SRP TRANSMISSION FUNCTION JOB DESCRIPTIONS

October 2010

The Salt River Project consists of two organizations: the Salt River Project Agricultural Improvement and Power District (SRP), an agricultural improvement district organized and existing under the laws of the State of Arizona which provides electric service to approximately 800,000 retail customers in the State of Arizona; and the Salt River Valley Water Users’ Association (the Association), an Arizona corporation which, as SRP’s contractual agent, operates and maintains an irrigation and water supply system. SRP has two wholly owned subsidiaries: Papago Park Center, Inc., a real estate management company; and New West Energy Corporation, a marketer of electric power and energy services to end-use customers outside of SRP’s distribution service area in states that have implemented retail competition programs.

• President, Board of Directors of SRP and of the Association – Serves as chief executive officer and chairman of the Board of Directors of SRP and of the Association. The President does not exercise control over the day-to-day operations of any SRP or Association function. The President does not have access to transmission or reliability information on SRP’s Energy Management System (EMS) or other databases.

• General Manager – Sets overall company policies for six functional areas: Power, Construction and Engineering Services; Commercial and Customer Services; Water Group; Public and Communications Services; Operations, Information and Human Resources Services; and Law and Administrative Services. The General Manager reports to the President of the Board of Directors of SRP and the Association. The General Manager does not exercise control over the day-to-day operations of any SRP or Association function. The General Manager does not have access to transmission or reliability information on SRP’s Energy Management System (EMS) or other databases.

• Associate General Manager, Power, Construction and Engineering Services – Sets overall company policies relating to all operational aspects of SRP’s generation, transmission system and distribution system. The Associate General Manager reports to the General Manager. Departments reporting to the Associate General Manager are: Power Generation; System Operations; Fuels; Electric System Design and Construction; and Electric System Operations and Maintenance. The Associate General Manager sets overall company policy regarding the transmission operations/reliability function. Neither the Associate General Manager nor any of the employees reporting through his chain of command have responsibility for wholesale merchant functions.

• Manager, System Operations – Has management responsibility for the reliable operation of SRP’s transmission and subtransmission systems; transmission system planning; engineering for control, communication and system protection; accounting and billing for power system related transactions; and development and operation of the Energy Management System (EMS). The Manager of System Operations reports to the
Associate General Manager of Power, Construction and Engineering Services. Departments reporting to the Manager of System Operations are: Transmission and Generation Operations; Transmission Planning; Electronic Systems; Power Accounting Services; and Computer Applications. Positions reporting to the Manager of System Operations which perform transmission operations/reliability functions are:

- Manager, Transmission Planning – Has management responsibility for development of strategic direction and corporate policy relating to SRP’s transmission system; technical system analysis to support development of cost-effective system expansion alternatives, secure system operations and construction outage scheduling; determination of operating transfer capabilities and calculation of Available Transfer Capability (ATC) for posting on SRP’s OASIS; analyzing requests for long term transmission service under SRP’s Open Access Transmission Tariff and approving any contracts for transmission service entered into thereunder; and directing SRP’s transmission line siting activities. The Manager of Transmission Planning reports to the Manager of System Operations. The department reporting to the Manager of Transmission Planning is Transmission System Planning. Positions reporting to the Manager of Transmission Planning which perform transmission operations/reliability functions are:

  - Engineers – Develop recommendations for SRP transmission strategic direction and policy; determines Available Transfer Capability (ATC) for posting on SRP’s OASIS; coordinates evaluation and processing of long term transmission requests; and develops long range transmission plans. Represents SRP and its corporate position on transmission in industry forums such as the North American Electric Reliability Council (NERC), Western Electricity Coordinating Council (WECC), Regional Planning Groups, and special panels, committees and work groups as required.

  - Project Managers – Direct SRP’s transmission line siting activities.

  - Manager, Transmission System Planning – Manages technical system analysis of the SRP interconnected system for operating studies, expansion planning and determination of transfer capabilities.

