,
9 rather than a proposed increase in depreciation expense as requested by the Company,
10 a reduction of \$113,112,961 to the requested level or a \$15,757,531 reduction to
11 existing depreciation expense is warranted as set forth on Exhibit_ (JP-1).

12
13 The Company's request for an increase in depreciation expense is inconsistent with
14 the undisputed fact that customers have significantly overpaid depreciation expense
15 historically, even prior to recognition that the depreciation parameters reflected in the
16 Company's study are excessively aggressive and inappropriate. The acceleration of
17 depreciation expense as proposed by the Company is not warranted and should be
18 denied by the Commission. A brief discussion of the various issues I will address in
19 detail later in my testimony follows.

- 20 • **Excess Reserve:** The Company, through its depreciation study,
21 admits to a \$646 million excess reserve. This level of excess reserve
22 increases significantly when one applies to PEF's production and mass
23 property accounts the different depreciation parameters I recommend
24 and support in my analysis. Consistent with the Commission's prior
25 decisions, it is appropriate to return to customers some portion of the

1 excess reserve over a period shorter than the remaining life. In order
2 to remain conservative, I recommend returning the Company-
3 identified \$646 million amount over a 4-year period. Limiting the
4 return of the excess reserve to the Company's identified amount rather
5 than the full amount that results from my recommended adjustments
6 leaves the Company with a substantial cushion of remaining excess
7 reserve, which can be addressed in future depreciation studies. OPC
8 witness Dan Lawton establishes in his testimony that limiting the
9 amount to be amortized to \$646 million, and accomplishing the
10 amortization over four years, will assure that the adjustment leaves
11 PEF with very strong financial integrity. The impact of my
12 recommendation is a \$161,451,136 annual depreciation expense credit,
13 prior to jurisdictional allocation, for the next four years.

- 14
15 • **Production Plant Life Spans:** The Company proposes artificially
16 short life spans (the time frame between when a unit goes into service
17 and when it ultimately retires) for many of its steam generating units.
18 The Company has also underestimated the reasonable life expectancy
19 of its investment in combined cycle generation. As a first step toward
20 correcting this situation, I recommend that the life spans for the
21 Crystal River 4 and 5 coal-fired units be increased from the low 50-
22 year range as proposed by the Company to 60 years as is now being
23 recognized by other regulators and utilities. I further recommend that
24 the minimum life span for the two large steam oil-fired generating
25 units at Anclote be set at a minimum of 50 years. The approximate

1 impact of this recommendation is a \$26 million reduction to the
2 Company's depreciation expense based on plant as of December 31,
3 2009.

- 4
5 ● **Interim Retirements:** Interim retirements are intended to represent
6 limited downward adjustments to the life span for generating units due
7 to items of investment that will retire and be replaced prior to the
8 ultimate retirement date for a generating facility. The Company has
9 proposed a method that is inappropriate for generation investment and
10 which overstates depreciation expense by millions of dollars. The
11 Company's proposed interim retirement results are excessively
12 aggressive, even when measured against the interim retirement results
13 that the Company's depreciation consultant, AUS Consultants, has
14 proposed elsewhere. Correcting the method and level of interim
15 retirements results in an approximate \$45 million annual reduction in
16 depreciation expense based on plant as of December 31, 2009.

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

1 the Company seeks in excess of \$600 million of interim net salvage to
2 be collected over the remaining life of its generating facilities.
3 Correcting the Company's excessively negative levels of interim
4 retirement related production net salvage results in a \$30 million
5 reduction to annual depreciation expense based on plant as of
6 December 31, 2009.

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

1 approaches than the costly “reverse construction” approach that PEF
2 presented in this case.

- 3
- 4 • **Mass Property Life Analysis:** Mass property consists of
5 transmission, distribution and general plant. The Company has relied
6 on its interpretation of actuarial results to propose life characteristics
7 for its various accounts. The Company’s proposals are not the best
8 statistical results obtained from its actuarial analysis and fail to
9 recognize other Company specific information which would result in
10 longer average service lives (“ASL”). After reviewing the Company’s
11 proposals on an account by account basis, I recommend adjustments to
12 2 mass property accounts which result in a \$13 million reduction to
13 annual depreciation expense based on plant as of December 31, 2009.

- 14
- 15 • **Mass Property Salvage Analysis:** The Company performed
16 an “interpretative” analysis. The Company failed to provide any
17 specific support for its various proposals in theory derived from its
18 “interpretative” analyses. Also, by failing to correct for “catastrophic”
19 hurricane events or explain significant changes or unusual amounts or
20 occurrences, PEF skewed its future net salvage proposals. Those
21 proposals are not appropriate because they are not indicative of future
22 expectations for the investment in each of the Company’s plant
23 accounts. After my review and investigation, I recommend
24 adjustments to the proposed net salvage level for 15 mass property
25 accounts. The standalone impact of these recommendations results in

1 a reduction of \$29 million in annual depreciation expense based on
2 plant as of December 31, 2009.

- 3
- 4 • **Combined Impact:** Due to the interaction of life and salvage
5 parameters, life spans, and interim retirement levels, the combined
6 impact of my various recommendations is not simply the summation
7 of each standalone adjustment. As shown on Exhibit__(JP-1), the
8 combined impact of all adjustments results in a \$274,564,296
9 reduction to annual depreciation expense based on plant as of
10 December 31, 2009. The recommended adjustment is reduced to
11 \$226.9 million when applied to 2010 test year plant balances and then
12 allocated to the retail jurisdiction.
- 13

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

16 A. Yes. My recommendation must be viewed in two distinct categories: the return of a
17 portion of excess reserve in the amount of \$161 million for the next 4 years; and,
18 \$113 million in normal annual depreciation adjustments. The \$113 million of annual
19 normal depreciation adjustments represents approximately 25% of the Company's
20 request for normal depreciation expense, but is only a 14% reduction to the existing
21 level of depreciation rates. The Company's request represents a greater increase to
22 existing rates than my recommended decrease represents, absent the reserve
23 amortization.

24

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

14
15 To remain conservative in my level of adjustments, I have not proposed in this
16 proceeding longer life spans for over a billion dollars of investment in new combined
17 cycle generating facilities. The Company's proposal for 30-year life spans for this
18 new investment is artificially short. Extending the assumption to 35-year life spans or
19 longer for this type of generation would have resulted in substantial further reductions
20 to the Company's request. In addition, the Company's terminal demolition cost
21 estimates for its generating facilities are excessively high. Correcting the Company's
22 request with a more realistic and reasonable scenario would further reduce the level
23 of annual depreciation expense.

24

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

10
11 **SECTION II. DEPRECIATION**

12
13 **Q. PLEASE ELABORATE ON THE BASIC DEFINITION OF DEPRECIATION**
14 **THAT YOU PROVIDED IN THE GENERAL BACKGROUND SECTION.**

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

18 'Depreciation', as applied to depreciable plant, means the loss
19 in service value not restored by current maintenance, incurred
20 in connection with the consumption or prospective retirement
21 of electric plant in the course of service from causes which are
22 known to be in current operation and against which the utility
23 is not protected by insurance. Among the causes to be given
24 consideration are wear and tear, decay, action of the elements,

1 inadequacy, obsolescence, changes in the art, changes in
2 demand and requirements of public authorities.

3
4 The second definition, from the American Institute of Certified Public Accountants
5 ("AICPA"), is similar:

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

16
17 **Q. WHAT ARE THE TWO GENERAL FORMULAS USED IN DETERMINING**
18 **DEPRECIATION RATES?**

19 A. The *whole life* and the *remaining life* techniques are the most commonly used
20 formulas. The whole life technique is as follows:

21

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

22

1 The remaining life technique is as follows:

$$\begin{array}{l} \text{Depreciation Rate (\%)} \\ = \end{array} \left[\frac{\begin{array}{c} \text{Original Cost-Accumulated Provision for Depreciation - Net} \\ \text{Salvage} \\ \text{Average Service Life} \end{array}}{\text{Original Cost}} \right]$$

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

6

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

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

12

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

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

16

17 **Q. BRIEFLY DESCRIBE WHAT IS MEANT BY “METHOD”.**

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

4

5 **Q. BRIEFLY DESCRIBE WHAT IS MEANT BY “PROCEDURE”.**

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

10

11 **Q. PLEASE BRIEFLY DESCRIBE WHAT IS MEANT BY “TECHNIQUES”.**

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

23

24 **Q. DO THE METHODS, PROCEDURES, AND TECHNIQUES INTERACT**
25 **WITH ONE ANOTHER?**

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

4
5 **Q. HOW ARE THE LIFE AND REMAINING LIFE DETERMINED?**

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

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

21
22 **Q. WHAT IS NET SALVAGE?**

23 A. Net salvage is the value obtained from retired property (the gross salvage) less the
24 cost of removal. Net salvage can be either positive in cases where gross salvage

1 exceeds cost of removal, or negative in cases where cost of removal is greater than
2 gross salvage.

3
4 **Q. HOW DOES NET SALVAGE IMPACT THE CALCULATION OF**
5 **DEPRECIATION?**

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

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

17 A. The concept of depreciation utilized for utility ratemaking has evolved over time.
18 Currently, there are still many different combinations of methods, procedures, and
19 techniques employed in the development of utility depreciation rates. A depreciation
20 system must, among other things, be systematic and rational. The regulator must
21 further take into the account the quality, quantity, and timeliness of data relied upon,
22 as well as the quality of the judgment employed by the depreciation analysts. Given
23 the subjectivity involved in the various estimation processes, judgment plays an
24 important role in establishing depreciation rates. While judgment is critical, that does

1 not mean that an analyst can simply refer to “judgment” as the basis for a proposal
2 without providing meaningful factual support for that “judgment,” nor can
3 “judgment” serve as the basis for ignoring relevant facts.
4

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

7 A. The life parameters and net salvage for the mass property accounts in the above
8 formula are at issue. Also, the treatment of the Company’s excess reserve is at issue
9 in this case.
10

11 **SECTION: III RESERVE IMBALANCE**

12
13 **Q. WHAT IS THE FUNDAMENTAL PURPOSE OF DEPRECIATION?**

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

20 **Q. IS THE RECOVERY OF CAPITAL THROUGH DEPRECIATION A**
21 **PRECISE PROCESS?**

22 A. No. The depreciation process for utility ratemaking relies on forecasting the future
23 life and net salvage of the investment. As with any forecasting process, there are
24 inherent inaccuracies that will exist whether due to inappropriate forecasts of
25 mortality characteristics or real changes in life and salvage characteristics over time.

1 In recognition of the inherent inaccuracies, depreciation studies should be performed
2 on a regular basis and should incorporate a true-up provision to address recognized
3 excesses or deficiencies that are indentified.

4

5 **Q. HOW ARE RESERVE EXCESSES OR DEFICIENCIES IDENTIFIED?**

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

20

21 **Q. WHAT ARE THE GUIDING PRINCIPLES THAT SHOULD BE**
22 **CONSIDERED IN DETERMINING THE CAPITAL RECOVERY PATTERN**
23 **THROUGH DEPRECIATION OVER TIME?**

24 A. In my opinion, the overriding considerations of fairness and equity that govern the
25 utility ratemaking process mandate adherence to the matching principle. In other

1 words, the generation of customers that causes an expense or cost to be incurred
2 should be the generation of customers that pays for such expense or cost through the
3 rates charged for usage of the final product, in this case electricity. The matching
4 principle attempts to achieve the goal of eliminating intergenerational inequities.
5 Intergenerational inequities occur when one set or generation of customers pays too
6 much or too little for its use of the investment necessary to provide electricity, and
7 transfers either an undue benefit or undue burden to some future set of customers.

8
9 **Q. HAS THIS COMMISSION HISTORICALLY RECOGNIZED THE**
10 **MATCHING PRINCIPLE WHEN IT COMES TO CAPITAL RECOVERY**
11 **THROUGH DEPRECIATION?**

12 A. Yes. When capital recovery becomes materially imbalanced between generations of
13 customers, as measured by the difference between the theoretical and book reserve,
14 normally one of two industry options is employed. The two options for truing-up or
15 correcting the imbalance are (1) to amortize the calculated differences over a short
16 period of time, or (2) to simply implement new depreciation rates based on the
17 remaining life technique where the recovery period is the remaining life. This
18 Commission has established a long and identifiable policy of correcting material
19 reserve imbalances by (1) reserve transfers, (2) one time reserve adjustments based on
20 changes to revenue requirement areas other than depreciation, and (3) amortizing the
21 reserve differences over periods much shorter than the remaining life of the
22 investment. In addition to these practices, this Commission recently approved a
23 settlement in Florida Power & Light Company (“FPL”) last rate case that allowed
24 FPL to reduce revenue requirements by \$500 million over a four year period, or \$125
25 million per year, through credits to depreciation expense. (See Exhibit CRC-1, page

1 69 in Docket No. 080677-EI). Rigid adherence to “remaining life” concepts would
2 not have permitted this flexibility.

3
4 **Q. CAN YOU PROVIDE EXAMPLES OF THIS COMMISSION’S LONG AND**
5 **IDENTIFIABLE POLICIES TO WHICH YOU REFER?**

6 A. Yes. In the area of implementing corrective reserve transferences, some examples of
7 this Commission’s previous actions are Gulf Power Company in Docket No. 880053-
8 EI and Marianna Electric Division by Florida Public Utilities Company in Docket No.
9 010669-EI. These examples occurred during the time frame of the 1980s through the
10 early 2000s. (See Order Nos.19901, PSC-01-2270-PAA-EI). An example of a
11 Commission action to change the depreciation reserve due to revenue requirements
12 from an area other than depreciation is Tampa Electric Company in Docket No.
13 860868-EI. (See Order No. 19438). Finally, examples of depreciation reserve
14 differences that the Commission required to be amortized over periods shorter than
15 the average remaining life are General Telephone Co. in Docket No. 840049-TL, City
16 Gas Company in Docket No. 890203-GU, and FPL in Docket No. 970410-EI. (See
17 Order Nos. 14929, 22115, PSC-97-0499-FIF-EI).

18
19 **Q. WHAT HAS THE COMMISSION STATED AS ITS UNDERLYING POLICY**
20 **OR BASIS WHEN ADDRESSING THE TREATMENT OF RESERVE**
21 **DIFFERENCES OR INTERGENERATIONAL INEQUITIES?**

22 A. The Commission has adopted the position that depreciation reserve differences
23 “*should be recovered as fast as possible, unless such recovery prevents the Company*
24 *from earning a fair and reasonable return on its investments.*” (Emphasis added).
25 (See Order No. PSC-93-1839-FOF-EI). In another case, the Commission adopted a

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

14 **Q. IN THE CASES YOU CITED, DID THE AMOUNT OF THE RESERVE**
15 **IMBALANCE THAT THE COMMISSION DECIDED TO CORRECT OVER**
16 **A PERIOD SHORTER THAN THE REMAINING LIFE APPROACH HALF**
17 **BILLION DOLLARS?**

18 A. No.

19
20 **Q. HOW HAVE YOU NORMALLY HANDLED RESERVE MATERIAL**
21 **IMBALANCE SITUATIONS LIKE THIS?**

22 A. Before this Commission in Docket No. 050078-EI, I recommended that PEF's \$844
23 million of excess reserve above the \$504 million of excess reserve PEF itself
24 identified be amortized back to customers over a 4-year period. (See Mr. Pous'
25 Direct Testimony at page 34 in Docket No. 050078-EI). That case settled prior to the

1 scheduled evidentiary hearing. Also in Docket No. 080677-EI, FPL's current case, I
2 recommend a 4-year amortization of that company's identified \$1.25 billion excess
3 reserve. In other cases, utilities normally perform frequent depreciation studies and
4 implement corrective measures so as not to get too far out of line with current
5 depreciation expectations. In this case, PEF identifies over \$645 million dollars of
6 excess reserve based on its proposed depreciation parameters. (See Exhibit No. __
7 (EMR-2) page 2-79).

8
9 Rather than acting on such a significant and increasing level of excess with an
10 immediate and meaningful response, the Company proposes "business as usual."
11 That approach would attempt to correct the excess reserve situation over the average
12 21-year remaining life of all its current investment. (See Exhibit No. __ (EMR-2)
13 page 2-22). Particularly in view of the fact that, as I will demonstrate later, the actual
14 magnitude of the reserve excess is \$858 million – in other words, about a third greater
15 than the amount the Company identified, I do not believe this is an appropriate
16 reaction to the facts and circumstance presented in this case. The magnitude of the
17 intergenerational inequity compels an immediate and sizeable departure from the
18 remaining life approach to mitigate the degree of unfairness that otherwise could be
19 imposed on current customers.

20
21 **Q. DOES THE EXCESS LEVEL OF RESERVE AFFECT REVENUE**
22 **REQUIREMENTS?**

23 A. Yes. The effect of the excess reserve imbalance on revenue requirements is
24 significant, no matter the approach undertaken to correct this situation. The shorter
25 the period utilized to return the excess to current customers, the greater the revenue

1 requirement impact in this case. For example, the Company-identified \$645 million
2 excess reserve is already reflected in the Company's filing and is partially responsible
3 for the Company's recommended increase in depreciation expense of an amount less
4 than \$100 million annually. (See Exhibit No. __ (EMR-2) page 2-8). However, had
5 the Company's calculated excess reserve been credited back to current customers
6 over a period shorter than the remaining life utilized by the Company in its
7 calculation, the overall revenue requirement impact could be a decrease in
8 depreciation expense.

9 **Q. SHOULD THE CORRECTIVE TREATMENT OF A RESERVE IMBALANCE**
10 **DIFFER DEPENDING ON WHETHER IT IS MATERIAL EXCESSIVE OR**
11 **MATERIAL DEFICIENT?**

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

16 **Q. WHY DO YOU REFER TO *MATERIAL* IMBALANCES RATHER THAN**
17 **IMBALANCES IN GENERAL?**

18 A. Any process that involves estimates will result in actual values that differ from the
19 predicted values. As previously noted, I do not believe most utilities allow identified
20 imbalances of this magnitude to be created. Generally speaking, by revisiting the
21 reserve situation with a comprehensive study every few years, one would reasonably
22 expect the variance between the theoretical reserve and the book reserve to stay
23 within reasonable bounds. When reserve imbalances occur, they are normally treated
24 through the remaining life process. Not every discrepancy between theoretical and
25 book reserves is so large as to require a departure from the method of recalculating

1 the accrual that will recover the asset over its remaining life. However, the greater
2 the disparity in the reserve, the greater the level of intergenerational inequity that
3 exists. The greater the level of intergenerational inequity, the more compelling
4 becomes the corresponding rationale for addressing the imbalance over a shorter
5 period.

6
7 **Q. IS THERE ANY REASONABLE QUESTION IN THIS CASE WHETHER A**
8 **SIGNIFICANT OR MATERIAL EXCESS IN THE DEPRECIATION**
9 **RESERVE EXISTS?**

10 A. No, in my view there is no room for argument on this question. The Company
11 identifies a \$645 million excess in its depreciation study. I submit that this level of
12 excess must be considered material and significant by any reasonable measuring
13 index. Moreover, the \$645 million size of the reserve excess reported in PEF's
14 depreciation study has been artificially *understated* by the effect of inappropriate net
15 salvage and life estimates. When restated to adjust for the distortions created by the
16 inappropriate net salvage and life assumptions, the reserve excess is not \$645 million,
17 but over \$850 million as shown on Exhibit (JP-2). The magnitude of the excess is so
18 huge, and the prejudicial impact of the imbalance on current customers is so great,
19 that fairness compels a departure from PEF's "business as usual" remaining life
20 approach so that current customers do not continue to subsidize future customers to
21 such a large extent.

22
23 **Q. WHAT IS THE BASIS FOR THE COMPANY'S TREATMENT OF THIS**
24 **MATTER?**

1 A. The Company's depreciation study is silent on this matter. However, Mr. Robinson
2 made various comments regarding this matter in his rebuttal testimony in the last case
3 that sheds light on the Company's position. First, Mr. Robinson stated that "the
4 FPSC has no mandate for companies under their jurisdiction to provide any special
5 treatment of the variance." (See Mr. Robinson's rebuttal testimony in Docket No.
6 050078-EI at page 5). In other words, unless the Commission orders it to correct the
7 intergenerational inequity on a more expedited basis, the Company will rely on the
8 remaining life approach.

9
10 Next, Mr. Robinson stated that if approval from the Nuclear Regulatory Commission
11 is not received for the Crystal River life extension, then "a sizable portion of the
12 reserve variance will instantaneously disappear." (See Mr. Robinson's rebuttal in
13 Docket No. 050087-EI at page 6). Mr. Robinson went on to introduce additional
14 concerns regarding the potential early shut down of Crystal River 3 and the additional
15 investment that will be needed, which will have a shorter life span. All these
16 unsubstantiated, generalized and unwarranted concerns were presented as support for
17 the Company's position that unless the Commission orders it to correct the imbalance
18 on an expedited basis, it will not do so, and will take advantage of such situation by
19 increasing the level of excess as it has done since the last case.

20
21 **Q. DOES THIS POSITION COMPORT WITH COMMISSION PRECEDENT?**

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

24

1 Q. DOES THIS POSITION TAKEN BY PEF ADEQUATELY ADDRESS THE
2 INTERGENERATIONAL INEQUITY THAT EXISTS FOR CURRENT
3 CUSTOMERS?

4 A. No. For example, the 20-year change in the number of residential customers on an
5 actual and forecasted basis is 33%, as set forth on page 2-3 of the Company's Ten-
6 Year Site Plan dated April 1, 2009. While this is a sizeable change in the customer
7 base, it tells only part of the story. The 33% growth is a net number and does not
8 identify how many customers left or will leave the system. Thus, the change in
9 customers corresponding to the remaining life period employed by PEF for the return
10 to customers of its prior acceleration of depreciation expense, at least for the
11 residential class, could easily be over 40%. I submit that the current intergenerational
12 inequity that exists due to the current excess of the depreciation reserve created by
13 prior accelerated levels of depreciation (whether intentional or not) cannot reasonably
14 be addressed or rectified by relying on a 21-year remaining life period.

15
16 Q. DOES MR. ROBINSON'S RELIANCE ON THE REMAINING LIFE
17 APPROACH TO ADDRESS RESERVE IMBALANCES IN OTHER
18 JURISDICTIONS DIMINISH THE NEED TO FOLLOW FPSC'S LONG AND
19 IDENTIFIABLE PRECEDENT?

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

1 Q. IS THERE A VALID CONCERN REGARDING A POTENTIAL
2 TURNAROUND OF THE EXCESS RESERVE IN THE NEAR TERM
3 FUTURE?

4 A. No. While the excess reserve level identified by the Company is sizeable and has
5 increased since the last case, I am confident that it will increase even further if the
6 Company's proposed depreciation rates are adopted. Even with my recommended
7 excess reserve amortization, which would amortize only \$646 million of the \$858
8 million identified excess more rapidly than the remaining life, the Company is well
9 protected until the next depreciation study. Because I have purposely tempered my
10 recommendation to be conservative, under the circumstances I believe there is no
11 realistic scenario under which PEF could swing to a reserve deficiency prior to the
12 next study. Certainly, that extremely remote prospect is more than outweighed by the
13 prejudice to current customers if the Commission were to take no action to address
14 the severe imbalance more rapidly than the remaining lives of the assets. My position
15 is that there is no realistic basis or possibility that the excess reserve would
16 turnaround and become a deficiency by the time the next depreciation study is
17 completed in four years.

18

19 Q. WHAT IS YOUR SPECIFIC PROPOSAL REGARDING THE TREATMENT
20 OF THE RESERVE EXCESS?

21 A. I recommend an approach that should satisfy all concerns if all or even a portion of
22 my recommended adjustments to net salvage and life parameters are adopted. I
23 recommend that the \$645,805,342 Company identified excessive reserve be returned
24 to customers over the next 4-years. The excess reserve associated with my

1 adjustments to net salvage and life parameters can be returned to customers over the
2 remaining life of the assets in this case. This latter aspect provides a safety cushion
3 for those that may believe that one is necessary, while providing the most
4 representative generation of customers available the return of a significant portion of
5 their prior overpaid depreciation expense. This approach addresses the matching
6 principle as it relates to the intergenerational inequity problem, but not to the degree
7 that this Commission has previously found appropriate in other cases. This approach
8 also takes into account the need to gauge the impact of a shorter amortization period
9 so as to protect the financial integrity of the Company. I have discussed the impact of
10 my recommended adjustment with OPC's financial, policy and accounting witnesses,
11 who confirmed that PEF can implement my recommendation *and* maintain the
12 healthy coverage ratios adequate to access the capital markets on reasonable terms.
13 Dan Lawton addresses this subject in detail.

14
15 **Q. WHY DID YOU CHOOSE A 4-YEAR AMORTIZATION PERIOD?**

16 A. The 4-year period is not only within the range of periods previously adopted by this
17 Commission for other cases where a reserve deficiency was present, it also corrects
18 the intergenerational equity situation in an effective but manageable manner. Further,
19 the 4-year period provides sufficient time for the Company to gain additional
20 experience and perform and present a new, complete and well-documented
21 depreciation study within the normal cycle required by the Commission's rule on the
22 mater. Finally, one must always recognize that the ratemaking process already
23 disadvantages current customers in the intergenerational inequity scenario.
24 Remember, those generations of customers nearer to the end of the useful life of an
25 investment pay much less for service than do customers at the beginning of the useful

1 life. While future customers will not see a difference in the actual product (i.e., a kwh
2 of energy or a Kw of capacity), a different price will be paid for specific assets.
3 Payment for electricity near the end of the useful life of an investment is associated
4 with heavily depreciated investment. Recognition of heavily depreciated investment
5 results in a much smaller return on investment being required for that asset.
6 Therefore, it is inappropriate to violate the strong and identifiable precedent
7 employed by this Commission in the past by penalizing current customers for the
8 benefit of future customers.

9
10 **Q. WHAT IS THE IMPACT ON REVENUE REQUIREMENTS IF YOUR**
11 **BIFURCATED APPROACH TO THE BILLION DOLLAR RESERVE**
12 **EXCESS IS ADOPTED?**

13 A. Amortizing the \$645,805,342 excess reserve PEF has identified as of December 31,
14 2009 over a 4-year period results in a \$161,456,336 reduction in annual depreciation
15 expense, and a corresponding reduction to that amount in the Company's overall
16 revenue requirements prior to the impact of jurisdictional allocation.

17
18 **SECTION: IV PRODUCTION PLANT**

19
20 **A. INTRODUCTION**

21
22 **Q. PLEASE PROVIDE AN OVERVIEW OF THE COMPANY'S PRODUCTION**
23 **PLANT RELATED DEPRECIATION REQUEST.**

24 A. The Company has approximately \$6.5 billion of generating investment reflected in its
25 depreciation request. (See Exhibit No. ___ (EMR-2) page 2-2, 2-3, and 2-6).

1 Associated with this level of investment the Company seeks in excess of \$238 million
2 of annual depreciation expense based on plant as December 31, 2009.

3
4 **Q. IS DEPRECIATION EXPENSE CALCULATED THE SAME FOR**
5 **PRODUCTION PLANT AS IT IS FOR TRANSMISSION, DISTRIBUTION OR**
6 **GENERAL PLANT?**

7 A. No. The Company relies on a life span approach to depreciation for production plant.
8 In addition, the Company also seeks recovery of costs associated with terminal
9 dismantlement studies that estimate the cost to totally demolish existing generating
10 facilities.

11
12 **Q. ARE THESE THE ONLY DIFFERENCES?**

13 A. No. For production plant, the Company has proposed the recognition of interim
14 retirements. As discussed later, those interim retirements simply reflect individual
15 items at a power station that are projected to retire before the final plant is retired.
16 For transmission, distribution, and general plant analyses the concept of interim
17 retirements does not exist.

18
19 **Q. IS THERE ANOTHER DIFFERENCE BETWEEN PRODUCTION PLANT**
20 **AND MASS PROPERTY DEPRECIATION?**

21 A. Yes. For production plant, the Company must estimate a future expected retirement
22 year or "Projected Year of Retirement" in conjunction with the life span method.
23 Thus, if a generating unit was placed in service in the middle of 2000 with a 60-year
24 life span it would be expected to retire in the middle of 2060. Again, the need to
25 forecast a specific future retirement date is not an issue for mass property accounts.

1 **Q. HAVE YOU REVIEWED THE VARIOUS COMPONENTS OF THE**
2 **COMPANY'S PROPOSED PRODUCTION DEPRECIATION EXPENSE?**

3 A. Yes. After a detailed review, I find that the Company's proposed production plant
4 depreciation request is excessive and must be modified. The Company's proposed life
5 and net salvage parameters can only be characterized as aggressive. In other words,
6 based on available information, the Company's proposed life spans are artificially
7 short, its proposed interim retirement method and results excessively reduce the
8 remaining life for its generating units, its proposed interim net salvage is excessively
9 negative, and its proposed terminal net salvage represents a high-side estimate of a
10 worst case scenario.

11
12 **Q. IS THE COMPANY'S NEED FOR AN INCREASE IN DEPRECIATION**
13 **EXPENSE QUESTIONABLE GIVEN THE EXCESS RESERVE POSITION?**

14 A. Yes. The Company proposes a remaining life technique for depreciation. The
15 remaining life technique adjusts the depreciation expense for the future, taking into
16 account whether the existing reserve is excessive or understated. If the existing
17 reserve is excessive in comparison to the theoretical reserve based on the Company-
18 proposed mortality characteristics, then the remaining life technique forces a
19 reduction in annual depreciation expense from what would have been the level absent
20 an excess in the reserve. In other words, if depreciation expense has been collected
21 on an accelerated basis historically, whether intentionally or not, the rate of
22 recovering the remaining level of expense must be decelerated over the remaining life
23 so that only 100% of cost is recovered.

24

1 Q. DOES THE COMPANY ADMIT TO AN EXCESS RESERVE POSITION FOR
2 ITS GENERATION-RELATED DEPRECIATION?

3 A. Yes. The Company claims a \$472.5 million excess reserve position for production
4 plant. (See Exhibit No. ___ (EMR-2) page 2-75 and 2-77).
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 several of its steam and nuclear
9 generating units, the Company's method and results for interim retirements, and the
10 Company's over statement of negative net salvage.
11

12 **B. PRODUCTION PLANT LIFE SPANS**
13

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

15 A. This portion of my testimony will deal with limited modifications to the Company's
16 proposed retirement dates for its steam-fired generating facilities.
17

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

21 A. The Company has proposed four different future retirement dates for the Company's
22 steam production investment. For the Crystal River 1 and 2 coal-fired units, the
23 Company proposes a retirement date in the middle of 2020. For the Crystal River 4
24 and 5 coal-fired generating units, the Company proposes a mid 2035 retirement date.
25 For the Anclote units the Company proposes a mid 2022 retirement date, and for the

1 remaining 3 Suwannee generating units the Company proposes a mid 2013 retirement
2 date, or only 3 ½ years beyond the end of the depreciation study period of 2009.

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

6 A. The Company's mid 2020 retirement date for its investment in Crystal River 1 and 2
7 units equates to a 53.5 and 50.5-year life spans, respectively. The Company's mid
8 2022 retirement date for the Anclote 1 and 2 units yields 47.5 and 43.5-year life
9 spans, respectively. The Company's proposed mid 2035 retirement date for the
10 Crystal River 4 and 5 units results in 52.5 and 50.5-year life spans, respectively.

11
12 **Q. DO ANY OF THE COMPANY'S PROPOSED RETIREMENT DATES FALL**
13 **WITHIN THE PLANNING HORIZON OF THE COMPANY'S 10-YEAR SITE**
14 **PLAN?**

15 A. Yes. The most recent 10-year site plan for the Company encompasses a planning
16 horizon only for the Suwannee plant.

17
18 **Q. ARE THE COMPANY'S PROPOSED RETIREMENT DATES FOR ITS**
19 **STEAM FIRED GENERATING FACILITIES REASONABLE?**

20 A. No. The Company's proposed life spans for its newer large coal-fired and its large oil
21 and gas-fired generating units are inadequate or short.

22
23 **Q. ON WHAT DO YOU BASE YOUR STATEMENT THAT THE LIFE SPANS**
24 **FOR THE COMPANY'S NEWER COAL AND LARGE OIL AND GAS-FIRE**
25 **GENERATING FACILITIES ARE INADEQUATE OR SHORT?**

1 A. There are various reasons, but the most compelling is the fact that the Company has
2 demonstrated through actual operation that it can operate its other oil and gas fired
3 generating facilities for more than 55 years. Moreover, the Company's expectation is
4 that such facilities can operate in excess of 60 years. (See OPC's POD 7 No. 174,
5 Attachment). If the Company has or expects to operate smaller less efficient
6 generating facilities for 60 years or longer, estimated life spans for its newer, larger
7 and costly generating facilities should not be limited to the low 50-year range. The
8 Company's proposal is contrary to standard economic theory which dictates that large
9 capital intensive investments should be operated to maximum levels in order to
10 deliver the economic worth that such facilities are capable of obtaining.

11

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

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

22

23 As time progressed and more empirical data became available the life span issue
24 changed from one where utilities would propose 30 to 35-year lives to where the
25 utilities were proposing upper 30 to low 40-year lives. In other words, as time

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

9
10 **Q. HAVE THERE BEEN RECENT CASES TO WHICH 60-YEAR LIFE SPANS**
11 **HAVE BEEN ADOPTED FOR STEAM GENERATING FACILITIES?**

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

23
24 **Q. CAN YOU PROVIDE OTHER EXAMPLES?**

1 A. Yes. Another example is a recent Rocky Mountain Power Company case in the state
2 of Utah. In that case, the regulatory staff of five states negotiated a settlement where
3 that company's proposed life span for its coal-fired generating facilities was reduced
4 to 61 years. (See Utah Public Service Commission Docket No. 07-035-13). In that
5 case, the Company had actually proposed a longer life span for its coal-fired
6 generating facilities.

7
8 Yet another very recent example is the settlement in the Southwestern Public Service
9 Company ("SPS") case in Texas. (See Public Utility Commission of Texas Docket
10 No. 35763). It should further be noted that SPS is part of the large Xcel holding
11 company which has operations in numerous states across the country. In that case,
12 SPS had proposed a 55-year life span for its coal-fired generating facilities, but settled
13 and accepted a 60-year life span. It is worth noting that SPS is one of the utilities that
14 for decades argued in rate cases that anything in excess of a 35-year life span was
15 unrealistic and would not occur. Yet, in only a period of a decade or so SPS is now
16 not only proposing 55-year life spans, but accepting 60-year life spans for its coal-
17 fired generating facilities.

18

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

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

1 adequate empirical data to support life spans much 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**
5 **THE COMPANY'S GENERATING FACILITIES CAN LAST FOR 50 TO 60**
6 **YEARS, 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
9 have 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**
13 **ITS LARGE COAL, GAS OR OIL-FIRED FACILITIES CANNOT OPERATE**
14 **FOR 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 43 years as
17 proposed by the Company for one of its Anclote units.

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
24 beyond the Company's proposed retirement dates. Moreover, other utilities and

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

3
4 **Q. IS THERE ANY BASIS TO DENY LONGER LIFE SPANS ASSOCIATED**
5 **WITH ANY POTENTIAL ARGUMENT ASSOCIATED WITH INTERIM**
6 **ADDITIONS?**

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

12
13 **Q. WHY WOULD SUCH AN ARGUMENT NOT BE APPROPRIATE?**

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

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

24 A. In order to present a conservative initial adjustment, I recommend the lengthening of
25 life spans for Crystal River 4 and 5 coal-fired generating units, as well as the

1 Company's large Anclote oil-fired generating units. Specifically, I am
2 recommending a 60-year life span for Crystal River 4 and 5 coal-fired generating
3 units and a minimum 50-year life span for the Company's Anclote large oil-fired
4 generating units.

