

J.R. KELLY Public Counsel

STATE OF FLORIDA OFFICE OF PUBLIC COUNSEL

C/O THE FLORIDA LEGISLATURE 111 WEST MADISON ST. **ROOM 812** TALLAHASSEE, FLORIDA 32399-1400 850-488-9330

EMAIL: OPC_WEBSITE@LEG.STATE.FL.US WWW.FLORIDAOPC.GOV



May 26, 2020

Adam J. Teitzman, Commission Clerk Office of Commission Clerk Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850

Docket No. 20200069-EI- Review of 2020-2029 Storm Protection Plan pursuant to Rule Re:

25-6.030, F.A.C., Duke Energy Florida, LLC.

Dear Mr. Teitzman:

Please find enclosed for filing in the above referenced docket the Direct Testimony and Exhibits of Helmuth Schultz, III. This filing is being made via the Florida Public Service Commission's Web Based Electronic Filing portal.

Should you have any questions please do not hesitate to contact Charles J. Rehwinkel at 850.488.9330

Sincerely,

/s/ Charles A. Rehwinkel

Charles A. Rehwinkel Deputy Public Counsel

cc: All Parties of Record

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Review of 2020-2029 Storm Protection

Plan pursuant to Rule 25-6.030, F.A.C., by

Duke Energy Florida, LLC

Docket No. 20200069-EI

Filed: May 26, 2020

DIRECT TESTIMONY

OF

HELMUTH SCHULTZ III

ON BEHALF OF THE OFFICE OF PUBLIC COUNSEL

J. R. Kelly Public Counsel

Charles J. Rehwinkel Deputy Public Counsel Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 (850) 488-9330

Attorneys for the Citizens of the State of Florida

TABLE OF CONTENTS

1	I. STATEMENT OF QUALIFICATIONS	. 1
2	II. BACKGROUND	2
3	III. FILING	3
4	IV. GENERAL CONCERNS	3
5	V. SPECIFIC CONCERNS	. 7

LIST OF EXHIBITS

Exhibit HWS-1	Experience and Qualifications
Exhibit HWS-2	2020 Planned Targeted Underground
Exhibit HWS-3	2020 Planned Deteriorated Conductor
Exhibit HWS-4	2020 Planned Distribution Pole Replacement/Inspection
Exhibit HWS-5	2020 Planned Transmission Pole Replacement

DIRECT TESTIMONY

OF

Helmuth W. Schultz, III

On Behalf of the Office of Public Counsel

Before the

Florida Public Service Commission

Docket No. 20200069-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		
8	Q.	PLEASE DESCRIBE THE FIRM LARKIN & ASSOCIATES, P.L.L.C.
9	A.	Larkin performs independent regulatory consulting primarily for public service/utility
10		commission staffs and consumer interest groups (public counsels, public advocates,
11		consumer counsels, attorney generals, etc.). Larkin has extensive experience in the
12		utility regulatory field as expert witnesses in over 600 regulatory proceedings,
13		including water and sewer, gas, electric and telephone utilities.
14		
15	Q.	HAVE YOU PREPARED AN EXHIBIT WHICH DESCRIBES YOUR
16		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		
4	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE FLORIDA PUBLIC
5		COMMISSION AS AN EXPERT WITNESS?
6	A.	Yes. I have provided testimony before the Florida Public Service Commission
7		("Commission" or "FPSC") as an expert witness in the area of regulatory accounting
8		and storm recovery in numerous cases as listed in Exhibit No(HWS-1).
9		
10	Q.	BY WHOM WERE YOU RETAINED, AND WHAT IS THE PURPOSE OF
11		YOUR TESTIMONY?
12	A.	Larkin was retained by the Florida Office of Public Counsel ("OPC") to review the
13		request by Duke Energy Florida, LLC ("Duke Energy", "Duke" or "Company") in its
14		petition to this Commission for approval of its 2020-2029 Storm Protection Plan
15		("SPP") pursuant to Rules 25-6.030 and 28-106.201, Florida Administrative Code
16		("FAC"). My review is focused on accounting and cost analysis.
17		
18		II. BACKGROUND
19	Q.	PLEASE SUMMARIZE YOUR UNDERSTANDING OF THE COMPANY'S
20		REQUEST.
21	A.	Docket No. 20200069-EI is a petition by Duke for approval of its 2020-2029 Storm
22		Protection Plan ("SPP"). Approval of the SPP is necessary for the Company to

implement a request for recovery of storm hardening costs by means of a recovery clause.

III. FILING

O. IS THE FILING SUFFICIENT FOR APPROVAL BY THE COMMISSION?

5 A. I do not believe it is sufficient. There are some general concerns and a specific concern
6 from an accounting prospective that should be addressed prior to approval by the
7 Commission.

9 Q. IF YOUR CONCERNS ARE SUFFICIENTLY ADDRESSED AND CHANGES

ARE MADE, WOULD THE FILING BE SUFFICIENT IN YOUR OPINION?

11 A. My concerns are cost driven and from an accounting prospective. I cannot address any engineering concerns and/or administrative concerns identified by others.

IV. GENERAL CONCERNS

Q. WOULD YOU IDENTIFY YOUR FIRST GENERAL CONCERN WITH THE

FILING?

A. Yes. Rule 25-6.030(2)(a) defines a storm protection program as a category, type, or group of related storm protection projects that are undertaken to enhance the utility's existing infrastructure for the purpose of reducing restoration costs and reducing outage times associated with extreme weather conditions, therefore improving overall service reliability. Rule 25-6.030(2)(a) defines a storm protection project as a specific activity within a storm protection program designed for the enhancement of an identified portion or area of existing electric transmission or distribution facilities for the purpose of reducing restoration costs and reducing outage times associated with extreme

weather conditions, therefore improving overall service reliability. In response to Staff Interrogatory No. 1-1, the Company stated that various programs are new. This I found concerning since the Company has been performing various work to improve the infrastructure of its system and this response gave me the impression that the only benefit to come from the hardening activities would be a reduction to storm costs. This hardening, while designed to reduce future storm costs, should also have an impact on costs currently incurred by the Company and included in base rates. This impact would be in the form of base rate cost reductions for hardening work currently being performed and the work itself would presumably have an impact on the level of maintenance costs currently being incurred and that cost similarly should be a cost savings resulting from the SPP program work performed. Citizens' Interrogatory No. 4-130 asked for specific detail with respect to the cost savings. In response, Duke stated:

The explanation of reduced outage times and costs in extreme weather conditions is provided in Exhibit No. __ (JWO-2). Intuitively, the programs will also provide cost savings during normal operating conditions, which is what is being referred to in the testimony. DEF has not performed the necessary analysis to quantify estimated cost savings during normal operating conditions (i.e., non-extreme weather conditions).

The Company acknowledges that there would be cost reductions; however, without quantification of those savings, even an estimated amount, there is a risk that ratepayers will be paying for improvements that will reduce the Company's costs in base rates but those savings will not be passed through to the ratepayers unless base rates are reduced accordingly. At a minimum the Commission should identify this as an area of concern and place Duke on notice that it will be addressed in the next general base rate case filed by the Company.

