

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

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In re: Petition for increase in rates by  
Progress Energy Florida

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Docket No. 090079-EI

Submitted for filing: March 20, 2009

**DIRECT TESTIMONY**

**OF**

**DALE OLIVER**

**On behalf of Progress Energy Florida**

**Petition for increase in rates by Progress Energy Florida**

**DOCKET NO.090079-EI**

**DIRECT TESTIMONY OF**

**DALE OLIVER**

1 **I. INTRODUCTION AND SUMMARY**

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

3 A. My name is Dale Oliver. My business address is 299 First Avenue North, St.  
4 Petersburg, Florida 33701.

5  
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Progress Energy Florida, Inc. ("PEF" or the "Company") as its  
8 Vice President, Transmission Operations & Planning Department ("TOPD",  
9 "Transmission" or the "Department"). In this role, I have overall responsibility  
10 for PEF's transmission system, including its design, construction, operation and  
11 maintenance, in order to provide reliable transmission service to PEF's retail and  
12 wholesale customers. I am also responsible for the integration of PEF's  
13 transmission system with the Florida transmission grid.

14  
15 **Q. Please describe your educational background and professional experience.**

16 A. I received a bachelor's degree in electrical engineering from Georgia Tech in  
17 1981 and an MBA from Georgia State University in 2001. Prior to assuming my  
18 current role in February, 2007, I was the Regional Vice President for PEF's South  
19 Coastal Region from October, 2005 to February, 2007, and from May 2004 to

1           October, 2005 the Company's Regional Vice President for the South Central  
2           Region. From 2001 to 2004, I was PEF's Director of Transmission Engineering  
3           and the Director of the Company's Commitment to Excellence ("CTE") program.  
4           Prior to joining PEF in January 2001, I held a number of supervisory and  
5           management positions in the transmission maintenance and operations areas for  
6           the Southern Company's Georgia Power subsidiary in Atlanta, Georgia. I am a  
7           registered professional engineer in the states of Florida and Georgia.

8  
9           **Q. What is the purpose of your direct testimony?**

10          A. The purpose of my direct testimony is to support the reasonableness of PEF's  
11          transmission capital and O&M expenses.

12  
13          **Q. Are you sponsoring any Minimum Filing Requirements Schedules?**

14          A. Yes. The Minimum Filing Requirements (MFRs) Schedules that I sponsor or co-  
15          sponsor are listed in Exhibit No. \_\_\_ (JDO-1) to my testimony. These MFR  
16          Schedules are true and correct, subject to being updated during the course of this  
17          proceeding.

18  
19          **Q. Do you have any exhibits to your testimony?**

20          A. Yes, I have prepared or supervised the preparation of the following exhibits to my  
21          direct testimony:

- 22                 • Exhibit No. \_\_\_ (JDO-1), a summary of sponsored or co-sponsored schedules  
23                 of the Company's Minimum Filing Requirements (MFRs); and

- 1 • Exhibit No. \_\_ (JDO-2), a summary of Transmission capital projects, with  
2 total capital project cost, (1) to comply with federal reliability standards, (2) to  
3 comply with regional reliability initiatives, (3) to accommodate new  
4 generation and reliability needs from expansion, and (4) to maintain the  
5 system.

6 These exhibits are true and correct.

7  
8 **Q. Please summarize your testimony.**

9 A. PEF requires transmission capital expenditures of \$185.2 million and O&M  
10 expenses of approximately \$45.3 million in 2010. These expenditures enable the  
11 Company to strike a reasonable balance between the high quality of service that  
12 our regulators and our customers expect and a reasonable cost for transmission  
13 service. PEF's O&M expenses are further reasonable and necessary because they  
14 are \$ 0.03 million or 0.0% above the Commission O&M benchmark cost of \$38.4  
15 million.

16 PEF has successfully provided reliable transmission service to its customers  
17 at a reasonable cost for years. PEF's reliability performance is consistent and at  
18 levels that drive customer satisfaction with our service. PEF's transmission  
19 reliability and operations has consistently ranked high among forty utilities across  
20 the country. PEF needs its requested transmission capital and O&M expenditures  
21 to meet the expanded capacity demands placed on the system, increasingly  
22 stringent federal reliability standards, and the Commission's storm hardening  
23 initiatives, while maintaining the reliable system operation that our customers

1 expect. PEF has demonstrated an ability to successfully operate the Transmission  
2 side of its business by balancing the need to maintain excellence in reliability  
3 with providing transmission service at a reasonable cost.  
4

