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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KENT D. HEDRICK

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 030007-EI

AUGUST 8, 2003

Q. Please state your name and business address,

A. My name is Kent D. Hedrick. My business address is Post Office Box 14042,
St. Petersburg, Florida 33733.

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

A. I am employed by Progress Energy Florida as Supervisor of Environmental
Services.

Q. What is the scope of your duties?

A. Currently, my responsibilities include management of the environmental
compliance functions and activities for Progress Energy Florida (PEF or
“Company”).

Q. Please describe your educational background and professional experience.

1 **A.** I received a Bachelors of Science degree in Environmental Engineering from the
2 University of Florida. In addition, I am a registered professional engineer in the
3 State of Florida. I was just recently promoted to Supervisor of Environmental
4 Services. Before then, I held several environmental management positions with
5 the Company.

6

7 **Q.** **What is the purpose of your testimony?**

8 **A.** The purpose of my testimony is to explain material variances between the
9 Estimated/Actual project expenditures and the original cost projections for
10 environmental compliance costs associated with PEF's Substation and
11 Distribution System Environmental Investigation, Remediation, and Pollution
12 Prevention Programs for the period January 2003 through December 2003. The
13 Commission approved the Substation and Distribution System Programs last
14 year in response to a new Florida Department of Environmental Protection
15 (DEP) interpretation of its authority to regulate clean up of contaminated soils.
16 *See*,PSC Order No. PSC-02-1735-FOF-EI.

17

18 **Q.** **Are you sponsoring any exhibits in support of your testimony?**

19 **A.** Yes. I am sponsoring Exhibit No. ____ (KDH-1), which is a short-form consent
20 order that PEF and DEP entered to address investigation and remediation of
21 Substation System sites, and Exhibit No. ____ (KDH-2), which is a Substation
22 Inspection Plan that PEF has submitted in accordance with the DEP consent
23 order.

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Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Substation System Program for the period January 2003 to December 2003.

A. Project expenditures for the Substation System Program are estimated to be \$423,260 higher than originally projected. This is due primarily to the need to perform DEP-mandated remediation activities that could not be projected at the time of last year's filing, as well as new requirements imposed in a June 2003 DEP consent order that addresses contamination resulting from transformer leaks at the Company's substations.

In last year's filing, PEF included projected costs of \$30,000 for development of new components of its Environmental Management System and \$20,000 for soil and groundwater investigations at substation sites for the period January 2003 to December 2003. Although there were ongoing DEP investigations at several substation sites, no remediation costs were included in the 2003 projections because neither DEP nor the Company at that time had identified the need for specific remediation activities at substation sites. As a result of detailed assessments required by DEP, however, the Department subsequently required PEF to proceed with remediation activities at six substation sites (Lake Tarpon, Ulmerton, Kenneth City, 40th Street, South Bartow, and Six Mile Creek) during 2003. The assessments and remediation activities at these six substations began in December 2002 and concluded in July 2003. Actual costs of \$322,725 for

1 the site assessment and remediation activities at these six substations has been
2 included in the Estimated/actual cost expenditures for the Substation System
3 Program for the period January 2003 through July 2003.

4

5 In addition, since last year's filing, DEP and PEF entered into a short-form
6 consent order addressing transformer leaks at substation sites. (A copy of the
7 consent order is attached as Exhibit ___ (KDH-1)). In accordance with the
8 consent order, the Company has submitted a Substation Inspection Plan calling
9 for inspection of all remaining PEF substation sites (other than the six already
10 remediated) to determine whether soil and/or groundwater remediation is
11 required at those sites. (A copy of the Substation Inspection Plan is attached as
12 Exhibit ___ (KDH-2)). Under the schedule proposed in the Substation
13 Inspection Plan, all inspections are expected to be completed within 180 days
14 from DEP's approval of the Plan. Although DEP has not yet formally approved
15 the Substation Inspection Plan, we expect DEP approval at any time. In the
16 interim, based on discussions with DEP, we are operating under the assumption
17 that all inspections must be completed by December 2003. Accordingly, the
18 Estimated/actual cost expenditures for the period January 2003 to December
19 2003 include the estimated costs of performing the additional substation
20 inspections at a cost of \$200 per station. In addition, the Estimated/Actual cost
21 expenditures include estimated costs for the development of an electronic
22 Environmental Data Management Tracking System as originally contemplated
23 and needed to ensure compliance with the requirements of the consent order.