5

6 **Q. IS THE COMPANY'S PROPOSED LIFE SPAN FOR CRYSTAL RIVER 3**
7 **NUCLEAR PLAN ARTIFICIALLY SHORT?**

8 A. Yes. Unlike steam generating units the Company's nuclear unit has a very specific
9 license termination date. With the requested 20-year license extension, the license
10 termination date is December 3, 2036. The Company has proposed a mid-2036
11 retirement date. Therefore, I recommend the remaining life for crystal River 3 be
12 extended to recognize approximately 11/12ths of calendar year 2036.

13

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

16 A. No. In particular, the Company's proposal for an approximate 30-year life span for
17 combined cycle generating units is also understated. Other utilities and regulators are
18 recommending longer life spans for combined cycle generating facilities. In this case,
19 I recommend that the Commission order the Company to perform a detailed analysis
20 demonstrating why its substantial investment in combined cycle generating facilities
21 cannot be expected to reasonably operate for 35 years or longer, and present the study
22 in its next depreciation filing. However, if the Commission were so inclined, it would
23 be more than reasonable to increase the life span to 35 years as initial steps in this
24 case. It is no longer reasonable to expect customers to overpay for decades for the

1 use of generating facilities that realistically should and can be expected to last longer
2 than the Company's unsubstantiated 30-year life expectations.

3

4 **Q. WHAT IS THE IMPACT OF YOUR ADJUSTMENT?**

5 A. I have not made a precise quantification of the standalone impact of this adjustment
6 due to the manner in which the Company has presented its data. However, a
7 reasonable estimate of the impact on a standalone basis is a reduction to depreciation
8 expense of \$26 million annually.

9

10 **C. INTERIM RETIREMENTS**

11

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

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

17

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

19 A. Interim retirements have been characterized as a fine tuning adjustment to the life
20 span analysis. The life span method is used in estimating the retirement date for any
21 large unit of property such as an entire generating unit. The theory behind interim
22 retirement rates is that even though a large unit of property such as a generating unit
23 might retire in 60 years, in the interim period many components have to be replaced
24 in order to maintain the overall generating facility in operating condition. An analogy
25 to this would be a car which might be anticipated to have a service life of 10 years.

1 During the 10-year life of the car, the owner might have to replace the battery, tires,
2 alternator and other components in order to maintain the automobile in a safe and
3 operable condition. Therefore, even though the automobile may have an overall 10-
4 year life span, its dollar weighted adjusted life span may be 9.8 years due to the
5 averaging of the automobile's overall life span with the average of the individual
6 replaced components. In other words, the interim retirement rate would be a fine
7 tuning factor used to reduce the service life from 10 years to 9.8 years.

8
9 **Q. HAS THE COMPANY INCORPORATED THE IMPACT OF INTERIM**
10 **RETIREMENTS IN ITS DEPRECIATION ANALYSIS?**

11 A. Yes. The Company proposes to implement a calculation procedure for interim
12 retirements based on truncated Iowa Survivor curves that are "designed" to recognize
13 "anticipated" interim retirements. (See Exhibit No. ___ (EMR-2) page 1-4).

14
15 **Q. DO YOU AGREE WITH THE COMPANY'S POSITION?**

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

20
21 **Q. PLEASE EXPLAIN THE PROBLEMS WITH THE COMPANY'S PROPOSED**
22 **METHOD.**

23 A. The Company's approach relies on an actuarial analysis of the historical data to
24 determine an interim retirement life-curve combination. Actuarial analyses are
25 normally performed on more homogeneous-type investments that are not generally

1 dependent on one another, such as poles or wires. In particular, the varying types of
2 investments within each of the major production plant accounts do not reasonably
3 lend themselves to actuarial analyses. In other words, the retirement forces
4 experienced by electric motor drives booked in Account 312 are noticeably different
5 than the retirement forces on smoke stacks, also booked in Account 312. However,
6 the Company's actuarial approach treats all items in the same account as one type of
7 item for life estimation purposes.

8
9 The actuarial approach can also overreact to unusual activity or the timing of unusual
10 activity. Indeed, the results of the Company's actuarial analysis are greatly affected
11 by the unusual retirement activity that the Company booked during the past 4 years
12 since its last depreciation study. For example, the Company's assumed "25O1" life-
13 curve combination for Account 343 is based on unusual levels of infant mortality.
14 (See Exhibit No.__(EMR-2), page 5-39 through 5-41). In order to properly recognize
15 what has transpired since the Company's last depreciation study and the impact on
16 the Company's current proposal, I have attached the equivalent analysis performed by
17 Mr. Robinson in his last depreciation study as Exhibit (JP-3). In the last case Mr.
18 Robinson proposed a 48R0.5 life-curve combination for Account 343. Therefore, his
19 proposal in this proceeding basically cuts the average service life in half and
20 dramatically changes the shape of dispersion pattern.

21
22 **Q. DOES MR. ROBINSON'S SELECTION AND APPROACH FOR ACCOUNT**
23 **343 REPRESENT APPROPRIATE DEPRECIATION ESTIMATION**
24 **PRACTICES?**

1 A. No. First, it must be noted that even Mr. Robinson states that “gradualism” is a
2 concept he employs in the development of his depreciation studies. (See Mr.
3 Robinson’s rebuttal testimony in Docket No. 050078-EI at page 10). Given that Mr.
4 Robinson’s previously proposed average service life for interim retirement purposes
5 for this account was 48 years, or approximately 100% higher than his current
6 proposal, it appears he must have made an unexplained and unwarranted exception to
7 his concept.

8

9 Next, Mr. Robinson chose not to explain why in the last case a zero level of
10 retirements existed for the zero to one half year age interval, meaning no infant
11 mortality, yet in this proceeding he relies on \$46.5 million of infant mortality during
12 the same age interval. Retirements of this magnitude at the time of installation of
13 investment, an age of zero, is simply not realistic or practical for estimation purposes.
14 Moreover, the claimed retirement activity between the Company’s prior depreciation
15 study and the current depreciation study for the first four age brackets increased by
16 more than a 1,000%. Whether such activity represents true retirement activity
17 experienced by the Company during the last 4 years, it cannot reasonably or
18 realistically be assumed to be a repeating pattern in the future absent reliance on
19 imprudent activity.

20

21 **Q. WHAT IS THE PRACTICAL IMPACT OF MR. ROBINSON’S PROPOSED**
22 **INTERIM RETIRMENT APPROACH FOR ACCOUNT 343?**

23 A. The real practical impact of Mr. Robinson’s method and assumptions are best
24 described as it applies to the new combined cycle investment for Account 343 –
25 Bartow combined cycle. Mr. Robinson proposes a 5.08% depreciation rate

1 corresponding to an estimated \$632 million of new investment. (See Exhibit
2 No.__(EMR-2), page 2-4). While the Company claims a 2039 Probable Year of
3 Retirement date for this new investment (See OPC's POD 7-174, Attachment), which
4 corresponds to a 30-year life span, Mr. Robinson reduces that value to only 20.7 years
5 for remaining life purposes. (See Exhibit No.__(EMR-2), page 2-18, column (j)). In
6 other words, Mr. Robinson's proposed interim retirement approach and resulting life-
7 curve combination takes the 30-year life span proposed by the Company and cuts off
8 a full 1/3rd of that life span due to the impact of his assumed interim retirement
9 calculation. Such massive and artificial reduction in life spans due to Mr.
10 Robinson's approach and quantification of interim retirements can only be
11 characterized as an attempt to create and implement an accelerated form of
12 depreciation. The annual revenue requirement impact of reducing a 30-year life span
13 to a 20.7-year adjusted remaining life for this single account for this single generating
14 unit is \$9.8 million. It is precisely this type of activity that will result in an excess
15 level of depreciation reserve in the future if the Company's proposal is adopted. This
16 practice must be stopped now before it acerbates the current excess reserve situation.

17
18 **Q. IS THERE ANOTHER ASPECT TO THE COMPANY'S INTERIM**
19 **RETIREMENT PROPOSAL THAT HIGHLIGHTS ITS UNREASONABLE**
20 **RESULTS?**

21 A. Yes. In this case the Company proposes two types of net salvage for production
22 plant: interim retirement net salvage and terminal net salvage. The interim retirement
23 net salvage is associated only with the retirements that are estimated by employing
24 the Company's proposed interim retirement life-curve combination approach. For

1 other production plant the Company calculated interim retirements as 47% of total
2 investment as of December 31, 2009. (See Exhibit No.__(EMR-2) page 2-134).

3
4 The Company performed this analysis for interim net salvage in order to determine
5 how to adjust its total proposed plant account net salvage values so that the adjusted
6 value applied to total plant in service would be the equivalent of applying the net
7 salvage only to interim retirements. For example, for Account 312 the Company
8 proposes a total overall negative 50% net salvage estimate. However, the Company
9 realized that it should not apply the negative 50% to the entire plant balance since the
10 entire plant balance does not correspond to the level of "estimated" interim
11 retirements prior to the final retirement of each generating unit. Therefore, the
12 Company presented an approach which reduces its proposed total account net salvage
13 level to a negative 21% in an attempt to make it equivalent to only the level of interim
14 retirements. The significance of this example is that the Company's proposed interim
15 retirement approach, which relies on a 48S0 truncated Iowa Survivor curve, projected
16 that \$394 million of plant would retire between January 1, 2010 and the projected 20-
17 year remaining life for its boiler plant equipment. (See Exhibit No.__(EMR-2), pages
18 2-131 and 9-15).

19 **Q. CAN YOU PLACE THE \$394 MILLION OF PROJECTED INTERIM**
20 **RETIREMENT ACTIVITY FOR BOILER PLANT EQUIPMENT INTO**
21 **PROPER PERSPECTIVE?**

22 A. Yes. The Company provided the annual historical boiler plant retirement activity for
23 the period 1976 through 2007. (See Exhibit No.__(EMR-2), pages 8-5 through 8-8).
24 This time frame represents a 32-year period or 1.6 times the Company's projected
25 remaining life for the existing boiler plant equipment. During the historical 32-year

1 period the Company reports retirements of approximately \$60 million or \$1.8 million
2 per year. Thus, on a per year basis the Company's projected interim retirement
3 values are more than *10 times* the historical annual retirement levels experienced by
4 the Company for the same plant. There is no evidence that demonstrates that such a
5 proposed expansion of interim retirements is reasonable or realistic.

6
7 **Q. DOES INDUSTRY DATA CONFIRM THE REASONABLENESS OF THE**
8 **COMPANY'S PROPOSAL?**

9 A. No. A review of the electric industry data provided by the Company's depreciation
10 consultant identifies longer lives than his proposal for Account 312 in this case. For
11 example, Mr. Robinson's interim retirement values average over 60 years with half of
12 his prior proposals at or above 70 years for Account 312. (See OPC's 5th
13 Interrogatories No. 192, Attachment). Mr. Robinson's historical average represents a
14 28% increase above the value he proposed in this case. Thus, the method employed
15 by Mr. Robinson for interim retirements produced results that vary to a significant
16 extent and artificially reduce the remaining life of the production facilities to too great
17 of an extent in this case.

18 **Q. ARE YOU PROPOSING ANY ADJUSTMENTS TO THE LEVEL OF**
19 **INTERIM RETIREMENTS REQUESTED BY THE COMPANY?**

20 A. Yes. Given (1) the excessive level of interim retirements that are produced by the
21 Company's approach, (2) the level of variance between what the Company proposed
22 compared to what the Company's consultant has proposed in other proceedings for
23 the same accounts, and (3) the unrealistic results that are a direct fallout of the
24 Company's process, I recommend an alternative approach and values for interim
25 retirements.

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

2 A. I propose an interim retirement adjustment that is not based on truncated Iowa
3 Survivor curves. In other words, I have replaced the actuarial component of the
4 analysis, given that the plant analyzed is neither reasonably homogeneous nor
5 independent from the life of the overall generating unit. The method I rely upon is
6 one sponsored by the California Public Utilities Commission in its publication
7 entitled "Determination of Straight – Line Remaining Life Depreciation Accruals
8 Standard Practice U-4", and also recognized by the NARUC in its publication entitled
9 "Public Utility Depreciation Practices." Thus, there can be no doubt that the method I
10 recommend has been employed and adopted historically and currently by utilities and
11 utility regulators.

12

13 Next, I developed interim retirement ratios for each of the plant accounts based on
14 actual and realistic Company specific information. In other words, the interim
15 retirement ratios utilized in my approach were developed from the historical reported
16 levels of retirement activity by account for each of the steam, nuclear and other
17 production accounts as also relied upon by the Company. (See Exhibit No.__(EMR-
18 2), page 8-1 through 8-62). The resulting interim retirement ratios and the
19 corresponding impact on remaining lives are set forth on Exhibit (JP-4).

20

21 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDED MODIFICATIONS**
22 **TO THE APPROACH AND LEVEL OF INTERIM RETIREMENTS?**

23 A. The adoption of my recommended approach for interim retirement ratios on a
24 standalone basis results in an approximate \$45 reduction to depreciation expense on a
25 total Company basis.

1 **D. INTERIM NET SALVAGE**

2

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

4 A. This portion of my testimony addresses the Company's proposal for net salvage
5 associated with interim retirements. The Company has proposed a wide array of
6 values ranging from zero to a negative 50% for various production plant accounts.

7

8 **Q. WHAT IS INTERIM NET SALVAGE?**

9 A. The Company proposes two different types of net salvage for production plant,
10 interim net salvage and terminal net salvage. Terminal net salvage corresponds to the
11 estimated cost associated with the final retirement and disposition of a generating
12 facility once it has been retired. Alternatively, interim net salvage reflects the cost the
13 Company estimates it will incur when replacing components of the plant that retire
14 between now until when the Company forecasts the unit will retire. In other words,
15 interim net salvage corresponds to the interim retirements projected by the Company.

16

17 **Q. HOW DID THE COMPANY DEVELOP ITS PROPOSED INTERIM NET**
18 **SALVAGE LEVELS?**

19 A. That is a good question; unfortunately, the Company provided no specifics that
20 support the Company's proposals. Rather, the Company states that it relied on an
21 "interpretive as opposed to an arithmetic approach." (See OPC's 2nd Interrogatories
22 No. 64). The Company also states that the "level of interim net salvage of each
23 property was based upon an account level analysis of historic data to date." (See
24 Exhibit No. (EMR-2), Section 4 pages 4-1 through 4-31). Mr. Robinson further
25 stated that the interim net salvage "was based upon an analysis of the Company's

1 historical experience, consideration of the prepared net salvage forecast, plus current
2 and perspective factors.” (See Mr. Robinson’s direct testimony at page 22). In other
3 words, the Company admits that its presentation is based on some vague
4 interpretation of a combination of historical data, considerations of Mr. Robinson’s
5 forecast approach to net salvage, plus current and perspective “factors.”
6

7 **Q. DID MR. ROBINSON PRESENT AN ANALYSIS OF EACH ACCOUNT?**

8 A. Yes, however, the mathematical analyses presented do not correspond to or verify the
9 interim net salvage proposals made by Mr. Robinson. This lack of connection
10 between numerical analysis and Mr. Robinson’s proposed results are to be expected
11 given his admission that his estimation process is an “interpretative as opposed to an
12 arithmetic approach.”
13

14 **Q. DID YOU SEEK SPECIFICS REGARDING MR. ROBINSON’S RELIANCE**
15 **ON JUDGMENT AND EXPERIENCE IN DETERMINING THE FINAL**
16 **SELECTION OF NET SALVAGE SELECTIONS?**

17 A. Yes. In fact, the Company was specifically requested to provide a “detailed narrative
18 identifying and explaining each item of judgment and experience relied upon by
19 account and/or subaccount in the estimation of life and net salvage values.” (See
20 OPC’s 2nd Interrogatories No. 64, Subpart C). It is in response to this request that the
21 Company admits for the first time that its process is interpretative as opposed to
22 mathematical, yet both the Company and Mr. Robinson failed to provide any
23 specifics as requested.
24

1 Q. HAVE YOU REVIEWED MR. ROBINSON'S NOTES TO DETERMINE IF
2 HE PROVIDED INFORMATION THAT MIGHT RELATE TO CURRENT
3 AND SPECIFIC FACTORS ASSOCIATED WITH HIS INTERIM NET
4 SALVAGE PROPOSALS?

5 A. Yes. (See OPC's 2nd Interrogatories No. 99, Attachment). Mr. Robinson's notes shed
6 no additional light on the specific proposal he presents and the Company relies upon
7 for its depreciation request. His failure to provide any meaningful information by
8 account regarding the current proposed factors is inappropriate given he also states
9 that "input from management regarding its view of current and potential changes in
10 coming years are considered in the process." (See OPC's 2nd Interrogatories No. 64).
11 Mr. Robinson cannot be allowed to claim that his process is "interpretative" and relies
12 on "input from management" and then not provide a single specific item of
13 information regarding this process when requested to do so. The real issue is that Mr.
14 Robinson and the Company failed to provide any specifics in the first place when the
15 case was filed.

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

18 A. No. Most of the Company's proposals are excessively negative. The Company's
19 failure to investigate the underlying data other than through a faulty "forecast"
20 process has caused it to inappropriately select excessively negative values which are
21 not representative of the remaining investment in the account. Moreover, the
22 Company fails to provide any specifics of how it arrived at its proposal, versus any
23 other value, for each separate account. (See OPC's 2nd Interrogatories No. 64 and 5th
24 Interrogatories No. 177). In fact, Mr. Robinson provided less specifics than he did in
25 his last study.

1 **Q. CAN YOU PROVIDE AN EXAMPLE OF THE COMPANY'S FAILURE TO**
2 **PROVIDE ADEQUATE EXPLANATION AND SUPPORT FOR ITS**
3 **PROPOSALS?**

4 A. Yes. I will use steam production plant Account 312 – Boiler Plant Equipment for the
5 example. For this account, the Company has proposed an overall negative 50% net
6 salvage. When adjusted for the Company's claimed level of interim retirements the
7 negative 50% net salvage is reduced to a negative 21%. (See Exhibit No.__(EMR-
8 2) page 2-130). The Company's depreciation study and responses to interrogatories
9 and document productions failed to identify how the initial negative 50% net salvage
10 level was established. What the Company has provided is general statements that (1)
11 it relied on an "interpretative" approach, (2) it reviewed historical data, (3) it did a
12 "forecast" analysis, and (4) it relied on input from management. However, a review
13 of the historical data and analyses, forecasted data and analyses, information from the
14 Company's last study, Company notes, responses relating to input from management,
15 etc., all fail to identify why a negative 50% net salvage was selected or why it was
16 appropriate in the first place.

17
18 What the Company's information does identify is that the overall historical data
19 indicates a negative 37% net salvage and that the Company's forecast analysis
20 indicates a negative 130% net salvage. (See Exhibit No.__(EMR-2) page 4-3). Thus,
21 the negative 50% proposed by the Company does not appear to be based on either the
22 forecast or the historical information. Given that the Company failed to provide any
23 specifics regarding the input, and the impact of such input, from any Company
24 individual, renders its proposal completely void of any supporting evidence.

1 **Q. HOW DOES THE COMPANY'S PROPOSAL COMPARE TO ITS**
2 **PROPOSAL FOR THIS SAME ACCOUNT IN THE LAST CASE?**

3 A. The two proposals are identical. However, the net salvage "forecast" in the last case
4 was a negative 384%, while in this case it is only a negative 130%. Thus, while the
5 forecasted amount has been reduced by 2/3rd there is no change in the Company's
6 proposed negative 50% overall net salvage. Obviously, the "forecast" analysis played
7 no meaningful role in the selection process. Turning to the historical data, the overall
8 net salvage for this account in the last study was a negative 67%. In this study that
9 value has changed to a negative 36%, yet the Company made no change in its
10 proposed negative 50% overall net salvage. Obviously the Company's proposal is
11 not based on any analysis or a review of historical data or trends in the data.
12 Moreover, the ultimate interim retirement related net salvage as proposed by the
13 Company in the last case was a negative 12.5%. However, in this case the Company
14 now proposes a negative 21%. This proposal is made in spite of the fact that its own
15 "forecast" analysis has been cut by 2/3rd and the overall historical data indicates
16 approximately a 50% cut in negative net salvage. In spite of these contradictory
17 movements between cases, Mr. Robinson and the Company elected to remain silent
18 as to the basis for the proposal.

19
20 **Q. PLEASE SUMMARIZE THE COMPANY'S PRESENTATION?**

21 A. The Company presentation is less than vague, yet based on the depreciation study it
22 still seeks approximately \$33 million of annual revenue requirements based on plant
23 as of December 31, 2009. (See Exhibit No. (EMR-2) pages 2-31, through 2-36).
24 Rather than presenting any specific facts, considerations, documents, exhibits or even
25 meaningful testimony in support of its various proposals, the Company simply places

1 such values within its 165 pages of summary numerical documentation identified as
2 Section 2 of its depreciation study. There are no notes that explain the various
3 proposals, there are no workpapers that explain the proposal, and there is no
4 testimony that explains the proposal other than to indicate three potential approaches.
5 Indeed, while the study identifies three very generalized basis for Mr. Robinson's
6 proposals, the Company only admits in response to an interrogatory that the
7 arithmetic approach reflected in the historical analysis and in the forecast analyses
8 were not relied upon. Even when making such admission the Company and Mr.
9 Robinson still fail to provide any support for the bases of its proposals. The
10 Company's proposal should be denied since the Company has met no burden of proof
11 associated with its interim net salvage request and has still not identified any credible
12 support.

13
14 **Q. WHAT DO YOU RECOMMEND?**

15 A. While a zero level of net salvage would be a logical reaction to the Company's total
16 failure to present and support its proposals, I have two recommendations. First, I
17 recommend that the actual overall historic values reflected in the Company's
18 depreciation study be utilized for interim retirement purposes, with one very
19 conservative limitation. That limitation is that in each instance where the historical
20 data for interim net salvage yields a positive value that the interim net salvage be set
21 to zero. This limitation is conservative in favor of the Company. The second
22 recommendation is that the Commission order the Company to perform a detailed,
23 thorough and well documented depreciation study for its next proceeding. The
24 presentation by the Company should clearly identify what was specifically relied
25 upon by account and how the various items of information relied on result in

1 whatever proposal the Company makes in its next depreciation study. The
2 Commission and customers should not be left hanging in the dark even after
3 requesting information that was intended to elicit the clear basis and support for the
4 Company's proposals.

5

6 **Q. WHAT SPECIFIC INTERIM NET SALVAGE VALUES RESULT FROM**
7 **YOUR RECOMMENDATION?**

8 A. Exhibit (JP-5) presents a listing of the overall net salvage and interim net salvage by
9 account for production plant as proposed by the Company and as I recommend based
10 on actual Company specific data.

11

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

13 A. My recommendation results in an approximate \$30 million reduction to annual
14 depreciation expense based on plant as of December 31, 2009.

15

16 **E. INCONSISTENT INTERIM NET SALVAGE ANALYSES**

17

18 **Q. IS THERE INTERNAL INCONSISTENCY IN THE COMPANY'S**
19 **PRESENTATION FOR INTERIM NET SALVAGE?**

20 A. Yes. Once the Company establishes the overall proposal for net salvage for an
21 account it then adjusts the proposed value downward to reflect the fact that it will be
22 applied to total plant, yet intended to have the effect of only being applicable to
23 interim retirements. Unfortunately, the Company calculates the modification to its
24 proposed overall net salvage value based on data as of December 31, 2007. While
25 this portion of the depreciation analysis is based on data as of December 31, 2007, the

1 Company specifically carries forward additions and retirements through the end of
2 2009 in all other portions of its study. The Company takes such projected additions
3 and retirements into account in calculating the remaining life for the overall
4 depreciation expense and resulting rates, but fails to update the applicable level of
5 interim retirements due in part to its reliance on a truncated Iowa Survivor curve
6 approach in establishing the level of interim retirements.

7
8 **Q. CAN SUCH INTERNAL INCONSISTENCY HAVE A SIGNIFICANT**
9 **IMPACT IN THE FINAL RESULT?**

10 A. Yes. For example, Account 322 – Nuclear Plant Equipment represents one such
11 instance. A review of Exhibit No. _ (EMR-2) pages 7-49 and 7-50, which reflects
12 data as of December 31, 2007, and page 9-39, which reflects plant data as of
13 December 31, 2009, establishes that substantial additions and retirements are
14 projected to occur to this account. In particular, the plant balance increased from
15 \$267 million at the end of 2007 to approximately \$516 million as of the end of 2009.
16 A close comparison of these pages identifies that the Company projected additions of
17 \$311,892,596.74 during calendar year 2008 and 2009. However, when these
18 additions are added to the 2007 plant balance set forth on page 7-50 it yields a
19 difference of \$62.8 million. This is precisely the amount the Company estimated
20 would retire during 2008 and 2009. The \$62.8 million of retirements are interim
21 retirements. The significant additions of over \$311 million and the \$62.8 million of
22 retirements have a dramatic impact on the average age of the investment that should
23 be reflected in the depreciation study in order to be consistent.

24

1 Q. WHAT AGE DID THE COMPANY RELY UPON IN PERFORMING ITS
2 STUDY?

3 A. As set forth only in the Company's electronic workpapers provided during discovery,
4 the Company relied on a 19.5 year average age as of December 31, 2007 for this
5 account. This value can be duplicated by multiplying the original cost set forth on
6 Exhibit No. __ (EMR-2) pages 7-49 and 7-50 beginning with 0.5 year of age
7 corresponding to 2007 and increasing the age by one year as values move back in
8 time to 1951, and dividing the sum of the weighted dollars by the total original cost.
9 When the same calculation is performed on the values on page 9-39, which reflects
10 the substantial new additions in 2008 and 2009, the average age drops to 8 years. The
11 age for this account that Mr. Robinson used in one portion of his study is 2.4 times
12 the age of the investment relied on in a different portion of his study.

13

14 Q. WHAT DIFFERENCE DOES THE AVERAGE AGE HAVE IN THE
15 CALCULATION PRESENTED BY THE COMPANY?

16 A. The Company's calculation of age was used to establish the 48-year average age for
17 the Projected Year of Retirement on Table 2 – a, set forth at page 2-131 of the
18 Company's depreciation study. The 48-year value was calculated by adding the age
19 of 19.5 years to the remaining life for this unit of 28.5 years. This 48-year average
20 age was divided by the 40-year average service life reflected in the Company's
21 proposed 40-R0.5 life-curve combination in its interim retirement approach. That
22 calculation yields a value of 120% of the average service life as set forth on Table 2 –
23 a, page 2-131 of the Company's study. The Company then identified a 62% value for
24 the level of plant retired on an interim basis from standard Iowa Survivor tables for a
25 40R0.5 at 48 years of age. This 62% value is critical as it represents the Company's

1 assumed level of interim retirements and was applied to the negative 20% net salvage
2 value estimated on an overall basis for the account. Multiplying 62% times the
3 proposed negative 20% net salvage yields the Company's proposed interim retirement
4 net salvage level of negative 12.4%. Also set forth on page 2-131 of the Company's
5 study, the Company relied on the negative 12.4% interim net salvage proposal for
6 calculating the ultimate depreciation rate it proposed.

7
8 **Q. WOULD THE SIGNIFICANT CHANGE IN THE AGE PROPOSED BY MR.**
9 **ROBINSON EFFECT THE PROPOSED LEVEL OF INTERIM**
10 **RETIREMENTS?**

11 A. Absolutely. Reducing the 19.5-year age to 8 years of age relied upon and proposed
12 by the Company through the end of 2009 results in a 36.5-year average age for the
13 investment in this account at the Projected Year of Retirement versus the 48-year
14 value relied upon by Mr. Robinson. Performing the same calculations as the
15 Company did in its study results in a 91% percent of average service life value
16 compared to the Company's 120% value. The final percentage retirements
17 corresponding to the level of interim retirements that should have been utilized drops
18 to 42% compared to the Company's proposed 62%, or a full 20 percentage point
19 reduction.

20
21 Even assuming the Company's proposed overall negative 20% net salvage for this
22 account was appropriate, which it is not, the resulting negative net salvage applicable
23 to interim retirements would have declined to a negative 8.4% compared to the
24 Company's proposed 12.4%. In other words, the Company's proposed value is
25 approximately 50% higher than it should have been had the Company calculated its

1 interim net salvage process on a consistent basis. This single change for this single
2 account reduces the Company's claimed depreciation expense by \$929,000. The
3 Company has performed this calculation on over 150 entries corresponding to
4 different accounts by generating units. While there is no impact in those instances
5 where the Company did not project additions or retirements for a given account for a
6 generating unit, the Company has proposed additions and retirements for the vast
7 majority of the 150 plus entries.

8
9 **Q. HAVE YOU CORRECTED EACH OF THE COMPANY'S ERRORS?**

10 A. By relying upon my recommended approach to calculating and quantifying interim
11 retirements, I have effectively corrected the Company's errors due to inconsistent
12 recognition of plant additions and retirements. I have not recalculated the impact of
13 the Company's errors relying on its inappropriate approach to interim retirements.

14
15 **F. TERMINAL NET SALVAGE**

16
17 **Q. WHAT ISSUE DO YOU ADDRESS IN THIS PORTION OF YOUR**
18 **TESTIMONY?**

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

21
22 **Q. HAVE YOU REVIEWED THE COMPANY'S DISMANTLEMENT STUDY?**

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

25

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

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

9

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

12 A. The range of options available to a utility range from total dismantlement and site
13 restoration to the sale of the facility. The cost to the utility and thus the cost to the
14 customers vary dramatically depending on the option selected. For example, if any
15 form of sale of the facility occurs, substantial levels of gross salvage can be expected
16 to be obtained and positive net salvage is a realistic result. Positive net salvage means
17 that the Company needs to recover less than 100% of its costs through depreciation,
18 as the balance of the cost is obtained through sale proceeds. On the other end of the
19 spectrum is the full dismantlement and site restoration approach. This approach
20 normally results in cost of removal exceeding gross salvage, and thus an overall
21 negative net salvage is required.

22

23 Basically, the options available to the Company range from the worst case scenario of
24 total dismantlement and site restoration, to the best case scenario corresponding to the
25 sale of the facility at an amount significantly above net book value. Since ratemaking

1 is an attempt to charge expected average costs, some weighting of future probabilities
2 associated with each potential option should be recognized.

3
4 **Q. HAS THE COMPANY RECOGNIZED ANY WEIGHTING OF DIFFERENT**
5 **OPTIONS ASSOCIATED WITH THE RETIREMENT COSTS FOR ITS**
6 **GENERATING FACILITIES?**

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

10
11 **Q. ARE YOU AWARE OF GENERATING FACILITIES THAT HAVE BEEN**
12 **SOLD RATHER THAN DEMOLISHED AT THE TIME THEY WERE**
13 **RETIRED FROM UTILITY OPERATIONS?**

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

18
19 **Q. IS PEF SUBJECT TO ELECTRIC DEREGULATION?**

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

22
23 **Q. ABSENT DEREGULATION, DO ELECTRIC UTILITIES EVER SELL**
24 **GENERATING FACILITIES?**

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

6

7 **Q. DID THE COMPANY PROPOSE ANY LESSER COST FORM OF**
8 **DISMANTLEMENT?**

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

11

12 **Q. IS THIS APPROACH REASONABLE?**

13 A. No. First, generating sites and facilities are valuable resources. The plant normally
14 will have access to water, adequate zoning for industrial usage, if applicable, and
15 most important, access to transmission corridors necessary to connect to the
16 transmission grid. In fact, the Company has used many of its existing generating plant
17 sites for new generation. The need to charge customers for returning such sites to a
18 greenfield status is unrealistic and quite excessive.

19

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

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

1 **Q. PLEASE DISCUSS THE SECOND LEVEL OF REVIEW ASSOCIATED**
2 **WITH DEMOLITION COST ESTIMATES.**

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

7
8 **Q. WHAT APPROACH HAS THE COMPANY PROPOSED?**

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

13
14 **Q. WHY IS THIS SIGNIFICANT?**

15 A. The approach proposed by the Company is again the worst case scenario for the
16 dismantlement option. A good example to depict what is at issue is the
17 dismantlement of a tall smoke stack at a power plant. In a recent case in Oklahoma,
18 the demolition cost estimator projected a cost of \$2 million to demolish a 600 foot tall
19 smoke stack. The estimate was predicated on a process that began at the top of the
20 smoke stack and knocked off sections of the smoke stack, tumbling the debris into the
21 stack. This process was to continue from the 600 foot elevation down to the base.
22 Once the rubble had been accumulated in a large cone at the bottom of the base, the
23 utility would remove it and dispose of it. This approach is very costly in comparison
24 to the available alternative of demolition, which involves exploding the smoke stack
25 base and allowing the stack to topple and break apart along a predefined "fall line".

1 Once the stack has been broken apart by gravity as it falls and smashes to the ground,
2 the rubble can be gathered and disposed of more easily and more cheaply.

3
4 **Q. ARE YOU AWARE OF SIGNIFICANT COST DIFFERENCES IN THE TWO**
5 **DIFFERENT TYPES OF APPROACHES?**

6 A. Yes. In another recent case in Nevada, another major engineering estimator projected
7 the cost of performing a reverse construction approach for generating facilities.
8 Shortly thereafter, Nevada Power Company actually entered into a contract with a
9 demolition firm to demolish the plant. The contractor employed explosive demolition
10 and controlled toppling of the facilities rather than the reverse construction approach.
11 The cost differential between the engineering firm's cost estimate based on a reverse
12 construction approach and the actual demolition based on explosive charges and
13 toppling the facility to the ground was about 30 cents on the dollar. In other words,
14 the estimate for reverse construction approach was approximately 3 times greater than
15 the cost that the utility incurred to employ the explosive demolition method.

16
17 **Q. TURNING TO THE COMPANY'S COST ESTIMATES, CAN YOU PROVIDE**
18 **A BRIEF OVERVIEW OF THE CRITICAL COMPONENTS OF A**
19 **DEMOLITION STUDY?**

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

1 Q. **HAVE YOU REVIEWED NUMEROUS DEMOLITION COST ESTIMATES?**

2 A. Yes.

3

4 Q. **WHAT IS THE GENERAL PROBLEM YOU FIND WITH SUCH**
5 **ESTIMATES?**

6 A. Of the three main categories of variables, the quantity of material to be removed is
7 generally not a major issue. However, the labor costs and productivity factors are
8 normally major issues. In addition, such studies normally include excessive levels of
9 indirect costs and contingency factors.

10

11 Q. **IN THIS CASE WAS THE COMPANY ABLE TO PROVIDE THE**
12 **UNDERLYING PRODUCTIVITY FACTORS?**

13 A. No. The Company hired Burns & McDonnell ("BM") as its new cost estimating firm
14 for this case. The Company then had BM rely on the crew mix, man-hours and
15 associated productivity factors that were developed by a different cost estimating firm
16 that performed a prior demolition cost estimate study as a starting point for this case.
17 (See OPC's Fifth Interrogatories No. 204). Thus, the Company does not have an
18 adequate underlying basis for the productivity factors that it employs in its demolition
19 cost estimates.

20

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

24 A. Yes. The Company states that a 20% "contingency was included because they "are
25 expected to be expended." (See Exhibit No._(EMR-2) page 4-3).

1 Q. IS THE COMPANY'S USE OF A 20% CONTINGENCY FACTOR
2 REASONABLE AND NECESSARY?

3 A. No. The 20% contingency factor is excessive given the dismantlement approach
4 proposed. In other words, if an estimate is based on a low side cost estimates --one
5 that assumes very efficient operation, no weather related delays, etc. -- then a positive
6 contingency might be warranted. However, if the cost estimate is based on a "reverse
7 construction" approach then a *negative* contingency may be warranted.