5 **II. PEF'S TRANSMISSION SYSTEM.**

6 **Q. Please generally describe PEF's transmission system.**

7 A. PEF is part of a nationwide interconnected and Florida intraconnected power  
8 network that enables interconnected utilities to exchange power. As a result,  
9 PEF's transmission system is subject to regulation with respect to the reliability  
10 of its system by both the Federal Energy Regulatory Commission ("FERC") and  
11 the Florida Public Service Commission ("PSC" or the "Commission"). PEF's  
12 transmission system includes approximately 5,000 circuit miles of transmission  
13 lines, including 500 kV, 230kV, 115 kV, and 69 kV lines, transmission  
14 substations, towers, poles, and related equipment and material across 20,000  
15 square miles in west central Florida and the densely populated areas around  
16 Orlando, St. Petersburg, and Clearwater. Within Florida, PEF's system is  
17 interconnected with the other investor-owned utilities, twenty-two municipal  
18 electric utilities, and nine rural electric cooperatives. By improving, maintaining,  
19 and adding to this transmission system when necessary, PEF reliably delivers  
20 power from generation resources to be distributed to its customers' homes and  
21 businesses around-the-clock, each day.  
22

1 **Q. What has the Company done to maintain and improve transmission system**  
2 **reliability since 2005?**

3 A. Our base line for transmission system reliability was our 2002-2004 CTE  
4 program. The CTE program included a number of capital and O&M initiatives  
5 that improved the reliable delivery of power to our customers. From this base  
6 line, in each of the past four years we have assessed our system performance in  
7 the previous year and established priorities for the next year. For example, our  
8 annual, targeted maintenance capital expenditure plan prioritizes the replacement  
9 of transmission capital units according to the age, condition, and significance of  
10 the replacement of that unit to the overall reliability of the system. This  
11 maintenance capital expenditure plan focuses on transmission poles, pole  
12 insulators, static wire, transmission line conductor, substation transformers,  
13 breakers, capacitors, relays, and battery banks.

14 Our transmission O&M initiatives the past four years also built upon our  
15 CTE initiatives by focusing on initiatives that offered the greatest benefit to  
16 system reliability. To illustrate, O&M initiative spending since 2005 included  
17 vegetation management, line bonding and grounding, relay calibration, and  
18 transformer inspections in addition to our routine O&M expenditures for the  
19 transmission system.

20 Our annual process of planning our capital, maintenance capital, and O&M  
21 expenditures has resulted in the strengthening of our transmission grid and the  
22 enhancement of the operation of our transmission system, with continued,  
23 improved reliability performance for our customers over the last four years.

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**Q. How does the Company measure transmission reliability performance?**

A. PEF regularly analyzes reliability data to assess and track the performance of its transmission system using generally accepted reliability measures or indices in the electric utility industry. These indices include (1) the Circuit System Average Interruption Duration Index or “Circuit SAIDI”, which tracks the average duration of a transmission-related outage; (2) the System Average Interruption Frequency Index (“SAIFI”), which tracks the average frequency of transmission-caused outages; (3) the System Average Interruption Frequency Index for Momentaries (“SAIFI-M”), which tracks the average frequency of transmission-caused outages for outages of less than a minute; and (4) the System Average Restoration Index (“SARI”), which tracks the time required to re-energize circuits following an outage. These reliability indices are regularly used by utilities and regulators to assess reliability performance by tracking changes in the results of these indices from one period of time to another, later period and comparing the direction of the change and the magnitude of the change from the earlier period to that later period of time.

**Q. What are the results of these reliability performance indices for PEF’s transmission system?**

A. For the latest completed five-year window (2003-2007), PEF’s transmission system reliability improved. All of these reliability indices that PEF regularly tracks showed positive trends. Specifically, Circuit SAIDI decreased by 23.4%,

1 SAIFI decreased by 7.9%, SAIFI-M decreased by 10.1%, and SARI decreased by  
2 20.6%. These positive trends demonstrate that PEF is providing customers with  
3 reliable transmission service. They further demonstrate that PEF has reasonably  
4 and prudently maintained its transmission system over time, when the  
5 transmission system has expanded and the existing transmission assets have  
6 further aged, adding to the cost to maintain and improve system reliability. Our  
7 reliability performance under increasing cost pressures indicates our commitment  
8 to excellent customer service.

9  
10 **Q. Are there other ways that PEF monitors its transmission performance?**

11 A. Yes. PEF annually participates in a benchmarking study managed by an outside  
12 contractor. This benchmarking study, known as the *SGS Transmission Reliability*  
13 *Benchmarking Study*, includes approximately 40 other utilities from around the  
14 country comprising almost half of the transmission circuit miles in the United  
15 States. PEF has consistently compared well against the benchmark group for  
16 several years now, and particularly given the often harsh conditions under which  
17 our system operates.

