

**INTERAGENCY POST EMPLOYEE POSITION DESCRIPTION**

Prepare according to instructions given in Foreign Service National Handbook, Chapter 4 (3 FAH-2).

1. Post <b>Hermosillo</b>	2. Agency <b>STATE</b>	3a. Position Number 312819
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3b. Subject to Identical Positions? Agencies may show the number of such positions authorized and/or established after the "Yes" block.

☒ Yes ☐ No If yes, please provide position number: Base classification is 312819 A52612; IA is A52613

## 4. Reason for Submission

- ☐ a. Redescription of duties: this position replaces  
(Position Number) \_\_\_\_\_, (Title) \_\_\_\_\_ (Series) \_\_\_\_\_ (Grade) \_\_\_\_\_
- ☒ b. New Position \_\_\_\_\_
- ☐ c. Other (explain) \_\_\_\_\_

5. Classification Action	Position Title and Series Code	Grade	Initials	Date(mm-dd-yr)
a. Post Classification Authority	Electrician, FSN-1210	FSN-06	GTM/OE	Sept 2018
b. Other WHA/EX/FRC	Electrician, FSN-1210	FSN-06		3/09/2021
c. Proposed by Initiating Office				

6. Post Title Position (*If different from official title*)  
Electrical Technician (NCC)

7. Name of Employee

8. Office /Section  
Management Officea. First Subdivision  
Facility Management Office (FAC)

b. Second Subdivision

N/A

c. Third Subdivision

N/A

9. This is a complete and accurate description of the duties and responsibilities of my position.

\_\_\_\_\_  
Printed Name of Employee\_\_\_\_\_  
Date (mm-dd-yyyy)Employee Signature  
\_\_\_\_\_

10. This is a complete and accurate description of the duties and responsibilities of this position.

\_\_\_\_\_  
Printed Name of Supervisor\_\_\_\_\_  
Date (mm-dd-yyyy)Supervisor Signature  
\_\_\_\_\_

11. This is a complete and accurate description of the duties and

12. I have satisfied myself that this is an accurate description of this

The incumbent reports directly to the Building Engineer Supervisor in the Facility Management office. The position holder is employed as an Electrical Technician to accomplish skilled maintenance and repair work at the journeyman electrician level, to International Building Code standards, throughout all facilities on the New Consulate Compound

(NCC) to include office buildings, grounds, out buildings, ancillary structures, and residential owned/leased properties.

#### 14. Major Duties and Responsibilities

\_\_\_\_\_ % of Time

Employed as an Electrical Technician to carry out skilled maintenance and repair work at the journeyman level, to International Building Code standards, throughout the NCC to include office buildings, grounds, out buildings, ancillary structures, and residential owned/leased properties. Work assignments include installation and repair of electrical hardware, associated peripherals components, circuit configuration, optimization of equipment performance through preventive maintenance, electrical power distribution systems, power and lighting panels, control circuits, voltage regulators, transformers, switchgear, automatic transfer switches, uninterruptible power supply systems, lighting systems, and any other item that has an electrical connection .

##### 1. Operations Support 50%

1. Performs hands-on installation and repairs of the electrical power and lighting system, control circuitry, and other building electrical systems. Work includes, but is not limited to emergency generator controls, HVAC power and controls, mechanical pump power and controls, fire alarm system controls and devices, panel boards, UPS system, automatic transfer switches, relay controls, programmable control systems for switchgear, medium voltage transformers, motor control centers, convenience outlet power circuits, lighting fixtures and lighting control circuits. Ensures that all assigned repairs are accomplished promptly and completely, using the manufacturers recommended repair or replacement parts, and meeting International Building Code standards/requirements for installation methods and serviceability.
2. Performs preventive maintenance on the electrical power and lighting distribution systems and related components to maintain system operation and reliability to ensure uninterrupted power to critical facilities, equipment, and critical systems. Uses Reliability Centered Maintenance (RCM) techniques to determine system reliability, schedule equipment shut downs for preventive maintenance, and to predict when equipment and/or systems will need to be replaced. Responds to scheduled, unscheduled, and preventive maintenance work orders generated by the Computerized Maintenance Management System (CMMS) and completes assigned work orders within the time standards set by the Collaborative Management Initiative (CMI).
3. Inspects, tests, evaluates, calibrates and updates electrical power and lighting distribution systems and wiring to improve reliability and to assure dependability, safe operation, and code and OBO compliance. Inspects facilities (including houses, temporary trailers, office buildings, etc.); equipment (e.g. fire and life safety, generators, compressors, etc.); systems (e.g. electrical, lighting, power distribution , and HVAC/plumbing where applicable, etc.); and work of vendors to determine condition of facilities, safe operation of equipment, quality and safety of work being performed and/or recently completed, and scheduled maintenance. Provides routine inspections on all systems, as specified by manufacturer requirements and equipment operations and maintenance (O&M) manuals, and advises the Facility Manager and Supervising Engineer in writing of the system or equipment's condition, and existing or potential problems that need to be addressed, and recommendations to bring systems or equipment back to the manufacturers recommended operating parameters.
4. Removes, relocates, repairs, installs and tests electrical equipment to maintain occupant comfort and



equipment protection in buildings and structures. Restores the operation of non-functioning equipment to the manufacturers recommended operating parameters.

