

# **CEWD Workforce Planning**

## **Demographic Job Category and Business Unit Definitions**

### **Contents**

Scope For 2023 .....	2
Total Company.....	2
Support Organizations .....	2
Admin – Human Resources .....	2
Admin – Information Technology .....	2
Admin – Finance.....	2
Admin – Customer Service.....	2
Admin – Other .....	2
Electric Transmission and Distribution (T&D) Business Unit .....	3
Electric Job Categories .....	3
Line Workers .....	3
Electric Transmission & Distribution Technicians .....	3
Electric Transmission and Distribution Load Dispatchers .....	3
Non-nuclear Generation Business Unit .....	5
Non-nuclear Generation Job Categories .....	5
Plant/Field Operators .....	5
Non-nuclear Generation Technicians .....	5
Gas Transmission and Distribution (T&D) Business Unit .....	6
Gas Transmission and Distribution Job Categories .....	6
Gas Plant Operators .....	6
Gas Transmission and Distribution (T&D) Technicians .....	6
Nuclear Generation Business Unit.....	8
Nuclear Generation Job Categories .....	8
Nuclear Generation Plant/Field Operators.....	8
Nuclear Generation Technicians.....	8
Emerging Technology Jobs (New Category).....	9
Emerging Technology Job Categories.....	9
Emerging Technology Technicians .....	9
Data Scientists.....	9
Engineers (reported within every Business Unit above).....	11
Energy Workforce Job Alignment .....	12

# **CEWD Workforce Planning**

## **Demographic Job Category and Business Unit Definitions**

### **Scope For 2023**

In the HRIS data extracts provided as part of the survey response, please include all full-time employees; those in both regulated and unregulated businesses, as applicable.

### **Total Company**

Total Company includes **all** full-time employees in the company.

### **Support Organizations**

#### **Admin – Human Resources**

This category includes **all** full-time employees working in Human Resources functions. This would include employees in compensation, benefits, recruiting and staffing, employee development, labor relations, diversity and inclusion as examples, including supervisors, managers, executives, and administrative support.

#### **Admin – Information Technology**

This category includes **all** full-time employees working in Information Technology functions. This would include programmers, systems analysts, database analysts, computer operations personnel, software developers, web developers, network support specialists, information security / cybersecurity, as examples, including supervisors, managers, executives, and administrative support. Additional functions in this category include: App Development, CICD, DevOps, Help Desk, InfoSec / Cybersecurity.

#### **Admin – Finance**

This category includes **all** full-time employees working in Finance functions. This would include financial analysts, cost estimators, accountants and auditors, budget analysts, payroll/timekeepers, bill and account collectors, bookkeepers, economists, statisticians as examples, including supervisors, manager, executives, and administrative support. Additional functions in this category include: Accounting, Audit, Financial Planning and Analysis, Risk, Tax, and Treasury.

#### **Admin – Customer Service**

This category includes **all** full-time employees working in Customer Service. This would include customer service representatives who respond to customer requests/questions regarding new service, billing questions, service contracts, payment options whether by phone or in person, switchboard operators and meter readers. Additional functions in this category include: Account Management, Collections, Communications, Field Support, Marketing. This category also includes all supervisors, managers, executives, and administrative support personnel.

#### **Admin – Other**

This category includes **all** full-time employees working in other corporate support functions not assignable to an operating group. These include but are not limited to: Compliance, Continuous Improvement, Corporate Strategy, Economic Development, Emergency Management / Incident Response, Environmental, Ethics, External / Public Affairs, Facilities, Fleet (Non-EV), General Counsel / Legal, Safety, Security, Supply Chain, and Strategic Planning.

## **CEWD Workforce Planning**

### **Demographic Job Category and Business Unit Definitions**

#### **Electric Transmission and Distribution (T&D) Business Unit**

This business unit includes **all** full-time employees involved in the transmission and distribution of electric power to industrial, commercial, and residential customers. This would include all individuals in the key jobs listed below plus supervisory and management personnel involved in the direct operations of the business, administrative support personnel, engineers, and other technicians supporting the business operations.