18  
19 **Q. Has PEF maintained the reliable transmission of power to customers at a**  
20 **reasonable cost?**

21 A. Yes. Since 2005, PEF has continued to incorporate best practices in the industry  
22 to manage and control its transmission-related capital and O&M costs. For  
23 example, we set up an organizational model that includes a unit in the



1 Transmission Maintenance Section called Maintenance Resource Management  
2 that is comprised of Resource Coordinators who are responsible for planning and  
3 scheduling all capital and O&M-related work performed in our transmission  
4 areas. This group provides efficient and organized maintenance work scheduled  
5 and monitored at 15-minute increments, where appropriate. They also procure  
6 necessary materials and closely monitor their delivery to ensure their timely and  
7 cost-effective use to maintain the system. Our results over the last three years  
8 demonstrate that the Maintenance Resource Management processes are working  
9 and contributing to overall reliability improvement at a reasonable cost.

10 Additionally, in 2007 we created a new Project Support group in our Project  
11 Management unit that focuses on optimizing the scheduling, procurement of  
12 materials, and management of contract support work. This Project Support group  
13 improved the organization of maintenance, planning, engineering, and  
14 construction group projects with resulting cost savings. Also in 2007, a  
15 Transmission Finance group comprised of several business financial analysts was  
16 created to more efficiently achieve our operational objectives by providing  
17 improved budgeting, cost management, and business planning support.  
18 Transmission Finance continuously works with Transmission to facilitate  
19 informed decision making, increase productivity, decrease costs, and establish  
20 effective internal controls. As a result, of these measures and others, PEF's  
21 Transmission management efficiently provides our customers with reliable  
22 transmission service.

1       **Q. Can you provide us with some of the other ways Transmission ensures the**  
2       **Company is providing reliable transmission service to customers in an**  
3       **efficient, cost-effective manner?**

4       A. Yes. Our improved safety record has also contributed to the delivery of reliable  
5       transmission service to customers at a reasonable cost. Transmission has  
6       demonstrated continually improving safety records since 2002. Our OSHA-  
7       recordable injury totals have improved from eleven injuries for 2002 to five  
8       injuries for 2008. The corresponding improvement in OSHA injury rates was  
9       from 3.04 in 2002 to 1.05 in 2008. These improvements were made with  
10      increases in employees and, accordingly, the hours worked. Transmission  
11      employs over 400 employees working nearly 1,000,000 hours annually,  
12      performing tasks that have inherent risk much of that time. As a result, we have  
13      an excellent safety record that demonstrates our commitment to a safety culture.  
14      Customers benefit directly from our exemplary safety record in transmission  
15      because the Company does not experience the lost time and inefficiencies that  
16      result from job-site injuries and the required investigations, “lessons learned”  
17      practices, and time and cost of dealing with potential employee and third party  
18      claims.

19               Additionally, our training programs benefit our customers by improving our  
20      ability to efficiently and reliably provide customers transmission services. One  
21      example is the training program for System Dispatchers at our Energy Control  
22      Center (ECC). PEF Dispatchers must be certified at the Reliability Authority  
23      level by the North American Reliability Corporation (“NERC”), which was

1 established as a result of the Federal Energy Policy Act of 2005 ("EPAct") to  
2 develop and enforce mandatory transmission reliability standards. As a result,  
3 they are required to obtain 200 Continuing Education Hours (CEH's) over a  
4 three-year period to maintain their certification. To acquire these CEH's, the ECC  
5 Training team annually provides 80 hours of training classes that consist of  
6 presentations, discussions, simulation (including hours of one-on-one simulation  
7 training), and debriefs on operational and other issues. Additional training hours  
8 consist of computer-based and written material based on Plantview modules and  
9 PEF ECC Procedures and Policies. Overall, PEF System Dispatchers will receive  
10 120 to 140 hours of training annually to maintain their performance skills in an  
11 ever changing transmission system. This training is also required for PEF to  
12 comply with Federal Energy Regulatory Commission ("FERC"), NERC, and  
13 Florida Reliability Coordinating Council ("FRCC") regulation.

14 All other Transmission personnel are required to receive training as well.  
15 This training includes OSHA Compliance, Safety, Environmental, and skill-based  
16 technical training. Our training programs continually increase our employees'  
17 ability to provide efficient, safe, and reliable transmission service to our customers.