1		
2	Q.	DO YOU HAVE ANY OTHER GENERAL CONCERNS WITH THE FILING?
3	A.	Yes. Duke was requested in multiple interrogatories ¹ to explain in detail how the
4		capitalized and O&M amounts on various pages of Exhibit No. (JWO-1) were
5		determined. The responses were similar to the following response to Interrogatory No
6		133:
7 8 9 10		Capital unit cost consists of labor and materials based on historical averages and guidance from Finance for Indirect overheads. O&M is 1.25% of the Capital unit cost based on historical averages.
11		Clearly, this response is not a detailed explanation as it provides no specific details or
12		determinations.
13		
14	Q.	WHY IS SPECIFIC COST DETAIL SO IMPORTANT FOR THIS FILING?
15	A.	The SPP filing is the precursor to the cost recovery filing. Rule 25-6.030(3)(d) and (e)
16		requires a cost estimate for capital and operating costs ² along with a description of the
17		respective projects ³ . While I did not participate in the development of Rule 25-6.030
18		and Rule 25-6.031, I am confident that the referencing of specific cost information (i.e
19		capital and operating expenses) by project was not intended to serve as a best wild

¹ Citizens' Interrogatory Nos. 133, 137,141, 148, 152, 158 and 167.
² Rule 25-6.030 (3)(d)(3) and (4) and Rule 25-6.030(3)(e)(1)(c).
³ Rule 25-6.030(3)(e)(1).

20

21

22

guess of projected costs or a blank check for initial recovery of costs as part of the

Storm Protection Plan Cost Recovery Clause ("SPPCRC"). The estimated costs to be

recovered need to be developed with specific detail in a manner that would not allow

1	for an arbitrary recovery of costs that are not based on substantive cost detail. I will
2	discuss why I am concerned with the lack of detail on how costs were developed.

A.

Q. DO YOU HAVE OTHER CONCERNS WITH HOW THE COMPANY REPLIED TO REQUESTS REGARDING THE COSTS PROJECTED OR ITS COMPLIANCE WITH RULE 25-6.030?

Yes. My understanding of Rule 25-6.030 is that it sets the blueprint for the cost recovery clause. The plan must be in effect and properly established so that the SPPCRC can function properly and as intended. Since Rule 25-6.030(3)(h) refers to the impact on rates and Rule 25-6.031(6)(b) states costs included in clause recovery shall not include costs recovered through the utility's base rates, the information that is included in the cost requirement provisions in the SPP should exclude costs recovered through the utility's base rates. Duke was requested in multiple interrogatories to provide comparable costs that would be included in base rates during 2020-2022 to the cost estimates included in Exhibit No._(JWO-1)⁴. The Company's responses did not provide the information for base rates as requested. Instead, the responses generally were similar to the response to Citizens' Interrogatory No. 132 which was as follows:

Subject to and without waiving DEF's objection submitted contemporaneously to this request, Exhibit No. ___(JWO-1), Page 5, has a "3-Year Scope" table, which includes the estimated costs of the work to be performed for the years 2020-2022. The table also includes the number of units by year. The number of customers for 2020 are included in the "2020 Planned Duke Energy Florida — Targeted Underground (TUG)" table in Exhibit No. ___(JWO-1), Pages 6-10. Per the SPP rules, location identification was only required for Year 1. Therefore, the number of customers, which are tied to specific locations, are only available for Year 1. For 2022, as described in the footnote of

⁴ Citizens' Interrogatory Nos. 132,136,140,144,147,151,155,157,161,166, 170, 174, 176, 179 and 181.

1	the "3-Year Scope" table on Page 5, this work will be incorporated into
2	the Lateral Hardening Program beginning in 2022.
3	

This response suggests there are no costs currently in base rates for any of the planned work which is not correct. Duke has been engaged in hardening activities and is recovering these costs through its current base rates. Absent recognition of these amounts, a clause petition could result in double recovery if the costs are not identified and accounted for appropriately.

9

10

11

12

13

14

15

16

17

18

19

20

21

22

4

5

6

7

8

Q. THE COMPANY HAS INCLUDED IN EXHIBIT NO._(JWO-2), PAGE 40 A TABLE THAT SHOWS WHAT THE IMPACT IS ON REVENUE REQUIREMENT AND RATE IMPACTS THAT SHOW 2020 HAS NO CLAUSE RECOVERY AND 2021 WILL HAVE MINIMAL CLAUSE RECOVERY.

WOULD THAT ELIMINATE YOUR CONCERN?

A. Not entirely. I agree that this exhibit indicates Duke is seeking no recovery for 2020, recovery of \$8.8 million in costs for 2021, recovery of an estimated \$105.6 million in costs for 2022. The Plan as filed in the SPP is to provide the framework for the SPPCRC. If the issues with how these cost estimates were determined are not addressed in this docket, Duke as well as other utilities could assume that the methodologies employed are sufficient for estimating costs going forward in the years 2021 and 2022. Based upon my expertise and experience, changes are necessary to comply with the applicable rules and underlying statute.

V. SPECIFIC CONCERNS

23 24

Q.	YOU INDICATED	EARLIER THAT	THERE WAS A	SPECIFIC CONCERN
----	---------------	--------------	-------------	------------------

WITH THE COSTS PROJECTED FOR THE RESPECTIVE PROJECTS.

WOULD YOU EXPLAIN WHAT YOU FOUND?

A. Yes. Duke was requested in multiple interrogatories to provide actual costs and status for projects with a start date prior to April 15, 2020⁵. The responses to those interrogatories provided a listing of projects with an indication of whether the project was completed or in progress along with the actual cost capitalized and/or charged to O&M for completed projects. The responses provided some significant and important information for comparing the estimates to actual. On Exhibit HWS-2, I summarized the estimated and actual costs for 33 Planned Targeted Underground projects listed as being completed. The result was that the projected capital costs of \$3,951,335 for those 33 projects were overestimated by \$2,174,948 or 55.04%. Exhibit HWS-3 shows the results for the six 2020 Planned Deteriorated Conductor projects and costs along with the five 2020 Planned Self Optimizing Grid projects and costs completed. projected capital costs of \$1,389,561 for the six 2020 Planned Deteriorated Conductor projects appear to be overestimated by \$344,919 or 24.82%. The projected capital costs of \$298,476 for the five 2020 Planned Self Optimizing Grid projects appear to be overestimated by \$119,794 or 40.14%. Exhibit HWS-4 shows the results for the 2020 Planned Distribution Pole Replacement projects completed. The projected capital costs for these projects appear to be

22

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

overestimated by approximately \$7,711,326.

⁵ Citizens' Interrogatory Nos. 134, 138, 142, 145, 149, 159, 162, 164 and 171.

Q. WHY DIDN'T YOU PROVIDE A PERCENTAGE OF THE OVERESTIMATED

2 COSTS FOR THE 2020 PLANNED DISTRIBUTION POLE REPLACEMENT

PROJECTS? WHY DID YOU ESTIMATE THE OVERSTATEMENT?

4 A. Duke's response for these projects was different from its other discovery responses.

Duke identified specific projects as completed but the unit count for the specific project

was different. For example, the projects listed as complete included a total of 2,668

units in the projection of \$22,072,989 of capital costs at an average cost of \$8,273. The

same projects listed as complete only had 873 units completed at a cost of \$4,699,300

at an average cost of \$5,383 per unit. Therefore, I could not make a similar analysis to

that shown in my earlier exhibits. I determined the best way to proceed was to calculate

an approximate overestimate by the Company on a per unit basis. The completed cost

difference of \$2,890 (\$8,273-5,383) multiplied by the 2,668 total projected units gives

an approximate overestimate of \$7,711,326.

