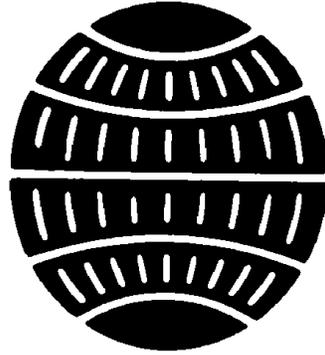


# CHAPTER 29



## ELECTRICIAN'S MATE (EM)

NAVPERS 18068F-29H  
Change 92

Updated: October 2022

ELECTRICIAN'S MATE, NUCLEAR POWER (EMN)  
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NAVY ENLISTED OCCUPATIONAL STANDARD

FOR

ELECTRICIAN'S MATE, NUCLEAR POWER (EMN)



SCOPE OF RATING

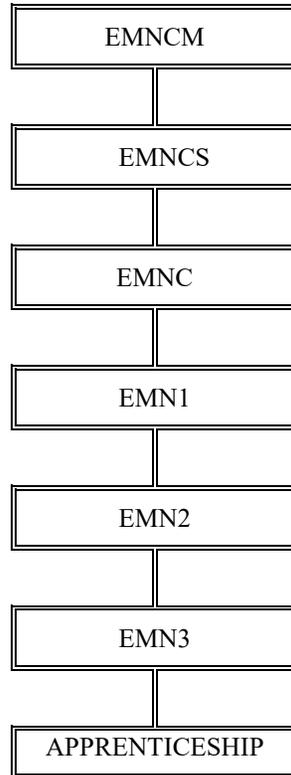
Electrician's Mates, Nuclear Power (EMN) operate and control generators, switchboards, control equipment, and electrical equipment associated with reactor plants; operate and perform organizational and intermediate maintenance on power and lighting circuits, electrical fixtures, motors, generators, voltage and frequency regulators, controllers, distribution switchboards, and other electrical equipment; test for short circuits, grounds or other casualties; and repair and/or rebuild electrical equipment, including solid state circuitry and mechanical devices.

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This Occupational Standard is to be incorporated in Volume I, Part B, of the Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards (NAVPERS 18068F) as Chapter 29.

## GENERAL INFORMATION

### CAREER PATTERN



Normal path of advancement to Chief Warrant Officer and Limited Duty Officer categories can be found in OPNAVINST 1420.1.

For rating entry requirements, refer to MILPERSMAN 1306-500, 1306-502, 1306-504, and 1306-618.

### SAFETY

**The observance of Operational Risk Management (ORM) and proper safety precautions in all areas is an integral part of each billet and the responsibility of every Sailor; therefore, it is a universal requirement for all ratings.**

**Job Title****Submarine Propulsion Plant Electrical Operator****Job Code****003777****Job Family**

Production

**NOC**

TBD

**Short Title (30 Characters)**

SUB PROPULSION PLANT ELECT OP

**Short Title (14 Characters)**

SS PPE OP

**Pay Plan**

Enlisted

**Career Field**

EMN

**Other Relationships and Rules**

NECs NXXX series and other NECs as assigned

**Job Description**

Submarine Propulsion Plant Electrical Operators perform operations and basic preventive and corrective maintenance on electrical distribution systems, motors and controllers, electrical generators, lighting systems, alarm and indicating systems, machinery vibration analysis equipment, throttle control systems, and other electrical and electronic support equipment; perform shutdown reactor plant operations; perform nuclear reactor, steam plant, and auxiliary equipment operations; and perform work critical to the movement of Naval tactical and strategic forces.

**DoD Relationship**Group Title

Nuclear Power

DoD Code

166100

**O\*NET Relationship**Occupation Title

Power Distributors and Dispatchers

SOC Code

51-8012.00

Job Family

Production

**Skills***Quality Control Analysis**Equipment Maintenance**Operation Monitoring**Equipment Selection**Management of Material Resources**Complex Problem Solving**Repairing**Troubleshooting**Operation and Control**Systems Evaluation***Abilities***Problem Sensitivity**Near Vision**Finger Dexterity**Deductive Reasoning**Arm-Hand Steadiness**Written Expression**Control Precision**Written Comprehension**Information Ordering**Manual Dexterity***CASUALTY CONTROL****Paygrade**

E4

**Task Type**

CORE

**Task Statements**

Clean emergency propulsion systems

E4

CORE

Correct battery abnormalities (e.g., high temperature, high voltage, loss of ventilation, etc.)

