

# NERC

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

## NERC Balancing Authority (BA) Certification Review of Progress Energy Florida for Reedy Creek Improvement District

Site Visit Conducted  
December 7-8, 2010  
Progress Energy  
St. Petersburg, Florida

to ensure  
the reliability of the  
bulk power system

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# Introduction

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This report presents the results of the North American Electric Reliability Corporation's (NERC) Balancing Authority (BA) Certification review of Progress Energy Florida (PEF) NCR00063, preparation for the Reedy Creek Improvement District (RCID) NCR00065 to the PEF Balancing Authority footprint.

BAs have a primary responsibility for maintaining the reliability of the Bulk Power System. They accomplish this by directly controlling their generation and/or load resources to continuously balance their actual interchange with their scheduled interchange while regulating and stabilizing the alternating-current frequency of the Interconnection. Acceptable reliability levels can be maintained only if the BAs and other entities which make up the interconnection function in accord with good operating practices and reliability criteria, including planning and operating standards as defined by the NERC Reliability Standards. Good operating practices include, but are not limited to, compliance with the NERC Standards without regard to economic consideration, and burdening neighboring systems.

## Certification Review Team

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Florida Reliability Coordinating Council's (FRCC) and NERC's decision to complete a certification review began the process that is outlined in the NERC Rules of Procedure (RoP) Section 500 and RoP Appendix 5, and a Certification Review Team (CT) was formed. The team rosters for members of both the CT and PEF/RCID team are listed in Attachment 1.

## Objective and Scope

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The objective of this review was to assess the PEF readiness to integrate RCID into an expanded PEF BA footprint. The scope of the review included: (1) Communication capabilities, procedures and protocol between PEF and RCID; (2) Various PEF Energy Management System (EMS) screen shots regarding the RCID footprint; (3) Interviewing PEF system operations personnel; (4) Confirming applicable tie line and generator test data, (5) Reviewing scheduled training programs for PEF and RCID operating personnel, (6) Reviewing applicable agreements for the PEF BA responsibility of RCID. The review was conducted at the PEF control facility in St. Petersburg, FL December 7-8, 2010.

# Overall Conclusion

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The certification review process was completed in reasonable accordance with the aforementioned Rules of Procedure to determine if the applicants have the necessary tools, processes, and procedures to incorporate RCID into the PEF BA footprint and continue to perform the function as a NERC certified BA. The PEF presented to the CT the necessary evidence for its review, as it relates to the scope of this certification review. Therefore, the CT has a reasonable assurance that PEF does have the facilities, staff, tools, processes, and procedures in place to reliably perform the necessary BA services for RCID. Therefore, the CT recommends certification of the expanded BA footprint.

The PEF expanded BA operation is currently slated to begin on or about December 29, 2010.

## Needed for Operation – Expanded Footprint

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The CT recommends to the FRCC-RE and NERC that the expansion of the PEF BA footprint to include RCID to be certified by NERC contingent upon the following work in progress items being completed prior to PEF going operational for the expanded footprint:

- Training completed for all PEF operators
- Agreements fully executed & signed
  - BA
  - Network Operating
  - FRSG
  - Operating agreement PEF & TECO (Studio Sub)
- Final EMS Displays, one lines, and the new tie line
  - Testing Protocol and test results for all EMS changes
- Test results to implement FTMS Data
  - Capacity Assessment
  - Load Forecast
  - Planned Outage
- Assessment of frequency bias changes
  - Implement any necessary changes to ACE equation
- Affirmation that RC is ready for transition
- Testing protocol/data for RTU & point to point
  - Verify RTU accuracy and TECO meter
- Demonstrate ATC/OASIS changes have been revised

## Positive Observations

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In the implementation of the process, the CT had noted a number of positives that stood out to the team, and they are:

- Operator involvement in the change management process
- Reedy Creek's involvement in the BA transition
- Pro-forma approach to agreements
- Toggle date and time
- Project management transition tools

## Company Background

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Progress Energy is a Fortune 500 energy company with more than 22,000 megawatts of generation capacity. Progress Energy includes two major electric utilities that serve about 3.1 million customers in the Carolinas and Florida. PEF operates a control center and Balancing Authority in St. Petersburg, Florida from which it controls its Florida based generation and transmission system. PEF is part of the NERC Florida Reliability Coordinating Council Reliability Area.

RCID is a public corporation of the State of Florida and is located in Orange and Osceola Counties in central Florida, about 15 miles southwest of the City of Orlando. RCID currently encompasses approximately 25,000 acres or 38.6 square miles. Approximately 18,800 acres of RCID's property are located in Orange County and 6,200 acres are located in Osceola County. The approximate peak load being transferred from RCID balancing area to the PEF balancing area is 200MW.

Following the transition on December 29, 2010 at 10:00 AM RCID will cease to be a BA and will become part of the PEF BA responsibility.

## Operating Facility Details

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The PEF Control Center is located in St. Petersburg, Florida. All EMS support (administrative and IT) is located within the perimeter of the control center. The PEF control system consists of an EMS system. The center contains a number of Work Stations with operator interface.

PEF has its primary and backup control systems set up to interface with the operator computer profiles so that the operators can log onto the system from either control center. The PEF EMS is adequate to add RCID's 200 MW load.

# Documentation List

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Electronic copies of all of the supporting evidence provided by PEF were reviewed by the CT at the PEF control center and will be stored by the FRCC-RE per NERC requirements. The supporting evidence is not provided as part of this report. The supporting evidence includes:

- Transition task list
- EMS Screen-print
- Operating agreements
- Training documents
- Interview documents
- Test results
- Various correspondence between FRCC-RE, NERC, PEF, and RCID
- Opening and closing presentations
- Documentation/evidence resulting from the “Needed for Operation” items

## **CIP Requirements**

CIP standards are not in scope for this certification review.

# Attachment 1 - Certification Participants

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## **The BA Certification Team**

- Barry Pagel FRCC-RE
- Jim Dodge FRCC-RE
- Jim Hughes NERC (Lead)
- Linda Campbell FRCC-RE
- Renny Ramai FRCC-RE
- Ryan Stewart NERC
- Tom Bell FRCC-RE

## **The PEF and RCID Personnel that Participated in the On-site Visit**

- Manager – Regional Operations, PEF
- Director – Energy Control, PEF
- Manager – Power Systems Operations, PEF
- Dispatcher – ECC, PEF
- Senior Engineer – Transmission Services, PEF
- Lead Engineer – EMS, PEF
- Senior Engineering Support Specialist – Metering, PEF
- Manager – Transmission Services, PEF
- Lead Engineer – Transmission Services, PEF
- Manager – Electric Operations, RCID