

**Duke Energy Progress
Standards of Conduct
Transmission Function Employee
Job Titles and Job Descriptions
9/1/13**

Transmission Operations & Planning – Carolinas

Power System Operations

Director 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)

Supervisor Power Systems 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 (System Operator I, II and III)

- 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 (System Operator I, II and III)

- 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 (System Operator I, II and III)

- 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

Technical Support Assistant

- Configuration Control of System Operator References (procedure updates, compliance documentation, etc)
- Creates/maintains spreadsheets or database applications that organize various data for tracking and documentation purposes
- Site Security Administrator for FL ECC
- Creates/maintains user documentation for System Operator tools
- Training Coordinator for FL ECC
- Creates/edits technical presentations and documents for FL System Operations
- Miscellaneous administrative tasks and back-up to Administrative Assistant

System Operators Transmission Switching Desk (System Operator I, II and III)

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

Associate System Operator

- In System Operator Qualification Program

Intern

- Perform support and work assignments relating to Transmission Operations & Planning appropriate for an Intern

Technical Support Assistant I

- Provide clearance technical support in the processing of outage requests for the Progress Energy-Carolinas Bulk Electric System

- Maintain ECC's On-Call System as the primary contact to ensure that the customized on-call database and the Vesta phone system are accurate and updated within 24 hours of receiving revised schedules/information.

Transmission Services**Manager Transmission Services - TOP**

- 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

System Operations Compliance Program Leader

- Coordinate compliance with NERC reliability standards
- Support the NERC standards development process
- Support NERC audit and compliance activities
- Support the corporate compliance program and provide leadership for a culture of compliance
- Coordinate with Transmission Training to develop and provide NERC Standards training for System Operations personnel
- Provide timely feedback to System Operations personnel on NERC Standard Requirements changes and interpretations
- Participate in and provide feedback to the Corporate ERO Working Group to help improve the ERO Governance process

Mgr-Trans & Ops Training

- Oversight and implementation of the Joint Open Access Transmission Tariff (Joint OATT) for the Duke Energy Carolinas region. This includes the proper disposition of all requests for transmission service through the OASIS and leadership for System Operations Center personnel on the use of OASIS.
- This position verifies the accuracy of postings on the OASIS and completes the necessary testing of the OASIS due to changes in the software or regulatory requirements.

Lead Engineer

- Network Customer operating representative
- 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 I

- 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-PFSC 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

Senior 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 Planning

Manager Transmission Planning - Carolinas

- Manage planning of transmission line and substation facilities
- Manage coordination of new wholesale and retail transmission delivery points
- Manage the development and funding approval for transmission line and substation projects
- Assure that planned projects are cost effective in relation to benefit, acceptable customer service reliability, and operating flexibility
- Coordinate Transmission Planning's participation in regional and inter-regional planning activities
- Assign and/or review system impact studies
- Provide guidance on granting or denying of transmission service requests

Principal Engineer

- Perform generator stability studies
- Perform L.O.C.A. voltage studies
- Maintain generator stability database
- Analyze transmission clearances that affect stability and voltage support at PEC nuclear plants
- Provide support for system impact studies

Senior Engineer

- Determine required transmission projects and obtain funding approval
- Perform power flow analysis
- Perform and/or provide support for system impact studies
- Support regional and inter-regional planning activities
- Coordinate retail transmission delivery points
- Conduct loss studies
- Maintain software to support planning
- Perform long term planning for the Available Transfer Capability
- Evaluate ATC for the long term reservation and generator interconnection requests
- Generate unit operating parameter verification and analysis – including unit voltage schedules
- Establish and maintain ATC planning criteria

Senior Engineering Technical Support Specialist

- Maintain peak and light load power flow base cases for the upcoming 10 year period
- Coordinate with planning personnel to facilitate data needs in support of various planning analyses
- Maintain and distribute up-to-date Transmission Facilities Rating Database
- Maintain working relationships with various data suppliers to receive most recent source data

