

State of California
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
POSITION DUTY STATEMENT
BU: 1, 4, 9, 10, 11, 12 & 14

EMPLOYEE:	CLASSIFICATION: Associate Telecommunications Engineer	HEADQUARTERS: PSC Sacramento
PROGRAM/UNIT: Public Safety Communications / Radio Communications / Client Engineering / Statewide Interoperability	POSITION NUMBER: 163-742-3640-007 (61431)	CBID: R09
TENURE: Permanent	TIME BASE: Full-Time	WORK WEEK GROUP: 2
APPT EFFECTIVE DATE:	RANGE (IF APPLICABLE):	PROBATIONARY PERIOD: ☒ 6 Mos. ☐ 12 Mos. ☐ N/A
IMMEDIATE SUPERVISOR: Senior Telecommunications Engineer	CONFLICT OF INTEREST CATEGORY: ☒ Yes ☐ No	DMV PULL PROGRAM: ☒ Yes ☐ No

1. SUPERVISION RECEIVED:
The Associate Telecommunications Engineer is under direction of the Senior Telecommunications Engineer, Statewide Interoperability Unit.

2. SUPERVISION EXERCISED:
None

3. PHYSICAL DEMANDS (SEE ADDITIONAL PAGES):

- Work schedule is Monday – Friday.
- Willingness to work overtime if needed.

During travel outside the office:

- Dress for safety and outdoor environment (e.g. snow, rain, desert, mountains, tunnels, body of water).
- Use of public safety radios.
- Work in close quarters (e.g. radio vaults, telephone closet, computer server room, garages, inside vehicles).
- Travel to job sites, as necessary.
- Such travel may be any combination of the following: airline; automotive, including 4-wheel drive, snow-cat and/or watercraft.
- Required travel may be to facilities and/or proposed facilities located anywhere in California and in neighboring areas of Oregon, Nevada, and/or Arizona.
- Such travel may be to any radio communications facility including facilities located in remote areas requiring travel off normal paved roads.
- Required to operate vehicles for such travel in accordance with a Class C driver's license.
- Travel may require multiple days out of town.

4. PERSONAL CONTACT (WHO THE EMPLOYEE MAY BE IN CONTACT WITH WHILE PERFORMING DUTIES):
The Associate Telecommunications Engineer is required to communicate with all levels of Public Safety Communications (PSC) staff, California Governor's Office of Emergency Services (Cal OES) staff, and local government agencies. Weekly communication is required with outside client agencies during the design, recommendation and implementation of projects. Additionally, communications may be necessary with equipment vendors to determine if devices can solve new or ongoing technical problems.

5. ACTIONS AND CONSEQUENCES (AS RELATED TO DUTIES PERFORMED):

This is a non-supervisory journey level technical staff position. The incumbent must study operational, technical, and legal criteria in order to design, plan, recommend, and support radio communication systems and project work in an assigned program area. Poor decisions by the incumbent may result in delays in or loss of communications to public safety users (who protect life and public property).

6. EMERGENCY OPERATIONS – ACTIVATION/OPERATIONAL ASSIGNMENT 100%:

When requested to fill an operational assignment and until demobilized, the following duties will be performed and your regular duties may temporarily cease:

May be required to work in the State Operations Center (SOC), Regional Emergency Operations Center (REOC), Joint Field Office (JFO), Area Field Office (AFO), Local Assistance Center (LAC), or other location to provide assistance in emergency response and recovery activities. All staff is required to complete operational related training and participate in one of three Readiness Teams that rotate activation availability on a monthly basis if not assigned to an Operational Branch (e.g., Fire/Law/Region/PSC Operations (Technicians)/PSC Engineering (Engineers)). May be required to participate in emergency drills, training, and exercises.

Staff need to work effectively under stressful conditions; work effectively & cooperatively under the pressure of short leave time; work weekends, holidays, extended and rotating shifts (day/night). Statewide travel may also be required for extended periods of time and on short notice.

While fulfilling an operational assignment it is important to understand that you are filling a specific "position" and that position reports to a specific Incident Command System (ICS) hierarchy. This is the chain of command that you report to while on this interim assignment.

On Call/Standby/Duty Officer (if applicable)

If assigned on-call, standby or as a Duty Officer, you are required to be ready and able to respond immediately to any contact by Governor's Office of Emergency Services (Cal OES) Management (including contact from the State of California Warning Center) and report to work in a fit and able condition if necessary as requested.

7. JOB DESCRIPTION/GENERAL STATEMENT:

Public Safety Communications (PSC), Client Engineering Division, Statewide Interoperability Unit, also known as the California Radio Interoperable System or CRIS Unit, is responsible for a wide array of engineering activities and services related to the public safety communications systems engineering and design for public safety agencies, including both State and non-State entities, operating within the State of California.