5. Orders and stocks electrical supplies, materials and replacement parts (e.g. motors, wiring, electrical devices and hardware, tools, and other electrical parts, etc.) to replace materials consumed and to assure their availability for future assigned projects, scheduled maintenance, and emergency responses.
6. Ensures proper use of time, tools, materials and parts, and provides labor and material data on all completed scheduled and unscheduled work orders and maintenance task so the Work Control Clerk can perform accurate data entry and close the work order in the CMMS program.
7. Responds to 24-hour emergency calls during off-duty hours when critical systems have stopped functioning, or there is an imminent threat to the life safety of personnel, or structure integrity.

## **2. Maintenance Support 40%**

1. Maintains all electrical systems; drafts and submits reports to the Facility Manager (FM) and/or supervising engineer detailing operational efficiency of systems, equipment, and critical components. Reports consist of power monitoring and consumption, key performance indicators (KPI) such as vibration analysis, oil analysis, and temperature, historical data vs current conditions, and systems performance vs the manufacturer's requirements and operating parameters. Receives reports and maintenance logs generated by the BASET and Electrical Controls Technician to act upon and enhance each systems performance. Provides contractor's with design information for proposed renovation or new construction work and assists Facility Management Locally Employed (LE) Staff in the performance of in-house projects.
2. Assists in the preparation of Statements of Work (SOW) and other construction documents for repairs, new construction, and renovation work. Assistance includes obtaining telephone/written estimates and quotes for materials and equipment needed to facilitate repairs and the completion of assigned job/tasks. Monitors contractors work to ensure they are providing products and services per the terms and conditions of the contract. Assists in developing punch lists, testing, and inspections as required to ensure acceptable quality in both services and construction work, and assists Facility Management LE Staff in the performance of in-house projects.
3. Assists in providing guidance and training to other Facility Management LE Staff and vendors/contractors in the correct operation of equipment, proper use of diagnostic devices to inspect and test materials used to complete required maintenance activities, general operations, and future expansion projects.
4. Assists in the development and implementation of a comprehensive preventive maintenance program for electrical generation and distribution systems, equipment, branch circuit wiring, and associated electrical components and devices when new structures or equipment are brought on line, or re-commissioned after a being overhauled.

## **3. Logistic Support 10 %**

1. Contributes to the safety program managed by the POSHO. Ensures work does not present a safety or health problem, or risk of injury to workers, other employees, or visitors. Is vigilant in addressing workplace safety issues.

2. Remains current on job specific expertise through various sources (e.g. on line distance learning courses, trade publications, trade shows, vendor communication, etc.) to keep abreast of the latest technological developments and products to improve system and equipment reliability.
3. Collateral duty assignments will be at the discretion of the Supervising Building Engineer or the Facility Manager. Tasks may include the following: Additional mechanic duties, Assistant POSHO, assist Government Technical Monitor (GTM) on Post managed projects, and/or vendor/contractor escort. Participates in Facility Management LE Staff training programs sponsored by DOS, manufacturers, and private vendors.

**\*\*Note: This position description in no way states or implies that these are the only duties to be performed by incumbent. Incumbent will be required to perform other duties as assigned by the agency.**

**15. Qualifications Required For Effective Performance**

a. Education

Completion of secondary school is required. Completion of vocational training program from an accredited institute recognized as producing journeyman level technicians with specialization in the Electrical field is required. The Incumbent will have completed courses of study covering the principles of AC and DC circuitry, power distribution, control wiring, circuit ampacity and safe wiring practices for office and residential buildings, use of diagnostic equipment and electrical meters, and commercial wiring standards including power generation and distribution.

b. Prior Work Experience

A minimum of three (3) years' experience journey-level experience in the repair and maintenance of electrical equipment and systems, power generation and electrical distribution systems, grounding, and control circuitry. This should include a minimum of two (2) years work experience on similar sized equipment configurations and systems with an increased level of complex work requirements.