8

9 Q. WHAT TYPE OF APPROACH HAS THE COMPANY PROPOSED?

10 A. As previously noted, the Company has proposed a very high side cost estimate. This
11 is precisely the type of situation that I referenced earlier when discussing the situation
12 in Nevada. The cost to pre-cut members, beams, piping etc., high above the ground
13 and carefully lowering them, rather than blowing the support beams and toppling the
14 facility, produces an excessively high cost estimate. Therefore, to the extent any
15 contingency should be considered in this case, it should be a negative contingency. In
16 fact, under the right circumstances demolition contractors will actually pay a positive
17 value for the right to demolish a power plant.

18

19 Q. ARE YOU SAYING THAT IT IS POSSIBLE THAT, EVEN WITHOUT
20 SELLING THE GENERATING FACILITIES AS ONGOING OPERATING
21 STATIONS, THE COMPANY COULD POSSIBLY OBTAIN POSITIVE
22 SALVAGE?

23 A. Yes. In fact, recently the Fort Pierce Florida Utilities Authority employed a
24 contractor to demolish the King generating plant. The demolition contractor actually

1 paid Fort Pierce approximately \$1 million for the right to demolish the plant and sell
2 the resulting scrap.

3
4 **Q. CAN SUCH SITUATIONS REASONABLY BE ANTICIPATED TO OCCUR**
5 **IN ALL INSTANCES?**

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

14
15 **Q. IS THERE ANOTHER PROBLEM WITH THE COMPANY'S DEMOLITION**
16 **STUDIES?**

17 A. Yes. The Company has made an error in its calculation of labor costs.

18
19 **Q. WHAT IS THE ERROR?**

20 A. The Company claims that for "the study an average of these two wage rates was
21 utilized." The two wage rates referenced are local union wage rates and the pay
22 scales listed in the 2008 RS Means Heavy Construction Cost Data, 22nd Annual
23 Edition. (See OPC's Fifth Interrogatories No. 189).

24
25 **Q. IS THE COMPANY'S STATEMENT ACCURATE?**

1 A. No. A review of the fully loaded labor rates demonstrates that rather than using the
2 average of union and RS Means pay scales, the Company's study actually relies on
3 only the higher union labor rates.

4
5 This error can be seen by review of the Iron Worker labor rate of \$67.98 per hour
6 employed by the Company. (See OPC's Fifth Interrogatories No. 200, Attachment at
7 bate stamp 3). This fully loaded labor rate starts with the union only labor rate for an
8 iron worker of \$37.58. (See OPC's Fifth Interrogatories No. 200, Attachment bate
9 stamp page 1 for iron worker at the Anclote plant). The calculation ignores a \$33.96
10 hourly rate for the same iron worker as reported in the RS Means publication.
11 Increasing the \$37.58 base labor rate by the 30% contractor burden, an additional
12 10% to cover overtime, and finally by the 26.499% proposed additional "mark up"
13 precisely yields the previously referenced \$67.98 labor rate. (See OPC's Fifth
14 Interrogatories No. 200, the attachment identified as "PROGRESS FLORIDA mark
15 up.pdf at bate stamp 8). In other words, the Company has overstated labor costs for
16 this category of workers by a minimum of over 5% prior to the impact of the
17 Company's additional 10% mark up for indirect costs and the 20% mark up for
18 contingencies. The value is initially overstated by 11% when comparing union versus
19 non union base labor rates.

20
21 **Q. GIVEN THE VARIOUS PROBLEMS YOU HAVE IDENTIFIED, WHAT DO**
22 **YOU RECOMMEND?**

23 A. Given the significant level of adjustments that I recommend elsewhere in the area of
24 depreciation, I have elected not to propose an additional adjustment to the Company's
25 requested level of demolition cost revenue requirements. However, I do recommend

1 that the Commission order the Company to perform detailed and well documented
2 analyses of the different approaches and probabilities of end of life termination for
3 generating facilities. I further recommend that the Commission also order the
4 Company to develop and fully justify the most cost efficient manner for any actual
5 demolition cost approach that it determines to be appropriate. This study, with all
6 analyses, work papers, etc., should be provided to the Commission no later than the
7 Company's next depreciation or rate proceeding. However, if the Commission finds
8 that it is appropriate to modify or adjust the Company's request in this proceeding, I
9 would recommend that it reduce the Company's requested costs by 60%.

10
11 **Q. WHAT IS YOUR BASIS FOR A 60% REDUCTION?**

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

20
21 **SECTION V: MASS PROPERTY LIFE ANALYSES**

22
23 **A. INTRODUCTION**

1 **Q. WHAT IS THE PURPOSE OF THE LIFE PORTION OF A DEPRECIATION**
2 **ANALYSIS?**

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

12
13 **Q. WHAT ARE THE MAIN TOOLS UTILIZED IN PERFORMING LIFE**
14 **ANALYSIS?**

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

21
22 **Q. PLEASE PROVIDE MORE INFORMATION REGARDING HOW A**
23 **DEPRECIATION ANALYST PERFORMS A LIFE ANALYSIS THAT**
24 **RELIES ON AN ACTUARIAL APPROACH.**

1 A. Aged data is gathered and analyzed. Aged data means that when an asset retires in
2 2007 we know that it originally went in service in 1967, and was 40 years old at the
3 time of retirement. When all the aged data in a group is statistically analyzed by
4 actuarial techniques, a resulting Observed Life Table or OLT is developed that
5 depicts the rate of retirement over the life of the group. The OLT starts at 100%
6 surviving and declines from there as each year of age is obtained and retirements
7 occur. Naturally, not all units retire at once; instead, the retirement dates are
8 dispersed through time, creating a “dispersion pattern.” In order to permit testing of
9 the results some standard or index must be used. The principal tool that a
10 depreciation analyst uses for this aspect of the study is a set of “survivor curves.”
11 The industry standard and most extensively used curves are called the Iowa Survivor
12 Curves. The name is derived from the fact that they were developed at Iowa State
13 College in the 1930s.

14
15 Most often, and as is the case for many of PEF accounts, the data analyzed does not
16 yield a complete OLT, one that fully declines to 0% surviving. This means that the
17 data set will produce an incomplete OLT or a “stub curve.” Also, the limited data
18 base may include atypical or abnormal events not reasonably anticipated to occur
19 again or at the same magnitude during the remaining life.

20 The Iowa Survivor Curves are based on empirical studies of retirement “behavior” of
21 physical property. They are designed to predict the retirement patterns of the
22 property under study based on detailed past observations. The Iowa Survivor Curves
23 make the calculation of the average service life far more manageable and comparable;
24 instead of making and weighting a myriad of individual calculations that include each
25 data point in the universe, the analyst measures the area below the curve and uses an

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

8
9 Not surprisingly, choosing the survivor curve that provides the best fit to the data is
10 critical to the accuracy of the analysis. When fitting the curves to the OLT the
11 analyst must bear in mind that some data points—those that occur on the points of the
12 graph that reflect the most significant level of plant exposed to retirement events-- are
13 more important to the determination of the ASL and dispersion pattern than others.
14 Further, the analyst cannot use the curves in isolation of other considerations. The
15 analyst must incorporate such things as knowledge of the nature of the property being
16 studied, an understanding of the causes of unusual events, recognition of changes or
17 trends, and judgment when using the curves. Also, the nature of survivor curves
18 limits their usefulness. For instance, they are best suited to studies of homogeneous
19 items that, because of their physical similarity and common exposure to retirement
20 forces, can be expected to share common retirement characteristics. (By analogy:
21 When an insurance actuary performs a mortality/longevity study for life insurance
22 purposes, the actuary does not combine people and horses in the universe of data). It
23 is for that reason that I criticized PEF’s analyst for inappropriately applying the Iowa
24 Survivor Curves to interim retirements for generation plant. The items of generation
25 plant involved in interim retirements frequently are far from homogeneous.

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

2 A. Yes, I have reviewed the Company's life analyses. The main problem with the
3 analyses is that for two accounts Mr. Robinson proposes ASLs with corresponding
4 Iowa Survivor curves that are significantly out of line with realistic expectations and
5 fail to properly evaluate factors that directly impact the OLT. Mr. Robinson's
6 selections for these two accounts reflect a bias toward artificially short ASLs. Mr.
7 Robinson fails to provide support for his questionable practice.

8

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

11 A. Yes. I recommend adjustments to 2 accounts. The two accounts are 364 –
12 Distribution Poles and Fixtures and 368 – Distribution Line Transformers.

13

14 The combined impact of the two adjustments I recommend result in a standalone
15 impact of a \$13,977,196 reduction to annual depreciation expense, based on plant as
16 of December 31, 2009.

17

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

19 A. The output of an actuarial analysis is called an observed life table or OLT. This OLT
20 output includes a graphical depiction of the remaining surviving level at each
21 progressive age of the plant. In other words, all plant additions start at "100%
22 surviving" when first placed into service. As plant ages and items of plant begin to
23 retire, the initial 100% survivor level decreases until it reaches zero, if it has
24 completed a full life cycle.

25

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

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

5

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

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

9

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

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

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

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

24

1 This is significant, since as each additional year of plant activity transpires the OLT
2 can and usually does change. However, the future changes will not occur equally to
3 all portions of the OLT. In fact, it is highly unlikely, given the level of exposures
4 near the “head” or top of the OLT, that the few years between depreciation studies
5 would result in any appreciable movement of that portion of the OLT. The same
6 cannot be said of the “tail” portion of the OLT, and potentially even the mid portion
7 of the curve. If larger retirements transpire in older age intervals, or more dollars of
8 exposures filter further down in the OLT without corresponding retirements, the mid
9 portion or tail of the OLT can move significantly based on only a few years of
10 additional data. That is precisely why matching the “head” of the observed life table
11 is more important than matching the “tail.”

12
13 **Q. DID MR. ROBINSON FOLLOW THIS PRACTICE IN HIS CURVE FITTING**
14 **PROCESS?**

15 A. No, not to the extent he should have. As will be discussed in the Account Specific
16 portion of my testimony, Mr. Robinson did not perform appropriate curve fitting
17 practices in conjunction with evaluation of projected levels of retirement recognized
18 elsewhere in his depreciation study. As a result, he understated the appropriate ASL
19 or chose an Iowa Survivor curve that is not the best fit to the OLT.

20
21 **B. ACCOUNT SPECIFIC**

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364 –**
24 **DISTRIBUTION POLES, TOWERS AND FIXTURES?**

1 A. The Company proposes a 29-year ASL with a corresponding R4 Iowa Survivor curve.
2 This proposal represents a 1-year change from the Company's last depreciation study
3 and a modification from an L4 to a R4 Iowa Survivor curve. The existing ASL is a
4 result of a settlement in the last case.

5

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

7 A. From a narrative standpoint, the Company is silent as to the basis for its proposal.
8 The Company performed actuarial analyses and presented the full band results, 1957
9 through 2007. (See Exhibit No. ___ (EMR-2) page 5-92). Therefore, the Company's
10 basis can only be characterized as Mr. Robinson's interpretation of the full band
11 actuarial analysis.

12

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

14 A. No. The Company's proposal reflects an ASL significantly shorter than any ASL Mr.
15 Robinson has presented for investment in this account during the past 10 years. The
16 shortest ASL Mr. Robinson has proposed during the past 10 years is 35 years, while
17 the average of his proposals was 42 years. (See OPC's Fifth Interrogatories No. 192,
18 Attachment). The obviously short ASL on its face should have caused Mr. Robinson
19 to further investigate or explain in detail why such an artificially short life is
20 reasonable for the Company. As previously noted, no such explanation or analysis
21 has been provided. I recommend a 35-year ASL with a corresponding R3 Iowa
22 Survivor curve.

23

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

1 A. First, my recommendation corresponds to the shortest ASL Mr. Robinson has
2 proposed for any other electric utility during the past 10 years and is still 7 years
3 below the average ASL Mr. Robinson proposed during that period. The 35-year ASL
4 recommendation is also equivalent to what Mr. Robinson proposed for Progress
5 Energy Carolina, a sister company.

6
7 Unlike Mr. Robinson, I investigated further into the base data in an effort to identify
8 the underlying cause for such a short ASL. The underlying cause indication can be
9 identified on Exhibit No. (EMR-2) at page 5-92. There the values for age interval
10 24.5 to 25.5 years and the following two subsequent years drive the observed life
11 table appreciably downward at a steep rate of decline. These particular data points
12 appear to be the driving factor to which Mr. Robinson reacted in order to propose his
13 artificially short ASL.

14
15 **Q. DOES THE MAGNITUDE OF THE RETIREMENTS IN RELATIONSHIP TO**
16 **THE EXPOSURES FOR THESE THREE AGE INTERVALS APPEAR**
17 **REASONABLE?**

18 A. No. For example, the average retirement ratio (the ratio of dollars retired in an age
19 interval divided by the dollars exposed to retirement at the beginning of the age
20 interval) for the three years in question is 0.12226. The equivalent ratio for the prior
21 three age intervals is only 0.02115. Thus, the retirement ratio during the unusual
22 period is six times the average retirement ratio experienced during the three age
23 intervals immediately prior to that period. Indeed, the period in question is also four
24 times the level of the retirement ratio for the three age intervals immediately
25 following the period in question. Moreover, one age interval, 24.5 to 25.5 years of

1 age, reflects a dollar level of retirements that is approximately two to eight times the
2 dollar level of retirement activity in the 3-year brackets proceeding or following that
3 particular age interval. This single unusual year of activity caused over a 14% drop in
4 the observed life table.

5
6 **Q. IS THIS PARTICULAR YEAR SIGNIFICANT?**

7 A. Yes. Given the manner in which observed life tables are calculated, dollar retirement
8 levels of such magnitude can have an artificial impact for a period of time. However,
9 if the underlying events are more atypical than normal, the impact of such event over
10 time will diminish. For example, in the Company's last depreciation study the same
11 significant level of retirement activity that occurred during the 24.5 to 25.5 year age
12 interval yielded a 0.21646 retirement ratio. (See Docket No. 050078-EI 2005
13 Depreciation Study at page 5-75). The impact of this single age interval declined by
14 approximately 1/3rd since the last depreciation study (0.21646 versus 0.14496). This
15 decline since the last study is due to more dollars being exposed to retirements during
16 the age interval. In the last case, the unusually high dollar level of retirement activity
17 for the 24.5 to 25.5 age interval was associated with \$64 million of exposures. In this
18 case, because four more years of exposures have passed through this age interval, the
19 level increased to \$97 million. In other words, because the actual retirements during
20 the last 4 years for this age interval increased only by 1%, yet the dollar level of
21 exposures in the last 4 years increased by 51%, the resulting retirement ratio declined
22 dramatically.

23
24 Exhibit __ (JP-6) sets forth the observed life table for this account for both the current
25 and prior depreciation studies. As can be seen, there is relatively little movement

1 between the two studies at early ages, but the difference becomes more pronounced
2 once an age of approximately 20 years is reached. The unusual activity that occurred
3 during the 24.5 to 25.5 year and the two subsequent age intervals are not repeated as 4
4 additional years of history experienced. The middle portion of the observed life table
5 moves upward over time to reflect this reality. Mr. Robinson failed to recognize the
6 unusual nature of this portion of the observed life table and the dynamic upward
7 movement in the shape of the observed life table over time as the impact of some
8 prior unusual events diminishes.

9
10 **Q. DO YOU EXPECT THE OBSERVED LIFE TABLE TO CONTINUE TO**
11 **MOVE UPWARD BY THE TIME OF THE NEXT DEPRECIATION STUDY?**

12 A. Yes. For example, the Company projected retirement activity for this account
13 through 2009 of approximately \$5 million, or \$2.5 million per year. (See Exhibit
14 No. (EMR-2) pages 2-44 and 2-51). The Company has not projected any retirement
15 activity corresponding to the age intervals of concern. Assuming this pattern
16 continues for the years 2010 and 2011, the dollar level of exposures corresponding to
17 the 24.5 to 25.5 age interval can be estimated to increase to approximately \$150
18 million. A \$150 million level of exposures corresponds to an approximate 50%
19 increase in exposures ($\$150/\97). If no additional retirements occur for this age
20 interval during 2010 and 2011, the new retirement ratio would drop to approximately
21 0.093, which represents another 35% reduction by the time of the next depreciation
22 study. This new reduction in the retirement ratio would again have the affect of
23 raising the middle portion of the survivor curve indicating a longer ASL than the 29-
24 year level proposed by Mr. Robinson.

25

1 **Q. HAVE YOU ANALYSED THE COMPANY'S PROPOSED OBSERVED LIFE**
2 **TABLE?**

3 A. Yes. Exhibit __ (JP-7) sets forth my comparative analysis. As can be seen, the
4 Company's proposal versus my recommended 35R3 life-curve combination are
5 approximately equal matches through the first 21 years of age. However, my
6 recommendation is a better fit to the actual data through approximately 25 years of
7 age. At that point, the observed life table is impacted by the major retirements that
8 occurred during the 24.5 to 25.5 age interval as previously discussed. While
9 subsequent to that age the Company's proposal is a better match than my
10 recommendation, that is precisely the portion of the curve that will change to the
11 greatest extent by the next depreciation study. As previously noted we are already 2
12 years into the 4 year period between depreciation studies. The Company's
13 presentation for those 2 years 2008 and 2009, do not continue the unusual retirement
14 activity reflected in the 24.5 to 25.5 age interval. The survivor curve that I currently
15 recommend will be a much better fit to the observed life table in the next proceeding
16 as the impact of the unusual historical event is diminished due to substantial more
17 exposures. Therefore, from a knowledge based life-curve combination matching
18 process, my recommendation is superior to the artificially short ASL proposal by Mr.
19 Robinson. Moreover, unlike Mr. Robinson's proposal, my recommendation reflects
20 proper evaluation of historical data in order to make appropriate estimates of future
21 expectations.

22
23 **Q. ARE THERE OTHER CONSIDERATIONS WHY A LONGER ASL IS**
24 **WARRANTED AT THIS TIME?**

1 A. Yes. Recall that depreciation is a projection of anticipated events in the future.
2 Historical analyses are a starting point for future expectations. With this in mind,
3 there are additional facts that further support increasing the ASL at this time. First,
4 the Company notes that it has implemented a “program to inspect poles on an
5 ongoing basis.” (See Exhibit No. _ (EMR-2) at page 4-54). Based on this inspection
6 program the Company has become more proactive in maximizing the life expectancy
7 for its investment. Due to the inspection program the Company now reinforces poles,
8 which permits poles to achieve a longer service life due to such reinforcement.
9 Another consideration is the fact that the Company now chemically treats wood poles
10 with preservatives. Again, the purpose of such actions is to lengthen the life
11 expectancy of poles compared to historical time frames. These are precisely the type
12 of considerations that a depreciation analyst should take into account when making
13 recommendations. Mr. Robinson failed to account for such considerations, which
14 helps explain why he is proposing an artificially short ASL for this account.
15

16 **Q. DID FP&L EXPERIENCE THE SAME HIGH LEVELS OF RETIREMENT**
17 **RATIOS FOR THIS ACCOUNT?**

18 A. No. I just recently reviewed FP&L’s life analyses for this account in Docket No.
19 080677-EI). Exhibit No. __ (JP-8) sets forth FP&L’s observed life table for this
20 account. During the first 38.5 year of age FP&L did not experience a retirement ratio
21 anywhere near what PEF experienced during the mid 20-year age intervals, the period
22 during, which Mr. Robinson reacted as the basis for his proposal.
23

24 **Q. PLEASE SUMMARIZE YOUR ADJUSTMENT?**

1 A. A longer ASL is warranted for this account given (1) both Mr. Robinson and the
2 industry sponsor longer service lives for investment in this account, (2) the Company
3 has not explained why it significantly deviates from industry expectations, including
4 those of its sister utility, (3) Mr. Robinson failed to investigate unusual historical
5 retirement activity which significantly impacts the shape of the observed life table,
6 (4) Mr. Robinson failed to recognize the limited level of retirement activity he has
7 projected elsewhere in the depreciation study for 2008 and 2009 that would force the
8 observed life table to move upward from what he relied upon and (5) Mr. Robinson
9 failed to take into account the new inspection program and the Company's practice of
10 chemically treating poles with preservatives in order to lengthen the life expectancy
11 compared to prior periods. Therefore, the Commission should adopt my 35-year R3
12 life-curve combination as a conservative estimate of the life characteristics for this
13 account. The Commission should further order the Company to fully investigate and
14 substantiate whether the unusual historical retirement activity during the mid 20 year
15 age intervals is representative of the future, and present its results in the next
16 depreciation study.

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

18 A. The standalone impact of my recommendation results in a \$8,451,288 reduction to
19 annual depreciation expense based on plant as of December 31, 2009.

20

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

23 A. The Company proposes a 27-year ASL with a corresponding R2 Iowa Survivor curve.
24 This proposal represents a 1-year change from the Company's last depreciation study

1 and a modification from an R2.5 to a R2 Iowa Survivor curve. The existing ASL is a
2 result of a settlement in the last case.

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

5 A. From a narrative standpoint, the Company is again silent as to the basis for its
6 proposal. The Company performed actuarial analyses and presented the full band
7 results, 1957 through 2007. (See Exhibit No. ___ (EMR-2) page 5-105). Therefore,
8 the Company's basis can only be characterized as Mr. Robinson's interpretation of
9 the full band actuarial analysis.

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

12 A. No. The Company's proposal reflects an ASL significantly shorter than any ASL Mr.
13 Robinson has presented for investment in this account during the past 10 years. The
14 shortest ASL Mr. Robinson has proposed during the past 10 years is 34 years, while
15 the average of his proposal was 40 years. (See OPC's Fifth Interrogatories No. 192,
16 Attachment). The obviously short ASL on its face should have caused Mr. Robinson
17 to further investigate or explain in detail why such an artificially short life is
18 reasonable for the Company. As previously noted, no such explanation or analysis
19 has been provided. I recommend a 33-year ASL with a corresponding S0.5 Iowa
20 Survivor curve.

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

23 A. First, my recommendation corresponds to basically the shortest ASL Mr. Robinson
24 has proposed for any other electric utility during the past 10 years and is still 7 years
25 below the average ASL Mr. Robinson proposed during that period. The 33-year ASL

1 recommendation is 2 years less than what Mr. Robinson proposed for Progress
2 Energy Carolina, a sister company.

3
4 Unlike Mr. Robinson, I investigated further into the base data in an effort to identify
5 the underlying cause for such a short ASL indication. The underlying cause for such
6 a short ASL indication can be identified on Exhibit No. __ (EMR-2) at page 5-105.
7 There the values for age intervals 26.5 to 27.5 years and the following year drive the
8 observed life table appreciably downward at a steep rate of decline. These particular
9 data points appear to be the driving factor to which Mr. Robinson reacted in order to
10 propose his artificially short ASL.

11
12 **Q. DOES THE MAGNITUDE OF THE RETIREMENTS IN RELATIONSHIP TO**
13 **THE EXPOSURES FOR THESE TWO AGE INTERVALS APPEAR**
14 **REASONABLE?**

15 A. No. For example, the average retirement ratio for the two years in question is
16 0.14232. The equivalent ratio for the prior two age intervals is only 0.05608. Thus,
17 the retirement ratio during the unusual period is 2.5 times the average retirement ratio
18 experienced during the two age intervals immediately prior to that period. Moreover,
19 one age interval, 26.5 to 27.5 years of age, reflects a dollar level of retirements that is
20 approximately two to three times the dollar level of retirement activity in the 2-year
21 brackets preceding that particular age interval. This single unusual year of activity
22 caused over a 15% drop in the observed life table.

23
24 **Q. IS THIS PARTICULAR YEAR SIGNIFICANT?**

1 A. Yes. Given the manner in which observed life tables are calculated, dollar retirement
2 levels of such magnitude can have an artificial impact for a period of time. However,
3 if the underlying events are more atypical than normal, the impact of such event over
4 time will diminish. For example, in the Company's last depreciation study the same
5 significant level of retirement activity that occurred during the 26.5 to 27.5 year age
6 interval yielded a 0.19179 retirement ratio. (See Docket No. 050078-EI 2005
7 Depreciation Study at page 5-87). The impact of this single age interval declined by
8 approximately 25% since the last depreciation study (0.19179 versus 0.14665). This
9 decline since the last study is due to more dollars being exposed to retirements during
10 the age interval. In the last case, the unusually high dollar level of retirement activity
11 for the 26.5 to 27.5 age interval was associated with \$50 million of exposures. In this
12 case, because four more years of exposures have passed through this age interval, the
13 level increased to \$90 million. In other words, because the actual retirements during
14 the last 4 years for this age interval increased only by 16%, yet the dollar level of
15 exposures in the last 4 years increased by 80%, the resulting retirement ratio declined
16 dramatically. The unusual activity that occurred during the 26.5 to 27.5 year age
17 interval is not repeated as 4 additional years of history was experienced. The middle
18 portion of the observed life table moves upward over time to reflect this reality. Mr.
19 Robinson has failed to recognize the unusual nature of this portion of the observed
20 life table and the dynamic upward movement in the shape of the observed life table
21 over time as the impact of some prior unusual events diminishes.

22
23 **Q. DO YOU EXPECT THE OBSERVED LIFE TABLE TO CONTINUE TO**
24 **MOVE UPWARD BY THE TIME OF THE NEXT DEPRECIATION STUDY?**

1 A. Yes. For example, the Company projected retirement activity for this account
2 through 2009 of approximately \$5 million, or \$2.5 million per year. (See Exhibit
3 No. __ (EMR-2), pages 2-44 and 2-51). The Company has not projected any
4 retirement activity corresponding to the age intervals of concern. Assuming this
5 pattern continues for the years 2010 and 2011, the dollar level of exposures
6 corresponding to the 26.5 to 27.5 age interval can be estimated to increase to
7 approximately \$140 million. A \$140 million level of exposures would correspond to
8 an approximate 55% increase in exposures (\$140/\$90). If no additional retirements
9 occur for this age interval during 2010 and 2011, the new retirement ratio would drop
10 to approximately 0.0943, which represents another 35% reduction by the time of the
11 next depreciation study. This new reduction in the retirement ratio would again have
12 the affect of raising the middle portion of the survivor curve indicating a longer ASL
13 than the 27-year level proposed by Mr. Robinson.

14
15 **Q. HAVE YOU ANALYSED THE COMPANY PROPOSED OBSERVED LIFE**
16 **TABLE?**

17 A. Yes. Exhibit __ (JP-9) sets forth my comparative analysis. As can be seen, the
18 Company's proposal versus my recommended 33S0.5 life-curve combination is
19 approximately equal matches through the first 17 years of age. However, my
20 recommendation is a better fit to the actual data from 22 through approximately 27
21 years of age. At that point, the observed life table is impacted by the major
22 retirements that occurred during the 26.5 to 27.5 age interval as previously discussed.
23 While subsequent to that age the Company's proposal is a better match than my
24 recommendation, that is the portion of the curve that will change to the greatest
25 extent by the next depreciation study. As previously noted we are already 2 years into

1 the 4 year period between depreciation studies. The Company's presentation for
2 those 2 years, 2008 and 2009, does not continue the unusual retirement activity
3 reflected in the 26.5 to 27.5 age interval. The survivor curve that I currently
4 recommend will be a much better fit to the observed life table in the next proceeding
5 as the impact of the unusual historical event is diminished due to more exposures.

6
7 Another consideration is the level of dollars exposed to retirement forces at each age
8 interval. Mr. Robinson's efforts to match the observed life table at ages beginning at
9 28.5 years is misguided. The beginning level of exposures for this account is \$636
10 million. (See Exhibit No. __ (EMR-2) page 5-105). The exposures at the 28.5 age
11 bracket are \$56 million, or only 9% of the original level. The exposure relationship
12 falls swiftly at older ages and is only 5% of the original level by 31.5 years of age.
13 The minimal levels of exposures should be given little weight in the matching process
14 since they can change significantly from year to year. Therefore, from a knowledge
15 based life-curve combination matching process, my recommendation is superior to
16 the artificially short ASL proposal by Mr. Robinson.

17
18 **Q. ARE THERE OTHER CONSIDERATIONS WHY A LONGER ASL IS**
19 **WARRANTED AT THIS TIME?**

20 A. Yes. Recall that depreciation is a projection of anticipated events in the future.
21 Historical analyses are a starting point for future expectations. With this in mind,
22 there is an additional fact that further supports increasing the ASL at this time. The
23 Company notes that it has implemented an inspection program for pad mounted
24 underground service transformers. (See Exhibit No. __ (EMR-2) at page 4-62). Based
25 on this inspection program the Company has become more proactive in maximizing

1 the life expectancy for its pad mounted underground service transformers. The
2 inspection program will yield a longer life expectancy for the investment in the
3 future. This program is significant since the majority of the investment in this
4 account relates to underground service transformers. (See OPC's Second
5 Interrogatories No.96, Attachment). This is precisely the type of consideration that a
6 depreciation analyst should take into account when making recommendations. Mr.
7 Robinson failed to account for such consideration, which helps explain why he is
8 proposing an artificially short ASL for this account.

9
10 **Q. PLEASE SUMMARIZE YOUR ADJUSTMENT?**

11 A. A longer ASL is warranted for this account given (1) both Mr. Robinson and the
12 industry sponsor longer service lives for investment in this account, (2) the Company
13 has not explained why it significantly deviates from industry expectations, including
14 those of its sister utility, (3) Mr. Robinson failed to investigate unusual historical
15 retirement activity which significantly impacts the shape of the observed life table,
16 (4) Mr. Robinson failed to recognize the limited level of retirement activity he has
17 projected elsewhere in the depreciation study for 2008 and 2009 that would force the
18 observed life table to move upward movement from what he relied upon, (5) Mr.
19 Robinson failed to recognize the limited level of plant exposure at older ages where
20 he attempted to match the observed life table while sacrificing better curve matches at
21 ages with more meaningful levels of exposures, and (6) Mr. Robinson failed to take
22 into account the new inspection program that will result in longer life expectancy
23 compared to prior periods. Therefore, the Commission should adopt my 33-year S0.5
24 life-curve combination as a conservative estimate of the life characteristics for this
25 account.

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

2 A. The standalone impact of my recommendation results in a \$5,525,908 reduction to
3 annual depreciation expense based on plant as of December 31, 2009.

4

5 **SECTION VI: MASS PROPERTY NET SALVAGE ANALYSES**

6

7 **A. GENERAL**

8

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

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

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

16

17 "Cost of removal" means the cost of demolishing, dismantling, tearing down or
18 otherwise removing electric plant including the cost of transportation and handling
19 incidental thereto.

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

23 "Replacing" or "replacement," when not otherwise indicated in the
24 context, means the *construction or installation* of electric plant in

1 place of property retired, *together with the removal of the property*
2 *retired.*" (Emphasis added).

3 In other words, "net salvage" is simply the value received for the sale, reuse, or
4 reimbursement of retired property (gross salvage), less the cost of retiring such
5 property (cost of removal), whether the retirement reflects demolition of the item of
6 plant or only the accounting transaction for retiring an item of property in place
7 (abandonment). Limited or no costs of removal should occur with replacement
8 activity. This situation conforms to USOA Electric Plant Instructions 10B(2). That
9 instruction recognizes cost of removal being "appropriate" when not accompanied by
10 replacement activity. However, the crediting of the plant account for the retirement
11 shall occur, with or without replacement.

12
13 **Q. CAN YOU ILLUSTRATE "NET SALVAGE" USING AN ACTUAL FPL**
14 **EXAMPLE?**

15 A. Yes. For Account 364, Distribution Poles and Fixtures, the Company has requested a
16 negative 50% net salvage. This means PEF assumes that removing a pole will
17 impose a net cost on the system that equals 50% of the original cost of buying and
18 installing the pole. Given the plant balance of \$506 million, the Company's proposed
19 net salvage figure would result in approximately \$253 million of depreciation
20 expense over the life of the investment *above* the recovery of the original \$506
21 million investment. (See Exhibit __ (EMR-2) page 2-13). The proposed annual
22 depreciation rate for this account to recover all proposed amounts, both investment
23 and net salvage, is 5.91%. (See Exhibit (EMR-2) page 2-27). If one assumes the
24 scrap value of the pole at retirement is exactly offset by the cost of removing it, in
25 other words a zero level of net salvage, the annual depreciation rate falls to only

1 3.29%. The difference in rates that would be applied to the \$506 million plant
2 balance corresponding to the different net salvage assumption results in over \$13
3 million of additional annual revenue requirements for this account alone.
4

5 **Q. WHAT PERIOD HAS THE COMPANY CHOSEN TO ANALYZE TO**
6 **DERIVE ITS NET SALVAGE VALUES?**

7 A. The Company has analyzed a 32-year period, 1976 through 2007. (See Exhibit
8 No.__(EMR-2) Section 8).
9

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

12 A. Yes. The information provided is inadequate to support or demonstrate the
13 appropriateness of its request for an overall *negative 22%* net salvage for electric
14 transmission, distribution and general property. (See Exhibit No. __ (EMR-2) pages
15 2-27, 30, 37 and 38). PEF's request includes \$1.2 billion for negative net salvage
16 related to electric mass property over the life of the investment. PEF's requested
17 negative net salvage requires over \$43 million of annual revenue requirements as
18 compared to a zero (0) level of net salvage.

19 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATION CONCERNING**
20 **PROPOSED NET SALVAGE VALUES FOR MASS PROPERTY.**

21 A. PEF's proposed net salvage reflected in the 2007 Study is flawed and insufficiently
22 substantiated. As a result, it proposes excessive levels of negative net salvage. I
23 recommend a reduction to PEF's depreciation expense based on adjustments to its
24 proposed net salvage level for 15 accounts as summarized on Exhibit__ (JP-10). The

1 standalone impact of my net salvage recommendations is a reduction of \$29,041,861
2 in annual depreciation expense.

3
4 **Q. WHY DO YOU BELIEVE PEF'S PROPOSED NET SALVAGE LEVELS ARE**
5 **INAPPROPRIATE?**

6 There are numerous problems with PEF's proposals. For example, (the following is
7 not intended to be a comprehensive listing):

- 8 • Mr. Robinson relies on data that incorporates "catastrophic
9 circumstances" related to hurricane events.
- 10 • Mr. Robinson calculates a forecasted future level of cost of removal
11 that attempts to only recognize estimated future inflation.
- 12 • Mr. Robinson makes no meaningful effort to actually identify and
13 understand what is reflected in PEF's historical retirement database
14 from a net salvage standpoint.
- 15 • Mr. Robinson fails to investigate the reasonableness of unusually high
16 levels of cost of removal in the historical database.
- 17 • Mr. Robinson fails to investigate or explain significant changes in net
18 salvage values between the existing and proposed levels, including
19 swings that exceed \$200 million of net salvage (i.e., Account 364).
- 20 • Mr. Robinson fails to explain the underlying reasons for changes that
21 cause revenue requirements to increase by more than \$10 million
22 annually for an individual account.

- 1 • The Company fails to comply with NARUC Interpretation No. 67 as it
2 relates to reimbursed retirements.
- 3 • Mr. Robinson fails to adequately recognize, or recognize at all, the
4 impact that economies of scale will have in the future.

5

6 In summary, when the Company's net salvage proposals seek over *\$40 million of*
7 *annual revenue requirements*, the Commission and customers are entitled to a
8 *qualitative* presentation of the basis for net salvage proposals adequate to support the
9 request. PEF has not met this standard with its study and in fact has reduced the
10 narrative explanation for its proposals when compared to its prior study. I
11 recommend that the Commission order the Company to develop and present --not just
12 a depreciation study supported by substantial *quantities of paper* -- but a study that is
13 substantiated by *meaningful levels of explanations and analyses* of what caused the
14 retirements and related net salvage, and to determine whether such historical causes
15 and relationships are indicative of future expectations. Mr. Robinson's approach of
16 simply claiming that costs have increased can no longer be an acceptable basis for
17 seeking such increases in annual revenue requirements. The concern I raise is the
18 same concern that was raised at the Annual NARUC meeting this year. I submit that
19 if it is reasonable for the Commission to have previously required substantial
20 documentation and support for assumptions when reviewing forecasts for future
21 resources and loads, then it should demand no less for projections of future net
22 salvage when such net salvage requests seek over \$1 billion from customers over the
23 life of the assets. The Company's presentation in this case, even though backed by
24 significant quantities of paper, does not meet the standard. It is important to

1 distinguish quantity from quality of information. Mr. Robinson completely failed to
2 explain and substantiate his interpretation and blending of the results of an
3 inappropriate “forecast” with his review of different portions of historical data that
4 results in a proposal that falls outside the range of results is unacceptable (e.g.,
5 Account 369.1). (See Exhibit __ (EMR-2) page 4-64). Mr. Robinson’s presentation
6 does not constitute a reasonable and appropriate basis upon which to set such
7 substantial levels of revenue requirements.