Under direction of a Senior Telecommunications Engineer, the Associate Telecommunications Engineer provides direction to maintenance technical staff for the installation of new systems or maintenance and solutions to problems with existing systems. In large system implementations, the incumbent may act as a lead person and may mentor junior level staff in the series. The incumbent is responsible for technical reports, equipment selection criteria, provide project cost estimates in part and labor, notify supervisor of risks to project budget, schedule or scope. Additionally, the incumbent will provide management and oversight to public safety telecommunications projects under the responsibility and authority of CRIS.

This position may be rotated within the Client Engineering Division or Microwave Engineering Division based on factors that include cross-training and workload management.

In alignment with our commitment to diversity, equity, inclusion, and accessibility, all Cal OES employees are encouraged to promote and foster an equitable and inclusive workplace environment.

Percent of Time	ESSENTIAL FUNCTIONS
35%	• Identify and define system configuration requirements and conduct comprehensive research using engineering publications, technical studies, and industry resources to develop and evaluate complex solutions. • Recommend and justify new systems or major modifications to existing communication systems to enhance performance, improve efficiency, and address obsolescence. • Lead the development of statements of work, detailed project specifications, and accurate cost estimates for engineering projects. • Review, evaluate, and present project plans for client system development, planning, and installation, providing expert guidance and technical direction. • Oversee the creation, review, revision, and finalization of all engineering documentation at project close-out. • Lead research, planning, and implementation of internal infrastructure changes to support system expansion and modernization. • Evaluate and recommend large-scale enhancements such as additional sites, expanded Very High Frequency (VHF) deployment, and architectural changes to the P25 radio core. • Collaborate with external vendors and technical partners to assess, select, and deploy advanced technologies—including Long Term Evolution (LTE), new frequency bands, P25 system interconnections, and new console solutions. • Plan, implement, and maintain network infrastructure to ensure reliable connectivity and optimal system performance, including IP addressing, routing tables, and redundancy strategies. • Design and manage Virtual Local Area Network (VLANs) and network segmentation to support secure, efficient traffic flow and scalable system architecture. • Administer network devices, monitor network performance, and apply security measures such as firewalls, access controls, and intrusion detection to protect data integrity and system availability. • Troubleshoot and resolve network issues across multiple layers of the Transmission Control Protocol/Internet Protocol Address (TCP/IP) model, providing technical guidance to ensure seamless communication between systems.
35%	• Lead Radio Frequency (RF) planning activities, determining optimal site locations, performing complex propagation studies, and evaluating RF characteristics for system performance • Develop advanced and detailed equipment specifications for major public safety communication projects • Design and oversee specification compliance testing, interpret complex results, and approve equipment for operational use • Perform advanced computer-simulated radio coverage modeling and validate predictions through field performance analysis • Direct automated field coverage data collection, resolve discrepancies between modeled and measured results, and recommend corrective actions • Conduct complex intermodulation studies and develop high-level recommendations to mitigate or eliminate RF interference across systems • Oversee preparation and accuracy of all Federal Communications Commission (FCC) licensing information, ensuring full technical and regulatory compliance Write or approve detailed technical jobs and installation instructions for complex radio and console system modifications

15%	• Provide expert technical support to maintenance personnel, resolving high-impact or escalated issues • Lead programming strategies for transmitters, receivers, and system components, including template development and configuration standards • Design and oversee complex systems integration for RF and audio using advanced digital and analog architectures • Select and approve equipment for use on statewide public safety systems, ensuring compatibility, performance, and lifecycle suitability • Ensure assigned project schedules are met, anticipate and identify risks, and communicate potential impacts to supervisors and stakeholders early
10%	• Prepare construction and maintenance standards by documenting agency system configurations for inclusion in the Telecommunications Division Manual and Telecommunications Division Central Records library • Attend client planning committee meetings and provide training opportunities on existing and new communications technologies Meet with clients on a regular basis regarding their communications systems' needs
Percent of Time	MARGINAL FUNCTIONS
5%	Other Job-Related Duties as Required • In order to maintain critical public safety communications radio systems, may be called on during off-duty hours to respond to emergencies related to PSC activities. • The incumbent will perform other job-related duties as required to fulfill the Cal OES mission, goals and objectives. Additional duties may include, but not be limited to: assisting where needed within the program, which may include special assignments; complying with general State and Cal OES administrative reporting requirements (i.e. completion of time sheets, Empower time reporting, travel requests, travel expense claims, work plans, training requests, individual development plans, etc.); and attendance at staff meetings.