Use and implementation of International Building Code (IBC) standards, building, electrical, mechanical, and fire and life safety codes in the execution of projects.

c. Post Entry Training

Will receive orientation training on the Embassy's and the Facilities Management Office's organizational structure, policies and procedures. Incumbent will receive specific on-the-job training to become familiar with mission maintenance operations and how the work order system processes scheduled and unscheduled work orders and what your responsibility is in regards to the work order process.

Distance Learning:

PA528 – OBO Computerized Maintenance Management System

- d. Language Proficiency: List both English and host country languages(s) proficiency requirements by level (II, III) and specialization (sp/read). English level II (Limited Knowledge) Written/Speaking/Reading in English is required in order understand verbal requests, read some technical material, and prepare simple reports.

Spanish level III (Good knowledge) Written/Speaking/Reading is required. In order to communicate with local contractors and other LE Staff.

e. Job Knowledge

The incumbent must know how to install circuits and electrical apparatuses, diagnose electrical problems in circuitry, make repairs that meet or exceed the standards of the IBC, and what constitutes proper preventive maintenance. Must know how to use diagnostic equipment and be able to analyze readings to determine what and where the electrical problem is located. Must know how to use safety equipment when working near



energized equipment and parts. Must know how to read and interpret construction and as-built drawings, schematics, manufacturers shop drawings, and performance curve charts and graphs. Must have a thorough knowledge of ohms law and how to apply its formulas to circuit analysis.

Must have a very good technical understanding of major building electrical systems, switchgear, panelboards, lighting and power outlets, equipment, and control wiring. Knowledge of reading technical documents, interpreting maintenance plans and technical literature is required and highly emphasized. General computer literacy is required in multiple applications (MS Office).

f. Skills and Abilities

The incumbent shall have superior skills and abilities in the following areas: diagnosing and repairing electrical power generating and distribution systems, lighting and power branch circuit systems and components, and taking equipment readings with various meters. Must be skilled and comfortable using hand tools, power tools, and specialty tools to determine appropriate repairs. Must be able to use tools of the trade in order to install, troubleshoot and repair building electrical systems, and work with the mechanical technicians when repairs or replacement of control circuits, wiring, and associated devices needs to be performed. Must have substantial skill in comprehending engineering reports, specifications, and related materials in English. Must have an analytical mind to take cause and affect problems and diagnose the root cause creating the deficiency in the operating system or equipment. Additional abilities include responding to emergency situations in an efficient and timely manner to effect immediate repairs; work in various adverse conditions such as tight or enclosed spaces, heights, and temperature extremes, indoors or outdoors to complete work assignments; communicate orally and in writing with co-workers, contractors and vendors, the supervising engineer, the FM, and upper management providing pertinent information and technical jargon and translating it into laymen terminology. A driver's license is required. Must have excellent interpersonal skills and be able to handle a large workload and multiple tasks. Must be organized.

**16. Position Element**

a. Supervision Received

This position receives day-to-day supervision from the supervising Engineer. Secondary supervision will come from the Facility Manager or the Maintenance Supervisor.

b. Supervision Exercised

A. This position has no direct line management or supervision responsibilities.

B. The incumbent will be required to supervise trade helpers, or others assigned to assist depending on nature and complexity of the task/project. The incumbent will also oversee, manage, and monitor plumbing repair/replacement projects, and Building Maintenance Expense (BME) service contracts specifically related to plumbing equipment, components, and systems.

c. Available Guidelines

Department of State rules and regulations including the Foreign Affairs Manual (FAM), manufactures technical library and equipment literature, Operations and Maintenance manuals, equipment maintenance plans, as-built drawings, the LE Staff handbook, the housing handbook, ILMS use and functions, and OBO technical guidelines.

d. Exercise of Judgment

The incumbent will exercise sound judgment when carrying out the duties of the position. Safety of self and others must be first and foremost in the performance of duties. The incumbent will make routine judgment decisions when repairing or troubleshooting equipment to determine and implement the best course of action to bring equipment and systems back to the designed operating parameters. The incumbent will lead by example, showing exemplary behavior and character for colleagues and subordinate personnel.

e. Authority to Make Commitments

The incumbent receives written or verbal request for maintenance services and ascertains all of the necessary information to determine whether the work is of a routine, immediate, or emergency nature.

f. Nature, Level, and Purpose of Contacts

The incumbent will have contact with personnel at all levels within the embassy, both Americans and local nationals. These contacts will be in the performance of assigned tasks. The Electrical Technician routinely interfaces with subject matter experts for system support and may work closely with outside contractors on repairs and service to equipment and systems throughout the NCC and residential compounds.

g. Time expected to Reach Full Performance Level

Six months.