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BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of:

DOCKET NO. 20190155-EI

PETITION FOR ESTABLISHMENT  
OF REGULATORY ASSETS FOR  
EXPENSES NOT RECOVERED  
DURING RESTORATION FOR  
HURRICANE MICHAEL, BY  
FLORIDA PUBLIC UTILITIES  
COMPANY.

DOCKET NO. 20190156-EI

PETITION FOR A LIMITED  
PROCEEDING TO RECOVER  
INCREMENTAL STORM  
RESTORATION COSTS, CAPITAL  
COSTS, REVENUE REDUCTION  
FOR PERMANENTLY LOST  
CUSTOMERS, AND REGULATORY  
ASSETS RELATED TO HURRICANE  
MICHAEL, BY FLORIDA PUBLIC  
UTILITIES COMPANY.

DOCKET NO. 20190174-EI

PETITION FOR APPROVAL OF  
2019 DEPRECIATION STUDY BY  
FLORIDA PUBLIC UTILITIES  
COMPANY.

\_\_\_\_\_ /

VOLUME 2  
PAGES 182 through 351

PROCEEDINGS: HEARING

COMMISSIONERS  
PARTICIPATING: CHAIRMAN GARY F. CLARK  
COMMISSIONER ART GRAHAM  
COMMISSIONER JULIE I. BROWN  
COMMISSIONER DONALD J. POLMANN  
COMMISSIONER ANDREW GILES FAY

1     DATE:                   Monday, September 21, 2020  
2     TIME:                   Commenced: 11:00 a.m.  
                              Concluded: 11:18 a.m.  
3  
4     PLACE:                  Betty Easley Conference Center  
                              Room 148  
                              4075 Esplanade Way  
5                              Tallahassee, Florida  
6     REPORTED BY:          ANDREA KOMARIDIS WRAY  
                              Court Reporter  
7  
8     APPEARANCES:          (As heretofore noted.)

9                              PREMIER REPORTING  
10                             114 W. 5TH AVENUE  
                              TALLAHASSEE, FLORIDA  
11                             (850) 894-0828

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## I N D E X

## WITNESSES

NAME :

PAGE NO.

HELMUTH W. SCHULTZ, III

Prefiled direct testimony inserted

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DAVID J. GARRETT

Prefiled direct testimony inserted

246

DEBRA M. DOBIAC

Prefiled direct testimony inserted

331

CARL VINSON

Prefiled direct testimony inserted

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P R O C E E D I N G S

(Transcript follows in sequence from  
Volume 1.)

1                   (Whereupon, Witness Schultz's prefiled direct  
2           testimony was inserted into the record as though  
3           read.)

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## ERRATA SHEET

WITNESS: Helmuth W. Schultz

The following table contains the corrected errata in his direct testimony.

| <u>Page</u> | <u>Line</u> | <u>Original</u> | <u>Revision</u> |
|-------------|-------------|-----------------|-----------------|
| Page 5      | Line 16     | WAAC            | WACC            |
| Page 12     | Line 22     | WAAC            | WACC            |
| Page 19     | Line 2      | WAAC            | WACC            |
| Page 26     | Line 21     | WHERE           | WERE            |
| Page 27     | Line16      | \$116,469       | \$166,469       |

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for a limited proceeding to recover incremental storm restoration costs, capital costs, revenue reduction for permanently lost customers, and regulatory assets related to Hurricane Michael, by Florida Public Utilities Company.

DOCKET NO. 20190156-EI

In re: Petition for establishment of regulatory assets for expenses not recovered during restoration for Hurricane Michael, by Florida Public Utilities Company.

DOCKET NO. 20190155-EI

In re: Petition for approval of 2019 depreciation study by Florida Public Utilities Company.

DOCKET NO. 20190174-EI

DATED: July 2, 2020

**REDACTED**

**DIRECT TESTIMONY**

**OF**

**HELMUTH SCHULTZ III**

**ON BEHALF OF THE OFFICE OF PUBLIC COUNSEL**

J. R. Kelly

Public Counsel

Patricia Christensen  
Associate Public Counsel  
Office of Public Counsel  
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Attorneys for the Citizens  
of the State of Florida

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**DIRECT TESTIMONY**  
**OF**  
**Helmuth W. Schultz, III**

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 20190156-EI, Docket No. 20190155-EI and Docket No. 20190174-EI

1        **I. STATEMENT OF QUALIFICATIONS**

2        **Q.     PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS ADDRESS.**

3        A.     My name is Helmuth W. Schultz, III. I am a Certified Public Accountant licensed in  
4           the State of Michigan and a senior regulatory consultant at the firm Larkin &  
5           Associates, PLLC, (“Larkin”) Certified Public Accountants, with offices at 15728  
6           Farmington Road, Livonia, Michigan, 48154.

7        **Q.     PLEASE DESCRIBE THE FIRM LARKIN & ASSOCIATES, P.L.L.C.**

8        A.     Larkin performs independent regulatory consulting primarily for public service/utility  
9           commission staffs and consumer interest groups (public counsel, public advocates,  
10          consumer counsel, attorneys general, etc.). Larkin has extensive experience in the  
11          utility regulatory field as expert witnesses in over 600 regulatory proceedings,  
12          including water and sewer, gas, electric and telephone utilities.

13       **Q.     HAVE YOU PREPARED AN EXHIBIT WHICH DESCRIBES YOUR**  
14       **EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE?**

1 A. Yes. I have attached Exhibit No. HWS-1, which is a summary of my background,  
2 experience and qualifications.

3 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC**  
4 **COMMISSION AS AN EXPERT WITNESS?**

5 A. Yes. I have provided testimony before the Florida Public Service Commission  
6 (“Commission” or “FPSC”) as an expert witness in the area of regulatory accounting  
7 and storm recovery in numerous cases as listed in Exhibit No. HWS-1.

8 **Q. BY WHOM WERE YOU RETAINED, AND WHAT IS THE PURPOSE OF**  
9 **YOUR TESTIMONY?**

10 A. Larkin was retained by the Florida Office of Public Counsel (“OPC”) to review the  
11 petitions filed by Florida Public Utilities Company’s (the “Company” or “FPUC”)   
12 requesting recovery of 2018 incremental storm costs, and requesting a limited  
13 proceeding for recovery on new plant, accumulated depreciation, the establishment of  
14 regulatory assets and recovery of lost revenues. The request related to storm cost  
15 recovery is for an annual recovery of \$11,884,648 based on a jurisdictional rate base of  
16 \$67,248,113 of costs, inclusive of interest, associated with Hurricanes Michael and  
17 Dorian.<sup>1</sup> Accordingly, I am appearing on behalf of the citizens of Florida (“Citizens”)  
18 who are customers of FPUC.

19 **II. BACKGROUND**

20 **Q. PLEASE SUMMARIZE YOUR UNDERSTANDING OF THE COMPANY’S**  
21 **REQUEST.**

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<sup>1</sup> Company Revised MDN-1, Revised A-1.

1 A. Docket No. 20190155-EI is described by FPUC as a petition for the establishment of  
2 regulatory assets for expenses not recovered during the restoration of service associated  
3 with Hurricane Michael. Docket No. 20190156-EI is described by FPUC as a petition  
4 for a limited proceeding to recover incremental storm costs, capital costs, revenue  
5 reduction for permanently lost customers, and regulatory assets associated with  
6 Hurricane Michael. These dockets were consolidated along with the 2019 depreciation  
7 study in Docket No. 20190174-EI. What is not included in the description of these  
8 petitions is the Company's request to treat the recovery as if this is a single-issue rate  
9 case, including earning a rate of return (essentially a profit) based on the Weighted  
10 Average Cost of Capital ("WACC") on the storm costs, new capital additions and  
11 requested regulatory assets, that factors in a purported jurisdictional adjusted net  
12 operating loss and the subsequent addition of costs associated with Hurricane Dorian.

13 **Q. PLEASE SUMMARIZE WHAT THE COMPANY INCLUDED IN ITS**  
14 **REQUEST TO THE COMMISSION?**

15 A. The August 7, 2019, petition filed by FPUC seeks recovery of \$67,684,489 to pay for  
16 alleged costs resulting from Hurricane Michael. The initial request proposed recovery  
17 of \$8,777,340 on an annual basis. That request was determined by applying a rate of  
18 return to a rate base consisting of the four requested regulatory assets and the  
19 capitalized plant that was replaced during the storm. The resulting revenue requirement  
20 was then compared to a calculated jurisdictional net operating loss based on the alleged  
21 lost revenues added to the costs associated with Hurricane Michael. The proposed  
22 amortization of the regulatory assets for undepreciated plant and storm costs was for a  
23 period of 30 years. Amortization for the claimed lost revenues for unrecovered

1 expenses and lost customers was 5 years. The Company's initial petition  
2 acknowledged that this request is unique and that some aspects might seem more  
3 appropriately handled through a full rate case.<sup>2</sup> On March 11, 2020, FPUC filed a  
4 revised petition along with direct testimony requesting recovery of \$67,248,113 with  
5 an annual revenue requirement of \$11,884,648. The change in total costs is attributed  
6 to various changes to FPUC's original request for costs associated with Hurricane  
7 Michael and FPUC's additional request for \$1.2 million in costs attributed to Hurricane  
8 Dorian. The most significant change in the annual recovery amount is because FPUC  
9 revised the requested amortization period for the undepreciated plant and storm costs  
10 from 30 years to 10 years, which increased the alleged Net Operating Loss by \$2.5  
11 million.

12 **Q. WHY WAS THE AMORTIZATION PERIOD ACCELERATED AS PART OF**  
13 **THE COMPANY'S REVISED FILING?**

14 A. In his testimony, Company witness Michael Cassel explains that after the initial filing,  
15 the Commission approved a reduction in FPUC's Fuel Cost Recovery factor in Order  
16 No. PSC -2019-0501-PCO-EI. He further explained that in order to avoid customer  
17 confusion by decreasing overall rates and shortly thereafter raising overall rates, the  
18 Company adjusted the amortization period of the storm costs, thereby mitigating the  
19 rate shock impact to customers.<sup>3</sup>

20 **Q. ARE YOU ADDRESSING THE ENTIRETY OF THE COMPANY'S**  
21 **REQUEST?**

---

<sup>2</sup> Petition of FPUC dated August 7, 2019, Page 9, Paragraph 17, in Docket No. 20190156-EI.

<sup>3</sup> Revised Direct Testimony of Michael Cassel, Pages 9-11.

1 A. Yes, I will be. The type of costs requested will be discussed by classification as well  
2 as the overall appropriateness of FPUC's unusual requests. First, I will discuss the  
3 appropriateness of the single-issue rate case approach. This will include FPUC's  
4 request for a return on new plant and a regulatory asset for unrecovered accumulated  
5 depreciation. Next, I will discuss the requested recovery of the lost revenue, then the  
6 alleged unrecovered expenses and finally the storm costs regulatory asset. As part of  
7 my analysis, I relied on my experience in analyzing storm costs in other jurisdictions,  
8 my past review of storm costs in Florida, and Rule 25-6.0143, Florida Administrative  
9 Code ("F.A.C"), which addresses what costs should be included and excluded from a  
10 utility's request for recovery of storm related costs. To the extent any of the storm  
11 costs are determined to be inappropriate, the request for recovery should be reduced.

12 My recommended adjustments to FPUC's storm recovery requests are  
13 contained in my Exhibits labeled HWS-2 through HWS-8 attached to this testimony.  
14 On Exhibit HWS-2, I reflect my analysis of FPUC's requests and my recommendations  
15 for adjusting the requests. Exhibit HWS-3 provides a calculation that shows FPUC's  
16 requested revenue requirement using its ~~WAAC~~ WACC is \$2,387,149 higher than what  
17 FPUC's revenue requirement would be if its short-term debt rate was appropriately  
18 applied to the requested rate base treatment. Exhibit HWS-4 provides a calculation that  
19 shows FPUC's revenue requirement would be \$2,493,271 lower if plant costs were  
20 appropriately excluded from FPUC's request. On Exhibit HWS-5, I have calculated  
21 an adjustment to line contractor costs for excessive charges billed by Florida Power  
22 and Light Company ("~~FPUC~~ FPL") when compared to all the other vendors' costs,  
23 including the related costs for logistics and other costs. Exhibit HWS-6 provides a

1 sample of the detail provided by a vendor as support for its invoices, and Exhibits  
2 HWS-7 and Exhibit HWS-8 are samples of FPUC review documents.

3 **III. SINGLE-ISSUE RATE CASE**

4 **Q. DO YOU CONSIDER FPUC'S REQUESTS IN ITS LIMITED PROCEEDING**  
5 **TO BE A SINGLE-ISSUE RATE CASE?**

6 A. Yes, I do. In its petition for limited proceeding, FPUC is requesting the Commission  
7 to allow a return on new plant and to focus solely on selective increased costs and to  
8 establish them as regulatory assets. This is essentially a single-issue rate case.

9 **Q. WHAT IS A SINGLE-ISSUE RATE CASE?**

10 A. A single-issue rate case focuses on essentially a single group of issues (or costs in this  
11 docket) that would typically be included in a traditional rate case but excludes any  
12 consideration to other changes in costs, revenues or rate base. A traditional rate case  
13 includes many issues for consideration such as estimated costs for payroll, changes in  
14 maintenance and operating costs, changes to plant and other rate base components,  
15 changes to the capital structure and changes in the return on equity based on current  
16 economic conditions and comparable returns currently allowed other regulated utilities.

17 **Q. CAN YOU EXPLAIN WHY YOU BELIEVE FPUC'S REQUEST IS A**  
18 **SINGLE-ISSUE RATE CASE?**

19 A. Yes. In a normal storm recovery petition, a utility will request recovery of only the  
20 expenses it incurred to bring its system back on-line after a named storm event. The  
21 recovery of these expenses is governed by Rule 25-6.0143, F.A.C. The actual,  
22 legitimate storm costs are recovered from the storm accrual account or as a surcharge

1 per a settlement agreement. No profit is added to these costs, and new capital additions  
2 are addressed in the utility's next base rate case.

3 In contrast, in this docket FPUC is seeking unusual treatment for certain costs  
4 it allegedly incurred associated with Hurricane Michael. Specifically, FPUC is  
5 requesting to earn a rate of return based on the WACC on both the storm costs and new  
6 capital additions. In addition, FPUC is seeking creation of regulatory assets for lost  
7 revenues due to the reduction in its customers and O&M expenses that it claims were  
8 unrecovered which also includes a profit margin based on WACC. The Company is  
9 also seeking creation of a regulatory asset for depreciation-related costs.

10 **Q. WHAT IS THE ISSUE WITH FPUC'S REQUEST WITH RESPECT TO IT**  
11 **BEING A SINGLE-ISSUE RATE CASE?**

12 A. The Company's filing assumes that there are no changes to revenue and expenses  
13 outside of the costs included in its filing. As a result, FPUC wants the Commission to  
14 focus on one set of costs and disregard the consideration of any other issues related to  
15 changes in revenue or costs. It is not appropriate to make this assumption and disregard  
16 other adjustments since it has been years since FPUC has filed a base rate case. In  
17 addition, it is clear that FPUC is more likely than not to file a rate case in the near  
18 future. In response to Citizen's Interrogatory No. 5-107, the Company stated the loss  
19 reflected in its calculated revenue requirement for 2020 is based on a traditional rate  
20 case approach. Clearly, the filing in this docket is not a traditional rate case because  
21 FPUC does not want to factor in *all* revenues and expenses normally considered when  
22 setting base rates. Using the single-issue calculated loss from the hurricane is not  
23 appropriate because: (1) it includes amortization of lost revenues due to lost customers

1 in 2018 and all of 2019 which is not allowed as part of the recovery process for storm  
2 restoration; (2) it includes amortization of what is labeled an unrecovered expense that  
3 is in reality lost revenue, which is not allowed by the Commission's storm Rule as part  
4 of recovery of storm costs; (3) and it includes amortization and depreciation of retired  
5 plant and new plant, respectively, that are more appropriate to be addressed in FPUC's  
6 next base rate case.

7 **Q. CAN YOU BRIEFLY EXPLAIN THE DIFFERENCE BETWEEN THE**  
8 **CALCULATION OF A TRADITIONAL STORM CHARGE AND FPUC'S**  
9 **REQUEST?**

10 A. In a traditional petition seeking the recovery of storm costs incurred during restoration  
11 related to a named storm event, the Commission determines the amount of prudently  
12 incurred storm costs for recovery, establishes the recovery period, and establishes the  
13 annual surcharge based on recovery of the approved amount of prudent storm costs  
14 over the approved time period.

15 In this docket, FPUC is not only seeking to recover normal storm costs but also  
16 additional costs by applying traditional base rate case calculations to specific cost items  
17 without consideration of all traditional base rate case issues.

18 **Q. EARLIER YOU STATED THAT THERE WAS AN INCREASE IN THE**  
19 **REVENUE REQUIREMENT FROM \$8,777,340 IN THE ORIGINAL FILING**  
20 **TO \$11,884,648 IN THE REVISED FILING AND THAT WAS ATTRIBUTED,**  
21 **IN PART, TO AN INCREASE IN THE NET OPERATING LOSS BY \$2.5**

1           **MILLION. WOULD YOU EXPLAIN IN MORE DETAIL HOW THAT**  
2           **CHANGED FPUC'S REQUEST FOR RECOVERY?**

3    A.    Yes. The Company's initial filing included lost revenue and depreciation expense,  
4           amortization expense and added taxes in calculating a Jurisdictional Adjusted Net  
5           Operating Loss of \$2,292,738. After applying the requested Net Operating Income  
6           Multiplier of 1.3442, the Revenue Requirement for the Jurisdictional Adjusted Net  
7           Operating Loss, alone, was \$3,081,898 of the \$8,777,340. That one component is  
8           35.11% of the initial requested amount. When the Company revised its filing, the  
9           Jurisdictional Adjusted Net Operating Loss increased to \$4,722,730 (an increase of  
10          \$2.5 million). After, application of the Net Operating Income Multiplier of 1.3295 the  
11          Revenue Requirement for the Jurisdictional Adjusted Net Operating Loss increased to  
12          \$6,278,870, which is 52.83% of the current Revenue Requirement request of  
13          \$11,884,648. Thus, single issue rate making is the major contributor to FPUC's  
14          requested Revenue Requirement.

15   **Q.    IS FPUC'S UNPRECEDENTED REQUEST TO APPLY WACC TREATMENT**  
16   **TO THE RECOVERY OF STORM RESTORATION COSTS APPROPRIATE?**

17   A.    No, it is not. First, FPUC's request to apply a rate of return to storm cost recovery  
18          effectively rewards the Company with a profit margin on the storm costs by applying  
19          a WACC. It is not appropriate for any utility to earn a profit on costs it incurs to restore  
20          service after a storm. These are extraordinary costs incremental to a utility's normal  
21          operations and maintenance (O&M) costs that are recovered through base rates, and  
22          there is no justification for those storm dollars to earn a profit for shareholders.

1 **Q. DOES FPUC'S REQUEST TO APPLY WACC TO THE NEW CAPITAL**  
2 **ADDITIONS REWARD THE COMPANY WITH A PROFIT MARGIN?**

3 A. Yes, it would. If the Company's request is approved by the Commission, FPUC would  
4 be allowed to recover costs for new plant that would typically (and should) be delayed  
5 until the Company files its next base rate case. This issue is complicated by the fact  
6 that FPUC's request includes recovery of the net book value of retired plant without  
7 considering the fact that the cost of that retired plant is being recovered through current  
8 base rates, essentially allowing a double recovery. This new plant request is another  
9 issue that is not part of a typical storm recovery proceeding and should be considered  
10 in a future base rate case.

11 **Q. DOES FPUC'S REQUEST TO APPLY WACC TO THE REQUESTED**  
12 **REGULATORY ASSETS REWARD THE COMPANY WITH A PROFIT**  
13 **MARGIN?**

14 A. Yes, it would. FPUC is requesting the application of WACC to its requested recovery  
15 of lost revenues for prior periods in two ways. First, the Company is requesting  
16 recovery for what is specifically identified as lost revenues due to the loss of customers.  
17 The second lost revenues requested are masked by the title "expenses not recovered."  
18 If FPUC's request is approved by the Commission, it would earn a profit on both of  
19 these amounts which is not appropriate.

20 **Q. ARE THERE FAIRNESS REASONS WHY THE COMPANY SHOULD NOT**  
21 **BE ALLOWED TO EARN A PROFIT ON RESTORATION COSTS**  
22 **INCURRED AS A RESULT OF A STORM EVENT?**

1 A. Yes, the occurrence of a storm is a unique event that impacts service to a utility's  
2 customers and creates an additional level of costs over and above that which is  
3 necessary for providing every day electrical service. As a result of Hurricanes Michael  
4 and Dorian, FPUC's customers were inconvenienced with a loss of service and incurred  
5 damages to their own property. Awarding FPUC with a profit margin in the form of a  
6 return on equity penalizes FPUC's customers even more. The question to the  
7 Commission is whether a utility's shareholders should benefit financially from a storm  
8 event? In my professional opinion, the answer is a resounding no.

9 **Q. IS IT APPROPRIATE IN THIS DOCKET TO ALLOW THIS SINGLE ISSUE**  
10 **RATE CASE?**

11 A. No, it is not. Normally, customers provide a fair and reasonable profit margin to FPUC  
12 as part of a base rate filing when the WACC is applied to the Company's rate base. A  
13 base rate case looks at all of the new capital additions and retirements added to rate  
14 base since the utility's last rate case, its current cost of capital and its current O&M  
15 expenses.

16 Clearly, there is a significant difference between the costs that are considered  
17 in a single-issue rate case which are selectively limited versus a traditional rate case  
18 which is inclusive of all relevant costs. This difference is significant and should not be  
19 ignored. When you actually review FPUC's petitions and move beyond the subterfuge,  
20 what the Company is actually seeking is a single-issue rate case that not only duplicates  
21 some cost recovery, but also ignores FPUC's changes in revenues and expenses that  
22 would be evaluated as part of a full base rate filing petition.

1 **Q. IF THE COMPANY INCURRED ADDITIONAL COSTS NOT CHARGEABLE**  
2 **TO ACCOUNT 228.1 DUE TO THE STORMS, WHAT IS THE APPROPRIATE**  
3 **RECOVERY MECHANISM FOR THOSE COSTS?**

4 A. If FPUC accumulated legitimate costs not chargeable to Account 228.1, then the  
5 Company could request regulatory asset treatment for consideration in a future base  
6 rate proceeding. Since the timing of recovery is at a cost to the Company, FPUC should  
7 be allowed to accrue interest at the short-term cost of debt until fully recovered. The  
8 cost incurred, if determined to be appropriate, plus interest would then be amortized  
9 into rates over a period of time but excluded from rate base. This approach would  
10 ensure ratepayers are not penalized by having to pay a profit margin to FPUC, and the  
11 Company is not penalized because it will be compensated for the additional costs it  
12 incurred that were associated with the storms.

13 **Q. HOW WOULD THE REQUESTED 2020 PROJECTED ANNUAL REVENUE**  
14 **REQUIREMENT OF \$11,884,648 BE IMPACTED IF THE DEBT-ONLY**  
15 **APPROACH WAS APPLIED TO FPUC'S REQUEST?**

16 A. On Exhibit No. HWS-3, I have recalculated the annual revenue requirement, assuming  
17 no cost adjustments to FPUC's request. The difference between the return based on  
18 WACC and the short-term debt rate is \$2,387,149, annually. That change would have  
19 a significant impact on reducing the annual revenue requirement customers will pay  
20 when compared to FPUC's requested \$11,884,648 based on the application of WACC.  
21 I would note that this calculation is only to show the significance of the application of  
22 ~~WACC~~ WACC compared to the use of the short-term debt rate and is in no way  
23 suggesting that the overall costs as requested are reasonable and appropriate.

1 **IV. NEW PLANT REQUEST**

2 **Q. PLEASE EXPLAIN WHY REQUESTING RECOVERY ON THE NEW**  
3 **CAPITALIZED PLANT IS NOT APPROPRIATE IN THIS PROCEEDING?**

4 A. FPUC is requesting recovery of new plant due to replacement of plant such as poles  
5 and wires caused by the impact of Hurricane Michael. Under traditionally rate-making  
6 principles, the cost of new plant is allowed to be recovered by means of a traditional  
7 base rate case filing. However, this docket is not a traditional base rate case. Including  
8 new plant as a single rate case issue in the storm proceeding is not appropriate because  
9 it fails to consider offsetting costs associated with the inclusion of the new plant and  
10 the retirement of old plant. For example, one potential offsetting cost relates to the  
11 assumption that O&M costs previously required for the old plant that is being retired  
12 or replaced, will be the same for the new plant. Another example relates to tree  
13 trimming costs, Company witness Michael Cassel stated that the new plant will not  
14 have an offsetting reduction to expense mainly due to tree trimming.<sup>4</sup> However, given  
15 Hurricane Michael's impact, it is reasonable to assume that there are fewer trees than  
16 before, thus there should be a reduction in future tree trimming activities. To assume  
17 that there are no costs reductions realized when you replace old plant with new plant is  
18 just not reasonable. Therefore, while the maintenance costs being recovered through  
19 base rates would remain the same (i.e. FPUC would continue to collect these costs),  
20 any efficiencies related to the new plant would not be captured.

21 Moreover, it is more likely than not that FPUC will be filing a base rate petition  
22 in the near future. It will be more appropriate to consider the new added plant, along

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<sup>4</sup> Revised Direct Testimony of Michael Cassel, Page 8, Lines 10-22.

1 with the retired plant plus applicable depreciation and accumulated depreciation issues,  
2 in that base rate case. This issue is more fully discussed below.

3 **Q. ARE THERE ANY ADDITIONAL REASONS THAT INCLUDING**  
4 **CAPITALIZATION OF NEW PLANT AS PART OF THE STORM**  
5 **RESTORATION REQUEST IS INAPPROPRIATE?**

6 A. Yes, there are. In addition to the concerns I previously enumerated, FPUC is seeking  
7 recovery of the net book value of assets retired which are still being recovered through  
8 current base rates. Normally in a base rate case, the old plant is retired and the new  
9 plant is added to rate base and rates are established on the new plant only. However,  
10 in this docket, FPUC's is asking its customers to pay additional revenues for new plant  
11 and old plant, on top of the depreciation on the old plant, and a return on the old plant  
12 that is being recovered through current base rates. As explained in more detail below,  
13 if FPUC's request for a regulatory asset is approved, base rates would continue to  
14 reflect a return on the plant identified as retired and FPUC's requested regulatory asset  
15 would earn a return on that same net plant, an asset that no longer exists. Thus, FPUC's  
16 request for a regulatory asset on retired plant would result in a double recovery.

17 **Q. WHAT IS THE FPUC'S POSITION ON WHETHER IT IS SEEKING DOUBLE**  
18 **RECOVERY IN THEIR REQUEST?**

19 A. The Company alleges that there is no double recovery. However this is inaccurate.  
20 Citizens' Interrogatory No. 4-83 asked whether costs for the undepreciated plant  
21 balance being retired would be recovered as part of base rates as well as part of the  
22 regulatory asset for the undepreciated plant balance being retired. The Company's  
23 response was as follows:

1 No, the new plant added was reduced by the plant retired on Schedule  
2 B-3. Depreciation was computed on the net increase to plant. Since we  
3 requested the undepreciated plant as part of the regulatory asset, we did  
4 not reduce accumulated depreciation on B-3 by the entire amount of the  
5 retired plant as required by FERC accounting instructions. On B-3  
6 accumulated depreciation was reduced by the estimated amount of the  
7 retired assets depreciated. The undepreciated plant was included in the  
8 regulatory asset petition. Please refer to the response to OPC  
9 Interrogatory 42.

10 In its response to Citizens' Interrogatory No. 42, the Company stated it would be  
11 earning a return on plant that was destroyed. Additionally, FPUC stated that, because  
12 of the early retirement of destroyed plant, it is required to debit accumulated  
13 depreciation for the retired plant thereby creating a negative reserve in accumulated  
14 depreciation. This undepreciated asset and the cost of removal would be included in  
15 rate base and recovered through traditional methodology (i.e. a base rate case) or as a  
16 regulatory asset. The Company's response concluded by stating that, to avoid  
17 shareholders having to bearing the loss of these assets, FPUC is proposing to earn a  
18 return now instead of waiting until the next rate case. Essentially, the Company's  
19 proposal ignores the fact that under traditional ratemaking shareholders are allowed a  
20 return on equity that assumes there are risks and regulatory lag.

21 **Q. GIVEN THE EXPLANATION PROVIDED BY FPUC, IS THE POSSIBILITY OF**  
22 **DOUBLE RECOVERY ELIMINATED?**

23 A. No. In essence, FPUC is stating that the possibility of double recovery is eliminated,  
24 and in theory that could possibly be true if all the numbers were synchronized.  
25 However, everything is not synchronized because the proposed treatment by FPUC is  
26 in reality a single-issue rate case that ignores what is currently being recovered through  
27 base rates. Regarding the issue of double recovery, the reduction to the cost of new

1 plant by an amount for plant being retired only creates an illusion that double recovery  
2 is not occurring. The adjustment made by FPUC simply shifts the dollars from the  
3 requested recovery amount being depreciated to an amount identified as part of a  
4 regulatory asset on which recovery of and on is still being requested. With respect to  
5 the return on retired plant, FPUC's proposal does reduce the plant amount requested  
6 for some retired plant; however, it also provides an added return on that same plant by  
7 the creation of a regulatory asset that reflects the net plant identified as undepreciated  
8 retired plant. This regulatory asset is the \$856,500 shown as part of the \$8,251,471  
9 requested on Company Exhibit MDN-7. Since base rates continue to reflect a return  
10 of and on the plant identified as retired and the requested regulatory asset in this  
11 proceeding asks for a return of and on that same net plant, there is a double recovery of  
12 this asset which is no longer used and useful. In fact, the recovery is in actuality higher  
13 than double recovery since the \$1,429,416 of retired plant had an accumulated  
14 depreciation balance that was lower than the \$572,916 that was reflected in FPUC's  
15 current filing.

16 **Q. HOW IS THE DOUBLE RECOVERY ACTUALLY HIGHER BASED ON THE**  
17 **COMPANY'S FILING?**

18 A. FPUC's filing indicates the retired plant has a cost of \$1,429,416 and an accumulated  
19 depreciation balance of \$572,916 for net book value of \$856,500. This \$856,500 is  
20 included in the regulatory asset of \$8,251,471 that FPUC is seeking to amortize as an  
21 expense which increases the amount sought for recovery and that regulatory asset is  
22 also included in the rate base request that recovery is being sought on. Current rates  
23 were last set years prior to this proceeding. Based on the low value of the retired plant

1 in comparison to the replacement value, this \$1,429,416 of plant was factored into base  
2 rates when last reset. Since that occurred years ago, the accumulated depreciation on  
3 that plant would have been far less. If you assume accumulated depreciation was  
4 \$150,000 at the time rates were last reset, the current base rates reflect a return on  
5 \$1,279,416 ( $\$1,429,416 - \$150,000$ ) of net plant. Thus, if the Commission were to  
6 approve FPUC's request as filed, the ratepayers' base rates would continue to reflect a  
7 return on the amount \$1,279,416 and the single-issue case would provide a return on  
8 the \$856,500 current balance. Therefore, not only would this result in a earning double  
9 on the same plant, but it would also be higher.

10 **Q. HOW COULD THIS DOUBLE RECOVERY BE AVERTED?**

11 A. The Commission has two options. First, if the requested regulatory asset is allowed as  
12 part of a single-issue rate case, the only way to prevent double recovery would be for  
13 the Commission to adjust base rates to exclude the identified plant being recovered  
14 through current base rates. Absent some form of credit mechanism to this request,  
15 FPUC would be recovering a return of and on the same dollars twice. That option  
16 would be highly unusual. The second, and best option, would be for the Commission  
17 to exclude the \$856,500 from the regulatory asset that might be established. That  
18 would legitimize the adjustment to plant made by FPUC because the adjustment was  
19 not simply shifted from plant to a regulatory asset. As explained elsewhere in my  
20 testimony, all issues related to new plant, retired plant, and applicable depreciation and  
21 accumulated issues should be considered in FPUC's next base rate case, not considered  
22 in this case to establish regulatory assets.

23

1 **Q. DO YOU HAVE ANY OTHER CONCERNS WITH THE PLANT**  
2 **REQUESTED?**

3 A. Yes. The retired plant according to Company Exhibit MDN-9, page 4 was \$1,429,416  
4 and the replacement cost was \$20,003,327. This is a significant difference. According  
5 to FPUC's response to Citizens' Interrogatory No. 2-41, the difference in these amounts  
6 is based upon the following: (1) the replaced plant was old; (2) inflation has increased  
7 the cost; and (3) contractors performed much of the work and contractor costs are  
8 higher than internal labor costs. I do not dispute any of these reasons, and in fact, I  
9 have taken the same position on many occasions when taking issue with the  
10 capitalization quantification employed by utilities as part of storm restoration  
11 proceedings. However, I have a concern as to whether the cost of plant removed is  
12 accurate. In response to Staff Interrogatory No. 1-11, FPUC stated that  
13 "Approximately 10 to 12% of the Northwest Division's Distribution System" required  
14 replacement. The Company's response to Citizens' Interrogatory No. 4-71 indicated  
15 the Northwest Division's Distribution System's gross plant prior to Hurricane Michael  
16 was \$46,281,784. Applying 10% to that number suggests the replaced plant should be  
17 upward of \$4 million which is significantly more than the \$1,429,416 of retired plant  
18 reflected on page 4 of Company Exhibit MDN-9. Thus, it appears the Company's  
19 estimate for plant retirement may be understated, resulting in a less than sufficient  
20 offset to plant when determining the depreciation expense.

21 **Q. WHAT IS THE RATE IMPACT OF FPUC'S REQUEST FOR RECOVERY ON**  
22 **THE NEW PLANT?**

1 A. Assuming no changes to any other costs in FPUC's request or in the inappropriate  
2 application of a ~~WAAC~~ WACC, removal of the new plant results in a revenue  
3 requirement for 2020 of \$9,391,377, as shown on Exhibit No. HWS-4. The \$2,493,271  
4 reduction in annual revenue requirements due to the difference between including the  
5 new plant based on WACC and the calculated return using WACC excluding the new  
6 plant is significant when compared to the Company's requested \$11,884,648 annual  
7 requirement. Again, it should be noted here that my calculation is in no way suggesting  
8 that all the costs requested or the use of WACC is reasonable and/or appropriate.

