Serves as electrical engineer in a construction field office. The incumbent is in charge of all phases of electrical installations, inspection testing, and partial contract administration of all systems and construction operations. Provides expertise and serves as technical advisor on electrical engineering problems arising during construction. Contracted items typically include substations, overhead and underground distribution systems, building power and lighting controls, fire alarms and electrical systems with related mechanical systems found in administrative buildings, shops, storage facilities, tactical equipment shops and other typical structures, as well as energy conservation projects. Assignments involves multistory buildings, large energy plants, state-of-the-art solar systems, hospital, and/or other large and comparably complex electrical systems for which job is technically responsible/authoritative.

1. Reviews the electrical portion of plans and specifications prior to start of construction to ensure design is in compliance with sound engineering practices, established criteria, and functional requirements of the facility as outlined in the master plan. Utilizing a professional knowledge in electrical engineering and related engineering fields, the incumbent participates in design and planning review conferences with designers or A-Es and construction contractors, or other interested parties to discuss construction aspects and problems. Supports the source selection process. Reviews contractor electrical design submittals and shop drawings for conformance with contractual requirements. Approves electrical materials utilized as well as all electrical equipment submittals. Checks and ensures contractor progress by constant surveillance of installation and construction of all electrical components involved with particular attention paid to delivery of long lead time elements.

2. Suggest changes in design and/or specifications to improve performance of the facility, to reduce cost of construction or material involved, or to enhance the project in any significant way.

3. In connection with design on later changes, conducts studies or investigations, compiling data as to existing field conditions. Conducts studies to determine solutions to unusual problems. Consults with representatives of the using service to determine their needs and/or to discuss necessary changes, modifications, etc. Prepares correspondence, cost estimates, sketches, electrical specifications, recommended procedures, and revised construction schedules to serve as a basis for contract modifications. Conducts or participates in negotiations and prepares modifications.


5. Exercises close surveillance over the contractor quality control activities to insure adequacy of: testing, material utilization, construction methods, safety procedures and equipment installation. Ensures compliance with contract documents, applicable electrical codes and functional requirements of the using service.

6. Responsible for the full application of the General Safety Requirement Manual EM 385-1-1 and other District and contractual safety requirements to the work being performed under his/her supervision; on supervision of contractor activities, is responsible for inspecting work areas, making safety recommendations, and noting safety recommendations and corrective action taken on daily reports.