Load Dispatcher (Class Code 5223)

Task List

A. Load Dispatching, General

- Prior to work shift speaks to Load Dispatcher(s), reviews hardcopy and computer logs, and looks at the dispatcher's diagram board in order to determine system status information such as generation availability and capability, transmission capabilities, fuel availability, reservoir levels, outages, weather conditions, projected system peak load, ongoing switching, and any abnormal conditions.
- 2. Reviews scheduled work with Senior Load Dispatchers to identify and resolve problems to ensure proper system conditions.
- 3. Operates the system in accordance with federal standards such as NERC and WECC, and guidelines such as DWP Operating Orders, instructions to Load Dispatchers, operating bulletins, and other interconnection agreements and criteria.
- 4. Updates and maintains electronic and hardcopy records by reviewing current information and conditions in order to keep system information current and accurate.
- 5. Determines amount of generation required or load to be transferred taking equipment status and security into consideration in order to maintain continuous service in areas where circuits are to be deenergized.
- 6. Runs computer programs such as system security monitor programs, contingency arming programs, economic dispatch programs, or spreadsheet application programs on personal or mainframe computers in order to operate the system more securely and economically and/or to obtain or to transmit information.
- 7. Operates system equipment such as circuit breakers, tap changers, and circuit switches using computer controls in order to deenergize circuits, restore service and control VARs, megawatts, and voltages.
- 8. Evaluates system condition in real time using information from sources such as computers, other Load Dispatchers, other utilities, and previous experience in order to develop contingency response plans.

- 9. Provides on the job training to Load Dispatcher trainees as well as a work station review/refresher to Load Dispatchers who are changing from their previous work assignment to their new assignment in either subtransmission or bulk power in order to have trained personnel available to meet workload requirements.
- 10. Uses materials such as nomograms, tables of megawatt flow, contingency arming graphs to make decisions about switching and energy flows for when remedial action is necessary.

B. Generation/Voltage

- 11. Controls output of generation resources such as hydro and thermal generating plants and of reactive assets such as synchronous condensers, capacitors, and shunt reactors by verbal instructions or by direct control via computer.
- 12. Maintains adequate generating reserves as directed by the Senior Load Dispatcher or in emergencies by ordering units on line in order to maintain system reliability and to meet consumer demand.
- 13. Develops immediate and/or short-term generation plans and priorities by using information obtained from the marketing group and information regarding available resources.

C. Switching

- 14. Obtains information from computers, maps and from the diagram board about the status of specific parts of the system including equipment and circuits in trouble, where field crews are working, OKs TO and CLEARANCEs in effect, or loads on circuits in various parts of the system for purposes such as ensuring safe working conditions for field crews or maintaining system loading within specified ranges.
- 15. Updates information on diagram board by placing or moving colored plugs in order to keep system information accurate and current.
- 16. Plans switching required for repairs and/or routine maintenance of the system.
- 17. Directs station operators or field crews verbally via telephone or radio in order to provide safe working conditions for field crews, to avoid outages, to restore service, and to keep equipment and circuits operating within their capability.

- 18. Coordinates generation and/or switching with customers or non-utility generators by taking or initiating telephone calls to provide information, CLEARANCES, or work authorities.
- 19. Instructs station operators to perform switching required to fill requests received from the Electric Trouble Dispatching Unit or other necessary switching for the 4.8 kv system in order to provide safe working conditions for field crews, to avoid unplanned outages, to provide for planned outages, and to restore service.
- Orders placement of accident prevention tags via phone or radio such as CLEARANCEs and OKs TO for portions of the system under ECC jurisdiction in order to provide safe working conditions for field crews.
- 21. Places or removes appropriate software inhibit and note tags by calling up the appropriate computer display, moving the cursor to the symbol for the affected equipment, and pressing the correct dedicated control key to produce the tag in order to provide safe working conditions for field crews.
- 22. Decides on priority, timing, and sequence of switching in order to provide safe working conditions for field crews, to avoid outages, to restore service, and to maintain system reliability.
- 23. Decides on priority, timing, and sequence of switching in order to coordinate work within ECC jurisdiction and with operators of interconnected systems extending outside ECC jurisdiction.
- 24. Contacts field personnel by telephone or two-way radio and instructs them to go to specific locations in order to perform switching, to investigate abnormal conditions, and/or to inform ECC of changes in equipment status.
- 25. Contacts staff of other DWP sections, other utilities and other interconnected systems to provide information, to discuss problems, to coordinate repair work, and/or to implement restoration of circuits.

D. Energy Accounting

- 26. Responds to notification of air quality episodes by the Senior Load Dispatcher by ordering necessary changes in the power generation schedule.
- 27. Verifies hourly energy flows (megawatt hours) in different parts of the system by calling up appropriate computer displays in order to observe trends and to make decisions such as transferring loads, use of resources, or switching schedules.

- 28. Monitors, via computer, firm energy (energy required to be delivered by one utility to another so that the supply is guaranteed except in emergencies) schedules for DWP and for co-owners of generation facilities and transmission lines jointly owned by DWP and other agencies in order to meet contractual obligations.
- 29. Verifies and approves the purchase, sale, or wheeling of energy and generation capacity by DWP and power pool partners, and other agencies by
 - a. making agreements and entering the data into the computer;
 - b. confirming intertie schedules for transfer of energy.

E. Record Keeping and Reporting

- 30. Contacts appropriate agency such as the Western Electricity Coordinating Council, or other affected utilities or agencies in case of accidents, emergencies, or unusual events such as equipment failure affecting other systems, load shedding, or observed fires.
- 31. Uses information from computer terminals and reports of conditions received from sources such as power plants or other utilities to maintain system reliability.
- 32. Responds to reports from the field such as injured DWP personnel, or damaged towers or automobile accidents which may endanger personnel or other persons by referring them to the appropriate agency/City department or responsible parties such as DWP supervisors, U.S. Forest service staff, and police or fire departments.
- 33. Keeps records of work done through written reports and/or entries in written logs and/or computer data banks for such purposes as recording CLEAR-ANCEs and OKs TO, switching reports, times of outages, reports of accidents, actions taken in emergencies, and advisements made (reports of the person or agency notified and of what was said).
- 34. Collects data and prepares written, tabular, and/or graphic reports of information such as summaries of dispatchers' activities, system disturbances, and totals of megawatt hours generated and distributed, in order to provide complete and concise information to appropriate interested parties such as the Operating Engineering group, Energy Scheduling and Accounting section, or Power Operation and Maintenance line management.

- 35. Updates records such as computer data, diagram board, system maps, and operating records which reflect system changes in order to ensure that the information is current, complete, and accurate.
- 36. Makes entries in logs, reports of document changes, and computer data bases, either handwritten or entered directly on the computer, in order to ensure completeness and accuracy.
- 37. Provides information, which may include recommendations, regarding system operations to supervisors, engineers, and Department management staff, through written and oral reports.
- 38. Writes and/or changes instructions to Load Dispatchers in order to keep them up to date.
- 39. Writes or collects and summarizes information for daily, periodic, and special reports to appropriate interested parties regarding system and interconnected system operation and trouble such as power resources, loads, interchange operations, subtransmission and transmission outages, and dispatcher work load in connection with load dispatching functions.
- 40. Communicates with Senior Load Dispatchers, Energy Control Center (ECC) manager, and district offices (using telephone, e-mail, facsimile machine, and face to face contact) regarding system status issues in order to inform of status and to obtain necessary information and instructions.