14

15

16

17

18

19

20

21

22

23

24

1

3

5

6

7

8

9

10

11

12

13

Q. WERE ANY OF THE SPECIFIC POLE PROJECTS COMPLETED IN THEIR

ENTIRETY?

A. It is not clear from Duke's responses. However, some projects appear to have been

completed. For example, the Deland project estimated 234 units at an average cost of

\$8,316 and the completed numbers show 252 units at an average unit cost of \$2,877.

That unit cost difference of \$5,439 is significant and indicates my current estimate of

the Company's overstatement of costs is low. Similarly, the two listed Monticello

projects estimated costs of \$373,442 for a combined 45 units for an average unit cost

of \$8,299. Actual costs for 44 units are \$192,304, for an average of \$4,371 per unit.

Here again, the apparent difference is significant.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

Q. DO YOU HAVE ANY OTHER INFORMATION THAT YOU ARE AWARE OF

THAT WOULD CAUSE YOU TO QUESTION THE ESTIMATES?

Α. Yes. I have reviewed numerous storm cost recovery requests for many utilities, including Duke. When I observed the unit cost for pole replacements, I questioned whether these costs were consistent with the costs incurred by the Company in storms despite storm work being done under less than desirable conditions as opposed to blue sky days when the hardening work that is the subject of this docket would be performed. Duke's response to Citizens' Interrogatory No. 1-31 provided a summary of the capitalized costs for Hurricane Michael in Docket No. 20190110-EI. The Company identified \$533,196 of material and burden costs plus \$8,067,155 for labor and burden costs resulting in a total capital cost of \$8,600,351. The number of poles identified as being capitalized was 1,970 which gives an average per pole cost of \$4,366 (\$8,600,351/1,970). Duke's same response provided information for Tropical Storm Alberto. The capitalized cost for 13 poles was \$55,218, for an average of \$4,248. The lower cost for work being performed during storm restoration raises a concern when compared to the \$8,273 cost per unit for poles that Duke is showing in its SPP filing. Clearly, without more explanation than has been provided by Duke so far, there is a problem with either the rate used during storm restoration or the estimates included in the current filing in this docket.

21

22

23

Q. ARE YOU AWARE OF ANY OTHER UNIT COSTS WHERE DIFFERENCES

EXIST THAT CAUSE YOU TO QUESTION THE ESTIMATES?

Yes. Similar to the pole replacement costs, the replacement of wire is significantly different. For example, Duke's response to Citizens' Interrogatory No. 138 stated the unit count for Deteriorated Conductor in circuit feet. The cost per unit for Deteriorated Conductor is \$47.59 per circuit foot. However, Duke's response to Interrogatory No. 1-36, in Docket No. 20190110-EI, states the capitalized loaded material and labor cost for replacing 821,246 feet of wire was \$3,824,318. That shows \$4.66 per circuit foot. When compared to the \$47.59 cost per foot in the SPP filing, this difference is significant. Replacing conductors during or immediately following a storm event as compared to replacing deteriorated conductors during blue sky days is not the same exact activity; however, cost of the replacement wire is close enough to warrant a detailed explanation of why there is such a material cost disparity and how the cost per unit was developed for the SPP filing.

A.

Q. WHAT DOES EXHIBIT HWS-5 INDICATE?

A. Exhibit HWS-5 shows the projected capital costs for the 2020 Planned Transmission Pole Replacement projects of \$4,113,248 appears to exceed the actual costs by \$819,958 or 19.93%. I would note that the actual costs included an additional 10 units. The average estimated unit cost was \$41,548 and the average actual unit cost for completed projects was \$30,214. Again, this shows a significant apparent difference that supports why it is important to know the details as to how costs were developed and estimated, and that by all appearances the methodology results in an excessive estimate.

Q. THE RESULTS YOU PROVIDED COVER FIVE PLAN AREAS. DID YOU INQUIRE ABOUT OTHER COST ESTIMATES?

Yes. As I indicated earlier, there was an inquiry into various actual costs to date based on the start dates in the various planned estimates. For example, Citizens' Interrogatory No. 4-162 inquired about the planned Pole/Tower Inspections; Duke's response indicated no actual costs were available. Citizens' Interrogatory No. 4-164 inquired about the planned spending for Tower Replacements. Duke's response indicated one project was under construction. The Company responded in a similar fashion to Citizens' Interrogatory No. 4-171 that inquired about planned Substation Hardening.

A.

A.

Q. WERE YOU ABLE TO IDENTIFY HOW DUKE DETERMINED THE

ESTIMATES INCLUDED IN ITS RESPECTIVE PLAN COST CATEGORIES?

Based upon Duke's limited responses, it appears the amounts were determined based on unit costs multiplied by the expected units to be replaced. As shown in my exhibits, the unit costs for estimates are very similar, yet they are different from what Duke is showing as the actual completed unit costs. The referenced averaging used by the Company needs to be evaluated to determine why those unit costs result in significant differences from what the company is stating are actual costs. For example and as discussed earlier, Duke's unit cost for 2020 Planned Deteriorated Conductor appears to be \$47.59 per unit; however, based on the over/(under) on Exhibit HWS-3, this cost varies significantly from project to project. In reviewing and presenting the estimates and actual costs to the Commission for evaluation and cost recovery, the Company's methodology must be revised.

1	Q.	WHAT DO YOU RECOMMEND THE COMMISSION DECIDE WITH
2		RESPECT TO THE COST ACCOUNTING FOR THE PLAN FILED BY DUKE?
3	A.	The Company must be required to provide a more in-depth level of detail in requesting
4		recovery of costs. Additionally, the method used must be based on detail that can be
5		verified for reasonableness. Further, the Commission's SPP determinations should be
6		based on a cost recovery estimate that is more in line with what actual costs may be.
7		
R	0	DOES THAT CONCLUDE VOUR TESTIMONY?

9 Yes it does. A.

Docket No. 20200069-EI Experience & Qualifications Exhibit No. HWS-1 Page 1 of 19

QUALIFICATIONS OF HELMUTH W. SCHULTZ, III

Mr. Schultz received a Bachelor of Science in Accounting from Ferris State College in 1975. He maintains extensive continuing professional education in accounting, auditing, and taxation. Mr. Schultz is a member of the Michigan Association of Certified Public Accountants

Mr. Schultz was employed with the firm of Larkin, Chapski & Co., C.P.A.s, as a Junior Accountant, in 1975. He was promoted to Senior Accountant in 1976. As such, he assisted in the supervision and performance of audits and accounting duties of various types of businesses. He has assisted in the implementation and revision of accounting systems for various businesses, including manufacturing, service and sales companies, credit unions and railroads.

In 1978, Mr. Schultz became the audit manager for Larkin, Chapski & Co. His duties included supervision of all audit work done by the firm. Mr. Schultz also represents clients before various state and IRS auditors. He has advised clients on the sale of their businesses and has analyzed the profitability of product lines and made recommendations based upon his analysis. Mr. Schultz has supervised the audit procedures performed in connection with a wide variety of inventories, including railroads, a publications distributor and warehouser for Ford and GM, and various retail establishments.