9 **Q. WHAT IS YOUR RECOMMENDATION AS TO HOW THE COST OF FPUC'S**  
10 **STORM RESTORATION EFFORTS SHOULD BE RECOVERED?**

11 A. The Company's storm cost recovery should be limited to the costs of restoration efforts  
12 deemed to be reasonable and prudent. This is consistent with past storm recovery  
13 requests approved by the Commission. The recovery of the cost of new plant and  
14 recovery of the cost of removal/retired plant regulatory assets should be excluded from  
15 this request and deferred to FPUC's next base rate proceeding. Any concern with  
16 double recovery will be eliminated because FPUC's base rate filing will reflect plant  
17 accounting consistent with traditional ratemaking accounting. Therefore, I am  
18 recommending a reduction to rate base of \$18,798,487 for new plant and a reduction  
19 to rate base of \$7,838,898 for the Regulatory Asset Unrecovered Accumulated  
20 Depreciation. This adjustment will reduce depreciation expense in the amount of  
21 \$696,680 and amortization expense in the amount of \$825,147.

1 **V. LOST CUSTOMERS**

2 **Q. IS THE REQUEST FOR RECOVERY OF REVENUE ASSOCIATED WITH**  
3 **LOSING CUSTOMERS APPROPRIATE?**

4 A. No. Rule 25-6.0143(1) (f) (9), F.A.C., specifically excludes the recovery of lost  
5 revenues from services not provided. The fact that customer's homes and businesses  
6 were destroyed making service impossible is irrelevant. In addition, asking for this  
7 type of recovery amounts to retroactive ratemaking which is more fully discussed later.  
8 Initially, the Company estimated the lost revenue to be \$605,068. That estimate  
9 assumed losing 779 customers.<sup>5</sup> The revised filing also includes a reduction of lost  
10 customers. Revised Exhibit E shows the initial 762 lost customers (as of November  
11 2018) decreasing to 556 lost customers (as of November 2019). FPUC's claim for  
12 estimated lost revenue is now at \$448,113. While the reduction in total number of lost  
13 customers is indicative that this number is temporary and ever changing, this  
14 nevertheless, is not an appropriate expense which is authorized for recovery under Rule  
15 25-6.0143, F.A.C.

16 **Q. HOW DID THE COMPANY IDENTIFY THE CUSTOMERS LOST?**

17 A. When the Company was asked for a log identifying its customers allegedly lost,  
18 FPUC's response stated that no log existed. The Company's response continued that  
19 the adjustment was based on the customers it identified as not connected after the storm.  
20 Yet, FPUC stated that it has not yet determined "whether, or how many, customers may  
21 have already returned," and would revise its request accordingly.<sup>6</sup> This resulted in a  
22 reduction to the request. This decrease indicates the number of lost customers could

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<sup>5</sup> Attachment E to the initial petition filed August 7, 2019, in Docket No. 20190156-EI.

<sup>6</sup> Company response to Citizens Interrogatory No. 2-44.

1 continue to decrease; however, it doesn't change the fact that this is not a recoverable  
2 expense under Rule 25-6.0143, F.A.C.

3 **Q. ARE YOU AWARE OF ANY OTHER REASON THAT THE REQUEST FOR**  
4 **LOST REVENUE SHOULD NOT BE ALLOWED?**

5 A. Yes. There are accounting requirements for recording a regulatory asset for recovery  
6 in the future. The following is an excerpt of the requirements from the Financial  
7 Accounting Standards Codification for this to occur:

8 980 Regulated Operations  
9 340 Other Assets and Deferred Costs  
10 25 Recognition  
11 Recognition of Regulatory Assets  
12

13 25-1 Rate actions of a regulator can provide reasonable assurance of the  
14 existence of an asset. An entity shall **capitalize** all or part of an  
15 **incurred cost** that would otherwise be charged to expense if both of the  
16 following criteria are met:

- 17  
18 a. It is probable (as defined in Topic 450) that future revenue  
19 in an amount at least equal to the capitalized cost will result from  
20 inclusion of that cost in **allowable costs** for rate-making  
21 purposes.  
22 b. Based on available evidence, the future revenue will be  
23 provided to permit recovery of the previously incurred cost  
24 rather than to provide for expected levels of similar future  
25 costs. If the revenue will be provided through an automatic rate-  
26 adjustment clause, this criterion requires that the regulator's  
27 intent clearly be to permit recovery of the previously **incurred**  
28 **cost**.

29 A cost that does not meet these asset recognition criteria at the date the  
30 cost is incurred shall be recognized as a regulatory asset when it does  
31 meet those criteria at a later date. (Emphasis bold-only in original and  
32 bold-underline added)  
33

34 As set forth in accounting standards, an incurred cost is a cost arising from cash paid  
35 out to obligations to pay for an acquired asset or service. As indicated by these

1 standards, FPUC's claim for lost revenue is not an incurred cost; therefore, a regulatory  
2 asset is not allowed to be established for this phantom cost.

3 **Q. ARE THERE ADDITIONAL REASONS THAT THIS REQUEST IS**  
4 **INAPPROPRIATE?**

5 A. Yes, if FPUC is allowed to establish a regulatory asset for lost revenue due to a loss of  
6 customers, a precedent would be established that is totally contrary to ratemaking  
7 standards. The traditional ratemaking paradigm allows a utility the opportunity to earn  
8 a reasonable return, but does not guarantee a return.<sup>7</sup> Thus, when FPUC's base rates  
9 were last reset, it received no guarantee from the Commission that it would earn a  
10 certain amount of return. Moreover, retroactive ratemaking is a long established  
11 principle that a utility cannot seek to make up lost revenues if it is earning below its  
12 authorized range; conversely, customers cannot seek a refund of revenues for prior  
13 periods if a utility earns above its authorized range.<sup>8</sup> In this docket, FPUC is asking  
14 for revenues to make up for earning less than its authorized range for the prior period  
15 of October 2018 through December 2019. If approved, this will essentially turn long-  
16 standing ratemaking standards on its head by guaranteeing to shareholders that every  
17 time revenues were not sufficient to cover expenses to achieve that allowed return,

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<sup>7</sup> *Federal Power Commission v. Hope Natural Gas Co.*, (Hope), 320 U.S. 591 (1944), and *Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia*, (Bluefield), 262 U.S. 679 (1923).

<sup>8</sup> See *City of Miami v. Florida Public Service Com.*, 208 So. 2d 249, 260 (Fla. 1968); Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, in Docket No, 971596-WS, *In re: Petition for limited proceeding regarding other postretirement employee benefits and petition for variance from or waiver of Rule 25-14.012, F.A.C., by United Water Florida, Inc.*

1 companies could request a regulatory asset for the shortfall. FPUC has an available  
2 option if it is earning below its authorized earnings range just like all other utilities; and  
3 that is to file for base rate relief.

4 **Q. WHAT ARE YOU RECOMMENDING WITH RESPECT TO THE COST**  
5 **RELATED TO “LOST REVENUE” BEING REQUESTED?**

6 A. The revised regulatory asset amount of \$454,003 included in the Company’s request  
7 should be denied because it is not allowed by Rule 25.6.0143 (1)(f)(9), F.A.C., and  
8 would burden customers with added costs previously determined to be inappropriate  
9 for recovery per Commission rule. Exclusion of the \$454,003 from the rate base and  
10 the request would reduce amortization expense in the amount of \$100,884.

11 **VI. EXPENSES NOT RECOVERED**

12 **Q. IS THE REQUEST FOR RECOVERY OF A REGULATORY ASSET FOR**  
13 **EXPENSES NOT RECOVERED APPROPRIATE?**

14 A. No. Rule 25-6.0143(1)(f)(9), F.A.C., specifically excludes recovery for lost revenues  
15 from services not provided. FPUC is attempting to include an amount for recovery as  
16 a regulatory asset by simply reclassifying it as “expenses not recovered.” The  
17 Company claims that, since it did not receive “sufficient” revenues in October 2018  
18 and November 2018 because it did not sell electricity, the expenses it incurred in those  
19 months were not recovered (i.e. unrecovered expenses). Notwithstanding FPUC’s  
20 attempt at reclassification, these unrecovered expenses are, in fact, revenues lost from  
21 services not provided in October 2018 and November 2018. Simply put, the amount  
22 requested for October and November 2018 expenses represents electric services not

1 billed. In fact, the Company's Revised Attachment F identifies the dollars as  
2 "Expenses Related to October Revenues Lost" and "Expenses Related to November  
3 Lighting Revenue." Clearly, this is a request by FPUC for recovery of lost revenues  
4 which is prohibited by Rule 25-6.0143(1)(f)(9), F.A.C.

5 **Q. IS THERE ANY EVIDENCE THAT FPUC DID NOT RECOVER ITS**  
6 **EXPENSES?**

7 A. No. Based on the earnings surveillance report for December 2018, FPUC covered its  
8 expenses for the year ended December 31, 2018. The December 31, 2018 return on  
9 equity ("ROE") was 7.48% and the ROR for December 2018 was 4.27%. While FPUC  
10 did not achieve earnings within its authorized range, it nevertheless realized a profit  
11 and its expenses incurred during the year 2018 were recovered. This is evident by the  
12 fact that FPUC's ROR was not negative; in other words, above zero indicating a profit  
13 was earned.

14 **Q. DOES THE ACCOUNTING REQUIREMENT FOR ESTABLISHING A**  
15 **REGULATORY ASSET APPLY TO THE REVENUE RELATED TO FPUC'S**  
16 **REQUEST FOR UNRECOVERED EXPENSES?**

17 A. Yes, it does. As I stated above, the Company classified this as a request for unrecovered  
18 expenses although in actuality, it is a request for lost revenue. Despite FPUC's  
19 attempted nomenclature sleight of hand to reclassify this lost revenue as unrecovered  
20 expenses, this is not an expense that it incurred. This is a claim to recover revenue that  
21 was not billed because electricity was not provided to any customers; as such, it is not  
22 an incurred expense. If FPUC's reclassification of lost revenue to "unrecovered  
23 expenses" were to be accepted, and FPUC allowed to establish a regulatory asset, the

1 Commission would be establishing a precedent that is totally contrary to basic  
2 ratemaking standards. It is understood as a basic principle that the Commission sets  
3 rates that allow a utility the opportunity to earn a fair and reasonable return. This does  
4 not guarantee a return for the utility, but gives the utility an opportunity to earn that  
5 return. Moreover, retroactive ratemaking is a long established principle that a utility  
6 cannot seek to make up lost revenues if it earns below its authorized range; conversely  
7 customers cannot seek a refund of revenues for prior periods if a utility as earning above  
8 its authorized range.<sup>9</sup>

9 In this docket, FPUC is asking to recover revenues because it earned below its  
10 authorized range for the prior periods of October 2018 and November 2018. If  
11 approved, this would essentially turn long-standing ratemaking standards on its head  
12 by guaranteeing to shareholders that, every time a utility earned below its authorize  
13 range, the utility could request the Commission establish a regulatory asset for the  
14 shortfall.

15 **Q. WHAT ARE YOU RECOMMENDING WITH RESPECT TO THE COST FOR**  
16 **EXPENSES NOT RECOVERED BEING REQUESTED BY FPUC?**

17 A. The regulatory asset amount of \$885,855 included in the Company's request should be  
18 denied, similar to the lost revenues being requested, because it is not allowed under  
19 Rule 25-6.0143(1)(f)(9), F.A.C., and would burden customers with additional costs

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<sup>9</sup> See *City of Miami v. Florida Public Service Com.*, 208 So. 2d 249, 260 (Fla. 1968); Order No. PSC-98-1243-FOF-WS, issued September 21, 1998, in Docket No, 971596-WS, *In re: Petition for limited proceeding regarding other postretirement employee benefits and petition for variance from or waiver of Rule 25-14.012, F.A.C., by United Water Florida, Inc.*

1 previously determined to be inappropriate for recovery. Similar to the lost revenue  
2 recommendation, the Commission should reduce amortization expense by \$196,857.  
3 Moreover, FPUC's request violates long-standing principles against retroactive  
4 ratemaking. For these reasons, FPUC's requests for lost revenue and recovery of  
5 expenses that were not recovered through base rates are inappropriate and should be  
6 denied.

7 **VII. STORM RESTORATION COSTS**

8 **Q. HOW HAVE YOU PRESENTED YOUR ANALYSIS OF STORM**  
9 **RESTORATION COSTS?**

10 A. My analysis of storm costs is presented in a format similar to the Company's summary  
11 provided on Revised Exhibit MDN-4 which separates the costs by type of cost. My  
12 analysis also includes separate schedules analyzing the various cost categories.

13 **Q. PLEASE BRIEFLY DESCRIBE THE RESTORATION COST ISSUES YOU**  
14 **WILL BE ADDRESSING IN THIS PROCEEDING.**

15 A. I am addressing the appropriateness of FPUC's proposed recovery of costs related to  
16 payroll, overhead, benefits, contractors, line clearing, materials and supplies, logistics  
17 and other items as reflected in its petition. As part of my analysis, I relied on my  
18 experience in analyzing storm costs in other jurisdictions, past review of storm costs in  
19 Florida, and Rule 25-6.0143, F.A.C., which addresses what costs should be included  
20 and excluded from a utility's request for recovery of storm related costs.

21 **Q. WHERE WERE THERE ANY PARTICULAR CONCERNS THAT**  
22 **NEGATIVELY IMPACTED YOUR REVIEW OF THE STORM COSTS?**

1 A. Yes, there were. One concern was the method of invoice delivery by some vendors  
2 and another concern was the method of billing by some vendors. I observed that some  
3 vendors were allowed to bill a bulk rate for equipment and employees instead of having  
4 these billed per piece of equipment and per employee with corresponding time sheets  
5 for verification. How can FPUC ensure that these vendors are billing correctly and  
6 how can they verify the hours and expenses submitted for payment by these vendors?  
7 This is a matter of transparency and accountability on behalf of customers.

8 **Q. PLEASE SUMMARIZE YOUR RECOMMENDED ADJUSTMENTS TO**  
9 **STORM RESTORATION COSTS?**

10 A. I am recommending a reduction of \$120,800 to FPUC's request for payroll expense  
11 associated with prohibited bonus payments pursuant to Rule 25-6.0143, F.A.C. I  
12 recommend a reduction of \$24,703 related to benefits and overhead costs that also are  
13 prohibited bonus payments pursuant to Rule 25-6.0143, F.A.C. I recommend a  
14 reduction of \$4,788,243 related to contractor costs to adjust for excessive rates and  
15 \$273,768 for an excessive amount of mobilization/demobilization payments. I  
16 recommend a reduction of ~~\$116,469~~ \$166,469 related to other contractor costs where  
17 no support was located. Finally, I am recommending an adjustment to logistics of  
18 \$316,884 for lack of support. In total, I recommend a reduction of \$5,690,868 to  
19 FPUC's overall storm restoration request. My Exhibit HWS-2 contains these  
20 adjustments.

21 **Q. WHAT IS YOUR OVERALL RECOMMENDATION FOR RECOVERY OF**  
22 **STORM RESTORATION COSTS?**

1 and Hurricane Dorian should be based on a reasonable amount of restoration costs  
2 prudently incurred. As will be discussed, I have calculated the appropriate recovery  
3 for storm restoration costs to be \$34,055,610 with estimated interest of \$1,363,432, for  
4 a total to be recovered of \$35,419,042. I am recommending amortization over five  
5 years, resulting in an annual recovery of \$7,083,808. The calculation of this is shown  
6 on Exhibit HWS-2, Schedule C.

7 **a. Payroll**

8 **Q. WHAT HAS THE COMPANY REQUESTED FOR RECOVERY OF PAYROLL**  
9 **COSTS?**

10 A. FPUC's request includes \$609,196 of regular payroll costs and \$490,433 of overtime  
11 payroll costs. Excluded from FPUC's request is \$125,143 of payroll that was deemed  
12 non-incremental (\$113,316 regular and \$11,827 overtime); therefore, the net total  
13 payroll being requested is \$974,486 prior to capitalization of storm costs. Additionally,  
14 this request includes \$371,902 for Payroll Overhead Allocations reduced by \$60,039  
15 for non-incremental costs. That leaves \$311,863 for Payroll Overhead Allocations in  
16 the Company's total request for payroll costs prior to capitalization.

17 **Q. WHAT ARE THE PAYROLL AND OVERHEAD AMOUNTS THAT WERE**  
18 **CAPITALIZED?**

19 A. In its initial response to Citizens' Interrogatory No. 1-2, FPUC provided a summary  
20 that identified the capitalized amount and the cost of removal that totaled to the initial  
21 \$28,218,969 identified as capitalized costs on Company Exhibit MDN-4. When the  
22 Company revised its filing on March 11, 2020, the capitalized amount was revised to  
23 \$27,398,298. I could not locate an updated response that summarized the distribution

1 of costs by category. The Company's initial response to Citizens' Interrogatory No. 1-  
2 24 provided a breakdown of the \$345,471 of payroll overhead costs separated between  
3 capital, storm, and non-incremental. After FPUC filed its revision, the total overhead  
4 costs were \$371,902. Again, I was unable to locate an update to the Company's initial  
5 response providing the necessary separation of costs.

6 **Q. ARE THERE CONCERNS WITH WHAT THE COMPANY IS REQUESTING**  
7 **FOR PAYROLL?**

8 A. Yes, there is. The Company's request includes payroll dollars that, under Rule 25-  
9 6.0143, F.A.C., are prohibited from being charged to the storm reserve. More  
10 specifically, Rule 25-6.0143(1)(f)1. and 2., F.A.C., prohibit "[b]ase rate recoverable  
11 regular payroll and regular payroll-related costs for utility managerial and non-  
12 managerial personnel" from being charged to the reserve and it prohibits recovery of  
13 "[b]onuses or any other special compensation for utility personnel not eligible for  
14 overtime."

15 **Q. WHAT IS YOUR CONCERN WITH INCLUDING STORM BONUSES AS**  
16 **PART OF THE COMPANY'S REQUEST FOR RECOVERY?**

17 A. Rule 25-6.0143(1)(f)2., F.A.C., specifically states "[b]onuses or *any other special*  
18 *compensation* for utility personnel not eligible for overtime pay" and are prohibited  
19 from being charged to the reserve. (Emphasis added) FPUC should not be allowed to  
20 recover any of these costs in its request for storm recovery charges.

21 **Q. WHY HAVE YOU EMPHASIZED "ANY OTHER SPECIAL**  
22 **COMPENSATION"?**

1 A. Citizens' Interrogatory No. 1-28, asked whether any amount of payroll cost was  
2 included in the Company's request that was not base payroll or overtime. The  
3 Company's response stated that MDN-4 included \$120,800 of inclement weather pay  
4 that was allowed by the Commission in Docket No. 20180061-EI and that the plant  
5 additions included \$24,703 of IPP bonus. Inclement weather pay is a form of special  
6 compensation and the IPP bonus is a bonus. The inclusion of special compensation is  
7 not allowed under Rule 25-6.0143(1)(f)2., F.A.C.. Similarly, the capitalizing of the  
8 IPP bonus is also not allowed under Rule 25-6.0143(1)(f)2., F.A.C., and thus is not  
9 appropriate either.

10 **Q. SINCE THE ADDED COMPENSATION WAS ALLOWED BY THE**  
11 **COMMISSION IN DOCKET NO. 20180061-EI, WHY ARE YOU STILL**  
12 **RECOMMENDING THIS COST BE EXCLUDED FROM THIS REQUEST?**

13 A. In my opinion, the Commission erred in reaching its conclusion that these costs are  
14 allowable and it should not hesitate to correct the error in this case. A simple change  
15 in the description to "inclement weather pay" does not change the fact that these  
16 payments constitute an added form of employee compensation for salaried utility  
17 personnel not eligible for overtime pay or, at the very least, other special compensation  
18 that is prohibited from recovery by the Rule. With respect to the capitalized amount,  
19 IPP bonus clearly is a bonus and again is prohibited by the Rule. Allowing the recovery  
20 of costs prohibited by the Commission's rule simply because the Company changed its  
21 description of these costs would set a bad precedent for other rules where costs are not  
22 recoverable by allowing utilities to simply change the name of a cost, not the

1 characteristic of that cost, to provide an avenue to recovery that would normally not be  
2 allowed.

3 Moreover, Rule 25-6.0143, F.A.C., is not limited in its application only to the  
4 “incremental” costs chargeable to Account No. 228.1. Merely changing the means of  
5 recovery for storm costs should not be used to thwart the application of Rule 25-6.0143,  
6 F.A.C. The Rule establishes the Commission’s policy for the types of storm costs that  
7 are recoverable from customers: “[i]n determining the costs to be charged to cover  
8 storm-related damages, the utility shall use an Incremental Cost and Capitalization  
9 Approach methodology (ICCA).” Therefore, irrespective of how the Company  
10 chooses to seek recovery of storm-related costs from its customers (i.e. surcharge or  
11 regulatory asset), the principles of the ICCA methodology apply. Under the application  
12 of the ICCA methodology, bonus and special compensation for employees not eligible  
13 for overtime, which in most cases is salaried employees, is prohibited.

14 **Q. WHAT ADJUSTMENT ARE YOU PROPOSING TO THE COMPANY’S**  
15 **REQUEST FOR PAYROLL COSTS?**

16 A. As shown on Exhibit No. HWS-2, Schedule D, I am recommending the total payroll be  
17 reduced by \$120,800. This adjustment reduces the regular payroll requested by FPUC  
18 from \$303,946 to \$183,146.

19 **Q. DID YOU IDENTIFY ANY OTHER CONCERNS WHEN EVALUATING**  
20 **PAYROLL COSTS?**

21 A. Yes, I did. However, the concern is not necessarily with what FPUC did but with how  
22 FPUC’s approach is different from what is traditionally done by utilities in capitalizing  
23 costs. Citizens Interrogatory No. 1-31 asked FPUC whether it had utilized a formula

1 for determining the capitalized costs for poles, and, if so, to provide a breakdown of  
2 the cost components. A similar request was made for the capitalization of wires<sup>10</sup>. The  
3 Company's response indicated a work order was established and that materials and  
4 employee payroll were charged directly and an estimate was made for contractor costs.  
5 This response did not provide any detail as to how the contractor cost was determined  
6 other than stating the costs were allocated based on the "bird dog crew's" time  
7 allocation as this was considered the best way to estimate contractors costs. FPUC's  
8 employees that were in charge of contractor crews were called "bird dogs." This raises  
9 a concern about other utilities' claims over the many years I have reviewed storm costs  
10 that tracking capital time is not feasible since everything is being performed in a "get  
11 it done" manner and tracking is not something that can be done. I note that in the  
12 previous storm cost recovery case, FPUC utilized a formula. I discuss the issue of  
13 capitalization later as part of my discussion of contractor costs and in my testimony on  
14 capitalization.

15 **Q. WHY DO YOU CONSIDER THE TRACKING OF CAPITAL COSTS TO BE A**  
16 **CONCERN?**

17 **A.** As I indicated above, utilities have claimed in past dockets that they cannot do any real-  
18 time tracking of labor to determine what labor costs should be capitalized. In my  
19 opinion, the use of a formula to determine capitalizable costs does not accurately reflect  
20 the actual capital costs of plant restoration. FPUC's real-time approach suggests that  
21 the use of a formulistic approach utilized by utilities in the past to capitalize their labor  
22 costs was not justified and their arguments that tracking labor was not an option may

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<sup>10</sup> Citizens Interrogatory No. 1-36.

1 have been disingenuous. Nevertheless, while FPUC's real-time approach appears  
2 reasonable, it has not been tested for accuracy. This should be done by reviewing the  
3 actual time sheets of the bird dog crews and then verifying the calculations of the  
4 respective percentages applied to contractor costs. Because of time constraints, I was  
5 unable to do this as part of my review.

6 **Q. ARE YOU RECOMMENDING AN ADJUSTMENT TO THE REQUESTED**  
7 **OVERHEAD COSTS?**

8 A. Yes, I am. As indicated earlier, the capitalized costs for overhead benefits included  
9 \$24,703 of IPP bonus pay. This is a cost prohibited under Rule 25-6.0143(1)(f)2.,  
10 F.A.C. and, therefore, the capitalized adjustment to overheads costs needs to be  
11 adjusted to remove this prohibited costs in the same amount. I am recommending the  
12 overhead costs be reduced by \$24,703. The adjustment is shown on Exhibit No.  
13 HWS-2, Schedule D. This adjustment reduces recoverable burden costs from  
14 \$103,670 to \$78,967.

15 **b. Contractor Costs**

16 **Q. WHAT IS INCLUDED IN THE CONTRACTOR COSTS IN THE COMPANY'S**  
17 **PETITION?**

18 A. The Petition included \$57,147,169 of costs labeled as contractor costs. In its revised  
19 response to Citizens' Interrogatory No. 1-2, the Company provided a complete listing  
20 of each invoice included in the filed amount. That consisted of \$52,723,318 of line  
21 contractor invoices, \$4,051,976 vegetation contractors, and \$371,875 of other  
22 contractor costs.

1 **Q. WHAT IS THE AMOUNT OF STORM RESTORATION COSTS IDENTIFIED**  
2 **AS BEING RESTORATION COSTS FOR LINE CONTRACTORS AND WHAT**  
3 **AMOUNT OF LINE CONTRACTOR COSTS WERE CAPITALIZED?**

4 A. In its revised response to Citizens' Interrogatory No. 1-2, the Company identified  
5 \$57,147,169 in contractor costs associated with Hurricanes Michael and Dorian. I  
6 sorted the costs by type, as identified by FPUC, into line contractors, line clearing and  
7 consultants. Line contractor costs were \$52,723,318, line clearing contractors were  
8 \$4,051,976, and consultants were \$371,875.

9 The Company's revised response provided a separation of these costs into plant,  
10 cost of removal and storm. The amount identified as being capitalized for line  
11 contractors, which consists of plant and cost of removal, totaled \$23,163,090. The  
12 capitalized amounts were \$21,242,556 for line contractors, \$1,913,108 for line clearing  
13 contractors and \$7,425 for consultants. The result is storm recovery costs (total less  
14 capitalized) are \$31,480,762 for line contractors, \$2,138,867 for line clearing  
15 contractors and \$364,450 for consultants.

16 **Q. WHY DID YOU USE THE TERM "IDENTIFIED" INSTEAD OF JUST**  
17 **SAYING THE AMOUNT CAPITALIZED?**

18 A. On Company Exhibit Revised MDN-4, FPUC lists a total capitalized amount of  
19 \$27,398,298. That amount includes \$20,003,326 identified as plant and \$7,394,972  
20 identified as removal. The Company's classification on its exhibit as capitalization  
21 costs is somewhat misleading. The \$20,003,326 is the amount actually capitalized and  
22 being depreciated over various periods of time, from 20 to 42 years, depending on  
23 account classification. The \$7,394,972 identified as removal has been reflected as a

1 regulatory asset along with \$856,500 for the net book value of retired plant, discussed  
2 earlier, for a total of \$8,251,471. FPUC is requesting this amount be amortized and  
3 recovered over 10 years.

4 **i. Line Contractors**

5 **Q. WITH THE ADJUSTMENTS MADE, ARE YOU SATISFIED WITH THE**  
6 **REQUESTED STORM RECOVERY OF \$31,480,762 FOR OUTSIDE LINE**  
7 **CONTRACTOR COSTS?**

8 A. No, I am not. There are two concerns with the amount requested. First, there is a  
9 concern with the hours charged and the rates charged. Second, there is a concern with  
10 whether costs are adequately supported.

11 **Q. WHAT ARE THE CONCERNS WITH THE HOURS AND RATES CHARGED**  
12 **IN FPUC'S STORM COST RECOVERY FILING?**

13 A. Based on my past experience in reviewing storm costs, generally there are issues with  
14 respect to excessive hourly rates, standby time, and excessive  
15 mobilization/demobilization charges, and whether these rates were reasonable under  
16 the circumstances. For example, in FPUC's filing in Docket No. 20180061-EI, the  
17 Company paid PAR Electric an extremely excessive rate. I note that PAR was not one  
18 of the contractors utilized in this filing. However, there is another service provider  
19 whose rates I believe were excessive which I discuss below.

20 In addition, based on my prior experience in reviewing storm recovery costs, I  
21 have found that utilities generally allow for travel time that exceeds normal travel based  
22 on a Google Maps or MapQuest estimate of travel time required. I also generally find  
23 that there is a concern with excessive standby time where contractors are on standby

1 time prior to the storm, until after the storm passes, yet the utilities either determined  
2 the crews were not needed or an assignment of work is not made until a day or more  
3 after impact. In this case, I have only identified issues with travel time for mobilization  
4 and demobilization. However, since no standby time was charged, there were no  
5 adjustments to make in this case, although I do have concerns which I address later in  
6 this testimony.

7 **Q. IS THERE A CONCERN WITH THE HOURLY RATES CHARGED TO FPUC**  
8 **DURING THE RESTORATION PROCESS?**

9 A. Yes, there is one concern identified. In reviewing hourly rates, it is generally assumed  
10 that the average rate charged will be higher for external contractors when compared to  
11 other electric utilities providing restoration assistance. This is because utilities  
12 generally limit their charges to actual costs whereas contractors are recovering cost plus  
13 a profit margin. It is my understanding, this is a requirement by South East Exchange  
14 (SEE) and this is typically what I have seen in reviewing storm costs recovery filings  
15 for other utilities. In its response to Citizens' Interrogatory No. 1-12, FPUC identified  
16 FPL FPUC as having an overall cost per hour of [REDACTED]  
17 next highest charge being ARC American, Inc., at an average hourly [REDACTED]  
18 With the exception of one other contractor, the average hourly rate ranged from \$122  
19 to \$146. This range of costs for the other contractors is considered reasonable.  
20 However, in reviewing the detail provided the average hourly rate for FPL FPUC was  
21 understated. In its response to Citizens' Production of Documents No. 4, FPUC's  
22 documents indicated a different billing amount for labor, benefits, vehicle costs and  
23 overheads that increases the [REDACTED] hourly rate charged by FPL FPUC significantly.

1 The total bill was [REDACTED]. After eliminating [REDACTED] for administrative and  
2 general cost, which includes subsistence, the cost is [REDACTED] which calculates to  
3 an average hourly rate of [REDACTED]. Review of the detail provided  
4 by FPUC suggests that ~~FPUC~~ FPL's loaded pay rate and added costs are much higher  
5 when compared to the rate charged by external contractors (general highest rates) and  
6 the IOU rates (using SEE requirements to implement cost-only billing amongst  
7 utilities) and calls into question the reasonableness of ~~FPUC~~ FPL's rates charged in this  
8 docket.

9 **Q. DID YOU INQUIRE AS TO WHY ~~FPUC~~ FPL'S COSTS WERE SO HIGH?**

10 A. Yes. Based on the comparison of rates, a follow up request was made. FPUC's  
11 response to Citizens' Interrogatory No. 52 stated that ~~FPUC~~ FPL's per hour cost is  
12 higher because ~~FPUC~~ FPL provided restoration support that was fully self-contained  
13 including its own support staff, lodging, facilities and meals.

14 **Q. DOES THE EXPLANATION PROVIDE JUSTIFICATION FOR THE HIGHER**  
15 **CHARGES FROM ~~FPUC~~ FPL?**

16 A. No, it does not. On the surface, it may seem to be a logical explanation. However,  
17 when you factor in all the other costs associated with the contractor costs summarized  
18 in FPUC's response to Citizens' Interrogatory No. 1-12, ~~FPUC~~ FPL's average hourly  
19 rate is still extremely high in comparison. I made a calculation on Exhibit HWS-5 that  
20 begins with the total cost and hours provided by the Company in the response and then  
21 deducted the ~~FPUC~~ FPL cost and hours charged by ~~FPUC~~ FPL. The net result was an  
22 average cost of [REDACTED] per hour for other contractors. I then added the extra costs  
23 associated with housing, meals, fuel, equipment rental and other costs incurred. After

1 adding \$4,103,592 of costs, the average hourly rate for the external contractors is [REDACTED].  
2 When you compare this to FPUC-FPL's billing of [REDACTED] for [REDACTED] hours (which  
3 results in an average cost of [REDACTED] per hour), this shows an hourly rate being charged  
4 that is much higher than that charged by external contractors. For comparison  
5 purposes, the overall cost billed by Tampa Electric Company ("TECO") was [REDACTED]  
6 for [REDACTED] hours of labor. That results in an average hourly rate of [REDACTED]. Thus, FPUC  
7 FPL's rate appears excessive and not justified under the circumstances.

8 **Q. ARE YOU MAKING ANY RECOMMENDATION WITH RESPECT TO THE**  
9 **COST CHARGED BY FPUC FPL?**

10 A. Yes. As shown on Exhibit HWS-5, there is a calculated excess billing by FPUC FPL  
11 of [REDACTED]. Absent any justification for the significant billing difference, I am  
12 recommending that [REDACTED] or 50% of the excess be excluded from FPUC's request.  
13 An argument presented by FPUC in Docket No. 20180061-EI when it paid PAR  
14 Electric an excessive rate was that external contractors have to be paid whatever they  
15 charge due to the circumstances. This argument does not apply to a neighboring  
16 electric utility that is subject to the SEE cost recovery protocol.