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
VISION: Reviewing mail; preparing various forms; proofreading documents; reading printed material, computer screens, and handwritten materials.	☐	☐	☐	☐	☒
HEARING: Answering telephones; receiving verbal information from outside sources; understanding verbal instruction.	☐	☐	☒	☐	☐
SPEAKING: Receiving visitors; answering inquiries and providing verbal information or instruction.	☐	☐	☒	☐	☐
MOVEMENT: Delivering material to others; picking up materials from others; copying; faxing; distributing information; filing.	☐	☒	☐	☐	☐
SITTING: At a computer terminal or desk; conferring with employees.	☐	☐	☐	☐	☒
STANDING:	☐	☒	☐	☐	☐
BALANCING:	☐	☒	☐	☐	☐
CONCENTRATING: Reviews and reads records/documents, researches, composes, analyzes, compiles, and updates technical documents; multi-tasking; prepares various forms and documents.	☐	☐	☐	☐	☒
COMPREHENSION: Understanding needs of co-workers, clients; understands procedures and practices; Understands laws, regulations related to their work.	☐	☐	☐	☒	☐
WORKING INDEPENDENTLY: Possesses ability to work independently as well as a team member, have good interpersonal and communication skills, ability to follow directions, take initiative, assume responsibility, and exercise good judgment and tact. Must be able to work alone without much guidance or interaction or interaction from other staff.	☐	☐	☐	☐	☒
LIFTING UP TO 10 LBS. OCCASIONALLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20 LBS. OCCASIONALLY AND/OR 10 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20-50 LBS. OCCASIONALLY AND/OR 25-50 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
KEYING: Pushing buttons on telephone; typing; copying.	☐	☐	☐	☒	☐

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
REACHING: Answering phones.	☐	☐	☒	☐	☐
CARRYING: Distributing mail; reports; stocking supplies.	☐	☒	☐	☐	☐
CLIMBING: Stairs	☐	☒	☐	☐	☐
BENDING AT WAIST:	☐	☒	☐	☐	☐
KNEELING:	☐	☒	☐	☐	☐
PUSHING OR PULLING:	☐	☒	☐	☐	☐
HANDLING: Documents, manuals	☐	☐	☐	☐	☒
DRIVING:	☐	☒	☐	☐	☐
OPERATING EQUIPMENT: Computer; telephone; copy machine; fax.	☐	☐	☐	☐	☒
WORKING INDOORS:	☐	☐	☐	☐	☒
WORKING OUTDOORS:	☐	☒	☐	☐	☐
WORKING IN CONFINED SPACE: Enclosed office environment.	☐	☐	☐	☐	☒

OTHER INFORMATION

Must have knowledge of the state and related federal laws, rules, regulations, policies, and procedures. Must exercise good writing skills; follow oral and written directions, be responsive to the needs of the public and employees of Cal OES and other agencies; analyze situations and take effective action using initiative, resourcefulness, and good judgment. May need to work with limited supervision.

Consistent with good customer service practices and the goals of the Cal OES Strategic Plan, the incumbent is expected to be courteous and provide timely responses to internal and external customers, follow through on commitments, and solicit and consider internal and external customer input when completing work assignments.

SIGNATURES

Certification of Applicant/Employee

Note – If any concerns with performing the duties of this position with or without reasonable accommodation, discuss your concerns with the hiring supervisor, who in turn, will discuss with the Reasonable Accommodation Coordinator.

I certify that I possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties as described above with or without reasonable accommodation.

I have read and discussed these duties with my supervisor:

Employee's Signature

Date

I certify that the above accurately represents the duties of the position:

Supervisor's Signature

Date

Civil Service Title

State of California
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
POSITION DUTY STATEMENT
BU: 1, 4, 9, 10, 11, 12 & 14

EMPLOYEE:	CLASSIFICATION: Assistant Telecommunications Engineer	HEADQUARTERS: Sequoia Pacific I
PROGRAM/UNIT: Public Safety Communications / Radio Communications / Client Engineering / Statewide Interoperability	POSITION NUMBER: 163-742-3643-xxx (61431)	CBID: R09
TENURE: Permanent	TIME BASE: Full-Time	WORK WEEK GROUP: 2
APPT EFFECTIVE DATE:	RANGE (IF APPLICABLE):	PROBATIONARY PERIOD: ☒ 6 Mos. ☐ 12 Mos. ☐ N/A
IMMEDIATE SUPERVISOR: Senior Telecommunications Engineer	CONFLICT OF INTEREST CATEGORY: ☐ Yes ☒ No	DMV PULL PROGRAM: ☒ Yes ☐ No

1. SUPERVISION RECEIVED:
The Assistant Telecommunications Engineer is under supervision of the Senior Telecommunications Engineer.

2. SUPERVISION EXERCISED:
None

3. PHYSICAL DEMANDS (SEE ADDITIONAL PAGES):

- Work Schedule is Monday – Friday.