8
9 **B. REIMBURSED RETIREMENTS**

10
11 **Q. WHAT ARE REIMBURSED RETIREMENTS?**

12 A. I define reimbursed retirements as a situation in which a third party reimburses the
13 Company for the retirement of plant.

14
15 **Q. DOES MR. ROBINSON STATE THAT REIMBURSED RETIREMENTS ARE**
16 **AN APPROPRIATE COMPONENT OF NET SALVAGE?**

17 A. Yes.

18 **Q. DOES MR. ROBINSON’S STATED POSITION COMPLY WITH**
19 **GUIDELINES?**

20 A. Yes. In NARUC Interpretation No. 67, NARUC has identified how such amounts are
21 to be treated. In particular, for any amount received from a third party to be
22 considered as a contribution in aid of construction, it must specifically be designated
23 as such on a *contractual basis*.

1 **Q. WHAT DOES NARUC INTERPRETATION NO. 67 SPECIFICALLY STATE?**

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

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

14

15 **Q. IS THE COMPANY'S DATABASE RELIED UPON BY MR. ROBINSON**
16 **CONSISTENT WITH NARUC'S INTERPERTATION?**

17 A. No. As discussed later, the Company has inappropriately assigned a portion of
18 amounts received from third parties as contributions in aid of construction.

19

20 **C. ECONOMIES OF SCALE**

21

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

24 A. No. The Company's historical database, as it applies to net salvage, reflects a
25 situation in which relatively few retirement dollars have occurred compared to the

1 level of retirement activity that will occur in the future on an annual basis. In other
2 words, in future years, as a greater level of the Company's investment approaches its
3 ASL, a larger number of investments will retire on an annual basis. The greater level
4 of annual retirements should result in a reduction to the per unit cost of removal as
5 economies of scale are realized. Recognition of this concept belongs in the proper
6 technique to be utilized in any depreciation analysis. By contrast, the Company's
7 approach is more reflective of an analysis of historical data without proper evaluation
8 of future expectations.

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

12 A. Yes. In its publication "*Public Utility Depreciation Practices*" NARUC indicates,
13 among other things that while future cost of removal logically may be higher than
14 past costs, this premise does not necessarily indicate that the percentage cost of
15 removal will increase over time. Moreover, the publication acknowledges that as
16 labor costs increase over time, so do the number of items to be removed, thus making
17 it more economical in many cases to invest in special tools, which may actually result
18 in an overall decrease in cost of removal per item removed. This rationale
19 reflects the appropriate depreciation rates to be utilized in the future better. Moreover,
20 the NARUC stated concept and my reference of the concept does not rely on a
21 concept "similar to a production line" approach as Mr. Robinson incorrectly
22 referenced in his rebuttal testimony at page 11 in the prior case.

23
24 **D. ACCOUNT SPECIFIC**

1 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 353.1 –**
2 **TRANSMISSION STATION EQUIPMENT?**

3 A. The Company proposes a zero level of net salvage for this account. The Company's
4 specific basis is not presented. The Company only notes the results of its most recent
5 3-year rolling bands as well as the 5, 10, 15, 20 and full band historical analyses.
6 (See Exhibit No. __ (EMR-2), page 4-36). The Company also identifies a forecasted
7 net salvage value of a negative 42%.

8
9 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

10 A. No. The Company's proposal at best is unsubstantiated. Moreover, it appears that
11 the Company's proposal reacts to a limited level of recent negative net salvage
12 occurrences. (See Exhibit No. _ (EMR-2), pages 8-71 through 8-74). Therefore, I
13 recommend a *positive* 5% net salvage.

14 My recommended positive 5% net salvage is based on several factors. First, the
15 Company's summary for this account is wrong when it identifies a zero level of net
16 salvage for its 1975 through 2007 full depth band analysis. The Company sets forth
17 the correct value later in its study as a positive 20%. (See Exhibit No. _ (EMR-2),
18 pages 8-71 through 8-74). Next, it is important to note that the Company cannot
19 identify the mix of investment in this account or the mix of retirements that are
20 reflected in its historical retirement activity. (See OPC's Second Interrogatories No.
21 78 and 79). This situation is in contrast to what Mr. Robinson stated in completing
22 his prior depreciation analyses that "consideration is given to the range and level of
23 historic activity (gross salvage and cost of removal), *the content of the account*, and
24 the likely and/or potential for generating gross salvage at the end of the property's
25 useful life." (Emphasis added). (See Mr. Robinson's rebuttal testimony in Docket

1 No. 050078-EI at page 29). Taking Mr. Robinson at his word and the Company's
2 responses to interrogatories, it is clear that he could not have taken into account the
3 mix of investment within the account nor the mix of retirements.

4
5 **Q. WHY IS THIS IMPORTANT?**

6 A. This account normally reflects transformers as the largest single investment.
7 However, the account normally contains substantial amounts for breakers, switches,
8 foundations and other investment. If the historical retirement data in recent years
9 reflects negative net salvage corresponding to retirements that excluded large
10 transformers or reflected a disproportionately lower level of transformer investment,
11 then the negative values provide false indications of the overall net salvage potential
12 for this account. This was precisely the situation for FP&L, a utility that does
13 identify the investment and retirement mix unlike PEF. (See Docket No. 050078-EI,
14 Mr. Pous' direct testimony pages 148-151).

15
16 **Q. DID THE COMPANY RECENTLY EXPERIENCE ITS LARGEST DOLLAR**
17 **LEVEL OF RETIREMENT ACTIVITY?**

18 A. Yes. In 2007 the Company reported approximately \$11.7 million of retirement
19 activity for this account. (See Exhibit No._(EMR-2), page 8-72). Normally when
20 large retirement activity occurs, one anticipates that large transformers are reflected in
21 such activity. The corresponding net salvage experienced by the Company yielded a
22 positive 5% net salvage. In 2006, the year before the large positive net salvage
23 corresponding to the large retirement activity, the Company retired only \$2 million.
24 In that year the Company experienced the largest negative net salvage percent in its
25 entire database. This event, in part, appears to be the activity that the Company relied

1 upon to change from a positive 10% net salvage last approved by the Commission in
2 a fully litigated proceeding to the Company's proposed zero level, which corresponds
3 to its most recent settled proceeding.

4
5 Another consideration is the fact that transformers and other scrap material have
6 increased in value during the last several years. For example, copper prices hit a peak
7 of over \$4 in the scrap metal market during 2008, or approximately 10 times the level
8 experienced earlier in the 2000's. While the level of scrap metal prices has declined
9 from the peak during 2008 it is anticipated that they will again increase as the
10 economies of China and India eventually again ramp back up. The Company's
11 depreciation analysis fails to take into account the trend in gross salvage values
12 contrary to its actions relating to its fossil-fired dismantlement study also part of this
13 case. (See Staff's 6th Interrogatories No. 12).

14
15 **Q. DOES YOUR RECOMMENDATION ALSO CORRESPOND WITH MR.**
16 **ROBINSON'S STATED GOAL OF GRADUALISM?**

17 **A.** Yes. Mr. Robinson's reaction to the recent negative net salvage values, which
18 represent a relatively small component of the overall database, is contrary to his
19 stated principal of relying on gradualism. Mr. Robinson has previously stated that "it
20 is prudent not to move all at once to the results indicated by the analysis." (See Mr.
21 Robinson's rebuttal testimony in Docket no. 050078-EI at page 10). According to
22 Mr. Robinson, if movement is to transpire, it should be done so in a step wise manner.

23
24 Mr. Robinson's failure to recognize the significant increase in scrap metal prices that
25 have transpired since the early 2000's is contrary to his position that

1 recommendations should not be “based upon the Company’s historical experience
2 with no consideration of anticipated future costs incorporated into future net salvage
3 estimates.” (See Mr. Robinson’s rebuttal Docket No. 050078-EI at page 14).

4
5 **Q. DID THE COMPANY RECOMMEND A POSITIVE 10% NET SALVAGE IN**
6 **ITS 2002 DEPRECIATION STUDY?**

7 A. Yes. While Mr. Robinson has attempted to distance the Company from its own
8 recommendation in its 2002 depreciation study by referencing what has been
9 identified as “abnormal” net salvage, the fact is the Company did recognize and
10 recommended results predicated on what was labeled as “abnormal” net salvage.
11 (See Docket No. 050078-EI Mr. Robinson’s rebuttal testimony at Exhibit No._(EMR-
12 2)). In other words, while the Company employed the term “abnormal” for reuse and
13 reimbursed retirements, it appropriately did recognize that such amounts represent
14 real and ongoing gross salvage amounts.

15 **Q. PLEASE SUMMARIZE THE BASIS FOR YOUR RECOMMENDATION?**

16 A. The Company’s failure to present adequate support for its position should not be
17 allowed to default to the concept that the Commission should accept its proposal.
18 The Company recognizes the importance of knowing what is in the account but fails
19 to investigate the investment mix and retirement mix to see if the historical data is
20 representative of current expectations. Review of the historical data does indicate
21 that when the largest level of retirement activity occurs a positive net salvage can
22 normally be expected. In addition, the Company’s historical database is predicated
23 on low levels of scrap metal prices, which understates the realistic level of gross
24 salvage that can and will be experienced in the future. Mr. Robinson has over reacted
25 to recent negative net salvage occurrences that correspond to hurricane time frames.

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

2 A. My recommendation results in a \$647,102 reduction to the Company's request based
3 on plant as of December 31, 2009.

4

5 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 355 –**
6 **TRANSMISSION, POLES AND FIXTURES?**

7 A. The Company proposes a negative 50% net salvage. The proposed value represents a
8 doubling of the existing negative 25% net salvage that was a result of a settlement in
9 the last case. It also represents a 67% increase from the Company's negative 30%
10 established in the Company's last litigated rate proceeding. (See Docket No. 050078-
11 EI, Exhibit No. _ (EMR-2)).

12

13 Neither the Company's written narrative in its depreciation study nor in Mr.
14 Robinson's testimony sheds light on the Company's significant movement towards a
15 more a negative value. The only information provided that represents any basis for
16 the Company's significant movement is the actual negative net salvage recorded
17 during the last several years. (See Exhibit No. _ (EMR-2) at pages 8-82 through 8-
18 85).

19

20 **Q. DOES THE COMPANY'S PROPOSAL IN THIS CASE VIOLATE MR.**
21 **ROBINSON'S PREVIOUSLY STATED CONCEPT OF GRADUALISM?**

22 A. Yes. The Company's presentation in this proceeding is a significant movement both
23 from the existing level of negative net salvage as well as the last Commission
24 approved level set in a fully litigated proceeding.

25

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

2 A. I recommend a negative 25% net salvage. The recommendation does not react to the
3 unexplained 5 to 10 fold increase in cost of removal experienced by the Company
4 during the last several years. This is significant given the hurricane related activity
5 associated with this time frame. The Company admits that its replacement activity
6 for this account occurred “under catastrophic circumstances.” (See Staff’s 15th
7 Interrogatories No. 169). Modifying future net salvage parameters based on
8 “catastrophic circumstances” is inappropriate and should be denied. Moreover, only
9 one year out of the past 4 years since the Company’s last depreciation study reflects
10 any level of gross salvage. (See Exhibit No. __ (EMR-2) at page 8-83). This
11 contrasts significantly with the average 36% gross salvage associated with the
12 Company’s entire historical database. Thus, the combination of dramatic increases in
13 cost of removal, elimination of gross salvage and Mr. Robinson’s stated policy of
14 gradualism would all contradict the Company’s movement to a negative 50% net
15 salvage.

16

17 Another consideration is the fact that the Company is replacing wood poles with steel
18 poles. (See Exhibit (EMR-2) at page 4-42). Consideration of future expectations
19 rather than reliance on history would indicate that scrap value for steel poles will be
20 recognized in the future contrary to what the Company has experienced since the last
21 depreciation study. In summary, the Company has not substantiated any valid basis
22 upon which to base its substantial change in net salvage absent reaction to
23 catastrophic occurrences during the past several years. The Commission should order
24 the Company to investigate and substantiate the dramatic change in cost of removal

1 and gross salvage values since the last depreciation study and present such findings in
2 the Company's next depreciation study.

3
4 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

5 A. My recommendation results in a \$3,612,647 reduction to annual depreciation and
6 expense based on plant as of December 31, 2009.

7
8 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 356 –**
9 **TRANSMISSION OVERHEAD CONDUCTORS AND DEVICES?**

10 A. The Company proposes a negative 30% net salvage. This value is equivalent to the
11 existing rate as adopted in the Company's last proceeding, which reflected a
12 settlement, but is more negative than the negative 20% approved by the Commission
13 in the Company's last fully litigated case.

14 Unlike the Company's last depreciation study, the Company provides no explanative
15 narrative in support of its proposal. It appears the Company's proposal is predicated
16 on some combination of the full depth analysis of historical data, which yields a
17 negative 10%, and the very high negative net salvage values experienced during
18 recent years that incorporates the impact of hurricanes. (See Exhibit No. __ (EMR-2)
19 at page 4-44).

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

22 A. No. The Company's proposal is excessively negative and not justified. I recommend
23 a negative 10% net salvage.

24 The negative 10% net salvage recognizes that prior to the impact of the recent
25 hurricanes the Company had almost exclusively experienced positive net salvage for

1 this account. (See Exhibit No. __ (EMR-2) at page 8-86 and 8-87). The Company
2 appears to be overreacting to the excessive level of negative net salvage incurred in
3 association with various projects that are heavily weighted to hurricane activity. The
4 3-year rolling bands relied upon by the Company that encompass the 2004 through
5 2007 hurricane related time frames range from a negative 63% to a high of a negative
6 209%. In contrast the comparable four 3-year rolling bands immediately prior to the
7 2004 hurricane period yield a range from a low of a positive 9% to a positive 127%.
8 Therefore, the Company's proposal is not supported by what can reasonably be
9 expected absent significant hurricane activity.

10
11 **Q. IS THERE ANOTHER PROBLEM WITH THE COMPANY'S PROPOSAL?**

12 A. Yes. The Company was requested to provide information regarding retirement
13 activity for this account, including copies of work orders relating to more than 1
14 linear mile of overhead conductor billing retired during the past 10 years. (See
15 OPC's 2nd Interrogatories No. 92). A review of the limited number of work orders
16 provided clearly establishes that the Company's database reflected in its depreciation
17 study is erroneous. For example, in 2005 the Company provided 5 separate work
18 orders that produced a total level of gross salvage of approximately \$250,000. Yet,
19 the Company's reported value in its deprecation study is zero. Further, even if one
20 were to assume that the work order may actually encompass other accounts such as
21 Account 354 or 355, a review of the gross salvage for 2005 for those accounts also
22 indicates a zero level of gross salvage. This concept of zero level of gross salvage
23 when significant levels of retirement activity have occurred is inconsistent with the
24 Company's previously stated history. It is only during the hurricane related time
25 frame that the Company for the first time begins to report zero levels of gross salvage

1 compared to all prior years where the Company reported substantial levels of gross
2 salvage.

3
4 The Company's depreciation related net salvage database relied upon by Mr.
5 Robinson differs from actual work order reported values. Therefore, it appears Mr.
6 Robinson has relied on data which has overstated the level of negative net salvage
7 appropriate for this account.

8
9 **Q. IS THERE ANOTHER CONCERN REGARDING THE COMPANY'S**
10 **PROPOSAL?**

11 A. Yes. Review of work orders corresponding to instances where the Company retired
12 more than the one linear mile of transmission lines sets forth projects where the
13 Company received reimbursement for the retirement activity. When that situation
14 occurred the Company reported a zero level for gross salvage and over \$50,000 for
15 cost of removal, yet assigned the entire reimbursement as a contribution in aid of
16 construction. This particular accounting is inappropriate and in conflict with NARUC
17 Interpretation No. 67 as previously discussed. This situation further calls into
18 question the underlying negative net salvage reflected in the Company's historical
19 data, which Mr. Robinson relied for his proposal.

20
21 Given the questionable accounting employed by the Company and relied upon by Mr.
22 Robinson, I recommend that the Commission order the Company to further analyze
23 its historical data and correct such situations so as to properly report gross salvage
24 and present such data in a fully documented and explained manner in the Company's
25 next depreciation study. Until that time, the Commission should deny the Company's

1 request and adopt my recommendation which reflects a blending of both the overall
2 historical data as well as partial recognition of the negative net salvage activity that
3 has occurred during the hurricane time frame.

4
5 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

6 A. My recommendation results in a \$1,555,815 reduction to annual depreciation expense
7 based on plant as of December 31, 2009.

8
9 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 358 -**
10 **TRANSMISSION UNDERGROUND CONDUCTORS AND DEVICES?**

11 A. The Company proposes a negative 3% net salvage. This proposal represents a change
12 from the zero level of net salvage last approved by the Commission in a fully litigated
13 case for the Company, but is equivalent to the net salvage adopted in the settlement in
14 the Company's last rate proceeding.

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

17 A. No. The Company's proposal lacks support and is excessively negative. Therefore, I
18 recommend a zero level of net salvage equivalent to what the Commission adopted in
19 the Company's last fully litigated rate proceeding.

20
21 Given that the Company failed to provide any narrative explanation for its proposal,
22 and that the proposal is equivalent to the same proposal made by the Company in its
23 last depreciation study, a review of the last case provides insight into the Company's
24 reasoning. In the last depreciation study the Company stated that its forecasted level
25 of net salvage "is not anticipated for all the current property investments,

1 nevertheless, some modest amount of negative net salvage *is anticipated* in
2 conjunction with future retirements. *Based upon the limited size of the amount of the*
3 *property* in the account, net salvage is estimated at negative three (3) percent.”
4 (Emphasis added). (See Docket No.050078-EI 2005 Depreciation Study at page 4-
5 32). The only basis Company can establish for its proposal is that it is “anticipated”,
6 as well as reference to the limited size of the amount of the property. Neither of these
7 generalized statements rise to the level of a credible basis for the Company’s
8 proposal.

9
10 The actual history for this account indicates retirements in only 4 years over the past
11 31 years. (See Exhibit No. ___ (EMR-2) page 8-94 and 8-95). While the overall net
12 salvage for this account is a negative 0.27%, the overall retirement activity is less
13 than one half of one percent of the existing balance over the entire 31-year period.
14 Therefore, from a materiality, frequency, or pattern standpoint set forth in historical
15 data, there is no basis for the Company’s proposed expectations or anticipation. A
16 zero level of net salvage is the only appropriate value based on available information.

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

19 A. My recommendation results in a \$287,862 reduction to annual depreciation expense
20 based on plant as of December 31, 2009.

21
22 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 362 –**
23 **DISTRIBUTION STATION EQUIPMENT?**

24 A. The Company proposes a negative 15% net salvage, this represents a significant
25 change from the Company last fully litigated case where a *positive* 15% level was

1 adopted. A negative 15% does correspond to the level adopted in the Company's last
2 rate case, which was based on a settlement.

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

5 A. No. The Company's proposal is excessively negative and unsubstantiated. I
6 recommend a zero net salvage be adopted.

7
8 Given the Company's failure to provide any narrative basis for its proposal in its
9 current depreciation study, a review of the Company's prior depreciation study
10 provides limited yet some information. In the last depreciation study where the
11 Company proposes the same negative 15% net salvage, Mr. Robinson stated that:

12 "the Company's experienced net salvage has historically averaged
13 approximated twenty-five (25) percent. However, the historically experienced
14 net salvage has principally occurred as a result of the relocation and reuse of
15 existing transformers and is not generally the product of final salvage
16 generated from the disposal of property at the final end of life. Furthermore,
17 positive net salvage has been declining during recent years and has turned
18 negative. The forecast of the historical net salvage experience indicates future
19 net salvage of negative thirty (30) percent. Giving consideration to the recent
20 experience and anticipated higher future cost of removal, future net salvage is
21 estimated at negative fifteen (15) percent." (Emphasis added). (See Docket
22 No. 050078-EI 2005 Depreciation Study at pages 4-35 and 4-36).

23 (See Docket No. 050078-EI 2005 Depreciation Study at pages 4-35 and 4-36). The
24 Company's statement that its historical activity is principally a result of relocation
25 and reuse of existing transformers is questionable given the Company's inability to

1 provide the categorization of investment or retirement activity when requested to do
2 so. (See OPC's 2nd Interrogatories Nos. 78 and 79). Next, the Company's reliance on
3 its "forecast" of net salvage provides no support or evidence as even Mr. Robinson
4 makes it a practice to heavily discount or ignore his own forecast given the
5 excessively high negative net salvage levels that are normally produced. Finally, the
6 Company's "anticipated higher future cost of removal" also is without support or
7 basis. Thus, the Company's significant swing from a positive 15% to a negative 15%
8 in the last proceeding and its attempt to continue such position into this case are
9 unsupported.

10
11 The net salvage experienced by the Company since the last depreciation study also
12 calls into question its current proposal. While the retirement activity from 2004 to
13 2007 produced a negative net salvage, it reflects retirements that were "significantly
14 impacted by a group of devastating hurricanes." (See Staff's 15th Interrogatories No.
15 175). A review of the historical data demonstrates a dramatic shift from prior history
16 to the period encompassed by hurricane activity. To base a negative net salvage
17 proposal on unusual activity which reflects higher costs of removal than would be
18 anticipated during more normal operation should not be relied upon for establishing
19 long term net salvage expectations.

20 Another consideration is the higher scrap metal prices that currently exist and can
21 reasonably be anticipated to increase as the economies of China and India again gain
22 momentum. This is significant since transformers normally comprise a significant
23 component of the investment in this account. Transformers also contain significant
24 quantities of copper. Copper prices had previously increased by a factor of
25 approximately 10 prior to the recent world wide economic downturn. However,

1 current copper prices are still over 5 times the level they were in the late 90s and early
2 2000s.

3
4 Another consideration is the fact that the Company has proposed a zero level of net
5 salvage for transmission station equipment. This represents a significant difference
6 from the Company's negative 15% proposed for this account. Moreover, as
7 previously noted I recommend a positive 5% for transmission station equipment.
8 Therefore, a zero level of net salvage for this account at this time is a reasonable and
9 realistic level to be utilized for ratemaking purposes. The zero value I recommend is
10 still conservative in favor of the Company given the historical data, includes the
11 events during the hurricane period I recommend yields an overall positive 10% net
12 salvage overall.

13
14 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

15 A. My recommendation results in a standalone impact of \$1,521,831 reduction to annual
16 depreciation expense based on plant as of December 31, 2009.

17
18 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 364 –**
19 **DISTRIBUTION POLES, TOWERS AND FIXTURES?**

20 A. The Company proposes a negative 50% net salvage. This level represents a 100%
21 increase in the level of negative net salvage previously approved by the Commission
22 in the Company's last fully litigated proceeding. It also represents a 43% increase
23 from the negative 35% value adopted as part of the settlement in the last proceeding.

24
25 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

1 A. No. The Company's proposal is still excessively negative, just as it was in the
2 Company's last proceeding. In the Company's last proceeding Mr. Robinson
3 proposed a negative 90% for this account. (See Mr. Robinson's rebuttal testimony in
4 Docket No. 050078-EI, Exhibit No. (EMR-2)). While Mr. Robinson now recognizes
5 his proposal in the last proceeding for a negative 90% net salvage was extremely
6 unreasonable, his proposal for a negative 50% in this proceeding is still excessively
7 negative and unreasonable.

8
9 I recommend a negative 35% net salvage as a reasonable yet still conservative value
10 in favor of the Company. While the Company relied on values that it admitted in the
11 last proceeding were "bogus" (See Mr. Robinson's deposition in Docket No. 050078-
12 EI at page 141), Mr. Robinson again attempts to rely on data that the Company
13 admits occurred "under catastrophic circumstances". (See Staff's 15th Interrogatories
14 No. 177). In fact, even during the catastrophic circumstances that occurred in
15 association with hurricanes subsequent to the last depreciation study, the level of
16 negative net salvage was less negative than the negative 50% Mr. Robinson proposes
17 this proceeding. In other words, even in association with catastrophic events, the
18 Company did not sustain an overall level of a negative 50% net salvage for the
19 investment in this account.

20
21 My recommendation for a negative 35% net salvage still provides the Company with
22 over \$11 million of annual negative net salvage for this account based on plant as of
23 December 31, 2009. This amount is over 12.5 times the level the Company
24 experienced on average during the past 10 years, including the "bogus" value Mr.
25 Robinson admits to. Moreover, the negative 35% provides the Company with 3.7

1 times the highest level it has ever experienced, the value Mr. Robinson identified as
2 being “bogus.” Therefore, my recommendation is very conservative while providing
3 additional time to determine how net salvage levels settle once the impacts of
4 catastrophic circumstances associated with hurricane activity subside.

5
6 **Q. WHAT IS THE IMPACT OF YOUR RECOMMENDATION?**

7 A. My recommendation results in a \$4,774,199 reduction to annual depreciation expense
8 based on plant in service of December 31, 2009.

9 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 365 –**
10 **DISTRIBUTION OVERHEAD CONDUCTORS AND DEVICES?**

11 A. The Company proposes a negative 45% net salvage. This proposal is approximately
12 30% more negative than the negative 35% last approved by the Commission in a fully
13 litigated case, and is 3 times the existing level of net salvage as established in the last
14 case, which was settled.

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

17 A. No. The Company’s proposal is excessively negative and unsupported. Therefore, I
18 recommend a negative 20% net salvage.

19
20 My recommendation reflects historical experience of the Company with less weight
21 placed on the more recent activities since the last case. Placing less weight on recent
22 events is due in part to the Company’s admission that it failed to report gross salvage
23 for the years 2003 through 2006. Another consideration is the Company’s admission
24 that cost of removal increased since the Company’s last depreciation study “due to
25 the affect of the 2004/2005 hurricanes.” (See Staff’s 15th Interrogatories No. 179).

1 Thus, the Company's proposal, which results in a significantly more negative level of
2 net salvage for this account, appears to be in reaction to hurricane related activity.
3 Reactions to hurricane related activity artificially skews the results from what can
4 reasonably anticipated for the investment in the future. In addition, my
5 recommendation of a negative 20% net salvage is more in line with Mr. Robinson's
6 previously stated basis for his proposal in the last depreciation study. There Mr.
7 Robinson stated his proposal was in part "based upon the Company's overall
8 experience." (See Docket No. 050078-EI 2005 Depreciation Study at page 4-38).
9 Had Mr. Robinson been consistent between studies he would have recognized a
10 negative 20% net salvage for the overall level of this account. (See Exhibit No. __
11 (EMR-2) at page 8-117).

12
13 My recommendation is also conservative given that there are still substantial
14 quantities of copper wire in the system, and the price of copper can reasonably be
15 expected to increase as the economies of the world return to higher growth rates than
16 reflected in the current economic situation. (See OPC's 2nd Interrogatories No. 94,
17 Attachment). In addition, my recommendation still provides the Company with \$5.1
18 million of annual negative net salvage. This level of negative net salvage is almost 9
19 times the average level experienced historically and higher than every year in the
20 Company's database with the exception of 2005, which reflects hurricane related
21 activity. Thus, the Company is more than adequately protected until its next
22 depreciation study where it can demonstrate, absent hurricane related activities, what
23 a more realistic level of net salvage for this account might be.

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

1 A. My recommendation on a standalone basis results in a \$5,100,267 reduction to annual
2 depreciation expense based on plant as of December 31, 2009.

3

4 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 366 –**
5 **DISTRIBUTION UNDERGROUND CONDUIT?**

6 A. The Company proposes a negative 10% net salvage. This compares to the zero level
7 of negative net salvage that it proposed in the last case as well as the zero level
8 approved by the Commission in the Company's last fully litigated proceeding.

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

10 A. No. The Company's proposal is again excessively negative and not indicative of the
11 underlying facts. Therefore, I recommend a zero level of net salvage for this account.

12 My recommendation takes into account several factors. First, it is common practice
13 in the industry to abandon in place investment in this account whenever possible.
14 Plant abandoned in place normally does not incur any appreciable level of negative
15 net salvage. Another consideration is that if plant is removed rather than abandoned,
16 normally some level of gross salvage should be experienced. However, just as was
17 the situation for Account 365, the Company reported a zero level of gross salvage for
18 the years 2004 through 2006 representing the only years in the Company's entire 33-
19 year database with zero salvage values. (See Exhibit No. (EMR-2) at pages 8-118
20 and 8-119). Another consideration is the excessive level of cost of removal the
21 Company experienced during the recent hurricanes.

22

23 It is also significant that the Company itself proposed a zero level of net salvage for
24 this account in its last depreciation study. In fact, while Mr. Robinson failed to

1 provide any narrative supporting his proposal in this proceeding, in the last
2 proceeding he stated that “little or no salvage is expected to be achieved in
3 conjunction with future retirements. Based upon the experience and future
4 expectations, future net salvage is estimated at zero (0) percentage.” (See Docket No.
5 050078-EI 2005 Depreciation Study at page 4-39). Thus, without any explanation,
6 Mr. Robinson proposes a significant movement in net salvage for this account based
7 on impacts of hurricane related activity. There is no support for Mr. Robinson’s
8 unsubstantiated position.

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

11 A. The standalone impact of relying on a zero level of net salvage for this account
12 reduces annual depreciation expense by \$375,423 based on plant as of December 31,
13 2009.

14
15 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 367 –**
16 **DISTRIBUTION UNDERGROUND CONDUCTORS AND DEVICES?**

17 A. The Company proposes a negative 10% net salvage. This proposed value compares
18 to the zero level of net salvage found appropriate by the Commission in the
19 Company’s last fully litigated case, and the existing negative 5% net salvage adopted
20 by settlement in the Company’s last rate proceeding.

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

23 A. No. Again, the Company failed to present any narrative basis for its proposed level of
24 negative net salvage. The Company apparently believes sole reliance on unidentified
25 portions of the historical data or reference to a “forecasted” value that Mr. Robinson

1 heavily discounted, if not totally ignored, is adequate support for its proposal. I
2 recommend a negative 5% net salvage.

3
4 In the last proceeding, Mr. Robinson did provide a limited narrative identifying that
5 his then proposed negative 15% net salvage was “based upon the Company’s
6 experience and expectations.” (See Docket No. 050078-EI 2005 Depreciation Study
7 at page 4-40). One can only assume that in this case Mr. Robinson again relied on
8 historic experience and a changing expectation of the future. In any instance, the
9 Company’s negative 10% net salvage is still too negative.

10 The Company’s recent experience subsequent to its last depreciation study
11 encompasses the significant impact associated with hurricane activity. In fact, absent
12 the resulting excessive levels of negative net salvage associated with calendar years
13 2004 and 2005 the Company would actually be in a *positive* historical net salvage
14 position. (See Exhibit No. (EMR-2) at page 8-123). Thus, from the standpoint of the
15 Company’s normalized experience, a positive net salvage might be warranted.
16 Another consideration is the fact that the Company admits that it has a “policy to
17 retire the investment in this account in place when possible.” (See OPC’s 2nd
18 Interrogatories No. 95). Thus, while the Company obviously does not retire all of its
19 investment in this account in a manner where such investment is abandoned in place,
20 one can expect a significant component of the retirement activity to be retired without
21 being removed. Moreover, in instances where the Company actually removes
22 conductor, such conductor should have a gross salvage associated with it. In
23 summary, the Company has not justified movement to a more negative net salvage
24 than a negative 5%. Moreover, a negative 5% may also be excessively negative.

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

2 A. The standalone impact of my recommendation results in a \$1,052,091 annual
3 reduction in depreciation expense based on plant as of December 31, 2009.

4

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

7 A. The Company proposes a negative 15% net salvage. This represents a level equal to
8 what the Commission last approved to the Company's most recently fully litigated
9 case, but is more negative than the existing negative 5% adopted by settlement in the
10 Company's last proceeding. Further, the negative 15% proposal is more negative
11 than Mr. Robinson's proposed negative 10% in the Company's last proceeding.

12

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

14 A. No. The Company's proposal is again unsubstantiated and excessively negative. I
15 recommend a negative 5% net salvage for this account.

16

17 The historical data relied upon by the Company since the last depreciation study
18 contains excessively negative aspects associated with hurricane activities. (See
19 Staff's 15th Interrogatories No. 181). In addition, the Company admits to reassessing
20 its salvage potential and reported a true-up of increased gross salvage in 2007
21 offsetting zero values in 2004 and 2005, as well as possibly understating 2006. The
22 historic understatement of salvage during 2004 through potentially 2006 appears to be
23 part of the cause of the Company's decision to propose a more negative net salvage.
24 Alternatively, a consideration that the Company apparently did not take into account
25 is the fact that during 2005 and 2006 it retired a significantly higher percentage of

1 pole mounted transformers rather than pad mounted transformers. This relationship is
2 opposite the dollar level of investment for this account where pad mounted
3 transformers represent 56% of the investment. (See OPC's 2nd Interrogatories No. 96,
4 Attachment).

5
6 Another consideration demonstrating why the Company's proposal is excessive is the
7 fact that excluding the hurricane related activity the Company did not report a single
8 annual occurrence as negative as it proposes in this case during the past 10 years.
9 (See Exhibit No. (EMR-2) at pages 8-126 and 8-127). During this period the
10 Company reported positive values in three years and reported values less negative
11 than the negative 5% that I am recommending in six of those years. Thus, when Mr.
12 Robinson states that a "negative five (5) percent to negative fifteen (15) percent
13 identified through an analysis of the Company's historical experience and future
14 expectations" is the basis for his net salvage proposal, (See Mr. Robinson's direct
15 testimony at page 25) it becomes clear that his proposal is based on an inappropriate
16 encompassing of hurricane related activity as a normal ongoing expectation.
17 Excluding hurricane related activity, my recommended negative 5% net salvage is a
18 conservative value at this time.

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

20 A. The standalone impact of my recommendation results in an annual \$3,026,237
21 reduction to depreciation expense based on plant as of December 31, 2009.

22
23 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.1 -**
24 **DISTRIBUTION SERVICES - OVERHEAD?**

1 A. The Company proposes a negative 50% net salvage. This compares to the same level
2 of net salvage approved by the Commission in the Company's last fully litigated case
3 and is the level adopted by settlement in the last proceeding. However, the proposed
4 value is noticeably less negative than the negative 75% Mr. Robinson proposed in the
5 last case.

6
7 **Q. DO YOU AGREE WITH THE COMPANY'S PROPOSAL?**

8 A. No. The Company's proposal is unsupported and excessively negative. I recommend
9 a normal reduction to a negative 40% net salvage.

10 In the last case, Mr. Robinson had no problem with claiming that "based upon the
11 Company's experience and expectations and anticipated level of increased retirement
12 activity at progressively higher retirement cost, future net salvage is estimated at
13 negative seventy-five (75) percent." (See Docket No. 050078-EI 2005 Depreciation
14 Study at page 4-42). Now, Mr. Robinson recognizes that his previously proposed
15 negative 75% net salvage was severely excessive. However, he still fails to recognize
16 the updated data, including the impact of hurricane related activity, yields a positive
17 level of net salvage. In fact, reliance on data during the last 5 to 10 years would
18 indicate a positive net salvage to no more than a negative 5% to 10% net salvage
19 would be warranted. However, in recognition of the concept of gradualism I am only
20 recommending a change to a negative 40% net salvage for this account. It is further
21 worth noting that even if the gross salvage reported in 2004 were totally eliminated,
22 the negative net salvage during the past 10 years would still not exceed a negative
23 10%. Therefore, I recommend a minimum 10 percentage point reduction to the
24 Company's proposal, which results in a negative 40% net salvage for this account.