E4

CORE

Inspect emergency propulsion systems

E4

CORE

Isolate damaged electrical equipment

E4

CORE

Perform casualty power system operations

E4

CORE

Perform corrective actions to combat reactor plant casualties

E5

CORE

Repair emergency propulsion systems

E4

CORE

Supply propulsion using Emergency Propulsion Motor (EPM) (e.g., shift propulsion, start EPM electrically, etc.)

E4

CORE

Test emergency propulsion systems

**CIRCUIT BREAKERS****Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Adjust circuit breaker operating mechanisms

E4

CORE

Clean circuit breakers (e.g., auxiliary contacts, contact surfaces, operating mechanisms, wiring, connections, etc.)

E5

CORE

Inspect circuit breakers (e.g., auxiliary contacts, contact surfaces, operating mechanisms, wiring, connections, etc.)

### **CIRCUIT BREAKERS (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Repair circuit breakers
E4	CORE	Test circuit breakers and circuit breaker operating mechanisms
E5	CORE	Troubleshoot circuit breakers (e.g., manual, remote-operated, motor-operated, etc.)

### **ELECTRICAL CONTROL EQUIPMENT**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Adjust control panel components (e.g., interlocks, operating mechanisms, operating or alarm set points and limits, etc.)
E4	CORE	Adjust hotwell level control system set points
E4	CORE	Adjust motor controllers (e.g., operating set points and limits, standby features, etc.)
E4	CORE	Adjust salinity indicating system set points
E4	CORE	Adjust temperature monitoring system set points
E4	CORE	Analyze salinity system data
E4	NON-CORE	Calibrate electrical meters
E4	CORE	Clean Arc Fault Detector (AFD) components
E4	CORE	Clean electrical panel components and interiors (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Clean electrically-operated valve components
E4	CORE	Clean electrostatic precipitators
E4	CORE	Clean galley equipment electrical components
E4	CORE	Clean hotwell level control system components
E4	CORE	Clean laundry equipment
E4	CORE	Clean lighting system components
E4	CORE	Clean motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Clean Programmable Logic Controllers (PLC)
E4	CORE	Clean salinity cells and indicating panels
E4	CORE	Clean shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Clean temperature monitoring panels
E4	CORE	Collect machinery and hull vibration data
E4	CORE	Inspect Arc Fault Detector (AFD) components
E4	CORE	Inspect control panels (e.g., operating mechanisms, panel wiring, connections, etc.)
E4	CORE	Inspect electrically-operated valve components
E4	CORE	Inspect electrostatic precipitators
E4	CORE	Inspect galley equipment electrical components
E4	CORE	Inspect hotwell level control systems
E4	CORE	Inspect laundry equipment
E4	CORE	Inspect lighting system components
E4	CORE	Inspect motor controllers (e.g., contactor, wiring, relays, etc.)

## ELECTRICAL CONTROL EQUIPMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Inspect Programmable Logic Controllers (PLC)
E4	CORE	Inspect salinity indicating systems
E4	CORE	Inspect shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Inspect temperature monitoring systems
E4	CORE	Perform main engine throttle operations
E5	CORE	Repair Arc Fault Detector (AFD) components
E5	CORE	Repair control panels (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E5	CORE	Repair electrically-operated valve components
E4	CORE	Repair electrostatic precipitators
E4	CORE	Repair galley equipment
E5	CORE	Repair hotwell level control systems
E4	CORE	Repair laundry equipment
E4	CORE	Repair lighting system components
E5	CORE	Repair motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Repair salinity indicating systems
E4	CORE	Repair shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Repair temperature monitoring systems
E5	CORE	Replace Programmable Logic Controllers (PLC)
E4	CORE	Test Arc Fault Detector (AFD) components
E4	CORE	Test control panels (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Test electrically-operated valve components
E4	CORE	Test electrostatic precipitators
E4	CORE	Test hotwell level control systems
E4	CORE	Test laundry equipment
E4	CORE	Test lighting system components
E5	CORE	Test motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Test Programmable Logic Controllers (PLC)
E4	CORE	Test salinity indicating systems
E4	CORE	Test shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Test temperature monitoring systems
E5	CORE	Troubleshoot Arc Fault Detector (AFD) components
E5	CORE	Troubleshoot control panels and electrical components (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Troubleshoot electrically-operated valve components