During travel outside the office:

- Dress for safety and outdoor environment (e.g. snow, rain, desert, mountains, tunnels, body of water).
- Use of public safety radios.
- Work in close quarters (e.g. radio vaults, telephone closet, computer server room, garages, inside vehicles).
- Travel to job sites, as necessary. Such travel may be any combination of the following: airline; automotive, including 4-wheel drive, snow-cat and/or watercraft.
- Required travel may be to facilities and/or proposed facilities located anywhere in California and in neighboring areas of Oregon, Nevada, and/or Arizona.
- Such travel may be to any radio communications facility including facilities located in remote areas requiring travel off normal paved roads.
- Required to operate vehicles for such travel in accordance with a Class C driver's license.
- Travel may require multiple days out of town.

4. PERSONAL CONTACT (WHO THE EMPLOYEE MAY BE IN CONTACT WITH WHILE PERFORMING DUTIES):
The Assistant Telecommunications Engineer is required to communicate with all levels of personnel and local government agencies. Weekly communication is required with outside client agencies during the design, recommendation, and implementation stages of projects. Additionally, communications may be necessary with equipment vendors to determine if devices can solve new or ongoing technical problems.

5. ACTIONS AND CONSEQUENCES (AS RELATED TO DUTIES PERFORMED):
This is a non-supervisory, developing journey-level technical position. The engineer independently performs routine system design, analysis, and support activities while receiving direction on more

complex assignments. The position evaluates operational, technical, and regulatory criteria to plan and recommend solutions for radio communication systems within an assigned program area. Poor decisions may result in project delays or reduced system performance, potentially affecting public safety users who rely on continuous and reliable communications.

6. EMERGENCY OPERATIONS – ACTIVATION/OPERATIONAL ASSIGNMENT 100%:

When requested to fill an operational assignment and until demobilized, the following duties will be performed and your regular duties may temporarily cease:

May be required to work in the State Operations Center (SOC), Regional Emergency Operations Center (REOC), Joint Field Office (JFO), Area Field Office (AFO), Local Assistance Center (LAC), or other location to provide assistance in emergency response and recovery activities. All staff is required to complete operational related training and participate in one of three Readiness Teams that rotate activation availability on a monthly basis if not assigned to an Operational Branch (e.g., Fire/Law/Region/PSC Operations (Technicians)/PSC Engineering (Engineers)). May be required to participate in emergency drills, training, and exercises.

Staff need to work effectively under stressful conditions; work effectively & cooperatively under the pressure of short leave time; work weekends, holidays, extended and rotating shifts (day/night). Statewide travel may also be required for extended periods of time and on short notice.

While fulfilling an operational assignment it is important to understand that you are filling a specific "position" and that position reports to a specific Incident Command System (ICS) hierarchy. This is the chain of command that you report to while on this interim assignment.

On Call/Standby/Duty Officer (if applicable)

If assigned on-call, standby or as a Duty Officer, you are required to be ready and able to respond immediately to any contact by Governor's Office of Emergency Services (Cal OES) Management (including contact from the State of California Warning Center) and report to work in a fit and able condition if necessary as requested.

7. JOB DESCRIPTION/GENERAL STATEMENT:

Public Safety Communications (PSC), Client Engineering Division, Statewide Interoperability unit, also known as the California Radio Interoperable System or CRIS unit, is responsible for a wide array of engineering activities and services related to the public safety communications systems engineering and design for public safety agencies, including both State and non-State entities, operating within the State of California.

Under supervision of the Senior Telecommunications Engineer, the Assistant Telecommunications Engineer provides direction to maintenance technical staff for the installation and maintenance of new systems, and solutions to problems with existing systems. In large system implementations of average difficulty, the incumbent assists engineering lead persons. The incumbent performs duties of increasing responsibility such as developing technical reports and equipment selection criteria; providing project cost estimates for parts and labor; and notifying the supervisor of risks to the project's budget, schedule, and scope. Additionally, the incumbent ensures engineering services for public safety communications meet the critical operational requirements of the state.

This position may be rotated within the Client Engineering Division or the Microwave Engineering Division based on factors that include cross-training and workload management.

In alignment with our commitment to diversity, equity, inclusion, and accessibility, all Cal OES employees are encouraged to promote and foster an equitable and inclusive workplace environment.