Mr. Schultz has performed work in the field of utility regulation on behalf of public service commission staffs, state attorney generals and consumer groups concerning regulatory matters before regulatory agencies in Alaska, Arizona, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Kentucky, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, New Jersey, New York, Nevada, North Dakota, Ohio, Pennsylvania, Rhode Island, Texas, Utah, Vermont and Virginia. He has presented expert testimony in regulatory hearings on behalf of utility commission staffs and intervenors on numerous occasions.

Partial list of utility cases participated in:

U-5331 Consumers Power Co.

Michigan Public Service Commission

Docket No. 770491-TP Winter Park Telephone Co.

Florida Public Service Commission

Case Nos. U-5125 Michigan Bell Telephone Co.

and U-5125(R) Michigan Public Service Commission

Case No. 77-554-EL-AIR Ohio Edison Company

Public Utility Commission of Ohio

Case No. 79-231-EL-FAC Cleveland Electric Illuminating

Public Utility Commission of Ohio

Case No. U-6794 Michigan Consolidated Gas Refunds

Michigan Public Service Commission

Docket No. 820294-TP Southern Bell Telephone and Telegraph Co.

Florida Public Service Commission

Case No. 8738 Columbia Gas of Kentucky, Inc.

Kentucky Public Service Commission

82-165-EL-EFC Toledo Edison Company

Public Utility Commission of Ohio

Case No. 82-168-EL-EFC Cleveland Electric Illuminating Company,

Public Utility Commission of Ohio

Case No. U-6794 Michigan Consolidated Gas Company Phase II,

Michigan Public Service Commission

Docket No. 830012-EU Tampa Electric Company,

Florida Public Service Commission

Case No. ER-83-206 Arkansas Power & Light Company,

Missouri Public Service Commission

Appendix I, Qualifications of Helmuth W. Schultz, III

Page 2 of 19

Case No. U-4758	The Detroit Edison Company - (Refunds), Michigan Public Service Commission
Case No. 8836	Kentucky American Water Company, Kentucky Public Service Commission
Case No. 8839	Western Kentucky Gas Company, Kentucky Public Service Commission
Case No. U-7650	Consumers Power Company - Partial and Immediate Michigan Public Service Commission
Case No. U-7650	Consumers Power Company - Final Michigan Public Service Commission
U-4620	Mississippi Power & Light Company Mississippi Public Service Commission
Docket No. R-850021	Duquesne Light Company Pennsylvania Public Utility Commission
Docket No. R-860378	Duquesne Light Company Pennsylvania Public Utility Commission
Docket No. 87-01-03	Connecticut Natural Gas State of Connecticut Department of Public Utility Control
Docket No. 87-01-02	Southern New England Telephone State of Connecticut Department of Public Utility Control
Docket No. 3673-U	Georgia Power Company Georgia Public Service Commission
Docket No. U-8747	Anchorage Water and Wastewater Utility Alaska Public Utilities Commission
Appendix I, Qualifications of Hel	Imuth W. Schultz, III Page 3 of 19

Docket No. 8363 El Paso Electric Company

The Public Utility Commission of Texas

Docket No. 881167-EI Gulf Power Company

Florida Public Service Commission

Docket No. R-891364 Philadelphia Electric Company

Pennsylvania Office of the Consumer Advocate

Docket No. 89-08-11 The United Illuminating Company

The Office of Consumer Counsel and

the Attorney General of the State of Connecticut

Docket No. 9165 El Paso Electric Company

The Public Utility Commission of Texas

Case No. U-9372 Consumers Power Company

Before the Michigan Public Service Commission

Docket No. 891345-EI Gulf Power Company

Florida Public Service Commission

ER89110912J Jersey Central Power & Light Company

Board of Public Utilities Commissioners

Docket No. 890509-WU Florida Cities Water Company, Golden Gate Division

Florida Public Service Commission

Case No. 90-041 Union Light, Heat and Power Company

Kentucky Public Service Commission

Docket No. R-901595 Equitable Gas Company

Pennsylvania Consumer Counsel

Docket No. 5428 Green Mountain Power Corporation

Vermont Department of Public Service

Docket No. 90-10 Artesian Water Company

Delaware Public Service Commission

Appendix I, Qualifications of Helmuth W. Schultz, III

Page 4 of 19

Docket No. 900329-WS Southern States Utilities, Inc.

Florida Public Service Commission

Case No. PUE900034 Commonwealth Gas Services, Inc.

Virginia Public Service Commission

Docket No. 90-1037* Nevada Power Company - Fuel

(DEAA Phase) Public Service Commission of Nevada

Docket No. 5491** Central Vermont Public Service Corporation

Vermont Department of Public Service

Docket No. Southwest Gas Corporation - Fuel

U-1551-89-102 Before the Arizona Corporation Commission

Southwest Gas Corporation - Audit of Gas Procurement

Practices and Purchased Gas Costs

Docket No. Southwest Gas Corporation

U-1551-90-322 Before the Arizona Corporation Commission

Docket No. United Cities Gas Company 176-717-U Kansas Corporation Commission

Docket No. 5532 Green Mountain Power Corporation

Vermont Department of Public Service

Docket No. 910890-EI Florida Power Corporation

Florida Public Service Commission

Docket No. 920324-EI Tampa Electric Company

Florida Public Service Commission

Docket No. 92-06-05 United Illuminating Company

The Office of Consumer Counsel and the Attorney General

of the State of Connecticut

Docket No. C-913540 Philadelphia Electric Co.

Before the Pennsylvania Public Utility Commission

Appendix I, Qualifications of Helmuth W. Schultz, III

Page 5 of 19

Docket No. 92-47 The Diamond State Telephone Company

Before the Public Service Commission

of the State of Delaware

Docket No. 92-11-11 Connecticut Light & Power Company

State of Connecticut

Department of Public Utility Control

Docket No. 93-02-04 Connecticut Natural Gas Corporation

State of Connecticut

Department of Public Utility Control

Docket No. 93-02-04 Connecticut Natural Gas Corporation (Supplemental)

State of Connecticut

Department of Public Utility Control

Docket No. 93-08-06 SNET America, Inc.

State of Connecticut

Department of Public Utility Control

Docket No. 93-057-01** Mountain Fuel Supply Company

Before the Public Service Commission of Utah

Docket No. Dayton Power & Light Company

94-105-EL-EFC Before the Public Utilities Commission of Ohio

Case No. 399-94-297** Montana-Dakota Utilities

Before the North Dakota Public Service Commission

Docket No. Minnegasco

G008/C-91-942 Minnesota Department of Public Service

Docket No. Pennsylvania American Water Company

R-00932670 Before the Pennsylvania Public Utility Commission

Docket No. 12700 El Paso Electric Company

Public Utility Commission of Texas

Case No. 94-E-0334 Consolidated Edison Company

Appendix I, Qualifications of Helmuth W. Schultz, III

Page 6 of 19

Before the New York Department of Public Service	Before the New	ew York Department	t of Public Service
--	----------------	--------------------	---------------------

On Behalf of the Division of Public Utilities and Carriers, Before the Rhode Island Public Utilities Commission

