

JOB DESCRIPTION AND POSITION CLASSIFICATION

CLASSIFICATION Associate Control Engineer		DWR POSITION NUMBER 2762-3659-XXX	SAP POSITION NUMBER 50001823	MCR 1
APPOINTEE Vacant		SAP PERSONNEL NO. TBD	DIVISION/SECTION O&M/ADM1/UPSS/EMS/POC Engineering	
COLLECTIVE BARGAINING IDENTIFIER Management Related BU: <input type="checkbox"/> Supervisory Related BU: <input type="checkbox"/> Confidential Related BU: <input type="checkbox"/> Rank and File BU: <input checked="" type="checkbox"/> R09				
RESPONSIBILITIES EXERCISED <input type="checkbox"/> Supervisory <input type="checkbox"/> Lead Person		IMMEDIATE SUPERVISOR (Print) Susan Johnston	SUPERVISOR'S CLASSIFICATION Senior Control Engineer (Sup)	
APPROVED BY (Personnel Analyst's Name) Marissa Arriaga			DATE 6/26/26	
<i>Percent of Time</i>	<i>Activity</i>			
30%	<p>POSITION SUMMARY:</p> <p>Under the supervision of the State Water Project (SWP) Energy Management Systems (EMS) Project Operation Center Engineering (POCE) Engineering Supervisor, the Associate Control Engineer (ACE) is responsible for conducting technical studies and providing support for Utility Power Systems Services (UPSS) Systems and Applications related to the operation and maintenance of the Joint Operations Center (JOC) and Project Operations Center (POC). Key systems include Supervisory Control and Data Acquisition (SCADA), Control, and EMS Systems that support the statewide operation of water facilities, including pumping, hydroelectric power generation, and water conveyance. This role involves assisting in the development of business processes, architectural analyses, and technical specifications for complex systems that facilitate the real-time delivery of water and energy within the SWP. The ACE will also develop procedures for testing, operations, and maintenance, review manuals and training programs, support simulated operational malfunctions, and prepare reports on real-time water and energy operations, as well as accounting systems and interfaces. Additionally, this role contributes to the development, monitoring, and maintenance of processes to ensure SWP compliance with Federal regulatory requirements, specifically the North American Electric Reliability Corporation (NERC), Critical Infrastructure Protection (CIP), Program.</p> <p>ESSENTIAL FUNCTIONS:</p> <p>This position requires that the incumbent work independently as well as cooperatively with others, maintain regular, consistent, predictable attendance, and exercise good judgment as a high-level technical specialist. The specific essential duties include, but are not limited to the following:</p> <p>Conduct complex technical engineering studies and analysis to support the SWP POC in scheduling and executing commands for the delivery and generation of water and energy. Provide technical expertise for existing infrastructure and systems, including the California Independent System Operator's (CAISO) Revenue and Real-time Metering System, Physical Access Control</p>			
SUPERVISOR'S STATEMENT:		I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE.		
SUPERVISOR'S NAME (Print) Susan Johnston		SUPERVISOR'S SIGNATURE ➤	DATE	
EMPLOYEE'S STATEMENT:		I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT.		
EMPLOYEE'S NAME (Print) Vacant		EMPLOYEE'S SIGNATURE ➤	DATE	