## ELECTRICAL CONTROL EQUIPMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Troubleshoot electrostatic precipitators
E4	CORE	Troubleshoot galley equipment
E5	CORE	Troubleshoot hotwell level control systems
E4	CORE	Troubleshoot laundry equipment
E4	CORE	Troubleshoot lighting system components
E5	CORE	Troubleshoot motor controllers (e.g., contactor, wiring, relays, etc.)
E5	CORE	Troubleshoot Programmable Logic Controllers (PLC)
E4	CORE	Troubleshoot salinity indicating systems
E5	CORE	Troubleshoot shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Troubleshoot temperature monitoring systems

## ELECTRICAL INSTALLATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Clean grounding straps
E4	CORE	Conduct shore power ground checks
E4	CORE	Disconnect shore power cables
E4	CORE	Inspect grounding straps
E4	CORE	Inspect shore power cables
E4	CORE	Install permanent cables
E4	CORE	Install shore power cables
E4	CORE	Replace grounding straps
E4	CORE	Solder basic electrical connections
E4	CORE	Test grounding straps
E4	CORE	Test shore power cables

## MOTORS AND GENERATORS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Align brush rigging heights
E4	CORE	Clean Alternating Current (AC) generators
E4	CORE	Clean Alternating Current (AC) motor components
E4	CORE	Clean Direct Current (DC) generators
E4	CORE	Clean Direct Current (DC) motor components
E4	CORE	Clean generator governor electrical components
E5	CORE	Inspect Alternating Current (AC) generators
E5	CORE	Inspect Alternating Current (AC) motor components
E4	CORE	Inspect brush rigging assemblies
E5	CORE	Inspect Direct Current (DC) generators
E5	CORE	Inspect Direct Current (DC) motor components
E5	CORE	Inspect generator governor electrical components

### **MOTORS AND GENERATORS (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Perform motor generator maintenance
E5	CORE	Repair Alternating Current (AC) generators
E5	CORE	Repair Alternating Current (AC) motor components
E5	CORE	Repair Direct Current (DC) generators
E5	CORE	Repair Direct Current (DC) motor components
E5	CORE	Repair generator governor electrical components
E5	CORE	Repair motor generators
E4	CORE	Set brush spring tensions
E4	CORE	Supply propulsion using Secondary Propulsion Motor (SPM)
E4	CORE	Test Alternating Current (AC) generators
E4	CORE	Test Alternating Current (AC) motor components
E4	CORE	Test Direct Current (DC) generators
E4	CORE	Test Direct Current (DC) motor components
E4	CORE	Test generator governor electrical components
E4	CORE	Test motor generators
E5	CORE	Troubleshoot Alternating Current (AC) generators
E5	CORE	Troubleshoot Alternating Current (AC) motor components
E5	CORE	Troubleshoot Direct Current (DC) generators
E5	CORE	Troubleshoot Direct Current (DC) motor components
E5	CORE	Troubleshoot generator governor electrical components
E5	CORE	Troubleshoot motor generators

### **POWER DISTRIBUTION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Analyze shutdown electric plant trends
E4	CORE	Clean bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Clean circuit breaker cabinets
E4	CORE	Clean switchboard components and interiors
E4	CORE	Conduct high voltage maintenance (greater than 700 Volts)
E4	CORE	Conduct switchboard testing
E4	CORE	Inspect bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Inspect submarine battery cell jumpers
E4	CORE	Inspect switchboard components
E5	CORE	Install submarine battery cell jumpers
E4	CORE	Maintain submarine batteries (e.g., cleaning, testing, etc.)
E4	CORE	Maintain submarine battery cell jumpers