#### **Electric Job Categories**

##### **Line Workers**

This job category is responsible for the installation and repair of overhead and underground distribution and transmission lines, poles, transformers, and other equipment.

Titles could include line worker, line installer, lineman, linewoman, underground mechanic, underground specialist, towerman, towerwoman, utility mechanic, overhead mechanic, utility worker, ironworker, and rigger.

##### **\*SOC Code   Description**

49-9051	Electrical power-line installers and repairers
	Electrical and Power Transmission Installers
	Lineworker

#### **Electric Transmission & Distribution Technicians**

This job category includes the installation, repair and maintenance of both electrical and mechanical equipment. This includes inspecting, testing electrical equipment in substations and switching stations.

Titles could include substation mechanic, relay technician, electrician, system specialist, conditions specialist, controls specialist, installer, electrician, welder, and metering technicians (not meter readers).

##### **SOC Code   Description**

47-2111	Electricians
17-3023	Electrical and Instrumentation Technician
	Electrical and Electronic Engineering Technicians
49-2095	Substation Mechanic
	Relay Technician

#### **Electric Transmission and Distribution Load Dispatchers**

Load Dispatchers on the Electric Transmission side have the responsibility to interface with Regional Transmission Operators to ensure continuity of the national/regional

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

electric grid and to signal generating stations to operate based on economic and reliability requirements. They also coordinate with engineers, planners, field personnel or other utility workers to provide information such as clearances, switching or distribution process changes. Distribution load dispatchers are responsible for preparing switching orders that will isolate work areas without causing power outages, referring to drawings of power systems and maintain the reliability of the distribution network.

Titles could include transmission system operator, distribution system operator, operations supervisor, control room operator, and control room coordinator.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
51-8012	Power Distributors and Dispatchers

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

### **Non-nuclear Generation Business Unit**

This business unit includes **all** full-time employees involved in the generation of electric power using fossil-fuels such as coal, oil, or gas and/or geothermal, etc. This would include all individuals in the key jobs listed below plus supervisory and management personnel involved in the direct operations of the business, administrative support personnel, engineers, and other technicians supporting the business operations.

### **Non-nuclear Generation Job Categories**

#### **Plant/Field Operators**

This job category is responsible for the maintenance and operation of all primary and auxiliary equipment required to generate electricity at plants that use fuels other than nuclear, including coal, natural gas, bio-fuels, and hydro.

Titles could include power plant operator, technical operator, auxiliary operator, combined cycle supervisor, control room supervisor, and mechanical operator.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
51-8013	Power plant operators Auxiliary Equipment operators
51-8099	Plant and System Operators, All Other

#### **Non-nuclear Generation Technicians**

This job category is responsible for the construction, assembly, maintenance, and repair of steam boilers and boiler house auxiliaries.

Titles could include: mechanics, welders, electricians, Instrument and Control technicians, maintenance technicians, and engineering support.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
17-3023	Electrical & Instrumentation Technician Instruments and Control Technician Electrical and Electronic Engineering Technicians
49-9041	Industrial Machinery Mechanics
49-9044	Millwright Mechanic Technician
49-2095	Electrical and Electronics Repairers, Powerhouse, Substation and Relay
51-4041	Machinist
49-9012	Control and Valve Installers and Repairers, Except Mechanical Doors
41-2152	Plumbers, Pipefitters and Steamfitters

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

### **Gas Transmission and Distribution (T&D) Business Unit**

This business unit includes **all** full-time employees involved in the transmission and distribution of natural gas to industrial, commercial, and residential customers. This would include all individuals in the key jobs listed below plus supervisory and management personnel involved in the direct operations of the business, administrative support personnel, engineers, and other technicians supporting the business operations.