25

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

2 A. My recommendation on a standalone basis results in a \$516,263 reduction in annual
3 depreciation expense based on plant as of December 31, 2009.

4

5 Q. **WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 369.2 –**
6 **DISTRIBUTION SERVICES – UNDERGROUND?**

7 A. The Company proposes a negative 15% net salvage. This value compares to the
8 value approved by the Commission in the Company's last fully litigated case, but is
9 significantly more negative than the zero level reflected in the Company's most
10 recent case, which was settled. The value is also less negative than the negative 25%
11 Mr. Robinson proposed in the Company's last rate proceeding.

12

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

14 A. No. The Company's proposal again appears to react to a major cost of removal
15 reported during 2005 corresponding to hurricane related activity. Based on my
16 review of the information I recommend a zero level of net salvage for this account.

17

18 Since Mr. Robinson failed to provide any narrative explanation for his proposal, a
19 review of the narrative he did provide in the last depreciation study provides insight
20 to his approach. In the last study, Mr. Robinson stated that "the Company has
21 routinely experienced negative net salvage in conjunction with Underground Service
22 retirements. The three year rolling band analysis shows net salvage has varied
23 between a positive and negative salvage and averaged approximately four (4) percent.
24 Future net salvage is forecasted to [be] in excess of negative thirty (30) percent.
25 Based upon the Company's experience and expectations and anticipated level of

1 increase of retirement activity at progressively higher retirement costs, future net
2 salvage is estimated at negative twenty-five (25) percent.” (See Docket No. 050078-
3 EI 2005 Depreciation Study at page 4-43). In other words, the Company reviewed
4 historical averages, specifically recent rolling bands, performed its “forecast” analysis
5 of inflating values into the future, and then made a proposal based on historical
6 experience, its expectation and anticipation of higher levels of negative net salvage.
7 Assuming that Mr. Robinson was consistent between his last study and this study, one
8 can identify that the “forecasted” future net salvage is still approximately negative
9 30%. Therefore, that portion of the two different analyses is basically identical. That
10 leaves actual Company experiences apparently as the driving factor. The four years
11 in between studies, even after the inclusion of hurricane related activity, yields only a
12 negative 11.5% level of net salvage. This would explain why Mr. Robinson elected
13 to propose a negative 15% in this proceeding rather than the negative 25% he
14 proposed in the last study, but leaves the undefined and unsubstantiated “anticipation
15 and expectation” of the future still as a basis for Mr. Robinson’s artificial increase in
16 negative net salvage.

17
18 Mr. Robinson apparently again failed to recognize the unusual and negative aspect of
19 hurricane related activity. Had Mr. Robinson eliminated both the retirement and the
20 significant level of negative net salvage that occurred in 2005 associated with
21 hurricane activity, the overall results for over the last 10 years would generally be
22 between zero and a negative 4%, with trends towards zero. Mr. Robinson’s failure to
23 compensate in any manner for the unusual storm related activity during the last
24 several years is incorrect and unacceptable.

1 In addition, even Mr. Robinson recognizes that “much, if not most of underground
2 services will be abandoned in place.” (See Docket No. 050078-EI, Mr. Robinson’s
3 rebuttal testimony at page 46). While some level of cost of removal may be incurred
4 in association with abandonment, there may also be gross salvage in instances where
5 third party reimbursements occur or scrap metal maybe salvaged when services are in
6 fact removed. Given these facts, a negative 15% net salvage does not rise to an
7 acceptable level of reasonableness. As can clearly be seen by a review of the
8 Company’s historical data during the past 10 years, with the exclusion of the single
9 hurricane event in 2005, a zero level net salvage is reasonable and appropriate at this
10 time.

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

13 A. The standalone impact of my recommendation results in a \$1,692,112 reduction in
14 depreciation expense based on plant as of December 31, 2009.

15
16 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 370 –**
17 **DISTRIBUTION METERS?**

18 A. The Company proposes a negative 10% net salvage. This compares to the same level
19 approved by the Commission in the Company’s last fully litigated case, but represents
20 a slight change from the negative 8% reflected in the Company’s last rate proceeding,
21 which was based on a settlement.

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

1 A. No. The Company's proposal to move from a negative 8% to a negative 10% is
2 inappropriate given the Company's actual information and other industry information.
3 Therefore, I recommend a negative 6% net salvage.

4
5 The Company retired \$82 million of investment in this account during 2006. The
6 resulting net salvage was a negative 6%. In addition, Oncor Delivery Company, the
7 largest utility in Texas just went through a similar significant concentrated change out
8 of meters and testified that a \$5.63 cost of removal per meters was reasonable. While
9 I recognize that labor rates between Florida and Texas may be different, relying on a
10 \$5.63 per cost of removal for retiring meters would also yield an approximate
11 negative 6%, based on the Company's number of meters. (See Staff's 4th
12 Interrogatories No. 71). Therefore, a negative 6% net salvage would appear to be a
13 reasonable and appropriate value at this time.

14

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

16 A. My recommendation on a standalone basis results in a \$359,623 reduction to
17 depreciation expense based on plant as of December 31, 2009.

18

19 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 373 -**
20 **DISTRIBUTION STREET LIGHTING AND SIGNALS?**

21 A. The Company proposes a negative 20% net salvage. This compares to the negative
22 10% net salvage last approved by the Commission in a litigated case and the existing
23 zero level which was established by means of settlement in the Company's last
24 proceeding. The Company again provides no narrative basis for its position.

25

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

2 A. No. The Company's proposal is excessively negative. Had Mr. Robinson remained
3 consistent with his statements in the last case where his proposal was "based on the
4 trend of recent experience and future expectations" (See Docket No. 050078-EI 2005
5 Depreciation Study at page 4-46), he would have proposed a zero to negative 5% net
6 salvage in this case, exclusive of the impact of the hurricane event during 2005. In
7 fact, the most recent data indicates a positive 3% net salvage. (See Exhibit
8 No.__(EMR-2) at page 8-147).

9

10 Street lighting investment poses a somewhat different situation from many other
11 accounts. The Company can go years without selling a street lighting system and then
12 incur a significant positive salvage associated with a sale. To assume that the
13 Company will not sell any street lighting systems in the future has not been
14 established as reasonable and would be contrary to historical activity. Such an
15 assumption also fails to recognize that the overall net salvage for this account is a
16 positive 8%. However, in order to remain conservative, I am recommending a
17 negative 5% net salvage based on historical data exclusive of the hurricane related
18 activity recorded during 2005. The negative 5% is both reasonable and appropriate,
19 but does not give adequate weight to the potential of selling future street lighting
20 systems. Therefore, my recommendation is conservative in favor of the Company.

21

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

23 A. The standalone impact of my recommendation is a \$3,520,001 reduction to
24 depreciation expense based on plant as of December 31, 2009.

25

1 **Q. WHAT DOES THE COMPANY PROPOSE FOR ACCOUNT 390 – GENERAL**
2 **STRUCTURES AND IMPROVEMENTS?**

3 A. The Company proposes a negative 5% net salvage. This compares to the zero level
4 established in the Company's last rate proceeding which was based on a settlement.
5

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

7 A. No. The Company's proposal is unrealistic and inappropriate. Buildings can be
8 anticipated to appreciate rather than depreciate in value over the useful life proposed
9 by the Company. Therefore, as a first step in the proper recognition of future positive
10 salvage for the Company's investment I am recommending a positive 15% net
11 salvage.
12

13 Mr. Robinson yet again remains silent on the basis for his proposal in this case. In
14 the prior case Mr. Robinson recognized that there was a 6% overall positive level of
15 net salvage, but that he "anticipated" an increase in cost of removal as interim
16 retirements occurred due to renovations at the Company's various properties and
17 estimated a zero level of net salvage overall. (See Docket No. 050078-EI 2005
18 Depreciation Study at page 4-47 and 4-48). This is yet another account where review
19 of historic data may not be adequate given the nature of the investment in the account.
20

21 In particular, approximately 20% of investment in the account is associated with the
22 Company's ten largest general plant structures and improvements. (See OPC's 2nd
23 Interrogatories No. 80). The Company has recently expended over \$20 million for
24 block and concrete or metal buildings to house various distribution operation centers,
25 garages etc. Moreover, the Company has proposed only a 24-year ASL for the

1 investment in this account. (See Exhibit No.__(EMR-2), page 4-72). It is
2 unreasonable and unrealistic to believe that block and concrete buildings, or metal
3 buildings, after only 24 years or even 30 years would require demolition and the
4 removal rather than a sale or reuse. As a standard practice throughout the United
5 States, commercial buildings are expected to increase in value not decline in value
6 over time. A building can obviously sell for more than 100% net salvage after
7 extended periods of time. Failure to properly recognize the type of investment at
8 issue and its significant potential for positive net salvage results in the Company's
9 proposal being inaccurate and inappropriate. Some form of positive salvage is
10 appropriate. Therefore, as a first step in the right direction I recommend the
11 Commission adopt a positive 15% net salvage for this account.

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

14 A. My recommendation on a standalone basis would result in a \$1,218,203 reduction to
15 depreciation expense based on plant in service as of December 31, 2009.

16
17 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

18 A. Yes; however, to the extent I have not addressed a method, value, issue, etc., it should
19 not be assumed that I am accepting or endorsing that method, value, or issue.

DOCKET NO. 090079-EI
CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the Direct Testimony of Jacob Pous has been furnished by U.S. Mail and * hand delivery on this 10th day of August 2009, to the following parties:

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EXHIBITS OF JACOB POUS

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JACOB POUS, P.E.
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B.S. INDUSTRIAL ENGINEERING M.S. MANAGEMENT

I graduated from the University of Missouri in 1972, receiving a Bachelor of Science Degree in Engineering, and I graduated with a Master of Science in Management from Rollins College in 1980. I have also completed a series of depreciation programs sponsored by Western Michigan University, and have attended numerous other utility related seminars.

Since my graduation from college, I have been continuously employed in various aspects of the utility business. I started with Kansas City Power & Light Co., working in the Rate Department, Corporate Planning and Economic Controls Department, and for a short time in a power plant. My responsibilities included preparation of testimony and exhibits for retail and wholesale rate cases. I participated in cost of service studies, a loss of load probability study, fixed charge analysis, and economic comparison studies. I was also a principal member of project teams that wrote, installed, maintained, and operated both a computerized series of depreciation programs and a computerized financial corporate model.

I joined the firm of R. W. Beck and Associates, an international consulting engineering firm with over 500 employees performing predominantly utility related work, in 1976 as an Engineer in the Rate Department of its Southeastern Regional Office. While employed with that firm, I prepared and presented rate studies for various electric, gas, water, and sewer systems, prepared and assisted in the preparation of cost of service studies, prepared depreciation and decommissioning analyses for wholesale and retail rate proceedings, and assisted in the development of power supply studies for electric systems. I resigned from that firm in November 1986 in order to co-found Diversified Utility Consultants, Inc. At the time of my resignation, I held the titles of Executive Engineer, Associate and Supervisor of Rates in the Austin office of R. W. Beck and Associates. I later founded P&L Concepts, Inc.

As a principal of the firm of Diversified Utility Consultants, Inc., I have presented and prepared numerous electric, gas, and water analyses in both retail and wholesale proceedings. These analyses have been performed on behalf of clients, including public utility commissions, throughout the United States and Canada. As president of P&L Concepts, Inc., I perform the same type of services as performed under Diversified Utility Consultants, Inc.

I have been involved in over 300 different utility rate proceedings, many of which have resulted in settlements prior to the presentation of testimony before regulatory bodies.

I am registered to practice as a Professional Engineer in the states of Florida, Texas, Mississippi, North Carolina, Arizona, New Mexico, Arkansas, and Oklahoma.

**UTILITY RATE PROCEEDINGS IN WHICH
 TESTIMONY HAS BEEN PRESENTED BY JACOB POUS**

ALASKA		
<i>ALASKA REGULATORY COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Beluga Pipe Line Co.	P-04-81	Refundable Rates
Kenai Nikiski Pipeline	U-04-81	Rate Base
Beluga Pipe Line Co.	U-07-141	Depreciation
ARIZONA		
<i>ARIZONA CORPORATION COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Citizens Utilities Co.	E-1032-93-111	Depreciation
ARKANSAS		
<i>ARKANSAS PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Reliant Energy ARKLA	01-0243-U	Depreciation
CALIFORNIA		
<i>CALIFORNIA PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Pacific Gas & Electric Co.	Application No. 97-12-020	Depreciation, Net Salvage, and Amortization of True Up
Pacific Gas & Electric Co.	Application No. 02-11-017	Mass Property Salvage, Net Salvage, Mass Property Life, Life Analysis, Remaining Life, Depreciation
San Diego Gas & Electric Co.		Value of Power Plants
Southern California Edison Co.	Application 02-05-004	Depreciation, Net Salvage
CANADA		
<i>ALBERTA ENERGY AND UTILITIES BOARD</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
AltaLink Management/ Transalta Utilities Corp	App. Nos. 1279345 and 1279347	Depreciation
Epcor Distribution, Inc.	App No. 1306821	Depreciation
Enmax Corporation	App No. 1306818	Depreciation
Transalta Utilities Corporation	TFO Tariff Appl. 1287507	Depreciation

UtiliCorp Networks Canada (Alberta) Ltd.	App. No. 1250392	Depreciation
Atco Electric	App. No. 1275494	Depreciation
ALBERTA PUBLIC UTILITIES BOARD		
Alberta Power Limited	E 91095	Depreciation
Alberta Power Limited	E 97065	Depreciation
Canadian Western Natural Gas Co. Limited		Depreciation
Centra Gas Alberta Inc.		Depreciation
Edmonton Power Co.	E 97065	Depreciation
Edmonton Power Generation, Inc.	1999/2000	GUR Compliance, Depreciation
Northwestern Utilities Limited	E 91044	Depreciation
NOVA Gas Transmission Ltd.	RE95006	Depreciation
TransAlta Utilities Corporation	E 91093	Depreciation
TransAlta Utilities Corporation	E 97065	Depreciation
TransAlta Utilities Corporation	App No. 200051	Gain on Sale
NORTHWEST TERRITORIES PUBLIC UTILITIES BOARD		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Northwest Territories Power Corporation	1995/96 and 1996-97	Depreciation
Northwest Territories Power Corporation	2001	Depreciation
COURTS		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
112th Judicial District Court of Texas	5093	Ratemaking principles, Calculation of damages
253rd Judicial District Court of Texas	45,615	Ratemaking principles, Level of Bond
126th Judicial District Court of Texas	91-1519	Ratemaking principles, Level of Bond
172 Judicial District Court of Texas		Franchise Fees
United States Bankruptcy Court Eastern District of Texas	93-10408S	Level of Harm, Ratemaking, Equity for Creditors
3rd Judicial District Court of Texas		Adequacy of Notice
DISTRICT OF COLUMBIA		
PUBLIC SERVICE COMMISSION OF THE DISTRICT OF COLUMBIA		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Washington Gas Light Co.	768	Depreciation

FLORIDA		
<i>FLORIDA PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Progress Energy Florida, Inc.	050078-EL	Depreciation
Florida Power & Light Co.	790380-EU	Territorial Dispute
Florida Power & Light Co.	080677-EI 090130-EI	Depreciation & Dismantlement
FEDERAL ENERGY REGULATORY COMMISSION		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Alabama Power Co.	ER83-369	Depreciation
Connecticut Municipal Elect. Energy Coop v Connecticut Light & Power Co.	EL83-14	Decommissioning
Florida Power & Light Co.	ER84-379	Depreciation, Decommissioning
Florida Power & Light Co.	ER93-327-000	Transmission access
Georgia Power Co.	ER76-587	Rate Base
Georgia Power Co.	ER79-88	Depreciation
Georgia Power Co.	ER81-730	Coal Fuel Stock Inventory, Depreciation
ISO New England, Inc.	ER07-166-000	Depreciation
Maine Yankee Atomic Power Co.	ER84-344-001	Depreciation, Decommissioning
Maine Yankee Atomic Power Co.	ER88-202	Decommissioning
Pacific Gas & Electric	ER80-214	Depreciation
Public Service of Indiana	ER95-625-000, ER95-626-000 & ER95-039-000	Depreciation, Dismantlement
Southern California Edison Co.	ER81-177	Depreciation
Southern California Edison Co.	ER82-427	Depreciation, Decommissioning
Southern California Edison Co.	ER84-75	Depreciation, Decommissioning
Southwestern Public Service Co.	EL 89-50	Depreciation, Decommissioning
System Energy Resource, Inc.	ER95-1042-000	Depreciation, Decommissioning
Vermont Electric Power Co.	ER83 342000 & 343000	Decommissioning
Virginia Electric and Power Co.	ER78-522	Depreciation, Rate Base
INDIANA		
<i>INDIANA UTILITY REGULATORY COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Indianapolis Water Co.	39128	Depreciation

Indiana Michigan Power Co.	39314	Depreciation, Decommissioning
KANSAS		
<i>KANSAS CORPORATION COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Arkansas Louisiana Gas Co.	181,200-U	Depreciation
United Cities Gas Co.	181,940-U	Depreciation
LOUISIANA		
<i>LOUISIANA PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Louisiana Power & Light Co.	U-16945	Nuclear Prudence, Depreciation
CITY OF NEW ORLEANS		
Entergy New Orleans, Inc.	UD-00-2	Rate Base, Depreciation
MASSACHUSETTS		
<i>MASSACHUSETTS TELECOMMUNICATIONS AND ENERGY</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Bay State Gas	D.T.E.-0527	Depreciation
National Grid/KeySpan	07-30	Quality of Service
MISSISSIPPI		
<i>MISSISSIPPI PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Mississippi Power Co.	U-3739	Cost of Service, Rate Base, Depreciation
MONTANA		
<i>MONTANA PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Montana Power Co. (Gas)	90.6.39	Depreciation
Montana Power Co. (Electric)	90.3.17	Depreciation, Decommissioning
Montana Power Co. (Electric and Gas)	95.9.128	Depreciation
Montana-Dakota Utilities	D2007.7.79	Depreciation
NEVADA		
<i>NEVADA PUBLIC SERVICE COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Nevada Power Co.	81-602, 81-685 Cons.	Depreciation
Nevada Power Co.	83-667, Consolidated	Depreciation
Nevada Power Co.	91-5032	Depreciation, Decommissioning
Nevada Power Co.	03-10002	Depreciation
Nevada Power Company	08-12002	Depreciation & CWC

Nevada Power Company	06-06051	Depreciation, Life Spans, Decommissioning Costs, Deferred Accounting
Nevada Power Company	06-11022	General Rate Case
Sierra Pacific Power Co.	83-955	Depreciation (Electric, Gas, Water, Common)
Sierra Pacific Power Co.	86-557	Depreciation, Decommissioning
Sierra Pacific Power Co.	89-516, 517, 518	Depreciation, Decommissioning (Elec., Gas, Water, Common)
Sierra Pacific Power Co.	91-7079, 80, 81	Depreciation, Decommissioning (Elec., Gas, Water, Common)
Sierra Pacific Power Co.	03-12002	Allowable level of plant in service
Sierra Pacific Power Co.	05-10004	Depreciation
Sierra Pacific Power Co.	05-10006	Depreciation
Sierra Pacific Gas Company	06-07010	Depreciation, Generating Plant Life Spans, Decommissioning Costs, Carrying Costs
Sierra Pacific Power Co.	07-12001	Depreciation, CWC
Southwest Gas Corporation	93-3025 & 93-3005	Depreciation
Southwest Gas Corporation	04-3011	Depreciation
Southwest Gas Company	07-09030	Depreciation
NORTH CAROLINA		
<i>NORTH CAROLINA UTILITIES COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
North Carolina Natural Gas	G-21, Sub 177	Cost of Service, Rate Design, Depreciation
OKLAHOMA		
<i>OKLAHOMA CORPORATION COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Arkansas Oklahoma Gas Corporation	PUD 200300088	CWC, Legal expenses, Factoring, Cost Allocation, Depreciation
Oklahoma Natural Gas Co.	PUD 980000683	Depreciation, Calculation Procedure, Depreciation on CWIP
Public Service Co. of Oklahoma	PUD 960000214	Depr., Interim Activity, Net Salvage, Mass Prop., Rate Calc. Technique
Reliant Energy ARKLA	PUD 200200166	Depreciation, Net Salvage, Software Amortization
Public Service Company of Oklahoma	PUD 200600285	Depreciation

Public Service Company of Oklahoma	PUD 200800144	Depreciation
TEXAS		
<i>TEXAS PUBLIC UTILITY COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Centerpoint Energy Houston Electric LLC	29526	Stranded Costs
Centerpoint Energy Houston Electric LLC	36918	Hurricane Cost Recovery
Central Power & Light Co.	6375	Depreciation, Rate Base, Cost of Service
Central Power & Light Co.	8439	Fuel Factor
Central Power & Light Co.	8646	Rate Base, Excess Capacity, Depreciation, Rate Design, Rate Case Expense
Central Power & Light Co.	9561	Depr., Excess Capacity, Cost of Service, Rate Base, Taxes
Central Power & Light Co.	11371	Economic Development Rate
Central Power & Light Co.	12820	Nuclear Fuel & Process, OPEB, Pension, Factoring, Depr.
Central Power & Light Co.	14965	Depr., Cash Working Capital, Pension, OPEB, Factoring, Demonstration & selling expense, non-nuclear decommissioning
Central Power & Light Co.	22352	Depreciation
Central Telephone & United Telephone Co. of Texas D/B/A Sprint	17809	Rate case expenses
City of Fredericksburg	7661	Territorial Dispute
El Paso Electric Co.	9165	Depreciation
Entergy Gulf States, Inc.	16705	Depr., Prepayments, Payroll Exp.e, Pension Exp., OPEB's, CWC, Transfer of T&D Depr.
Entergy Gulf States, Inc.	21111	Reconcilable fuel costs
Entergy Gulf States, Inc.	21384	Fuel surcharge
Entergy Gulf States, Inc.	23000	Fuel surcharge
Entergy Gulf States, Inc.	22356	Unbundling, Competition, Cost of Service
Entergy Gulf States, Inc.	23550	Reconcilable fuel costs
Entergy Gulf States, Inc.	24336	Price to Beat
Entergy Gulf States, Inc.	24460	Implement PUC

		Subst.R.25.41(f)(3)(D)
Entergy Gulf States, Inc.	24469	Delay of Deregulation
Entergy Gulf States, Inc.	24953	Interim Fuel Surcharge
Entergy Gulf States, Inc.	26612	Fuel Surcharge
Entergy Gulf States, Inc.	28504	Interim Fuel Surcharge
Entergy Gulf States, Inc.	28818	Cert. for Independent Organization
Entergy Gulf States, Inc.	29408	Fuel Reconciliation
Entergy Gulf States, Inc.	30163	Interim Fuel Surcharge
Entergy Gulf States, Inc.	31315	Incremental Purchase Capacity Rider
Entergy Gulf States, Inc.	31544	Transition to Competition Cost
Entergy Gulf States, Inc.	32465	Interim Fuel Surcharge
Entergy Gulf States, Inc.	32710	River Bend 30%, Explicit Capacity, Imputed Capacity, IPCR, SGSF Operating Costs and Depreciation Recovery, Option Costs
Entergy Gulf States, Inc.	33687	Transition to Competition
Entergy Gulf States, Inc.	33966	Interim Fuel Surcharge
Entergy Gulf States, Inc.	32907	Hurricane Reconstruction
Entergy Gulf States, Inc.	34724	IPCR
Entergy Gulf States, Inc.	34800	JSP, Depreciation, Decommissioning, Amortization, CWC, Franchise Fees, Rate Case Exp.
Gulf States Utilities Co.	5560	Depreciation, Fuel Cost Factor
Gulf States Utilities Co.	5820	Fuel Cost, Capacity Factors, Heat Rates
Gulf States Utilities Co.	6525	Depreciation, Rate Case Expenses
Gulf States Utilities Co.	7195 & 6755	Depr., Interim Cash Study, Excess Capacity, Rate Case Exp.
Gulf States Utilities Co.	8702	Rate Case Expenses, Depreciation
Gulf States Utilities Co.	10,894	Fuel Reconciliation, Rate Case Expenses
Gulf States Utilities Co. & Entergy Corporation	11292	Acquisition Adjustment Regulatory Plan, Base Rate, Rate Case Exp.
Gulf States Utilities Co. & Entergy Corporation	12423	North Star Steel Agreement
Gulf States Utilities Co. & Entergy Corporation	12852	Depreciation, OPEB, Pensions, Cash Working Capital, Other Cost of Service, and Rate Base Items
Houston Light & Power Co.	6765	Depreciation, Production Plant, Early Retirement

Lower Colorado River Authority	8400	Rate Design
Magic Valley Electric Cooperative, Inc.	10820	Cost of Service, Financial Integrity, Rate Case Expenses
Oncor	35717	Depreciation, Self-Insurance, Payroll, Automated Meters, Regulatory Assets, PHFU
Southwestern Bell Telephone Co.	18513	Rate case expenses
Southwestern Electric Power Co.	3716	Depreciation
Southwestern Electric Power Co.	4628	Depreciation
Southwestern Electric Power Co.	5301	Depreciation, Fuel Charges, Franchise Fees
Southwestern Electric Power Co.	24449	Fuel Factor Component of Price to Beat Rates
Southwestern Electric Power Co.	24468	Delay of Deregulation
Southwestern Public Service Co.	11520	Depreciation, Cash Working Capital, Rate Case Expenses
Southwestern Public Service Co.	32766	Depreciation Expense Revenue Requirements
Southwestern Public Service Co.	35763	Depreciation
Texas-New Mexico Power Co.	9491	Avoided Cost, Rate Case Expenses
Texas-New Mexico Power Co.	10200	Jurisdictional Separation, Cost Allocation, Rate Case Expenses
Texas-New Mexico Power Co.	17751	Rate Case Expenses
Texas-New Mexico Power Co.	36025	Depreciation
Texas Utilities Electric Co.	5640	Franchise Fees
Texas Utilities Electric Co.	9300	Depreciation, Rate Base, Cost of Service, Fuel Charges, Rate Case Expenses
Texas Utilities Electric Co.	11735	Cost Allocation, Rate Design, Rate Case Expenses
Texas Utilities Electric Co.	18490	Depreciation Reclassification
West Texas Utilities Co.	7510	Depreciation, Decommissioning, Rate Base, Cost of Service, Rate Design, Rate Case Expenses
West Texas Utilities Co.	10035	Fuel Reconciliation, Rate Case Expenses
West Texas Utilities Co.	13369	Depreciation, Payroll, Pension, OPEB'S, cash working capital, fuel inventory, cost allocation, other.
West Texas Utilities Co.	22354	Depreciation

<i>TEXAS RAILROAD COMMISSION</i>		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Atmos Energy Corporation	9530	Gas Cost, Gas Purchases, Price Mitigation, Rate Case Expense
Atmos Energy Corporation	9670	CWC, Depreciation, Expenses, Shared Services, Taxes Other Than FIT, Excess Return
Atmos Energy Corporation	9695	Rate Case Expense
Atmos Energy Corporation	9762	Depreciation, O&M Expense
Atmos Energy Corporation	9732	Rate Case Expense
Atmos Energy Corporation	9869	Revenue Requirements
CenterPoint Energy Entex-City of Tyler	9364	Capital investment, Affiliates
CenterPoint Energy Entex	9791	Rate Base, Cost Allocation, Affiliate Expenses, Depreciation Net Salvage, Call Center, Litigation, Uncollectibles, Post Test Year Adjustments
Energas Co.	5793	Depreciation
Energas Co. v. Westar Transmissions Co.	5168 & 4892 Cons.	Cost of Service, Refunds, Contracts, Depreciation
Energas Co.	8205	Cost of Service, Rate Base, Depreciation, Affiliate Transactions, Sale/Leaseback, Losses, Income Taxes
Energas Co.	9002-9135	Depr., Pension, Cash Working Capital, OPEB's, Rate Design
Lone Star Gas Co.	8664	Cash Working Capital, Depreciation Expense, Gain on Sale of Plant, OPEB's, Rate Case Expenses
Rio Grande Valley Gas Co.	7604	Depreciation
Southern Union Gas Co.	2738, 2958, 3002, 3018, 3019 Cons.	Cost of Service, Rate Design, Depreciation
Southern Union Gas Co.	6968 Interim & Cons.	Affiliate Transactions, Rate Base, Income Taxes, Revenues, Cost of Service, Conservation, Depreciation
Southern Union Gas Co.	8033 Consolidated	Acquisition Adj., Depr., Accumulated Provisions for Depr., Distribution Plant, Cost of Gas Clause, Rate Case Expenses
Southern Union Gas Co.	8878	Depreciation, Cash Working Capital, Gain on Sale of Building, Rate Case

		Expenses, Rate Design
TXU Lone Star Pipeline	8976	Depreciation, Net Salvage, Cash Working Capital, ALG vs. ELG
TXU Gas Distribution	9145-9147	Depreciation, Cash Working Capital, Revenues, Gain on Sale of Assets, Clearing Accounts, Over Recovery of Clearing Accounts, SFAS 106, Wages and Salaries, Merger Costs, Intra System Allocation, Zero Intercept, Customer Weighting Factor, Rate Design
TXU-Gas Distribution	9400	Depreciation, Net Salvage, Cash Working Capital, Affiliate Transactions, Software Amortization, Securitization, O&M Expenses, Safety Compliance
Westar Transmissions Co.	5787	Depreciation, Rate Base, Cost of Service, Rate Design, Contract Issues, Revenues, Losses, Income Taxes
TEXAS WATER COMMISSION		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
City of Harlingen-Certificate for Convenience & Necessity	8480C/8485C/ 8512C	Rate Impact for CCN
City of Round Rock	8599/8600M	Rate Discrimination, Cost of Service
Devers Canal System	8388-M	Affil. Transactions, O&M Exp., Return, Allocation, Acquisition Adj., Retroactive Ratemaking, Rate Case Exp., Depr.
Devers Canal System	30102-M	Cost of Service, Rate base, Ratemaking Principles, Affil. Trans.
Southern Utilities Co.	7371-R	Affiliate Transactions, Cost of Service
Scenic Oaks Water Supply Corporation	8097-G	Affiliate Transactions, Cost of Service, Rate base, Cost of Capital, Rate Design, Depreciation
Sharyland Water Supply vs. United Irrigation District	8293-M	Rate Discrimination, Cost of Service, Rate Case Exp.
Travis County Water Control & Improv. District No. 20		Cost of Service
EL PASO PUBLIC UTILITY REGULATION BOARD		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
Southern Union Gas Co.	1991	Depreciation, Calculation Procedure
Southern Union Gas Co.	1997	Depreciation, Calculation Procedure
Southern Union Gas Co.	GUD 8878 -	Depreciation, Cash Working Capital,

	1998	Rate Design, Rate Case Expenses
Texas Gas Services Co.	2007	Revenue Requirements
UTAH		
UTAH PUBLIC SERVICE COMMISSION		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
PacifiCorp	98-2035-03	Production Plant Net Salvage, Production Life Span, Interim Additions, Mass Property, Depreciation
Rocky Mountain Power	07-035-13	Depreciation
Questar	05-057-T01	Conservation Enabling Tariff Adjustment Option and Accounting Orders
WYOMING		
WYOMING PUBLIC SERVICE COMMISSION		
<i>JURISDICTION / COMPANY</i>	<i>DOCKET NO.</i>	<i>TESTIMONY TOPIC</i>
PacifiCorp	20000-ER-00-162	Rate Parity

OFFICE OF PUBLIC COUNSEL'S RECOMMENDED
 DEPRECIATION ADJUSTMENTS BASED ON
 DEPRECIATION STUDY PLANT AS OF DECEMBER 31, 2009

Account	Description	Balance	PEF Proposed		OPC Recommended		OPC \$
		31-Dec-09	%	\$	%	\$	Adjustment
		(a)	(b)	(c)	(d)	(e)	(f)
	Steam Production						
311	Anclote Steam	38,350,675	3.29%	1,261,737	2.01%	770,849	-480,889
311	Crystal River 1 & 2 Steam	75,370,657	2.93%	2,208,360	2.41%	1,818,433	-391,927
311	Crystal River 4 & 5 Steam	162,686,202	2.31%	3,758,051	1.39%	2,261,338	-1,496,713
311	Suwannee River Steam	5,100,438	4.57%	233,090	3.74%	190,756	-42,334
311	Bartow/Ancl. Pipeline	1,111,324	3.13%	34,784	1.95%	21,671	-13,114
311	Transmission Substation - FL	15,484	1.58%	245	1.37%	212	-33
	Total 311	282,634,780		7,496,268		5,061,259	-2,435,009
312	Anclote Steam	105,799,830	4.28%	4,528,233	1.80%	1,904,397	-2,623,836
312	Crystal River 1 & 2 Steam	196,160,063	5.77%	11,318,436	3.62%	7,100,994	-4,217,441
312	Crystal River 4 & 5 Steam	548,224,898	2.60%	14,253,847	2.36%	12,938,108	-1,315,740
312	Crystal River 4 & 5 Clean Air	948,919,815	5.17%	49,059,154	2.36%	22,394,508	-26,664,647
312	Suwannee River Steam	15,144,445	8.45%	1,279,706	2.63%	398,299	-881,407
312	Bartow/Ancl. Pipeline	17,743,469	5.16%	915,563	2.44%	432,941	-482,622
312	Railroad Cars	32,774,301	1.87%	612,879	0.60%	196,646	-416,234
	Subtotal 312	1,864,766,821		81,967,818		45,365,892	-36,601,926
312	Crystal River 1 & 2 Coal	1,023,482	0.22%	2,252	3.62%	37,050	34,798
312	Crystal River 4 & 5 Coal	1,727,433	0.37%	6,392	2.36%	40,787	34,376
	Subtotal 312 Coal	2,750,915		8,643		77,817	69,174
	Total 312	1,867,517,736		81,976,461		45,443,709	-36,532,752
314	Anclote Steam	113,665,043	4.08%	4,648,900	2.85%	3,239,454	-1,409,447
314	Crystal River 1 & 2 Steam	125,470,734	2.69%	3,375,163	2.28%	2,873,280	-501,883
314	Crystal River 4 & 5 Steam	207,676,990	1.46%	3,032,084	0.93%	1,931,396	-1,100,688
314	Suwannee River Steam	13,344,583	7.90%	1,054,222	6.96%	928,783	-125,439
	Total 314	460,157,350		12,110,369		8,972,913	-3,137,457
315	Anclote Steam	26,465,047	2.31%	611,343	1.56%	412,855	-198,488
315	Crystal River 1 & 2 Steam	35,779,320	2.54%	908,795	2.35%	840,814	-67,981
315	Crystal River 4 & 5 Steam	80,707,011	1.28%	1,033,050	0.81%	653,727	-379,323
315	Suwannee River Steam	2,719,876	8.11%	220,582	7.94%	215,958	-4,624
315	Bartow/Ancl. Pipeline	1,252,617	1.74%	21,796	1.16%	14,530	-7,265
	Total 315	146,923,871		2,795,565		2,137,884	-657,680
316	Anclote Steam	6,248,190	2.65%	165,577	1.61%	100,596	-64,981
316	Crystal River 1 & 2 Steam	6,228,997	2.49%	155,102	1.97%	122,711	-32,391
316	Crystal River 4 & 5 Steam	20,157,544	3.06%	616,821	1.97%	397,104	-219,717
316	Suwannee River Steam	508,755	3.64%	18,519	2.69%	13,686	-4,833
316	Bartow/Ancl. Pipeline	152,597	0.0511	7,798	3.27%	4,990	-2,808
316	System - Steam	221,096	0.0335	7,407	3.57%	7,893	486
316	Transmission Substation - FL	42,666	0.035	1,493	3.57%	1,523	30
	Total 316	33,559,845		972,716		648,502	-324,214
	Total Steam Production	2,790,793,582		105,351,379		62,264,267	-43,087,112