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Q. Please explain the variance between the Estimated/Actual project expenditures for the Distribution System Program and the original projections for the period January 2003 to December 2003.

A. Project expenditures for the Distribution System Program are estimated to be \$10,896,455 higher than originally projected. This variance is due to increased estimates of the magnitude and extent of contamination at Distribution System sites, as well as increased cost estimates for associated investigation and remediation activities.

In last year's filing, PEF's cost projections for remediation activities to be performed as part of the Distribution System Program were based on an estimated cost of \$1,850 per site. Since that time, PEF has been working with the DEP to finalize the investigation and remediation procedures and criteria for distribution system transformer sites being investigated as part of the Company's ongoing TRIP Program. Rather than address the procedures and criteria separately within each DEP district, the Department has agreed to work with the company to develop a master Environmental Remediation Strategy for the scope of soil and groundwater remediation for the TRIP Program.

In February 2003, PEF submitted a proposed Environmental Remediation Strategy for the TRIP Program. Since that time, the Company and DEP have had continuing discussions regarding the level of cleanup to be required under

1 the Environmental Remediation Strategy. DEP has not formally approved the
2 Environmental Remediation Strategy, but is expected to do so by September,
3 2003. Based on our discussions with DEP, PEF anticipates that DEP will, for
4 the first time, require the Company to perform investigation and remediation
5 activities that will result in documented cleanup of all contaminated soils to
6 specific SCTL levels for total recoverable petroleum hydrocarbons (TRPH). We
7 also expect that DEP will require PEF to perform new procedures to detect the
8 presence of lead in the coating used at the distribution system sites and, if lead is
9 present, to document the removal of lead contamination in soils to below the
10 applicable SCTL.

11
12 Application of SCTLs to PEF's distribution system sites will require additional
13 sampling procedures and a significantly greater degree of cleanup than had been
14 envisioned at the time the Company sought approval for the Distribution System
15 Program. As a result, the Company now projects a significant increase in the
16 original estimate of the magnitude and extent of contamination, as well as a
17 significant increase in the associated costs of investigation and remediation
18 activities. The unit cost for investigation and remediation activities is now
19 estimated to be \$8,500 per site on average, rather than \$1,850 per site as
20 originally projected. This increased unit cost is the primary reason for the
21 variance between the original projections and the Estimated/Actual project
22 expenditures for the Distribution System Program.

23

1 Q. Does this conclude your testimony?

2 A. Yes.



Jeb Bush
Governor

Department of Environmental Protection

Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

David B. Struhs
Secretary

June 4, 2003

By HAND DELIVERY

Sarah S. Rogers, P.E.
Vice President, Transmission
Progress Energy Florida
3300 Exchange Place
Lake Mary, FL 32746-5413

Re: Proposed Settlement by Short Form Consent Order of
Progress Energy Florida Substations
OGC File No.: 03-0771

Dear Ms. Rogers:

The purpose of this letter is to complete the resolution of the matters previously identified by the Department in the Warning Letters dated September 12, 2002, (248604 Southwest District), and November 4, 2002, (OWL-HW-C/E-02-029, Central District) copies of which are attached. The Department finds that you are in violation of the rules and statutes cited in the attached Warning Letters.