17 **Q. ARE THERE ANY CONCERNS WITH THE CAPITALIZATION OF**  
18 **CONTRACTOR COSTS?**

19 A. No. Based on the Company's response to Citizens' Interrogatory No. 1-16, the major  
20 costs capitalized were for pole replacement, conductor and services. Since there were  
21 concerns with the capitalization process in Docket No. 20180061-EI, FPUC was  
22 requested to explain whether a formula was utilized to determine the amount  
23 capitalized and, if so, to provide an explanation of the process and a detailed calculation

1 of the capitalization for poles and wire. The Company's response to Citizens'  
2 Interrogatory No. 1-31 explained that FPUC set up work orders for the capitalization  
3 of poles and when materials were issued the costs were charged to the work order. The  
4 associated labor was based on employee labor that was directly charged to the capital  
5 work order. As stated earlier, FPUC's employees that were in charge of contractor  
6 crews were called bird dogs and charged their time to the work orders. The FPUC "bird  
7 dogs" employees had oversight and monitoring responsibilities over contractor crews.  
8 Using the FPUC bird dog employees' allocation of time, contractor costs were similarly  
9 allocated. In its response to Citizens' Interrogatory No. 3-50 asking how specific  
10 capital costs were determined, FPUC stated that costs were based on the tracking of  
11 time by the FPUC bird dogs and that costs were then allocated based on the tracked  
12 time. This method suggests that the calculation of capitalized costs should be  
13 uniformly determined with cost variances being based on who did the work (i.e.  
14 contractor rates vary). In its various responses to Citizens' Interrogatory No. 1-2,  
15 FPUC provided the cost for each invoice and an allocation of that cost to plant, cost of  
16 removal and storm restoration. In reviewing that detail, I was able to confirm that the  
17 vendor costs were uniformly assigned. The assignment was 31.97% to plant and  
18 16.21% to cost of removal. In reviewing the Company's capitalized cost and, based on  
19 my experience in analyzing component costs, the capitalization process appears to be  
20 reasonable.

21 **Q. WOULD YOU DISCUSS ANY CONCERNS YOU HAVE WITH THE**  
22 **MOBILIZATION/DEMOBILIZATION COSTS INCLUDED AS PART OF**  
23 **FPUC'S REQUESTED COST FOR LINE CONTRACTORS?**

1 A. Yes. FPUC was asked to provide a summary of the mobilization/demobilization costs.  
2 If not available the Company was asked to provide an explanation as to why the costs  
3 were not available and to explain how the mobilization/demobilization costs were  
4 verified by the Company. The response to Citizens' Interrogatory No. 1-8 was as  
5 follows:

6 The Company has not prepared separate summaries for  
7 mobilization/demobilization costs. The costs are included in contractor  
8 costs in the filing. Contractors were asked to increase the size of the  
9 crews over a few days period. Each crew is summarized in the  
10 supporting invoices, both for contractor and line clearing. The  
11 contractor summaries performed are included in OPC POD 1 numbers  
12 4 and 6.

13 The referenced Production of Documents ("PODs") did contain contractor summaries  
14 along with invoices and, on some occasions, travel maps. However, I note that the  
15 summaries, at least in part, included information prepared in response to discovery and  
16 not as part of FPUC's routine storm cost invoice review process. One example is  
17 attached as Exhibit HWS-6. This is identified as OPC POD 1 number 4a and includes  
18 23 pages. The first 3 pages are a summary of bills "Over \$25,000" which is the  
19 threshold set for invoices to be provided; thus this summary is in response to discovery  
20 and was not part of the invoice review process. Page 4 is a vendor summary, prepared  
21 by FPUC, with dates and locations of the vendor. Looking at one example, a review  
22 of the summary for ARC American Inc. indicates the travel date is prior to the date that  
23 ARC American Inc. was secured by FPUC and, even though the starting location is  
24 Wakarusa, Indiana and the ending destination is Marianna, Florida, there are no miles  
25 entered in "Miles" line on the form. Absent the travel details and miles, the  
26 Commission should question how an appropriate review of the invoices can be done.  
27 The next 5 pages (pages 5-9), along with pages 12-15, of the attachment are line by line

1 summaries of costs. The only indication of mobilization is an entry for fuel costs, and  
2 there are no labor hours indicated for mobilization/demobilization. Page 10 contains  
3 contractor information and page 11 shows the hourly rates charged. Pages 16-23 are  
4 various invoices, none of which reference any mobilization time being billed.  
5 Specifically, the invoices on pages 16-18, are for dates that, according to the vendor  
6 summary, included dates when travel was to occur; yet, there is no indication of travel  
7 time on those invoices.

8 **Q. IS EXHIBIT HWS-6 REPRESENTATIVE OF WHAT WAS INCLUDED IN**  
9 **FPUC'S RESPONSE TO "OPC POD 1 NUMBERS 4 AND 6?"**

10 A. Yes, it is. Another example is the folder labeled "OPC POD 1 number 4 p" for Chain  
11 Electric Company ("Chain") where the information is similar to that of Exhibit HWS-  
12 6. There is one difference here, as well as with other attachments, where this folder  
13 included a time sheet. Notably, the time sheet was for a period of time (October 26 -  
14 31, 2018), where the vendor summary indicates this vendor would be released and  
15 demobilizing. The time sheet does not include any time for demobilization. I also note  
16 that the vendor summary does not identify a "Starting Travel Location," no "Ending  
17 Destination" for demobilizing and no "Miles." Once again, this raises the question as  
18 to how these costs could have been verified by FPUC. There is no documentation  
19 indicating that Company checked the contractor's travel time and/or verified the billed  
20 charges as part of FPUC's review process in approving the contractor's invoice for  
21 payment.

22 As shown on Exhibit HWS-2, Schedule E, I reviewed a significant number of  
23 the invoices and found the information uncharacteristically different from other storm

1 reviews that I have performed. Typically, the invoices and/or time sheets will identify  
2 mobilization/demobilization date and time; however, in this case the invoices and time  
3 sheets were very limited and in many cases mobilization/demobilization did not appear  
4 to be labeled as such. In some cases, invoices had some form of log sheets included  
5 along with the time sheets that indicated travel on specific dates but they did not  
6 specifically identify the hours of mobilization/demobilization travel time. This again  
7 is something of an anomaly.

8 **Q. DID YOU INQUIRE AS TO HOW FPUC VERIFIED THE REASONABLENESS**  
9 **OF MOBILIZATION/DEMOBILIZATION COSTS FOR CONTRACTORS?**

10 A. Yes. The Company's response to Citizens' Interrogatory No. 1-7 states as follows:

11 The Company applied the same policy that it has applied in prior storm  
12 events with regard to mobilization/demobilization. This policy includes  
13 notification of third party companies of an existing need with an  
14 estimated start time based on the most current track of the storm event,  
15 in this case Hurricane Michael. At the conclusion of the restoration  
16 effort, the Company notifies the third party companies of an anticipated  
17 release date. FPUC consistently reviews the policies in place and has  
18 found the mobilization/demobilization policy effective. So no formal  
19 study was completed by either the Company, nor outside consultants.  
20 While the Company has not completed a study, nor had one completed  
21 for it, it does continue to evaluate the mobilization/demobilization  
22 activity with the same fervor as it has in previous storm events. For  
23 Hurricane Michael, these steps included review of vendor's invoice for  
24 mobilization/demobilization costs. Each vendor's invoice were  
25 summarized to include the distance travelled via google maps (start and  
26 stop location), the start and finish date, and any additional expenses for  
27 reasonableness. The comparisons that were documented are included  
28 in the response to OPC's POD 4 and 6. None of the invoices seemed  
29 unreasonable for days in travel or travel expenses charged.

30

1 **Q. DID YOU FIND INVOICE SUMMARIES THAT INCLUDED DISTANCE**  
2 **TRAVELED, THE START DATE, THE FINISH DATE AND COMPARISONS**  
3 **MADE?**

4 A. No, I did not. As I indicated earlier there was “a” vendor summary but the dates and  
5 miles were missing on some. As for an analysis of “each vendor invoice,” that  
6 documentation was not provided. In addition, the comparisons referred to by FPUC in  
7 its discovery response could not be located. This could be because FPUC’s response  
8 refers to “. . . the comparisons that were documented. . .”; however, if the comparisons  
9 were not documented, then that would explain why it was not something that was  
10 commonly found, if at all.

11 **Q. ARE YOU AWARE OF ANY DOCUMENTED REVIEW OF CONTRACTOR**  
12 **COSTS PERFORMED BY FPUC?**

13 A. Yes. In its response to Citizens’ Interrogatory No. 6-114, FPUC provided various  
14 reviews that summarized all the costs, hours and other detail associated with respective  
15 contractors. Additionally, other reviews were provided in response to Citizens’ POD  
16 No. 4-24. The review included a document entitled “Contractor Summary” that was  
17 similar to the vendor summary provided with documents in response to Citizens’ POD  
18 No. 1-4 and 1-6, discussed above. In most cases, this document was more complete  
19 than the vendor summary. For example, Exhibit HWS-6 is for ARC American, Inc.  
20 (“ARC”) and the review provided in the attachment labeled “OPC ROG 6 Number  
21 114b ARC American” included a Contractor Summary that I am attaching as Exhibit  
22 HWS-7. Unlike the vendor summary, the miles are included and there are dates for  
23 mobilization and for demobilization. According to this summary, ARC employees

1 were allowed 2 days of required travel (October 11, 2018 to October 12, 2018) when  
2 traveling to Florida and were able to return back to Indiana in 1 day (November 5,  
3 2018). The trip is listed as 663 miles. According to the labor hours summary, the hours  
4 billed for October 11, 2018 and October 12, 2018 totaled 1,338 hours, with some  
5 employees billing for 25 hours and others billing for 16 hours. This presents an issue  
6 with travel time. According to MapQuest, traveling from Wakarusa, Indiana to  
7 Marianna Florida is 853 miles and takes 13 hours and 38 minutes. That is an average  
8 of approximately 61 miles per hour. Thus, I cannot explain where the 663 miles in the  
9 contractor summary came from.

10 Evaluating the travel time, using the 853 miles, and assuming an average speed  
11 of 53 miles per hour, the travel time would be approximately 16 hours. Therefore,  
12 except for the employees who billed for 25 hours, the employees with 16 hours of travel  
13 seem reasonable. The return trip on November 5, 2018 reflected 1,392 hours for 87  
14 employees. Again the 16 hours is reasonable using the 853 miles that I identified in  
15 place of the 663 listed by FPUC. I also note that the review document did not have  
16 totals for the hours or employees for a number of the days included in this worksheet.  
17 This incompleteness of information was not uncommon in the documentation provided  
18 by FPUC in this docket. For example, there was no time labeled as  
19 mobilization/demobilization, despite the fact the review document has a column  
20 specifically labeled "MOB/DEMOB" where hours should have been listed. Thus, the  
21 documentation is insufficient to support the Company's claim that the travel hours were  
22 verified for its contractors. None of the review documents utilized this column for any  
23 of the contractors.

1 **Q. WHY DID YOU USE A DIFFERENT AVERAGE MILES PER HOUR THAN**  
2 **THE CALCULATED AVERAGE BASED ON YOUR MAPQUEST SEARCH?**

3 A. In a proceeding in Massachusetts, I requested any study the utility had that would  
4 support the use of a multiplier applied to the hours that are determined using a mapping  
5 program. Two studies were provided which concluded that, on average, larger trucks  
6 traveled slower than cars. One study set the rate of speed to be 6.7 miles per hour  
7 slower and the other set it at 7.8 miles per hour slower. Therefore, I reduced the 61  
8 miles per hour to 53 miles per hour using the 7.8 miles rounded up to 8.

9  
10 **Q. DID YOU IDENTIFY CONCERNS WITH OTHER CONTRACTORS' TIME?**

11 A. Yes. In the Contractor Summary for Chain Electric Company, attached as Exhibit  
12 HWS-8 and included in the FPUC review document OPC ROG 6 Number 114f,  
13 identifying two vendors traveling from two different locations in Mississippi. The  
14 miles traveled were either 279 miles or 381 miles on October 11, 2018. The review  
15 document did not utilize the "MOB/DEMOB" column for travel and had the weekly  
16 hours as opposed to the daily hours. As a result, in analyzing the travel for Chain  
17 Electric, I relied on FPUC's response to Citizens' POD No. 1-4, attachment OPC POD  
18 1 number 4q. According to one of the time sheets supporting invoice 123791,<sup>11</sup> 4  
19 employees charged 17 hours each on October 11, 2018<sup>12</sup>. The time sheet itself did not  
20 identify this as travel time; however, the "Storm Crew Log for Chain Electric  
21 Company"<sup>13</sup> identified it as a day of travel. The starting location was identified as  
22 Hattiesburg, Mississippi and indicated 279 miles. MapQuest calculated a distance of

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<sup>11</sup> Bates FPUC-HM-01357.

<sup>12</sup> Bates FPUC-HM-01358.

<sup>13</sup> Bates FPUC-HM-01360.

1 275 miles requiring 4 hours and 21 minutes of travel time. Assuming a travel time of  
2 4 hours and 30 minutes that equates to 61.1 miles per hour. Once again, I assumed a  
3 rate of 53 mile per hour which results in a reasonable travel time of approximately 5.5  
4 hours. This indicates that FPUC paid Chain Electric for 46 hours of excessive travel  
5 time ( $17 - 5.5 = 11.5 \times 4$ ).

6 Another example from Chain Electric is invoice 125530J<sup>14</sup> that billed for the  
7 week ending November 4, 2018, and included the demobilizing date of October 31,  
8 2018 for a Clinton, Mississippi crew. The time sheet shows 5 employees billing 16  
9 hours each on October 31, 2018 and in this case the time sheet did indicate that it was  
10 for demobilization<sup>15</sup>. Exhibit HWS-8 indicates the travel distance to be 381 miles and  
11 MapQuest indicates a distance of 374 miles with a travel time of 6 hours. The 374  
12 miles in 6 hours equates to approximately 62 miles per hour. Using the 53 miles per  
13 hour rate this trip should have been completed in 7 hours. Thus Chain Electric was  
14 paid for an extra 45 hours ( $16 - 7 = 9 \times 5$ ). In my review, I found this to be a pattern.

15 **Q. DID YOU IDENTIFY ANY ISSUES WITH STANDBY TIME IN THIS FILING?**

16 A. No. In its response to Citizens' Interrogatory No. 1-9, FPUC stated it did not incur any  
17 standby time for its contractors for any of the storms. In my review of the time sheets  
18 for contractors, I did not identify any reference to standby. Based on all the storm cases  
19 I have reviewed, this appears to be an anomaly. However, I note that while the storm  
20 impacted FPUC's system on October 10, a number of contractors were mobilized or  
21 commenced work on October 11 or later. I commend the Company in this regard

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<sup>14</sup> Bates FPUC-HM-01361.

<sup>15</sup> Bates FPUC-HM-01362.

1 because it shows that, despite accounts of other utilities claiming contractors have to  
2 be acquired well in advance of a storm event, FPUC did not do this and was able to get  
3 a devastated system up and running in a reasonable time frame.

4 **Q. ARE YOU MAKING ANY RECOMMENDATION WITH RESPECT TO**  
5 **CONTRACTOR TIME FOR MOBILIZATION/DEMOBILIZATION AND**  
6 **STANDBY TIME?**

7 A. Yes, I am. I am recommending FPUC be required to separately identify the number of  
8 hours and costs that are associated with mobilization/demobilization and standby time.  
9 This is essential information that is beneficial not only to the Company, but also to the  
10 Commission. This information provides critical insight into how FPUC is planning  
11 and controlling costs before, during, and after storm restoration activities. The review  
12 documents are already set up to accommodate the tracking of this information and  
13 should be utilized to properly verify the contractor costs and support the requested  
14 recovery of prudent and reasonable storm restoration costs.

15 **Q. ARE YOU RECOMMENDING A DISALLOWANCE OF COSTS FOR THE**  
16 **EXCESSIVE MOBILIZATION/DEMOBILIZATION?**

17 A. I am recommending the line contractor costs be reduced by \$273,678 for the excessive  
18 travel time charged and unsupported mobilization/demobilization time.

19 **Q. HOW DID YOU DETERMINE YOUR ADJUSTMENT?**

20 A. My analysis of line contractor cost is shown on Exhibit No. HWS-2, Schedule E, Page  
21 2 of 4. Using the time reports or the review documents, I estimated the  
22 mobilization/demobilization dollars by multiplying the hours times the average hourly

1 rate for labor. In many cases, but not all, this approach was conservative since FPUC's  
2 documentation may have indicated travel on certain dates, yet when the travel exceeded  
3 one day, I prorated the hours on the second day of travel because I did not believe the  
4 travel could be as high as the documents suggested. As I discussed above, each of the  
5 three examples had excessive travel time. Based on that analysis, the excess appears  
6 to be in the 40-50% range. While I am confident that excessive time was allowed for  
7 travel, the ability to calculate an exact amount is not possible since the information for  
8 mobilization/demobilization was not sufficiently tracked. My recommended reduction  
9 of 25% instead of 40%-50% allows for stopping for fuel and resting. Thus, my  
10 recommended reduction of 25% is a conservative estimate for the  
11 mobilization/demobilization costs that should be disallowed.

12 **Q. WHAT ARE YOU RECOMMENDING FOR AN OVERALL ADJUSTMENT**  
13 **TO THE LINE CONTRACTOR COSTS INCLUDING**  
14 **MOBILIZATION/DEMobilIZATION?**

15 A. As shown on Exhibit No. HWS-2, Schedule E, Page 1 of 4, I am recommending the  
16 line contractor costs charged to restoration be reduced by \$5,062,011 (from  
17 \$31,480,762 to \$26,418,750). This includes an adjustment of [REDACTED] for the  
18 excessive costs related to the FPUC FPL charges and \$273,768 for excessive charges  
19 for mobilization/demobilization.

20 **ii. Line Clearing Costs**

21 **Q. WHAT IS FPUC REQUESTING FOR LINE CLEARING?**

22 A. FPUC reported \$4,051,976 of line clearing costs in its response to Citizens'  
23 Interrogatory No. 1-2. FPUC allocated \$1,269,449 to plant and \$643,659 to cost of

1 removal leaving \$2,138,867 for storm restoration cost recovery. Costs were allocated  
2 using the same allocation methodology that was applied to line contractor costs.

3 **Q. DO YOU HAVE ANY CONCERNS WITH RESPECT TO FPUC'S**  
4 **PROCESSING OF LINE CLEARING INVOICES?**

5 A. Yes, I do. Similar to Docket No. 20180061-EI, my review of these costs was limited  
6 because a large number of invoices from the line clearing contractors appear to be daily  
7 billings which fell below the selection threshold of \$25,000. In jurisdictions where a  
8 dollar threshold is applied to invoices for review purposes, the setting of a dollar  
9 threshold comes at the behest of the utility. Should there be another review of storm  
10 cost in the future. I recommend the Commission utilize a threshold of \$10,000 for  
11 FPUC to avoid the scope limitation imposed when invoices are for less than a week's  
12 work. Of the \$4,051,976 reported costs, I was only able to review \$1,302,708 of costs  
13 based on invoices that were over \$25,000.

14 **Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO LINE CLEARING**  
15 **COSTS?**

16 A. I am not recommending a specific adjustment amount, even though one should be  
17 made. I have not been able to quantify even an estimated amount for  
18 mobilization/demobilization costs for line clearing contractors that should be  
19 disallowed due to the limited detail provided. However, the same issue I identified for  
20 mobilization and demobilization with line contractors also exists for line clearing  
21 contractors. Therefore, a similar disallowance of 25% could be made for the reasons  
22 discussed in my line contractor testimony.

1           **iii. Other Contractor Costs**

2   **Q.    WHAT IS FPUC REQUESTING FOR OTHER CONTRACTOR COSTS?**

3   A.    FPUC is requesting \$371,875 for other contractor costs based on its response to  
4       Citizens' Interrogatory No. 1-2. FPUC allocated \$5,122 to plant and \$2,303 to cost of  
5       removal, leaving \$364,450 for storm restoration recovery. The costs listed as other are  
6       various consulting costs.

7   **Q.    ARE YOU RECOMMENDING ANY ADJUSTMENTS TO THE OTHER**  
8       **CONTRACTOR COSTS?**

9   A.    Yes. These costs include a "projected" amount of \$166,469 for Gunster Yoakley &  
10       Steward, P.A. No adequate documentation was provided to support this invoice as  
11       related to storm recovery efforts; therefore, absent support, this cost estimate should  
12       be disallowed. The adjustment is reflected on Exhibit HWS-2, Schedule E, page 4.

13           **c. Logistics**

14   **Q.    WHAT AMOUNT OF LOGISTIC COSTS HAS FPUC INCLUDED IN ITS**  
15       **REQUEST?**

16   A.    FPUC includes logistic costs for Hurricane Michael and Hurricane Dorian in the  
17       amount of \$1,754,780. There are no logistics costs that were allocated to plant or cost  
18       of removal. Logistic costs are costs related to the establishment and operation of storm  
19       restoration sites, and to support employees and contractors who are working on storm  
20       restoration (i.e., lodging, meals, transportation, etc.). The amount requested was  
21       increased by \$316,884 in FPUC's revised filing; however, the Company failed to  
22       provide any added supporting detail in its updates.

1 Q. ARE THERE ANY CONCERNS WITH THE LOGISTIC COSTS  
2 REQUESTED?

3 A. Yes, there are. There are at least two invoices for generators that should be considered  
4 capital costs; however FPUC did not capitalize any logistics costs. Additionally, the  
5 Company's updated filing added \$316,484 of costs and no additional documentation  
6 was provided to substantiate the increase in costs. It is the Company's burden to prove  
7 up its requested storm cost recovery. When FPUC updated its filing, it was incumbent  
8 upon the Company to provide comparable supporting detail to that originally requested.  
9 The Company has the information and is cognizant of changes it makes to its filing and  
10 it should be compelled to automatically provide detail and support for any additional  
11 costs being requested. If such costs are approved without any such requirement to  
12 provide supporting detail, the Company would be granted cart blanche approval to add  
13 whatever new costs it desires whether justified or not.

14 Q. ARE YOU PROPOSING AN ADJUSTMENT TO THE COMPANY'S  
15 LOGISTIC EXPENSE FOR THE DIFFERENCE?

16 A. Yes, I am. As I stated, there was no supporting detail for the \$316,484 increase  
17 included in FPUC's updated filing. Unless and until the Company provides supporting  
18 documentation of what the costs are and that these costs are appropriately recoverable  
19 as storm recovery costs, these costs should be denied. This adjustment is reflected on  
20 Exhibit HWS-2, Schedule F.

21 **d. Vehicle & Fuel Costs**

22 Q. WHAT IS FPUC REQUESTING FOR VEHICLE AND FUEL COSTS?

1 A. FPUC's is requesting \$1,475,235 for fuel costs. None of these costs were charged to  
2 plant or removal.

3 **Q. DO YOU HAVE ANY CONCERNS WITH THE LEVEL OF VEHICLE AND**  
4 **FUEL COSTS BEING REQUESTED?**

5 A. No, I do not. After a review of these costs and the supporting detail provided, I have  
6 not identified any issues that would require an adjustment to the Company's request  
7 concerning vehicle and fuel costs.

8 **e. Materials & Supplies**

9 **Q. WHAT DID YOU DETERMINE FROM YOUR REVIEW OF THE COSTS FOR**  
10 **MATERIALS AND SUPPLIES THAT WERE INCLUDED IN THE**  
11 **COMPANY'S REQUEST FOR RECOVERY?**

12 A. FPUC's is requesting \$1,221,060 for materials and supplies, after capitalizing  
13 \$3,592,133.

14 **Q. ARE THERE ANY CONCERNS WITH THE LEVEL OF MATERIALS AND**  
15 **SUPPLIES BEING CHARGED TO FPUC'S REQUEST?**

16 A. I am not recommending any adjustment to FPUC's requested costs for materials and  
17 supplies.

18 **f. Capitalizable Costs**

19 **Q. ARE YOU MAKING ANY RECOMMENDATIONS TO IMPROVE THE**  
20 **METHOD OF ACCOUNTING FOR AND RECOVERING STORM COSTS?**

21 A. Yes, I am. FPUC does not appear to have a set policy or methodology for capitalization  
22 of storm costs. In its response to Citizens' POD No. 1-1 in Docket No. 20180061-EI,

1 FPUC stated no capitalization policy existed. Apparently, the Company still does not  
2 have a policy to properly capitalize costs for replacement of poles and wires. While I  
3 am not taking an issue with the capitalized costs in this docket, FPUC should  
4 memorialize the methodology it utilized so a consistent approach can be followed from  
5 one storm to the next. It should be noted that I am not necessarily agreeing with how  
6 FPUC determined its capitalization in this docket because the Company provided only  
7 a brief explanation as to the method it utilized. My acceptance is based on the averages  
8 that were reflected for replacement property. Absent some formalized process that can  
9 be tested, the results in a future storm event may not produce the same results.

#### 10 VIII. RECOMMENDATIONS

11 **Q. ARE YOU MAKING ANY RECOMMENDATIONS TO IMPROVE THE**  
12 **PROCEDURE FOR SEEKING RECOVERY OF STORM COSTS?**

13 A. Yes, I am. In addition to my previous recommendations regarding record keeping  
14 associated with mobilization/demobilization and standby time, I recommend the  
15 Commission mandate additional filing requirements when FPUC seeks to recover  
16 future storm restoration costs. FPUC incurred a significant amount of costs during the  
17 process of restoring service to customers after Hurricane Michael. When seeking cost  
18 recovery for storm restoration costs, the supporting cost documentation and testimony  
19 should be provided simultaneously with the petition seeking such recovery. This will  
20 significantly reduce the need for additional discovery by Commission staff and  
21 intervening parties, and will provide the requisite support for the recovery that is being  
22 requested from ratepayers. For example, in Massachusetts when a company seeks  
23 recovery for storm costs, it is required to include all supporting documentation at the

1 time the petition for cost recovery is filed. I believe this is a better model for Florida  
2 to implement and will improve the overall process. Another important element for the  
3 Commission to consider is to require a utility to submit documentation demonstrating  
4 it has reviewed all contractor costs. While there were a number of issues with missing  
5 or omitted information in this proceeding, documenting that the utility has reviewed its  
6 contractor costs will provide, a higher level of assurance with respect to the reliability  
7 of the costs and amounts being requested.

8 **Q. BASED ON YOUR TESTIMONY, PLEASE SUMMARIZE YOUR**  
9 **RECOMMENDED ADJUSTMENTS?**

10 A. My recommended adjustments are as follows:

- 11 • A reduction of \$120,800 to FPUC's request for payroll cost recovery for prohibited  
12 bonus payments;
- 13 • A reduction of \$24,703 to FPUC's request for benefit/overhead cost recovery that  
14 included prohibited bonus payments;
- 15 • A reduction to contractor costs of [REDACTED] for excessive hourly charge by FPL  
16 FPUC;
- 17 • A reduction of \$273,768 to FPUC's request related to excessive  
18 mobilization/demobilization costs associated with line contractor costs;
- 19 • A reduction of \$166,469 to FPUC's request for unsupported other contractor costs;
- 20 • A reduction of \$316,884 to FPUC's request for unsupported logistic costs;
- 21 • A reduction of \$885,855 to rate base and reduction of \$196,857 of associated  
22 amortization expense for the unsupported and prohibited recovery of lost revenues from  
23 expenses not recovered which is in fact a request for lost revenues;

- 1       • A reduction of \$454,000 to rate base and a reduction of \$100,890 of associated  
2       amortization expenses for unsupported and prohibited recovery of lost revenues due to  
3       lost customers;
- 4       • A reduction of \$18,798,487 to rate base for new plant and a reduction of \$696,680 of  
5       associated depreciation expenses because this is a storm cost recovery proceeding and  
6       not a base rate case proceeding; and
- 7       • A reduction of \$7,838,897 to rate base for retired plant/cost of removal and a reduction  
8       of \$825,147 of associated amortization expenses because this is a storm cost recovery  
9       proceeding and not a rate case.

10       For the quantified amounts identified above, I recommend a total elimination of any  
11       rate base recovery as part of a single-issue rate case request and a total reduction of  
12       \$5,690,868 to FPUC's overall storm restoration costs. Further, I recommend that  
13       FPUC's request for application of WACC be denied and that the short-term cost of debt  
14       be applied to any storm costs determined to be reasonable and prudent.

15   **Q.    DOES THAT CONCLUDE YOUR TESTIMONY?**

16   **A.    Yes, it does.**

1                   (Whereupon, Witness Garrett's prefiled direct  
2           testimony was inserted into the record as though  
3           read.)

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## ERRATA SHEET

WITNESS: David J. Garrett

The following table contains the corrected errata in his direct testimony.

| <u>Page</u> | <u>Line</u> | <u>Original</u> | <u>Revision</u> |
|-------------|-------------|-----------------|-----------------|
| Page 30     | Line 13     | \$25,976        | \$27,075        |
| Page 37     | Line 3      | Account 353     | Account 366     |
| Page 40     | Line 1      | Account 353     | Account 367     |
| Page 46     | Line 3      | Account 353     | Account 369     |

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for establishment of regulatory assets for expenses not recovered during restoration for Hurricane Michael, by Florida Public Utilities Company.

DOCKET NO. 20190155-EI

In re: Petition for a limited proceeding to recover incremental storm restoration costs, capital costs, revenue reduction for permanently lost customers, and regulatory assets related to Hurricane Michael, by Florida Public Utilities Company.

DOCKET NO. 20190156-EI

In re: Petition for approval of 2019 depreciation study by Florida Public Utilities Company.

DOCKET NO. 20190174-EI

**DIRECT TESTIMONY  
OF  
DAVID J. GARRETT**

**ON BEHALF OF THE FLORIDA OFFICE OF PUBLIC COUNSEL**

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## APPENDICES

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## LIST OF EXHIBITS

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| Exhibit DJG-2  | Summary Depreciation Accrual Adjustment                       |
| Exhibit DJG-3  | Weighted Average Peer Group Service Lives                     |
| Exhibit DJG-4  | Peer Group Detailed Parameter Comparison                      |
| Exhibit DJG-5  | Detailed Rate Comparison – Weighted Average                   |
| Exhibit DJG-6  | Depreciation Rate Development – Weighted Average              |
| Exhibit DJG-7  | Detailed Rate Comparison – Midwest Peer Group                 |
| Exhibit DJG-8  | Depreciation Rate Development – Midwest Peer Group            |
| Exhibit DJG-9  | Detailed Rate Comparison – Coastal Peer Group                 |
| Exhibit DJG-10 | Depreciation Rate Development – Coastal Peer Group            |
| Exhibit DJG-11 | Detailed Rate Comparison – Florida Peer Group                 |
| Exhibit DJG-12 | Depreciation Rate Development – Florida Peer Group            |
|                | <u>Comparable Observed Life Tables and Iowa Curve Fitting</u> |
| Exhibit DJG-13 | Account 353 – Transmission Station Equipment                  |
| Exhibit DJG-14 | Account 355 – Transmission Poles and Fixtures                 |
| Exhibit DJG-15 | Account 362 – Distribution Station Equipment                  |
| Exhibit DJG-16 | Account 364 – Distribution Poles, Towers, and Fixtures        |
| Exhibit DJG-17 | Account 366 – Distribution Underground Conduit                |
| Exhibit DJG-18 | Account 367 – Distribution Underground Conductors             |
| Exhibit DJG-19 | Account 368 – Distribution Line Transformers                  |
| Exhibit DJG-20 | Account 369 – Distribution Services                           |

1 **I. INTRODUCTION**

2 **Q. STATE YOUR NAME AND OCCUPATION.**

3 A. My name is David J. Garrett. I am a consultant specializing in public utility regulation. I  
4 am the managing member of Resolve Utility Consulting PLLC.

5 **Q. SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL  
6 EXPERIENCE.**

7 A. I received a B.B.A. degree with a major in Finance, an M.B.A. degree, and a Juris Doctor  
8 degree from the University of Oklahoma. I worked in private legal practice for several  
9 years before accepting a position as assistant general counsel at the Oklahoma Corporation  
10 Commission in 2011. At the commission, I worked in the Office of General Counsel in  
11 regulatory proceedings. In 2012, I began working for the Public Utility Division as a  
12 regulatory analyst providing testimony in regulatory proceedings. After leaving the  
13 commission, I formed Resolve Utility Consulting PLLC, where I have represented various  
14 consumer groups and state agencies in utility regulatory proceedings, primarily in the areas  
15 of cost of capital and depreciation. I am a Certified Depreciation Professional with the  
16 Society of Depreciation Professionals. I am also a Certified Rate of Return Analyst with  
17 the Society of Utility and Regulatory Financial Analysts. A more complete description of  
18 my qualifications and regulatory experience is included in my curriculum vitae.<sup>1</sup>

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<sup>1</sup> Exhibit DJG-1.

1 **Q. DESCRIBE THE PURPOSE AND SCOPE OF YOUR TESTIMONY IN THIS**  
2 **PROCEEDING.**

3 A. I am testifying on behalf of the Florida Office of Public Counsel (“OPC”) in response to  
4 the Petition for approval of the 2019 depreciation study by Florida Public Utilities  
5 Company (“FPUC” or the “Company”). I will address the depreciation rates and  
6 parameters proposed by FPUC and sponsored in the direct testimony of Company witness  
7 Patricia Lee.

8 **II. EXECUTIVE SUMMARY**

9 **Q. SUMMARIZE THE KEY POINTS OF YOUR TESTIMONY REGARDING**  
10 **DEPRECIATION.**

11 A. In the context of utility ratemaking, “depreciation” refers to a cost allocation system  
12 designed to measure the rate by which a utility may recover its capital investments in a  
13 systematic and rational manner. There are two primary components of depreciation rates  
14 that must be estimated and are often the most pertinent issues in regulatory proceedings –  
15 service life and net salvage. Typically, the service lives proposed in depreciation studies  
16 are based on voluminous amounts of historical data. Through a combination of actuarial  
17 and simulated analysis, depreciation analysts can observe retirement patterns and trends in  
18 the historical data in order to make reasonably accurate projections of remaining life. In  
19 this case, however, FPUC did not provide the historical data required to conduct an  
20 accurate, company-specific analysis of the service life of its assets. Instead, FPUC based  
21 its service life proposals on the approved service lives of other Florida utilities. It is my

1 understanding that some of the approved service lives among the Florida peer group on  
2 which FPUC relied were also based on a similar peer group comparison. In other words,  
3 FPUC is basing its service life proposals on a Florida peer group average, and those service  
4 lives (at least in part), were based on other prior Florida peer group averages. Repeating  
5 this process case after case has the effect of creating a type of echo chamber or feedback  
6 loop among the approved service lives of some Florida utilities. As noted in Ms. Lee's  
7 testimony, the approach used in the Company's depreciation study in this case "is similar  
8 to that used in each FPUC electric depreciation study for the last 20+ years."<sup>2</sup> To the extent  
9 some of the peer group utilities have taken a similar approach over the same period of time,  
10 it means that some of FPUC's service lives might be based on information that is decades  
11 old, and such information may have never been originally based on company-specific  
12 historical service life data. In other words, FPUC's proposed service lives in this case are  
13 based on a copy of a copy of a copy of the same approved service lives of an echo-chamber  
14 peer group for over 20 years. This is not how service lives are typically estimated.