OFFICE OF PUBLIC COUNSEL'S RECOMMENDED
 DEPRECIATION ADJUSTMENTS BASED ON
 DEPRECIATION STUDY PLANT AS OF DECEMBER 31, 2009

Account	Description	Balance	PEF Proposed		OPC Recommended		OPC \$
		31-Dec-09	%	\$	%	\$	Adjustment
		(a)	(b)	(c)	(d)	(e)	(f)
Nuclear Production							
321	Structures & Improvement	225,916,505	1.85%	3,729,556	1.35%	3,049,873	-679,683
322	Reactor Plant Equip.	517,990,165	4.08%	21,158,950	3.21%	16,627,484	-4,531,466
323	Turbogenerators	96,725,866	2.22%	2,146,413	1.04%	1,005,949	-1,140,464
324	Accessory Ele. Equip.	194,982,520	1.63%	3,187,192	1.38%	2,690,759	-496,433
325	Misc. Power Plant Equip.	<u>34,816,144</u>	0.30%	<u>105,409</u>	-0.19%	<u>-66,151</u>	<u>-171,560</u>
	Total Nuclear Production	1,070,431,220		30,327,521		23,307,914	-7,019,607
Other Production							
341	Avon Park Peaking	405,755	0.68%	2,759	0.64%	2,597	-162
341	Bartow Peaking	1,074,388	2.06%	22,132	1.69%	18,157	-3,975
341	Bayboro Peaking	1,650,590	1.18%	19,642	1.02%	16,836	-2,806
341	Debary Peaking	4,966,043	2.74%	136,070	2.55%	126,634	-9,435
341	Debary Peaking P7-1 (New)	4,714,633	3.92%	184,814	3.75%	176,799	-8,015
341	Higgins Peaking	791,388	1.37%	10,842	1.33%	10,525	-317
341	Hines Energy Complex	43,694,771	3.55%	1,551,164	3.42%	1,494,361	-56,803
341	Hines Energy Complex Unit # 2	44,311,953	3.85%	1,706,010	3.72%	1,648,405	-57,606
341	Hines Energy Complex Unit # 3	10,134,858	3.46%	350,659	3.33%	337,484	-13,175
341	Hines Energy Complex Unit # 4	23,595,878	3.52%	830,575	3.40%	802,260	-28,315
341	Intercession City Peak # 11	1,244,317	4.34%	54,003	4.23%	52,635	-1,369
341	Intercession City Peak P1-P6	3,728,718	6.20%	231,161	5.89%	219,622	-11,559
341	Intercession City Peak P12-P14	1,426,366	1.33%	18,971	1.24%	17,687	-1,284
341	Intercession City Peak P7-P10	9,423,437	2.73%	257,260	2.50%	235,586	-21,674
341	Rio Pinar Peaking	117,906	3.27%	3,856	3.21%	3,785	-71
341	Suwannee River Peaking	1,471,200	1.45%	21,332	1.28%	18,831	-2,501
341	Tiger Bay Cogen	10,820,577	1.87%	198,605	1.68%	178,426	-20,179
341	Turner Peaking	1,394,020	2.01%	28,020	1.97%	27,462	-558
341	University of Fla Cogen	<u>6,489,783</u>	1.91%	<u>124,146</u>	1.74%	<u>113,096</u>	<u>-11,050</u>
	Total Structures & Improvem	171,266,391		6,752,040		5,501,187	-250,853
Fuel Holders & Access							
342	Avon Park Peaking	742,818	6.27%	46,562	5.51%	40,918	-5,644
342	Bartow Peaking	2,184,671	3.98%	86,950	3.01%	65,759	-21,191
342	Bartow Combined Cycle	840,823	4.51%	28,901	3.65%	23,390	-5,511
342	Bayboro Peaking	1,556,712	3.79%	58,999	2.95%	45,923	-13,076
342	Debary Peaking	6,797,693	4.51%	306,576	3.41%	231,801	-74,775
342	Debary Peaking P7-1 (New)	10,254,541	5.71%	585,534	4.66%	498,371	-87,164
342	Higgins Peaking	2,055,169	2.03%	41,720	1.52%	31,239	-10,481
342	Hines Energy Complex	21,889,678	4.26%	932,500	3.58%	783,650	-148,850
342	Hines Energy Complex Unit # 2	16,205,802	5.10%	826,466	4.18%	677,394	-149,092
342	Hines Energy Complex Unit # 3	24,129,739	4.80%	1,158,227	3.94%	950,712	-207,516
342	Hines Energy Complex Unit # 4	14,865,707	4.39%	652,605	3.55%	527,733	-124,872
342	Intercession City Peak # 11	1,500,308	5.23%	78,466	4.49%	67,364	-11,102
342	Intercession City Peak P1-P6	6,823,704	10.20%	696,018	9.29%	633,922	-62,096
342	Intercession City Peak P12-P14	6,263,750	2.77%	174,060	2.10%	131,959	-42,101
342	Intercession City Peak P7-P10	8,163,195	3.63%	296,324	2.73%	222,855	-73,469
342	Rio Pinar Peaking	445,628	4.77%	21,256	4.03%	17,959	-3,298
342	Suwannee River Peaking	4,048,308	4.21%	170,434	3.37%	136,428	-34,006
342	Tiger Bay Cogen	3,780,457	2.52%	95,268	1.84%	69,560	-25,707
342	Turner Peaking	3,092,650	6.94%	214,630	5.94%	183,703	-30,927
342	University of Fla Cogen	<u>6,055,286</u>	2.68%	<u>162,282</u>	2.00%	<u>121,106</u>	<u>-41,176</u>
	Total Fuel Holders & Access	141,516,239		6,633,798		5,461,746	-1,172,052

OFFICE OF PUBLIC COUNSEL'S RECOMMENDED
 DEPRECIATION ADJUSTMENTS BASED ON
 DEPRECIATION STUDY PLANT AS OF DECEMBER 31, 2009

Account	Description	Balance	PEF Proposed		OPC Recommended		OPC \$
		31-Dec-09	%	\$	%	\$	Adjustment
		(a)	(b)	(c)	(d)	(e)	(f)
343	Avon Park Peaking	5,901,820	4.43%	261,455	3.14%	185,320	-76,135
343	Bartow Peaking	14,123,299	2.29%	323,424	1.52%	214,674	-108,749
343	Bartow Combined Cycle	631,951,442	5.08%	32,103,133	3.79%	23,850,960	-8,152,174
343	Bayboro Peaking	16,243,648	4.18%	678,985	2.31%	375,228	-303,756
343	Debary Peaking	26,938,792	3.86%	1,039,837	2.76%	743,511	-296,327
343	Debary Peaking P7-1 (New)	67,970,052	5.10%	3,466,473	4.04%	2,745,990	-720,483
343	Higgins Peaking	9,787,748	-0.55%	-53,833	-0.94%	-92,005	-38,172
343	Hines Energy Complex	162,212,288	4.32%	7,007,571	3.38%	5,482,775	-1,524,796
343	Hines Energy Complex Unit # 2	122,363,181	5.00%	6,118,159	3.77%	4,613,092	-1,505,067
343	Hines Energy Complex Unit # 3	154,567,419	4.77%	7,372,866	3.58%	5,533,514	-1,839,352
343	Hines Energy Complex Unit # 4	197,280,280	4.95%	9,765,374	3.69%	7,279,642	-2,485,732
343	Intercession City Peak # 11	14,182,068	5.35%	758,742	4.39%	622,594	-136,148
343	Intercession City Peak P1-P6	23,371,270	9.77%	2,283,373	7.09%	1,657,023	-626,350
343	Intercession City Peak P12-P14	60,867,887	3.12%	1,899,078	2.16%	1,314,746	-584,332
343	Intercession City Peak P7-P10	61,658,589	3.88%	2,269,036	2.57%	1,584,626	-684,410
343	Rio Pinar Peaking	2,142,469	2.20%	47,135	1.48%	31,709	-15,426
343	Suwannee River Peaking	18,529,757	2.21%	409,508	1.32%	244,593	-164,915
343	Tiger Bay Cogen	37,861,712	2.21%	836,744	1.41%	533,850	-302,894
343	Turner Peaking	11,883,912	0.78%	92,695	0.18%	21,391	-71,303
343	University of Fla Cogen	<u>19,072,165</u>	3.65%	<u>696,134</u>	2.59%	<u>493,969</u>	<u>-202,165</u>
	Total Prime Movers	1,658,909,938		77,375,887		57,537,202	-19,838,685
344	Avon Park Peaking	1,633,594	-0.17%	-2,777	-0.32%	-5,228	-2,450
344	Bartow Peaking	7,725,049	2.34%	180,766	2.15%	166,089	-14,678
344	Bayboro Peaking	3,283,046	1.49%	48,917	1.40%	45,963	-2,955
344	Debary Peaking	9,457,806	3.42%	323,457	3.25%	307,379	-16,078
344	Debary Peaking P7-1 (New)	18,413,683	3.90%	718,134	3.82%	703,403	-14,731
344	Higgins Peaking	2,638,129	0.03%	791	-0.13%	-3,430	-4,221
344	Hines Energy Complex	44,807,805	2.75%	1,232,215	2.70%	1,209,811	-22,404
344	Hines Energy Complex Unit # 2	39,325,539	2.70%	1,061,790	2.65%	1,042,127	-19,663
344	Hines Energy Complex Unit # 3	50,311,679	3.55%	1,786,065	3.52%	1,770,971	-15,094
344	Hines Energy Complex Unit # 4	2,948,628	3.58%	105,561	3.56%	104,971	-590
344	Intercession City Peak # 11	2,664,079	4.36%	116,154	4.32%	115,088	-1,066
344	Intercession City Peak P1-P6	4,716,975	6.40%	301,866	6.23%	293,868	-8,019
344	Intercession City Peak P12-P14	16,681,378	2.15%	358,650	2.08%	346,973	-11,677
344	Intercession City Peak P7-P10	17,702,413	2.69%	476,195	2.60%	460,263	-15,932
344	Rio Pinar Peaking	430,677	3.75%	16,150	3.53%	15,203	-947
344	Suwannee River Peaking	5,021,099	1.53%	76,823	1.40%	70,295	-6,527
344	Tiger Bay Cogen	23,323,806	1.87%	436,155	1.78%	415,164	-20,991
344	Turner Peaking	4,611,530	3.48%	160,481	3.32%	153,103	-7,378
344	University of Fla Cogen	<u>3,561,068</u>	1.89%	<u>67,304</u>	1.80%	<u>64,099</u>	<u>-3,205</u>
	Total Generators	259,257,982	0.00%	7,464,717		7,276,111	-188,606

OFFICE OF PUBLIC COUNSEL'S RECOMMENDED
 DEPRECIATION ADJUSTMENTS BASED ON
 DEPRECIATION STUDY PLANT AS OF DECEMBER 31, 2009

Account	Description	Balance	PEF Proposed		OPC Recommended		OPC \$
		31-Dec-09	%	\$	%	\$	Adjustment
		(a)	(b)	(c)	(d)	(e)	(f)
345	Avon Park Peaking	1,152,348	0.90%	10,371	0.32%	3,688	-6,684
345	Bartow Peaking	2,133,581	2.27%	48,432	1.78%	37,551	-10,881
345	Bayboro Peaking	1,134,520	2.34%	28,548	1.80%	20,421	-6,126
345	Debary Peaking	5,814,579	4.29%	249,445	3.71%	215,721	-33,725
345	Debary Peaking P7-1 (New)	5,110,760	4.24%	216,696	3.81%	194,720	-21,976
345	Higgins Peaking	2,559,304	0.00%	0	1.21%	30,968	30,968
345	Hines Energy Complex	21,946,282	3.85%	844,932	3.52%	772,509	-72,423
345	Hines Energy Complex Unit # 2	17,793,092	2.86%	508,882	2.62%	466,179	-42,703
345	Hines Energy Complex Unit # 3	21,384,234	3.72%	795,865	3.50%	748,798	-47,067
345	Hines Energy Complex Unit # 4	25,663,669	3.75%	962,388	3.56%	913,627	-48,761
345	Intercession City Peak # 11	3,630,191	4.75%	172,434	4.36%	158,276	-14,158
345	Intercession City Peak P1-P6	3,292,138	6.66%	219,256	6.08%	200,162	-19,094
345	Intercession City Peak P12-P14	6,911,508	2.24%	154,818	1.99%	137,539	-17,279
345	Intercession City Peak P7-P10	5,257,047	2.93%	154,031	2.56%	134,580	-19,451
345	Rio Pinar Peaking	502,947	6.94%	34,905	6.38%	32,088	-2,817
345	Suwannee River Peaking	1,959,200	2.21%	43,298	1.79%	35,070	-8,229
345	Tiger Bay Cogen	5,402,435	2.38%	128,578	2.06%	111,290	-17,288
345	Turner Peaking	2,352,572	4.06%	95,514	3.45%	81,164	-14,351
345	University of Fla Cogen	5,569,377	2.15%	119,742	1.83%	101,920	-17,822
	Total Accessory Elec. Equip.	139,579,783		4,786,137		4,396,270	-389,867
346	Avon Park Peaking	71,944	-6.31%	-4,540	-6.32%	-4,547	-7
346	Bartow Peaking	144,659	0.64%	926	0.38%	550	-378
346	Bayboro Peaking	401,960	1.56%	6,271	1.10%	4,422	-1,849
346	Debary Peaking	633,498	4.59%	29,078	3.86%	24,453	-4,625
346	Debary Peaking P7-1 (New)	834,978	3.81%	31,813	3.26%	27,220	-4,592
346	Higgins Peaking	116,970	-4.66%	-5,451	-4.87%	-5,696	-246
346	Hines Energy Complex	3,722,885	3.07%	114,293	2.81%	97,167	-17,125
346	Hines Energy Complex Unit # 2	2,670,859	3.57%	95,350	3.06%	81,728	-13,621
346	Hines Energy Complex Unit # 3	1,579,733	3.52%	55,607	3.02%	47,708	-7,899
346	Hines Energy Complex Unit # 4	3,283,683	3.96%	130,034	3.43%	112,630	-17,404
346	Intercession City Peak # 11	188,206	4.30%	8,093	3.73%	7,020	-1,073
346	Intercession City Peak P1-P6	851,960	6.18%	52,651	5.42%	46,176	-6,475
346	Intercession City Peak P12-P14	0	0.00%	0	0.00%	0	0
346	Intercession City Peak P7-P10	1,075,045	2.68%	28,811	2.23%	23,974	-4,838
346	Rio Pinar Peaking	23,650	13.09%	3,096	11.88%	2,810	-286
346	Suwannee River Peaking	131,399	0.68%	894	0.39%	512	-381
346	Tiger Bay Cogen	1,615,284	1.77%	28,591	1.40%	22,614	-5,977
346	Turner Peaking	248,424	-2.73%	-6,782	-3.07%	-7,627	-845
346	University of Fla Cogen	995,623	1.88%	18,718	1.49%	14,835	-3,883
346	System-Other	386,645	1.71%	6,774	1.62%	6,426	-348
	Total Misc. Power Plant Equip.	18,987,405		594,223		502,375	-91,849
	Total Other Production	2,389,517,729		102,606,802		80,674,891	-21,931,911
	Total Production	6,250,742,531		238,285,702		166,247,072	-72,038,630

OFFICE OF PUBLIC COUNSEL'S RECOMMENDED
 DEPRECIATION ADJUSTMENTS BASED ON
 DEPRECIATION STUDY PLANT AS OF DECEMBER 31, 2009

Account	Description	Balance	PEF Proposed		OPC Recommended		OPC \$
		31-Dec-09	%	\$	%	\$	Adjustment
	Transmission	(a)	(b)	(c)	(d)	(e)	(f)
350.1	Land Rights	47,109,609	1.22%	574,737	1.22%	574,737	0
352	Structures and Improvements	23,956,108	1.46%	349,759	1.46%	349,759	0
353.1	Station Equipment	551,330,980	1.80%	9,923,958	1.69%	9,317,494	-606,464
353.2	Station Equipment-St. Control	35,527,391	1.78%	632,388	1.78%	632,388	0
354	Towers and Fixtures	66,502,241	1.50%	997,534	1.49%	990,883	-6,650
355	Poles and Fixtures	423,402,256	4.14%	17,528,853	3.27%	13,845,254	-3,683,600
356	Overhead Conductors & Device	325,943,293	2.09%	6,812,215	1.63%	5,312,876	-1,499,339
357	Underground Conduit	7,010,980	1.17%	82,028	1.17%	82,028	0
358	UG Conductors & Devices	138,173,545	2.01%	2,777,288	1.99%	2,749,654	-27,635
359	Roads and Trails	<u>3,133,902</u>	1.18%	<u>36,980</u>	1.18%	<u>36,980</u>	0
	Total Transmission	1,622,090,304		39,715,740		33,892,052	-5,823,688
	Distribution Plant						
360.1	Land Rights	1,579,853	1.37%	21,644	1.37%	21,644	0
361	Structures and Improvements	34,648,870	1.42%	492,014	1.41%	488,549	-3,465
362	Station Equipment	518,437,040	1.83%	9,487,398	1.48%	7,672,868	-1,814,530
364	Poles, Towers and Fixtures	506,065,129	5.91%	29,908,449	3.56%	18,015,919	-11,892,531
365	Overhead Conductors & Device	556,949,110	3.59%	19,994,473	2.68%	14,926,236	-5,068,237
366	Underground Conduit	209,861,454	1.56%	3,273,839	1.38%	2,896,088	-377,751
367	UG Conductors and Devices	532,357,814	3.12%	16,609,564	2.92%	15,544,848	-1,064,716
368	Line Transformers	502,355,286	3.96%	19,893,269	2.43%	12,207,233	-7,686,036
369.1	Services-Overhead	79,504,487	4.70%	3,736,711	4.05%	3,219,932	-516,779
369.2	Services-Underground	397,082,377	2.50%	9,927,059	2.08%	8,259,313	-1,667,746
370	Meters	121,372,606	8.85%	10,741,476	8.55%	10,377,358	-364,118
370.1	Meters-Energy Conservation	0	0.00%	0	0.00%	0	0
371	Installation on Cust. Premises	4,128,157	3.63%	149,852	3.63%	149,852	0
373	Street Lighting and Signal Syst.	<u>288,640,100</u>	4.29%	<u>12,382,660</u>	3.07%	<u>8,861,251</u>	<u>-3,521,409</u>
	Total Distribution	3,752,982,282		136,618,408		102,641,092	-33,977,316
	General Plant						
390	Structures and Improvements	112,683,761	4.55%	5,127,111	3.42%	3,853,785	-1,273,326
	Remaining Not Addressed	<u>281,899,088</u>	9.18%	<u>25,866,631</u>	9.18%	<u>25,866,631</u>	0
	Total General	394,582,849		30,993,742		29,720,416	-1,273,326
	Total Depreciable Plant	12,020,397,966		445,613,592		332,500,632	-113,112,961
	Excess Reserve Amortization			0		-161,451,336	-161,451,336
	Total OPC Adjustment					-274,564,296	

SOURCES AND REFERENCES

Columns (a-c) : Exhibit No.__(EMR-2) pages 2-1 through 2-8.
 Column (d) : Exhibit__(JP-1) Pages 6 through 15.
 Column (e) : Column (a) times Column (d).
 Column (f) : Column (e) less Column (c).

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF STEAM PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance 31-Dec-09 (a)	Net Salvage % (b)	\$ (c)	Reserve 31-Dec-09 (d)	Depreciable 31-Dec-09 (e)	Rem. Life (f)	Annual Depreciation Expense (g)	Rate (h)
	<u>Anclote</u>								
311	Structures and Improvements	\$38,350,675	-0.5%	-\$191,753	\$25,683,593	\$12,858,836	16.70	\$769,990	2.01%
312	Boiler Plant Equipment	\$105,799,830	-0.6%	-\$634,799	\$74,939,076	\$31,495,553	16.53	\$1,905,357	1.80%
314	Turbogenerator Units	\$113,665,043	-0.7%	-\$795,655	\$62,335,222	\$52,125,476	16.07	\$3,243,651	2.85%
315	Accessory Electric Equipmen	\$26,465,047	0.0%	\$0	\$19,592,371	\$6,872,676	16.70	\$411,537	1.56%
316	Misc. Power Plant Equipment	<u>\$6,248,190</u>	-0.5%	<u>-\$31,241</u>	<u>\$4,737,721</u>	<u>\$1,541,710</u>	15.36	<u>\$100,372</u>	1.61%
	Total Anclote	\$290,528,785		-\$1,653,449	\$187,287,983	\$104,894,251		\$6,430,908	
	<u>Crystal River 1 & 2</u>								
311	Structures and Improvements	\$75,370,657	-0.3%	-\$226,112	\$56,626,259	\$18,970,510	10.45	\$1,815,360	2.41%
312	Boiler Plant Equipment	\$197,183,545	-0.4%	-\$788,734	\$123,818,767	\$74,153,513	10.38	\$7,143,884	3.62%
314	Turbogenerator Units	\$125,470,734	-0.4%	-\$501,883	\$96,676,790	\$29,295,827	10.21	\$2,869,327	2.29%
315	Accessory Electric Equipmen	\$35,779,320	0.0%	\$0	\$26,997,301	\$8,782,019	10.45	\$840,385	2.35%
316	Misc. Power Plant Equipment	<u>\$6,228,997</u>	-0.3%	<u>-\$18,687</u>	<u>\$5,028,946</u>	<u>\$1,218,738</u>	9.93	<u>\$122,733</u>	1.97%
	Total Crystal River 1 & 2	\$440,033,253		-\$1,535,416	\$309,148,063	\$132,420,606		\$12,791,688	
	<u>Crystal River 4 & 5</u>								
311	Structures and Improvements	\$162,686,202	-0.9%	-\$1,464,176	\$88,393,164	\$75,757,214	33.40	\$2,268,180	1.39%
312	Boiler Plant Equipment	\$1,498,872,146	-1.3%	-\$19,485,338	\$362,648,116	\$1,155,709,368	32.71	\$35,331,989	2.36%
314	Turbogenerator Units	\$207,676,990	-1.3%	-\$2,699,801	\$150,831,152	\$59,545,638	30.87	\$1,928,916	0.93%
315	Accessory Electric Equipmen	\$80,707,011	0.0%	\$0	\$58,775,905	\$21,931,106	33.40	\$656,620	0.81%
316	Misc. Power Plant Equipment	<u>\$20,157,544</u>	-1.0%	<u>-\$201,575</u>	<u>\$9,271,654</u>	<u>\$11,087,465</u>	27.99	<u>\$396,122</u>	1.97%
	Total Crystal River 4 & 5	\$1,970,099,893		-\$23,850,890	\$669,919,991	\$1,324,030,792		\$40,581,828	

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF STEAM PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance	Net Salvage		Reserve	Depreciable	Rem.	Annual Depreciation	
		31-Dec-09	%	\$	31-Dec-09	31-Dec-09	Life	Expense	Rate
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
<u>Suwannee River</u>									
311	Structures and Improvements	\$5,100,438	-0.2%	-\$10,201	\$4,444,094	\$666,544	3.49	\$190,987	3.74%
312	Boiler Plant Equipment	\$15,144,445	-0.1%	-\$15,144	\$13,769,090	\$1,390,499	3.49	\$398,424	2.63%
314	Turbogenerator Units	\$13,344,583	-0.1%	-\$13,345	\$10,134,123	\$3,223,804	3.47	\$929,050	6.96%
315	Accessory Electric Equipmen	\$2,719,876	0.0%	\$0	\$1,965,784	\$754,092	3.49	\$216,072	7.94%
316	Misc. Power Plant Equipment	<u>\$508,755</u>	-0.1%	<u>-\$509</u>	<u>\$462,158</u>	<u>\$47,106</u>	3.44	<u>\$13,694</u>	2.69%
	Total Suwannee River	\$36,818,097		-\$39,199	\$30,775,250	\$6,082,046		\$1,748,227	
<u>Bartow/Anclothe Pipeline</u>									
311	Structures and Improvements	\$1,111,324	-0.5%	-\$5,557	\$761,664	\$355,216	16.38	\$21,686	1.95%
312	Boiler Plant Equipment	\$17,743,469	-0.6%	-\$106,461	\$10,825,265	\$7,024,665	16.21	\$433,354	2.44%
314	Turbogenerator Units	\$0	0.0%	\$0	\$0	\$0	0.00	\$0	0.00%
315	Accessory Electric Equipmen	\$1,252,617	0.0%	\$0	\$1,015,334	\$237,283	16.38	\$14,486	1.16%
316	Misc. Power Plant Equipment	<u>\$152,597</u>	-0.5%	<u>-\$763</u>	<u>\$77,898</u>	<u>\$75,462</u>	15.10	<u>\$4,997</u>	3.27%
	Total Bartow/Anc. Pipeline	\$20,260,007		-\$112,780	\$12,680,161	\$7,692,626		\$474,523	
<u>Other Steam Production</u>									
311	Structures and Improvements	\$15,484	0.0%	\$0	\$0	\$15,484	72.94	\$212	1.37%
312	Boiler Plant Equipment	\$32,774,301	-0.9%	-\$294,969	\$26,375,603	\$6,693,667	32.69	\$204,762	0.62%
314	Turbogenerator Units	\$0	0.0%	\$0	\$0	\$0	0.00	\$0	0.00%
315	Accessory Electric Equipmen	\$0	0.0%	\$0	\$0	\$0	0.00	\$0	0.00%
316	Misc. Power Plant Equipment	<u>\$263,762</u>	0.0%	<u>\$0</u>	<u>\$0</u>	<u>\$263,762</u>	27.99	<u>\$9,423</u>	3.57%
	Total Other Steam Prod.	\$33,053,547		-\$294,969	\$26,375,603	\$6,972,913		\$214,398	
	Total Steam Production	\$2,790,793,582		-\$27,486,702	\$1,236,187,051	\$1,582,093,233		\$62,241,571	
<u>Nuclear</u>									
321	Structures & Improvement	\$225,916,505	-0.2%	-\$451,833	\$147,042,037	\$79,326,301	26	\$3,051,012	1.35%
322	Reactor Plant Equip.	\$517,990,165	-0.3%	-\$1,553,970	\$115,214,937	\$404,329,198	24.3	\$16,639,062	3.21%
323	Turbogenerators	\$96,725,886	0.0%	\$0	\$73,880,403	\$22,845,483	22.78	\$1,002,875	1.04%
324	Accessory Ele. Equip.	\$194,982,520	0.0%	\$0	\$125,046,015	\$69,936,505	25.92	\$2,698,168	1.38%
325	Misc. Power Plant Equip.	<u>\$34,816,144</u>	0.0%	<u>\$0</u>	<u>\$36,335,037</u>	<u>-\$1,518,893</u>	22.41	<u>-\$67,777</u>	-0.19%
	Total Nuclear	\$1,070,431,220		-\$2,005,804	\$497,518,428	\$574,918,595		\$23,323,338	

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance	Net Salvage		Reserve	Depreciable	Remaining	Annual	Annual
		31-Dec-09	%	\$	31-Dec-09	Plant	Life	Expense	Rate
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
341	Avon Park Peaking	\$405,755	0.0%	0	388,920	16,835	6.49	2,594	0.64%
341	Bartow Peaking	\$1,074,388	0.0%	0	757,786	316,602	17.41	18,185	1.69%
341	Bayboro Peaking	\$1,650,590	0.0%	0	1,322,699	327,891	19.39	16,910	1.02%
341	Debary Peaking	\$4,966,043	0.0%	0	3,642,049	1,323,995	10.47	126,456	2.55%
341	Debary Peaking P7-1 (New)	\$4,714,633	0.0%	0	2,338,183	2,376,450	13.45	176,688	3.75%
341	Higgins Peaking	\$791,388	0.0%	0	723,315	68,073	6.49	10,489	1.33%
341	Hines Energy Complex	\$43,694,771	0.0%	0	16,163,733	27,531,038	18.4	1,496,252	3.42%
341	Hines Energy Complex Unit # 1	\$44,311,953	0.0%	0	5,894,406	38,417,547	23.33	1,646,702	3.72%
341	Hines Energy Complex Unit # 2	\$10,134,658	0.0%	0	1,592,127	8,542,531	25.3	337,649	3.33%
341	Hines Energy Complex Unit # 3	\$23,595,878	0.0%	0	1,722,696	21,873,182	27.27	802,097	3.40%
341	Intercession City Peak # 11	\$1,244,317	0.0%	0	589,330	654,986	12.45	52,609	4.23%
341	Intercession City Peak P1-P6	\$3,728,718	0.0%	0	1,428,302	2,300,417	10.47	219,715	5.89%
341	Intercession City Peak P12-P1	\$1,426,366	0.0%	0	959,878	466,488	26.29	17,744	1.24%
341	Intercession City Peak P7-P10	\$9,423,437	0.0%	0	4,393,425	5,030,012	21.36	235,487	2.50%
341	Rio Pinar Peaking	\$117,906	0.0%	0	93,328	24,578	6.49	3,787	3.21%
341	Suwannee River Peaking	\$1,471,200	0.0%	0	1,198,876	272,323	14.44	18,859	1.28%
341	Tiger Bay Cogen	\$10,620,577	0.0%	0	5,577,577	5,043,000	28.26	178,450	1.68%
341	Turner Peaking	\$1,394,020	0.0%	0	1,215,753	178,267	6.49	27,468	1.97%
341	University of Fla Cogen	\$6,499,783	0.0%	0	3,864,793	2,634,990	23.33	112,944	1.74%
	Total Structures & Improvemer	\$171,266,381		0	53,867,174	117,399,207		5,501,086	3.21%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance	Net Salvage		Reserve	Depreciable	Remaining	Annual	Annual
		31-Dec-09 (a)	% (b)	\$ (c)	31-Dec-09 (d)	Plant (e)	Life (f)	Expense (g)	Rate (h)
342	Avon Park Peaking	\$742,618	-0.1%	-\$743	\$481,251	\$262,110	6.40	\$40,955	5.51%
342	Bartow Peaking	\$2,184,671	-0.2%	-\$4,369	\$1,083,322	\$1,105,718	16.80	\$65,817	3.01%
342	Bartow Combined Cycle	\$640,823	-0.4%	-\$2,563	\$0	\$643,386	27.50	\$23,396	3.65%
342	Bayboro Peaking	\$1,556,712	-0.3%	-\$4,670	\$705,429	\$855,953	18.63	\$45,945	2.95%
342	Debary Peaking	\$6,797,693	-0.1%	-\$6,798	\$4,431,240	\$2,373,251	10.25	\$231,537	3.41%
342	Debary Peaking P7-1 (New)	\$10,254,541	-0.2%	-\$20,509	\$3,754,425	\$6,520,625	13.08	\$498,519	4.86%
342	Higgins Peaking	\$2,055,169	-0.1%	-\$2,055	\$1,856,757	\$200,468	6.40	\$31,323	1.52%
342	Hines Energy Complex	\$21,889,678	-0.3%	-\$65,669	\$8,064,414	\$13,890,933	17.71	\$784,355	3.58%
342	Hines Energy Complex Unit # 2	\$16,205,602	-0.3%	-\$48,617	\$1,185,395	\$15,068,824	22.23	\$677,860	4.18%
342	Hines Energy Complex Unit # 3	\$24,129,739	-0.4%	-\$96,519	\$1,408,545	\$22,817,713	24.00	\$950,738	3.94%
342	Hines Energy Complex Unit # 4	\$14,865,707	-0.4%	-\$59,463	\$1,315,408	\$13,609,762	25.76	\$528,329	3.55%
342	Intercession City Peak # 11	\$1,500,308	-0.2%	-\$3,001	\$686,299	\$817,009	12.14	\$67,299	4.49%
342	Intercession City Peak P1-P6	\$6,823,704	-0.1%	-\$6,824	\$329,450	\$6,501,078	10.25	\$634,251	9.29%
342	Intercession City Peak P12-P1	\$6,283,750	-0.4%	-\$25,135	\$3,031,543	\$3,277,342	24.88	\$131,726	2.10%
342	Intercession City Peak P7-P10	\$8,163,195	-0.3%	-\$24,490	\$3,624,848	\$4,562,837	20.44	\$223,231	2.73%
342	Rio Pinar Peaking	\$445,628	-0.1%	-\$446	\$331,204	\$114,870	6.40	\$17,948	4.03%
342	Suwannee River Peaking	\$4,048,308	-0.2%	-\$8,097	\$2,146,015	\$1,910,390	14.02	\$136,262	3.37%
342	Tiger Bay Cogen	\$3,780,457	-0.4%	-\$15,122	\$1,939,792	\$1,855,787	26.63	\$69,688	1.84%
342	Turner Peaking	\$3,092,650	-0.1%	-\$3,093	\$1,920,928	\$1,174,814	6.40	\$183,565	5.94%
342	University of Fla Cogen	\$6,055,286	-0.3%	-\$18,166	\$3,387,070	\$2,686,382	22.23	\$120,845	2.00%
	Total Fuel Holders	\$141,516,239		-\$416,346	\$41,683,333	\$100,249,252		\$5,463,588	3.86%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance	Net Salvage		Reserve	Depreciable	Remaining	Annual	Annual
		31-Dec-09	%	\$	31-Dec-09	Plant	Life	Expense	Rate
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
343	Avon Park Peaking	\$5,901,920	0.0%	\$0	\$4,726,338	\$1,175,582	6.35	\$185,131	3.14%
343	Bartow Peaking	\$14,123,299	0.0%	\$0	\$10,599,451	\$3,523,848	16.4	\$214,869	1.52%
343	Bartow Combined Cycle	\$631,951,442	0.0%	\$0	\$0	\$631,951,442	26.37	\$23,964,787	3.79%
343	Bayboro Peaking	\$16,243,648	0.0%	\$0	\$9,437,459	\$6,806,189	18.13	\$375,410	2.31%
343	Debary Peaking	\$26,938,792	0.0%	\$0	\$19,428,389	\$7,510,403	10.1	\$743,604	2.76%
343	Debary Peaking P7-1 (New)	\$67,970,052	0.0%	\$0	\$32,719,600	\$35,250,451	12.84	\$2,745,362	4.04%
343	Higgins Peaking	\$9,787,748	0.0%	\$0	\$10,370,006	-\$582,258	6.35	-\$91,694	-0.94%
343	Hines Energy Complex	\$162,212,288	0.0%	\$0	\$67,537,783	\$94,674,505	17.27	\$5,482,021	3.38%
343	Hines Energy Complex Unit # 2	\$122,363,181	0.0%	\$0	\$23,202,575	\$99,160,605	21.51	\$4,609,977	3.77%
343	Hines Energy Complex Unit # 3	\$154,567,419	0.0%	\$0	\$26,408,999	\$128,158,421	23.16	\$5,533,611	3.58%
343	Hines Energy Complex Unit # 4	\$197,280,280	0.0%	\$0	\$16,700,578	\$180,579,702	24.78	\$7,287,316	3.69%
343	Intercession City Peak # 11	\$14,182,088	0.0%	\$0	\$6,741,758	\$7,440,330	11.94	\$623,143	4.39%
343	Intercession City Peak P1-P6	\$23,371,270	0.0%	\$0	\$6,640,334	\$16,730,935	10.1	\$1,656,528	7.09%
343	Intercession City Peak P12-P1	\$60,867,887	0.0%	\$0	\$29,372,330	\$31,495,557	23.97	\$1,313,957	2.16%
343	Intercession City Peak P7-P10	\$61,658,589	0.0%	\$0	\$30,218,172	\$31,440,417	19.84	\$1,584,698	2.57%
343	Rio Pinar Peaking	\$2,142,489	0.0%	\$0	\$1,941,216	\$201,273	6.35	\$31,697	1.48%
343	Suwannee River Peaking	\$18,529,757	0.0%	\$0	\$15,174,555	\$3,355,202	13.74	\$244,192	1.32%
343	Tiger Bay Cogen	\$37,861,712	0.0%	\$0	\$24,195,133	\$13,666,579	25.58	\$534,268	1.41%
343	Turner Peaking	\$11,883,912	0.0%	\$0	\$11,747,483	\$136,429	6.35	\$21,485	0.18%
343	University of Fla Cogen	\$19,072,165	0.0%	\$0	\$8,431,071	\$10,641,094	21.51	\$494,704	2.59%
Total Prime Movers		\$1,658,909,938		\$0	\$355,593,233	\$1,303,316,705		\$57,555,068	3.47%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance 31-Dec-09 (a)	Net Salvage % (b)	\$ (c)	Reserve 31-Dec-09 (d)	Depreciable Plant (e)	Remaining Life (f)	Annual Expense (g)	Annual Rate (h)
344	Avon Park Peaking	\$1,633,594	0.0%	\$0	\$1,667,410	-\$33,816	6.42	-\$5,267	-0.32%
344	Bartow Peaking	\$7,725,049	0.0%	\$0	\$4,914,423	\$2,810,626	16.89	\$166,408	2.15%
344	Bayboro Peaking	\$3,283,046	0.0%	\$0	\$2,419,652	\$863,394	18.74	\$46,072	1.40%
344	Debary Peaking	\$9,457,806	0.0%	\$0	\$6,295,677	\$3,162,129	10.28	\$307,600	3.25%
344	Debary Peaking P7-1 (New)	\$18,413,683	0.0%	\$0	\$9,180,736	\$9,232,947	13.14	\$702,660	3.82%
344	Higgins Peaking	\$2,638,129	0.0%	\$0	\$2,659,824	-\$21,695	6.42	-\$3,379	-0.13%
344	Hines Energy Complex	\$44,807,805	0.0%	\$0	\$23,270,877	\$21,536,928	17.82	\$1,208,582	2.70%
344	Hines Energy Complex Unit # 2	\$39,325,539	0.0%	\$0	\$15,973,036	\$23,352,503	22.40	\$1,042,522	2.65%
344	Hines Energy Complex Unit # 3	\$50,311,679	0.0%	\$0	\$7,457,674	\$42,854,005	24.20	\$1,770,827	3.52%
344	Hines Energy Complex Unit # 4	\$2,948,628	0.0%	\$0	\$220,582	\$2,728,046	25.99	\$104,965	3.56%
344	Intercession City Peak # 11	\$2,664,079	0.0%	\$0	\$1,260,949	\$1,403,130	12.19	\$115,105	4.32%
344	Intercession City Peak P1-P6	\$4,716,975	0.0%	\$0	\$1,696,408	\$3,020,567	10.28	\$293,830	6.23%
344	Intercession City Peak P12-P14	\$16,681,378	0.0%	\$0	\$7,983,237	\$8,698,141	25.10	\$346,539	2.08%
344	Intercession City Peak P7-P10	\$17,702,413	0.0%	\$0	\$8,242,750	\$9,459,663	20.58	\$459,653	2.60%
344	Rio Pinar Peaking	\$430,677	0.0%	\$0	\$332,948	\$97,729	6.42	\$15,223	3.53%
344	Suwannee River Peaking	\$5,021,099	0.0%	\$0	\$4,028,569	\$992,530	14.08	\$70,492	1.40%
344	Tiger Bay Cogen	\$23,323,806	0.0%	\$0	\$12,136,302	\$11,187,504	26.88	\$416,202	1.78%
344	Turner Peaking	\$4,611,530	0.0%	\$0	\$3,629,741	\$981,789	6.42	\$152,927	3.32%
344	University of Fla Cogen	\$3,561,068	0.0%	\$0	\$2,124,489	\$1,436,579	22.40	\$64,133	1.80%
Total Structures & Improvem		\$259,257,982		\$0	\$115,495,284	\$143,762,698		\$7,275,093	2.81%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance	Net Salvage		Reserve	Depreciable	Remaining	Annual	Annual
		31-Dec-09 (a)	% (b)	\$ (c)	31-Dec-09 (d)	Plant (e)	Life (f)	Expense (g)	Rate (h)
345	Avon Park Peaking	\$1,152,348	-0.1%	-\$1,152	\$1,129,635	\$23,866	6.41	\$3,723	0.32%
345	Bartow Peaking	\$2,133,581	-0.3%	-\$6,401	\$1,508,000	\$631,982	16.87	\$37,462	1.76%
345	Bayboro Peaking	\$1,134,520	-0.3%	-\$3,404	\$755,129	\$382,794	18.72	\$20,448	1.80%
345	Debary Peaking	\$5,814,579	-0.2%	-\$11,629	\$3,608,765	\$2,217,443	10.27	\$215,915	3.71%
345	Debary Peaking P7-1 (New)	\$5,110,760	-0.2%	-\$10,222	\$2,565,188	\$2,555,793	13.13	\$194,653	3.81%
345	Higgins Peaking	\$2,559,304	-0.1%	-\$2,559	\$2,363,230	\$198,632	6.41	\$30,988	1.21%
345	Hines Energy Complex	\$21,946,282	-0.3%	-\$65,839	\$8,245,010	\$13,767,111	17.8	\$773,433	3.52%
345	Hines Energy Complex Unit # 2	\$17,793,092	-0.3%	-\$53,379	\$7,418,934	\$10,427,537	22.37	\$466,139	2.62%
345	Hines Energy Complex Unit # 3	\$21,394,234	-0.4%	-\$85,577	\$3,398,685	\$18,081,126	24.17	\$748,081	3.50%
345	Hines Energy Complex Unit # 4	\$25,663,669	-0.4%	-\$102,655	\$2,027,644	\$23,738,680	25.95	\$914,785	3.56%
345	Intercession City Peak # 11	\$3,630,191	-0.2%	-\$7,260	\$1,710,592	\$1,926,860	12.18	\$158,199	4.36%
345	Intercession City Peak P1-P6	\$3,292,138	-0.2%	-\$6,584	\$1,242,287	\$2,056,436	10.27	\$200,237	6.08%
345	Intercession City Peak P12-P1	\$6,911,508	-0.4%	-\$27,646	\$3,497,323	\$3,441,831	25.06	\$137,344	1.99%
345	Intercession City Peak P7-P10	\$5,257,047	-0.3%	-\$15,771	\$2,501,907	\$2,770,911	20.55	\$134,838	2.56%
345	Rio Pinar Peaking	\$502,947	-0.1%	-\$503	\$297,770	\$205,681	6.41	\$32,087	6.38%
345	Suwannee River Peaking	\$1,959,200	-0.2%	-\$3,918	\$1,469,163	\$493,956	14.07	\$35,107	1.79%
345	Tiger Bay Cogen	\$5,402,435	-0.4%	-\$21,610	\$2,441,369	\$2,982,676	26.83	\$111,169	2.06%
345	Turner Peaking	\$2,352,572	-0.1%	-\$2,353	\$1,834,677	\$520,247	6.41	\$81,162	3.45%
345	University of Fla Cogen	\$5,569,377	-0.3%	-\$16,708	\$3,305,638	\$2,280,448	22.37	\$101,942	1.83%
Total Structures & Improvem		\$139,579,783		-\$445,170	\$51,320,944	\$88,704,010		\$4,397,713	3.15%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF OTHER PRODUCTION DEPRECIATION RATES