In order to resolve the matters identified in the attached Warning Letters, you are assessed civil penalties in the amount of \$16,274.00, along with \$1,000.00 to reimburse Department costs, for a total of \$17,274.00. The civil penalty in this case includes one violation with a penalty of \$2,000.00 or more. Payment shall be sent to the Department of Environmental Protection, Central District, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767, within 30 days of the Department countersigning this letter. Payment must be made by cashier's check or money order. The instrument shall be made payable to the "Department of Environmental Protection" and shall include thereon the OGC number assigned to this Consent Order and the notation "Ecosystem Management and Restoration Trust Fund".

In addition, Progress Energy Florida (PEF) shall implement Best Management Practices (BMPs), Inspection Plans, Substation Waste Disposal Plans, and Remedial Action Plans (Plans) in order to address those areas of non-compliance determined during the inspections as described in both of the attached Warning Letters. The schedule for developing and implementing such BMPs and Plans is set forth in Exhibit "A." All BMPS, Plans and related documents shall be sent to Douglas Outlaw, Department of Environmental Protection, Hazardous Waste Regulation Section, 2600 Blairstone Road, MS #4560, Tallahassee, Florida 32399-2400.

"More Protection, Less Process"

Printed on recycled paper.

SHORT FORM CONSENT ORDER
June 4, 2003
Page 2

The Department reserves the right to conduct enforcement on PEF for violations of applicable law, rule, or this Order, if PEF does not submit Plans or, once approved, implement the Plans in the manner and within the time frames specified in Exhibit A. In any administrative proceeding instituted by the Department pursuant to Sections 120.569 and 120.57, Florida Statutes (F.S.), in which the Department alleges that Respondent is in violation of applicable law or rule, the Department shall have the burden of proof. Correspondingly, PEF reserves all of its rights and defenses, under Chapter 120, F.S., or otherwise, to respond to any such Department enforcement action. With regard to any agency action taken by the Department concerning submission or implementation of the Plans submitted by the Respondent to the Department as required by Exhibit A, the Respondent may file a Petition for Formal or Informal Administrative Hearing. The Respondent shall have the burden of proving that the Department's determination was unreasonable or inappropriate. If both parties agree, the Department and PEF may mediate any dispute as provided in Section 120.572, F.S. If the parties agree to mediation, the time for filing a petition for a formal administrative hearing under Chapter 120, F.S., pursuant to this paragraph, is tolled until such time as the mediation is unsuccessful. No penalties shall accrue against PEF after the parties agree to mediation and until such time that PEF receives notice from the Department that the mediation is unsuccessful. PEF shall have 21 days from receipt of such notice within which to file its petition for formal administrative hearing as referenced herein.

Your signing this letter constitutes your acceptance of the Department's offer to resolve this matter on these terms. If you elect to sign this letter, please return it to the Department at the address indicated above. The Department will then countersign the letter and file it with the Clerk of the Department. When the signed letter is filed with the Clerk, the letter shall constitute final agency action of the Department, which shall be enforceable pursuant to Sections 120.69 and 403.121, F.S.

Florida Power Corporation d/b/a Progress Energy Florida, Inc. does not admit, by signature of this letter, or actions taken hereunder, that it has violated any statute or rule promulgated by the Department or the U.S. Environmental Protection Agency. The parties are entering into this Consent Order to complete settlement of the violations alleged by the Department.

If you do not sign and return this letter to the Department at the District address by June 4, 2003, the Department will assume that you are not interested in settling this matter on the above described terms, and will proceed accordingly. None of your rights or substantial interests are determined by this letter unless you sign it and it is filed with the Department Clerk.

Sincerely,



Vivian F. Garfein
Director, Central District

SHORT FORM CONSENT ORDER
June 4, 2003
Page 3

FOR THE RESPONDENTS:

I, Sarah S. Rogers, on behalf of Progress Energy Florida, **HEREBY ACCEPT THE TERMS OF THE SETTLEMENT OFFER IDENTIFIED ABOVE.**

By: *Sarah S. Rogers*

Date: 6/4/03

.....
FOR DEPARTMENT USE ONLY

DONE AND ENTERED this 4th day of June, 2003.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Vivian Garfein
Vivian Garfein
Director, Central District

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to
§120.52, Florida Statutes,
With the designated Department
Clerk, receipt of which is hereby
Acknowledged.

