



Standards of Conduct

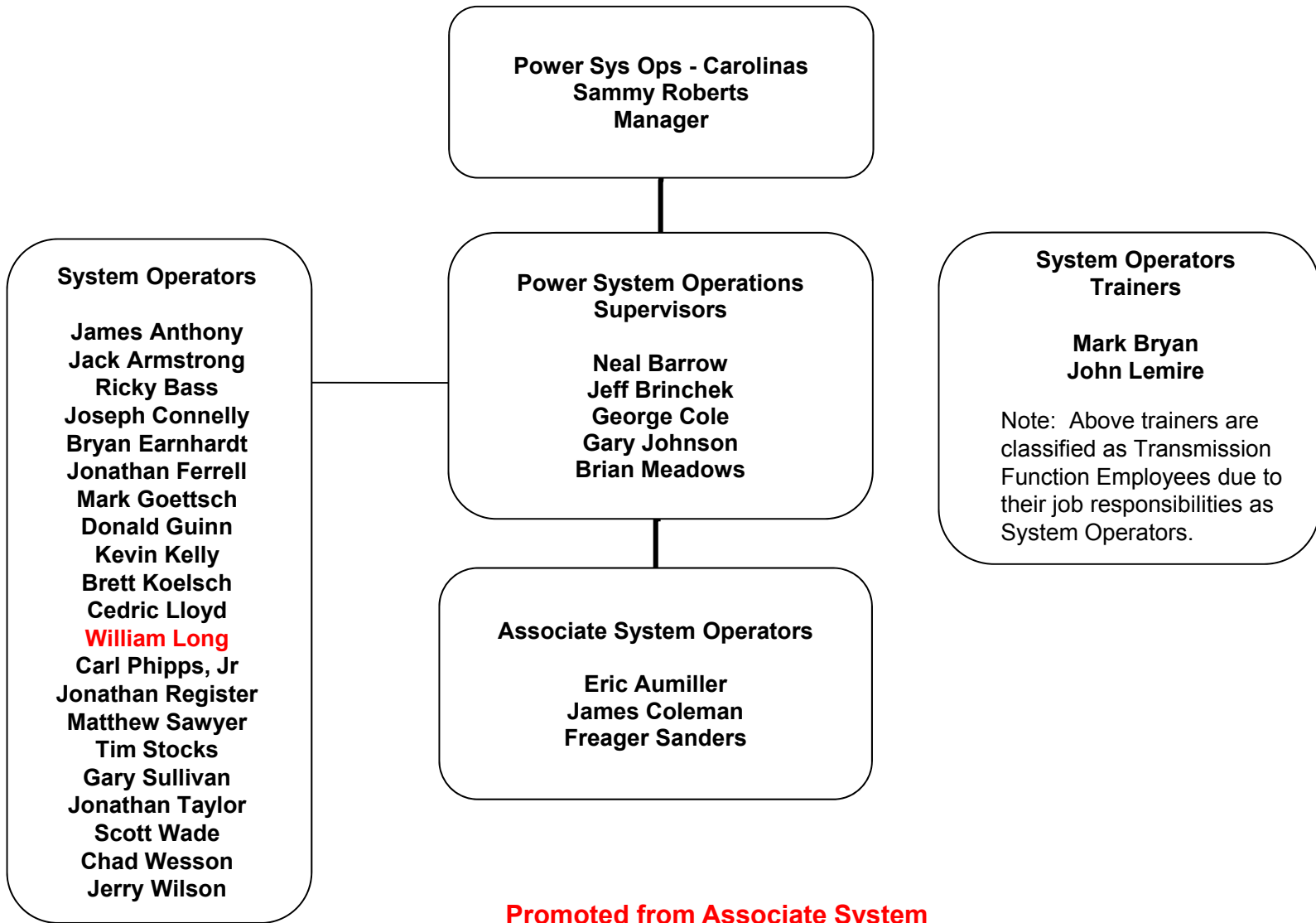
Transmission Function

Employees

10/5/09



Transmission Operations & Planning - Carolinas



Promoted from Associate System Operator to System Operator 7-24-09



Transmission Operations & Planning - Carolinas

Power System Operations - Job Descriptions

Manager Power System Operations-Carolinas

- Coordinate the power system control functions and manpower requirements
- Project system conditions and plan resources for the next seven days
- Responsible for maintaining system reliability and economics
- Oversee OASIS and CP&L's Open Access Transmission Tariff
- Ensure system operation regulatory compliance (FERC/NERC/SERC/NCUC/SCPSC)