Case No. PU-314-94-688 U.S. West Application for Transfer of Local Exchanges

Before the North Dakota Public Service Commission

Docket No. 95-02-07 Connecticut Natural Gas Corporation

State of Connecticut

Department of Public Utility Control

Docket No. 95-03-01 Southern New England Telephone Company

State of Connecticut

Department of Public Utility Control

Docket No. Tucson Electric Power

U-1933-95-317 Before the Arizona Corporation Commission

Docket No. 5863* Central Vermont Public Service Corporation

Before the Vermont Public Service Board

Docket No. 96-01-26** Bridgeport Hydraulic Company

State of Connecticut

Department of Public Utility Control

Docket Nos. 5841/5859 Citizens Utilities Company

Before Vermont Public Service Board

Docket No. 5983 Green Mountain Power Corporation

Before Vermont Public Service Board

Case No. PUE960296** Virginia Electric and Power Company

Before the Commonwealth of Virginia

State Corporation Commission

Docket No. 97-12-21 Southern Connecticut Gas Company State of Connecticut Department of Public Utility Control Docket No. 97-035-01 PacifiCorp, dba Utah Power & Light Company Before the Public Service Commission of Utah Black Mountain Gas Division of Northern States Docket No. G-03493A-98-0705* Power Company, Page Operations Before the Arizona Corporation Commission Docket No. 98-10-07 United Illuminating Company State of Connecticut Department of Public Utility Control Docket No. 99-01-05 Connecticut Light & Power Company State of Connecticut Department of Public Utility Control Docket No. 99-04-18 Southern Connecticut Gas Company State of Connecticut Department of Public Utility Control Docket No. 99-09-03 Connecticut Natural Gas Corporation State of Connecticut Department of Public Utility Control Docket No. Intercoastal Utilities, Inc. 980007-0013-003 St. John County - Florida Docket No. 99-035-10 PacifiCorp dba Utah Power & Light Company Before the Public Service Commission of Utah Citizens Utilities Company - Vermont Electric Division Docket No. 6332 ** Before the Vermont Public Service Board Docket No. Southwest Gas Corporation

Appendix I, Qualifications of Helmuth W. Schultz, III

G-01551A-00-0309

Page 8 of 19

Before the Arizona Corporation Commission

Docket No. 6460**	Central Vermont Public Service Corporation Before the Vermont Public Service Board
Docket No. 01-035-01*	PacifiCorp dba Utah Power & Light Company Before the Public Service Commission of Utah
Docket No. 01-05-19 Phase I St	Yankee Gas Services Company tate of Connecticut Department of Public Utility Control
Docket No. 010949-EI	Gulf Power Company Before the Florida Office of the Public Counsel
Docket No. 2001-0007-0023	Intercoastal Utilities, Inc. St. Johns County - Florida
Docket No. 6596	Citizens Utilities Company - Vermont Electric Division Before the Vermont Public Service Board
Docket Nos. R. 01-09-001 V	erizon California Incorporated
I. 01-09-002	Before the California Public Utilities Commission
I. 01-09-002 Docket No. 99-02-05	
	Before the California Public Utilities Commission Connecticut Light & Power Company State of Connecticut
Docket No. 99-02-05	Before the California Public Utilities Commission Connecticut Light & Power Company State of Connecticut Department of Public Utility Control United Illuminating Company State of Connecticut
Docket No. 99-02-05 Docket No. 99-03-04	Before the California Public Utilities Commission Connecticut Light & Power Company State of Connecticut Department of Public Utility Control United Illuminating Company State of Connecticut Department of Public Utility Control Citizens Utilities Company Probation Compliance

Appendix I, Qualifications of Helmuth W. Schultz, III Page 9 of 19

Docket No. 03-07-02	Connecticut Light & Power Company State of Connecticut Department of Public Utility Control
Docket No. 6914	Shoreham Telephone Company Before the Vermont Public Service Board
Docket No. 04-06-01	Yankee Gas Services Company State of Connecticut Department of Public Utility Control
Docket Nos. 6946/6988	Central Vermont Public Service Corporation Before the Vermont Public Service Board
Docket No. 04-035-42**	PacifiCorp dba Utah Power & Light Company Before the Public Service Commission of Utah
Docket No. 050045-EI**	Florida Power & Light Company Before the Florida Public Service Commission
Docket No. 050078-EI**	Progress Energy Florida, Inc. Before the Florida Public Service Commission
Docket No. 05-03-17	The Southern Connecticut Gas Company State of Connecticut Department of Public Utility Control
Docket No. 05-06-04	United Illuminating Company State of Connecticut Department of Public Utility Control
Docket No. A.05-08-021	San Gabriel Valley Water Company, Fontana Water Division Before the California Public Utilities Commission
Docket NO. 7120 **	Vermont Electric Cooperative Before the Vermont Public Service Board

Docket No. 7191 ** Central Vermont Public Service Corporation

Before the Vermont Public Service Board

Docket No. 06-035-21 ** PacifiCorp

Before the Public Service Commission of Utah

Docket No. 7160 Vermont Gas Systems

Before the Vermont Public Service Board

Docket No. 6850/6853 ** Vermont Electric Cooperative/Citizens

Communications Company

Before the Vermont Public Service Board

Docket No. 06-03-04** Connecticut Natural Gas Corporation

Phase 1 Connecticut Department of Public Utility Control

Application 06-05-025 Request for Order Authorizing the Sale by Thames GmbH

of up to 100% of the Common Stock of American Water Works Company, Inc., Resulting in Change of Control of

California-American Water Company

Before the California Public Utilities Commission

Docket No. 06-12-02PH01** Yankee Gas Company

State of Connecticut

Department of Public Utility Control

Case 06-G-1332** Consolidated Edison Company of New York, Inc.

Before the NYS Public Service Commission

Case 07-E-0523 Consolidated Edison Company of New York, Inc.

Before the NYS Public Service Commission

Docket No. 07-07-01 Connecticut Light & Power Company

Connecticut Department of Public Utility Control

Docket No. 07-035-93 Rocky Mountain Power Company

Before the Public Service Commission of Utah

Docket No. 07-057-13 Questar

Appendix I, Qualifications of Helmuth W. Schultz, III Page 11 of 19

D C	1 D 11'	α .	\sim	CTT. 1
Retore t	he Piihlic	Service	Commission	of Litah
DCIOIC	ne i uone		Commission	or otair

Docket No. 08-07-04	United Illuminating Company
	Connecticut Department of Public

Connecticut Department of Public Utility Control

Case 08-E-0539 Consolidated Edison Company of New York, Inc.

Before the NYS Public Service Commission

Docket No. 080317-EI Tampa Electric Company

Before the Florida Public Service Commission

Docket No. 7488** Vermont Electric Cooperative, Inc.

Before the Vermont Public Service Board

Docket No. 080318-GU Peoples Gas System

Before the Florida Public Service Commission

Docket No. 08-12-07*** Southern Connecticut Gas Company

Connecticut Department of Utility Control

Docket No. 08-12-06*** Connecticut National Gas Company

Connecticut Department of Utility Control

Docket No. 090079-EI Progress Energy Florida, Inc.