15 As discussed further in my testimony, the legal standards governing depreciation  
16 rates require that the utility make a convincing showing that its proposed depreciation rates  
17 are not excessive. Again, this showing is typically based, at the very least, on adequate  
18 amounts of historical retirement data upon which reasonable service life estimates can be  
19 made. The fact that FPUC has not provided such information in this case does not absolve  
20 it from its burden to make a convincing showing that its proposed depreciation rates  
21 (including service lives) are reasonable. By simply relying on an echo chamber of

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<sup>2</sup> Direct Testimony of Patricia Lee, p. 12, lines 7-9.

1 approved service lives for other utilities, FPUC's proposed service lives are not well  
2 supported. This is especially true in light of the fact that the approved service lives for  
3 utilities outside of the echo chamber for several key accounts are notably longer than those  
4 proposed by FPUC for the same accounts. All else held constant, longer service lives result  
5 in lower depreciation rates and expense.

6 Since FPUC did not provide adequate historical retirement data upon which to  
7 conduct an accurate service life analysis, a peer group comparison is an approach we can  
8 use to establish a relatively objective basis for service life estimates. My testimony not  
9 only discusses the service lives of other Florida utilities, but also looks at the approved  
10 service lives of other utilities in coastal and midwestern service territories. There are two  
11 notable benefits to this approach. First, it considers approved service lives outside of the  
12 echo chamber. Second, the approved service lives from these other areas were based on  
13 the type of actuarial analysis typically conducted to estimate service lives. It is important  
14 for the Commission to see the approved service lives of utilities that are not only in other  
15 regions, but that were also based on a thorough statistical analysis of voluminous amounts  
16 of historical retirement data. The costal utilities group provides a comparison of utilities  
17 in similar environmental conditions outside of Florida. The Midwestern utilities group  
18 provides a comparison of service lives that were developed through extensive analysis of  
19 actuarial data. Even though the Midwest region differs Florida in terms of climate, it  
20 nonetheless has its own environmental challenges, including tornados, hail, and ice storms.  
21 The results of my peer group analyses are summarized in the table below.

1  
2

**Figure 1:  
Peer Group Analysis Summary**

| Acct                             | Description               | FPUC<br>Proposed | Midwest<br>Avg | Coastal<br>Avg | Florida<br>Avg | Weighted<br>Avg |
|----------------------------------|---------------------------|------------------|----------------|----------------|----------------|-----------------|
| <b><u>TRANSMISSION PLANT</u></b> |                           |                  |                |                |                |                 |
| 353                              | Station Equipment         | 45               | 65             | 59             | 44             | 53              |
| 355                              | Poles & Fixtures          | 43               | 54             | 56             | 43             | 50              |
| <b><u>DISTRIBUTION PLANT</u></b> |                           |                  |                |                |                |                 |
| 362                              | Station Equipment         | 50               | 66             | 56             | 49             | 55              |
| 364                              | Poles, Towers, & Fixtures | 38               | 54             | 45             | 38             | 44              |
| 366                              | UG Conduit                | 60               | 71             | 58             | 65             | 64              |
| 367                              | Underground Conductors    | 35               | 60             | 48             | 39             | 47              |
| 368                              | Line Transformers         | 30               | 43             | 41             | 30             | 36              |
| 369                              | Services                  | 40               | 56             | 49             | 44             | 48              |

3 The numbers in the table represent the average approved service lives from multiple  
4 companies over three regions: the Midwest, Coastal, and Florida regions. The specific  
5 companies and approved service lives will be discussed in more detail below in the  
6 discussions by account. It is clear from the information presented in this table alone,  
7 however, that the service lives proposed by FPUC in this case are notably and consistently  
8 shorter than the approved service lives for the same accounts in the Midwest and Coastal  
9 regions. This further indicates that the effect of using the echo chamber approach for over  
10 20 years has resulted in inaccurately short service life estimates for FPUC.

11 **Q. PLEASE DESCRIBE THE ANALYTICAL WEIGHTINGS YOU APPLIED TO**  
12 **THE PEER GROUP AVERAGES.**

13 I considered the average approved service lives from each of the three peer group regions  
14 in my analysis. As an objective approach, I applied an analytical weighting to each of the  
15 peer group averages, as follows: Midwest – 20%, Coastal – 35%, and Florida – 45%. My

1 rational behind giving the Florida group the highest weighting is because it is my  
2 understanding that the Commission has consistently relied on an average of the Florida  
3 peer group. To the extent that some of the approved service lives in the Florida peer group  
4 are based on actuarial analysis of adequate historical data, it is reasonable to give the  
5 Florida group the highest weighting, despite my noted concerns regarding the echo  
6 chamber effect. I applied the next highest weighting of 35% to the Coastal peer group  
7 because these companies have service territories that are relatively comparable to FPUC's  
8 in terms of proximity and environment. Finally, I applied the lowest weighting to the  
9 Midwest peer group. Although I was directly involved in the depreciation analysis in each  
10 of the cases comprising the Midwest peer group and I know that the service lives were  
11 based on the actuarial analysis of reliable historical data, I gave this group the lowest  
12 weighting because the service territories in which the utilities in this group operate are  
13 relatively less comparable to FPUC's service territory.

14 **Q. PLEASE SUMMARIZE THE IMPACT OF YOUR PROPOSED SERVICE LIVES**  
15 **ON FPUC'S PROPOSED ANNUAL DEPRECIATION ACCRUAL**

16 A. Using FPUC's plant and reserve balances as of January 1, 2020, I applied my proposed  
17 service life adjustment for the eight accounts summarized in the table above to calculate  
18 my proposed depreciation rates and accrual amounts. The results are summarized in the  
19 table below.

1 **Figure 2:**  
2 **Summary Depreciation Accrual Adjustment**

| Plant Function             | Plant Balance<br>1/1/2020 | FPUC Proposed<br>Accrual | OPC Proposed<br>Accrual | OPC Accrual<br>Adjustment |
|----------------------------|---------------------------|--------------------------|-------------------------|---------------------------|
| Transmission               | 19,106,966                | 518,046                  | 425,184                 | (92,862)                  |
| Distribution               | 125,915,937               | 4,163,199                | 3,443,120               | (720,079)                 |
| General                    | 9,909,111                 | 432,892                  | 431,590                 | (1,302)                   |
| <b>Total Plant Studied</b> | <b>\$ 154,932,014</b>     | <b>\$ 4,985,663</b>      | <b>\$ 4,171,420</b>     | <b>\$ (814,243)</b>       |

3 Adopting my proposed depreciation rates would reduce the Company's proposed  
4 depreciation accrual by \$814,243.<sup>3</sup>

5 **Q. ARE YOU RECOMMENDING ANY ADJUSTMENTS TO FPUC'S PROPOSED**  
6 **NET SALVAGE RATES?**

7 A. No. In my opinion, FPUC's proposed net salvage rates are reasonable given the  
8 information provided to support such net salvage rates.

9 **Q. DESCRIBE WHY IT IS IMPORTANT NOT TO OVERESTIMATE**  
10 **DEPRECIATION RATES.**

11 A. Under the rate base rate of return model, the utility is allowed to recover the original cost  
12 of its prudent investments required to provide service. Depreciation systems are designed  
13 to allocate those costs in a systematic and rational manner – specifically, over the service  
14 life of the utility's assets. If depreciation rates are overestimated (i.e., service lives are  
15 underestimated), it encourages economic inefficiency. Unlike competitive firms, regulated

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<sup>3</sup> See also Exhibit DJG-2.

1 utility companies are not always incentivized by natural market forces to make the most  
2 economically efficient decisions. If a utility is allowed to recover the cost of an asset before  
3 the end of its useful life, this could incentivize the utility to unnecessarily replace the asset  
4 in order to increase its rate base, which results in economic waste. Thus, from a public  
5 policy perspective, it is preferable for regulators to ensure that assets are not depreciated  
6 before the end of their true useful lives. While underestimating the useful lives of  
7 depreciable assets could financially harm current ratepayers and encourage economic  
8 waste, unintentionally overestimating depreciable lives (i.e., underestimating depreciation  
9 rates) does not necessarily harm the Company financially. This is because if an asset's life  
10 is overestimated, there are a variety of measures that regulators can use to ensure the utility  
11 is not financially harmed. One such measure would be the use of a regulatory asset account.  
12 In that case, the Company's original cost investment in these assets would remain in the  
13 Company's rate base until they are recovered. Thus, the process of depreciation strives for  
14 a perfect match between actual and estimated useful life. When these estimates are not  
15 exact, however, it is better that useful lives are not underestimated for these reasons.

### 16 **III. LEGAL STANDARDS**

17 **Q. DISCUSS THE STANDARD BY WHICH REGULATED UTILITIES ARE**  
18 **ALLOWED TO RECOVER DEPRECIATION EXPENSE.**

19 A. In *Lindheimer v. Illinois Bell Telephone Co.*, the U.S. Supreme Court stated that  
20 "depreciation is the loss, not restored by current maintenance, which is due to all the factors  
21 causing the ultimate retirement of the property. These factors embrace wear and tear,

1 decay, inadequacy, and obsolescence.”<sup>4</sup> The *Lindheimer* Court also recognized that the  
 2 original cost of plant assets, rather than present value or some other measure, is the proper  
 3 basis for calculating depreciation expense.<sup>5</sup> Moreover, the *Lindheimer* Court found:

4 [T]he company has the burden of making a convincing showing that the  
 5 amounts it has charged to operating expenses for depreciation have not been  
 6 excessive. That burden is not sustained by proof that its general accounting  
 7 system has been correct. The calculations are mathematical, but the  
 8 predictions underlying them are essentially matters of opinion.<sup>6</sup>

9 Thus, the Commission must ultimately determine if the Company has met its burden of  
 10 proof by making a convincing showing that its proposed depreciation rates are not  
 11 excessive.

12 **Q. SHOULD DEPRECIATION REPRESENT AN ALLOCATED COST OF CAPITAL**  
 13 **TO OPERATION, RATHER THAN A MECHANISM TO DETERMINE LOSS OF**  
 14 **VALUE?**

15 A. Yes. While the *Lindheimer* case and other early literature recognized depreciation as a  
 16 necessary expense, the language indicated that depreciation was primarily a mechanism to  
 17 determine loss of value.<sup>7</sup> Adoption of this “value concept” would require annual appraisals

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<sup>4</sup> *Lindheimer v. Illinois Bell Tel. Co.*, 292 U.S. 151, 167 (1934).

<sup>5</sup> *Id.* (Referring to the straight-line method, the *Lindheimer* Court stated that “[a]ccording to the principle of this accounting practice, the loss is computed upon the actual cost of the property as entered upon the books, less the expected salvage, and the amount charged each year is one year's pro rata share of the total amount.”). The original cost standard was reaffirmed by the Court in *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591, 606 (1944). The *Hope* Court stated: “Moreover, this Court recognized in [*Lindheimer*], *supra*, the propriety of basing annual depreciation on cost. By such a procedure the utility is made whole and the integrity of its investment maintained. No more is required.”

<sup>6</sup> *Id.* at 169.

<sup>7</sup> See Frank K. Wolf & W. Chester Fitch, *Depreciation Systems* 71 (Iowa State University Press 1994).

1 of extensive utility plant, and thus, is not practical in this context. Rather, the “cost  
2 allocation concept” recognizes that depreciation is a cost of providing service, and that in  
3 addition to receiving a “return on” invested capital through the allowed rate of return, a  
4 utility should also receive a “return of” its invested capital in the form of recovered  
5 depreciation expense. The cost allocation concept also satisfies several fundamental  
6 accounting principles, including verifiability, neutrality, and the matching principle.<sup>8</sup> The  
7 definition of “depreciation accounting” published by the American Institute of Certified  
8 Public Accountants (“AICPA”) properly reflects the cost allocation concept:

9 Depreciation accounting is a system of accounting that aims to distribute  
10 cost or other basic value of tangible capital assets, less salvage (if any), over  
11 the estimated useful life of the unit (which may be a group of assets) in a  
12 systematic and rational manner. It is a process of allocation, not of  
13 valuation.<sup>9</sup>

14 Thus, the concept of depreciation as “the allocation of cost has proven to be the most useful  
15 and most widely used concept.”<sup>10</sup>

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<sup>8</sup> National Association of Regulatory Utility Commissioners, *Public Utility Depreciation Practices* 12 (NARUC 1996).

<sup>9</sup> American Institute of Accountants, *Accounting Terminology Bulletins Number 1: Review and Résumé* 25 (American Institute of Accountants 1953).

<sup>10</sup> Wolf *supra* n. 7, at 73.

#### IV. SERVICE LIFE ANALYSIS

1  
2 **Q. DESCRIBE THE ACTUARIAL PROCESS TYPICALLY USED TO ANALYZE A**  
3 **UTILITY'S DEPRECIABLE PROPERTY.**

4 A. The study of retirement patterns of industrial property is derived from the actuarial process  
5 used to study human mortality. Just as actuarial analysts study historical human mortality  
6 data in order to predict how long a group of people will live, depreciation analysts study  
7 historical plant data in order to estimate the average lives of property groups. The most  
8 common actuarial method used by depreciation analysts is called the "retirement rate  
9 method." In the retirement rate method, original property data, including additions,  
10 retirements, transfers, and other transactions, are organized by vintage and transaction  
11 year.<sup>11</sup> The retirement rate method is ultimately used to develop an "observed life table,"  
12 ("OLT") which shows the percentage of property surviving at each age interval. This  
13 pattern of property retirement is described as a "survivor curve." The survivor curve  
14 derived from the observed life table, however, must be fitted and smoothed with a complete  
15 curve in order to determine the ultimate average life of the group.<sup>12</sup> The most widely used  
16 survivor curves for this curve fitting process were developed at Iowa State University in  
17 the early 1900s and are commonly known as the "Iowa curves."<sup>13</sup> A more detailed  
18 explanation of how the Iowa curves are used in the actuarial analysis of depreciable

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<sup>11</sup> The "vintage" year refers to the year that a group of property was placed in service (aka "placement" year). The "transaction" year refers to the accounting year in which a property transaction occurred, such as an addition, retirement, or transfer (aka "experience" year).

<sup>12</sup> See Appendix C for a more detailed discussion of the actuarial analysis used to determine the average lives of grouped industrial property.

<sup>13</sup> See Appendix B for a more detailed discussion of the Iowa curves.

1 property is set forth in Appendix C. However, FPUC did not provide the type of aged data  
2 required to conduct actuarial analysis and traditional Iowa curve fitting techniques. As  
3 acknowledged by Ms. Lee in her testimony, “[s]urvivor curves were not generated by  
4 statistical analysis for any account in the [depreciation] Study.”<sup>14</sup> Nonetheless, I describe  
5 the process typically used to conduct service life estimates because, in the account-specific  
6 discussion below, I will illustrate this process using the actual OLT curve and Iowa curves  
7 from the Midwest peer group in order to show how the Iowa curves selected by FPUC are  
8 notably shorter than those of the other utilities.

9 **Q. GENERALLY DESCRIBE YOUR APPROACH IN ESTIMATING THE SERVICE**  
10 **LIVES OF MASS PROPERTY WHEN ADEQUATE AGED DATA ARE**  
11 **AVAILABLE.**

12 A. When adequate data is available, I use all of a utility’s aged property data to create an OLT  
13 for each account. The data points on the OLT can be plotted to form a curve (the “OLT  
14 curve”). The OLT curve is not a theoretical curve, rather, it is actual observed data from  
15 the Company’s records that indicate the rate of retirement for each property group. An  
16 OLT curve by itself, however, is rarely a smooth curve, and is often not a “complete” curve  
17 (i.e., it does not end at zero percent surviving). In order to calculate average life (the area  
18 under a curve), a complete survivor curve is needed. The Iowa curves are empirically-  
19 derived curves based on the extensive studies of the actual mortality patterns of many  
20 different types of industrial property. The curve-fitting process involves selecting the best

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<sup>14</sup> Direct Testimony of Patricia Lee, p. 15, lines 4-5.

1 Iowa curve to fit the OLT curve. This can be accomplished through a combination of visual  
2 and mathematical curve-fitting techniques, as well as professional judgment. The first step  
3 of my approach to curve-fitting involves visually inspecting the OLT curve for any  
4 irregularities. For example, if the “tail” end of the curve is erratic and shows a sharp decline  
5 over a short period of time, it may indicate that this portion of the data is less reliable, as  
6 further discussed below. After inspecting the OLT curve, I use a mathematical curve-  
7 fitting technique which essentially involves measuring the distance between the OLT curve  
8 and the selected Iowa curve in order to get an objective, mathematical assessment of how  
9 well the curve fits. After selecting an Iowa curve, I observe the OLT curve along with the  
10 Iowa curve on the same graph to determine how well the curve fits. I may repeat this  
11 process several times for any given account to ensure that the most reasonable Iowa curve  
12 is selected. I will illustrate this process further in the discussions below.

13 **Q. PLEASE SUMMARIZE YOUR SERVICE LIFE ADJUSTMENTS.**

14 A. Since FPUC did not provide the type of adequate aged data that is typically used for an  
15 accurate service life analysis, we must rely on the approved service lives of other utilities  
16 for some objective indication of an appropriate service life. Unlike FPUC, I not only  
17 considered the approved service lives of other utilities in the echo chamber, but I also  
18 considered the approved service lives of several other utilities from the Midwest and

1 Coastal regions. The approved service lives I considered are summarized in the tables  
 2 below.<sup>15</sup>

3 **Figure 3:**  
 4 **Midwest Peer Group Summary**

| <u>Acct</u>                      | <u>Description</u>        | <u>SWEPCO</u> | <u>OG&amp;E</u> | <u>PSO</u> | <u>Avg</u> |
|----------------------------------|---------------------------|---------------|-----------------|------------|------------|
| <b><u>TRANSMISSION PLANT</u></b> |                           |               |                 |            |            |
| 353                              | Station Equipment         | 73            | 63              | 60         | 65         |
| 355                              | Poles & Fixtures          | 50            | 65              | 46         | 54         |
| <b><u>DISTRIBUTION PLANT</u></b> |                           |               |                 |            |            |
| 362                              | Station Equipment         | 55            | 68              | 75         | 66         |
| 364                              | Poles, Towers, & Fixtures | 55            | 55              | 53         | 54         |
| 366                              | UG Conduit                | 70            | 65              | 78         | 71         |
| 367                              | Underground Conductors    | 50            | 64              | 65         | 60         |
| 368                              | Line Transformers         | 50            | 44              | 36         | 43         |
| 369                              | Services                  | 55            | 53              | 60         | 56         |

5 The Midwest peer group I selected consists of three companies: Southwestern Electric  
 6 Power Company, Oklahoma Gas and Electric Company, and Public Service Company of  
 7 Oklahoma.<sup>16</sup> I selected these in part because I was involved in the depreciation analysis in  
 8 each case, and the depreciation studies in these cases included voluminous historical  
 9 retirement data that was adequate for actuarial analysis.

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<sup>15</sup> See Exhibit DJG-3 for this information, including the weighted average calculations; see also Exhibit DJG-6 for depreciation rates calculated with the weighted average service life selections.

<sup>16</sup> See Exhibit DJG-4; see also Exhibit DJG-7 for a comparison of rates using the Midwest peer group average service lives and Exhibit DJG-8 for depreciation rates calculated with the Midwest peer group average service life selections.

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**Figure 4:  
Coastal Peer Group Summary**

| <b>Acct</b>                      | <b>Description</b>        | <b>Duke</b> | <b>SCG&amp;E</b> | <b>ETI</b> | <b>Avg</b> |
|----------------------------------|---------------------------|-------------|------------------|------------|------------|
| <b><u>TRANSMISSION PLANT</u></b> |                           |             |                  |            |            |
| 353                              | Station Equipment         | 52          | 60               | 64         | 59         |
| 355                              | Poles & Fixtures          | 50          | 53               | 65         | 56         |
| <b><u>DISTRIBUTION PLANT</u></b> |                           |             |                  |            |            |
| 362                              | Station Equipment         | 42          | 60               | 65         | 56         |
| 364                              | Poles, Towers, & Fixtures | 49          | 43               | 43         | 45         |
| 366                              | UG Conduit                | 55          | 60               | 60         | 58         |
| 367                              | Underground Conductors    | 54          | 49               | 42         | 48         |
| 368                              | Line Transformers         | 43          | 45               | 34         | 41         |
| 369                              | Services                  | 50          | 65               | 31         | 49         |

3 For the Coastal peer group, I considered the approved service lives for Duke Energy  
4 Carolinas, South Carolina Gas and Electric, and Entergy Texas.<sup>17</sup> I was directly involved  
5 in the depreciation analysis in the Entergy Texas case. I selected these companies because  
6 their service territories are relatively closer in proximity and environment to FPUC's  
7 service territory.

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<sup>17</sup> See Exhibit DJG-4; see also Exhibit DJG-9 for a comparison of rates using the Coastal peer group average service lives and Exhibit DJG-10 for depreciation rates calculated with the Coastal peer group average service life selections.

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**Figure 5:  
Florida Peer Group Summary**

| <b>Acct</b>                      | <b>Description</b>        | <b>Duke</b> | <b>TECO</b> | <b>Gulf</b> | <b>FPL</b> | <b>Avg</b> |
|----------------------------------|---------------------------|-------------|-------------|-------------|------------|------------|
| <b><u>TRANSMISSION PLANT</u></b> |                           |             |             |             |            |            |
| 353                              | Station Equipment         | 47          | 45          | 40          | 42         | 44         |
| 355                              | Poles & Fixtures          | 38          | 38          | 41          | 55         | 43         |
| <b><u>DISTRIBUTION PLANT</u></b> |                           |             |             |             |            |            |
| 362                              | Station Equipment         | 60          | 45          | 38          | 51         | 49         |
| 364                              | Poles, Towers, & Fixtures | 32          | 34          | 38          | 49         | 38         |
| 366                              | UG Conduit                | 67          | 60          | 67          | 66         | 65         |
| 367                              | Underground Conductors    | 35          | 35          | 41          | 46         | 39         |
| 368                              | Line Transformers         | 31          | 20          | 33          | 34         | 30         |
| 369                              | Services                  | 41          | 38          | 46          | 49         | 44         |

3 Finally, for the Florida peer group, I looked at the approved service lives for the same  
4 companies that FPUC relied upon in its depreciation study.<sup>18</sup> As discussed above, the  
5 problem with placing too much analytical weight on the approved service lives of this  
6 group relates to the echo chamber effect.<sup>1</sup> If approved service lives in an area are not based  
7 on utility-specific historical data, but rather the approved lives of the same utilities year  
8 after year, it can lead to inaccurate service life estimates. The fact that FPUC's proposed  
9 service lives are notably shorter than those of the other two peer groups further indicates  
10 that the echo chamber effect has led to unreasonably short service life estimates over time.  
11 My account-specific analysis is presented below.

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<sup>18</sup> See Exhibit DJG-4; see also Exhibit DJG-11 for a comparison of rates using the Florida peer group average service lives and Exhibit DJG-12 for depreciation rates calculated with the Florida peer group average service life selections.

1                                   A. Account 353 – Transmission Station Equipment

2   **Q.    DISCUSS THE COMPANY’S POSITION ON ACCOUNT 353 – TRANSMISSION**  
3   **STATION EQUIPMENT.**

4   A.    The Company’s depreciation study proposes an S3-45 Iowa curve for this account. As  
5       with the other accounts at issue in this case, FPUC bases its proposal on the approved  
6       service lives of the Florida peer group due to the lack of adequate historical data necessary  
7       for actuarial analysis.<sup>19</sup>

8   **Q.    HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
9   **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

10   A.   No, it has not. FPUC’s reliance on the approved service lives of the Florida peer group is  
11       insufficient evidence supporting its service life proposal, especially considering the  
12       approved service lives of utilities outside the peer group are notably longer. As with several  
13       other accounts discussed in this section of my testimony, the discrepancy between FPUC’s  
14       proposed service life and the average approved lives of the peer groups is so large that it is  
15       likely not reasonable to simply dismiss the discrepancy as a function of climate differences.  
16       First, the climate of the Coastal utility peer group is relative similar to that of Florida’s  
17       climate. In addition, the climate of the Midwest peer group has its own unique  
18       environmental challenges. In my experience, electric utility depreciation witnesses from  
19       all regions of the country use the climate in their particular areas to attempt to justify the

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<sup>19</sup> See Exhibit PSL-1, pp. 4-5.

1 fact that their proposed service lives are shorter than what is otherwise indicated by other  
2 objective measures.

3 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
4 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

5 A. The average approved service lives for this account from the Midwest and Coastal peer  
6 groups are 65 years and 59 years respectively, and range as high as 73 years.<sup>20</sup> This  
7 represents a substantial discrepancy in service life estimates for the same account.

8 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
9 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
10 **PEER GROUP COMPANIES.**

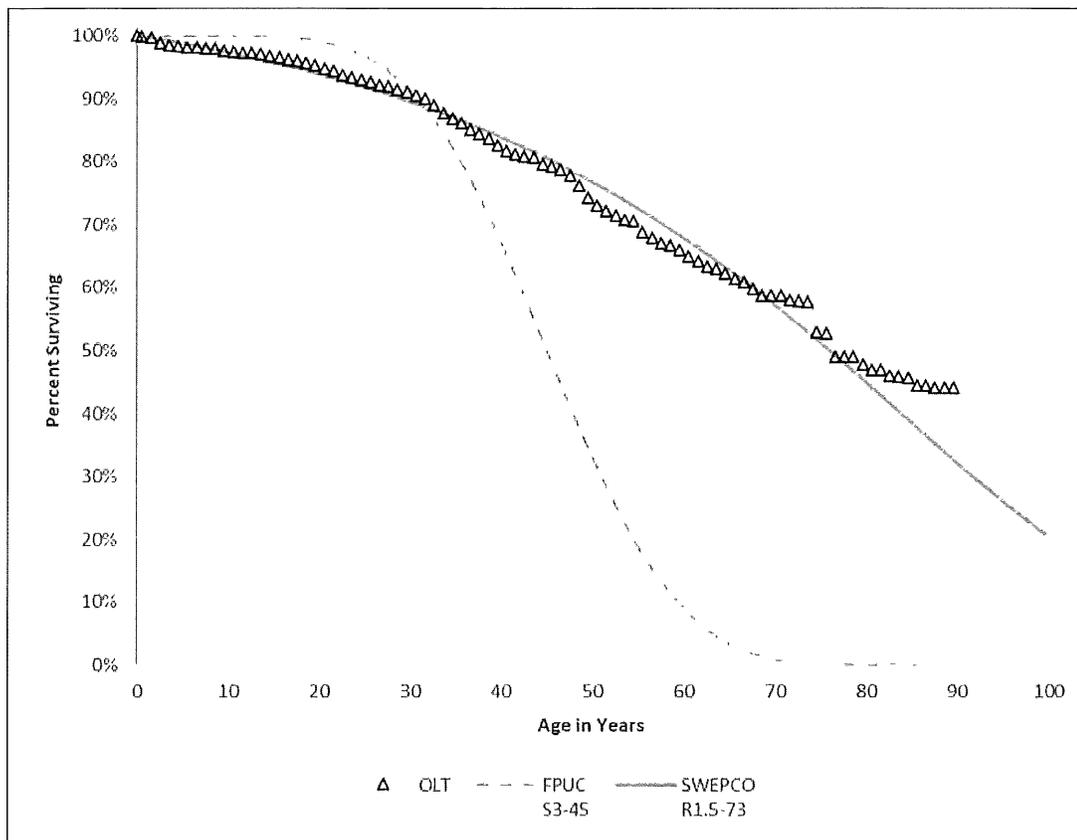
11 A. In the SWEPCO case included in my comparable analysis, an Iowa R1.5-73 curve was  
12 approved for Account 353. This Iowa curve was based on voluminous amounts of  
13 historical data provided by SWEPCO which was used to develop an OLT curve. The OLT  
14 curve is especially valuable in providing a visual representation of the historical retirement  
15 pattern of a group of assets in a particular account. The graph below shows this OLT curve  
16 along with the approved R1.5-73 Iowa curve. In addition, I have also added the S3-45  
17 curve proposed by FPUC in this case to illustrate the discrepancy between these service  
18 life estimates.

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<sup>20</sup> Exhibit DJG-4.

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**Figure 6:**  
**SWEPCO Account 353 – Station Equipment**



3 As shown in this graph, the R1.5-73 curve provides a close fit to the observed, OLT curve  
 4 for this account.<sup>21</sup> Again, the OLT curve is derived from SWEPCO’s actual, historical  
 5 retirement data for the assets in this account. This highlights one of the main benefits of  
 6 Iowa curve fitting – the analyst (and regulator) can visually inspect whether a particular  
 7 Iowa curve provides a good fit to the observed data as part of the curve selection process.  
 8 In contrast, FPUC provided no information from which an OLT curve could be formed.  
 9 As FPUC acknowledged in discovery, “[o]bserved life tables and original survivor curves

<sup>21</sup> Exhibit DJG-13.

1 were not generated for any account.”<sup>22</sup> It is clear in the graph above that FPUC’s S3-45  
 2 Iowa curve is significantly shorter than the retirement pattern indicated by the OLT curve.  
 3 Of course, it is possible that the assets in FPUC’s Account 353 have (and will continue to)  
 4 retire in a different pattern and rate than the assets in SWEPCO’s Account 353. However,  
 5 FPUC has not provided any convincing evidence to show why its station equipment assets  
 6 are lasting only 45 years on average – nearly 30 years shorter than the same type of assets  
 7 for SWEPCO. Similarly, the average life of only 45 years proposed by FPUC for this  
 8 account is notably shorter than the approved service lives for the other Midwest and Coastal  
 9 peer companies.<sup>23</sup>

10 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 353?**

11 A. Using the weighted average approach discussed in the executive summary of my testimony,  
 12 I propose a service life of 53 years for this account, which results in a reduction to  
 13 depreciation expense of \$28,155.<sup>24</sup>

14 **B. Account 355 – Transmission Poles and Fixtures**

15 **Q. DISCUSS THE COMPANY’S POSITION ON ACCOUNT 353 – TRANSMISSION**  
 16 **POLES AND FIXTURES.**

17 A. FPUC’s depreciation study proposes an R4-43 Iowa curve for this account. As with the  
 18 other accounts at issue in this case, FPUC bases its proposal on the approved service lives

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<sup>22</sup> FPUC’s response to OPC’s Second Set of Interrogatories, No. 14.

<sup>23</sup> Exhibit DJG-4.

<sup>24</sup> See Exhibit DJG-5.

1 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
2 analysis.<sup>25</sup>

3 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
4 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

5 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
6 insufficient evidence supporting its service life proposal, especially considering the  
7 approved service lives of utilities outside the peer group are notably longer.

8 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
9 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

10 A. The average approved service lives for this account from the Midwest and Coastal peer  
11 groups are 54 and 56 years respectively, and range as high as 65 years.<sup>26</sup> This represents a  
12 substantial discrepancy in service life estimates for the same account.

13 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
14 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
15 **PEER GROUP COMPANIES.**

16 A. In the ETI case included in my comparable analysis from the Coastal peer group, an Iowa  
17 R1.5-65 curve was approved for Account 355. This Iowa curve was based on voluminous

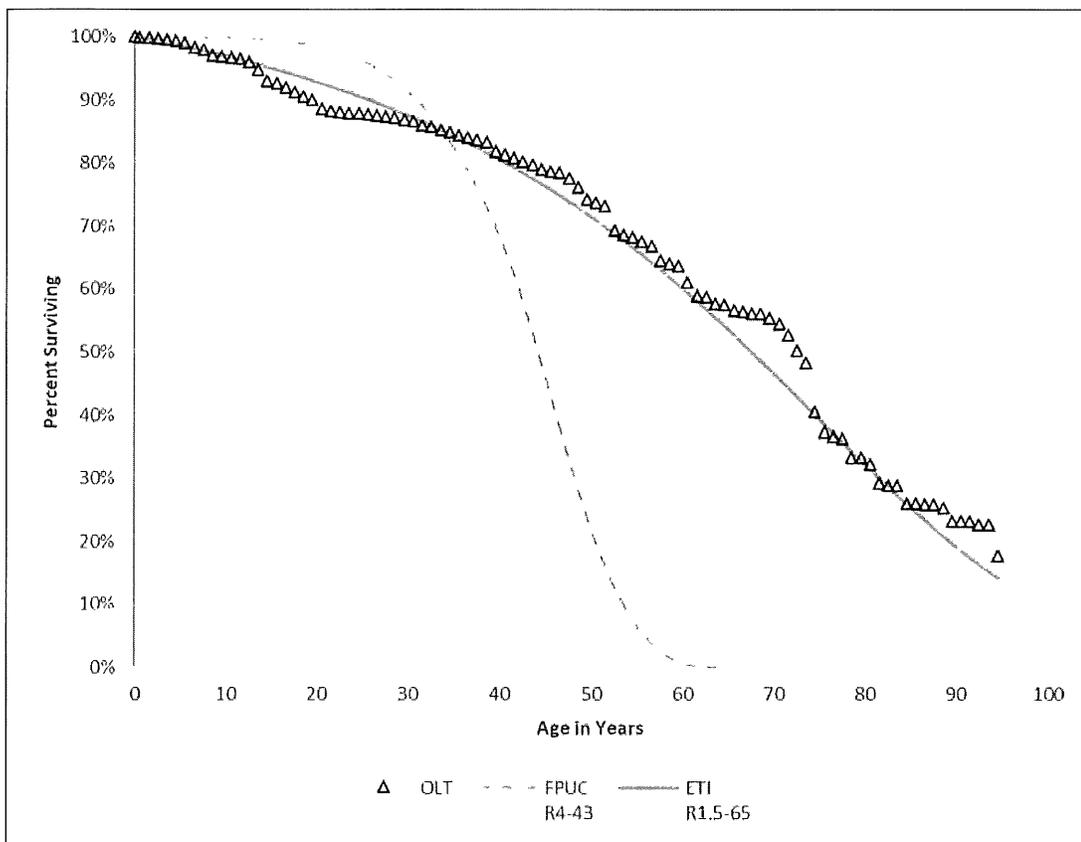
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<sup>25</sup> See Exhibit PSL-1, pp. 5-6.