### POWER DISTRIBUTION (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform routine battery operations (e.g., normal charge, equalizing charge, test discharge, etc.)
E5	CORE	Repair bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Shift electric plant lineups from normal and alternate control stations (e.g., Electric Plant Control Panel (EPCP), Emergency Switchboard Local Control Station (ESLCS), etc.)
E4	CORE	Test bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E5	CORE	Troubleshoot bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E5	CORE	Troubleshoot submarine battery and support systems faults
E5	CORE	Troubleshoot switchboard components

### REACTOR PLANT EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Align condensate and feed system
E4	CORE	Analyze main engine pressure and temperature parameter trends
E4	CORE	Analyze shutdown reactor plant trends
E4	CORE	Grant access to Radiological Controlled Areas (RCA)
E4	CORE	Inspect discharge boundary valve positions
E4	CORE	Line up reactor plant valves
E4	CORE	Maintain Radiological Controlled Areas (RCA)
E4	CORE	Survey Radiological Controlled Areas (RCA)
E5	CORE	Test coolant pump switchgear

### TECHNICAL ADMINISTRATION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Complete remote operability of key reactor plant valves checklists
E4	CORE	Maintain Radiological Controlled Area (RCA) records
E5	CORE	Record submarine battery performance data
E4	CORE	Store collected plant parameter data
E4	CORE	Tag out reactor plant components (e.g., instrumentation and control, mechanical, and electrical system, etc.)

**Job Title****Surface Propulsion Plant Electrical Operator****Job Code****003778****Job Family**

Production

**NOC**

TBD

**Short Title (30 Characters)**

SUR PROPULSION PLANT ELECT OP

**Short Title (14 Characters)**

SW PPE OP

**Pay Plan**

Enlisted

**Career Field**

EMN

**Other Relationships and Rules**

NECs NXXX series and other NECs as assigned

**Job Description**

Surface Propulsion Plant Electrical Operators perform operations and basic preventive and corrective maintenance of electrical distribution systems, motors and controllers, electrical generators, lighting systems, alarm and indicating systems, machinery vibration analysis equipment, throttle control systems, and other electrical and electronic support equipment; perform shutdown reactor plant operations; perform nuclear reactor, steam plant, and auxiliary equipment operations; and perform work critical for movement of Naval tactical and strategic forces.

**DoD Relationship**Group Title

Nuclear Power

DoD Code

166100

**O\*NET Relationship**Occupation Title

Power Distributors and Dispatchers

SOC Code

51-8012.00

Job Family

Production

**Skills***Quality Control Analysis**Equipment Maintenance**Operation Monitoring**Equipment Selection**Management of Material Resources**Complex Problem Solving**Repairing**Troubleshooting**Systems Evaluation**Operation and Control***Abilities***Problem Sensitivity**Near Vision**Finger Dexterity**Deductive Reasoning**Arm-Hand Steadiness**Written Comprehension**Written Expression**Information Ordering**Manual Dexterity**Reaction Time***CASUALTY CONTROL****Paygrade**

E4

**Task Type**

CORE

**Task Statements**

Isolate damaged electrical equipment

E4

CORE

Perform casualty power system operations

E4

CORE

Perform corrective actions to combat reactor plant casualties

**CIRCUIT BREAKERS****Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Adjust circuit breaker operating mechanisms

E4

CORE

Clean circuit breakers (e.g., auxiliary contacts, contact surfaces, operating mechanisms, wiring, connections, etc.)

E5

CORE

Inspect circuit breakers (e.g., auxiliary contacts, contact surfaces, operating mechanisms, wiring, connections, etc.)

E5

CORE

Repair circuit breakers

E4

CORE

Test circuit breakers and circuit breaker operating mechanisms

E5

CORE

Troubleshoot circuit breakers (e.g., manual, remote-operated, motor-operated, etc.)