Percent of Time	ESSENTIAL FUNCTIONS
35%	• Determine system configuration needs and conduct research using the internet, trade publications, engineering manuals, and communication studies to identify viable solutions • Recommend new systems or modifications to existing communication systems to improve efficiency, reduce cost, and replace outdated components • Develop statements of work, project specifications, and cost estimates for engineering projects with moderate independence • Review and present project plans for system development, planning, and installation to internal teams and client stakeholders • Create, review, revise, and finalize engineering documentation upon project completion • Research, recommend, and help implement internal infrastructure changes needed to support system improvements • Evaluate options such as adding sites, increasing Very High Frequency (VHF) utilization, or modifying the P25 radio core • Work with external vendors to evaluate and incorporate technologies such as Long-Term Evolution (LTE), new frequency bands, connections to other P25 systems, and new console interfaces • Plan, implement, and maintain network infrastructure to ensure reliable connectivity and optimal system performance, including IP addressing, routing tables, and redundancy strategies • Design and manage Virtual Local Area Network (VLANs) and network segmentation to support secure, efficient traffic flow and scalable system architecture • Administer network devices, monitor network performance, and apply security measures such as firewalls, access controls, and intrusion detection to protect data integrity and system availability • Troubleshoot and resolve network issues across multiple layers of the Transmission Control Protocol/Internet Protocol Address (TCP/IP) model, providing technical guidance to ensure seamless communication between systems
35%	• Plan the use of Radio Frequencies (RF) by selecting appropriate sites, evaluating RF propagation, and assessing RF characteristics • Develop full equipment specifications for assigned engineering projects • Perform specification compliance tests and evaluate whether equipment meets required standards • Perform and analyze computer-simulated radio coverage and recommend adjustments based on results • Conduct automated field coverage testing, analyze collected data, and compare it against modeled predictions • Perform intermodulation studies and recommend actions to reduce or eliminate RF interference • Prepare accurate Federal Communications Commission (FCC) licensing information, including coordinate data, elevation, antenna specifications, and transmitter power • Write complete installation and modification instructions for radio equipment and communications console components
15%	• Provide technical support and troubleshooting assistance to maintenance staff. • Independently program radio equipment, including transmitters, receivers, and related components • Design system integration solutions involving RF and audio using a mix of digital and analog devices

	- Specify and select equipment such as radios, antennas, filters, and amplifiers for public safety communication systems - Meet project schedules and notify supervisors promptly when issues arise that could affect work completion
10%	- Attend job-related training courses as conducted at the department, vendor, and outside training facilities or online - Prepare (with guidance from the lead person or senior) construction and maintenance standards by documenting agency system configurations for inclusion in the Telecommunications Division Manual and Central Records library - Represent PSC by attending client planning committee meetings and provide training opportunities on existing and new communications technologies - Meet with clients on a regular basis regarding their communications systems' needs
<i>Percent of Time</i>	MARGINAL FUNCTIONS
5%	Other Job-Related Duties as Required The incumbent will perform other job-related duties as required to fulfill the Cal OES mission, goals and objectives. Additional duties may include, but not be limited to: assisting where needed within the program, which may include special assignments; complying with general State and Cal OES administrative reporting requirements (i.e. completion of time sheets, Empower time reporting, travel requests, travel expense claims, work plans, training requests, individual development plans, etc.); and attendance at staff meetings.

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
VISION: Reviewing mail; preparing various forms; proofreading documents; reading printed material, computer screens, and handwritten materials.	☐	☐	☐	☐	☒
HEARING: Answering telephones; receiving verbal information from outside sources; understanding verbal instruction.	☐	☐	☒	☐	☐
SPEAKING: Receiving visitors; answering inquiries and providing verbal information or instruction.	☐	☐	☒	☐	☐
MOVEMENT: Delivering material to others; picking up materials from others; copying; faxing; distributing information; filing.	☐	☒	☐	☐	☐
SITTING: At a computer terminal or desk; conferring with employees.	☐	☐	☐	☐	☒
STANDING:	☐	☒	☐	☐	☐
BALANCING:	☐	☒	☐	☐	☐
CONCENTRATING: Reviews and reads records/documents, researches, composes, analyzes, compiles, and updates technical documents; multi-tasking; prepares various forms and documents.	☐	☐	☐	☐	☒
COMPREHENSION: Understanding needs of co-workers, clients; understands procedures and practices; Understands laws, regulations related to their work.	☐	☐	☐	☒	☐
WORKING INDEPENDENTLY: Possesses ability to work independently as well as a team member, have good interpersonal and communication skills, ability to follow directions, take initiative, assume responsibility, and exercise good judgment and tact. Must be able to work alone without much guidance or interaction or interaction from other staff.	☐	☐	☐	☐	☒
LIFTING UP TO 10 LBS. OCCASIONALLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20 LBS. OCCASIONALLY AND/OR 10 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20-50 LBS. OCCASIONALLY AND/OR 25-50 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
KEYING: Pushing buttons on telephone; typing; copying.	☐	☐	☐	☒	☐