Acct. No.	Description	Balance 31-Dec-09 (a)	Net Salvage % (b)	\$ (c)	Reserve 31-Dec-09 (d)	Depreciable Plant (e)	Remaining Life (f)	Annual Expense (g)	Annual Rate (h)
346	Avon Park Peaking	\$71,944	-0.1%	-\$72	\$101,380	-\$29,364	6.46	-\$4,545	-6.32%
346	Bartow Peaking	\$144,659	-0.3%	-\$434	\$135,647	\$9,446	17.24	\$548	0.38%
346	Bayboro Peaking	\$401,960	-0.4%	-\$1,608	\$318,609	\$84,959	19.18	\$4,430	1.10%
346	Debary Peaking	\$633,498	-0.2%	-\$1,267	\$380,148	\$254,617	10.41	\$24,459	3.86%
346	Debary Peaking P7-1 (New)	\$834,978	-0.3%	-\$2,505	\$474,257	\$363,226	13.35	\$27,208	3.26%
346	Higgins Peaking	\$116,970	-0.1%	-\$117	\$153,915	-\$36,828	6.46	-\$5,701	-4.87%
346	Hines Energy Complex	\$3,722,885	-0.4%	-\$14,892	\$1,966,999	\$1,770,777	18.21	\$97,242	2.61%
346	Hines Energy Complex Unit # 2	\$2,670,859	-0.5%	-\$13,354	\$799,922	\$1,884,292	23.03	\$81,819	3.06%
346	Hines Energy Complex Unit # 3	\$1,579,733	-0.5%	-\$7,899	\$395,458	\$1,192,174	24.95	\$47,783	3.02%
346	Hines Energy Complex Unit # 4	\$3,283,683	-0.5%	-\$16,418	\$277,827	\$3,022,274	26.86	\$112,520	3.43%
346	Intercession City Peak # 11	\$188,206	-0.2%	-\$376	\$101,740	\$86,842	12.37	\$7,020	3.73%
346	Intercession City Peak P1-P6	\$851,960	-0.2%	-\$1,704	\$372,584	\$481,080	10.41	\$46,213	5.42%
346	Intercession City Peak P12-P1	\$0	-0.5%	\$0	\$0	\$0	25.9	\$0	0.00%
346	Intercession City Peak P7-P10	\$1,075,045	-0.4%	-\$4,300	\$574,307	\$505,038	21.11	\$23,924	2.23%
346	Rio Pinar Peaking	\$23,650	-0.1%	-\$24	\$5,522	\$18,152	6.46	\$2,810	11.88%
346	Suwannee River Peaking	\$131,399	-0.3%	-\$394	\$124,395	\$7,398	14.32	\$517	0.39%
346	Tiger Bay Cogen	\$1,615,284	-0.6%	-\$9,692	\$998,264	\$626,712	27.81	\$22,535	1.40%
346	Turner Peaking	\$248,424	-0.1%	-\$248	\$297,969	-\$49,297	6.46	-\$7,631	-3.07%
346	University of Fla Cogen	\$995,623	-0.5%	-\$4,978	\$658,261	\$342,340	23.03	\$14,865	1.49%
346	Other	\$396,645	0.0%	\$0	\$217,402	\$179,243	27.81	\$6,445	1.62%
Total Structures & Improvem		\$18,987,405		-\$80,282	\$8,354,606	\$10,713,081		\$502,460	2.65%

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF TRANSMISSION AND DISTRIBUTION DEPRECIATION RATES

Acct. No.	Description	Balance 31-Dec-09 (a)	Net Salvage % (b)	\$ (c)	Reserve 31-Dec-09 (d)	Depreciable Plant (e)	Remaining Life (f)	Annual Expense (g)	Annual Rate (h)
<u>Transmission Plant</u>									
350.1	Land Rights	\$47,109,609	0%	\$0	\$16,726,141	\$30,383,468	52.9	\$574,357	1.22%
352	Structures and Improvements	\$23,956,108	-15%	-\$3,593,416	\$7,842,418	\$19,707,105	56.5	\$348,798	1.46%
353.1	Station Equipment	\$551,330,980	5%	\$27,566,549	\$121,307,523	\$402,456,908	43.3	\$9,294,617	1.69%
353.2	Station Equipment-Station Control	\$35,527,391	0%	\$0	\$32,613,534	\$2,913,857	4.6	\$633,447	1.78%
354	Towers and Fixtures	\$66,502,241	-30%	-\$19,950,672	\$55,987,867	\$30,465,046	30.8	\$989,125	1.49%
355	Poles and Fixtures	\$423,402,256	-25%	-\$105,850,564	\$128,969,464	\$400,283,356	28.9	\$13,850,635	3.27%
356	Overhead Conductors and Devices	\$325,943,293	-10%	-\$32,594,329	\$128,318,209	\$230,219,413	43.4	\$5,304,595	1.63%
357	Underground Conduit	\$7,010,980	0%	\$0	\$5,629,290	\$1,381,690	16.9	\$81,757	1.17%
358	Underground Conductors & Devices	\$138,173,545	0%	\$0	\$8,729,855	\$129,443,689	47	\$2,754,121	1.99%
359	Roads and Trails	\$3,133,902	0%	\$0	\$1,122,179	\$2,011,723	54.5	\$36,912	1.18%
Total Transmission Plant		\$1,622,090,304		-\$134,422,433	\$507,246,481	\$1,249,266,256		\$33,868,364	
<u>Distribution Plant</u>									
360.1	Land Rights	\$1,579,853	0%	\$0	\$120,777	\$1,459,076	67.2	\$21,712	1.37%
361	Structures and Improvements	\$34,648,870	-10%	-\$3,464,887	\$6,604,331	\$31,509,426	64.3	\$490,038	1.41%
362	Station Equipment	\$518,437,040	0%	\$0	\$126,465,254	\$391,971,786	51.1	\$7,670,681	1.48%
364	Poles, Towers and Fixtures	\$506,065,129	-35%	-\$177,122,795	\$283,119,926	\$400,067,998	22.19	\$18,029,202	3.56%
365	Overhead Conductors and Devices	\$556,949,110	-20%	-\$111,389,822	\$260,994,428	\$407,344,504	27.3	\$14,921,044	2.68%
366	Underground Conduit	\$209,861,454	0%	\$0	\$47,496,702	\$162,364,752	55.9	\$2,904,557	1.38%
367	Underground Conductors and Device	\$532,357,814	-5%	-\$26,617,891	\$166,120,865	\$392,854,839	25.3	\$15,527,859	2.92%
368	Line Transformers	\$502,355,286	-5%	-\$25,117,764	\$247,689,705	\$279,783,345	22.91	\$12,212,280	2.43%
369.1	Services-Overhead	\$79,504,487	-40%	-\$31,801,795	\$61,727,055	\$49,579,227	15.4	\$3,219,430	4.05%
369.2	Services-Underground	\$397,082,377	0%	\$0	\$106,778,402	\$290,303,974	35.2	\$8,247,272	2.08%
370	Meters	\$121,372,606	-6%	-\$7,282,356	-\$11,443,192	\$140,098,154	13.5	\$10,377,641	8.55%
370.1	Meters-Energy Conservation	\$0	0%	\$0	\$0	\$0	0	\$0	0.00%
371	Installation on Customers Premises	\$4,128,157	0%	\$0	\$1,490,089	\$2,638,067	17.6	\$149,890	3.63%
373	Street Lighting and Signal Systems	\$288,640,100	-5%	-\$14,432,005	\$194,228,450	\$108,843,655	12.3	\$8,849,078	3.07%
Total Distribution Plant		\$3,752,982,282		-\$397,229,315	\$1,491,392,793	\$2,658,818,804		\$102,620,685	

OFFICE OF PUBLIC COUNSEL'S CALCULATION OF GENERAL DEPRECIATION RATES

Acct. No.	Description	Balance 31-Dec-09 (a)	Net Salvage % (b)	\$ (c)	Reserve 31-Dec-09 (d)	Depreciable Plant (e)	Remaining Life (f)	Annual Expense (g)	Annual Rate (h)
	<u>General Plant</u>								
390	Structures and Improvements	\$112,683,761	15%	\$16,902,564	\$27,097,331	\$68,683,866	17.8	\$3,858,644	3.42%
	Other Non-Depreciable General	<u>\$281,899,088</u>	NA	NA	NA	NA	NA	NA	NA
	Total General	\$394,582,849		\$16,902,564	\$27,097,331	\$68,683,866		\$3,858,644	
	Total Depreciable Plant	\$12,020,397,966		-\$545,183,489	\$4,385,756,659	\$7,897,925,708		\$306,607,611	

SOURCES AND REFERENCES

- Columns (a & d) : Exhibit No.__(EMR-2) pages 2-74 through 2-79.
- Column (b) : See Mr. Pous' direct testimony under Production and Mass Property Net Salvage. Production values adjusted to reflect interim retirement levels.
- Column (c) : Column (a) times Column (b).
- Column (e) : Column (a) less Columns (c & d).
- Column (f) : See Mr. Pous' direct testimony under Production Life Span and Interim Retirements, and Mass Property Life Analyses. Further see Mr. Pous' work papers.
- Column (g) : Column (e) divided by Column (f).
- Column (h) : Column (g) divided by Column (a).

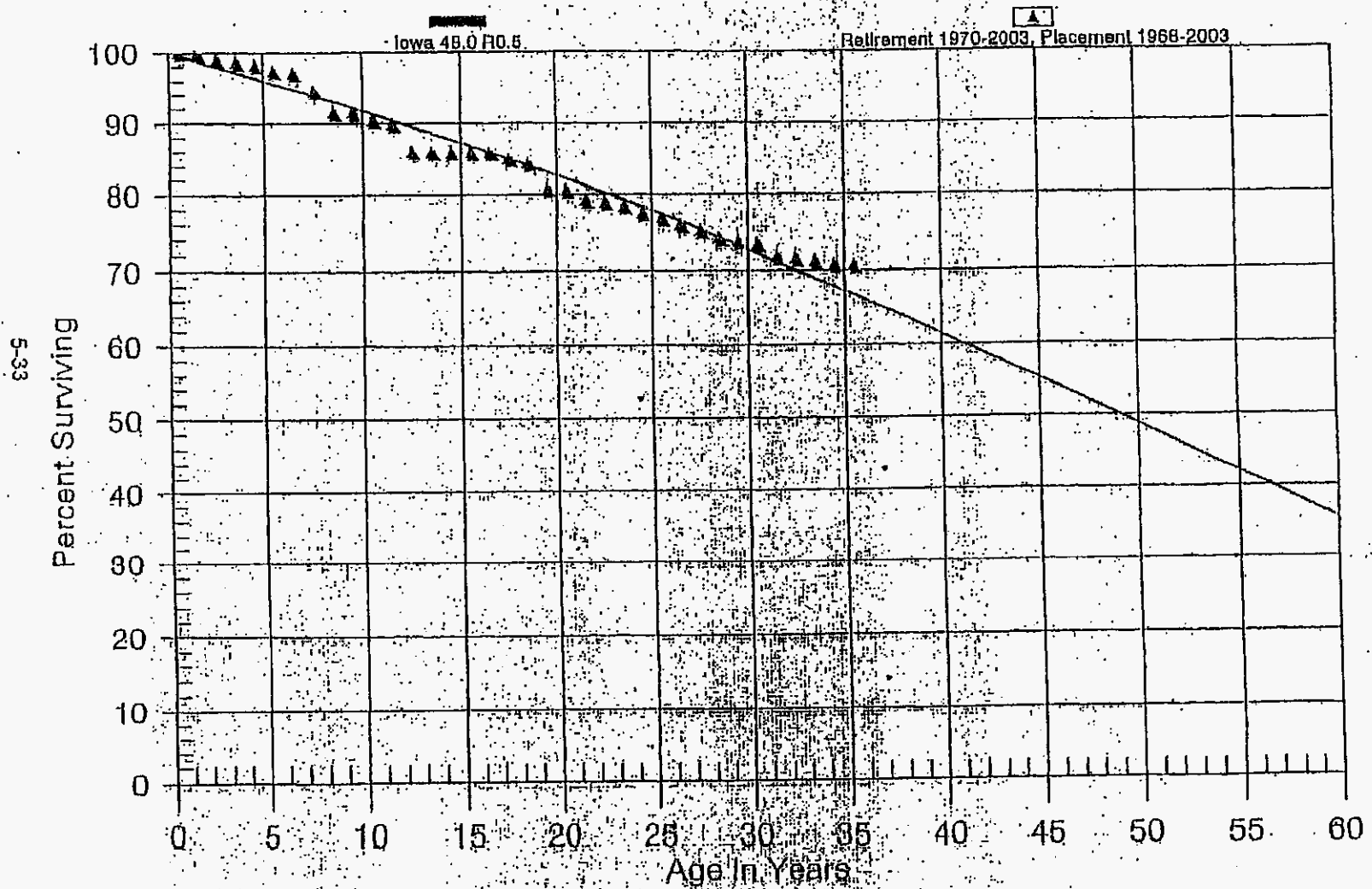
**OFFICE OF PUBLIC COUNSEL'S SUMMARY OF EXCESS RESERVES
 BASED ON PLANT AS ESTIMATED ENDING DECEMBER 31, 2009**

	<u>Company</u>			<u>OPC</u>		<u>OPC Incremental</u>
	<u>Book Reserve</u> (a)	<u>Theoretical Reserve</u> (b)	<u>Excess Reserve</u> (c)	<u>Theoretical Reserve</u> (d)	<u>Excess Reserve</u> (e)	<u>Excess Reserve</u> (f)
Steam	\$ 1,236,187,050	\$ 1,053,852,587	\$ 182,334,463	\$ 1,030,550,708	\$ 205,636,342	\$ 23,301,879
Nuclear	\$ 497,518,429	\$ 336,915,371	\$ 160,603,058	\$ 384,563,731	\$ 112,954,698	\$ (47,648,360)
Other Production	\$ 626,314,575	\$ 496,742,200	\$ 129,572,375	\$ 559,470,767	\$ 66,843,808	\$ (62,728,567)
Total Production	\$ 2,360,020,054	\$ 1,887,510,158	\$ 472,509,896	\$ 1,974,585,206	\$ 385,434,848	\$ (87,075,048)
Transmission	\$ 507,246,481	\$ 449,099,300	\$ 58,147,181	\$ 398,889,483	\$ 108,356,998	\$ 50,209,817
Distribution	\$ 1,491,392,793	\$ 1,372,746,617	\$ 118,646,176	\$ 1,129,834,537	\$ 361,558,256	\$ 242,912,080
General	\$ 27,097,331	\$ 30,595,243	\$ (3,497,912)	\$ 24,767,578	\$ 2,329,753	\$ 5,827,665
Total Mass Property	\$ 2,025,736,605	\$ 1,852,441,160	\$ 173,295,445	\$ 1,553,491,598	\$ 472,245,007	\$ 298,949,562
Grand Total	\$ 4,385,756,659	\$ 3,739,951,318	\$ 645,805,341	\$ 3,528,076,804	\$ 857,679,855	\$ 211,874,514

SOURCES AND REFERENCES

- Columns (a-c) :Company values from Exhibit_(EMR-2) pages 2-75 through 2-79.
- Column (d) : OPC theoretical reserve based on individual recalculation by plant account and by unit by account for production plant.
- Column (e) : Column (a) less Column (d).
- Column (f) : Column (e) less Column (c).

Progress Energy Florida, Inc
Total Company
343.00 PRIME MOVERS
Original And Smooth Survivor Curves



**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT RATIOS
AND RESULTING REMAINING LIVES
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	<u>Interim Retirement Rate</u>	<u>Unadjusted Remaining Life</u>	<u>Adjusted Remaining Life</u>
<u>Anclote</u>				
311	Structures and Improvements	0.0009	16.83	16.70
312	Boiler Plant Equipment	0.0021	16.83	16.53
314	Turbogenerator Units	0.0053	16.83	16.07
315	Accessory Electric Equipment	0.0009	16.83	16.70
316	Misc. Power Plant Equipment	0.0103	16.83	15.36
<u>Crystal River 1 & 2</u>				
311	Structures and Improvements	0.0009	10.50	10.45
312	Boiler Plant Equipment	0.0021	10.50	10.38
314	Turbogenerator Units	0.0053	10.50	10.21
315	Accessory Electric Equipment	0.0009	10.50	10.45
316	Misc. Power Plant Equipment	0.0103	10.50	9.93
<u>Crystal River 4 & 5</u>				
311	Structures and Improvements	0.0009	33.90	33.40
312	Boiler Plant Equipment	0.0021	33.90	32.71
314	Turbogenerator Units	0.0053	33.90	30.87
315	Accessory Electric Equipment	0.0009	33.90	33.40
316	Misc. Power Plant Equipment	0.0103	33.90	27.99
<u>Suwannee</u>				
311	Structures and Improvements	0.0009	3.50	3.49
312	Boiler Plant Equipment	0.0021	3.50	3.49
314	Turbogenerator Units	0.0053	3.50	3.47
315	Accessory Electric Equipment	0.0009	3.50	3.49
316	Misc. Power Plant Equipment	0.0103	3.50	3.44
<u>Bartow Pipeline</u>				
311	Structures and Improvements	0.0009	16.50	16.38
312	Boiler Plant Equipment	0.0021	16.50	16.21
314	Turbogenerator Units	0.0053	0.00	0.00
315	Accessory Electric Equipment	0.0009	16.50	16.38
316	Misc. Power Plant Equipment	0.0103	16.50	15.10
<u>Crystal River 3</u>				
321	Structures & Improvement	0.0025	26.90	26.00
322	Reactor Plant Equip.	0.0072	26.90	24.30
323	Turbogenerators	0.0114	26.90	22.78
324	Accessory Ele. Equip.	0.0027	26.90	25.92
325	Misc. Power Plant Equip.	0.0124	26.90	22.41

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT RATIOS
AND RESULTING REMAINING LIVES
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	<u>Interim Retirement Rate</u>	<u>Unadjusted Remaining Life</u>	<u>Adjusted Remaining Life</u>
341	Avon Park Peaking	0.0006	6.50	6.49
341	Bartow Peaking	0.0006	17.50	17.41
341	Bayboro Peaking	0.0006	19.50	19.39
341	Debary Peaking	0.0006	10.50	10.47
341	Debary Peaking P7-1 (New)	0.0006	13.50	13.45
341	Higgins Peaking	0.0006	6.50	6.49
341	Hines Energy Complex	0.0006	18.50	18.40
341	Hines Energy Complex Unit #	0.0006	23.50	23.33
341	Hines Energy Complex Unit #	0.0006	25.50	25.30
341	Hines Energy Complex Unit #	0.0006	27.50	27.27
341	Intercession City Peak # 11	0.0006	12.50	12.45
341	Intercession City Peak P1-P6	0.0006	10.50	10.47
341	Intercession City Peak P12-P1	0.0006	26.50	26.29
341	Intercession City Peak P7-P1C	0.0006	21.50	21.36
341	Rio Pinar Peaking	0.0006	6.50	6.49
341	Suwannee River Peaking	0.0006	14.50	14.44
341	Tiger Bay Cogen	0.0006	28.50	28.26
341	Turner Peaking	0.0006	6.50	6.49
341	University of Fla Cogen	0.0006	23.50	23.33
342	Avon Park Peaking	0.0046	6.50	6.40
342	Bartow Peaking	0.0046	17.50	16.80
342	Bartow Combined Cycle	0.0046	29.50	27.50
342	Bayboro Peaking	0.0046	19.50	18.63
342	Debary Peaking	0.0046	10.50	10.25
342	Debary Peaking P7-1 (New)	0.0046	13.50	13.08
342	Higgins Peaking	0.0046	6.50	6.40
342	Hines Energy Complex	0.0046	18.50	17.71
342	Hines Energy Complex Unit #	0.0046	23.50	22.23
342	Hines Energy Complex Unit #	0.0046	25.50	24.00
342	Hines Energy Complex Unit #	0.0046	27.50	25.76
342	Intercession City Peak # 11	0.0046	12.50	12.14
342	Intercession City Peak P1-P6	0.0046	10.50	10.25
342	Intercession City Peak P12-P1	0.0046	26.50	24.88
342	Intercession City Peak P7-P1C	0.0046	21.50	20.44
342	Rio Pinar Peaking	0.0046	6.50	6.40
342	Suwannee River Peaking	0.0046	14.50	14.02
342	Tiger Bay Cogen	0.0046	28.50	26.63
342	Turner Peaking	0.0046	6.50	6.40
342	University of Fla Cogen	0.0046	23.50	22.23

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT RATIOS
AND RESULTING REMAINING LIVES
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	<u>Interim Retirement Rate</u>	<u>Unadjusted Remaining Life</u>	<u>Adjusted Remaining Life</u>
343	Avon Park Peaking	0.0072	6.50	6.35
343	Bartow Peaking	0.0072	17.50	16.40
343	Bartow Combined Cycle	0.0072	29.50	26.37
343	Bayboro Peaking	0.0072	19.50	18.13
343	Debary Peaking	0.0072	10.50	10.10
343	Debary Peaking P7-1 (New)	0.0072	13.50	12.84
343	Higgins Peaking	0.0072	6.50	6.35
343	Hines Energy Complex	0.0072	18.50	17.27
343	Hines Energy Complex Unit #	0.0072	23.50	21.51
343	Hines Energy Complex Unit #	0.0072	25.50	23.16
343	Hines Energy Complex Unit #	0.0072	27.50	24.78
343	Intercession City Peak # 11	0.0072	12.50	11.94
343	Intercession City Peak P1-P6	0.0072	10.50	10.10
343	Intercession City Peak P12-P1	0.0072	26.50	23.97
343	Intercession City Peak P7-P1C	0.0072	21.50	19.84
343	Rio Pinar Peaking	0.0072	6.50	6.35
343	Suwannee River Peaking	0.0072	14.50	13.74
343	Tiger Bay Cogen	0.0072	28.50	25.58
343	Turner Peaking	0.0072	6.50	6.35
343	University of Fla Cogen	0.0072	23.50	21.51
344	Avon Park Peaking	0.0004	6.50	6.42
344	Bartow Peaking	0.0004	17.50	16.89
344	Bayboro Peaking	0.0004	19.50	18.74
344	Debary Peaking	0.0004	10.50	10.28
344	Debary Peaking P7-1 (New)	0.0004	13.50	13.14
344	Higgins Peaking	0.0004	6.50	6.42
344	Hines Energy Complex	0.0004	18.50	17.82
344	Hines Energy Complex Unit #	0.0004	23.50	22.40
344	Hines Energy Complex Unit #	0.0004	25.50	24.20
344	Hines Energy Complex Unit #	0.0004	27.50	25.99
344	Intercession City Peak # 11	0.0004	12.50	12.19
344	Intercession City Peak P1-P6	0.0004	10.50	10.28
344	Intercession City Peak P12-P1	0.0004	26.50	25.10
344	Intercession City Peak P7-P1C	0.0004	21.50	20.58
344	Rio Pinar Peaking	0.0004	6.50	6.42
344	Suwannee River Peaking	0.0004	14.50	14.08
344	Tiger Bay Cogen	0.0004	28.50	26.88
344	Turner Peaking	0.0004	6.50	6.42
344	University of Fla Cogen	0.0004	23.50	22.40

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT RATIOS
AND RESULTING REMAINING LIVES
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	<u>Interim Retirement Rate</u>	<u>Unadjusted Remaining Life</u>	<u>Adjusted Remaining Life</u>
345	Avon Park Peaking	0.0041	6.50	6.41
345	Bartow Peaking	0.0041	17.50	16.87
345	Bayboro Peaking	0.0041	19.50	18.72
345	Debary Peaking	0.0041	10.50	10.27
345	Debary Peaking P7-1 (New)	0.0041	13.50	13.13
345	Higgins Peaking	0.0041	6.50	6.41
345	Hines Energy Complex	0.0041	18.50	17.80
345	Hines Energy Complex Unit #	0.0041	23.50	22.37
345	Hines Energy Complex Unit #	0.0041	25.50	24.17
345	Hines Energy Complex Unit #	0.0041	27.50	25.95
345	Intercession City Peak # 11	0.0041	12.50	12.18
345	Intercession City Peak P1-P6	0.0041	10.50	10.27
345	Intercession City Peak P12-P1	0.0041	26.50	25.06
345	Intercession City Peak P7-P1C	0.0041	21.50	20.55
345	Rio Pinar Peaking	0.0041	6.50	6.41
345	Suwannee River Peaking	0.0041	14.50	14.07
345	Tiger Bay Cogen	0.0041	28.50	26.83
345	Turner Peaking	0.0041	6.50	6.41
345	University of Fla Cogen	0.0041	23.50	22.37
346	Avon Park Peaking	0.0017	6.50	6.46
346	Bartow Peaking	0.0017	17.50	17.24
346	Bayboro Peaking	0.0017	19.50	19.18
346	Debary Peaking	0.0017	10.50	10.41
346	Debary Peaking P7-1 (New)	0.0017	13.50	13.35
346	Higgins Peaking	0.0017	6.50	6.46
346	Hines Energy Complex	0.0017	18.50	18.21
346	Hines Energy Complex Unit #	0.0017	23.50	23.03
346	Hines Energy Complex Unit #	0.0017	25.50	24.95
346	Hines Energy Complex Unit #	0.0017	27.50	26.86
346	Intercession City Peak # 11	0.0017	12.50	12.37
346	Intercession City Peak P1-P6	0.0017	10.50	10.41
346	Intercession City Peak P12-P1	0.0017	26.50	25.90
346	Intercession City Peak P7-P1C	0.0017	21.50	21.11
346	Rio Pinar Peaking	0.0017	6.50	6.46
346	Suwannee River Peaking	0.0017	14.50	14.32
346	Tiger Bay Cogen	0.0017	28.50	27.81
346	Turner Peaking	0.0017	6.50	6.46
346	University of Fla Cogen	0.0017	23.50	23.03

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT NET SALVAGE
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	PEF Overall Interim <u>Net Salvage</u>	PEF Effective Interim <u>Net Salvage</u>	OPC Overall Interim <u>Net Salvage</u>	OPC Effective Interim <u>Net Salvage</u>
<u>Anclote</u>					
311	Structures and Improvements	-50.0%	-7.5%	-60.0%	-0.5%
312	Boiler Plant Equipment	-50.0%	-21.0%	-36.0%	-0.6%
314	Turbogenerator Units	-15.0%	-5.6%	-15.0%	-0.7%
315	Accessory Electric Equipment	-15.0%	-3.2%	-3.0%	0.0%
316	Misc. Power Plant Equipment	-10.0%	-4.4%	-6.0%	-0.5%
<u>Crystal River 1 & 2</u>					
311	Structures and Improvements	-50.0%	-7.5%	-60.0%	-0.3%
312	Boiler Plant Equipment	-50.0%	-21.0%	-36.0%	-0.4%
314	Turbogenerator Units	-15.0%	-5.6%	-15.0%	-0.4%
315	Accessory Electric Equipment	-15.0%	-3.2%	-3.0%	0.0%
316	Misc. Power Plant Equipment	-10.0%	-4.4%	-6.0%	-0.3%
<u>Crystal River 4 & 5</u>					
311	Structures and Improvements	-50.0%	-7.5%	-60.0%	-0.9%
312	Boiler Plant Equipment	-50.0%	-21.0%	-36.0%	-1.3%
314	Turbogenerator Units	-15.0%	-5.6%	-15.0%	-1.3%
315	Accessory Electric Equipment	-15.0%	-3.2%	-3.0%	0.0%
316	Misc. Power Plant Equipment	-10.0%	-4.4%	-6.0%	-1.0%
<u>Suwannee</u>					
311	Structures and Improvements	-50.0%	-7.5%	-60.0%	-0.2%
312	Boiler Plant Equipment	-50.0%	-21.0%	-36.0%	-0.1%
314	Turbogenerator Units	-15.0%	-5.6%	-15.0%	-0.1%
315	Accessory Electric Equipment	-15.0%	-3.2%	-3.0%	0.0%
316	Misc. Power Plant Equipment	-10.0%	-4.4%	-6.0%	-0.1%
<u>Bartow Pipeline</u>					
311	Structures and Improvements	-50.0%	-7.5%	-60.0%	-0.5%
312	Boiler Plant Equipment	-50.0%	-21.0%	-36.0%	-0.6%
314	Turbogenerator Units	-15.0%	-5.6%	0.0%	0.0%
315	Accessory Electric Equipment	-15.0%	-3.2%	-3.0%	0.0%
316	Misc. Power Plant Equipment	-10.0%	-4.4%	-6.0%	-0.5%
<u>Crystal River 3</u>					
321	Structures & Improvement	-15.0%	-4.4%	-7.0%	-0.2%
322	Reactor Plant Equip.	-20.0%	-12.4%	-4.0%	-0.3%
323	Turbogenerators	-15.0%	-12.5%	0.0%	0.0%
324	Accessory Ele. Equip.	-10.0%	-3.1%	0.0%	0.0%
325	Misc. Power Plant Equip.	-10.0%	-8.6%	0.0%	0.0%