Before the Florida Public Service Commission

Docket No. 7529 ** Burlington Electric Company

Before the Vermont Public Service Board

Docket No. 7585**** Green Mountain Power Corporation

Alternative Regulation

Before the Vermont Public Service Board

Docket No. 7336**** Central Vermont Public Service Company

Alternative Regulation

Before the Vermont Public Service Board

Docket No. 09-12-05 Connecticut Light & Power Company

Connecticut Department of Utility Control

Docket No. 10-02-13 Aquarion Water Company of Connecticut

Appendix I, Qualifications of Helmuth W. Schultz, III

Page 12 of 19

~		TT. 111	•
('onnecticut	Department of	I Itility ('ontr	·ωl
Connecticut	Department or	Cunty Cond	UI

Docket No. 10-70 Western Massachusetts Electric Company

Massachusetts Department of Public Utilities

Docket No. 10-12-02 Yankee Gas Services Company

Connecticut Department of Utility Control

Docket No. 11-01 Fitchburg Gas & Electric Light Company

Massachusetts Department of Public Utilities

Case No.9267 Washington Gas Light Company

Maryland Public Service Commission

Docket No. 110138-EI Gulf Power Company

Before the Florida Public Service Commission

Case No.9286 Potomac Electric Power Company

Maryland Public Service Commission

Docket No. 120015-EI Florida Power & Light Company

Before the Florida Public Service Commission

Docket No. 11-102*** Western Massachusetts Electric Company

Massachusetts Department of Public Utilities

Docket No. 8373**** Green Mountain Power Company

Alternative Regulation

Before the Vermont Public Service Board

Docket No. 110200-WU Water Management Services, Inc.

Before the Florida Public Service Commission

Docket No. 11-102/11-102A Western Massachusetts Electric Company

Massachusetts Department of Public Utilities

Case No.9311 Potomac Electric Power Company

Maryland Public Service Commission

Case No.9316	Columbia Gas of Maryland, Inc. Maryland Public Service Commission
Docket No. 130040-EI**	Tampa Electric Company Before the Florida Public Service Commission
Case No.1103	Potomac Electric Power Company Public Service Commission of the District of Columbia
Docket No. 13-03-23	Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority
Docket No. 13-06-08	Connecticut Natural Gas Corporation Connecticut Public Utility Regulatory Authority
Docket No. 13-90	Fitchburg Gas & Electric Light Company Massachusetts Department of Public Utilities
Docket No. 8190**	Green Mountain Power Company Before the Vermont Public Service Board
Docket No. 8191**	Green Mountain Power Company Alternative Regulation Before the Vermont Public Service Board
Case No.9354**	Columbia Gas of Maryland, Inc. Maryland Public Service Commission
Docket No.2014-UN-132**	Entergy Mississippi Inc. Mississippi Public Service Commission
Docket No. 13-135	Western Massachusetts Electric Company Massachusetts Department of Public Utilities
Docket No. 14-05-26	Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority

Docket No. 13-85	Massachusetts Electric Company and Nantucket Electric Company D/B/A/ as National Grid Massachusetts Department of Public Utilities
Docket No. 14-05-26RE01***	Massachusetts Department of Public Utilities Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority
Docket No.2015-UN-049**	Atmos Energy Corporation Mississippi Public Service Commission
Case No.9390	Columbia Gas of Maryland, Inc. Maryland Public Service Commission
Docket No. 15-03-01***	Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority
Docket No. 15-03-02***	United Illuminating Company Connecticut Department of Public Utility Control
Case No.9418***	Potomac Electric Power Company Maryland Public Service Commission
Case No.1135***	Washington Gas Public Service Commission of the District of Columbia
Docket No. 15-03-01***	Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority
Case No.1137	Washington Gas Public Service Commission of the District of Columbia
Docket No. 160021-EI	Florida Power & Light Company Before the Florida Public Service Commission
Docket No. 160062-EI	Florida Power & Light Company Before the Florida Public Service Commission
Docket No. 15-149	Western Massachusetts Electric Company Massachusetts Department of Public Utilities

Appendix I, Qualifications of Helmuth W. Schultz, III Page 15 of 19

Docket No. 8710	Vermont Gas Systems Inc. Before the Vermont Public Service Board
Docket No. 8698	Vermont Gas Systems Inc. Alternative Regulation Before the Vermont Public Service Board
Docket No. 16-06-042	United Illuminating Company Connecticut Department of Public Utility Control
Docket No. A.16-09-001	Southern California Edison Before the California Public Utilities Commission
Case No. 17-1238-INV**	Vermont Gas Systems Inc. Before the Vermont Public Utility Commission
Case No. 17-3112-INV**	Green Mountain Power Company Before the Vermont Public Utility Commission
Docket No. 17-10-46**	Connecticut Light & Power Company Connecticut Public Utility Regulatory Authority
Docket No. 20170141-SU	KW Resort Utilities Corp. Before the Florida Public Service Commission
Docket No. 2017-0105	The Hawaii Gas Company Before the Hawaii Public Utility Commission
Docket No. 20160251-EI**	Florida Power & Light. Company Before the Florida Public Service Commission
Case No. 18-0409-TF**	Vermont Gas Systems Inc. Before the Vermont Public Utility Commission
Docket No. 2018-00008	Maine Water Company (Tax Docket). Before the Maine Public Utility Commission
Docket No. 18-05-16**	Connecticut Natural Gas Company
Appendix I, Qualifications of Helmuth W. Schultz, III Page 16 of 19	

Connecticut Public U	Utility F	Regulatory	Authority
----------------------	-----------	------------	-----------

Docket No. 18-05-10**	Yankee Gas Services Company Connecticut Public Utility Regulatory Authority
Docket No. 20170272-EI**	Duke Energy Florida LLC. (Storm Case) Before the Florida Public Service Commission

Docket No. 20170271-EI**	Tampa Electric Company. (Storm Case)
	Before the Florida Public Service Commission

Docket No. 20180039-EI***	Gulf Power Company (Tax Docket).
Docket No. 20180044-EI***	Peoples Gas System (Tax Docket).
Docket No. 20180045-EI***	Tampa Electric Company (Tax Docket).
Docket No. 20180046-EI***	Florida Power & Light Company (Tax Docket).
Docket No. 20180047-EI***	Duke Energy Florida LLC (Tax Docket).
Docket No. 20180048-EI***	Florida Public Utilities Company (Tax Docket).
	Before the Florida Public Service Commission

Docket No. 20180061-EI	Florida Public Utilities Company. (Storm Case)
	Refore the Florida Public Service Commission

Docket No. 20180049-EI**	Florida Power & Light Company. (Storm Case)
	Before the Florida Public Service Commission

Case No. 19-0513-TF***	Vermont Gas Systems Inc.
	Before the Vermont Public Utility Commission

RPU-2019-0001	Interstate Power & Light
	Before the Iowa Utilities Board

D.P.U. 18-153	Massachusetts Electric Company and Nantucket
	Electric Company each d/b/a National Grid
	Massachusetts Department of Public Utilities

- * Certain issues stipulated, portion of testimony withdrawn.
- ** Case settled.
- *** Assisted in case and hearings, no testimony presented
- **** Annual filings reviewed and reports filed with Board.