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
REACHING: Answering phones.	☐	☐	☒	☐	☐
CARRYING: Distributing mail; reports; stocking supplies.	☐	☒	☐	☐	☐
CLIMBING: Stairs	☐	☒	☐	☐	☐
BENDING AT WAIST:	☐	☒	☐	☐	☐
KNEELING:	☐	☒	☐	☐	☐
PUSHING OR PULLING:	☐	☒	☐	☐	☐
HANDLING: Documents, manuals	☐	☐	☐	☐	☒
DRIVING:	☐	☐	☒	☐	☐
OPERATING EQUIPMENT: Computer; telephone; copy machine; fax.	☐	☐	☐	☐	☒
WORKING INDOORS:	☐	☐	☐	☐	☒
WORKING OUTDOORS:	☐	☒	☐	☐	☐
WORKING IN CONFINED SPACE: Enclosed office environment.	☐	☐	☐	☐	☒

OTHER INFORMATION

Must have knowledge of the state and related federal laws, rules, regulations, policies, and procedures. Must exercise good writing skills; follow oral and written directions, be responsive to the needs of the public and employees of Cal OES and other agencies; analyze situations and take effective action using initiative, resourcefulness, and good judgment. May need to work with limited supervision.

Consistent with good customer service practices and the goals of the Cal OES Strategic Plan, the incumbent is expected to be courteous and provide timely responses to internal and external customers, follow through on commitments, and solicit and consider internal and external customer input when completing work assignments.

SIGNATURES

Certification of Applicant/Employee

Note – If any concerns with performing the duties of this position with or without reasonable accommodation, discuss your concerns with the hiring supervisor, who in turn, will discuss with the Reasonable Accommodation Coordinator.

I certify that I possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties as described above with or without reasonable accommodation.

I have read and discussed these duties with my supervisor:

Employee's Signature

Date

I certify that the above accurately represents the duties of the position:

Supervisor's Signature

Date

Civil Service Title

State of California
GOVERNOR'S OFFICE OF EMERGENCY SERVICES
POSITION DUTY STATEMENT
BU: 1, 4, 9, 10, 11, 12 & 14

EMPLOYEE:	CLASSIFICATION: Electrical Engineer	HEADQUARTERS: PSC Campus
PROGRAM/UNIT: Public Safety Communications / Radio Communications / Client Engineering / Statewide Interoperability	POSITION NUMBER: 163-742-3613-XXX (61431)	CBID: R09
TENURE: Permanent	TIME BASE: Full-Time	WORK WEEK GROUP: 2
APPT EFFECTIVE DATE:	RANGE (IF APPLICABLE):	PROBATIONARY PERIOD: ☐ 6 Mos. ☒ 12 Mos. ☐ N/A
IMMEDIATE SUPERVISOR: Senior Telecommunications Engineer	CONFLICT OF INTEREST CATEGORY: ☐ Yes ☒ No	DMV PULL PROGRAM: ☒ Yes ☐ No

1. SUPERVISION RECEIVED:
The Electrical Engineer is under direction of the Senior Telecommunications Engineer, Statewide Interoperability Unit.

2. SUPERVISION EXERCISED:
None

3. PHYSICAL DEMANDS (SEE ADDITIONAL PAGES):

- Work schedule is Monday – Friday.

During travel outside the office:

- Dress for safety and outdoor environment (e.g. snow, rain, desert, mountains, tunnels, body of water).
- Use of public safety radios.
- Work in close quarters (e.g. radio vaults, telephone closet, computer server room, garages, inside vehicles).
- Travel to job sites, as necessary.
- Such travel may be any combination of the following: airline; automotive, including 4-wheel drive, snow-cat and/or watercraft.
- Required travel may be to facilities and/or proposed facilities located anywhere in California and in neighboring areas of Oregon, Nevada, and/or Arizona.
- Such travel may be to any radio communications facility including facilities located in remote areas requiring travel off normal paved roads.
- Required to operate vehicles for such travel in accordance with a Class C driver's license.
- Travel may require multiple days out of town.

4. PERSONAL CONTACT (WHO THE EMPLOYEE MAY BE IN CONTACT WITH WHILE PERFORMING DUTIES):
The Electrical Engineer is required to communicate with all levels of Public Safety Communications (PSC) staff, California Governor's Office of Emergency Services (Cal OES) staff, and local government agencies. Additionally, communications may be necessary with equipment vendors to determine if devices can solve new or ongoing technical problems.

5. ACTIONS AND CONSEQUENCES (AS RELATED TO DUTIES PERFORMED):
This is a non-supervisory, entry-level technical position. The engineer assists in analyzing operational and technical requirements, learning to apply established standards to support the planning, design, and documentation of radio communication systems. Work is performed under close

guidance, with decisions reviewed for accuracy and compliance. Incorrect decisions at this level may cause delays in project tasks but are generally mitigated through supervisory oversight to avoid impact on public safety communications.