<sup>26</sup> Exhibit DJG-4.

1 amounts of historical data provided by ETI which was used to develop an OLT curve. The  
 2 OLT curve is especially valuable in providing a visual representation of the historical  
 3 retirement pattern of a group of assets in a particular account. The graph below shows this  
 4 OLT curve along with the approved R1.5-65 Iowa curve. In addition, I have also added  
 5 the R4-43 curve proposed by FPUC in this case to illustrate the discrepancy between these  
 6 service life estimates.

7 **Figure 7:**  
 8 **ETI Account 355 – Transmission Poles and Fixtures**



1 As shown in this graph, the R1.5-73 curve provides a close fit to the observed, OLT curve  
2 for this account.<sup>27</sup> Again, the OLT curve is derived from ETI's actual, historical retirement  
3 data for the assets in this account. In contrast, FPUC provided no information from which  
4 an OLT curve could be formed. It is clear in the graph above that FPUC's R4-43 Iowa  
5 curve is significantly shorter than the retirement pattern indicated by the OLT curve. Of  
6 course, it is possible that the assets in FPUC's Account 355 have different life  
7 characteristics than the assets in ETI's Account 353. However, FPUC has not provided  
8 any convincing evidence to show why its transmission poles and fixtures are lasting only  
9 43 years on average – more than 20 years shorter than the same type of assets for ETI,  
10 which also has service territory along that gulf coast. Similarly, the average life of only 43  
11 years proposed by FPUC for this account is notably shorter than the approved service lives  
12 for the other Midwest and Coastal peer companies.<sup>28</sup>

13 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 355?**

14 A. Using the weighted average approach discussed in the executive summary of my testimony,  
15 I propose a service life of 50 years for this account, which results in a reduction to  
16 depreciation expense of \$37,823.<sup>29</sup>

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<sup>27</sup> Exhibit DJG-14.

<sup>28</sup> Exhibit DJG-4.

<sup>29</sup> See Exhibit DJG-5.

1 **C. Account 362 – Distribution Station Equipment**

2 **Q. DISCUSS THE COMPANY’S POSITION ON ACCOUNT 362 – DISTRIBUTION**  
3 **STATION EQUIPMENT.**

4 A. FPUC’s depreciation study proposes an S3-50 Iowa curve for this account. As with the  
5 other accounts at issue in this case, FPUC bases its proposal on the approved service lives  
6 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
7 analysis.<sup>30</sup>

8 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
9 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

10 A. No, it has not. FPUC’s reliance on the approved service lives of the Florida peer group is  
11 insufficient evidence supporting its service life proposal, especially considering the  
12 approved service lives of utilities outside the peer group are notably longer.

13 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
14 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

15 A. The average approved service lives for this account from the Midwest and Coastal peer  
16 groups are 66 and 56 years respectively, and range as high as 75 years.<sup>31</sup> This represents a  
17 substantial discrepancy in service life estimates for the same account.

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<sup>30</sup> See Exhibit PSL-1, pp. 7-8.

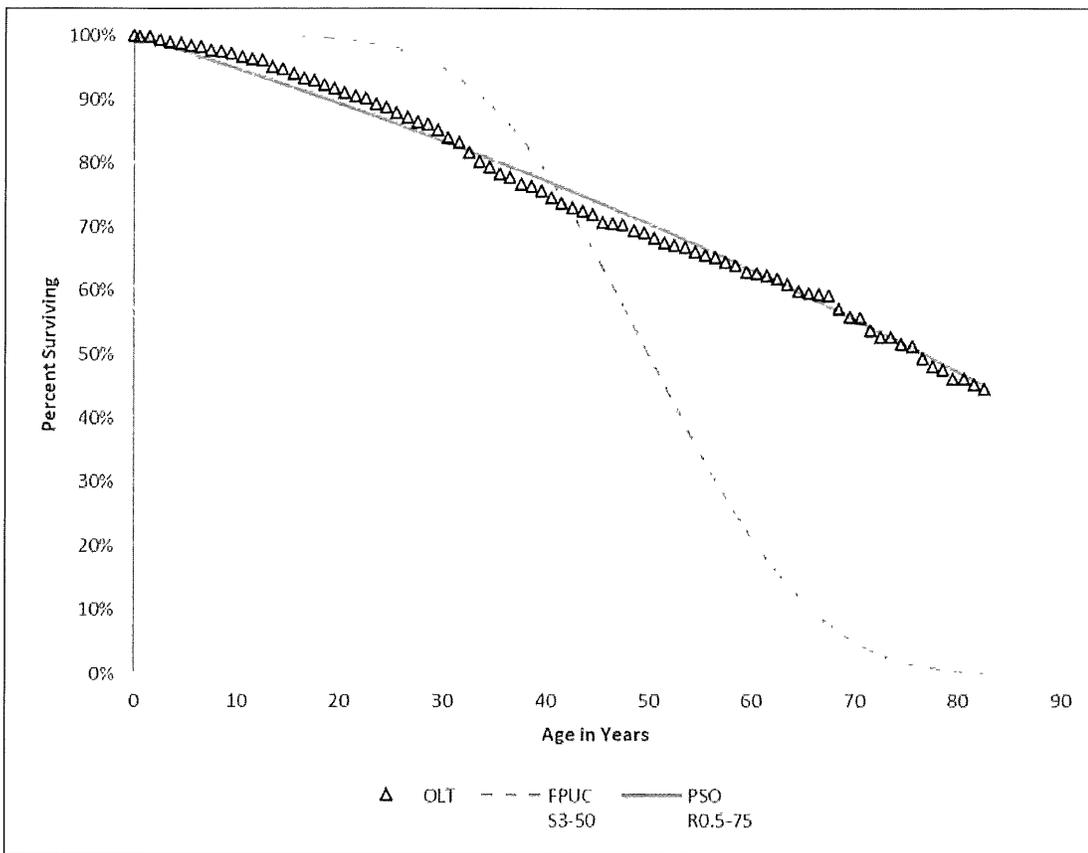
<sup>31</sup> Exhibit DJG-4.

1 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
2 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
3 **PEER GROUP COMPANIES.**

4 A. In the PSO case included in my comparable analysis, an Iowa R0.5-75 curve was approved  
5 for Account 362. This Iowa curve was based on voluminous amounts of historical data  
6 provided by PSO which was used to develop an OLT curve. The OLT curve is especially  
7 valuable in providing a visual representation of the historical retirement pattern of a group  
8 of assets in a particular account. The graph below shows this OLT curve along with the  
9 approved R0.5-75 Iowa curve. In addition, I have also added the S3-50 curve proposed by  
10 FPUC in this case to illustrate the discrepancy between these service life estimates.

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**Figure 8:  
PSO Account 362 – Distribution Station Equipment**



3 As shown in this graph, the R0.5-75 curve provides a very close fit to the observed, OLT  
 4 curve for this account.<sup>32</sup> In other words, the fact that the historical retirement pattern in  
 5 this account matches very closely with the R0.5-75 curve provides objective, reasonable,  
 6 and convincing evidence that the R0.5-75 curve will also accurately describe the remaining  
 7 life going forward in this account and result in a reasonable corresponding depreciation  
 8 rate. In stark contrast to the convincing, empirical evidence presented the PSO case to  
 9 support the service life estimate for Account 362, FPUC has provided no information in

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<sup>32</sup> Exhibit DJG-15.

1 this case, but has rather simply relied on the same echo chamber of approved service lives  
2 from prior cases. It is clear in the graph above that FPUC's S3-50 Iowa curve is  
3 significantly shorter than the retirement pattern indicated by the OLT curve. Again, it is  
4 possible that the assets in FPUC's Account 362 have different life characteristics than the  
5 assets in PSO's Account 362. However, it is not reasonable, absent convincing evidence,  
6 to simply assume that FPUC's distribution station equipment will last 25 years less than  
7 the same assets for PSO. That is a substantial discrepancy in service lives. Additionally,  
8 the average life of only 50 years proposed by FPUC for this account is generally much  
9 shorter than the approved service lives for the other Midwest and Coastal peer companies.<sup>33</sup>

10 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 362?**

11 A. Using the weighted average approach discussed in the executive summary of my testimony,  
12 I propose a service life of 55 years for this account, which results in a reduction to  
13 depreciation expense of \$25,976.<sup>34</sup>

14 **D. Account 364 – Distribution Poles, Towers, and Fixtures**

15 **Q. DISCUSS THE COMPANY'S POSITION ON ACCOUNT 364 – DISTRIBUTION**  
16 **POLES, TOWERS, AND FIXTURES.**

17 A. FPUC's depreciation study proposes an R4-38 Iowa curve for this account. As with the  
18 other accounts at issue in this case, FPUC bases its proposal on the approved service lives

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<sup>33</sup> Exhibit DJG-4.

<sup>34</sup> See Exhibit DJG-5.

1 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
2 analysis.<sup>35</sup>

3 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
4 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

5 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
6 insufficient evidence supporting its service life proposal, especially considering the  
7 approved service lives of utilities outside the peer group are notably longer.

8 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
9 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

10 A. The average approved service lives for this account from the Midwest and Coastal peer  
11 groups are 54 years and 45 years respectively, and range as high as 55 years.<sup>36</sup> This  
12 represents a substantial discrepancy in service life estimates for the same account.

13 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
14 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
15 **PEER GROUP COMPANIES.**

16 A. In the SWEPCO case included in my comparable analysis, an Iowa R0.5-55 curve was  
17 approved for Account 353. This Iowa curve was based on voluminous amounts of

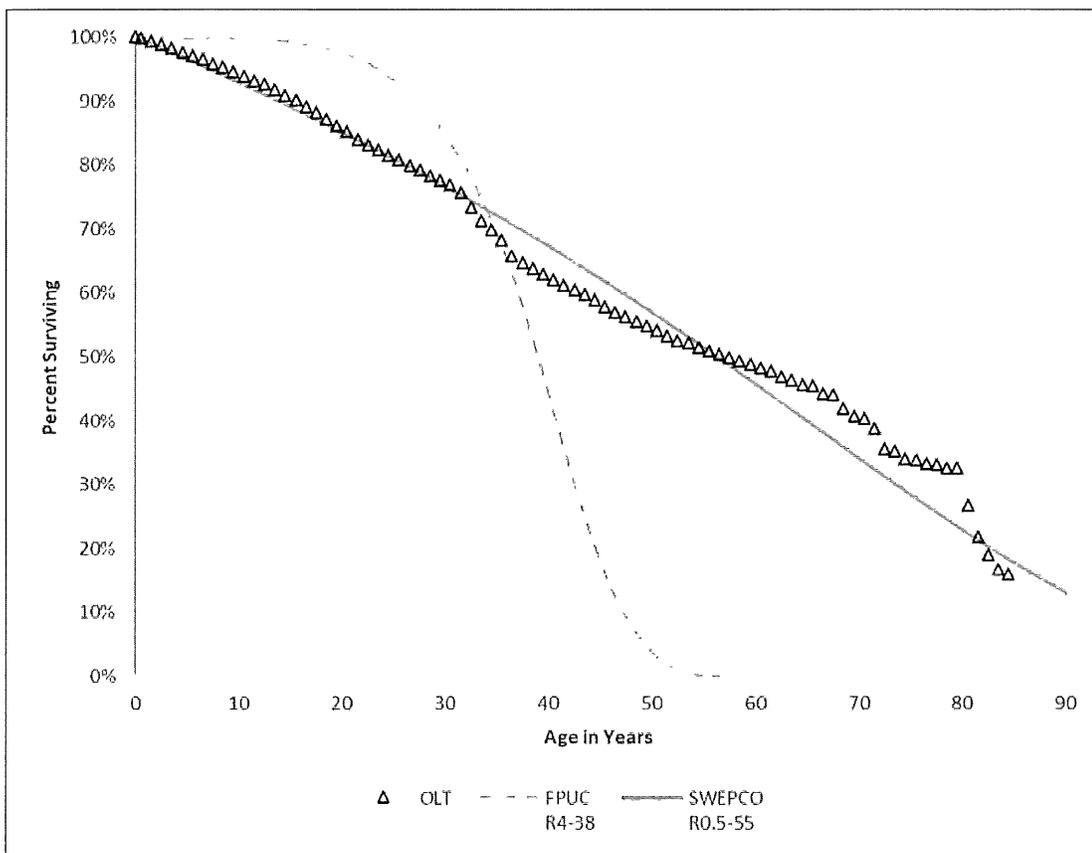
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<sup>35</sup> See Exhibit PSL-1, pp. 8-9.

<sup>36</sup> Exhibit DJG-4.

1 historical data provided by SWEPCO which was used to develop the OLT curve. The  
 2 graph below shows this OLT curve along with the approved R0.5-55 Iowa curve. In  
 3 addition, I have also added the R4-38 curve proposed by FPUC in this case to illustrate the  
 4 discrepancy between these service life estimates.

5 **Figure 9:**  
 6 **SWEPCO Account 364 – Distribution Poles, Towers, and Fixtures**



7 As shown in this graph, the R0.5-55 curve provides a close fit to the observed, OLT curve  
 8 for this account.<sup>37</sup> Again, the OLT curve is derived from SWEPCO’s actual, historical  
 9 retirement data for the assets in this account. Because this Iowa curve provides a

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<sup>37</sup> Exhibit DJG-16.

1 reasonably close fit to the OLT curve, this is an objective basis on which to calculate the  
2 depreciation rate for this account. In contrast, FPUC provided no information from which  
3 an OLT curve could be formed. It is clear in the graph above that FPUC's R4-38 curve is  
4 significantly shorter than the retirement pattern indicated by the OLT curve. While it is  
5 possible that the assets in FPUC's Account 364 have different mortality characteristics than  
6 the same assets in SWEPCO's Account 353, FPUC has provided no convincing evidence  
7 why they should be expected to last nearly 20 years less. In addition, the average life of  
8 only 38 years proposed by FPUC for this account is notably shorter than the approved  
9 service lives for the other Midwest and Coastal peer companies.<sup>38</sup>

10 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 364?**

11 A. Using the weighted average approach discussed in the executive summary of my testimony,  
12 I propose a service life of 44 years for this account, which results in a reduction to  
13 depreciation expense of \$182,295.<sup>39</sup>

14 **E. Account 366 – Distribution Underground Conduit**

15 **Q. DISCUSS THE COMPANY'S POSITION ON ACCOUNT 366 – DISTRIBUTION**  
16 **UNDERGROUND CONDUIT.**

17 A. FPUC's depreciation study proposes an R5-60 Iowa curve for this account. As with the  
18 other accounts at issue in this case, FPUC bases its proposal on the approved service lives

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<sup>38</sup> Exhibit DJG-4.

<sup>39</sup> Exhibit DJG-5.

1 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
2 analysis.<sup>40</sup>

3 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
4 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

5 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
6 insufficient evidence supporting its service life proposal, especially considering the  
7 approved service lives of utilities outside the peer group are notably longer.

8 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
9 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

10 A. The average approved service lives for this account from the Midwest and Coastal peer  
11 groups are 71 and 58 years respectively, and range as high as 78 years.<sup>41</sup> While FPUC's  
12 proposed service life of 60 years is slightly longer than the average life of the Coastal peer  
13 group for Account 366, it is actual five years shorter than the average approved life of the  
14 Florida peer group.<sup>42</sup>

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<sup>40</sup> See Exhibit PSL-1, p. 9.

<sup>41</sup> Exhibit DJG-4.

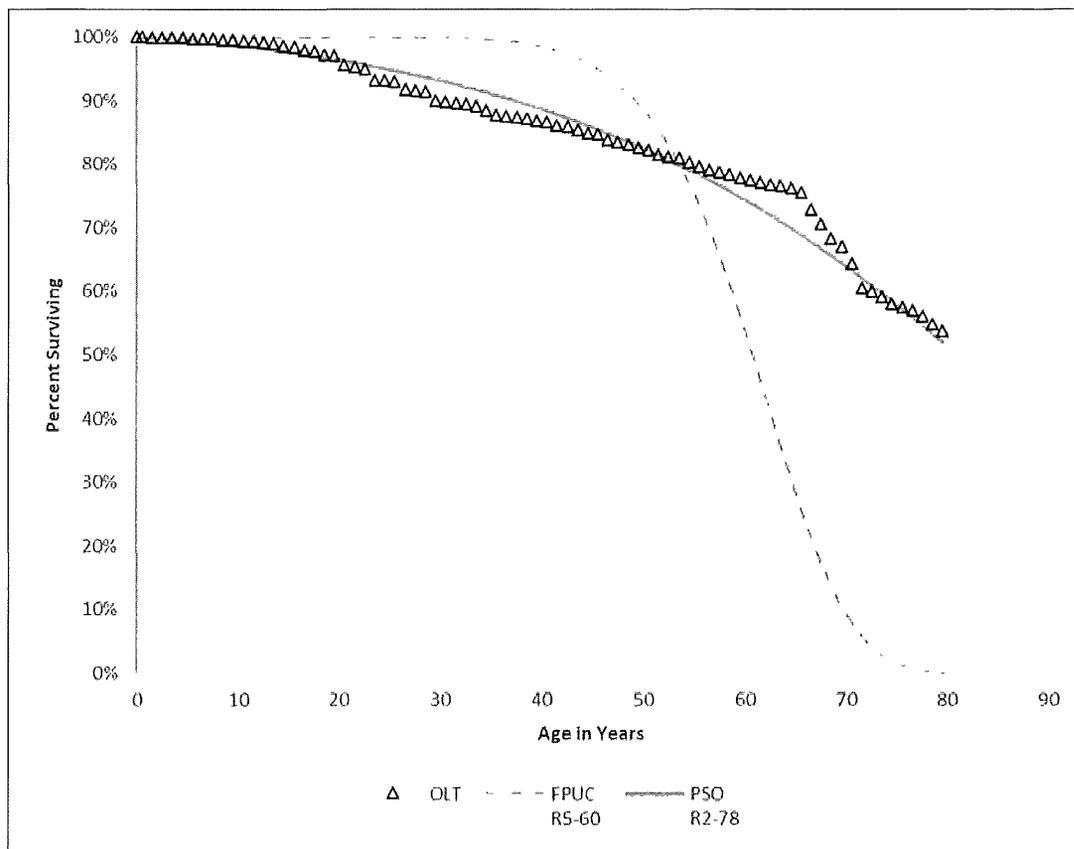
<sup>42</sup> *Id.*

1 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
2 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
3 **PEER GROUP COMPANIES.**

4 A. In the PSO case included in my comparable analysis, an Iowa R2-78 curve was approved  
5 for Account 366. This Iowa curve was based on voluminous amounts of historical data  
6 provided by PSO which was used to develop an OLT curve. The graph below shows this  
7 OLT curve along with the approved R2-78 Iowa curve. In addition, I have also added the  
8 R5-60 curve proposed by FPUC in this case to illustrate the discrepancy between these  
9 service life estimates.

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**Figure 10:**  
**PSO Account 366 – Distribution Underground Conduit**



3 As shown in this graph, the R2-78 curve provides a very close fit to the observed, OLT  
 4 curve for this account.<sup>43</sup> In other words, the fact that the historical retirement pattern in  
 5 this account matches very closely with the R2-78 curve provides convincing evidence that  
 6 this Iowa curve will accurately describe the remaining life going forward in this account,  
 7 and that it will result in a reasonable depreciation rate. In stark contrast to the convincing,  
 8 empirical evidence presented the PSO case to support the service life estimate for Account  
 9 362, FPUC has provided no such information in this case. It is clear in the graph above

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<sup>43</sup> Exhibit DJG-17.

1 that FPUC's R5-60 curve is significantly shorter than the retirement pattern indicated by  
2 the OLT curve.

3 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 353?**

4 A. Using the weighted average approach discussed in the executive summary of my testimony,  
5 I propose a service life of 64 years for this account, which results in a reduction to  
6 depreciation expense of \$9,071.<sup>44</sup>

7 **F. Account 367 – Distribution Underground Conductors**

8 **Q. DISCUSS THE COMPANY'S POSITION ON ACCOUNT 367 – DISTRIBUTION**  
9 **UNDERGROUND CONDUCTORS.**

10 A. FPUC's depreciation study proposes an R4-35 Iowa curve for this account. As with the  
11 other accounts at issue in this case, FPUC bases its proposal on the approved service lives  
12 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
13 analysis.<sup>45</sup>

14 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
15 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

16 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
17 insufficient evidence supporting its service life proposal, especially considering the  
18 approved service lives of utilities outside the peer group are notably longer.

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<sup>44</sup> See Exhibit DJG-5.

<sup>45</sup> See Exhibit PSL-1, pp. 9-10.

1 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
2 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

3 A. The average approved service lives for this account from the Midwest and Coastal peer  
4 groups are 60 and 48 years respectively, and range as high as 65 years.<sup>46</sup> As with several  
5 other accounts at issue in this case, FPUC's proposed service life is even shorter than the  
6 average life of the Florida peer group on which the Company's proposal is based.<sup>47</sup>

7 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
8 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
9 **PEER GROUP COMPANIES.**

10 A. In the PSO case included in my comparable analysis, an Iowa R2-78 curve was approved  
11 for Account 366. This Iowa curve was based on voluminous amounts of historical data  
12 provided by PSO which was used to develop an OLT curve. The graph below shows this  
13 OLT curve along with the approved R2-78 Iowa curve. In addition, I have also added the  
14 R4-35 curve proposed by FPUC in this case to illustrate the discrepancy between these  
15 service life estimates.

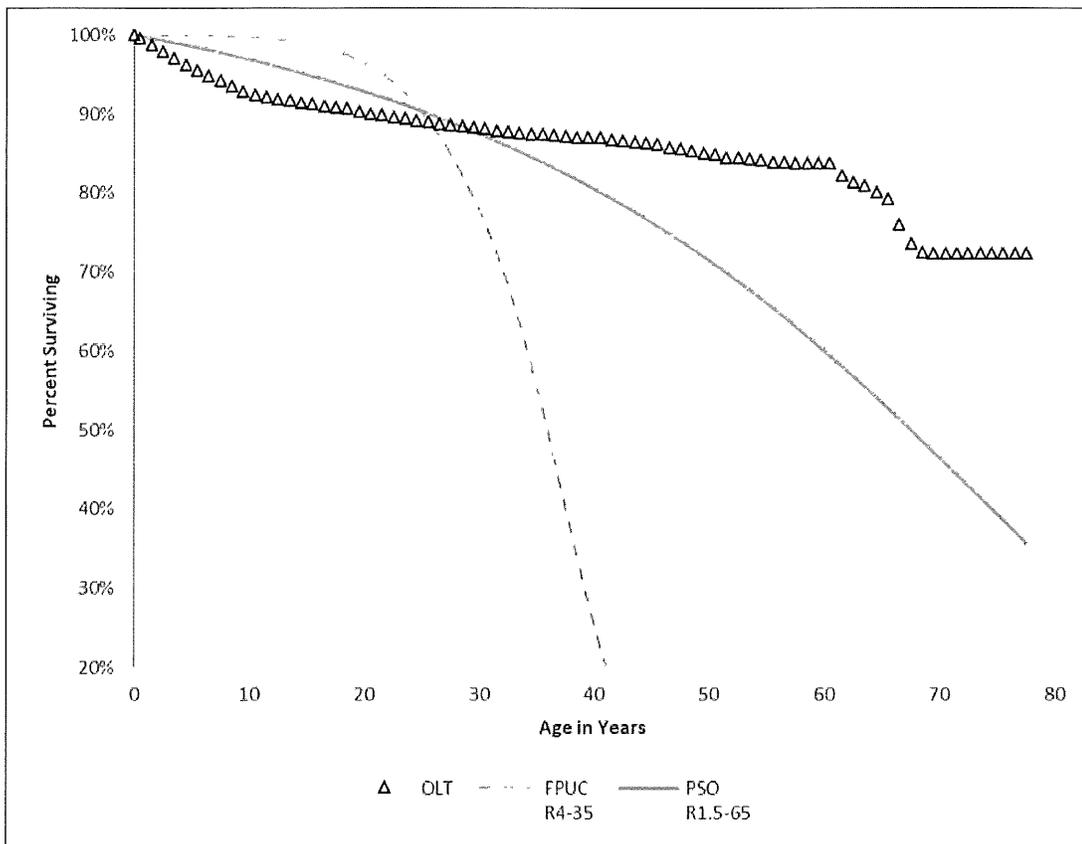
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<sup>46</sup> Exhibit DJG-4.

<sup>47</sup> *Id.*

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**Figure 11:  
PSO Account 367 – Distribution Underground Conductors**



3 As shown in this graph, even the approved R1.5-65 curve is relatively short compared with  
 4 the observed historical data plotted in the OLT curve.<sup>48</sup> In contrast, the R4-35 curve  
 5 selected by FPUC is significantly shorter than the OLT curve for this account.  
 6 Additionally, the 35-year average life proposed by FPUC for this account is notably shorter  
 7 than the approved average lives for the same account among the Midwest and Coastal peer  
 8 companies.<sup>49</sup>

<sup>48</sup> Exhibit DJG-18.

<sup>49</sup> Exhibit DJG-4.

1 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 353?**

2 A. Using the weighted average approach discussed in the executive summary of my testimony,  
3 I propose a service life of 47 years for this account, which results in a reduction to  
4 depreciation expense of \$119,283.<sup>50</sup>

5 **G. Account 368 – Distribution Line Transformers**

6 **Q. DISCUSS THE COMPANY'S POSITION ON ACCOUNT 368 – DISTRIBUTION**  
7 **LINE TRANSFORMERS.**

8 A. FPUC's depreciation study proposes an S4-30 Iowa curve for this account. As with the  
9 other accounts at issue in this case, FPUC bases its proposal on the approved service lives  
10 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
11 analysis.<sup>51</sup>

12 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
13 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

14 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
15 insufficient evidence supporting its service life proposal, especially considering the  
16 approved service lives of utilities outside the peer group are notably longer.

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<sup>50</sup> See Exhibit DJG-5.

<sup>51</sup> See Exhibit PSL-1, pp. 10-11.

1 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
2 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

3 A. The average approved service lives for this account from the Midwest and Coastal peer  
4 groups are 43 years and 41 years respectively, and range as high as 50 years.<sup>52</sup> This  
5 represents a substantial discrepancy in service life estimates for the same account.

6 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
7 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
8 **PEER GROUP COMPANIES.**

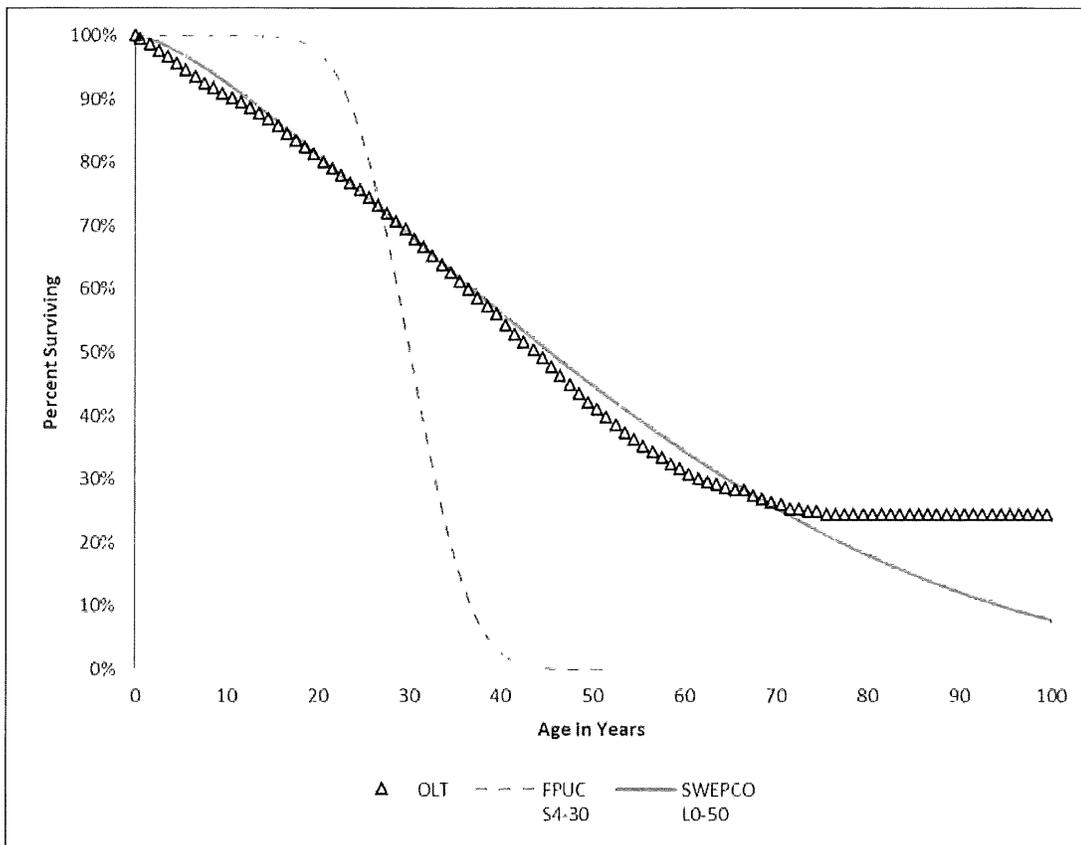
9 A. In the SWEPCO case included in my comparable analysis, an Iowa L0-50 curve was  
10 approved for Account 368. This Iowa curve was based on voluminous amounts of  
11 historical data provided by SWEPCO which was used to develop the OLT curve. The  
12 graph below shows this OLT curve along with the approved L0-50 curve. In addition, I  
13 have also added the S4-30 curve proposed by FPUC in this case to illustrate the discrepancy  
14 between these service life estimates.

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<sup>52</sup> Exhibit DJG-4.

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**Figure 12:**  
**SWEPCO Account 368 – Distribution Line Transformers**



3 As shown in this graph, the L0-50 curve provides a close fit to the observed, OLT curve  
 4 for this account.<sup>53</sup> Again, the OLT curve is derived from SWEPCO's actual, historical  
 5 retirement data for the assets in this account. Because this Iowa curve provides a  
 6 reasonably close fit to the OLT curve, this is an objective basis on which to calculate the  
 7 depreciation rate for this account. In contrast, FPUC provided no information from which  
 8 an OLT curve could be formed. It is clear in the graph above that FPUC's S4-30 curve is  
 9 significantly shorter than the retirement pattern indicated by the OLT curve. While it is

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<sup>53</sup> Exhibit DJG-19.

1 possible that the assets in FPUC's Account 368 have different mortality characteristics than  
2 the same assets in SWEPCO's account, FPUC has provided no convincing evidence why  
3 they should be expected to survive 20 years less. In addition, the average life of only 30  
4 years proposed by FPUC for this account is notably shorter than the approved service lives  
5 for the other Midwest and Coastal peer companies.<sup>54</sup>

6 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 364?**

7 A. Using the weighted average approach discussed in the executive summary of my testimony,  
8 I propose a service life of 36 years for this account, which results in a reduction to  
9 depreciation expense of \$273,338.<sup>55</sup>

10 **H. Account 369 – Distribution Services**

11 **Q. DISCUSS THE COMPANY'S POSITION ON ACCOUNT 369 – DISTRIBUTION**  
12 **SERVICES.**

13 A. FPUC's depreciation study proposes an R5-40 Iowa curve for this account. As with the  
14 other accounts at issue in this case, FPUC bases its proposal on the approved service lives  
15 of the Florida peer group due to the lack of adequate historical data necessary for actuarial  
16 analysis.<sup>56</sup>

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<sup>54</sup> Exhibit DJG-4.

<sup>55</sup> Exhibit DJG-5.

<sup>56</sup> See Exhibit PSL-1, p. 11.

1 **Q. HAS FPUC MADE A CONVINCING SHOWING THAT ITS PROPOSED**  
2 **DEPRECIATION EXPENSE FOR THIS ACCOUNT IS NOT EXCESSIVE?**

3 A. No, it has not. FPUC's reliance on the approved service lives of the Florida peer group is  
4 insufficient evidence supporting its service life proposal, especially considering the  
5 approved service lives of utilities outside the peer group are notably longer.

6 **Q. PLEASE DISCUSS THE APPROVED SERVICE LIVES FROM THE MIDWEST**  
7 **AND COASTAL PEER GROUPS FOR THIS ACCOUNT.**

8 A. The average approved service lives for this account from the Midwest and Coastal peer  
9 groups are 56 and 49 years respectively, and range as high as 65 years.<sup>57</sup> As with several  
10 other accounts at issue in this case, FPUC's proposed service life is even shorter than the  
11 average life of the Florida peer group on which the Company's proposal is based.<sup>58</sup>

12 **Q. PLEASE ILLUSTRATE THE SURVIVOR CURVE ANALYSIS FOR THIS**  
13 **ACCOUNT USING THE ACTUAL HISTORICAL DATA FROM ONE OF THE**  
14 **PEER GROUP COMPANIES.**

15 A. In the PSO case included in my comparable analysis, an Iowa R1.5-60 curve was approved  
16 for Account 369. This Iowa curve was based on voluminous amounts of historical data  
17 provided by PSO which was used to develop an OLT curve. The graph below shows this  
18 OLT curve along with the approved R1.5-60 curve. In addition, I have also added the R5-

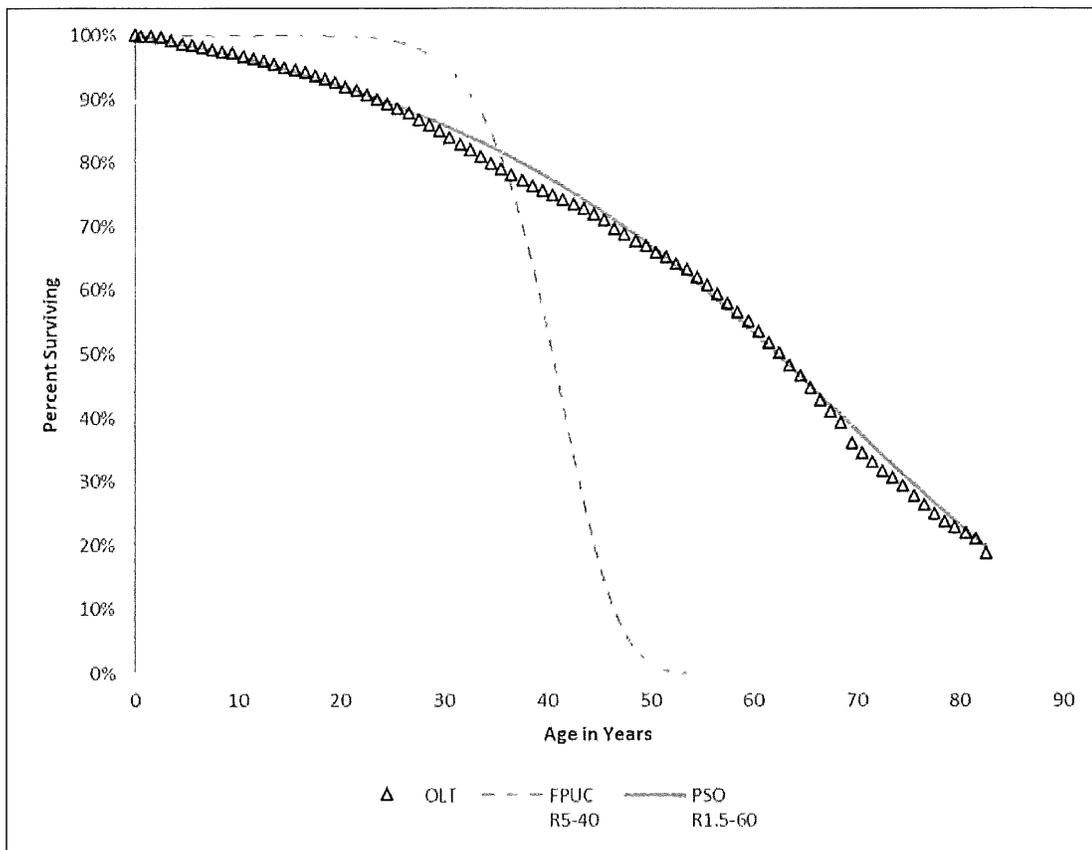
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<sup>57</sup> Exhibit DJG-4.