18 Our new outage management software application, known as the  
19 Transmission Outage Management System (TOMS), implemented since 2005, also  
20 improves the efficient delivery of reliable transmission service to our customers.  
21 TOMS manages outages in a well-organized manner, listing the physical location  
22 of the event (i.e. nearest street address and nearest substation or transmission line  
23 structure number), tracks the number of customers affected by the particular event,

1 and tabulates the number of calls that have been received for the event. TOMS also  
2 provides information on the location and magnitude of the short circuit associated  
3 with the outage, if there is one. This information is not only extremely helpful in a  
4 storm scenario when multiple outages are underway, but it is also useful for any  
5 outage that occurs on the transmission system. TOMS has resulted in our ability to  
6 respond to transmission outages in a very organized and thus efficient fashion, in  
7 both storm and non-storm conditions.

8  
9 **Q. Can the Company continue to provide customers with reliable transmission**  
10 **service?**

11 A. Yes, but maintaining our record of reliable transmission service requires  
12 additional capital and O&M investment in the transmission system. One reason  
13 is that PEF's transmission system is simply larger today compared to 2005. The  
14 transmission system therefore includes additional transmission assets that must be  
15 maintained. Another reason is that PEF must continue to invest in capital  
16 additions to the transmission system to meet increased customer capacity demand  
17 on the system and to replace a continually aging infrastructure. These capital and  
18 O&M investment needs coincide with labor, material, fuel, real estate corridor,  
19 and permitting cost escalations, requiring additional funding for these  
20 investments.

21 There is another reason too for our additional capital and O&M investments  
22 in the transmission system. Regulatory initiatives at both the federal and state  
23 level mandate changes in the way transmission planning occurs and change the

1 way we operate and maintain our transmission system. These regulatory  
2 initiatives further require PEF to incur additional capital and O&M expenditures  
3 to comply with the regulatory initiatives.  
4

### 5 **III. FEDERAL AND STATE REGULATORY RELIABILITY INITIATIVES.**

#### 6 **Q. What are the federal reliability initiatives that affect Transmission planning** 7 **and investment?**

8 **A.** EPEA in 2005 directed the FERC to establish an Electric Reliability Organization  
9 (“ERO”) to establish and enforce national transmission reliability standards. The  
10 FERC complied by certifying NERC as its ERO and the FERC authorized NERC  
11 to make the previously voluntary reliability standards mandatory, adopt new or  
12 more stringent mandatory reliability standards, and enforce them. The NERC  
13 adopted more stringent and new mandatory reliability standards pursuant to the  
14 FERC’s authorization and direction. Noncompliance with these reliability  
15 standards subjects electric utilities to enforcement actions and penalties.

16 The FERC further issued various Orders directing the operation and  
17 regulation of electric utility transmission systems and requiring increased  
18 transparency in the planning of transmission systems between electric utilities  
19 and/or any interested stakeholders in the transmission system. Also, in  
20 conjunction with NERC’s transmission planning and reliability activities, the  
21 FRCC has taken an increasingly active role in transmission planning and  
22 reliability from a regional perspective.

1 Compliance with the FERC, NERC, and FRCC orders, reliability standards,  
2 and planning coordination initiatives requires Transmission to implement new  
3 processes and augment existing planning processes. Transmission must also  
4 incur capital and O&M expenses to comply with these standards and initiatives.  
5

6 **Q. Can you explain how these federal regulatory directives or initiatives have**  
7 **influenced PEF's transmission planning?**

8 A. Yes, I can. The most straight-forward impact results from the NERC designation  
9 as the ERO with increased control over transmission reliability. The NERC  
10 adopted and the FERC approved more stringent transmission reliability standards.  
11 An administrative process and potentially significant fines follow from  
12 noncompliance with these standards. To comply with these NERC reliability  
13 standards, PEF must plan for and invest in Transmission capital projects that,  
14 absent these standards, are not mandatory and therefore required.

15 Additionally, FERC Order 890 establishes Nine Principles of Transmission  
16 Planning. These principles mandate more transparency in the transmission  
17 planning process and require additional administrative processes and increased  
18 regulatory scrutiny to ensure that transparency is achieved. PEF has historically  
19 been open and helpful in the transmission planning process with PEF's customers,  
20 and with the NERC and FRCC, but the additional administration and regulatory  
21 scrutiny means additional cost to PEF in the transmission planning process for both  
22 PEF's internal transmission planning analyses and analyses performed in joint  
23 planning efforts with other utilities.