					Estim	nated					
				Project	Project			Project	Project		Capital Cost
Line		Unit	Cust.	Cost-	Cost-			Cost-	Cost-		Est. Over
No.	Location	Count	Count	Capital	0&M	Start Date	End Date	Capital	0&M	End Date	(under)
1	Reddick A-34	0.1	1	89,826	1,123	12/18/19	01/15/20	7,180	507	01/15/20	82,646
2	Jasper South-N19:	0.23	1	215,714	2,697	03/27/20	05/01/20	30,325	0	04/07/20	185,390
3	Denham-C153	0.26	5	244,041	3,051	01/27/20	02/21/20	137,191	0	02/25/20	106,850
4	Denham-C157	0.21	3	191,114	2,389	02/10/20	03/13/20	41,604	0	03/25/20	149,510
5	West Davenport-k	0.16	19	148,158	1,852	03/09/20	04/13/20	87,227	0	04/08/20	60,931
6	Luraville-A192	0.17	3	161,482	2,019	03/23/20	04/27/20	58,332	404	03/25/20	103,150
7	Reddick A-36	0.17	1	157,755	1,972	12/19/19	01/16/20	44,214	1,015	01/16/20	113,541
8	Hemple K2246	0.16	4	146,387	1,830	03/09/20	04/13/20	27,808	0	04/02/20	118,579
9	Silver Springs-A15	0.08	2	72,867	911	12/17/19	01/14/20	29,621	507	01/14/20	43,246
10	Zephyrhills-C851	0.08	13	77,433	968	12/09/19	01/30/20	113,413	1,690	01/30/20	(35,980)
11	Zephyrhills North-	0.17	6	158,408	1,980	02/10/20	03/18/20	22,672	0	04/06/20	135,736
12	Alderman-C5010	0.13	23	122,440	1,531	01/13/20	02/14/20	114,174	1,419	03/18/20	8,266
13	Perry-N7	0.24	15	219,441	2,743	01/13/20	01/28/20	58,605	3,616	01/28/20	160,836
14	Altamonte-M578	0.15	7	137,069	1,713	03/09/20	04/13/20	40,905	0	03/06/20	96,164
15	Apoka South-M72	0.09	2	79,483	994	01/21/20	02/04/20	36,652	1,010	04/04/20	42,831
16	Apoka South-M72	0.04	2	37,645	471	2/30/20	03/04/20	32,508	404	03/16/20	5,137
17	Perry-N9	0.13	6	124,862	1,561	02/18/20	03/26/20	44,984	398	03/02/20	79,878
18	Lake Weir-A64	0.11	5	104,922	1,312	02/10/20	03/18/20	77,460	916	03/23/20	27,462
19	Holder-A48	0.07	1	68,674	858	02/10/20	03/11/20	38,589	287	02/13/20	30,085
20	Perry-N7	0.18	3	168,192	2,102	02/18/20	03/26/20	52,715	541	03/02/20	115,477
21	Jennings-N195	0.08	1	75,477	943	12/19/19	01/14/20	22,875	507	01/14/20	52,602
22	High Springs-A15	0.08	3	70,724	884	12/18/19	01/20/20	27,345	2,008	01/20/20	43,379
23	Trenton-A90	0.12	1	113,215	1,415	02/10/20	03/18/20	32,847	586	02/11/20	80,368
24	Trenton-A90	0.05	1	45,472	568	07/01/20	07/29/20	20,671	0	03/24/20	24,801
25	Walsingham-J558	0.11	5	104,269	1,303	12/16/19	02/10/20	56,936	0	02/24/20	47,333
26	Lake Weir-A61	0.18	9	165,117	2,064	03/09/20	04/13/20	136,027	202	03/19/20	29,090
27	Lakewood-K1693	0.05	2	47,429	593	05/01/20	05/29/20	21,250	0	03/30/20	26,179
28	Clermont-K606	0.07	5	64,761	810	01/13/20	02/04/20	115,417	666	02/04/20	(50,656)
29	Zuber-A203	0.22	8	200,339	2,504	03/09/20	04/13/20	104,898	404	04/01/20	95,441
30	Santos-A230	0.11	2	101,101	1,264	01/13/20	01/22/20	48,050	1,069	01/22/20	53,051
31	Desoto City-K3222	0.14	1	129,801	1,623	01/27/20	03/17/20	20,984	202	02/14/20	108,818
32	Desoto City-K3222	0.06	1	59,729	747	03/02/20	03/27/20	24,997	0	03/31/20	34,733
33	Haines City-K21	0.05	7	47,988	600	02/10/20	03/13/20	47,910	885	03/09/20	78
34	Total			3,951,335	49,395			1,776,387	19,241		2,174,948

44.96%

55.04%

Estimates are from Exhibit No.__(JWO-1), Pages 6-10. Actuals are from response to Citizens' IR-134.

35

Exhibit HWS-3 Docket No. 20200069-EI

		<u>Estimated</u>						<u>Actual</u>			
				Project	Project			Project	Project		Capital Cost
Line		Unit	Cust.	Cost-	Cost-			Cost-	Cost-		Est. Over
No.	Location	Count	Count	Capital	0&M	Start Date	End Date	Capital	O&M	End Date	(under)
1	Clarcona'-M342 Total	6,125	1,838	291,489	2,915	01/13/20	03/06/20	300,276	34,997	01/27/20	(8,787)
2	Deland East'-W1110 Tot	9,293	1,810	442,254	4,423	09/30/19	03/27/20	372,828	36,187	01/30/20	69,426
3	Dundee'-K3245 Total	3,802	1,812	180,937	1,809	01/06/20	01/31/20	151,004	23,082	02/07/20	29,933
4	East Orange'-W0250 Tot	4,118	1,886	195,976	1,960	09/23/19	02/28/20	64,582	7,503	02/06/20	131,394
5	Lisbon'-M1517 Total	2,746	2,159	130,663	1,307	09/30/19	02/21/20	113,557	0	02/05/20	17,106
6	Lockhart'-M402 Total	3,115	619	148,243	1,482	09/23/19	02/14/20	42,395	1,277	02/11/20	105,848
7	Total			1,389,561	13,896			1,044,642	103,046		344,919
8								75.18%			24.82%
Estimates are from Exhibit No(JWO-1), Page 12 Actuals are from response to Citizens' IR-138.											
2020 F	Planned Self Optimizing Gri	d									
9	East Orange-W0253 Total	1	1,231	40,000	814	11/18/19	02/17/20	19,524	0	03/12/20	20,476
10	East Orange-W0274 Total	1	2,399	64,619	1,400	10/15/19	04/09/20	64,260	5,145	03/26/20	359
11	Poinciana-K1236 Total	1	2,461	64,619	1,400	11/14/19	03/11/20	21,185	26	03/11/20	43,434
12	Deland East-W1107 Tota	1	331	64,619	1,400	12/30/19	01/06/20	32,652	32,652	01/09/20	31,967
13	Champions Gate-K1762	1	2,346	64,619	1,400	12/27/19	01/08/20	41,061	41,061	02/07/20	23,558
14											0
15	Total			298,476	6,414			178,682	78,884		119,794
16								59.86%			40.14%

Estimates are from Exhibit No.__(JWO-1), Pages 14-17 Actuals are from response to Citizens' IR-142.