<sup>58</sup> *Id.*

1 40 curve proposed by FPUC in this case to illustrate the discrepancy between these service  
 2 life estimates.

3 **Figure 13:**  
 4 **PSO Account 369 – Distribution Services**



5 As shown in this graph, the R1.5-60 curve approved for this account provides a very close  
 6 fit to the historical retirement pattern reflected in the OLT curve.<sup>59</sup> In contrast, the R5-40  
 7 curve selected by FPUC, as with the other accounts discussed in my testimony, is  
 8 significantly shorter than the OLT curve for this account. Additionally, the 40-year average

<sup>59</sup> Exhibit DJG-20.

1 life proposed by FPUC for this account is notably shorter than most of the approved  
2 average lives for the same account among the Midwest and Coastal peer companies.<sup>60</sup>

3 **Q. WHAT IS YOUR RECOMMENDATION FOR ACCOUNT 353?**

4 A. Using the weighted average approach discussed in the executive summary of my testimony,  
5 I propose a service life of 48 years for this account, which results in a reduction to  
6 depreciation expense of \$106,699.<sup>61</sup>

7 **V. CONCLUSION AND RECOMMENDATIONS**

8 **Q. PLEASE SUMMARIZE THE KEY POINTS OF YOUR TESTIMONY.**

9 A. In this case, FPUC has failed to make a convincing showing that its proposed depreciation  
10 rates are not excessive, particularly for the eight accounts discussed in my testimony.  
11 While FPUC provided adequate data to support its net salvage rate, it did not provide  
12 adequate data to support its service life proposals. Instead, FPUC simply based its  
13 proposed service lives on the approved service lives of several other Florida utilities.  
14 According to FPUC, the Company has taken a similar approach regarding its service life  
15 proposals for over 20 years. Over time, this has created an echo chamber effect, where  
16 subsequent service life estimates based on nothing more than previously approved service  
17 life estimates under the same peer-group approach has resulted in service life estimates that  
18 are not based on adequate and reliable company-specific data. Since there is no company-

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<sup>60</sup> Exhibit DJG-4.

<sup>61</sup> See Exhibit DJG-5.

1 specific, aged property data available, a peer group analysis can provide an objective basis  
2 on which to make service life estimates for FPUC's assets. However, my review of several  
3 companies in service territories outside of Florida has revealed that FPUC's proposed  
4 service lives for the eight accounts at issue are remarkably short. Unreasonably short  
5 service lives result in unreasonably high depreciation rates. I did not rely exclusively on  
6 any one company or region for my service life proposals; instead, I incorporated  
7 information from all of the peer companies, including those from Florida, as part of an  
8 objective analytical weighting approach.

9 **Q. WHAT IS YOUR RECOMMENDATION TO THE COMMISSION?**

A. I recommend the Commission adopt the depreciation rates listed in Exhibit DJG-5.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 A. Yes. To the extent I have not addressed a particular issue raised by the Company, it does  
12 not constitute my agreement with such issue.

## APPENDIX A: THE DEPRECIATION SYSTEM

A depreciation accounting system may be thought of as a dynamic system in which estimates of life and salvage are inputs to the system, and the accumulated depreciation account is a measure of the state of the system at any given time.<sup>62</sup> The primary objective of the depreciation system is the timely recovery of capital. The process for calculating the annual accruals is determined by the factors required to define the system. A depreciation system should be defined by four primary factors: 1) a method of allocation; 2) a procedure for applying the method of allocation to a group of property; 3) a technique for applying the depreciation rate; and 4) a model for analyzing the characteristics of vintage groups comprising a continuous property group.<sup>63</sup> The figure below illustrates the basic concept of a depreciation system and includes some of the available parameters.<sup>64</sup>

There are hundreds of potential combinations of methods, procedures, techniques, and models, but in practice, analysts use only a few combinations. Ultimately, the system selected must result in the systematic and rational allocation of capital recovery for the utility. Each of the four primary factors defining the parameters of a depreciation system is discussed further below.

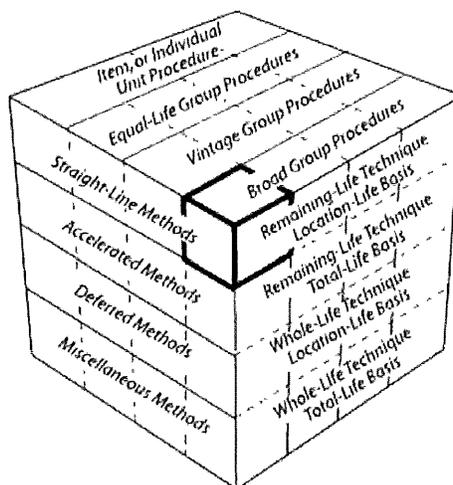
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<sup>62</sup> Wolf *supra* n. 7, at 69-70.

<sup>63</sup> *Id.* at 70, 139-40.

<sup>64</sup> Edison Electric Institute, *Introduction to Depreciation* (inside cover) (EEI April 2013). Some definitions of the terms shown in this diagram are not consistent among depreciation practitioners and literature due to the fact that depreciation analysis is a relatively small and fragmented field. This diagram simply illustrates the some of the available parameters of a depreciation system.

**Figure 14:  
The Depreciation System Cube**



#### 1. Allocation Methods

The “method” refers to the pattern of depreciation in relation to the accounting periods. The method most commonly used in the regulatory context is the “straight-line method” – a type of age-life method in which the depreciable cost of plant is charged in equal amounts to each accounting period over the service life of plant.<sup>65</sup> Because group depreciation rates and plant balances often change, the amount of the annual accrual rarely remains the same, even when the straight-line method is employed.<sup>66</sup> The basic formula for the straight-line method is as follows:<sup>67</sup>

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<sup>65</sup> NARUC *supra* n. 8, at 56.

<sup>66</sup> *Id.*

<sup>67</sup> *Id.*

**Equation 1:  
Straight-Line Accrual**

$$\text{Annual Accrual} = \frac{\text{Gross Plant} - \text{Net Salvage}}{\text{Service Life}}$$

Gross plant is a known amount from the utility's records, while both net salvage and service life must be estimated in order to calculate the annual accrual. The straight-line method differs from accelerated methods of recovery, such as the "sum-of-the-years-digits" method and the "declining balance" method. Accelerated methods are primarily used for tax purposes and are rarely used in the regulatory context for determining annual accruals.<sup>68</sup> In practice, the annual accrual is expressed as a rate which is applied to the original cost of plant in order to determine the annual accrual in dollars. The formula for determining the straight-line rate is as follows:<sup>69</sup>

**Equation 2:  
Straight-Line Rate**

$$\text{Depreciation Rate \%} = \frac{100 - \text{Net Salvage \%}}{\text{Service Life}}$$

2. Grouping Procedures

The "procedure" refers to the way the allocation method is applied through subdividing the total property into groups.<sup>70</sup> While single units may be analyzed for depreciation, a group plan of depreciation is particularly adaptable to utility property. Employing a grouping procedure allows for a composite application of depreciation rates to groups of similar property, rather than

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<sup>68</sup> *Id.* at 57.

<sup>69</sup> *Id.* at 56.

<sup>70</sup> Wolf *supra* n. 7, at 74-75.

excessively conducting calculations for each unit. Whereas an individual unit of property has a single life, a group of property displays a dispersion of lives and the life characteristics of the group must be described statistically.<sup>71</sup> When analyzing mass property categories, it is important that each group contains homogenous units of plant that are used in the same general manner throughout the plant and operated under the same general conditions.<sup>72</sup>

The “average life” and “equal life” grouping procedures are the two most common. In the average life procedure, a constant annual accrual rate based on the average life of all property in the group is applied to the surviving property. While property having shorter lives than the group average will not be fully depreciated, and likewise, property having longer lives than the group average will be over-depreciated, the ultimate result is that the group will be fully depreciated by the time of the final retirement.<sup>73</sup> Thus, the average life procedure treats each unit as though its life is equal to the average life of the group. In contrast, the equal life procedure treats each unit in the group as though its life was known.<sup>74</sup> Under the equal life procedure the property is divided into subgroups that each has a common life.<sup>75</sup>

### 3. Application Techniques

The third factor of a depreciation system is the “technique” for applying the depreciation rate. There are two commonly used techniques: “whole life” and “remaining life.” The whole life

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<sup>71</sup> *Id.* at 74.

<sup>72</sup> NARUC *supra* n. 8, at 61-62.

<sup>73</sup> *See* Wolf *supra* n. 7, at 74-75.

<sup>74</sup> *Id.* at 75.

<sup>75</sup> *Id.*

technique applies the depreciation rate on the estimated average service life of a group, while the remaining life technique seeks to recover undepreciated costs over the remaining life of the plant.<sup>76</sup>

In choosing the application technique, consideration should be given to the proper level of the accumulated depreciation account. Depreciation accrual rates are calculated using estimates of service life and salvage. Periodically these estimates must be revised due to changing conditions, which cause the accumulated depreciation account to be higher or lower than necessary. Unless some corrective action is taken, the annual accruals will not equal the original cost of the plant at the time of final retirement.<sup>77</sup> Analysts can calculate the level of imbalance in the accumulated depreciation account by determining the “calculated accumulated depreciation,” (a.k.a. “theoretical reserve” and referred to in these appendices as “CAD”). The CAD is the calculated balance that would be in the accumulated depreciation account at a point in time using current depreciation parameters.<sup>78</sup> An imbalance exists when the actual accumulated depreciation account does not equal the CAD. The choice of application technique will affect how the imbalance is dealt with.

Use of the whole life technique requires that an adjustment be made to accumulated depreciation after calculation of the CAD. The adjustment can be made in a lump sum or over a period of time. With use of the remaining life technique, however, adjustments to accumulated depreciation are amortized over the remaining life of the property and are automatically included

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<sup>76</sup> NARUC *supra* n. 8, at 63-64.

<sup>77</sup> Wolf *supra* n. 7, at 83.

<sup>78</sup> NARUC *supra* n. 8, at 325.

in the annual accrual.<sup>79</sup> This is one reason that the remaining life technique is popular among practitioners and regulators. The basic formula for the remaining life technique is as follows:<sup>80</sup>

**Equation 3:  
Remaining Life Accrual**

$$\text{Annual Accrual} = \frac{\text{Gross Plant} - \text{Accumulated Depreciation} - \text{Net Salvage}}{\text{Average Remaining Life}}$$

The remaining life accrual formula is similar to the basic straight-line accrual formula above with two notable exceptions. First, the numerator has an additional factor in the remaining life formula: the accumulated depreciation. Second, the denominator is “average remaining life” instead of “average life.” Essentially, the future accrual of plant (gross plant less accumulated depreciation) is allocated over the remaining life of plant. Thus, the adjustment to accumulated depreciation is “automatic” in the sense that it is built into the remaining life calculation.<sup>81</sup>

4. Analysis Model

The fourth parameter of a depreciation system, the “model,” relates to the way of viewing the life and salvage characteristics of the vintage groups that have been combined to form a continuous property group for depreciation purposes.<sup>82</sup> A continuous property group is created when vintage groups are combined to form a common group. Over time, the characteristics of the property may change, but the continuous property group will continue. The two analysis models

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<sup>79</sup> NARUC *supra* n. 8, at 65 (“The desirability of using the remaining life technique is that any necessary adjustments of [accumulated depreciation] . . . are accrued automatically over the remaining life of the property. Once commenced, adjustments to the depreciation reserve, outside of those inherent in the remaining life rate would require regulatory approval.”).

<sup>80</sup> *Id.* at 64.

<sup>81</sup> Wolf *supra* n. 7, at 178.

<sup>82</sup> See Wolf *supra* n. 7, at 139 (I added the term “model” to distinguish this fourth depreciation system parameter from the other three parameters).

used among practitioners, the “broad group” and the “vintage group,” are two ways of viewing the life and salvage characteristics of the vintage groups that have been combined to form a continuous property group.

The broad group model views the continuous property group as a collection of vintage groups that each has the same life and salvage characteristics. Thus, a single survivor curve and a single salvage schedule are chosen to describe all the vintages in the continuous property group. In contrast, the vintage group model views the continuous property group as a collection of vintage groups that may have different life and salvage characteristics. Typically, there is not a significant difference between vintage group and broad group results unless vintages within the applicable property group experienced dramatically different retirement levels than anticipated in the overall estimated life for the group. For this reason, many analysts utilize the broad group procedure because it is more efficient.

**APPENDIX B:****IOWA CURVES**

Early work in the analysis of the service life of industrial property was based on models that described the life characteristics of human populations.<sup>83</sup> This explains why the word “mortality” is often used in the context of depreciation analysis. In fact, a group of property installed during the same accounting period is analogous to a group of humans born during the same calendar year. Each period the group will incur a certain fraction of deaths / retirements until there are no survivors. Describing this pattern of mortality is part of actuarial analysis, and is regularly used by insurance companies to determine life insurance premiums. The pattern of mortality may be described by several mathematical functions, particularly the survivor curve and frequency curve. Each curve may be derived from the other so that if one curve is known, the other may be obtained. A survivor curve is a graph of the percent of units remaining in service expressed as a function of age.<sup>84</sup> A frequency curve is a graph of the frequency of retirements as a function of age. Several types of survivor and frequency curves are illustrated in the figures below.

**1. Development**

The survivor curves used by analysts today were developed over several decades from extensive analysis of utility and industrial property. In 1931 Edwin Kurtz and Robley Winfrey used extensive data from a range of 65 industrial property groups to create survivor curves

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<sup>83</sup> Wolf *supra* n. 7, at 276.

<sup>84</sup> *Id.* at 23.

representing the life characteristics of each group of property.<sup>85</sup> They generalized the 65 curves into 13 survivor curve types and published their results in *Bulletin 103: Life Characteristics of Physical Property*. The 13 type curves were designed to be used as valuable aids in forecasting probable future service lives of industrial property. Over the next few years, Winfrey continued gathering additional data, particularly from public utility property, and expanded the examined property groups from 65 to 176.<sup>86</sup> This resulted in 5 additional survivor curve types for a total of 18 curves. In 1935, Winfrey published *Bulletin 125: Statistical Analysis of Industrial Property Retirements*. According to Winfrey, “[t]he 18 type curves are expected to represent quite well all survivor curves commonly encountered in utility and industrial practices.”<sup>87</sup> These curves are known as the “Iowa curves” and are used extensively in depreciation analysis in order to obtain the average service lives of property groups. (Use of Iowa curves in actuarial analysis is further discussed in Appendix C.)

In 1942, Winfrey published *Bulletin 155: Depreciation of Group Properties*. In Bulletin 155, Winfrey made some slight revisions to a few of the 18 curve types, and published the equations, tables of the percent surviving, and probable life of each curve at five-percent intervals.<sup>88</sup> Rather than using the original formulas, analysts typically rely on the published tables containing the percentages surviving. This is because absent knowledge of the integration

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<sup>85</sup> *Id.* at 34.

<sup>86</sup> *Id.*

<sup>87</sup> Robley Winfrey, *Bulletin 125: Statistical Analyses of Industrial Property Retirements* 85, Vol. XXXIV, No. 23 (Iowa State College of Agriculture and Mechanic Arts 1935).

<sup>88</sup> Robley Winfrey, *Bulletin 155: Depreciation of Group Properties* 121-28, Vol XLI, No. 1 (The Iowa State College Bulletin 1942); *see also* Wolf *supra* n. 7, at 305-38 (publishing the percent surviving for each Iowa curve, including “O” type curve, at one percent intervals).

technique applied to each age interval, it is not possible to recreate the exact original published table values. In the 1970s, John Russo collected data from over 2,000 property accounts reflecting observations during the period 1965 – 1975 as part of his Ph.D. dissertation at Iowa State. Russo essentially repeated Winfrey’s data collection, testing, and analysis methods used to develop the original Iowa curves, except that Russo studied industrial property in service several decades after Winfrey published the original Iowa curves. Russo drew three major conclusions from his research:<sup>89</sup>

1. No evidence was found to conclude that the Iowa curve set, as it stands, is not a valid system of standard curves;
2. No evidence was found to conclude that new curve shapes could be produced at this time that would add to the validity of the Iowa curve set; and
3. No evidence was found to suggest that the number of curves within the Iowa curve set should be reduced.

Prior to Russo’s study, some had criticized the Iowa curves as being potentially obsolete because their development was rooted in the study of industrial property in existence during the early 1900s. Russo’s research, however, negated this criticism by confirming that the Iowa curves represent a sufficiently wide range of life patterns, and that though technology will change over time, the underlying patterns of retirements remain constant and can be adequately described by the Iowa curves.<sup>90</sup>

Over the years, several more curve types have been added to Winfrey’s 18 Iowa curves. In 1967, Harold Cowles added four origin-modal curves. In addition, a square curve is sometimes

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<sup>89</sup> See Wolf *supra* n. 7, at 37.

<sup>90</sup> *Id.*

used to depict retirements which are all planned to occur at a given age. Finally, analysts commonly rely on several “half curves” derived from the original Iowa curves. Thus, the term “Iowa curves” could be said to describe up to 31 standardized survivor curves.

## 2. Classification

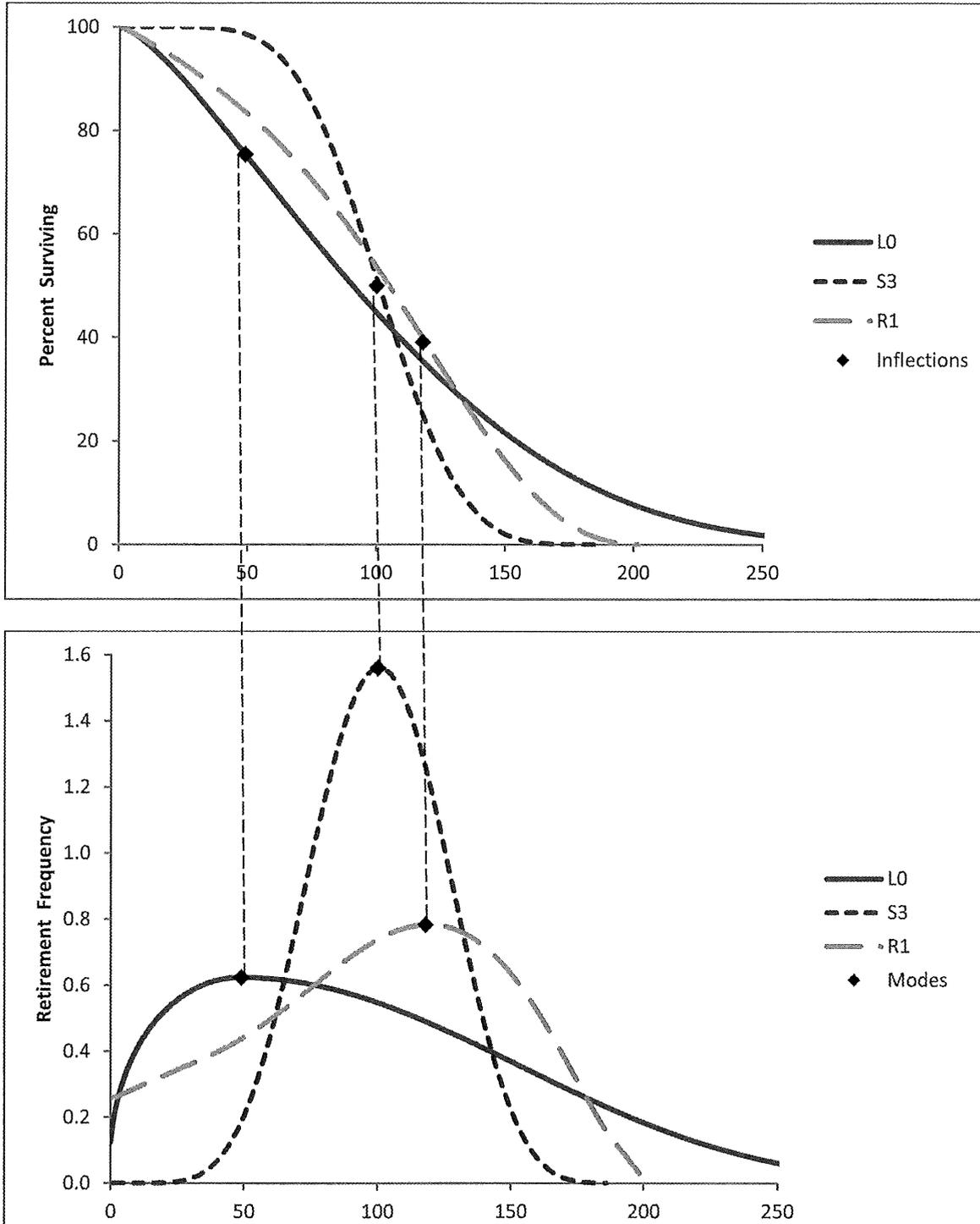
The Iowa curves are classified by three variables: modal location, average life, and variation of life. First, the mode is the percent life that results in the highest point of the frequency curve and the “inflection point” on the survivor curve. The modal age is the age at which the greatest rate of retirement occurs. As illustrated in the figure below, the modes appear at the steepest point of each survivor curve in the top graph, as well as the highest point of each corresponding frequency curve in the bottom graph.

The classification of the survivor curves was made according to whether the mode of the retirement frequency curves was to the left, to the right, or coincident with average service life. There are three modal “families” of curves: six left modal curves (L0, L1, L2, L3, L4, L5); five right modal curves (R1, R2, R3, R4, R5); and seven symmetrical curves (S0, S1, S2, S3, S4, S5, S6).<sup>91</sup> In the figure below, one curve from each family is shown: L0, S3 and R1, with average life at 100 on the x-axis. It is clear from the graphs that the modes for the L0 and R1 curves appear to the left and right of average life respectively, while the S3 mode is coincident with average life.

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<sup>91</sup> In 1967, Harold A. Cowles added four origin-modal curves known as “O type” curves. There are also several “half” curves and a square curve, so the total amount of survivor curves commonly called “Iowa” curves is about 31 (see NARUC *supra* n. 8, at 68).

**Figure 15:**  
**Modal Age Illustration**



The second Iowa curve classification variable is average life. The Iowa curves were designed using a single parameter of age expressed as a percent of average life instead of actual age. This was necessary in order for the curves to be of practical value. As Winfrey notes:

Since the location of a particular survivor on a graph is affected by both its span in years and the shape of the curve, it is difficult to classify a group of curves unless one of these variables can be controlled. This is easily done by expressing the age in percent of average life.<sup>92</sup>

Because age is expressed in terms of percent of average life, any particular Iowa curve type can be modified to forecast property groups with various average lives.

The third variable, variation of life, is represented by the numbers next to each letter. A lower number (e.g., L1) indicates a relatively low mode, large variation, and large maximum life; a higher number (e.g., L5) indicates a relatively high mode, small variation, and small maximum life. All three classification variables – modal location, average life, and variation of life – are used to describe each Iowa curve. For example, a 13-L1 Iowa curve describes a group of property with a 13-year average life, with the greatest number of retirements occurring before (or to the left of) the average life, and a relatively low mode. The graphs below show these 18 survivor curves, organized by modal family.

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<sup>92</sup> Winfrey *supra* n. 166, at 60.

**Figure 16:**  
**Type L Survivor and Frequency Curves**

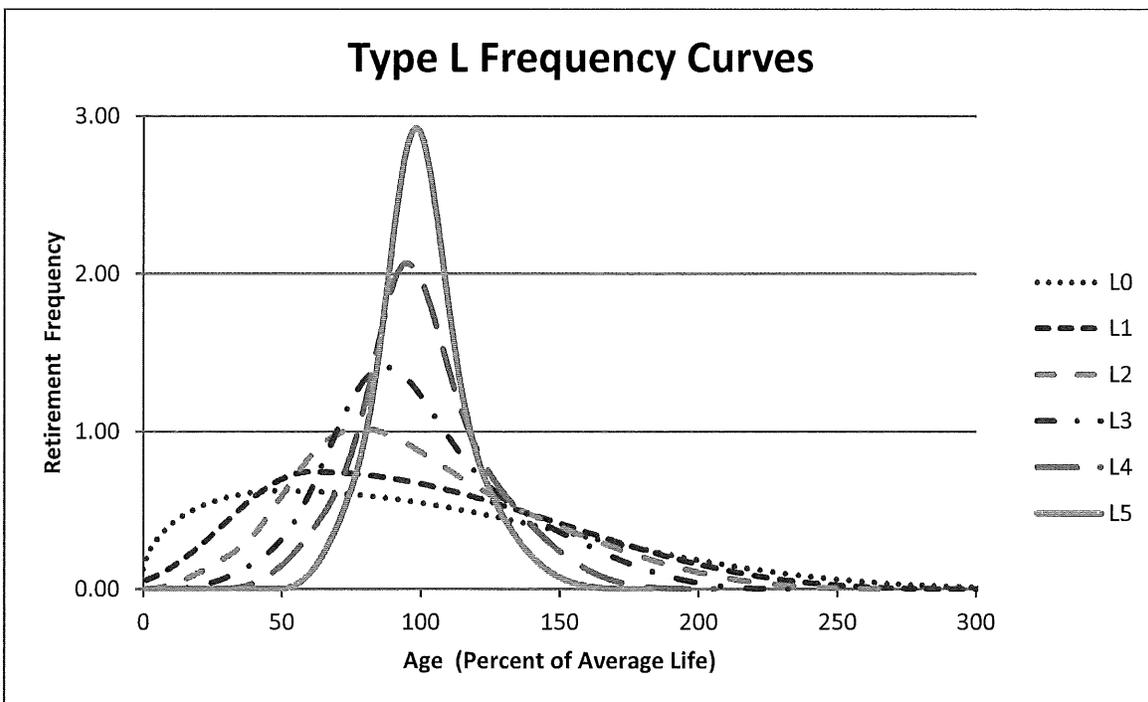
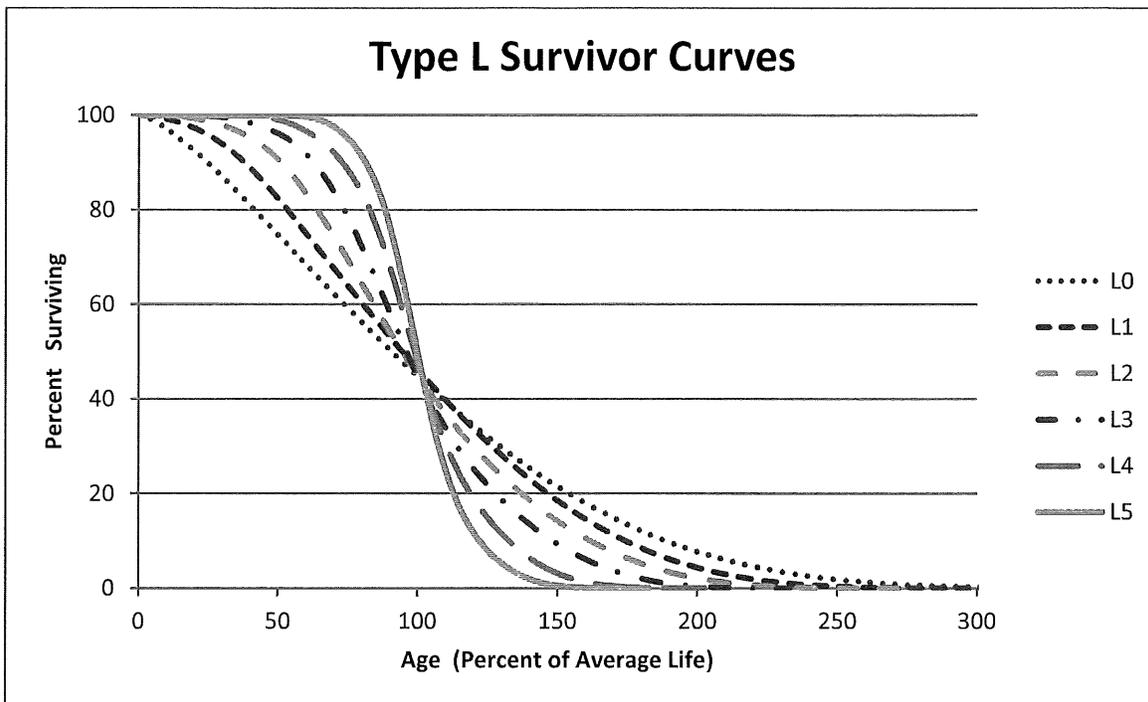
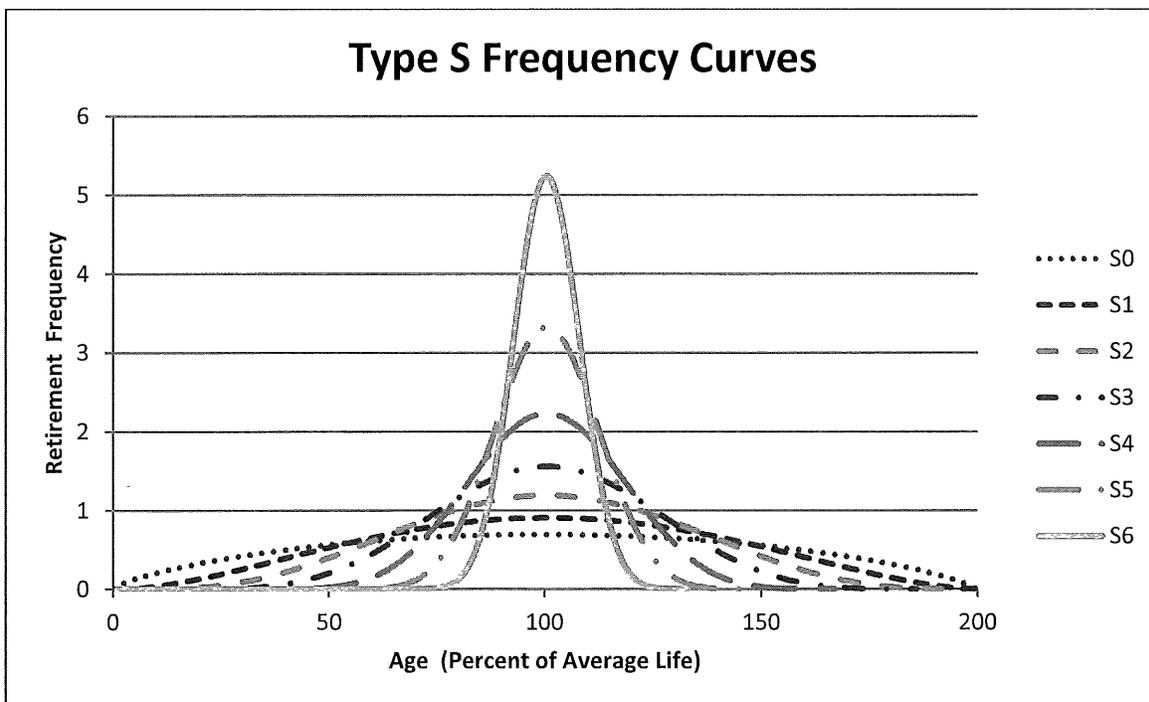
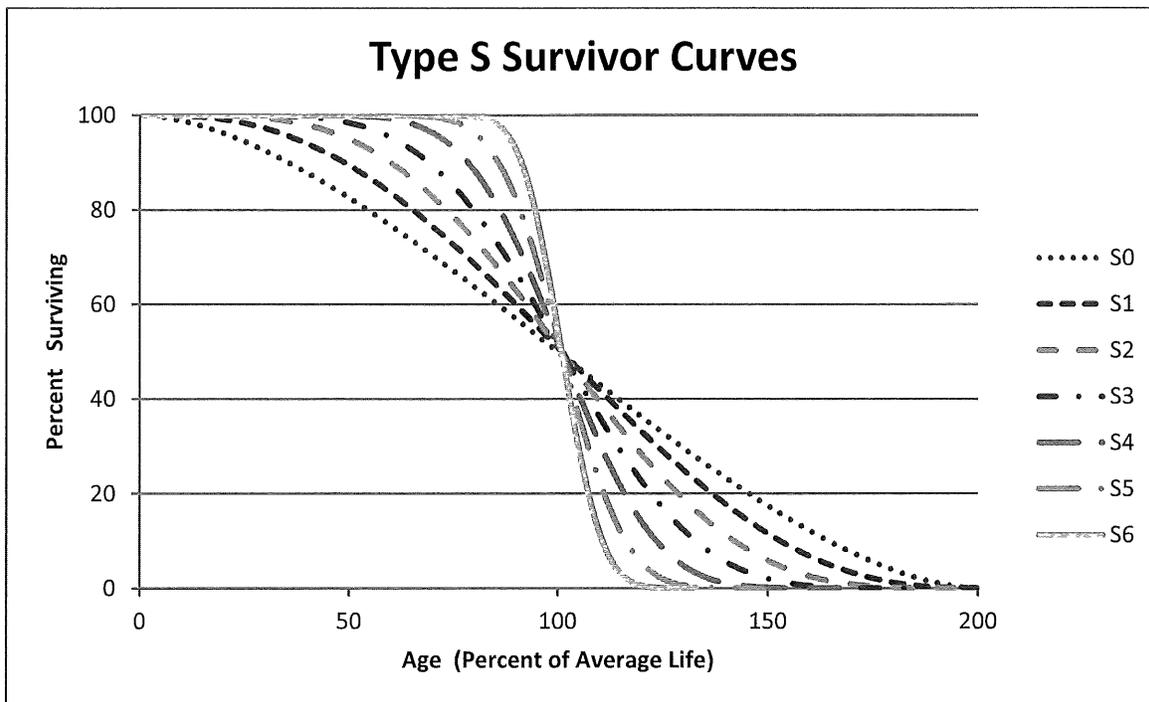
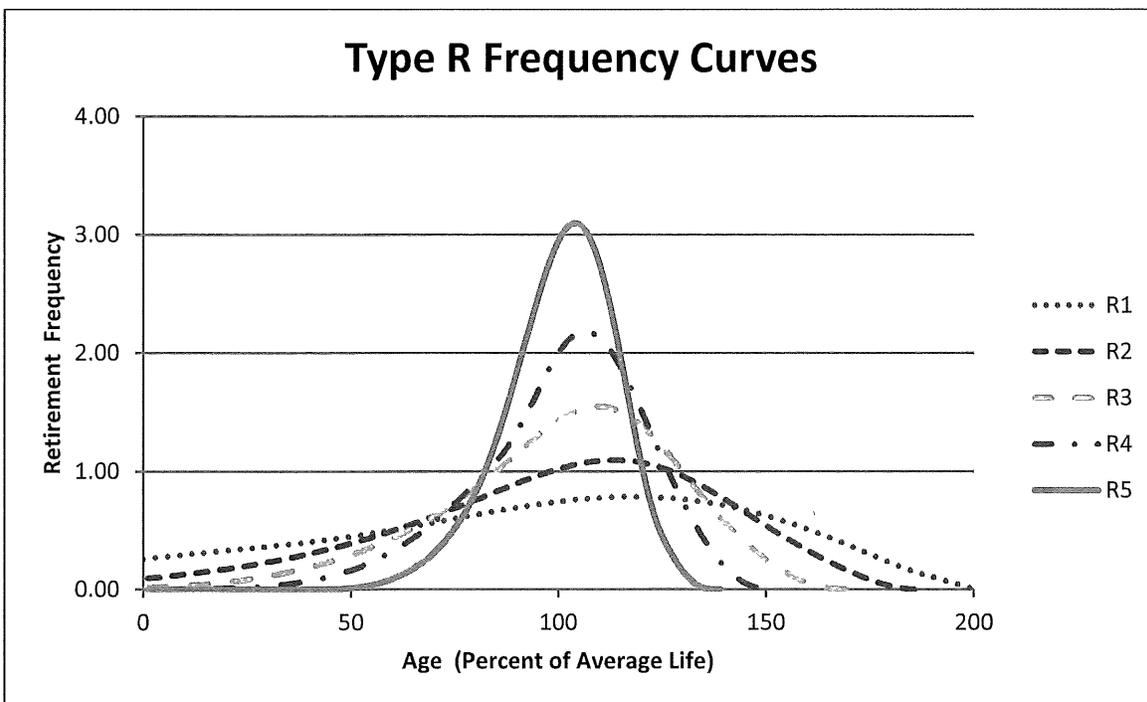
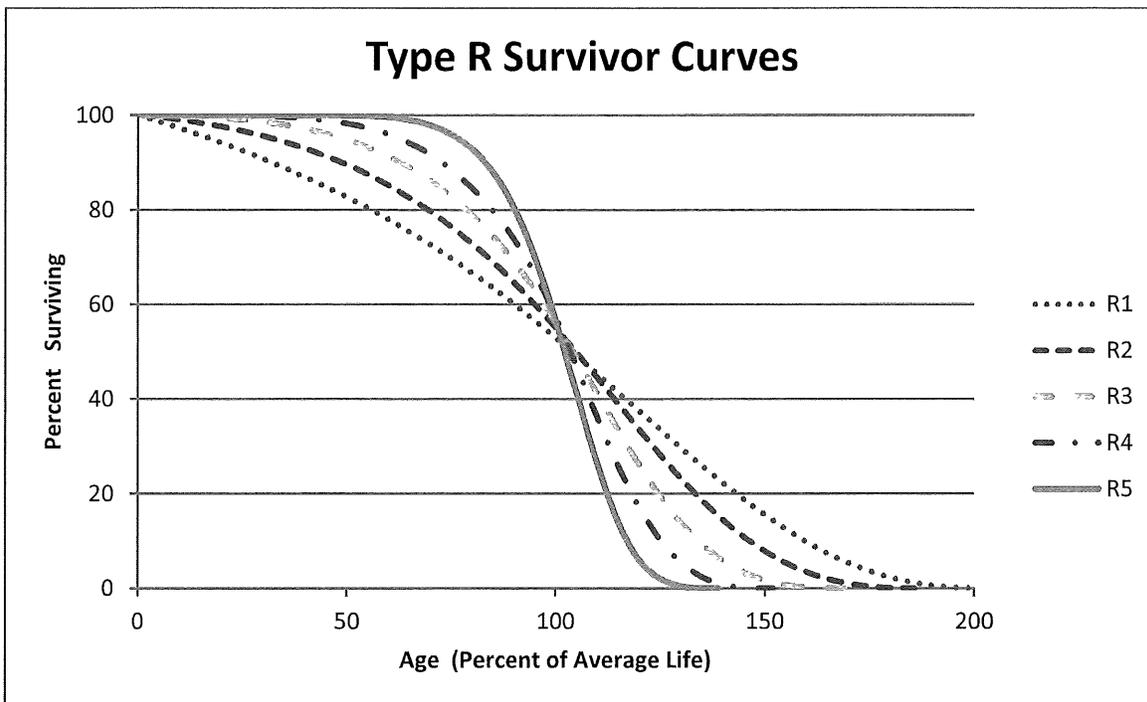