1           The increased federal activity in transmission planning and reliability  
2 through the FERC and the NERC has also led to additional transmission planning  
3 and reliability activity at the regional level. Within Florida, the FRCC provides  
4 technical assistance to identify the reliability need for large transmission projects.  
5 As the NERC's activity in transmission planning has increased so has the FRCC's,  
6 resulting in a several-fold increase in the FRCC reliability workload since the  
7 beginning of 2005. The increased FRCC activity resulted in increased findings of  
8 the need to construct transmission capital projects to mitigate reliability excursions  
9 from FRCC and NERC criteria. These findings translate into increased  
10 transmission costs for PEF.

11           Finally, the FRCC's increased activity in transmission reliability planning  
12 has led the FRCC to focus on the reliability of the PEF 69 kV system. PEF  
13 presently has over 2,000 circuit miles of 69 kV lines serving dozens of PEF and  
14 Rural Electric Cooperative substations. A significant portion of the 69 kV system  
15 provides flow-through, grid-related reliability support, and thus it functions  
16 practically the same as the Bulk Electric System ("BES"). Thus, the 69 kV system  
17 is important to the reliability of PEF's system even though it is not covered by any  
18 existing NERC standard. PEF has continually invested in the 69 kV system to  
19 maintain its reliability because of its importance to PEF's overall system and  
20 customers. With the additional emphasis that the FRCC has placed on the 69 kV  
21 system, PEF is making even further investments in that system.  
22

1       **Q. You also mentioned state regulatory initiatives that have impacted PEF's**  
2       **transmission capital and O&M requirements. Can you explain what those**  
3       **state regulatory initiatives are?**

4       A. Yes. The Commission has issued two Orders and enacted Rule 25-6.0342,  
5       Florida Administrative Code (F.A.C.), to require Florida investor owned utilities  
6       ("IOUs") to harden their systems against potential storm outages and damage. In  
7       February 2006, the FPSC issued Order No. PSC-06-0144-PAA-EI, requiring all  
8       Florida IOUs to implement an eight-year wood pole inspection cycle program.  
9       Consequently, PEF now files a Wood Pole Inspection Plan every three years with  
10      an inspection report submitted annually. The annual reports contain 1) the  
11      methods PEF used to determine National Electrical Safety Code ("NESC")  
12      compliance, 2) an explanation of the inspected poles selection criteria including  
13      geographic location and the rationale for including each selection criterion, 3)  
14      summary data and results of PEF's previous wood pole inspections addressing  
15      the strength, structural integrity and loading requirements, and 4) the cause for  
16      the poles failing inspection and actions taken by PEF to correct each pole failure.

17               In April 2006, the Commission also issued Order No. PSC-06-0351-PAA-  
18      EI, requiring all IOUs to file plans and estimated implementation costs for ten  
19      ongoing storm preparedness initiatives identified by the Commission. PEF  
20      consequently filed its Storm Preparedness Plan on June 1, 2006. PEF's Plan  
21      implemented processes meeting the requirements of the Commission's ten storm  
22      preparedness initiatives. In February 2007, the Commission enacted Rule 25-



1 6.0342, F.A.C. This rule mandates various storm hardening requirements for  
2 Florida electric utility transmission and distribution systems.

3 The Rule requires, at a minimum, that each IOU's storm hardening plan  
4 address the following: (1) Compliance with the NESC; (2) Extreme wind loading  
5 (EWL) standards for: (i) new construction, (ii) major planned work, including  
6 expansion, rebuild, or relocation of existing facilities, and (iii) critical  
7 infrastructure facilities and along major thoroughfares; (3) Mitigation of damage  
8 due to flooding and storm surges; (4) Placement of facilities to facilitate safe and  
9 efficient access for installation and maintenance; (5) A deployment strategy  
10 including: (i) the facilities affected, (ii) technical design specifications,  
11 construction standards, and construction methodologies, (iii) the communities and  
12 areas where the electric infrastructure improvements are to be made, (iv) the  
13 impact on joint use facilities on which third-party attachments exist, (v) an  
14 estimate of the costs and benefits to the utility of making the electric  
15 infrastructure improvements, and (vi) an estimate of the costs and benefits to  
16 third-party attachers affected by the electric infrastructure improvements; and (6)  
17 Attachment standards and procedures for third-party attachers.