	<u>Estimated</u>										<u>Actual</u>						
	Pole							Capital			Project	Project		Capital Cost	Capital		
Line	Replacment	Unit	Cust.	Project Cost-	Project			Cost per	Unit	Cust.	Cost-	Cost-		Est. Over	Cost per		
No.	Location	Count	Count	Capital	Cost-O&M	Start Date	End Date	Unit	Count	Count	Capital	0&M	End Date	(under)	Unit		
1	Apoka	5	105,668	40,678	2,847	01/01/20	05/31/20	8,136	8	105,096	37,041	2,408	03/31/20	3,637	4,630		
2	Apoka	4	105,668	33,315	2,332	01/01/20	12/31/20	8,329						33,315			
3	Deland	234	85,601	1,946,034	136,222	01/01/20	12/31/20	8,316	252	86,161	725,113	47,132	03/31/20	1,220,921	2,877		
4	Jamestown	175	138,613	1,454,830	101,838	01/01/20	12/31/20	8,313	7	142,222	61,968	4,028	03/31/20	1,392,862	8,853		
5	Longwood	130	92,030	1,077,911	75,454	01/01/20	12/31/20	8,292	69	93,286	359,305	23,355	03/31/20	718,606	5,207		
6	Inverness	279	79,397	2,307,307	161,511	01/01/20	12/31/20	8,270	101	78,282	465,054	30,228	03/31/20	1,842,253	4,604		
7	Monticello	7	58,417	56,949	3,986	01/01/20	07/31/20	8,136	44	56,333	192,304	12,500		(135,355)	4,371		
8	Monticello	38	58,417	316,493	22,155	01/01/20	12/31/20	8,329					03/31/20	316,493			
9	Ocala	138	80,509	1,141,643	79,915	01/01/20	12/31/20	8,273	93	79,918	350,894	22,808	03/31/20	790,750	3,773		
10	Clearwater	226	161,275	1,858,734	130,111	01/01/20	12/31/20	8,224	109	149,557	1,040,503	67,633	03/31/20	818,231	9,546		
11	Seven Springs	161	187,524	1,326,637	92,865	01/01/20	12/31/20	8,240	14	196,951	198,854	12,926	03/31/20	1,127,782	14,204		
12	St Pete	482	176,058	3,995,536	279,687	01/01/20	12/31/20	8,289	68	182,848	478,877	31,127	03/31/20	3,516,659	7,042		
13	Walsington	177	156,443	1,457,579	102,031	01/01/20	12/31/20	8,235	32	157,409	395,489	25,707	03/31/20	1,062,090	12,359		
14	Zephyrhills	12	27,764	97,627	6,834	01/01/20	12/31/20	8,136	0	27,458	0	0	03/31/20	97,627			
15	Buena Vista	11	135,224	89,491	6,264	01/01/20	11/30/20	8,136	17	134,031	121,228	7,880	03/31/20	(31,737)	7,131		
16	Buena Vista	33	135,224	274,849	19,239	01/01/20	12/31/20	8,329						274,849			
17	Clermont	9	37,129	73,220	5,125	01/01/20	09/30/20	8,136	3	38,269	27,289	1,774	03/31/20	45,931	9,096		
18	Clermont	11	37,129	91,616	6,413	01/01/20	12/31/20	8,329						91,616			
19	Highlands	79	57,450	654,302	45,801	01/01/20	12/31/20	8,282	6	57,385	50,561	3,286	03/31/20	603,741	8,427		
20	Lake Wales	154	114,912	1,276,835	89,378	01/01/20	12/31/20	8,291	36	110,084	84,556	5,496	03/31/20	1,192,279	2,349		
21	SE Orlando	212	94,574	1,751,983	122,639	01/01/20	12/31/20	8,264	7	96,200	98,127	6,378	03/31/20	1,653,857	14,018		
22	Winter Garden	91	85,734	749,418	52,459	01/01/20	12/31/20	8,235	7	86,812	12,138	789	03/31/20	737,280	1,734		
23	Total	2,668		22,072,989	1,545,109			8,273	873		4,699,300	305,454		17,373,689	5,383		

24 21.29% 78.71%

25 Estimated Over Statement Based on Projected Units

7,711,326

Estimates are from Exhibit No.__(JWO-1), Page 20. Actuals are from response to Citizens' IR-149.

19.93%

80.07%

	<u>Estimated</u>									<u>Actual</u>						
								Capital			Project	Project		Capital Cost	Capital	
Line		Unit	Cust.	Project Cost-	Project			Cost per	Unit	Cust.	Cost-	Cost-		Est. Over	Cost per	
No.	Pole Replacment Location	Count	Count	Capital	Cost-O&M	Start Date	End Date	Unit	Count	Count	Capital	0&M	End Date	(under)	Unit	
1	(ASL-2) Douglas Ave=Spring Lake	1	4,618	136,786	2,377	01/28/20	02/28/20	136,786	1	4,618	89,720	3,269	02/28/20	47,066	89,720	
2	(BWR-1)BrooksvilleWest-Hudso	19	0	654,092	30,985	03/02/20	03/27/20	34,426	19	0	807,614	39,230	03/30/20	(153,522)	42,506	
3	(CEB-3) Lake Louisa SEC-Clermo	21	10,293	726,386	50,112	02/03/20	03/13/20	34,590	21	10,293	851,668	65,384	03/08/20	(125,282)	40,556	
4	(DB-2) Monticello-Boston(GA Pv	1	0	140,814	3,848	06/15/20	06/20/20	140,814	2	0	42,721	3,266	03/13/20	98,093	21,361	
5	(DLW-1) Disston-Starkley Road	3	13,637	227,967	15,789	01/27/20	01/30/20	75,989	3	13,637	278,887	9,808	03/30/20	(50,920)	92,962	
6	(DLW-6)Ulmerton West-Walsing	2	20,746	159,707	7,886	02/17/20	02/21/20	79,854	2	20,746	182,392	6,538	02/16/20	(22,685)	91,196	
7	(DWB-1)Barberville-Deland Wes	9	3,180	474,829	11,591	03/16/20	04/04/20	52,759	17	3,180	223,460	0	04/13/20	251,369	13,145	
8	(GH-1)High Springs-Hull Road	1	0	21,664	556	02/02/20	02/03/20	21,664	1	0	34,731	1,633	02/03/20	(13,067)	34,731	
9	(HCL-1)Clearwater-Highlands	1	15,408	25,808	1,068	01/28/20	01/30/20	25,808	1	15,408	51,491	3,269	01/30/20	(25,683)	51,491	
10	(KZN) Kathleen-Zephyrhillis Nor	5	11,885	329,957	19,142	03/02/20	03/13/20	65,991	5	11,885	329,827	16,346	03/23/20	130	65,965	
11	(OCF-1)Silver Springs-Silver Spri	26	5,399	702,328	15,025	01/22/20	03/02/20	27,013	27	5,399	381,000	44,087	03/01/20	321,328	14,111	
12	(SF-2)Suwanee RiverPl-Ft White	9	5,409	376,306	8,300	05/25/20	06/13/20	41,812	9	5,409	6,143	9,797	03/29/20	370,163	683	
13	Pembroke Tap	1	20	136,604	3,339	03/02/20	03/05/20	136,604	1	20	13,636	1,633	03/01/20	122,968	13,636	
14	Total	99		4,113,248	170,018			41,548	109		3,293,290	204,260		819,958	30,214	

Estimates are from Exhibit No.__(JWO-1), Page 25. Actuals are from response to Citizens' IR-159.

15

CERTIFICATE OF SERVICE Docket No. 20200069-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail on this 26th day of May, 2020, to the following:

Dianne M. Triplett

Duke Energy Florida

299 First Avenue North

St. Petersburg FL 33701

dianne.triplett@duke-energy.com

Matthew R. Bernier

Duke Energy Florida

106 E. College Avenue, Ste. 800

Tallahassee FL 32301

matthew.bernier@duke-energy.com

Charles Murphy
Rachael Dziechciarz
Office of General Counsel
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850
cmurphy@psc.state.fl.us
RDziechc@psc.state.fl.us

s/Charles J. Rehwinkel

Charles J. Rehwinkel Deputy Public Counsel