## **ELECTRICAL CONTROL EQUIPMENT**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	CORE	Adjust control panel components (e.g., interlocks, operating mechanisms, operating or alarm set points and limits, etc.)
E4	CORE	Adjust hotwell level control system set points
E4	CORE	Adjust motor controllers (e.g., operating set points and limits, standby features, etc.)
E4	CORE	Adjust salinity indicating system set points
E4	CORE	Adjust temperature monitoring system set points
E4	CORE	Analyze salinity system data
E4	NON-CORE	Calibrate electrical meters
E4	CORE	Clean Arc Fault Detector (AFD) components
E4	CORE	Clean electrical panel components and interiors (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Clean electrically-operated valve components
E4	CORE	Clean electrostatic precipitators
E4	CORE	Clean hotwell level control system components
E4	CORE	Clean Interior Communications (IC) systems
E4	CORE	Clean lighting system components
E4	CORE	Clean motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Clean Programmable Logic Controllers (PLC)
E4	CORE	Clean salinity cells and indicating panels
E4	CORE	Clean shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Clean temperature monitoring panels
E4	CORE	Clean throttle control electrical systems
E4	CORE	Collect machinery and hull vibration data
E4	CORE	Inspect Arc Fault Detector (AFD) components
E4	CORE	Inspect control panels (e.g., operating mechanisms, panel wiring, connections, etc.)
E4	CORE	Inspect electrically-operated valve components
E4	CORE	Inspect electrostatic precipitators
E4	CORE	Inspect hotwell level control systems
E4	CORE	Inspect Interior Communications (IC) systems
E4	CORE	Inspect lighting system components
E4	CORE	Inspect motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Inspect Programmable Logic Controllers (PLC)
E4	CORE	Inspect salinity indicating systems
E4	CORE	Inspect shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Inspect temperature monitoring systems

**ELECTRICAL CONTROL EQUIPMENT (CONT'D)**

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Perform main engine throttle operations
E5	CORE	Repair Arc Fault Detector (AFD) components
E5	CORE	Repair control panels (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E5	CORE	Repair electrically-operated valve components
E4	CORE	Repair electrostatic precipitators
E5	CORE	Repair hotwell level control systems
E5	CORE	Repair Interior Communications (IC) systems
E4	CORE	Repair lighting system components
E5	CORE	Repair motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Repair salinity indicating systems
E4	CORE	Repair shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Repair temperature monitoring systems
E5	CORE	Repair throttle control electrical systems
E5	CORE	Replace Programmable Logic Controllers (PLC)
E4	CORE	Test Arc Fault Detector (AFD) components
E4	CORE	Test control panels (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Test electrically-operated valve components
E4	CORE	Test electrostatic precipitators
E4	CORE	Test hotwell level control systems
E4	CORE	Test lighting system components
E5	CORE	Test motor controllers (e.g., contactor, wiring, relays, etc.)
E4	CORE	Test Programmable Logic Controllers (PLC)
E4	CORE	Test salinity indicating systems
E4	CORE	Test shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Test temperature monitoring systems
E4	CORE	Test throttle control electrical systems
E5	CORE	Troubleshoot Arc Fault Detector (AFD) components
E5	CORE	Troubleshoot control panels and electrical components (e.g., alarm and indicating panels, control panels, remote control stations, etc.)
E4	CORE	Troubleshoot electrically-operated valve components
E4	CORE	Troubleshoot electrostatic precipitators
E5	CORE	Troubleshoot hotwell level control systems
E5	CORE	Troubleshoot Interior Communications (IC) systems

### ELECTRICAL CONTROL EQUIPMENT (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Troubleshoot lighting system components
E5	CORE	Troubleshoot motor controllers (e.g., contactor, wiring, relays, etc.)
E5	CORE	Troubleshoot Programmable Logic Controllers (PLC)
E4	CORE	Troubleshoot salinity indicating systems
E5	CORE	Troubleshoot shaft speed sensing, indication, and Engine Order Telegraph (EOT) components
E4	CORE	Troubleshoot temperature monitoring systems
E5	CORE	Troubleshoot throttle control electrical systems