Supervisors Power System Operations

- Responsible for overall operations in the control room
- Next day planning, load forecasting
- Unit commitment coordination, reserve planning
- Transmission system reliability

System Operators Automatic Generation Control Desk

- Responsible for running the AGC system
- Coordinating interchange schedules with neighbor control areas
- Coordinating generating resource outputs to match load requirements
- Maintaining proper operating reserves

System Operators Transmission Reliability Desk

- Responsible for the state estimator model solutions, real-time contingency analysis
- Maintaining LOCA voltage support for nuclear plants
- Maintaining system voltage profile

System Operators Transmission Service Desk

- Responsible for the real-time OASIS, the hourly and daily ATC values
- Evaluating non-firm and short-term firm point-to-point transmission requests
- Evaluating and scheduling interchange transaction requests



Transmission Operations & Planning - Carolinas

Power System Operations - Job Descriptions

System Operators Transmission Switching Desk

- Responsible for issuing transmission switching instructions
- Directing field personnel in response to unplanned transmission outages, responding to transmission alarms

Associate System Operators

- In System Operator Qualification Program



Transmission Operations & Planning - Carolinas

**Transmission Services
Mike Anthony
Manager**

**Lead Engineer - Chip Webb
System Operator - Daniel Stephens
Engineer - Paul Darden, Leslie Williams
Eng Tech Supp Spec – Tim West**

Manager Transmission Services

- Coordinate system reliability issues
- Ensure compliance with FERC Orders and OATT
- Ensure compliance with FERC, NERC, SERC and VACAR policies
- Network customer operations contact and coordination
- Provide oversight of Transmission Services personnel and functions
- Support the Reliability Coordinator planning process for the ECC Carolinas
- Business Practices
- Compliance monitoring
- Oversee joint interconnection planning studies with other utilities
- Manage preparation and reporting of budget and long-term financial forecast for system operations
- Manage monthly, quarterly, year-to-date and year-end projected financial reporting and variance analysis for system operations
- Oversee Transmission billing activities
- Oversee administration of the Progress Energy Inc regulated NERC/GADS Database
- Manage system operations analytical, technical and administrative support



Transmission Operations & Planning - Carolinas

Transmission Services - Job Descriptions

Lead Engineer

- Administer generator interconnection agreements
- Administer network integration service applications and network operating agreements
- Ensure proper implementation of OATT
- FERC Form 715 Filing
- Business Practices
- Support the Transmission Operations & Planning Department with scheduling projects
- Transmission Service request disposition

System Operator / Engineer

- Perform transmission/generation outage reliability studies
- Perform summer and winter operating studies
- Provide switching instructions to the control room
- Long term ATC calculations (13 months beyond next peak season)
- Perform generation/transmission outage reliability studies
- Short term ATC Calculations (through next peak season)
- Support the Reliability Coordinator planning process for the ECC
- Transmission Service request disposition
- Provide the control room with operating procedures
- Progress Energy Carolina's Representative to the ERAG & SERC NT-PFSG Study Group which develops power flow models for use in conducting interconnection operating and future year studies
- Provide long term ATC back-up and ERAG & SERC NT-PFSG support
- Coordinate ECC reliability drills
- Provide the control room with operating procedures
- Update General Load Reduction Plan
- Daily submittal of SDX data
- Monthly and quarterly submittal of SERC compliance data