6. EMERGENCY OPERATIONS – ACTIVATION/OPERATIONAL ASSIGNMENT 100%:

When requested to fill an operational assignment and until demobilized, the following duties will be performed and your regular duties may temporarily cease:

May be required to work in the State Operations Center (SOC), Regional Emergency Operations Center (REOC), Joint Field Office (JFO), Area Field Office (AFO), Local Assistance Center (LAC), or other location to provide assistance in emergency response and recovery activities. All staff is required to complete operational related training and participate in one of three Readiness Teams that rotate activation availability on a monthly basis if not assigned to an Operational Branch (e.g., Fire/Law/Region/PSC Operations (Technicians)/PSC Engineering (Engineers)). May be required to participate in emergency drills, training, and exercises.

Staff need to work effectively under stressful conditions; work effectively & cooperatively under the pressure of short leave time; work weekends, holidays, extended and rotating shifts (day/night). Statewide travel may also be required for extended periods of time and on short notice.

While fulfilling an operational assignment it is important to understand that you are filling a specific "position" and that position reports to a specific Incident Command System (ICS) hierarchy. This is the chain of command that you report to while on this interim assignment.

On Call/Standby/Duty Officer (if applicable)

If assigned on-call, standby or as a Duty Officer, you are required to be ready and able to respond immediately to any contact by Governor's Office of Emergency Services (Cal OES) Management (including contact from the State of California Warning Center) and report to work in a fit and able condition if necessary as requested.

7. JOB DESCRIPTION/GENERAL STATEMENT:

Public Safety Communications (PSC), Client Engineering Division, Statewide Interoperability Unit, also known as the California Radio Interoperable System or the CRIS Unit, is responsible for a wide array of engineering activities and services related to the PSC systems engineering and design for public safety agencies, including both State and non-State entities, operating within the State of California.

Under direction of a Senior Telecommunications Engineer, the Electrical Engineer assists Associate and Senior engineers in providing direction to maintenance technical staff for the installation of new systems or maintenance and solutions to problems with existing systems. In large system implementations, the incumbent assists engineering lead persons. The incumbent participates in developing technical reports and equipment selection criteria, provides project cost estimates for parts and labor, and notifies supervisor of risks to project budget, schedule, or scope. Additionally, the incumbent ensures engineering services for public safety communications meet the critical operational requirements of the state.

This position may be rotated within the Client Engineering Division or the Microwave Engineering Division based on factors that include cross-training and workload management.

In alignment with our commitment to diversity, equity, inclusion, and accessibility, all Cal OES employees are encouraged to promote and foster an equitable and inclusive workplace environment.

Percent of Time	ESSENTIAL FUNCTIONS
35%	• Assist in determining system configuration needs and perform basic research using online resources, trade journals, engineering references, and communication studies. • Support efforts to recommend updates or improvements to communication systems by gathering information and comparing solution options • Help develop statements of work, project specifications, and cost estimates under guidance from senior staff • Review project plans and participate in discussions related to system development, planning, and installation • Assist in creating, reviewing, and updating engineering documentation at the end of assigned projects • Support research and preliminary analysis related to internal infrastructure changes. • Assist in evaluating options such as adding sites, expanding Very High Frequency (VHF) usage, or making adjustments to the P25 radio core • Work with external vendors alongside senior engineers to learn about and help evaluate technologies such as Long-Term Evolution (LTE), additional frequency bands, P25 system interconnections, and new console deployments • Plan, implement, and maintain network infrastructure to ensure reliable connectivity and optimal system performance, including IP addressing, routing tables, and redundancy strategies • Design and manage Virtual Local Area Network (VLANs) and network segmentation to support secure, efficient traffic flow and scalable system architecture • Administer network devices, monitor network performance, and apply security measures such as firewalls, access controls, and intrusion detection to protect data integrity and system availability • Troubleshoot and resolve network issues across multiple layers of the Transmission Control Protocol/Internet Protocol Address (TCP/IP) model, providing technical guidance to ensure seamless communication between systems
35%	• Assist in planning radio frequency (RF) usage by helping identify site locations and learning basic RF propagation and characteristics • Help gather information for equipment specifications and contribute to early drafts under guidance • Support senior staff in performing specification compliance tests and documenting results • Run basic computer-simulated radio coverage predictions and assist in interpreting outcomes • Participate in automated on-road field coverage surveys and assist in collecting and organizing data • Help gather information for intermodulation studies and learn how interference issues are identified and resolved • Collect and verify technical data (latitude, longitude, elevation, antenna information, power, etc.) to support Federal Communications Commission (FCC) licensing work. • Assist in writing simple jobs and instructions for installing or modifying radio or console equipment
15%	• Provide basic technical information to maintenance staff and escalate more complex issues • Program transmitters and receivers with supervision and according to established templates • Support system integration tasks involving RF and audio paths using both digital and analog devices