Figure 17:  
Type S Survivor and Frequency Curves



**Figure 18:**  
**Type R Survivor and Frequency Curves**



As shown in the graphs above, the modes for the L family frequency curves occur to the left of average life (100% on the x-axis), while the S family modes occur at the average, and the R family modes occur after the average.

### 3. Types of Lives

Several other important statistical analyses and types of lives may be derived from an Iowa curve. These include: 1) average life; 2) realized life; 3) remaining life; and 4) probable life. The figure below illustrates these concepts. It shows the frequency curve, survivor curve, and probable life curve. Age  $M_x$  on the x-axis represents the modal age, while age  $AL_x$  represents the average age. Thus, this figure illustrates an “L type” Iowa curve since the mode occurs before the average.<sup>93</sup>

First, average life is the area under the survivor curve from age zero to maximum life. Because the survivor curve is measured in percent, the area under the curve must be divided by 100% to convert it from percent-years to years. The formula for average life is as follows:<sup>94</sup>

**Equation 4:  
Average Life**

$$\text{Average Life} = \frac{\text{Area Under Survivor Curve from Age 0 to Max Life}}{100\%}$$

Thus, average life may not be determined without a complete survivor curve. Many property groups being analyzed will not have experienced full retirement. This results in a “stub” survivor

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<sup>93</sup> From age zero to age  $M_x$  on the survivor curve, it could be said that the percent surviving from this property group is decreasing at an increasing rate. Conversely, from point  $M_x$  to maximum on the survivor curve, the percent surviving is decreasing at a decreasing rate.

<sup>94</sup> See NARUC *supra* n. 8, at 71.

curve. Iowa curves are used to extend stub curves to maximum life in order for the average life calculation to be made (see Appendix C).

Realized life is similar to average life, except that realized life is the average years of service experienced to date from the vintage's original installations.<sup>95</sup> As shown in the figure below, realized life is the area under the survivor curve from zero to age  $RL_x$ . Likewise, unrealized life is the area under the survivor curve from age  $RL_x$  to maximum life. Thus, it could be said that average life equals realized life plus unrealized life.

Average remaining life represents the future years of service expected from the surviving property.<sup>96</sup> Remaining life is sometimes referred to as "average remaining life" and "life expectancy." To calculate average remaining life at age  $x$ , the area under the estimated future portion of the survivor curve is divided by the percent surviving at age  $x$  (denoted  $S_x$ ). Thus, the average remaining life formula is:

**Equation 5:  
Average Remaining Life**

$$\text{Average Remaining Life} = \frac{\text{Area Under Survivor Curve from Age } x \text{ to Max Life}}{S_x}$$

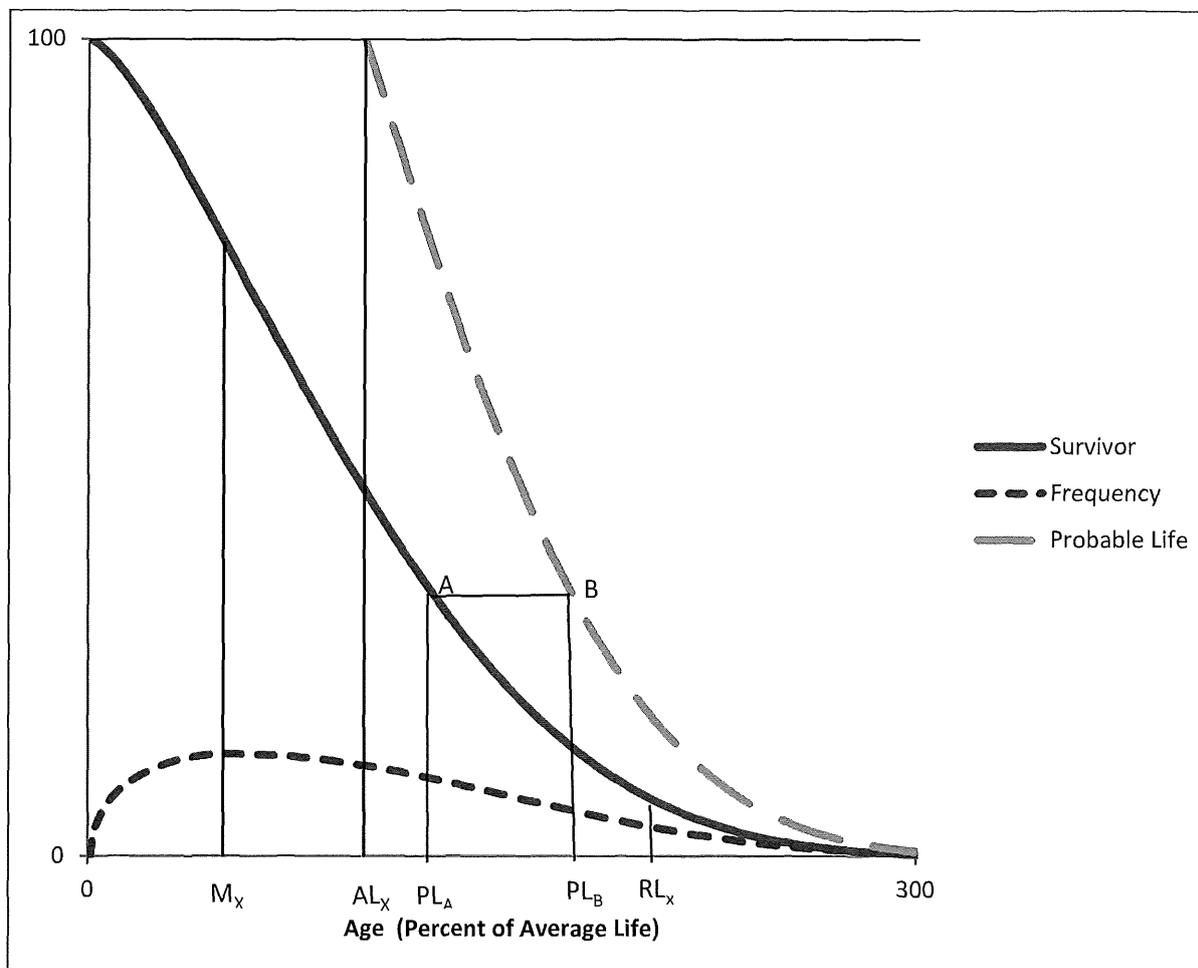
It is necessary to determine average remaining life in order to calculate the annual accrual under the remaining life technique.

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<sup>95</sup> *Id.* at 73.

<sup>96</sup> *Id.* at 74.

**Figure 19:  
Iowa Curve Derivations**



Finally, the probable life may also be determined from the Iowa curve. The probable life of a property group is the total life expectancy of the property surviving at any age and is equal to the remaining life plus the current age.<sup>97</sup> The probable life is also illustrated in this figure. The probable life at age  $PL_A$  is the age at point  $PL_B$ . Thus, to read the probable life at age  $PL_A$ , see the corresponding point on the survivor curve above at point "A," then horizontally to point "B" on

<sup>97</sup> Wolf *supra* n. 7, at 28.

the probable life curve, and back down to the age corresponding to point “B.” It is no coincidence that the vertical line from  $AL_x$  connects at the top of the probable life curve. This is because at age zero, probable life equals average life.

**APPENDIX C:**  
**ACTUARIAL ANALYSIS**

Actuarial science is a discipline that applies various statistical methods to assess risk probabilities and other related functions. Actuaries often study human mortality. The results from historical mortality data are used to predict how long similar groups of people who are alive will live today. Insurance companies rely of actuarial analysis in determining premiums for life insurance policies.

The study of human mortality is analogous to estimating service lives of industrial property groups. While some humans die solely from chance, most deaths are related to age; that is, death rates generally increase as age increases. Similarly, physical plant is also subject to forces of retirement. These forces include physical, functional, and contingent factors, as shown in the table below.<sup>98</sup>

**Figure 20:**  
**Forces of Retirement**

| <u>Physical Factors</u>   | <u>Functional Factors</u>   | <u>Contingent Factors</u>                             |
|---|---|---|
| Wear and tear<br>Decay or deterioration<br>Action of the elements | Inadequacy<br>Obsolescence<br>Changes in technology<br>Regulations<br>Managerial discretion | Casualties or disasters<br>Extraordinary obsolescence |

While actuaries study historical mortality data in order to predict how long a group of people will live, depreciation analysts must look at a utility’s historical data in order to estimate the average lives of property groups. A utility’s historical data is often contained in the Continuing Property Records (“CPR”). Generally, a CPR should contain 1) an inventory of property record

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<sup>98</sup> NARUC *supra* n. 8, at 14-15.

units; 2) the association of costs with such units; and 3) the dates of installation and removal of plant. Since actuarial analysis includes the examination of historical data to forecast future retirements, the historical data used in the analysis should not contain events that are anomalous or unlikely to recur.<sup>99</sup> Historical data is used in the retirement rate actuarial method, which is discussed further below.

### The Retirement Rate Method

There are several systematic actuarial methods that use historical data in order to calculating observed survivor curves for property groups. Of these methods, the retirement rate method is superior, and is widely employed by depreciation analysts.<sup>100</sup> The retirement rate method is ultimately used to develop an observed survivor curve, which can be fitted with an Iowa curve discussed in Appendix B in order to forecast average life. The observed survivor curve is calculated by using an observed life table (“OLT”). The figures below illustrate how the OLT is developed. First, historical property data are organized in a matrix format, with placement years on the left forming rows, and experience years on the top forming columns. The placement year (a.k.a. “vintage year” or “installation year”) is the year of placement of a group of property. The experience year (a.k.a. “activity year”) refers to the accounting data for a particular calendar year. The two matrices below use aged data – that is, data for which the dates of placements, retirements, transfers, and other transactions are known. Without aged data, the retirement rate actuarial method may not be employed. The first matrix is the exposure matrix, which shows the exposures

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<sup>99</sup> *Id.* at 112-13.

<sup>100</sup> Anson Marston, Robley Winfrey & Jean C. Hempstead, *Engineering Valuation and Depreciation* 154 (2nd ed., McGraw-Hill Book Company, Inc. 1953).

at the beginning of each year.<sup>101</sup> An exposure is simply the depreciable property subject to retirement during a period. The second matrix is the retirement matrix, which shows the annual retirements during each year. Each matrix covers placement years 2003–2015, and experience years 2008-2015. In the exposure matrix, the number in the 2009 experience column and the 2003 placement row is \$192,000. This means at the beginning of 2012, there was \$192,000 still exposed to retirement from the vintage group placed in 2003. Likewise, in the retirement matrix, \$19,000 of the dollars invested in 2003 was retired during 2012.

**Figure 21:  
Exposure Matrix**

| Placement Years | Experience Years                                       |             |             |             |             |             |             |             | Total at Start of Age Interval | Age Interval |
|-----------------|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------------------------|--------------|
|                 | Exposures at January 1 of Each Year (Dollars in 000's) |             |             |             |             |             |             |             |                                |              |
|                 | 2008   | 2009        | 2010        | 2011        | 2012        | 2013        | 2014        | 2015        |                                |              |
| 2003            | 261  | 245         | 228         | 211         | <b>192</b>  | 173         | 152         | 131         | 131                            | 11.5 - 12.5  |
| 2004            | 267  | 252         | 236         | 220         | 202         | <b>184</b>  | 165         | 145         | 297                            | 10.5 - 11.5  |
| 2005            | 304  | 291         | 277         | 263         | 248         | 232         | <b>216</b>  | 198         | 536                            | 9.5 - 10.5   |
| 2006            | 345  | 334         | 322         | 310         | 298         | 284         | 270         | <b>255</b>  | <b>847</b>                     | 8.5 - 9.5    |
| 2007            | 367  | 357         | 347         | 335         | 324         | 312         | 299         | 286         | 1,201                          | 7.5 - 8.5    |
| 2008            | 375  | 366         | 357         | 347         | 336         | 325         | 314         | 302         | 1,581                          | 6.5 - 7.5    |
| 2009            |  | 377         | 366         | 356         | 346         | 336         | 327         | 319         | 1,986                          | 5.5 - 6.5    |
| 2010            |  |             | 381         | 369         | 358         | 347         | 336         | 327         | 2,404                          | 4.5 - 5.5    |
| 2011            |  |             |             | 386         | 372         | 359         | 346         | 334         | 2,559                          | 3.5 - 4.5    |
| 2012            |  |             |             |             | 395         | 380         | 366         | 352         | 2,722                          | 2.5 - 3.5    |
| 2013            |  |             |             |             |             | 401         | 385         | 370         | 2,866                          | 1.5 - 2.5    |
| 2014            |  |             |             |             |             |             | 410         | 393         | 2,998                          | 0.5 - 1.5    |
| 2015            |  |             |             |             |             |             |             | 416         | 3,141                          | 0.0 - 0.5    |
| <b>Total</b>    | <b>1919</b>  | <b>2222</b> | <b>2514</b> | <b>2796</b> | <b>3070</b> | <b>3333</b> | <b>3586</b> | <b>3827</b> | <b>23,268</b>                  |              |

<sup>101</sup> Technically, the last numbers in each column are “gross additions” rather than exposures. Gross additions do not include adjustments and transfers applicable to plant placed in a previous year. Once retirements, adjustments, and transfers are factored in, the balance at the beginning of the next account period is called an “exposure” rather than an addition.

**Figure 22:  
Retirement Matrix**

| Placement<br>Years | Experience Years                               |      |      |      |      |      |      |      | Total During<br>Age Interval | Age<br>Interval |
|--------------------|--|------|------|------|------|------|------|------|------------------------------|-----------------|
|                    | Retirements During the Year (Dollars in 000's) |      |      |      |      |      |      |      |                              |                 |
|                    | 2008   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |                              |                 |
| 2003               | 16   | 17   | 18   | 19   | 19   | 20   | 21   | 23   | 23                           | 11.5 - 12.5     |
| 2004               | 15   | 16   | 17   | 17   | 18   | 19   | 20   | 21   | 43                           | 10.5 - 11.5     |
| 2005               | 13   | 14   | 14   | 15   | 16   | 17   | 17   | 18   | 59                           | 9.5 - 10.5      |
| 2006               | 11   | 12   | 12   | 13   | 13   | 14   | 15   | 15   | 71                           | 8.5 - 9.5       |
| 2007               | 10   | 11   | 11   | 12   | 12   | 13   | 13   | 14   | 82                           | 7.5 - 8.5       |
| 2008               | 9  | 9    | 10   | 10   | 11   | 11   | 12   | 13   | 91                           | 6.5 - 7.5       |
| 2009               |  | 11   | 10   | 10   | 9    | 9    | 9    | 8    | 95                           | 5.5 - 6.5       |
| 2010               |  |      | 12   | 11   | 11   | 10   | 10   | 9    | 100                          | 4.5 - 5.5       |
| 2011               |  |      |      | 14   | 13   | 13   | 12   | 11   | 93                           | 3.5 - 4.5       |
| 2012               |  |      |      |      | 15   | 14   | 14   | 13   | 91                           | 2.5 - 3.5       |
| 2013               |  |      |      |      |      | 16   | 15   | 14   | 93                           | 1.5 - 2.5       |
| 2014               |  |      |      |      |      |      | 17   | 16   | 100                          | 0.5 - 1.5       |
| 2015               |  |      |      |      |      |      |      | 18   | 112                          | 0.0 - 0.5       |
| Total              | 74   | 89   | 104  | 121  | 139  | 157  | 175  | 194  | 1,052                        |                 |

These matrices help visualize how exposure and retirement data are calculated for each age interval. An age interval is typically one year. A common convention is to assume that any unit installed during the year is installed in the middle of the calendar year (i.e., July 1st). This convention is called the “half-year convention” and effectively assumes that all units are installed uniformly during the year.<sup>102</sup> Adoption of the half-year convention leads to age intervals of 0-0.5 years, 0.5-1.5 years, etc., as shown in the matrices.

The purpose of the matrices is to calculate the totals for each age interval, which are shown in the second column from the right in each matrix. This column is calculated by adding each number from the corresponding age interval in the matrix. For example, in the exposure matrix, the total amount of exposures at the beginning of the 8.5-9.5 age interval is \$847,000. This number was calculated by adding the numbers shown on the “stairs” to the left (192+184+216+255=847).

<sup>102</sup> Wolf *supra* n. 7, at 22.

The same calculation is applied to each number in the column. The amounts retired during the year in the retirements matrix affect the exposures at the beginning of each year in the exposures matrix. For example, the amount exposed to retirement in 2008 from the 2003 vintage is \$261,000. The amount retired during 2008 from the 2003 vintage is \$16,000. Thus, the amount exposed to retirement in 2009 from the 2003 vintage is \$245,000 ( $\$261,000 - \$16,000$ ). The company's property records may contain other transactions which affect the property, including sales, transfers, and adjusting entries. Although these transactions are not shown in the matrices above, they would nonetheless affect the amount exposed to retirement at the beginning of each year.

The totaled amounts for each age interval in both matrices are used to form the exposure and retirement columns in the OLT, as shown in the chart below. This chart also shows the retirement ratio and the survivor ratio for each age interval. The retirement ratio for an age interval is the ratio of retirements during the interval to the property exposed to retirement at the beginning of the interval. The retirement ratio represents the probability that the property surviving at the beginning of an age interval will be retired during the interval. The survivor ratio is simply the complement to the retirement ratio ( $1 - \text{retirement ratio}$ ). The survivor ratio represents the probability that the property surviving at the beginning of an age interval will survive to the next age interval.

**Figure 23:  
Observed Life Table**

| Age at<br>Start of<br>Interval | Exposures at<br>Start of<br>Age Interval | Retirements<br>During Age<br>Interval | Retirement<br>Ratio | Survivor<br>Ratio | Percent<br>Surviving at<br>Start of<br>Age Interval |
|--------------------------------|--|---------------------------------------|---------------------|-------------------|---|
| A                              | B  | C                                     | D = C / B           | E = 1 - D         | F   |
| 0.0                            | 3,141                                    | 112                                   | 0.036               | 0.964             | <b>100.00</b>                                       |
| 0.5                            | 2,998                                    | 100                                   | 0.033               | 0.967             | <b>96.43</b>  |
| 1.5                            | 2,866                                    | 93                                    | 0.032               | 0.968             | <b>93.21</b>  |
| 2.5                            | 2,722                                    | 91                                    | 0.033               | 0.967             | <b>90.19</b>  |
| 3.5                            | 2,559                                    | 93                                    | 0.037               | 0.963             | <b>87.19</b>  |
| 4.5                            | 2,404                                    | 100                                   | 0.042               | 0.958             | <b>84.01</b>  |
| 5.5                            | 1,986                                    | 95                                    | 0.048               | 0.952             | <b>80.50</b>  |
| 6.5                            | 1,581                                    | 91                                    | 0.058               | 0.942             | <b>76.67</b>  |
| 7.5                            | 1,201                                    | 82                                    | 0.068               | 0.932             | <b>72.26</b>  |
| 8.5                            | 847                                      | 71                                    | 0.084               | 0.916             | <b>67.31</b>  |
| 9.5                            | 536                                      | 59                                    | 0.110               | 0.890             | <b>61.63</b>  |
| 10.5                           | 297                                      | 43                                    | 0.143               | 0.857             | <b>54.87</b>  |
| 11.5                           | 131                                      | 23                                    | 0.172               | 0.828             | <b>47.01</b>  |
| Total                          | 23,268                                   | 1,052                                 |                     |                   | <b>38.91</b>  |

Column F on the right shows the percentages surviving at the beginning of each age interval. This column starts at 100% surviving. Each consecutive number below is calculated by multiplying the percent surviving from the previous age interval by the corresponding survivor ratio for that age interval. For example, the percent surviving at the start of age interval 1.5 is 93.21%, which was calculated by multiplying the percent surviving for age interval 0.5 (96.43%) by the survivor ratio for age interval 0.5 (0.967)<sup>103</sup>.

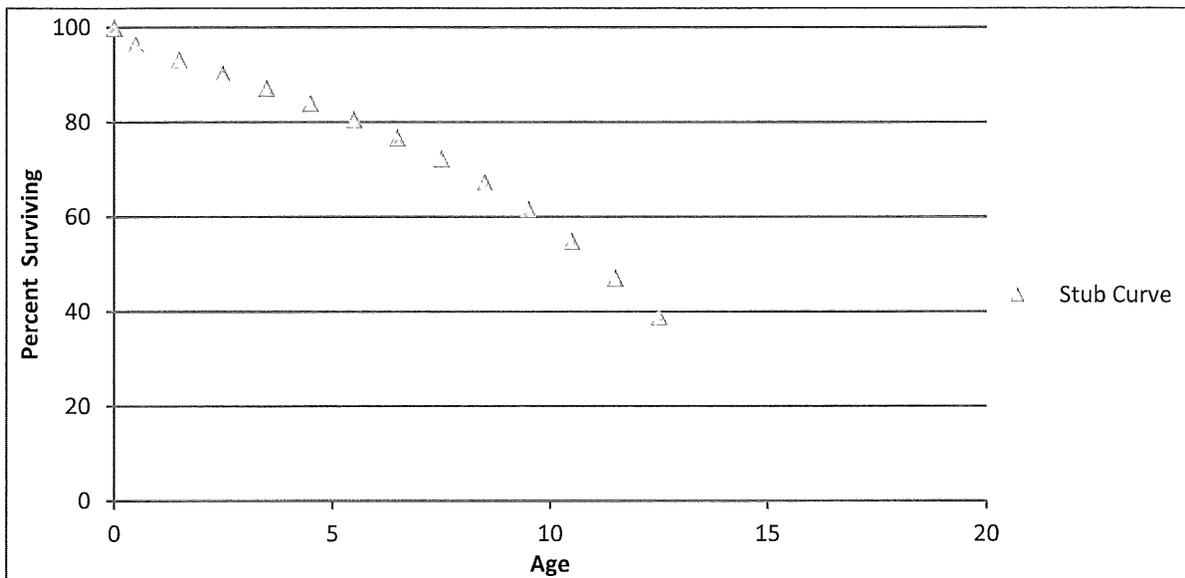
The percentages surviving in Column F are the numbers that are used to form the original survivor curve. This particular curve starts at 100% surviving and ends at 38.91% surviving. An

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<sup>103</sup> Multiplying 96.43 by 0.967 does not equal 93.21 exactly due to rounding.

observed survivor curve such as this that does not reach zero percent surviving is called a “stub” curve. The figure below illustrates the stub survivor curve derived from the OLT table above.

**Figure 24:  
Original “Stub” Survivor Curve**



The matrices used to develop the basic OLT and stub survivor curve provide a basic illustration of the retirement rate method in that only a few placement and experience years were used. In reality, analysts may have several decades of aged property data to analyze. In that case, it may be useful to use a technique called “banding” in order to identify trends in the data.

### Banding

The forces of retirement and characteristics of industrial property are constantly changing. A depreciation analyst may examine the magnitude of these changes. Analysts often use a technique called “banding” to assist with this process. Banding refers to the merging of several years of data into a single data set for further analysis, and it is a common technique associated

with the retirement rate method.<sup>104</sup> There are three primary benefits of using bands in depreciation analysis:

1. Increasing the sample size. In statistical analyses, the larger the sample size in relation to the body of total data, the greater the reliability of the result;
2. Smooth the observed data. Generally, the data obtained from a single activity or vintage year will not produce an observed life table that can be easily fit; and
3. Identify trends. By looking at successive bands, the analyst may identify broad trends in the data that may be useful in projecting the future life characteristics of the property.<sup>105</sup>

Two common types of banding methods are the “placement band” method and the “experience band” method. A placement band, as the name implies, isolates selected placement years for analysis. The figure below illustrates the same exposure matrix shown above, except that only the placement years 2005-2008 are considered in calculating the total exposures at the beginning of each age interval.

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<sup>104</sup> NARUC *supra* n. 8, at 113.

<sup>105</sup> *Id.*

**Figure 25:  
Placement Bands**

| Placement<br>Years | Experience Years                                       |      |      |      |      |      |      |      | Total at Start<br>of Age Interval | Age<br>Interval |
|--------------------|--|------|------|------|------|------|------|------|-----------------------------------|-----------------|
|                    | Exposures at January 1 of Each Year (Dollars in 000's) |      |      |      |      |      |      |      |                                   |                 |
|                    | 2008   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |                                   |                 |
| 2003               | 261  | 245  | 228  | 211  | 192  | 173  | 152  | 131  |                                   | 11.5 - 12.5     |
| 2004               | 267  | 252  | 236  | 220  | 202  | 184  | 165  | 145  |                                   | 10.5 - 11.5     |
| 2005               | 304  | 291  | 277  | 263  | 248  | 232  | 216  | 198  | 198                               | 9.5 - 10.5      |
| 2006               | 345  | 334  | 322  | 310  | 298  | 284  | 270  | 255  | 471                               | 8.5 - 9.5       |
| 2007               | 367  | 357  | 347  | 335  | 324  | 312  | 299  | 286  | 788                               | 7.5 - 8.5       |
| 2008               | 375  | 366  | 357  | 347  | 336  | 325  | 314  | 302  | 1,133                             | 6.5 - 7.5       |
| 2009               |  | 377  | 366  | 356  | 346  | 336  | 327  | 319  | 1,186                             | 5.5 - 6.5       |
| 2010               |  |      | 381  | 369  | 358  | 347  | 336  | 327  | 1,237                             | 4.5 - 5.5       |
| 2011               |  |      |      | 386  | 372  | 359  | 346  | 334  | 1,285                             | 3.5 - 4.5       |
| 2012               |  |      |      |      | 395  | 380  | 366  | 352  | 1,331                             | 2.5 - 3.5       |
| 2013               |  |      |      |      |      | 401  | 385  | 370  | 1,059                             | 1.5 - 2.5       |
| 2014               |  |      |      |      |      |      | 410  | 393  | 733                               | 0.5 - 1.5       |
| 2015               |  |      |      |      |      |      |      | 416  | 375                               | 0.0 - 0.5       |
| Total              | 1919   | 2222 | 2514 | 2796 | 3070 | 3333 | 3586 | 3827 | 9,796                             |                 |

The shaded cells within the placement band equal the total exposures at the beginning of age interval 4.5–5.5 (\$1,237). The same placement band would be used for the retirement matrix covering the same placement years of 2005 – 2008. This of course would result in a different OLT and original stub survivor curve than those that were calculated above without the restriction of a placement band.

Analysts often use placement bands for comparing the survivor characteristics of properties with different physical characteristics.<sup>106</sup> Placement bands allow analysts to isolate the effects of changes in technology and materials that occur in successive generations of plant. For example, if in 2005 an electric utility began placing transmission poles with a special chemical treatment that extended the service lives of the poles, an analyst could use placement bands to isolate and analyze the effect of that change in the property group's physical characteristics. While placement

<sup>106</sup> Wolf *supra* n. 7, at 182.

bands are very useful in depreciation analysis, they also possess an intrinsic dilemma. A fundamental characteristic of placement bands is that they yield fairly complete survivor curves for older vintages. However, with newer vintages, which are arguably more valuable for forecasting, placement bands yield shorter survivor curves. Longer “stub” curves are considered more valuable for forecasting average life. Thus, an analyst must select a band width broad enough to provide confidence in the reliability of the resulting curve fit, yet narrow enough so that an emerging trend may be observed.<sup>107</sup>

Analysts also use “experience bands.” Experience bands show the composite retirement history for all vintages during a select set of activity years. The figure below shows the same data presented in the previous exposure matrices, except that the experience band from 2011 – 2013 is isolated, resulting in different interval totals.

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<sup>107</sup> NARUC *supra* n. 8, at 114.