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25%	<p>System (PACS), Security Information and Event Management (SIEM) System, SCADA and EMS Historical Data Reporting and NERC CIP Compliance Programs. This support involves engineering design, development, testing, implementation/programming, and thorough documentation related to EMS. Create comprehensive engineering design documentation, including the development and review of business, functional, and technical requirements. Design functional block diagrams for existing systems, while documenting equipment installation details and inventory lists.</p> <p>Perform advanced technical analysis of cyber security alerts as a Senior Level Analyst for the SWP SCADA Security Operations Center (SOC), on a weekly basis. Identify, prevent, analyze, and mitigate cybersecurity incidents impacting critical assets owned by UPSS, ensuring no disruption to the Bulk Electric Systems (BES) across California. This support role focuses on monitoring and responding to security incidents within the SCADA System, actively detecting potential cyber threats, troubleshooting SCADA security issues, and collaborating with other teams to mitigate risks and uphold system integrity.</p>		
20%	<p>Develop, monitor, and maintain processes to ensure the SWP's compliance with Federal regulatory requirements, with a particular focus on the BES Cyber Assets. Administer and audit SCADA user accounts, validate Change control procedures, and evaluate the impact of system changes and designs on Critical Cyber Assets. Ensure all engineering changes are thoroughly documented. Lead compliance initiatives within EMS and UPSS, with an emphasis on meeting NERC and FERC CIP Standards. Provide expert technical responses during Western Electricity Coordinating Council (WECC) Audits regarding CIP compliance. Lead and coordinate the effort on UPSS Annual Compliance Activities.</p>		
20%	<p>Analyze systems and data sources that support the scheduling and implementation of water and energy operations for the SWP. Develop programs using Microsoft-based applications to monitor, test, analyze, and document systems that support the POC, including the Recovery Action Plan (RAP) and the power and cooling infrastructure of the Operations Control Office (OCO). Document interdependencies of systems such as POC SCADA, Power and Water Scheduling, Energy Market related software applications, Historical data reporting applications, and other business reporting systems. Assist the Unit Manager in coordinating resources within the POCE Unit and EMS Section.</p>		
5%	<p>Represent the POCE Unit in meetings and conferences with Federal, State, and local agencies, as well as local water and electric utilities, on matters related to areas of POCE team's responsibility. Engage with business owners to define new or evolving functional requirements, identifying engineering needs based on new initiatives or issues raised during these meetings and conferences.</p>		

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	<p>KNOWLEDGE, SKILLS, AND ABILITIES:</p> <p>Must have progressive knowledge and/or experience in Control Systems, Communication Systems, or EMS. Knowledge and/or Experience working on Systems implementation and maintenance for both hardware and software. Must have strong verbal and written communication skills as well as problem-solving skills. Ability to write, review and modify technical documentations and propose/present findings. Ability to coordinate and interface effectively with business users, technical personnel, and management. Ability to work independently as well as with a team. Ability to perform engineering analysis of equipment for conformance with operational standards. Ability to envision and comprehend asset life cycle processes. Ability to learn industry standards on Asset Management and other compliance requirements on the job. Ability to balance concurrent assignments and complete them on time at a level commensurate with the position classification. On-the-job training will be provided on CAISO/NERC/FERC-CIP standards. Prior knowledge or experience with compliance is not mandatory but desirable.</p> <p>SPECIAL REQUIREMENTS:</p> <p>Under the provisions of the North American Electric Reliability Corporation Critical Infrastructure Protection (NERC-CIP) Standard CIP-004 as part of the Energy Policy of 2005, this position has authorized cyber access to, and/or unescorted physical access around, critical cyber assets and is subject to a satisfactory background check prior to appointment and every seven years thereafter.</p> <p>Field inspections may require infrequent but occasional travel to DWR SWP locations. Must be able to lift up to 25lbs. Must be able to do on-site asset inspections at DWR facilities without assistance. Required to successfully complete all safety and compliance training related to the functions of the job.</p> <p>Occasional travel is required using State and/or private vehicles to perform some of the duties above. Must be willing to work sometimes outside of normal business hours, travel, and stay overnight in various locations throughout the State of California.</p> <p>The Department of Water Resources (DWR) is committed to its mission and employees, and we are grounded in our commitment to public safety. Employee is required to successfully complete all safety training related to the functions of the job.</p> <p>All employees are responsible for contributing to an inclusive, safe, and secure work environment that values diverse cultures, perspectives, and experiences, and is free from discrimination.</p>		

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	<p>OTHER REQUIREMENTS:</p> <p>This position provides necessary support to the Divisions of Flood Management, Safety of Dams, Operations and Maintenance, Engineering, and/or the Public Affairs Office during Governor declared emergencies, flood, dam, SWP, and other incidents and emergencies. Additionally, this position may participate in emergency operations in the capacity of area teams, field inspection, coordination, and assist agencies such as Cal OES and FEMA in disaster work, including performing fieldwork to complete damage survey reports for droughts, flooding, earthquakes, and other emergencies. Must be willing to work outside of normal business hours occasionally to support operational and project needs, travel, and stay overnight in various locations throughout California if needed. This position may also serve in one of the sections as established in the Incident Command System to assist the Department in performing its emergency preparedness, response, recovery, and mitigation functions. These functions are established in the California State Emergency Plan and the Department's Administrative Orders.</p>		