System Operations – Florida

Power System Operations

Director Energy Control

- 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 PEF's Open Access Transmission Tariff
- Ensure system operation regulatory compliance (FERC/NERC/FRCC/NRC/FPSC)

Supervisor Power Systems Operations

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

Dispatcher Generation Desk (Dispatcher - ECC)

- Balance generating resource outputs to match load requirements
- Responsible for running the AGC system
- 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 the maintaining system economics

Dispatcher Interchange Desk (Dispatcher - ECC)

- 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

Dispatcher Transmission Reliability Desk (Dispatcher - ECC)

- 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

Associate Dispatcher

- Enrolled in Dispatcher Qualification Program (DQP)
- Successfully pass the NERC Exam and obtain NERC Certification at the Reliability level
- Demonstrate proficiency and pass qualification in three areas: Generation, Interchange, Transmission

System Operator I / System Operator II / Trans Switching Dispatcher (Dispatcher - ECC)

- Represents the Energy Control Center on all new construction projects
- Evaluates all requests for work on the Transmission system
- Plans compiles 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

Energy Control**Regional Operations Manager**

- 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 Services

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

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

Senior Engineer / Engineer I / Senior Engineering Technical Support Specialist

- Responsible for the ATC calculations postings and compliance
- 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

Transmission Planning

Director - Transmission Planning Florida

- Responsible for directing the development of long-range electric transmission expansion
- Assures that transmission plans and assessments are done in accordance with all applicable NERC and Regional Planning Standards
- Develop plans and associated capital budgets for transmission projects
- Assure that planned projects are cost effective in relation to overall benefit
- Support Transmission Planning's participation in FRCC planning activities
- Assign and/or supervise system impact studies
- Provide guidance on granting or denying of transmission service requests
- Coordinate Transmission Planning's participation in FRCC planning activities
- FERC, NERC, FPSC, FRCC regulatory interface
- Planning and operating, reliability standards
- Generation and Transmission regulatory performance
- Regulatory testimony and filings
- Standards and order reviews
- Input coordination on regulatory changes and revisions
- Standards revision implementation and monitoring
- Provides technical and strategic support to Transmission department and the organization as a whole

Project Leader – TOP

- FPSC TLSA filing
- Regulatory testimony and filing
- Special transmission projects and analyses
- Integrated resource planning support
- Regional interface transmission projects
- Support to and integration of corporate planning products
- FERC, NERC, FPSC, FRCC regulatory interface
- Planning, operating, reliability standards
- Generation and Transmission regulatory performance
- Regulatory testimony and filings
- Standards and order reviews

- Input coordination on regulatory changes and revisions
- Standards revision implementation and monitoring
- Provide guidance on system impact studies
- Provide guidance on granting or denying of transmission service requests

Lead Engineer

- Conduct transmission planning studies of increasing complexity
- Determine required transmission projects and obtain funding approval
- Coordinating the engineering and construction for transmission projects
- Coordinate with regional wholesale and retail customers on new transmission delivery points
- Perform transmission system impact studies
- Provide guidance on granting or denying of transmission service requests
- Support the FRCC Transmission and Stability Working Groups

Senior Engineer / Engineer I / Engineer II / Engineer III / Senior Planning Analyst

- Supervise the maintenance of load flow and stability databases
- Support the FRCC Transmission and Stability Task Forces
- Determine required transmission projects and obtain project funding approval
- Conduct transmission planning studies
- Determine required transmission projects and obtain project funding approval
- Coordinate with regional wholesale and retail customers on new transmission delivery points
- Act as a liaison with regional wholesale and retail customers in maintaining an acceptable level of customer reliability
- Perform transmission feasibility and system impact studies
- Provide guidance on granting or denying of transmission service requests

Senior/Engineering Technical Support Specialist

- Prepare and up-date transmission load flow and equipment databases
- Prepare long-term planning cases as part of FRCC databank process
- Run load flow analysis in support of planning studies
- Assist Transmission Planning engineers as required in analysis of load flow results
- Prepare cases and/or run load flow analysis in support of system impact studies