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT NET SALVAGE
BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	PEF Overall Interim <u>Net Salvage</u>	PEF Effective Interim <u>Net Salvage</u>	OPC Overall Interim <u>Net Salvage</u>	OPC Effective Interim <u>Net Salvage</u>
341	Avon Park Peaking	0.0%	0.0%	0.0%	0.0%
341	Bartow Peaking	0.0%	0.0%	0.0%	0.0%
341	Bayboro Peaking	0.0%	0.0%	0.0%	0.0%
341	Debary Peaking	0.0%	0.0%	0.0%	0.0%
341	Debary Peaking P7-1 (New)	0.0%	0.0%	0.0%	0.0%
341	Higgins Peaking	0.0%	0.0%	0.0%	0.0%
341	Hines Energy Complex	0.0%	0.0%	0.0%	0.0%
341	Hines Energy Complex Unit # 2	0.0%	0.0%	0.0%	0.0%
341	Hines Energy Complex Unit # 3	0.0%	0.0%	0.0%	0.0%
341	Hines Energy Complex Unit # 4	0.0%	0.0%	0.0%	0.0%
341	Intercession City Peak # 11	0.0%	0.0%	0.0%	0.0%
341	Intercession City Peak P1-P6	0.0%	0.0%	0.0%	0.0%
341	Intercession City Peak P12-P14	0.0%	0.0%	0.0%	0.0%
341	Intercession City Peak P7-P10	0.0%	0.0%	0.0%	0.0%
341	Rio Pinar Peaking	0.0%	0.0%	0.0%	0.0%
341	Suwannee River Peaking	0.0%	0.0%	0.0%	0.0%
341	Tiger Bay Cogen	0.0%	0.0%	0.0%	0.0%
341	Turner Peaking	0.0%	0.0%	0.0%	0.0%
341	University of Fla Cogen	0.0%	0.0%	0.0%	0.0%
342	Avon Park Peaking	-5.0%	-2.6%	-6.0%	-0.1%
342	Bartow Peaking	-5.0%	-2.6%	-6.0%	-0.2%
342	Bartow Combined Cycle	-5.0%	-2.6%	-6.0%	-0.4%
342	Bayboro Peaking	-5.0%	-2.6%	-6.0%	-0.3%
342	Debary Peaking	-5.0%	-2.6%	-6.0%	-0.1%
342	Debary Peaking P7-1 (New)	-5.0%	-2.6%	-6.0%	-0.2%
342	Higgins Peaking	-5.0%	-2.6%	-6.0%	-0.1%
342	Hines Energy Complex	-5.0%	-2.6%	-6.0%	-0.3%
342	Hines Energy Complex Unit # 2	-5.0%	-2.6%	-6.0%	-0.3%
342	Hines Energy Complex Unit # 3	-5.0%	-2.6%	-6.0%	-0.4%
342	Hines Energy Complex Unit # 4	-5.0%	-2.6%	-6.0%	-0.4%
342	Intercession City Peak # 11	-5.0%	-2.6%	-6.0%	-0.2%
342	Intercession City Peak P1-P6	-5.0%	-2.6%	-6.0%	-0.1%
342	Intercession City Peak P12-P14	-5.0%	-2.6%	-6.0%	-0.4%
342	Intercession City Peak P7-P10	-5.0%	-2.6%	-6.0%	-0.3%
342	Rio Pinar Peaking	-5.0%	-2.6%	-6.0%	-0.1%
342	Suwannee River Peaking	-5.0%	-2.6%	-6.0%	-0.2%
342	Tiger Bay Cogen	-5.0%	-2.6%	-6.0%	-0.4%
342	Turner Peaking	-5.0%	-2.6%	-6.0%	-0.1%
342	University of Fla Cogen	-5.0%	-2.6%	-6.0%	-0.3%

**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT NET SALVAGE
BASED ON PLANT AS OF 12/31/2009**

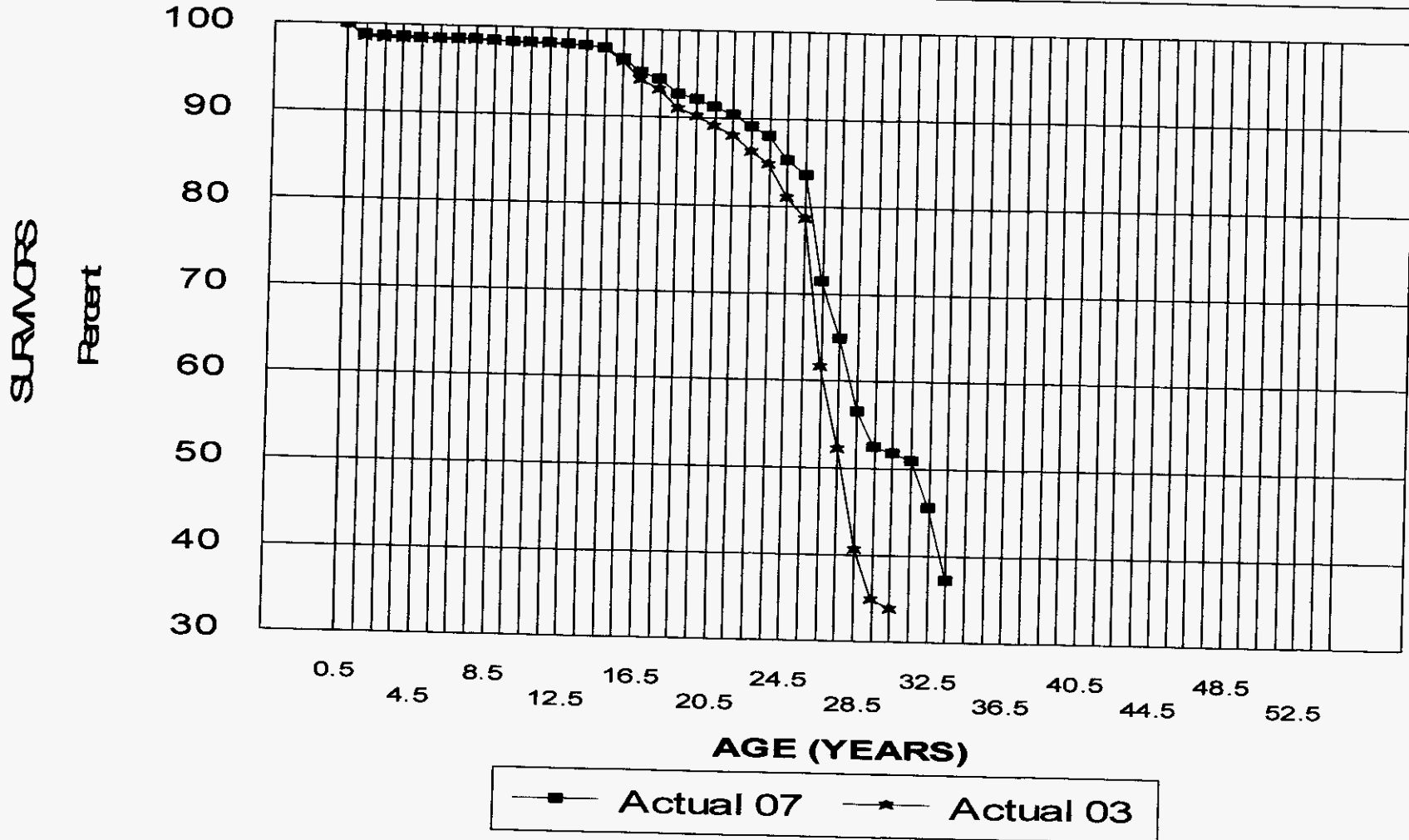
<u>Account</u>	<u>Description</u>	<u>PEF Overall Interim Net Salvage</u>	<u>PEF Effective Interim Net Salvage</u>	<u>OPC Overall Interim Net Salvage</u>	<u>OPC Effective Interim Net Salvage</u>
343	Avon Park Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Bartow Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Bartow Combined Cycle	-5.0%	-3.1%	0.0%	0.0%
343	Bayboro Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Debary Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Debary Peaking P7-1 (New)	-5.0%	-3.1%	0.0%	0.0%
343	Higgins Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Hines Energy Complex	-5.0%	-3.1%	0.0%	0.0%
343	Hines Energy Complex Unit # 2	-5.0%	-3.1%	0.0%	0.0%
343	Hines Energy Complex Unit # 3	-5.0%	-3.1%	0.0%	0.0%
343	Hines Energy Complex Unit # 4	-5.0%	-3.1%	0.0%	0.0%
343	Intercession City Peak # 11	-5.0%	-3.1%	0.0%	0.0%
343	Intercession City Peak P1-P6	-5.0%	-3.1%	0.0%	0.0%
343	Intercession City Peak P12-P14	-5.0%	-3.1%	0.0%	0.0%
343	Intercession City Peak P7-P10	-5.0%	-3.1%	0.0%	0.0%
343	Rio Pinar Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Suwannee River Peaking	-5.0%	-3.1%	0.0%	0.0%
343	Tiger Bay Cogen	-5.0%	-3.1%	0.0%	0.0%
343	Turner Peaking	-5.0%	-3.1%	0.0%	0.0%
343	University of Fla Cogen	-5.0%	-3.1%	0.0%	0.0%
344	Avon Park Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Bartow Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Bayboro Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Debary Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Debary Peaking P7-1 (New)	-5.0%	-1.0%	0.0%	0.0%
344	Higgins Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Hines Energy Complex	-5.0%	-1.0%	0.0%	0.0%
344	Hines Energy Complex Unit # 2	-5.0%	-1.0%	0.0%	0.0%
344	Hines Energy Complex Unit # 3	-5.0%	-1.0%	0.0%	0.0%
344	Hines Energy Complex Unit # 4	-5.0%	-1.0%	0.0%	0.0%
344	Intercession City Peak # 11	-5.0%	-1.0%	0.0%	0.0%
344	Intercession City Peak P1-P6	-5.0%	-1.0%	0.0%	0.0%
344	Intercession City Peak P12-P14	-5.0%	-1.0%	0.0%	0.0%
344	Intercession City Peak P7-P10	-5.0%	-1.0%	0.0%	0.0%
344	Rio Pinar Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Suwannee River Peaking	-5.0%	-1.0%	0.0%	0.0%
344	Tiger Bay Cogen	-5.0%	-1.0%	0.0%	0.0%
344	Turner Peaking	-5.0%	-1.0%	0.0%	0.0%
344	University of Fla Cogen	-5.0%	-1.0%	0.0%	0.0%

Docket No. 090079-EI
Interim Net Salvage Summary
Exhibit No. (JP-5)
Page 4 OF 4

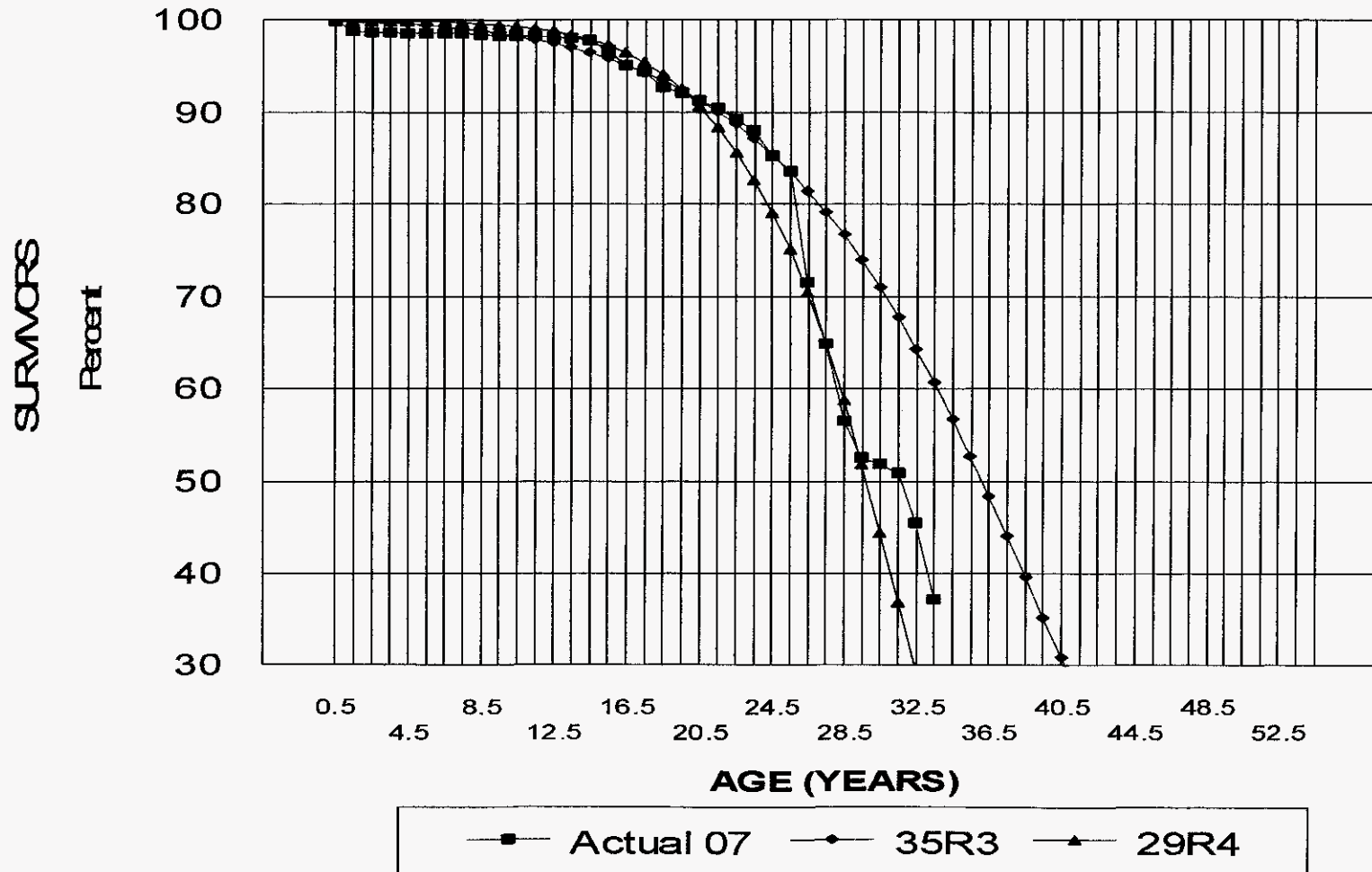
**OFFICE OF PUBLIC COUNSEL'S
RECOMMENDED INTERIM RETIREMENT NET SALVAGE
BASED ON PLANT AS OF 12/31/2009**

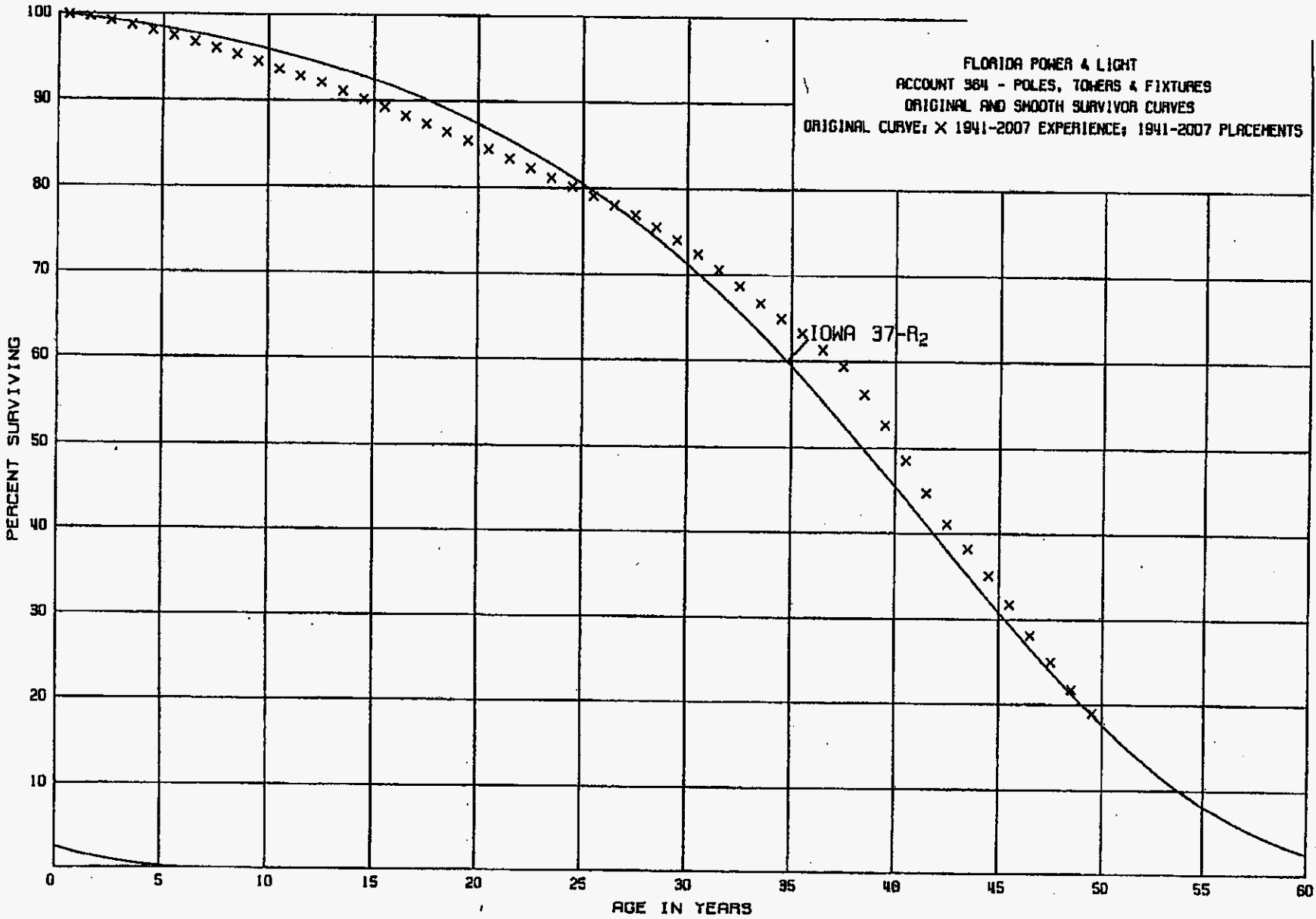
<u>Account</u>	<u>Description</u>	PEF Overall Interim <u>Net Salvage</u>	PEF Effective Interim <u>Net Salvage</u>	OPC Overall Interim <u>Net Salvage</u>	OPC Effective Interim <u>Net Salvage</u>
345	Avon Park Peaking	-15.0%	-3.6%	-7.0%	-0.1%
345	Bartow Peaking	-15.0%	-3.6%	-7.0%	-0.3%
345	Bayboro Peaking	-15.0%	-3.6%	-7.0%	-0.3%
345	Debary Peaking	-15.0%	-3.6%	-7.0%	-0.2%
345	Debary Peaking P7-1 (New)	-15.0%	-3.6%	-7.0%	-0.2%
345	Higgins Peaking	-15.0%	-3.6%	-7.0%	-0.1%
345	Hines Energy Complex	-15.0%	-3.6%	-7.0%	-0.3%
345	Hines Energy Complex Unit # 2	-15.0%	-3.6%	-7.0%	-0.3%
345	Hines Energy Complex Unit # 3	-15.0%	-3.6%	-7.0%	-0.4%
345	Hines Energy Complex Unit # 4	-15.0%	-3.6%	-7.0%	-0.4%
345	Intercession City Peak # 11	-15.0%	-3.6%	-7.0%	-0.2%
345	Intercession City Peak P1-P6	-15.0%	-3.6%	-7.0%	-0.2%
345	Intercession City Peak P12-P14	-15.0%	-3.6%	-7.0%	-0.4%
345	Intercession City Peak P7-P10	-15.0%	-3.6%	-7.0%	-0.3%
345	Rio Pinar Peaking	-15.0%	-3.6%	-7.0%	-0.1%
345	Suwannee River Peaking	-15.0%	-3.6%	-7.0%	-0.2%
345	Tiger Bay Cogen	-15.0%	-3.6%	-7.0%	-0.4%
345	Turner Peaking	-15.0%	-3.6%	-7.0%	-0.1%
345	University of Fla Cogen	-15.0%	-3.6%	-7.0%	-0.3%
346	Avon Park Peaking	-15.0%	-3.5%	-23.0%	-0.1%
346	Bartow Peaking	-15.0%	-3.5%	-23.0%	-0.3%
346	Bayboro Peaking	-15.0%	-3.5%	-23.0%	-0.4%
346	Debary Peaking	-15.0%	-3.5%	-23.0%	-0.2%
346	Debary Peaking P7-1 (New)	-15.0%	-3.5%	-23.0%	-0.3%
346	Higgins Peaking	-15.0%	-3.5%	-23.0%	-0.1%
346	Hines Energy Complex	-15.0%	-3.5%	-23.0%	-0.4%
346	Hines Energy Complex Unit # 2	-15.0%	-3.5%	-23.0%	-0.5%
346	Hines Energy Complex Unit # 3	-15.0%	-3.5%	-23.0%	-0.5%
346	Hines Energy Complex Unit # 4	-15.0%	-3.5%	-23.0%	-0.5%
346	Intercession City Peak # 11	-15.0%	-3.5%	-23.0%	-0.2%
346	Intercession City Peak P1-P6	-15.0%	-3.5%	-23.0%	-0.2%
346	Intercession City Peak P12-P14	-15.0%	-3.5%	-23.0%	-0.5%
346	Intercession City Peak P7-P10	-15.0%	-3.5%	-23.0%	-0.4%
346	Rio Pinar Peaking	-15.0%	-3.5%	-23.0%	-0.1%
346	Suwannee River Peaking	-15.0%	-3.5%	-23.0%	-0.3%
346	Tiger Bay Cogen	-15.0%	-3.5%	-23.0%	-0.6%
346	Turner Peaking	-15.0%	-3.5%	-23.0%	-0.1%
346	University of Fla Cogen	-15.0%	-3.5%	-23.0%	-0.5%

Docket No. 090079-EI, Exhibit No.__(JP-6), Mass Property Life Analyses, Page 1 of 1
364 - DISTRIBUTION POLES, TOWERS & FIXTURES



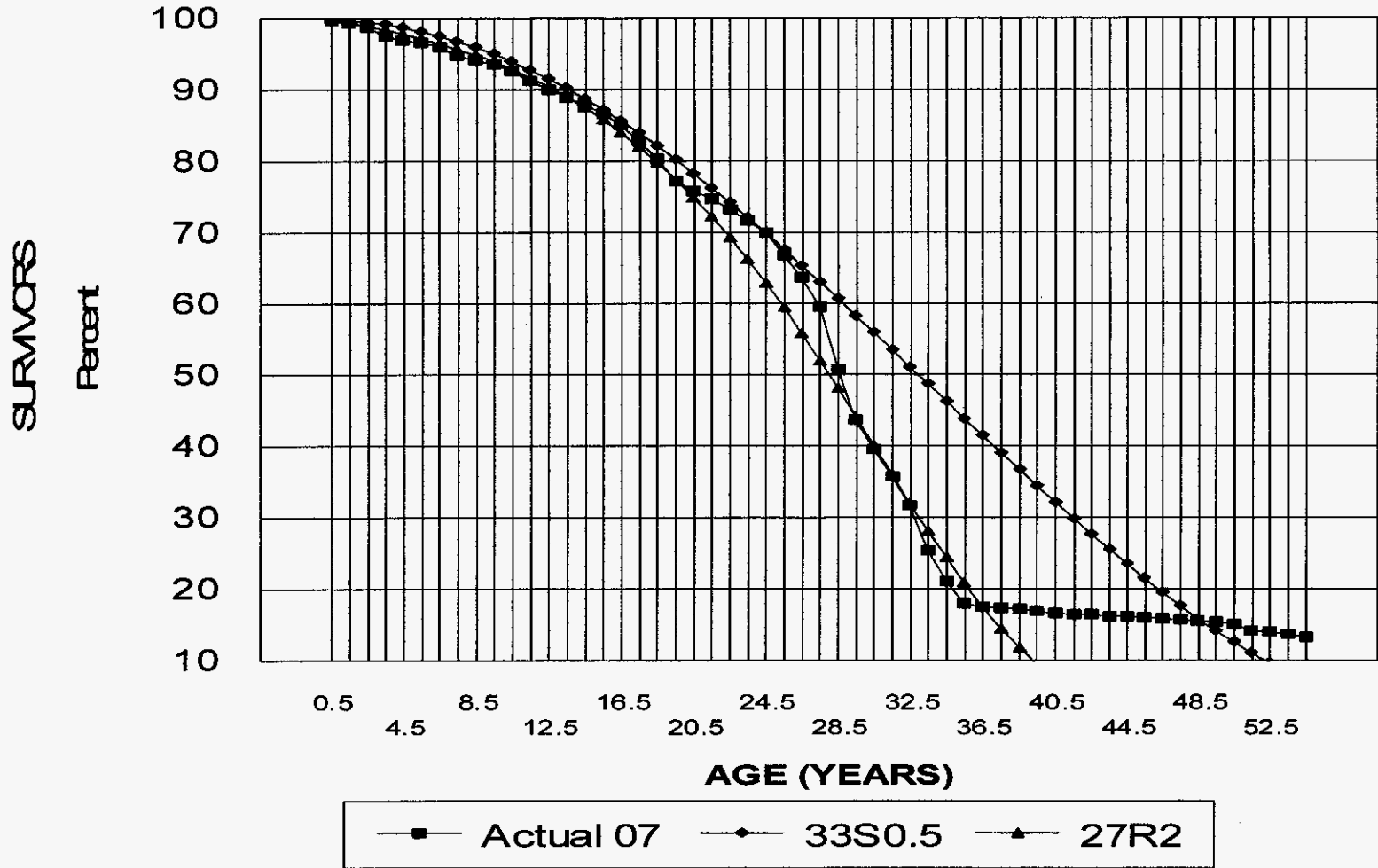
Docket No. 090079-EI, Mass Property Life Analyses, Exhibit No. _(JP-7), Page 1 of 1
364 - DISTRIBUTION POLES, TOWERS & FIXTURES





V-100

Docket No. 090079-EI, Mass Life Analyses, Exhibit No. _(JP-9), Page 1 of 1
368 - DISTRIBUTION LINE TRANSFORMERS



**OFFICE OF PUBLIC COUNSEL'S
 COMPARISON OF MASS PROPERTY NET SALVAGE
 BASED ON PLANT AS OF 12/31/2009**

<u>Account</u>	<u>Description</u>	<u>PEF Proposal</u>	<u>OPC Recommendation</u>	<u>Difference</u>
353.1	Transmission Station Equipmen	0%	5%	5%
355	Transmission Poles & Fixtures	-50%	-25%	25%
356	Transmission Conductors	-30%	-10%	20%
358	Transmission UG Conductors	-3%	0%	3%
362	Distribution Station Equipment	-15%	0%	15%
364	Poles, Towers and Fixtures	-50%	-35%	15%
365	Distribution OH Conductors	-45%	-20%	25%
366	Distribution UG Conduit	-10%	0%	10%
367	Distribution UG Conductors	-10%	-5%	5%
368	Distribution Line Transformers	-15%	-5%	10%
369.1	Distribution Services-Overhead	-50%	-40%	10%
369.2	Distribution Services-UG	-15%	0%	15%
370	Meters	-10%	-6%	4%
373	Distribution Street Lighting	-20%	-5%	15%
390	General Structures & Imprvmnts	-5%	15%	20%

IOWA SURVIVOR CURVES

Iowa Curves are the result of extensive analysis by Professor Robley Winfrey and others at Iowa State University. These curves represent retirement frequency patterns of empirically derived data over extensive periods of time. For depreciation purposes it has been determined that such curves provide curve shapes reflecting different patterns of retirement frequencies over time applicable to most plant in service of utilities.

The theory is that the generic curve shape will produce a definable pattern over time for the survival characteristics of utility property. Curves are broken down into left "L" modal, symmetrical "S" modal curves and right "R" modal curves. The L, S, and R simply reflect the anticipation of whether the pattern of retirements will exhibit characteristics of whether the survivor curve will cross the fifty (a50) percent surviving to the left of average service life, symmetrical with the average service life or to the right of the average service life. In addition, the numeric character zero through five (5) or six (6) in conjunction with the L, S, or R designation indicates the peakedness of the type of curve in question. In other words, a low modal (0 or 1) left, symmetrical or right curve will indicate that the retirement frequency experienced over the entire life span of the plan in question is relatively uniform. On the other than, a high modal (4, 5, 05 6) associated with a left, symmetrical or right curve indicates that the retirement frequency for such curves are low at the beginning and end of the life cycle, yet have their peak annual level of retirement near or around the average service life of the plant in question.

IOWA SURVIVOR CURVES

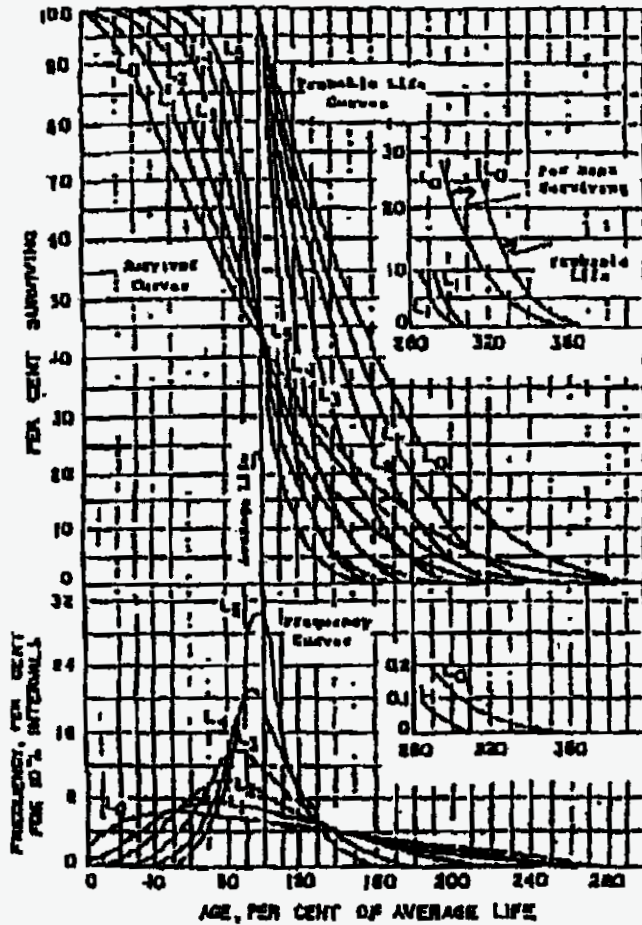


Fig. 14 Final survivor, Probable-life, and Frequency Curves for the Left-tailed Type
 Winthrop, Bulletin 116, p. 70.

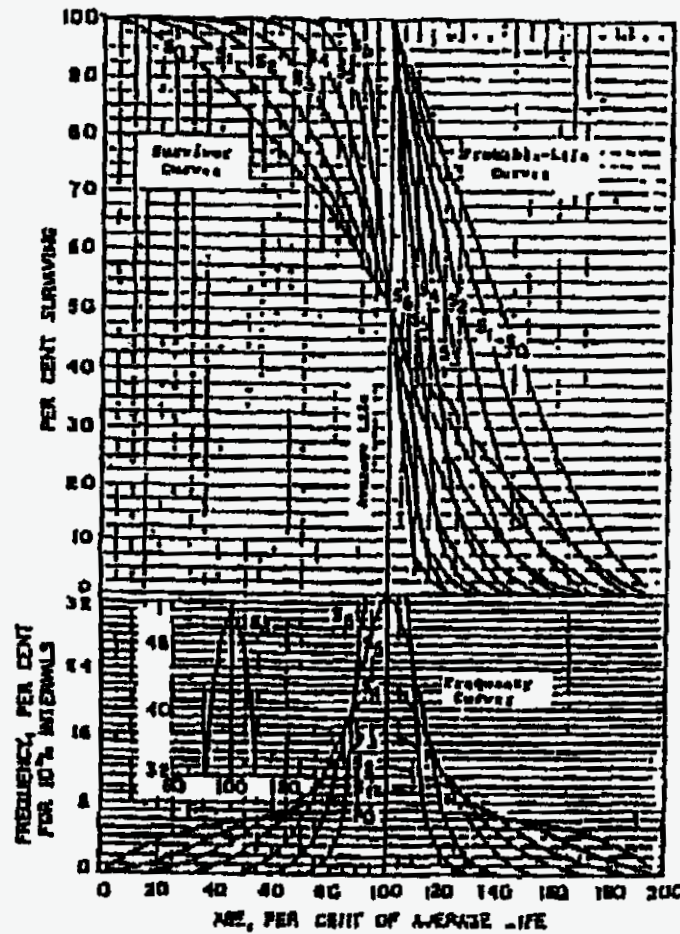


Fig. 15 Final survivor, Probable-life, and Frequency Curves for the Symmetrical Type
 Winthrop, Bulletin 116, p. 71.

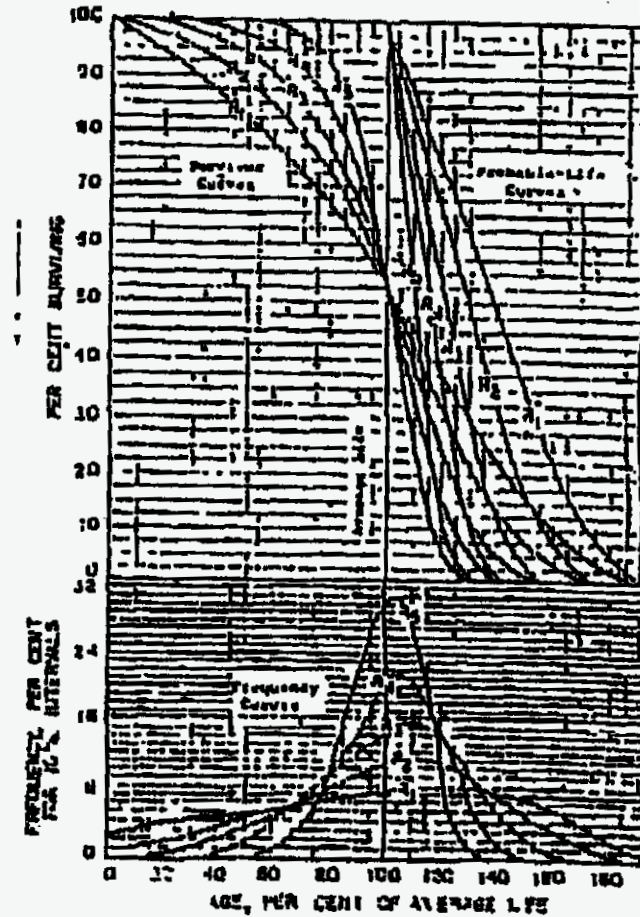


Fig. 16 Final survivor, Probable-life, and Frequency Curves for the Right-tailed Type
 Winthrop, Bulletin 116, p. 72.