18 On May 7, 2007, PEF filed its 2007 Electric Infrastructure Storm Hardening  
19 Plan (Docket No. 070298-EI). This Plan consolidated the requirements of the  
20 previous Orders and the new Rule into a single plan. As a result, PEF is meeting  
21 all storm hardening requirements and initiatives for its transmission system, at  
22 additional capital and O&M cost to PEF.  
23

1 **IV. TRANSMISSION CAPITAL AND O&M REQUIREMENTS.**

2 **Q. What are PEF's transmission capital and O&M expenditure requirements**  
3 **for 2010?**

4 A. PEF requires \$185.2 million in transmission capital spending and \$45.3 million in  
5 O&M expenses.

6  
7 **Q. How much of the required transmission capital spending is required by**  
8 **NERC and FRCC reliability initiatives and expansion?**

9 A. \$140.3 million of the \$185.2 million in transmission capital spending is allocated  
10 for planning, engineering, and construction expenditures for expansion of the  
11 PEF transmission system for NERC reliability initiatives and additional  
12 generation. The scope of PEF's transmission work required by the NERC  
13 Standards, in particular the NERC Transmission Planning (TPL) Standards, has  
14 increased significantly. PEF has successfully managed this increase in scope by  
15 recently completing several major capital projects and remaining on schedule to  
16 complete many others. Examples include the Vandolah - Hardee 230 kV line  
17 upgrade and the Lake Bryan - Windmere 230 kV circuit number 2 construction  
18 and circuit number 1 rebuild. Implementation of these projects and others assist  
19 PEF in complying with the NERC TPL standards, increase the reliability of the  
20 grid in the Central Florida area, and demonstrate our continuing commitment to  
21 our customers and stakeholders to provide reliable transmission service in  
22 compliance with regulatory reliability standards. My Exhibit No. \_\_\_ (JDO-2),

1 has a more detailed list of PEF NERC compliance-related transmission projects  
2 in Section A of that Exhibit.

3 PEF is also expanding its transmission system to accommodate new  
4 generation on the system and additional transmission reliability needs. Sections  
5 B and C of my Exhibit No. \_\_\_\_ (JDO-2) provide detailed lists of major  
6 transmission projects relating to the generation additions and other major  
7 transmission reliability needs. Additionally, PEF is building additional new 69  
8 kV lines or rebuilding existing ones. All new 69 kV construction is built to 115  
9 kV specifications to provide increased reliability and performance. As I  
10 explained, PEF's additional investment in its 69 kV system in part satisfies the  
11 FRCC's interest in enhanced reliability of the 69 kV system. PEF's major 69 kV  
12 transmission capital projects are listed in Section D of Exhibit No. \_\_\_\_ (JDO-2).

13  
14 **Q. How did PEF determine that these transmission projects were required?**

15 A. Each calendar year, transmission planning performs analyses for the long-term,  
16 ten-year transmission planning cycle, i.e. beginning one year out from present  
17 day through year ten. These analyses are performed from three distinct planning  
18 perspectives. First, the analyses by transmission planning must demonstrate that  
19 the PEF system will be in compliance for the ten-year planning period with the  
20 mandatory NERC reliability standards, specifically NER Reliability Standards  
21 TPL-001-0, TPL-002-0, TPL-003-0, TPL-004-0 and FAC-010-2. If the analysis  
22 shows that the PEF system deviates from these standards PEF must initiate either

1 an operational mitigation strategy or a new transmission capital project to bring  
2 the system back in compliance with the standards.

3 Second, an analysis is performed to demonstrate transmission system  
4 compliance with FRCC reliability standards. This analysis is similar to the  
5 analysis performed to ensure system compliance with the NERC reliability  
6 standards. The primary difference between the two analyses is that the FRCC  
7 treats the 69 kV system as if it is part of the BES. The lower bound under current  
8 NERC Reliability Standards is 100 kV. Third, additional analysis is performed to  
9 address the interconnection of new retail delivery points, such as new residential  
10 or commercial developments that require capital expansion of PEF's existing  
11 transmission system.

12 After these analyses are complete, PEF's transmission planning process  
13 requires the review of proposed transmission projects by other PEF areas affected  
14 by the proposal for feasibility and possible alternatives, if necessary. PEF's  
15 Project Review Group (PRG) subjects proposed transmission projects to multiple  
16 phases of review before a project is approved and included in the Transmission  
17 capital budget. All transmission capital projects are therefore carefully reviewed  
18 and scrutinized to ensure they are needed to provide customers with reliable  
19 transmission service at a reasonable cost.

20  
21 **Q. How much of the required transmission capital is for maintenance capital**  
22 **expenditures?**

1 A. PEF needs \$44.9 million for maintenance capital expenditures. Required  
2 maintenance capital expenditures are generally based on assessments of our  
3 system performance the previous year, with priority assigned to replace  
4 transmission capital property units according to age, condition, and significance  
5 with respect to system reliability. Additional maintenance capital work is  
6 required to comply with NERC TPL reliability activities. Further, PEF must  
7 perform maintenance capital work as part of its storm hardening plan to comply  
8 with the Commission's storm preparedness initiatives in the storm hardening  
9 orders and rule. In sum, PEF prioritizes maintenance capital expenditures to  
10 deliver the most cost-effective, reliable power that its customers already enjoy  
11 and have come to expect, consistent with federal and state regulations, initiatives,  
12 and policies.