**Figure 26:  
Experience Bands**

| Placement<br>Years | Experience Years                                       |      |      |      |      |      |      |      | Total at Start<br>of Age Interval | Age<br>Interval |
|--------------------|--|------|------|------|------|------|------|------|-----------------------------------|-----------------|
|                    | Exposures at January 1 of Each Year (Dollars in 000's) |      |      |      |      |      |      |      |                                   |                 |
|                    | 2008   | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |                                   |                 |
| 2003               | 261  | 245  | 228  | 211  | 192  | 173  | 152  | 131  |                                   | 11.5 - 12.5     |
| 2004               | 267  | 252  | 236  | 220  | 202  | 184  | 165  | 145  |                                   | 10.5 - 11.5     |
| 2005               | 304  | 291  | 277  | 263  | 248  | 232  | 216  | 198  | 173                               | 9.5 - 10.5      |
| 2006               | 345  | 334  | 322  | 310  | 298  | 284  | 270  | 255  | 376                               | 8.5 - 9.5       |
| 2007               | 367  | 357  | 347  | 335  | 324  | 312  | 299  | 286  | 645                               | 7.5 - 8.5       |
| 2008               | 375  | 366  | 357  | 347  | 336  | 325  | 314  | 302  | 752                               | 6.5 - 7.5       |
| 2009               |  | 377  | 366  | 356  | 346  | 336  | 327  | 319  | 872                               | 5.5 - 6.5       |
| 2010               |  |      | 381  | 369  | 358  | 347  | 336  | 327  | 959                               | 4.5 - 5.5       |
| 2011               |  |      |      | 386  | 372  | 359  | 346  | 334  | 1,008                             | 3.5 - 4.5       |
| 2012               |  |      |      |      | 395  | 380  | 366  | 352  | 1,039                             | 2.5 - 3.5       |
| 2013               |  |      |      |      |      | 401  | 385  | 370  | 1,072                             | 1.5 - 2.5       |
| 2014               |  |      |      |      |      |      | 410  | 393  | 1,121                             | 0.5 - 1.5       |
| 2015               |  |      |      |      |      |      |      | 416  | 1,182                             | 0.0 - 0.5       |
| Total              | 1919   | 2222 | 2514 | 2796 | 3070 | 3333 | 3586 | 3827 | 9,199                             |                 |

The shaded cells within the experience band equal the total exposures at the beginning of age interval 4.5–5.5 (\$1,237). The same experience band would be used for the retirement matrix covering the same experience years of 2011 – 2013. This of course would result in a different OLT and original stub survivor than if the band had not been used. Analysts often use experience bands to isolate and analyze the effects of an operating environment over time.<sup>108</sup> Likewise, the use of experience bands allows analysis of the effects of an unusual environmental event. For example, if an unusually severe ice storm occurred in 2013, destruction from that storm would affect an electric utility's line transformers of all ages. That is, each of the line transformers from each placement year would be affected, including those recently installed in 2012, as well as those installed in 2003. Using experience bands, an analyst could isolate or even eliminate the 2013 experience year from the analysis. In contrast, a placement band would not effectively isolate the

<sup>108</sup> *Id.*

ice storm's effect on life characteristics. Rather, the placement band would show an unusually large rate of retirement during 2013, making it more difficult to accurately fit the data with a smooth Iowa curve. Experience bands tend to yield the most complete stub curves for recent bands because they have the greatest number of vintages included. Longer stub curves are better for forecasting. The experience bands, however, may also result in more erratic retirement dispersion making the curve fitting process more difficult.

Depreciation analysts must use professional judgment in determining the types of bands to use and the band widths. In practice, analysts may use various combinations of placement and experience bands in order to increase the data sample size, identify trends and changes in life characteristics, and isolate unusual events. Regardless of which bands are used, observed survivor curves in depreciation analysis rarely reach zero percent. This is because, as seen in the OLT above, relatively newer vintage groups have not yet been fully retired at the time the property is studied. An analyst could confine the analysis to older, fully retired vintage groups in order to get complete survivor curves, but such analysis would ignore some the property currently in service and would arguably not provide an accurate description of life characteristics for current plant in service. Because a complete curve is necessary to calculate the average life of the property group, however, curve fitting techniques using Iowa curves or other standardized curves may be employed in order to complete the stub curve.

#### Curve Fitting

Depreciation analysts typically use the survivor curve rather than the frequency curve to fit the observed stub curves. The most commonly used generalized survivor curves used in the curve fitting process are the Iowa curves discussed above. As Wolf notes, if "the Iowa curves are

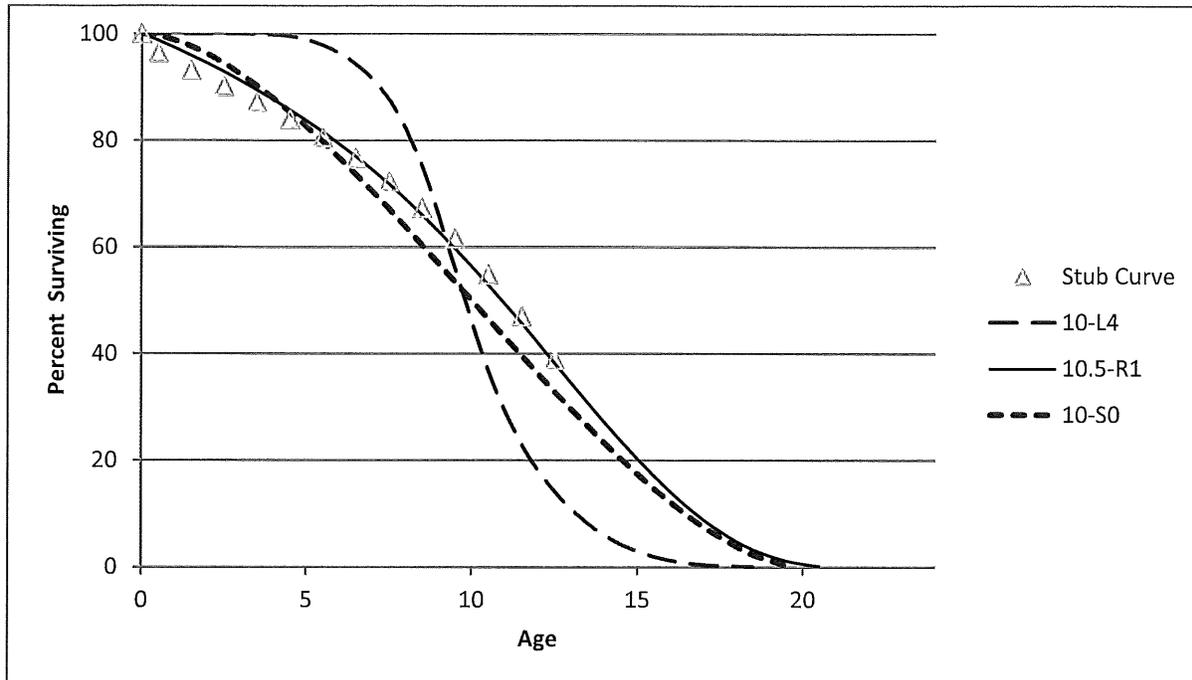
adopted as a model, an underlying assumption is that the process describing the retirement pattern is one of the 22 [or more] processes described by the Iowa curves.”<sup>109</sup>

Curve fitting may be done through visual matching or mathematical matching. In visual curve fitting, the analyst visually examines the plotted data to make an initial judgment about the Iowa curves that may be a good fit. The figure below illustrates the stub survivor curve shown above. It also shows three different Iowa curves: the 10-L4, the 10.5-R1, and the 10-S0. Visually, it is clear that the 10.5-R1 curve is a better fit than the other two curves.

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<sup>109</sup> Wolf *supra* n. 7, at 46 (22 curves includes Winfrey’s 18 original curves plus Cowles’s four “O” type curves).

**Figure 27:  
Visual Curve Fitting**



In mathematical fitting, the least squares method is used to calculate the best fit. This mathematical method would be excessively time consuming if done by hand. With the use of modern computer software however, mathematical fitting is an efficient and useful process. The typical logic for a computer program, as well as the software employed for the analysis in this testimony is as follows:

First (an Iowa curve) curve is arbitrarily selected. . . . If the observed curve is a stub curve, . . . calculate the area under the curve and up to the age at final data point. Call this area the realized life. Then systematically vary the average life of the theoretical survivor curve and calculate its realized life at the age corresponding to the study date. This trial and error procedure ends when you find an average life such that the realized life of the theoretical curve equals the realized life of the observed curve. Call this the average life.

Once the average life is found, calculate the difference between each percent surviving point on the observed survivor curve and the corresponding point on the Iowa curve. Square each difference and sum them. The sum of squares is used as a measure of goodness of fit for that particular Iowa type curve. This procedure is

repeated for the remaining 21 Iowa type curves. The “best fit” is declared to be the type of curve that minimizes the sum of differences squared.<sup>110</sup>

Mathematical fitting requires less judgment from the analyst, and is thus less subjective. Blind reliance on mathematical fitting, however, may lead to poor estimates. Thus, analysts should employ both mathematical and visual curve fitting in reaching their final estimates. This way, analysts may utilize the objective nature of mathematical fitting while still employing professional judgment. As Wolf notes: “The results of mathematical curve fitting serve as a guide for the analyst and speed the visual fitting process. But the results of the mathematical fitting should be checked visually, and the final determination of the best fit be made by the analyst.”<sup>111</sup>

In the graph above, visual fitting was sufficient to determine that the 10.5-R1 Iowa curve was a better fit than the 10-L4 and the 10-S0 curves. Using the sum of least squares method, mathematical fitting confirms the same result. In the chart below, the percentages surviving from the OLT that formed the original stub curve are shown in the left column, while the corresponding percentages surviving for each age interval are shown for the three Iowa curves. The right portion of the chart shows the differences between the points on each Iowa curve and the stub curve. These differences are summed at the bottom. Curve 10.5-R1 is the best fit because the sum of the squared differences for this curve is less than the same sum of the other two curves. Curve 10-L4 is the worst fit, which was also confirmed visually.

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<sup>110</sup> Wolf *supra* n. 7, at 47.

<sup>111</sup> *Id.* at 48.

**Figure 28:  
Mathematical Fitting**

| Age<br>Interval | Stub<br>Curve | Iowa Curves |       |         | Squared Differences |              |             |
|-----------------|---------------|-------------|-------|---------|---------------------|--------------|-------------|
|                 |               | 10-L4       | 10-S0 | 10.5-R1 | 10-L4               | 10-S0        | 10.5-R1     |
| 0.0             | 100.0         | 100.0       | 100.0 | 100.0   | 0.0                 | 0.0          | 0.0         |
| 0.5             | 96.4          | 100.0       | 99.7  | 98.7    | 12.7                | 10.3         | 5.3         |
| 1.5             | 93.2          | 100.0       | 97.7  | 96.0    | 46.1                | 19.8         | 7.6         |
| 2.5             | 90.2          | 100.0       | 94.4  | 92.9    | 96.2                | 18.0         | 7.2         |
| 3.5             | 87.2          | 100.0       | 90.2  | 89.5    | 162.9               | 9.3          | 5.2         |
| 4.5             | 84.0          | 99.5        | 85.3  | 85.7    | 239.9               | 1.6          | 2.9         |
| 5.5             | 80.5          | 97.9        | 79.7  | 81.6    | 301.1               | 0.7          | 1.2         |
| 6.5             | 76.7          | 94.2        | 73.6  | 77.0    | 308.5               | 9.5          | 0.1         |
| 7.5             | 72.3          | 87.6        | 67.1  | 71.8    | 235.2               | 26.5         | 0.2         |
| 8.5             | 67.3          | 75.2        | 60.4  | 66.1    | 62.7                | 48.2         | 1.6         |
| 9.5             | 61.6          | 56.0        | 53.5  | 59.7    | 31.4                | 66.6         | 3.6         |
| 10.5            | 54.9          | 36.8        | 46.5  | 52.9    | 325.4               | 69.6         | 3.9         |
| 11.5            | 47.0          | 23.1        | 39.6  | 45.7    | 572.6               | 54.4         | 1.8         |
| 12.5            | 38.9          | 14.2        | 32.9  | 38.2    | 609.6               | 36.2         | 0.4         |
| <b>SUM</b>      |               |             |       |         | <b>3004.2</b>       | <b>371.0</b> | <b>41.0</b> |

1                   (Whereupon, Witness Dobiac's prefiled direct  
2                   testimony was inserted into the record as though  
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1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **COMMISSION STAFF**

3                                   **DIRECT TESTIMONY OF DEBRA M. DOBIAC**

4                                   **DOCKET NO. 20190156-EI**

5                                   **JULY 10, 2020**

6 **Q.     Please state your name and business address.**

7 A.     My name is Debra M. Dobiac. My business address is 2540 Shumard Oak Boulevard,  
8 Tallahassee, Florida, 32399.

9 **Q.     By who are you presently employed?**

10 A.    I am employed by the Florida Public Service Commission (FPSC or Commission) in the  
11 Office of Auditing and Performance Analysis. I have been employed by the Commission since  
12 January 2008.

13 **Q.     Please describe your current responsibilities.**

14 A.    Currently, I am a Public Utility Analyst with the responsibilities of managing regulated  
15 utility financial audits. I am also responsible for creating audit work programs to meet a specific  
16 audit purpose.

17 **Q.     Briefly review your educational and professional background.**

18 A.    I graduated with honors from Lakeland College in 1993 and have a Bachelor of Arts  
19 degree in accounting. Prior to my work at the Commission, I worked for six years in internal  
20 auditing at the Kohler Company and First American Title Insurance Company. I also have  
21 approximately 12 years of experience as an accounting manager and controller.

22 **Q.     Have you presented testimony before this Commission or any other regulatory**  
23 **agency?**

24 A.    Yes. I testified in the Aqua Utilities Florida, Inc. Rate Case, Docket No. 20080121-WS,  
25 the Water Management Services, Inc. Rate Case, Docket No. 20110200-WU, and the Utilities,

1 Inc. of Florida Rate Case, Docket No. 20160101-WS. I also provided testimony for the Water  
2 Management Services, Inc. Rate Case, Docket No. 20100104-WU, the Gulf Power Company  
3 Rate Cases, Docket Nos. 20110138-EI and 20130140-EI, the Fuel and Purchased Power  
4 Recovery Clause (Hedging Activities) for Gulf Power Company, Docket Nos. 20130001-EI,  
5 20140001-EI, and 20190001-EI, the Fuel and Purchased Power Recovery Clause (Hedging  
6 Activities) for Florida Power & Light Company, Docket No. 20180001-EI, Florida Public  
7 Utilities Company's Limited Proceeding to recover incremental Storm Restoration Costs, Docket  
8 No. 20180061-EI, and the Gulf Power Company Limited Proceeding to recover incremental  
9 Storm Restoration Costs, Docket No. 20190038-EI.

10 **Q. What is the purpose of your testimony today?**

11 A. The purpose of my testimony is to sponsor the staff auditor's reports issued on February  
12 3, 2020 (Audit Control No. 2019-329-1-2) and June 8, 2020 (Audit Control No. 2020-108-1-1),  
13 which addresses Florida Public Utilities Company's (FPUC or Utility) petition and revised  
14 petition for limited proceeding for recovery of incremental storm restoration costs related to  
15 Hurricanes Michael and Dorian. These reports are filed with my testimony and are identified as  
16 Exhibit DMD-1 and Exhibit DMD-2.

17 **Q. Was this report prepared by you or under your direction?**

18 A. Yes, it was prepared under my direction.

19 **Q. Please describe the work you performed.**

20 A. I have separated the work performed into several categories.

21 Payroll, Overtime, and Related Costs

22 We scheduled payroll, overhead, and related costs by storm, capital, and cost of removal  
23 cost types. We selected a judgmental sample of costs for detail testing and traced the amounts to  
24 the payroll register and allocation schedules. No exceptions were noted.

25 Fuel

1 We scheduled fuel costs by storm, capital, and cost of removal cost types. We selected a  
2 judgmental sample of costs for detail testing and traced the amounts to the payroll allocation  
3 schedules, employee expense reports, or supporting invoices. No exceptions were noted.

#### 4 Contractors

5 We scheduled contractors' costs by storm, capital, and cost of removal cost types. We  
6 selected a judgmental sample of costs for detail testing and traced the amounts to the payroll  
7 allocation schedules, employee expense reports, or supporting invoices with cost allocation by  
8 work order schedules. No exceptions were noted.

#### 9 Materials

10 We scheduled materials by storm, capital, and cost of removal cost types. We selected a  
11 judgmental sample of costs for detail testing and traced the items to the payroll allocation  
12 schedules, employee expense reports, inventory system printouts, or supporting invoices. No  
13 exceptions were noted.

#### 14 Logistics

15 We scheduled logistics costs by storm, capital, and cost of removal cost types. We  
16 selected a judgmental sample of costs for detail testing and traced the items to the payroll  
17 allocation schedules, employee expense reports, or supporting invoices. No exceptions were  
18 noted.

#### 19 Other Costs

20 We scheduled other costs by storm, capital, and cost of removal cost types. We selected  
21 a judgmental sample of costs for detail testing and traced the items to the supporting invoices.  
22 No exceptions were noted.

#### 23 Non-Incremental Costs

24 Under Audit Control No. (ACN) 2019-329-1-2, we scheduled payroll and overhead costs  
25

1 by storm, capital, and cost of removal cost types. We traced the amounts to the payroll schedule,  
2 supporting documentation, and removed the capitalized payroll costs. We reviewed the Utility-  
3 provided schedule comparing base rate payroll per the last rate case with 2017 and 2018 payroll  
4 costs. No exceptions were noted.

5 Under ACN 2020-108-1-1, we scheduled payroll and overhead costs by storm, capital,  
6 and cost of removal cost types. We traced the amounts to the payroll schedule, supporting  
7 documentation, and removed the capitalized payroll costs. No exceptions were noted.

#### 8 Capitalizable Costs

9 Under ACN 2019-329-1-2, we scheduled capitalizable costs by capital, and cost of  
10 removal cost types. We tested the capitalizable costs to determine if the Utility included for  
11 recovery only those costs that are allowed by Rule 25-6.0143, Florida Administrative Code  
12 (F.A.C.), by tracing a judgmental sample of capitalized costs to the supporting documentation.  
13 No exceptions were noted.

14 Under ACN 2020-108-1-1, we scheduled capitalizable costs by capital, and cost of  
15 removal cost types. We noted that the capitalizable costs tested under ACN 2019-329-1-2  
16 included proforma adjustments. In this audit, we noted that the actual capitalizable costs were  
17 less than the prior proforma estimates and ensured that the Utility included for recovery only  
18 those costs that are allowed by the applicable Rule 25-6.0143, F.A.C. No exceptions were noted.

19 The capitalized costs included an amount of \$1,000,000, which was supported by a  
20 vendor contract. The project has not been completed as of May 29, 2020.

#### 21 Actual Costs Subsequent to December 31, 2019

22 Under ACN 2020-108-1-1, we requested and reviewed the supporting journal entries and  
23 documentation for the actual costs recorded between December 31, 2019 and May 29, 2020. No  
24 exceptions were noted.

25 **Q. Please review the findings in this report.**

1 A. There were no findings.

2 **Q. Does that conclude your testimony?**

3 A. Yes, it does.

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**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**COMMISSION STAFF**

**DIRECT TESTIMONY OF CARL VINSON**

**DOCKET NO. 20190156-EI**

**JULY 10, 2020**

**Q. Please state your name and business address.**

A. My name is Carl Vinson. My business address is 2540 Shumard Oak Boulevard, Tallahassee, Florida, 32399-0850.

**Q. By whom are you presently employed?**

A. I am employed by the Florida Public Service Commission (Commission) as the Supervisor of the Performance Analysis Section within the Office of Auditing and Performance Analysis.

**Q. Please describe your current responsibilities.**

A. I oversee a team that performs management audits and investigations of Commission-regulated utilities, focusing on the effectiveness of management and company practices, adherence to company procedures, and the adequacy of internal controls.

**Q. Briefly review your educational and professional background.**

A. I earned a Bachelor of Business Administration degree in Finance from Stetson University in 1980. Prior to my employment with the Commission, I worked for five years at Ben Johnson Associates, a consulting firm serving public utility commissions and offices of public counsel across the country. Since 1989, as part of Commission staff, I have conducted and overseen numerous management audits (also known as “operational audits”) and investigations of regulated utilities. As is the case in this docket, all of these audits provided assessments of the adequacy and appropriateness of management internal controls over various operational areas of

1 regulated electric, gas, telecom, or water utilities.

2 **Q. Have you presented testimony before this Commission or any other regulatory**  
3 **agency?**

4 A. Yes. I filed testimony regarding audits of project management internal controls over  
5 nuclear construction projects of Duke Energy Florida, LLC (DEF) and Florida Power & Light  
6 Company (FPL) in Docket Nos. 20080009-EI, 20090009-EI, 20150009-EI, and 20170009-EI. I  
7 also filed testimony in Docket No. 20050045-EI addressing FPL's vegetation management,  
8 lightning protection, and pole inspection processes.

9 Most recently, I have filed testimony in two other storm cost recovery proceedings currently  
10 before the Commission. I filed similar testimony regarding management audits of storm cost  
11 management and payment processing by Gulf Power Company and DEF in Docket Nos.  
12 20190038-EI and 20190110-EI, respectively.

13 **Q. Please describe the purpose of your testimony in this docket.**

14 A. My testimony presents the attached audit report entitled *Florida Public Utilities*  
15 *Company's Storm Cost Management and Payment Processing Practices for Hurricane Michael*  
16 (Exhibit CV-1). This report was prepared by the Performance Analysis Section under my  
17 direction. The purpose of the audit was to review, examine, and assess the methods by which  
18 FPUC controlled, incurred, and paid for portions of its Hurricane Michael storm costs. It also  
19 provides an assessment of the current procedures that will govern the incurring and payment of  
20 costs in DEF's future post-storm restoration and recovery efforts.

21 **Q. Are you sponsoring any exhibits?**

22 A. Yes. Exhibit CV-1, which presents the report, is attached to my testimony.

23 **Q. Please summarize the areas examined by your review.**

24 A. The objectives of the audit were to examine the following regarding FPUC's Hurricane  
25 Michael storm restoration and recovery costs:

- 1 Vendor storm cost invoice preparation and submission
- 2 Review and approval of vendor storm cost invoices
- 3 Invoice dispute, correction, and resolution
- 4 Staffing and training of payment processing personnel
- 5 Consistency of invoice with contract terms and conditions
- 6 Overrides and exceptions to procedures and contract terms
- 7 Operating systems supporting invoice payment processing
- 8 Work planning and deployment of contractors and mutual assistance resources
- 9 Oversight and work monitoring of contractors and mutual assistance resources
- 10 Recordkeeping of contractor and mutual assistance work hours and costs
- 11 Self-assessment and implementation of lessons learned

12 **Q. Does this conclude your testimony?**

13 A. Yes.

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1           CHAIRMAN CLARK: Do any of the parties have  
2 any other preliminary matters that we need to  
3 address at this time? Any preliminary matters?

4           Okay. Moving on to opening remarks from each  
5 of the parties regarding the settlement agreement.  
6 Pursuant to the procedural order issued on  
7 September 16th, the parties will be given five  
8 minutes for each of their remarks. So, we will  
9 begin this morning with FPUC.

10           Ms. Keating.

11           MS. KEATING: Good morning, Mr. Chairman and  
12 Commissioners.

13           CHAIRMAN CLARK: Good morning.

14           MS. KEATING: I'm going to start out first by  
15 thanking Mr. Kelly and his team at the Office of  
16 Public Counsel, Ms. Christensen and Ms. Fall-Fry,  
17 for working with us to negotiate the settlement  
18 that's before you today.

19           I'd also like to express FPUC's appreciation  
20 to Commission staff for their review of this  
21 settlement and for facilitating our presentation of  
22 it for your consideration.

23           The settlement you see is the product of  
24 thoughtful and very detailed negotiations that took  
25 place in tandem with the preparation for the

1 hearing that was originally scheduled to begin on  
2 September 8th. It represents a fair compromise of  
3 the positions of the parties and, most importantly,  
4 it provides real benefits and savings to FPUC  
5 customers.

6 Commissioners, as you're well aware, Hurricane  
7 Michael set a new precedent because it was the  
8 first Category 5 hurricane ever to hit the  
9 Panhandle. Hurricane Michael cut directly through  
10 the heart of FPUC's northwest service territory,  
11 which resulted in a complete loss of power  
12 throughout FPUC's northwest division as well as  
13 major structural damage to FPUC's customers' and  
14 employees' homes and businesses.

15 Nevertheless, with the help of significant  
16 additional resources and the extraordinary efforts  
17 of FPUC's employees and contractors, FPUC was able  
18 to rebuild enough of its facilities so that 97  
19 percent of its customers that were otherwise able  
20 to receive power were restored by November 1st,  
21 2018, just 22 days after the storm.

22 Less than a year later, FPUC prepared for a  
23 potential hit from Hurricane Dorian. Based on the  
24 storm's projected path, a mandatory evacuation was  
25 issued for Amelia Island, where FPUC's northeast

1 division is located.

2 Fortunately, the hurricane remained just  
3 offshore and FPUC's service territory experienced  
4 only minimal damage, but due to the dramatic  
5 fluctuations of the storm, the company nonetheless  
6 incurred costs to prepare for the storm and address  
7 the minor damage.

8 The magnitude of the combined financial impact  
9 of these storms as well as the overall economic  
10 impact to the areas served by FPUC's northwest  
11 division led the company to propose a different  
12 approach to cost recovery.

13 FPUC requested a limited-proceeding revenue  
14 increase to recover capital additions made in the  
15 wake of Hurricane Michael and recover a regulatory  
16 asset consisting of incremental storm-restoration  
17 costs arising from both Hurricanes Michael and  
18 Dorian.

19 The company also requested recovery of  
20 regulatory assets for lost customers, operations  
21 and maintenance and expenses that weren't  
22 recovered, and the cost of removal and other  
23 accumulated depreciation adjustments. In total,  
24 the company sought recovery of just over 70 million  
25 with an annual incremental revenue requirement of

1 just under 12 million.

2 But while preparing for hearing, the company  
3 also seized every opportunity to engage in  
4 negotiations with OPC regarding possible  
5 opportunities for compromise. Those discussions  
6 led to more in-depth good-faith negotiations and  
7 ultimately produced the agreement that's before you  
8 today.

9 The settlement terms really speak for  
10 themselves, but I note that among the key terms is  
11 a reduced revenue requirement and reduced storm-  
12 cost-recovery regulatory asset as well as  
13 implementation by FPUC of the storm-restoration  
14 costs process improvement that are consistent with  
15 those that you've approved for both Duke and TECO.

16 In addition, FPUC's depreciation rates will  
17 reflect the changes proposed by OPC's Witness  
18 Garrett, but otherwise reflect the depreciation  
19 study that was filed by FPUC.

20 The settlement provides relief to the company  
21 through an annual revenue increase to FPUC's base  
22 rates in the amount of 3.35 million and by allowing  
23 for a separate storm-cost surcharge, but more  
24 importantly, Commissioners, it provides FPUC's  
25 customers with a total savings over the ten-year

1 recovery period of just over 39 million.

2 Commissioners, FPUC believes that this  
3 settlement represents a good compromise among the  
4 parties and promotes regulatory certainty for the  
5 companies and its customers. Taken to the poll,  
6 FPUC and OPC agree that this settlement is in the  
7 public -- public interest and should be approved  
8 without modification.

9 Mr. Chairman, the company's witnesses, Mike  
10 Casell and the Michelle Napier, are here to address  
11 any questions that the Commission may have about  
12 the proposed settlement. Once your questions have  
13 been addressed, we believe this settlement will be  
14 ripe for a bench decision, whereupon, we'd ask  
15 respectfully that you approve it.

16 Thank you very much.

17 CHAIRMAN CLARK: Thank you very much,  
18 Ms. Keating.

19 Ms. Christensen.

20 MS. CHRISTENSEN: Good morning, Commissioners.  
21 Patti Christensen for the Office of Public Counsel  
22 representing the ratepayers of Florida Public  
23 Utilities Company along with A. Mireille Fall-Fry  
24 and J.R. Kelly, the Public Counsel.

25 OPC would like to thank our partners in this

1 negotiation and FPUC. We appreciate their working  
2 collaboratively with us to resolve the many issues  
3 in this matter and to come to a resolution that is  
4 fair to the ratepayers as well as the utilities.

5 On August 31st, 2020, OPC and FPUC filed a  
6 joint motion for approval of our stipulation and  
7 settlement which resolves all of the issues in  
8 Dockets 20190155, 20190156, 20190174 for Hurricane  
9 Michael storm-cost recovery and FPUC depreciation  
10 study.

11 OPC filed comprehensive witness testimony and  
12 conducted its extensive discovery in the these  
13 dockets. As a result of OPC's filing testimony of  
14 our expert witnesses conducting and reviewing the  
15 extensive discovery and reviewing in detail all  
16 testimonies filed, OPC is confident that the  
17 resolution of these dockets is in the best interest  
18 of all of FPUC's customers.

19 I will highlight some of the features of the  
20 settlement that we believe are beneficial to FPUC's  
21 ratepayers. In FPUC's revised petition filed  
22 March 11th, 2020, the company asked for an  
23 additional revenue requirement of approximately  
24 11.9 million with storm costs and three regulatory  
25 assets collected over ten years.

1           The settlement reduces the overall original  
2 requests to \$11,014,065. The settlement includes  
3 one regulatory asset for accumulated depreciation,  
4 cost of removal, and undepreciated plant amortized  
5 over ten years. The storm costs under the  
6 settlement are now to be amortized over six years  
7 rather than ten years.

8           For the eight accounts in its depreciation  
9 study, FPUC has adopted OPC's proposed longer  
10 lives, which reduces depreciation expense. The  
11 settlement also addresses additional items which  
12 are also beneficial to the ratepayers.

13           The company has agreed to delay filing its  
14 next base-rate case by delaying the filing of the  
15 test-year letter until at least September 1st,  
16 2021. The settlement extends the storm-surcharge  
17 provision while base rates are next set.

18           And, importantly, FPUC has agreed to implement  
19 the storm-restoration-costs process improvement,  
20 which are approved by this Commission to Tampa  
21 Electric in Docket Nos. 20170271 and Duke in  
22 Docket 20170272, which will improve the overall  
23 processing and review of storm costs during future  
24 storm events.

25           Because of these features as well as others

1 contained in this settlement, OPC believes that the  
2 Commission should approve this settlement as being  
3 in the public interest, resulting in fair, just,  
4 and reasonable rates.

5 Thank you.

6 CHAIRMAN CLARK: All right. Thank you,  
7 Ms. Christensen.

8 All right. Commissioners, we'll now discuss  
9 any comments on the agreements. If the  
10 Commissioners have questions for Mr. Casell or  
11 Ms. Napier, we will have to swear those guys in.  
12 Do you have any questions for either of those two?

13 No questions for those. Okay.

14 Any questions for any of the parties from any  
15 of the Commissioners? Any comments?

16 All right. I don't see any comments --  
17 Commissioner --

18 COMMISSIONER BROWN: I'll make a -- just a  
19 general comment regarding the settlement agreement  
20 which, you know, encompasses three dockets. It's  
21 unfortunate the magnitude of the hurricanes in  
22 FPUC's jurisdiction over the last two seasons. And  
23 I appreciate the parties' mutual willingness to  
24 work together to really set the best-interest  
25 outcome for the parties and really streamline the

1 process in the most -- fairest way. And I think  
2 the pre-regulatory treatment to mitigate the impact  
3 to customers also is commendable.

4 So, with that, I support the settlement  
5 agreement.

6 CHAIRMAN CLARK: Thank you, Commissioner  
7 Brown.

8 Commissioner Fay.

9 COMMISSIONER FAY: Thank you, Mr. Chair. And  
10 I'm going to second that motion just with a -- a  
11 quick comment. You know, there's three dockets  
12 here -- I was actually the prehearing officer on  
13 all -- all three of these. And, as initially  
14 filed, some of these petitions, I didn't know if  
15 all these issues would get resolved. And the  
16 parties have done a really good job to do that  
17 here.

18 And, like Commissioner Brown said, it wasn't  
19 an easy thing to do. So, I appreciate that. And  
20 with that, I'll second the motion.

21 CHAIRMAN CLARK: Thank you. I wanted to thank  
22 the prehearing officer for the outstanding job that  
23 he did as well during this process, but just wanted  
24 to make an observation and comment, myself. This  
25 was a pretty daunting task, I believe, on both

1 parties to reach a settlement.

2 The -- the amount of damage that FPUC received  
3 during the storm was, for their system, I'm  
4 certain, unprecedented. We got to experience a  
5 portion of that and -- and saw firsthand, the  
6 amount of destruction that occurred. And so, I do  
7 realize and understand that it's been a -- an  
8 incredible, daunting task of -- of calculating and  
9 coming up with what is a fair and reasonable amount  
10 for the consumers to bear in this particular case.

11 And my hat's off to both parties for reaching  
12 a settlement -- a settlement agreement in this  
13 particular case. So, I want to thank you all for  
14 your diligence and your hard work.

15 All right. Are there any other comments or  
16 questions regarding the settlement agreement?

17 All right. At this point, we will entertain a  
18 motion to approve the settlement agreement and to  
19 find it in the public interest as well as to close  
20 all three of the dockets. Is there a motion?

21 COMMISSIONER BROWN: I make that motion, sir.

22 CHAIRMAN CLARK: Commissioner Brown's  
23 motion --

24 COMMISSIONER FAY: I will second that motion,  
25 Mr. Chairman.

1 CHAIRMAN CLARK: Commissioner Fay's second.

2 Any discussion?

3 On the motion, all in favor, say aye.

4 (Chorus of ayes.)

5 CHAIRMAN CLARK: Opposed?

6 And the motion is granted. Thank you very  
7 much.

8 All right. Do any of the parties have any  
9 concluding matters to come before the Commission?

10 MS. DZIECHCIARZ: Chairman, staff is not aware  
11 of any other matters at this time. Thank you.

12 CHAIRMAN CLARK: All right. Thank you very  
13 much for your participation and help here today.

14 And, at this time, the meeting stands  
15 adjourned. Thank you.

16 (Whereupon the proceedings concluded at 11:18  
17 a.m.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA )  
COUNTY OF LEON )

I, ANDREA KOMARIDIS WRAY, Court Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 30th day of September, 2020.



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ANDREA KOMARIDIS WRAY  
NOTARY PUBLIC  
COMMISSION #GG365545  
EXPIRES February 9, 2021