A. Salonde 6/4/2003
Clerk Date

Copies furnished to:

ATTACHMENT A

**PREPARATION SCHEDULE for
 INSPECTION, WASTE DISPOSAL, and
 REMEDIAL ACTION PLANS and
 BEST MANAGEMENT PRACTICES at
 PROGRESS ENERGY FLORIDA SUBSTATIONS**

Inspections were conducted at Florida Power Corporation d/b/a/ Progress Energy Florida, Inc. (PEF) substations in 2002 by the Florida Department of Environmental Protection (FDEP) in four FDEP districts (Northeast, Central, Southwest and South). As agreed with FDEP, PEF is developing and implementing Best Management Practices (BMPs) to prevent and detect the release of dielectric fluids and other pollutants, if any, at substations and Inspection, Waste Disposal and Remedial Action Plans (Plans) to address remediation of past, present and future releases of dielectric fluid and other pollutants, if any, to the environment. The BMPs will upgrade maintenance, release prevention, and internal inspection programs. The Plans will address sampling activities, remedial action planning, waste profiling, and waste disposal activities at PEF substations and include reasonable timeframes for completing each task in the Plans. The BMPs and the Plans (as indicated below) will be submitted for review and approval by the FDEP and will be implemented consistently at all PEF owned or maintained substations located within Florida. Below is a list of proposed Plans and BMPs, along with a schedule for preparation and submittal of these documents to FDEP for approval. Each Plan and BMP will include implementation details along with an implementation schedule. FDEP will provide comments, as necessary, to PEF within 60 days of receipt of the proposed Plans and BMPs. Within 30 days of receipt of comments from the FDEP, PEF will submit appropriately modified plans, as necessary, to the FDEP for approval. The releases of dielectric fluid and other pollutants if any, from operations and maintenance shall be remediated to applicable Department approved standards or target levels, taking into account Risk-Based Corrective Action concepts or principles as they may be applicable to any PEF substations.

<i>Plan/BMP Title</i>	<i>Submittal Date</i>
Release Prevention BMP (submitted on 2/28/03)	February 28, 2003
Substation Operation and Maintenance BMP (submitted on 2/28/03)	March 15, 2003
Substation Inspection Plan	30 days after Consent Order effective date
Substation Waste Disposal Plan	30 days after Consent Order effective date
Substation Assessment and Remedial Action Plan	60 days after Consent Order effective date

BEST MANAGEMENT PRACTICES Progress Energy Florida substations

Progress Energy Florida is addressing release prevention of dielectric fluid at substations by development and implementation of Best Management Practices (BMPs) to prevent and detect the release of dielectric fluids. The development and implementation of these BMPs are consistent with PEF's Environmental Management System (EMS) and environmental policy. The policy includes commitments to comply with applicable environmental laws and regulations, pollution prevention, and to be prepared to act effectively and in a timely fashion in the event of an environmental emergency. The BMPs will upgrade maintenance, release prevention, and internal inspection programs. BMPs will be continually reviewed and updated as appropriate. In the future, additional BMP's will be developed and implemented as needed.

Release Prevention Best Management Practices

The following BMPs are included in our plan of action pertaining to release prevention of dielectric insulating fluid at substations:

- Spill Prevention, Control, and Countermeasure (SPCC) Plans have been developed for all substation sites located near navigable waters. Installation or improvements of containment structures are being conducted at 78 substations. As a BMP, plans have also been developed for all other substations determined not to require SPCC plans.
- Major and minor alarm systems are in place to alert crews to substation equipment problems that could result in equipment failure and a release of dielectric fluid. Crews are on-call 24 hours a day/ 7 days a week to respond to alarms and prevent or minimize potential releases.
- Valves and fittings are regularly inspected so that preventative maintenance can be performed on these components before releases to the environment occur.
- Substation maintenance vehicles carry spill control equipment. For example, pads and absorbent materials are used to manage operational leaks and small releases. Shovels are carried to construct earthen berms in the event of larger releases.
- Substation maintenance crews have received Oil Spill Awareness Training and SPCC Training. Additional training, specifically addressing labeling of containers for dielectric insulating fluid and containers for Used Oil has been provided for all substation crews.
- Progress Energy has retained several emergency response contractors that are available 24 hours a day/ 7 days a week to respond to large releases. These contractors are equipped to contain, excavate, and provide temporary storage of excavated materials.
- A regular inspection program for substation equipment has been implemented to minimize the frequency and impact from operational leaks. Equipment is wrapped with absorbent padding or absorbent materials are placed below the equipment to prevent releases to the environment. The equipment and absorbents are monitored to prevent releases to the environment until repairs can be made or an equipment outage can be secured to repair the equipment.

Substation Operation and Maintenance Best Management Practices

Preventative maintenance and system upgrades:

- BMPs include modifications to equipment to minimize the risk of spills. A current modification to transformer tapchanger components prevents a complete discharge of oil and a subsequent failure of the transformer.
- During maintenance activities requiring the transfer of dielectric insulating fluid, BMPs to reduce the risk of releases to the environment include: assigning a person responsible for monitoring the transfer; use of portable containment devices positioned under hose connections, filters, and other locations; use of absorbent pads and wraps; covering storm inlets; and having spill control equipment available in case of accidental release.
- An ongoing program of replacing gaskets on equipment is underway to reduce the frequency of leaks. The composition and design of gasket materials are periodically reviewed with the manufacturer to ensure that the most effective gasket materials are in use.
- Regasketing is conducted during a scheduled outage when equipment is taken out of service for an extended period. When gasket replacement cannot be completed due to electricity demand, operational maintenance procedures such as tightening bolts or reducing nitrogen pressure in the equipment is implemented when appropriate.
- A new, contracted epoxy injection repair has been implemented and found to be effective at reducing leaks at certain gaskets.
- Improvements to existing containment structures or new construction of berms, concrete curbs, or containment walls are being completed at all SPCC substation sites.

Site inspections and testing:

- A regular inspection program for substation equipment has been implemented to minimize the frequency and impact from operational leaks.
- Valves and fittings are regularly inspected so that preventative maintenance can be performed on these components before releases to the environment occur. The Substation Rounds Maintenance Order Form has been revised to include a section specifically addressing equipment leaks and other environmental concerns.
- A BMP for testing or performing an applicable waste determination of excavated material prior to disposal has been implemented.
- An environmental self-assessment program has been implemented to obtain input from substation crews on activities at substations that can have impact on the environment.



SUBSTATION INSPECTION PLAN

Purpose

This Substation Inspection Plan has been prepared in response to the June 17, 2003 Consent Order between Progress Energy Florida and the Florida Department of Environmental Protection. The purpose of the plan is to identify the scope, method, and schedule for conducting inspections of mineral oil discharges at Progress Energy Florida substations. The inspection results will be catalogued and sorted so that substations with mineral oil discharges that could potentially affect human health or the environment can be prioritized for remediation ahead of other substations with mineral oil discharges. The following criteria will be used to prioritize substations for remediation:

- Substation is located adjacent to populated areas
- Substation is located near Waters of the State
- Substation is located near potable water systems or wells
- The number and magnitude of mineral oil discharges onsite

Substation Inspections

The attached Substation Inspection Form (or similar) will be used to conduct each of the inspections at 360+ Progress Energy Substations. The data from the forms will be transferred to a database so that the substations can be prioritized for remediation as described previously.

Reporting

Following completion of the inspections, data tabulation and substation remediation prioritization, a report will be prepared and submitted to FDEP.

Schedule

It is anticipated that the inspections of 360+ substations will take 180 days from plan approval. Data tabulation and report preparation will take an additional 60 days. The substation inspection report will, therefore, be submitted to FDEP within 240 days of plan approval.