  - Engineer/Analysts – Performs transmission studies utilizing power flow, stability, post-transient and short circuit duty analyses for the operation, expansion and determination of transfer capabilities of the transmission system. Reviews planning studies for operational impacts.

  - Engineering Technicians/Specialists – Performs analytical studies, collects model data, prepares one-line diagrams, prepares reports, and provides general staff support under the direction of the Engineers and Analysts.

  - Manager, Transmission and Generation Operations – has management responsibility for real-time operation of SRP’s system dispatching control center, which operates 24
hours per day, 7 days per week. Functions of the control center include: real-time dispatch of SRP’s generation resources; operation of SRP’s transmission and subtransmission systems; operation of SRP’s OASIS and the Southwest OASIS node; provision of open access transmission services and ancillary services that support basic transmission services; administration of Southwest Reserve Sharing Group (SRSG, a reserves sharing group made up of 14 southwest utilities) functions; outage coordination; and performance of dispatching training program. The Manager of Transmission and Generation Operations reports to the Manager of System Operations. Departments reporting to the Manager of Transmission and Generation Operations are: Power Dispatch Office; Automatic Generation Control; and Transmission Services. Positions reporting to the Manager of Transmission and Generation Operations which perform transmission operations/reliability functions are:

• Manager, Grid Operations Transmission Dispatching – Manages the real-time operation (24 hours per day, 7 days per week) of SRP’s transmission and subtransmission systems. Positions reporting to the Manager of PDO which perform transmission operations/reliability functions are:

• Outage Scheduler – Reviews all transmission and subtransmission planned outage requests for maintenance and construction of facilities. Administers the Work Request Process, providing to the PDO Dispatchers switching instructions for implementing approved planned outages of SRP’s transmission and subtransmission elements.

• Power Dispatchers – Perform real-time operation of SRP’s transmission and subtransmission systems.

• Transmission Engineer – Produces transmission and subtransmission unplanned event Disturbance Analysis Reports and Root Cause Analysis Reports. Provides engineering services to the PDO Management, Dispatchers, System Operators and the Outage Scheduler.

• System Operators – Senior level dispatchers with NERC and WECC Operator certification. Performs real-time operation of SRP’s transmission and subtransmission systems. Acts as liaison to Computer Applications support so as to direct scheduling system maintenance and enhancements in accordance with established NERC/WECC policies. Provides expertise for on-the-job training material for new hires. Serves as project manager for special assignments.

• Manager, Grid Operations, Generation Dispatching – Manages the real-time operation (24 hours per day, 7 days per week) of dispatching SRP’s generation resources for the reliable operation of the interconnected system, including provision of generation-related ancillary services that support basic transmission services. Oversees the must-run generation unit commitment and unscheduled flow curtailment. Manages the real-time implementation of the Southwest Reserve Sharing Group function, Southwest OASIS function, the SRPCAOnet function (retail scheduling system), and the control
area operations function. Positions reporting to the Manager, AGC, which perform transmission operations/reliability functions are:

• Power Dispatchers – Perform real-time dispatching of SRP’s generation resources for reliable operation of the interconnected system, including provision of generation-related ancillary services that support basic transmission services.

• Engineer – Coordinates generator outage scheduling between Transmission & Generation Operations and plant personnel. Provides unscheduled flow curtailment support. Provides engineering services to the AGC Dispatchers and the Outage Scheduler.

• System Operators – Senior level dispatcher with NERC and WECC Operator certification. Performs real-time operation of SRP’s transmission and subtransmission systems. Acts as liaison to Computer Applications support so as to direct scheduling system maintenance and enhancements in accordance with established NERC/WECC policies. Provides expertise for on-the-job training material for new hires. Serves as project manager for special assignments.

• Manager, Transmission Services – Manages the interaction of all market participants with SRP’s open access delivery process implementing retail customer choice. Manages SRP’s OASIS, the Southwest OASIS node, and the Southwest Reserve Sharing Group function. Serves as the primary interface between scheduling coordinators and SRP’s control area operations.

