

EXHIBIT B-11 CLASSIFICATION SPECIFICATION

Job Title: Civil Engineer
Division: Power

Supervision by the Power Division Manager, and receiving general direction from the General Manager.

Perform civil engineering and project engineering for Agency power and water facilities, including storage reservoirs, dams, hydroelectric plants, conveyance and distribution systems, and buildings. Participate in the Agency's dam safety program. Develop engineering procedures, methods and standards. Provide engineering support for repair, maintenance and upgrade of Agency facilities and assets. Perform project management for capital projects, and contractor work.

Prerequisite Qualifications

Bachelor degree from an accredited college or university with course work in civil engineering, structural engineering, science or related fields. Coursework and experience preferred in civil design, structural design, engineering, operation and maintenance of hydroelectric projects, and project/construction management.

Possess California Professional Civil Engineering License.

Possess valid California drivers license with satisfactory driving record.

Basic Work Hours: 80 hours per pay period; weekly schedule as approved by Power Division Manager.

Hourly Compensation Range: As listed in Exhibit A of the Management and Professional Employees Unit M.O.U.

Job Requirements:

Technical

- Perform engineering design, analyses and investigations for operation and maintenance of Agency storage reservoirs, dams, hydroelectric plants, conveyance structures, valves and gates, concrete structures and other facilities.
- Possess knowledge of scientific and engineering technical practices; ability to understand engineering and technical drawings; ability to learn and understand hydrological patterns, and perform water storage and flow calculations.
- Perform site assessments and develop actionable plans in response to field change conditions at Agency water storage, conveyance, and hydro-generation facilities.
- Collect data from test instruments and manual measurements, and interpret data to research root causes, and recommend solutions.

- Perform Agency-wide civil engineering duties and tasks as assigned.

Project Management

- Prepare rough order of magnitude cost estimates. Prepare specifications, work scopes, and requests for proposals for bids for design and construction of Agency projects and facilities.
- Coordinate and review the work product and approved budgets of independent consultants.
- Oversee work of environmental/biological consultants and review reports prior to filing with appropriate resource and/or regulatory agencies.
- Supervise contractors and personnel in the construction, maintenance and operation of Agency facilities.

Regulatory

- Learn Federal and State regulations as applicable to Agency projects and work assignments.
- Participate in regulatory inspections and field data collection with Agency staff and outside consultants, as defined in Federal and State guidelines.
- Research and learn regulatory compliance requirements on a continual basis.

Communication

- Establish and maintain positive and productive working relationships with co-workers and all others contacted in the performance of assigned duties.
- Work collaboratively and proactively with staff, regulatory agency staff, interest groups, and the public to accomplish Agency goals and objectives.
- Prepare clear and concise written reports, studies, and other written materials, including requests for qualifications and proposals. Coordinate and review the work of independent consultants.

Essential Skills

- Perform all job duties in an organized and efficient manner with the ability to adjust priorities and perform multiple tasks. Monitor own work product for quality and accuracy. Follow through completion of complicated tasks, and focus on completing tasks within deadlines.
- Perform review of drawings, GIS and CAD files. Perform data entry to computer system for drawings and diagrams.
- Ability to work independently and make sound decisions regarding correct formatting and implementation of work products. Strong ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form, and process several abstract and concrete variables at one time. Ability to work with others and formulate appropriate recommendations to achieve desired goal.

- Ability to quickly organize and communicate thoughts orally, in writing or graphically. Strong ability to adapt communication style for a varied audience. Ability to speak clearly and hear well when communicating via voice-transmission devices and in person. Required to possess excellent listening skills, and highly skilled ability to accurately receive and process critical and complex information.
- Read complex manuals and instructions for hydro-generation equipment, and computer software and hardware.
- Read and write letters, reports, memos, messages, and fill out information forms. Required to possess excellent writing and grammar skills.
- Ability to use or quickly learn project management software, spreadsheet and word processing software, computer-aided drafting (CAD) software, geographical information system (GIS) software, email software or other computer programs used by the Agency.
- Maintain high level of concentration and attention to detail for extended periods of time required to produce reports and drawings. Ability to research and analyze issues, and provide support for management decisions.

Physical and Environmental Demands:

Physical Demand: Walking outdoors on slippery or uneven surfaces; sitting; standing; close vision; speaking; hearing; use of hands to finger, handle, or feel objects, tools or controls; writing; driving vehicle.

Outside: Work outside on occasion in a variety of weather conditions ranging from ice/snow to +100°F.

Inside: Usually work indoors in temperature-controlled environment.

Fumes/Gases: Exposure to various colognes/perfumes; fumes/dust from construction and unpaved roads.

Noise/Vibration: Exposure to the noise and vibration generated by construction equipment, hydroelectric facilities, pumps, and flowing or falling water.

Hazards: Potential physical hazards may be created from energized electrical equipment, rotating machinery, falling from heights, hydraulic systems, working around water, chemicals, and construction equipment. Required to wear and work in different types of PPE; occasionally required to work in dirty conditions and on steep slopes.