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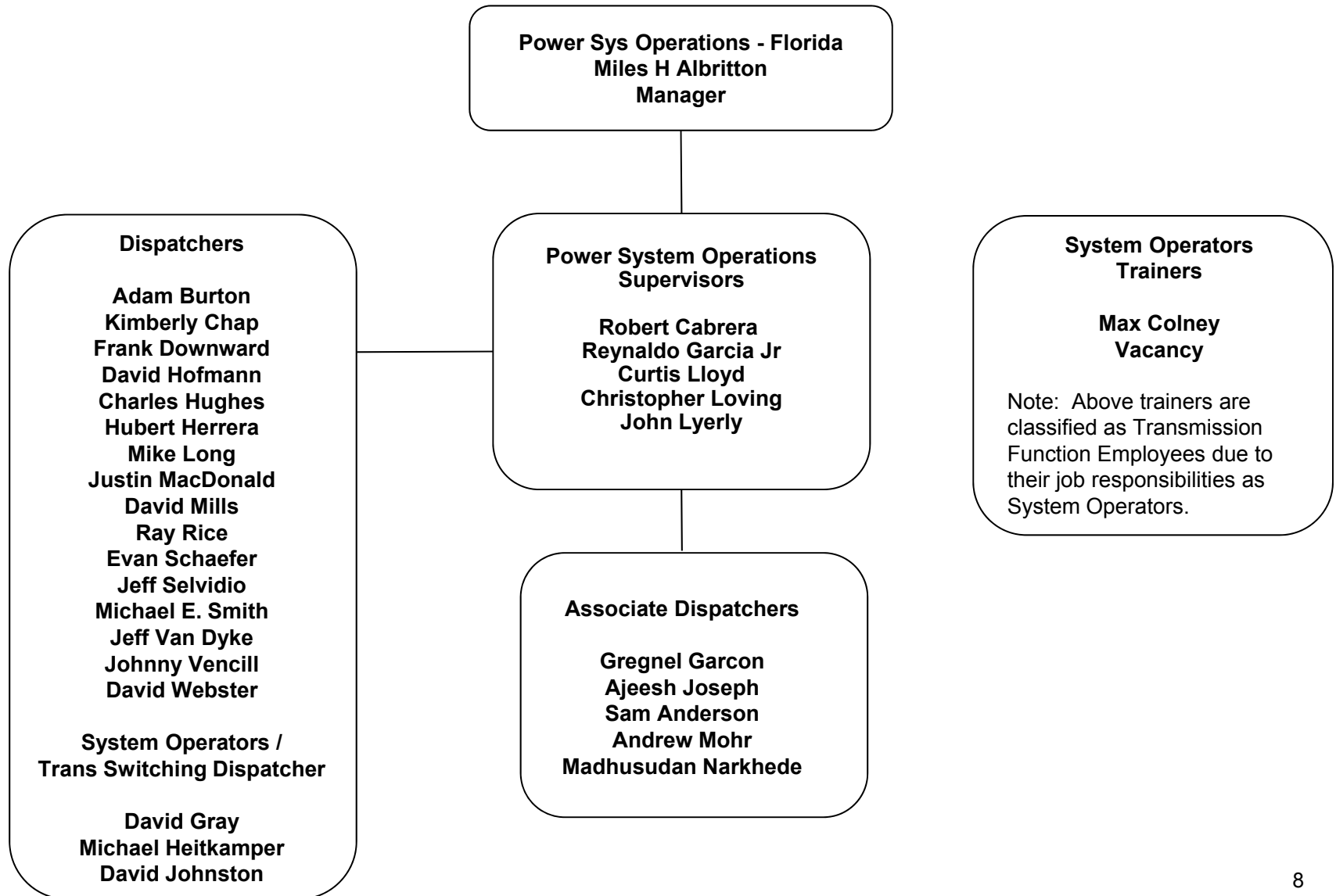
Transmission Services - Job Descriptions

Engineer Technical Support Specialist

- Perform transmission/generation outage reliability studies
- ECC transmission equipment outage request coordinator
- Provide switching instructions to the control room
- Support the Transmission Operations & Planning Department with scheduling projects



Transmission Operations & Planning - Florida





Transmission Operations & Planning - Florida

Power System Operations-Florida - Job Descriptions

Manager Power System Operations – Florida

- Manage the resources required to operate the ECC control room in a FERC and NERC compliant manner
- Manage the OASIS and requests for service under FPC's Open Access Transmission Tariff

Supervisors Power System Operations

- Responsible for overall operations in the control room
- Next day planning, load forecasting
- Unit commitment, reserve planning
- Transmission system reliability