• System Operators – Senior level dispatcher with NERC and WECC Operator certification. Supports real-time operation of SRP’s transmission and subtransmission systems. Acts as liaison to Computer Applications support so as to direct scheduling system maintenance and enhancements in accordance with established NERC/WECC policies. Provides expertise for on-the-job training material for new hires. Serves as project manager for special assignments.

• Engineer – Acts as the central point of contact for Control Area Services and large generator interconnection requests. Provides engineering support to the TGO Dispatchers.

• Analysts – Provide primary support for OASIS, Southwest Reserve Sharing Group (SRSG), Customer Choice, and Transmission and Generation Operations staff. Performs data collection monitoring, accounting, budgeting, invoicing, training and consultation services.

• Supervisor, Scheduling and Reliability – Supervises transmission sales and the prescheduling and post-scheduling operation for energy and transmission. Supervises daily operation of the SRP OASIS. Monitors transmission procurement for retail load requirements.
• Engineer – Acts as the central point of contact for Western Electric Coordinating Council (WECC) Reliability Management System (RMS) reporting requirements. Provides engineering support to the TGO Dispatchers.

• Analysts – Provide primary support for Transmission and Generation Operations staff. Performs data collection monitoring, accounting, budgeting, invoicing, training and consultation services.

• Transmission Schedulers – Sell excess transmission capacity to other entities and administer the retail direct access energy delivery process (Customer Choice). Complete settlement analysis for energy transactions on the bulk power system, provide customer service for power market entities, and support Transmission and Generation Operations staff.

• Supervisor, Training – Administers the training programs for PDO and Power Dispatchers. Training includes preparation for North American Electric Reliability Council (NERC) and Western Systems Coordinating Council (WSCC) Certification testing, computer based skills, system operations skills and communication (radio/voice) skills. Tracks initial training and refresher course training for core competency dispatcher skill requirements.

• Analysts – Provide primary support for Transmission and Generation Operations staff. Performs data collection monitoring, accounting, budgeting, invoicing, training and consultation services.

• Manager, Electronic Systems – Has management responsibility for creating the design of control, protection and communication systems, but has no responsibility for wholesale merchant functions or transmission operations/reliability functions. The Manager of Electronic Systems reports to the Manager of System Operations.

• Manager, Computer Applications – Supervises support of control computers and determines hardware/software problems. Responsible for programming and implementation of software for substation supervisory control and automatic generation control computers. Responsible for new program development and software enhancements for system dispatching and operational engineering. Responsible for fire walls, security, and design, and evaluation of network systems, such as local area networks, wide area networks, and the Internet. Additional responsibilities include network modeling, analysis, and planning and the interfacing of computer and communications equipment. Direct reports operate various loading and incremental cost programs and various power accounting programs. Monitors and reports on automatic generation control system performance as well as overall control computer performance. Neither the Manager of Computer Applications nor any employees reporting directly to the Manager of Computer Applications is responsible for transmission system functions or wholesale merchant functions.
Manager, Power Accounting – Supervises activities related to wholesale power billing, fuel accounting, options, hedge accounting, ancillary services accounting and transmission services billing. Approves invoices for sale of wholesale electricity, natural gas, options, exchanges, reserve capacity, regulation, imbalance energy, control area services, and transmission services. Signs check requests for payment of electricity, natural gas, options, hedge account transactions, exchanges, ancillary services and transmission services. Monitors delinquent payments. Implements deferred accounting for options premiums and commodity hedge account gains and losses. Reports mark to market status of commodity accounts for FAS 133 accounting. Administers and bills T&C contract and CAWCD contracts. Administers accounting for preference power contracts. Reviews and approves payment of TEP contract and AEPCO contract. Reviews and approves payment of CAISO settlement statements and provides Supply and Trading analysis of trends underlying CAISO charges. Prepares internal reports including issuance of System Operations Statistical Data and input to Accounting & Statistical Review and SRP’s Annual Report. Prepares external reports including EIA-412, energy accounting sections of Official Bond Statements and various WECC reports. Calculates system losses each fiscal year. Assesses needed upgrades/changes to selected functions of the energy management system and specifies upgrades for modification by computer applications personnel.