### ELECTRICAL INSTALLATIONS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Clean grounding straps
E4	CORE	Conduct shore power ground checks
E4	CORE	Disconnect shore power cables
E4	CORE	Inspect grounding straps
E4	CORE	Inspect shore power cables
E4	CORE	Install permanent cables
E4	CORE	Install shore power cables
E4	CORE	Replace grounding straps
E4	CORE	Solder basic electrical connections
E4	CORE	Test grounding straps
E4	CORE	Test shore power cables

### MOTORS AND GENERATORS

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E5	CORE	Align brush rigging heights
E4	CORE	Clean Alternating Current (AC) generators
E4	CORE	Clean Alternating Current (AC) motor components
E4	CORE	Clean generator governor electrical components
E5	CORE	Inspect Alternating Current (AC) generators
E5	CORE	Inspect Alternating Current (AC) motor components
E4	CORE	Inspect brush rigging assemblies
E5	CORE	Inspect generator governor electrical components
E5	CORE	Perform motor generator maintenance
E5	CORE	Repair Alternating Current (AC) generators
E5	CORE	Repair Alternating Current (AC) motor components
E5	CORE	Repair generator governor electrical components
E5	CORE	Repair motor generators
E4	CORE	Set brush spring tensions
E4	CORE	Test Alternating Current (AC) generators

### MOTORS AND GENERATORS (CONT'D)

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Test Alternating Current (AC) motor components
E4	CORE	Test generator governor electrical components
E4	CORE	Test motor generators
E5	CORE	Troubleshoot Alternating Current (AC) generators
E5	CORE	Troubleshoot Alternating Current (AC) motor components
E5	CORE	Troubleshoot generator governor electrical components
E5	CORE	Troubleshoot motor generators

### POWER DISTRIBUTION

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Analyze shutdown electric plant trends
E4	CORE	Clean bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Clean circuit breaker cabinets
E4	CORE	Clean switchboard components and interiors
E4	CORE	Conduct high voltage maintenance (greater than 700 Volts)
E4	CORE	Conduct switchboard testing
E4	CORE	Inspect bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Inspect switchboard components
E5	CORE	Repair bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E4	CORE	Shift electric plant lineups from normal and alternate control stations (e.g., Electric Plant Control Panel (EPCP), Emergency Switchboard Local Control Station (ESLCS), etc.)
E4	CORE	Test bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E5	CORE	Troubleshoot bus transfer devices (Automatic Bus Transfer (ABT), Automatic Static Bus Transfer (SABT), and Manual Bus Transfer (MBT))
E5	CORE	Troubleshoot switchboard components

### REACTOR PLANT EQUIPMENT

<u>Paygrade</u>	<u>Task Type</u>	<u>Task Statements</u>
E4	CORE	Align condensate and feed system
E4	CORE	Analyze main engine pressure and temperature parameter trends
E4	CORE	Analyze shutdown reactor plant trends
E4	CORE	Grant access to Radiological Controlled Areas (RCA)
E4	CORE	Line up reactor plant valves

### **REACTOR PLANT EQUIPMENT (CONT'D)**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E4	NON-CORE	Maintain Propulsion Plant Local Area Network (PPLAN) network settings
E4	CORE	Maintain Radiological Controlled Areas (RCA)
E4	CORE	Survey Radiological Controlled Areas (RCA)
E5	CORE	Test coolant pump switchgear

### **TECHNICAL ADMINISTRATION**

<b><u>Paygrade</u></b>	<b><u>Task Type</u></b>	<b><u>Task Statements</u></b>
E5	CORE	Complete remote operability of key reactor plant valves checklists
E4	CORE	Maintain Radiological Controlled Area (RCA) records
E4	CORE	Store collected plant parameter data
E4	CORE	Tag out reactor plant components (e.g., instrumentation and control, mechanical, and electrical system, etc.)

**Job Title****Submarine Propulsion Plant Electrical Supervisor****Job Code****003785****Job Family**

Production

**NOC**

TBD

**Short Title (30 Characters)**

SUB PROPULSION PLANT ELECT SUP

**Short Title (14 Characters)**

SS PPE SUP

**Pay Plan**

Enlisted

**Career Field**

EMN

**Other Relationships and Rules**

NECs NXXX series and other NECs as assigned

**Job Description**

Submarine Propulsion Plant Electrical Supervisors perform advanced electrical distribution operations and apply advanced level maintenance practices to electrical distribution systems and electrical generators; develop electrical division administrative programs; supervise operations and training; repair and maintain equipment; train personnel; perform risk management; and supervise work critical to the movement of Naval tactical and strategic forces.