Dispatchers Automatic Generation Control Desk

- Responsible for running the AGC system
- Coordinating generating resource outputs to match load requirements
- Assess the need for FPC resources and/or off-system purchases to meet native load requirements
- Monitor the transmission, generation, communication and computer systems and initiate the corrective actions necessary to maintain power system reliability
- Responsible for maintaining system economics



Transmission Operations & Planning - Florida

Power System Operations-Florida - Job Descriptions

Dispatchers Interchange Coordination Desk

- Responsible for coordinating interchange schedules with neighbor control areas
- Processing schedule tags
- Responsible for the real-time OASIS, the hourly and daily ATC values, evaluating non-firm and short-term firm point-to-point transmission requests
- Respond to OASIS requests for service under FPC's Open Access Transmission Tariff
- Monitor the transmission, generation, communication and computer systems and initiate the corrective actions necessary to maintain power system reliability
- Responsible for maintaining system economics

Dispatchers Transmission Reliability Desk

- Responsible for the state estimator model solutions
- Real-time contingency analysis
- Maintaining system voltage profiles
- Issuing transmission switching instructions
- Coordinating unplanned transmission outages with field personnel
- Responding to transmission alarms
- Coordinate all scheduled activities and switching on the transmission system to ensure safety and reliability
- Monitor the transmission, generation, communication and computer systems and initiate the corrective actions necessary to maintain power system reliability
- Responsible for maintaining system economics



Transmission Operations & Planning - Florida

Power System Operations-Florida - Job Descriptions

Associate Dispatchers

- Participates in Dispatcher Qualification Program (DQP) from 18-24 months
- Successfully pass the NERC Exam and obtain NERC Certification at the Reliability level within 6-8 months of entering the DQP
- Meet the required amount of days for Classroom Work, Field Work, On-the-Job-Training (OJT), and Simulation
- Receive a passing score of at least 80% on all written exams
- Receive evaluation scores of 4 or better on a 5-point scale prior to qualification
- Demonstrate proficiency and pass qualification in three areas: Generation, Interchange, Transmission

System Operators / Trans Switching Dispatcher

- Represents the Energy Control Center on all new construction projects
- Evaluates all requests for work on the Transmission system
- Plans complex switching evolutions for construction and maintenance projects
- Performs power flow studies on the Transmission system
- Prewrites switching orders for the Energy Control Center Dispatchers
- Develops mitigation strategies for possible contingencies and potential overloads



Transmission Operations & Planning - Florida

**Operations Management Specialist
Paul Graves**

Operations Management Specialist

- Develop engineering solutions to and providing technical guidance to others for the implementation of network customers into the EMS, interface with our transmission network customers, maintain good relationships, and comply with FERC Order 888
- Develop the Network Operating and Network Integrated Transmission Service Agreements (as required by FERC), act as a liaison to coordinate engineering solutions, and ensure that the reliability of the Florida power system is not jeopardized



Transmission Operations & Planning - Florida

**Transmission Services
Lee Schuster
Manager**

**Lead Engineer – Mike Scott, Scott Knewasser
Engineers – David Rahman, Paul Schmitt, Amy Yen**

Manager Transmission Services

- Transmission customer interface
- Transmission requests/NOA/NITSA
- OASIS business practices
- ATC/CBM/TRM calculations
- Generator interconnection requests
- Contract implementation
- Transmission Expansion liaison
- PEF/FRCC transmission database (PSSE)
- Maintain operating and emergency procedures
- Coordinate transmission outages and system reliability
- Reporting, billing, and budgeting functions
- Site physical security



Transmission Operations & Planning - Florida

Transmission Services-Florida - Job Descriptions

Lead Engineer

- Coordinate and perform generator interconnection studies
- Coordinate and perform long term transmission service studies
- Coordinate and perform regional interconnection studies
- Provide technical direction for ATC calculation activities
- Represent FPC on regional reliability study groups and task forces

Engineer / Senior Engineer

- ATC calculations
- Serve on FRCC ATC working group
- Perform transmission system operational analyses and studies
- Evaluate long-term firm transmission service requests
- ECC transmission equipment outage request coordinator
- Supports the Transmission Planning Unit with scheduling large projects
- Provide transmission services, security coordination and reliability support
- General control room support, procedure support, and change control coordinator
- Maintain system models and analyze results to support short-term operations
- Assist in analyzing switching and tagging requirements