SACRAMENTO MUNICIPAL UTILITY DISTRICT

JOB SPECIFICATION

JOB TITLE: JOB CODE: REP CODE:

CABLE SPLC/ELEC 50051574 IBEW

JOB PURPOSE:

Under general supervision, installs, maintains, repairs, and removes

underground cables and other underground electrical equipment. Splices

all types of underground cables within a full range of voltages, including but not limited to, fiber optic, communication, and low and high voltage power distribution cables.

DEFINITION OF LEVEL:

OTHER

NATURE AND SCOPE:

This series is assigned to distribution services. This is a journey-

level class for which there is an advanced apprenticeship. The work

performed in this class is distinguished from the Lineman/Woman in that

the Cable Splicer/Electrician splices and terminates cables of various

voltage ratings using tapes rather than preformed devices, requiring

specialized skills.

ESSENTIAL FUNCTIONS/DUTIES AND EXPECTED RESULTS:

Advanced Apprentice Cable Splicer/Electrician and Journey Cable Splicer/

Electrician: At the Advanced Apprentice level, incumbent is in a learning capacity and assists in the duties specified below for a Cable

Splicer/Electrician. Cable Splicer/Electrician will perform these

duties as a fully qualified and experienced journey level:

1) Installs, maintains, repairs, and removes high and low voltage

underground cables and other underground electrical equipment.

2) Splices all types of underground cables within a full range of

voltages, including but not limited to, fiber optic, communication, and

low and high voltage power distribution cables.

3) Operates, installs, drays, maintains and repairs electrical equipment associated with underground cable work (this ranges from cathodic and other protection systems, transformers, relays, switches, disconnects, switch boards, control systems, fire and smoke detection and control systems, ground fault protection systems, motors, and network protectors).

4) Works on or around energized high and low voltage equipment.

5) Operates equipment such as boom and bucket trucks, aerial equipment,

pullers, and forklifts.

6) Reads and interprets written documentation such as maps, mechanical

and electrical drawings and schematics, and equipment technical manuals.

MINIMUM QUALIFICATIONS:

KNOWLEDGE OF:

Advanced Apprentice: High and low voltage cable installation, splicing

and terminating; Theory and operation of power transformers, circuit

breakers, relays, fuses and limiters, and related electrical equipment;

Basic electrical theory including mathematics and algebra, electrical

terminology, electrical and mechanical drawings and schematics;

hand/power tools and test equipment used in installation and repair of

electrical equipment; appropriate use of English grammar in order to

understand and comprehend instructions and communicate information.

Journey: In addition to above: Theory and operation of an Underground

Secondary Network using transformers and network protectors such as Type

MG-8, MG-9, CM-22, CMD; relaying associated with network protectors;

techniques and practices used to splice and terminate a wide variety of

high voltage cables using both kit and hand splice methods; theory and

operation of 12-21KV underground radial distribution system, underground

high-voltage transmission systems, and associated control systems;

connection and termination methods associated with those systems.

SKILL TO:

Advanced Apprentice: Comprehend and apply technical information in shop

manuals and training texts; follow written and oral instructions for

installation, maintenance, and repair of equipment; develop and maintain

effective working relationships with all groups of individuals; complete

forms, requisitions, reports, and document work performed; perform work

at heights, below ground in vaults, manholes and other confined spaces,

and use ladders in a safe manner; perform required math calculations,

including algebra and trigonometry; distinguish colors; safely lift and

carry 80 pounds and move heavy cylinders.

Journey: In addition to the above: Understand electrical maintenance

procedures, electric schematics, and wiring diagrams; perform repairs on

transformers, network protectors, high voltages switches, and related

electrical equipment; troubleshoot electrical circuits and equipment

using testing equipment, wiring diagrams, schematics, and vendor

instruction manuals; use testing equipment such as ammeters, meggers,

and multimeters; effectively communicate orally and in writing, apply

basic computer skills.

EDUCATION and EXPERIENCE:

Advanced Apprentice: Progressively responsible experience in the

installation, connection, repair and maintenance of electrical equipment

used in Network and Underground high and low voltage distribution

systems. Progressively responsible experience and training splicing and

terminating high and low voltage power cables. Experience equivalent to

at least the 36-month level of a 54-month Cable Splicer/Electrician

apprenticeship.

Journey: Must have completed a formal/recognized apprentice program

that includes, but is not limited to splicing and terminating various

types of cables, installing maintaining and repairing various types of

electrical equipment used in Underground Commercial Distribution

(Network) Systems.

LICENSES OR CERTIFICATIONS:

None.

DESIRABLE QUALIFICATIONS:

None.

PHYSICAL REQUIREMENTS:

Applicants must be able to perform the essential job functions with or

without a reasonable accommodation.

This description is incomplete without the physical requirements

document that must be printed and attached. It is located on

\\Server01\SMUD\Physical\_Job\_Descriptions.