**DoD Relationship****Group Title**

Nuclear Power

**DoD Code**

166100

**O\*NET Relationship****Occupation Title**

First-line Supervisors of  
Production and Operating Workers

**SOC Code**

51-1011.00

**Job Family**

Production

**Skills***Management of Personnel Resources**Coordination**Monitoring**Operation and Control**Quality Control Analysis**Systems Analysis**Systems Evaluation***Abilities***Oral Expression**Problem Sensitivity**Inductive Reasoning**Deductive Reasoning**Manual Dexterity**Spatial Orientation**Written Expression***CASUALTY CONTROL****Paygrade**

E6

**Task Type**

CORE

**Task Statements**

Direct shutdown watch section casualty operations

E6

CORE

Supervise casualty electrical distribution operations

**POWER DISTRIBUTION****Paygrade**

E7

**Task Type**

CORE

**Task Statements**

Supervise high voltage electrical safety work (greater than 700 volts)

**TECHNICAL ADMINISTRATION****Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Analyze machinery vibration data for validity

E6

CORE

Plan division maintenance schedules, equipment availability, and personnel assignments

E6

CORE

Supervise division maintenance operations (e.g., electrical, mechanical, reactor control, etc.)

**Job Title**

**Surface Propulsion Plant Electrical Supervisor**

**Job Code**

**003786**

**Job Family**

Production

**NOC**

TBD

**Short Title (30 Characters)**

SUR PROPULSION PLANT ELECT SUP

**Short Title (14 Characters)**

SW PPE SUP

**Pay Plan**

Enlisted

**Career Field**

EMN

**Other Relationships and Rules**

NECs NXXX series and other NECs as assigned

**Job Description**

Surface Propulsion Plant Electrical Supervisors perform advanced electrical distribution operations and apply advanced level maintenance practices to electrical distribution systems and electrical generators; develop electrical division administrative programs; supervise operations and training; repair and maintain equipment; perform risk management; and supervise work critical for movement of Naval tactical and command forces.

**DoD Relationship**

**Group Title**

Nuclear Power

**DoD Code**

166100

**O\*NET Relationship**

**Occupation Title**

First-line Supervisors of  
Production and Operating Workers

**SOC Code**

51-1011.00

**Job Family**

Production

**Skills**

*Management of Personnel Resources*

*Coordination*

*Quality Control Analysis*

*Equipment Maintenance*

*Monitoring*

*Operation and Control*

*Systems Analysis*

*Systems Evaluation*

**Abilities**

*Problem Sensitivity*

*Oral Expression*

*Inductive Reasoning*

*Deductive Reasoning*

*Manual Dexterity*

*Near Vision*

*Spatial Orientation*

*Written Expression*

**CASUALTY CONTROL**

**Paygrade**

E6

**Task Type**

CORE

**Task Statements**

Direct shutdown watch section casualty operations

E6

CORE

Supervise casualty electrical distribution operations

**POWER DISTRIBUTION**

**Paygrade**

E7

**Task Type**

CORE

**Task Statements**

Supervise high voltage electrical safety work (greater than 700 volts)

**REACTOR PLANT EQUIPMENT**

**Paygrade**

E4

**Task Type**

CORE

**Task Statements**

Inspect discharge boundary valve positions

**TECHNICAL ADMINISTRATION**

**Paygrade**

E5

**Task Type**

CORE

**Task Statements**

Analyze machinery vibration data for validity

E6

CORE

Plan division maintenance schedules, equipment availability, and personnel assignments

E6

CORE

Supervise division maintenance operations (e.g., electrical, mechanical, reactor control, etc.)