	• Assist in researching and evaluating equipment such as radios, antennas, filters, and amplifiers • Complete assigned work by scheduled deadlines or promptly notify supervisors of issues that may delay completion
10%	• Attend job-related training courses as conducted at the department, vendor, and outside training facilities or online • Prepare (with guidance from the lead person or senior) construction and maintenance standards by documenting agency system configurations for inclusion in the Telecommunications Division Manual and Central Records library • Attend client project planning meetings • Attend meetings with clients on a regular basis regarding their communications systems' needs
<i>Percent of Time</i>	MARGINAL FUNCTIONS
5%	Other Job-Related Duties as Required The incumbent will perform other job-related duties as required to fulfill the Cal OES mission, goals and objectives. Additional duties may include, but not be limited to: assisting where needed within the program, which may include special assignments; complying with general State and Cal OES administrative reporting requirements (i.e. completion of time sheets, Empower time reporting, travel requests, travel expense claims, work plans, training requests, individual development plans, etc.); and attendance at staff meetings.

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
VISION: Reviewing mail; preparing various forms; proofreading documents; reading printed material, computer screens, and handwritten materials.	☐	☐	☐	☐	☒
HEARING: Answering telephones; receiving verbal information from outside sources; understanding verbal instruction.	☐	☐	☒	☐	☐
SPEAKING: Receiving visitors; answering inquiries and providing verbal information or instruction.	☐	☐	☒	☐	☐
MOVEMENT: Delivering material to others; picking up materials from others; copying; faxing; distributing information; filing.	☐	☒	☐	☐	☐
SITTING: At a computer terminal or desk; conferring with employees.	☐	☐	☐	☐	☒
STANDING:	☐	☒	☐	☐	☐
BALANCING:	☐	☒	☐	☐	☐
CONCENTRATING: Reviews and reads records/documents, researches, composes, analyzes, compiles, and updates technical documents; multi-tasking; prepares various forms and documents.	☐	☐	☐	☐	☒
COMPREHENSION: Understanding needs of co-workers, clients; understands procedures and practices; Understands laws, regulations related to their work.	☐	☐	☐	☒	☐
WORKING INDEPENDENTLY: Possesses ability to work independently as well as a team member, have good interpersonal and communication skills, ability to follow directions, take initiative, assume responsibility, and exercise good judgment and tact. Must be able to work alone without much guidance or interaction or interaction from other staff.	☐	☐	☐	☐	☒
LIFTING UP TO 10 LBS. OCCASIONALLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20 LBS. OCCASIONALLY AND/OR 10 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
LIFTING UP TO 20-50 LBS. OCCASIONALLY AND/OR 25-50 LBS. FREQUENTLY:	☐	☒	☐	☐	☐
KEYING: Pushing buttons on telephone; typing; copying.	☐	☐	☐	☒	☐

PHYSICAL AND MENTAL REQUIREMENTS OF ESSENTIAL FUNCTIONS					
Activity	Not Required	Less than 25%	25% to 49%	50% to 74%	75% or More
REACHING: Answering phones.	☐	☐	☒	☐	☐
CARRYING: Distributing mail; reports; stocking supplies.	☐	☒	☐	☐	☐
CLIMBING: Stairs	☐	☒	☐	☐	☐
BENDING AT WAIST:	☐	☒	☐	☐	☐
KNEELING:	☐	☒	☐	☐	☐
PUSHING OR PULLING:	☐	☒	☐	☐	☐
HANDLING: Documents, manuals	☐	☐	☐	☐	☒
DRIVING:	☐	☒	☐	☐	☐
OPERATING EQUIPMENT: Computer; telephone; copy machine; fax.	☐	☐	☐	☐	☒
WORKING INDOORS:	☐	☐	☐	☐	☒
WORKING OUTDOORS:	☐	☒	☐	☐	☐
WORKING IN CONFINED SPACE: Enclosed office environment.	☐	☐	☐	☐	☒

OTHER INFORMATION

Must have knowledge of the state and related federal laws, rules, regulations, policies, and procedures. Must exercise good writing skills; follow oral and written directions, be responsive to the needs of the public and employees of Cal OES and other agencies; analyze situations and take effective action using initiative, resourcefulness, and good judgment. May need to work with limited supervision.

Consistent with good customer service practices and the goals of the Cal OES Strategic Plan, the incumbent is expected to be courteous and provide timely responses to internal and external customers, follow through on commitments, and solicit and consider internal and external customer input when completing work assignments.

SIGNATURES

Certification of Applicant/Employee

Note – If any concerns with performing the duties of this position with or without reasonable accommodation, discuss your concerns with the hiring supervisor, who in turn, will discuss with the Reasonable Accommodation Coordinator.

I certify that I possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties as described above with or without reasonable accommodation.

I have read and discussed these duties with my supervisor:

Employee's Signature

Date

I certify that the above accurately represents the duties of the position:

Supervisor's Signature

Date

Civil Service Title