13 PEF's \$44.9 million maintenance capital expenditures include \$16.8 million  
14 for line improvements. An additional \$12.9 million is for emergency spare  
15 power transformers, \$12.0 million is for substation equipment replacement and  
16 refurbishment, and \$3.2 million is for needed vehicle replacements, operating  
17 system upgrades, tools and test equipment. All of these maintenance capital  
18 expenditures are required to replace aging infrastructure, strengthen the  
19 transmission grid, and enhance the operation of our system, resulting in safe and  
20 reliable service to the Company's customers.

21  
22 **Q. Please explain PEF's required transmission O&M expenses.**

1 A. PEF needs \$45.3 million for transmission O&M expenses. This funding is  
2 needed to perform required maintenance to maintain reliability and to satisfy  
3 federal and state regulatory requirements and policies.

4 For example, PEF has undertaken measures to significantly increase its tree-  
5 trimming initiatives in order to comply with NERC Standard FAC-003-1.  
6 Enhanced vegetation management is also an aspect of the Commission's storm  
7 hardening initiatives. Vegetation management within and adjacent to existing  
8 transmission corridors is a critical component of transmission maintenance,  
9 assuring the safe and reliable operation of the transmission system. It includes  
10 tree trimming, hand cutting, mowing, danger tree removal, a proactive herbicide  
11 program and aerial patrols to assess system conditions. The \$45.3 million O&M  
12 costs includes a \$2.1 million increase to the transmission vegetation management  
13 program as compared to benchmark spending, bringing the overall program  
14 spending up to \$9.3 million for 2010.

15 PEF has also undertaken major initiatives to maintain relays, instrument  
16 transformers, Special Protection Systems (SPSs), Under-Voltage Load Shedding  
17 Schemes (UVLS), Under-Frequency Load Shedding Schemes (UFLS) and  
18 substation control house battery banks to comply with the NERC Protection and  
19 Control (PRC) Standards. Additional maintenance capital is required for  
20 substation maintenance, the inspection of transmission lines, dispatch load, and  
21 planning the transmission system. Also included in the \$45.3 million O&M  
22 expenses are specific reliability initiatives of \$2.0 million for line bonding and  
23 grounding, bushing replacements, and cap and insulator replacements. These

1 reliability programs are incremental to base funding and assist PEF in preventing  
2 outages before they occur, enabling PEF to continue to deliver the cost-effective,  
3 reliable power to our customers that they expect.

4  
5 **Q. Are PEF's required 2010 Transmission capital and O&M expenses**  
6 **reasonable?**

7 A. Yes, they are reasonable and necessary for PEF to continue to provide reliable  
8 transmission service to its customers in compliance with NERC and FRCC  
9 reliability standards and the Commission's storm hardening initiatives.

10 PEF's O&M expenses are further reasonable and necessary because they  
11 are \$ 0.03 million or 0.0% above the Commission O&M benchmark cost of \$38.4  
12 million. This calculation excludes the \$6.9 million PEF will incur to comply with  
13 FERC Order 890. FERC Order 890 did not exist in 2006 and therefore these  
14 costs were not and could not be included in the base costs for the Commission's  
15 O&M benchmark test. Further, because PEF must incur these costs to comply  
16 with a FERC Order, they are beyond PEF's control.

17 PEF's required O&M expenses will support basic operation and  
18 maintenance activities to strengthen the grid and enhance the operation of our  
19 system. These expenditures are therefore reasonable and necessary to ensure  
20 compliance with NERC and FRCC Reliability Standards, to comply with  
21 Commission storm hardening initiatives, and to provide excellent customer  
22 service.

1 Q. Does this conclude your testimony?

2 A. Yes.

3

4



**MINIMUM FILING REQUIREMENT SCHEDULES**  
**Sponsored, All or in Part, by J. Dale Oliver**

<u>Schedule</u>	<u>Schedule Title</u>
B-7	Plant Balances by Account and Sub-Account
B-8	Monthly Balances Test Year – 13 Months
B-9	Depreciation Reserve Balances by Account and Sub-Account
B-10	Monthly Reserve Balances Test Year – 13 Months
B-13	Construction Work in Progress
C-6	Budgeted Versus Actual Operating Income and Expenses
C-8	Detail of Changes in Expenses
C-9	Five Year Analysis – Change in Cost
C-15	Industry Association Dues
C-33	Performance Indices
C-34	Statistical Information
C-35	Payroll & Fringe Benefit Increases Compared to CPI
C-36	Non-Fuel Operation and Maintenance Expense Compare to CPI
C-37	O&M Benchmark Comparison by Function
C-38	O&M Adjustments by Function
C-39	Benchmark Year Recoverable O&M Expenses by Function
C-41	O&M Benchmark Comparison by Function