**Job Title**

**Submarine Propulsion Plant Electrical Manager**

**Job Code**

**003793**

**Job Family**  
Management

**NOC**  
TBD

**Short Title (30 Characters)**  
SUB PROPULSION PLANT ELECT MGR

**Short Title (14 Characters)**  
SS PPE MGR

**Pay Plan**  
Enlisted

**Career Field**  
EMN

**Other Relationships and Rules**  
NECs NXXX series and other NECs as assigned

**Job Description**

Submarine Propulsion Plant Electrical Managers manage operations, maintenance, and training for personnel assigned to electrical divisions and/or engineering departments; coordinate ship electrical safety program; perform audits of divisional and/or departmental programs; evaluate trend analysis and implement process improvements; perform risk management; and manage work critical to the movement of Naval tactical and strategic forces.

**DoD Relationship**

**O\*NET Relationship**

**Group Title**  
Nuclear Power

**DoD Code**  
166100

**Occupation Title**  
Compliance Managers

**SOC Code**  
11-9199.02

**Job Family**  
Management

**Skills**

*Coordination*

*Monitoring*

*Reading Comprehension*

*Quality Control Analysis*

*Instructing*

*Management of Material Resources*

*Management of Personnel Resources*

*Operation and Control*

*Speaking*

*Systems Analysis*

**Abilities**

*Problem Sensitivity*

*Written Expression*

*Selective Attention*

*Information Ordering*

*Oral Expression*

*Written Comprehension*

*Visualization*

**REACTOR PLANT EQUIPMENT**

**Paygrade**

**Task Type**

**Task Statements**

E7

CORE

Control maintenance on systems affecting remote operability

E6

CORE

Verify conditions established for prevention of inadvertent discharges

**TECHNICAL ADMINISTRATION**

**Paygrade**

**Task Type**

**Task Statements**

E6

CORE

Administer continuous training exams

E6

CORE

Audit division records (e.g., electrical, mechanical, etc.)

E7

CORE

Audit engineering and reactor department records

E7

NON-CORE

Conduct key reactor plant valve remote operability training

E7

CORE

Manage department drill programs

E7

CORE

Manage department training drills

E7

CORE

Manage equipment modifications (e.g., reactor, non-reactor, etc.)

**Job Title****Surface Propulsion Plant Electrical Manager****Job Code****003794****Job Family**  
Management**NOC**  
TBD**Short Title (30 Characters)**  
SUR PROPULSION PLANT ELECT MGR**Short Title (14 Characters)**  
SW PPE MGR**Pay Plan**  
Enlisted**Career Field**  
EMN**Other Relationships and Rules**  
NECs NXXX series and other NECs as assigned**Job Description**

Surface Propulsion Plant Electrical Managers manage operations, maintenance, and training for personnel assigned to electrical divisions and/or reactor departments; coordinate the departmental electrical safety program; perform audits of divisional and/or departmental programs; evaluate trend analysis and implement process improvements; perform risk management; and manage work critical for movement of Naval tactical and command forces.

**DoD Relationship****Group Title**  
Nuclear Power**DoD Code**  
166100**O\*NET Relationship****Occupation Title**  
Compliance Managers**SOC Code**  
11-9199.02**Job Family**  
Management**Skills**

Coordination

Monitoring

Reading Comprehension

Quality Control Analysis

Instructing

Management of Material Resources

Management of Personnel Resources

Operation and Control

Speaking

Systems Analysis

**Abilities**

Problem Sensitivity

Written Expression

Selective Attention

Information Ordering

Oral Expression

Written Comprehension

Visualization

**REACTOR PLANT EQUIPMENT****Paygrade**

E7

**Task Type**

CORE

**Task Statements**

Control maintenance on systems affecting remote operability

E6

CORE

Verify conditions established for prevention of inadvertent discharges

**TECHNICAL ADMINISTRATION****Paygrade**

E6

**Task Type**

CORE

**Task Statements**

Administer continuous training exams

E6

CORE

Audit division records (e.g., electrical, mechanical, etc.)

E7

CORE

Audit engineering and reactor department records

E7

NON-CORE

Conduct key reactor plant valve remote operability training

E7

CORE

Manage department drill programs

E7

CORE

Manage department training drills

E7

CORE

Manage equipment modifications (e.g., reactor, non-reactor, etc.)