Project Description	Completion Date	Total Project Capital Cost
<b>Section A: Major NERC Compliance-related Transmission Capital Projects:</b>		
Avalon – Gifford 230 kV line	May 2010	\$39M
Dundee – West Lake Wales 230 kV circuit #1 rebuild and circuit #2	Nov 2009	\$22M
Dundee – Intercession City 230 kV circuit #1 rebuild and circuit #2	June 2010	\$41M
Avon Park to Ft Meade 115 kV line – convert to 230 kV	May 2009	\$20M
Central Florida South – Install new Substation with one (1) 500/230 kV Transformer	Nov 2014	\$28M
Dale Mabry to Zephyrhills North – install new 230 kV Line	Oct 2014	\$67M
Hines – West Lake Wales – Install 2 <sup>nd</sup> 230 kV circuit	May 2012	\$20M
Northeast to Disston – Install new 230 kV line, one (1) new 230/115 kV Transformer at Disston	Oct 2011	\$17M
Disston – 40 <sup>th</sup> Street – Install New 230 kV Line	May 2014	\$20M
Brooksville West – Install 2 <sup>nd</sup> 230/115 kV Transformer	May 2011	\$8M
Quincy – Havana – Rebuild existing 115 kV line to higher ampacity	May 2012	\$12M
Havana – Bradfordville – Rebuild existing 115 kV line to higher ampacity	May 2013	\$11M
Brooksville West – Brooksville 115 kV – Rebuild both circuits to higher ampacity	Nov 2012	\$12M

Project Description	Completion Date	Total Project Capital Cost
<b>Section B: Major Transmission Projects affiliated with the Bartow Repowering Project:</b>		
Bartow Plant – Northeast – install three (3) new 230 kV underground cables	March 2009	\$80.2M
Bartow – Substation Termination work for Cables	August 2008	\$18.6M
Northeast – Substation Termination work for Cables, and replace Northeast 230/115kV 224 MVA Transformer Banks 4 and 5 with 300 MVA Banks	March 2009	\$17.6M
51 <sup>st</sup> Street Substation – Loop in 40 <sup>th</sup> Street – Pasadena 230 kV line, add new 230/115 kV 300 MVA Transformer	June 2009	\$12.3M
Northeast – 32 <sup>nd</sup> Street – install one (1) new 115 kV line	March 2009	\$3.8M
32 <sup>nd</sup> Street – Gateway 115 kV – Install mid-span poles	October 2008	\$1.0M
Northeast – 40 <sup>th</sup> Street 230 kV line – Rebuilding existing line to higher ampacity	March 2009	\$7.7M
<b>Section C: Other Major 500 kV and 115 kV Transmission Projects:</b>		
West Leon – Install New 115/69 kV Substation	May 2012	\$15M
Hancock Road – Install new 230/69 kV Substation	May 2012	\$18M
Bushnell East – Install new Substation with one (1) 230/69 kV Transformer	May 2012	\$20M
Bithlo – Install 230/69 kV Transformer and loop in FPL 230 kV line	April 2010	\$26M
<b>Section D: Major 69 kV Transmission Capital projects:</b>		
Port St. Joe to Apalachicola – Install New 69 kV	June 2011	\$21M
Apalachicola – Eastpoint – Rebuild existing 69 kV	May 2015	\$20M

Project Description	Completion Date	Total Project Capital Cost
circuit to Double-Circuit		
Perry – Smith Tap – Luraville – Rebuild existing 69 kV circuits to higher ampacity	Feb 2011	\$11M
Fort White – Luraville – O’Brien – Rebuild existing 69 kV circuits to higher ampacity	June 2013	\$18M
Carrabelle – Eastpoint – Rebuild existing 69 kV circuit to higher ampacity	May 2014	\$16.5M
Chiefland – Install New 69 kV Switching Sub and loop in 69 kV lines	May 2013	\$9M
Turnpike – Install New 230/69 kV Substation and new Turnpike – Okahumpka 69 kV Line	May 2014	\$15M
Holder – Install 2 <sup>nd</sup> 230/69 kV Transformer and 2 <sup>nd</sup> Holder – Dunnellon 69 kV line	Nov 2010	\$20M
Hull Road – GE Alachua – Rebuild existing 69 kV circuit to higher ampacity	Oct 2012	\$25M