The Gas Transmission and Distribution business constructs, manages and maintains intrastate natural gas pipelines, distribution facilities and peaking and storage facilities. It also responds to and repairs gas leaks and other requests for service and is responsible for meter installation and repair. The employee base includes the skilled technical jobs defined below as well as all supervisory, management, administrative support personnel, and engineers.

Operator Qualification is a regulation of the Office of Pipeline Safety of the U.S. Department of Transportation (DOT). It requires pipeline operators to develop and maintain a written qualification program for individuals performing covered tasks on pipeline facilities. The intent of this qualification is to ensure a qualified workforce and to reduce the probability and consequence of incidents caused by human error. The jobs identified below are required to go through operator qualifications.

### **Gas Transmission and Distribution Job Categories**

#### **Gas Plant Operators**

This job category is responsible for the distribution or processing of gas for utility companies and others by controlling compressors to maintain specified pressures on main pipelines.

Titles could include: compressor station operator, engine room operator, gas controller, gas dispatcher, gas plant operator, gas system operator, liquid natural gas plant operator, and liquified natural gas specialist.

#### **SOC Code Description**

51-8092-01 Gas Processing Plant Operators  
51-8092-02 Gas Distribution Plant Operators  
    Gas Distribution Field Operators  
    LNG Plant Operators  
53-7071 Gas Compressor and Gas Pumping Station Operators

### **Gas Transmission and Distribution (T&D) Technicians**

This job category is responsible for the installation and maintenance of gas mains and distribution services. Also included are first responders to gas leaks.

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

Titles could include gas street leader, utility mechanic, distribution fitter, gas service specialist, field operations and maintenance representative, sheetmetal worker, corrosion specialist, lead utility crew, appliance service repairer, and welder.

47-2152	Plumbers, Pipefitters, and Steamfitters
51-4121	Welders, Cutters, Solderers, and Brazers
47-2151	Pipelayers
47-3015	Helpers, Pipelayers, Plumbers, Pipefitters and Steamfitters

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

### **Nuclear Generation Business Unit**

This business unit includes **all** full-time personnel involved in the generation of electric power using nuclear fuel. This would include all individuals in the key jobs listed below plus supervisory and management personnel involved in the direct operations of the business, administrative support personnel, engineers, and other technicians supporting the business operations.

### **Nuclear Generation Job Categories**

#### **Nuclear Generation Plant/Field Operators**

Operate or control nuclear reactors. Move control rods, start and stop equipment, monitor and adjust controls, and record data in logs. Implement emergency procedures when needed. May respond to abnormalities, determine cause, and recommend corrective action.

Titles could include non-licensed operator, reactor operator (licensed) and senior reactor operator (licensed).

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
51-8011	Nuclear Power Reactor Operators

#### **Nuclear Generation Technicians**

This job category is responsible for the installation and maintenance of electrical and mechanical systems within a nuclear power plant.

Titles could include electricians, mechanics, I&C technicians, radiation protection technicians, chemistry technicians, and welders.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
19-4051	Nuclear Technicians
	Nuclear Equipment Operations Technicians
	Nuclear Monitoring Technicians (Including Radiation Protection Technicians)



## **CEWD Workforce Planning**

### **Demographic Job Category and Business Unit Definitions**

#### **Emerging Technology Jobs (New Category)**

This business unit includes **all** full-time employees involved in the generation and distribution of electrical energy generated by renewable means, advanced metering, advanced utility / utility of the future, the development of advanced statistical models, machine learning models, and artificial intelligence applications, and electric vehicle fleet management and maintenance. This would include all individuals in the key jobs listed below plus supervisory and management personnel involved in the direct operations of the business, administrative support personnel, engineers, and other technicians supporting the business operations.

#### **Emerging Technology Job Categories**

#### **Emerging Technology Technicians**

Wind turbine technician role is responsible for the construction, assembly, inspects, diagnoses, adjusts, or repairs wind turbines and performs maintenance on wind turbine equipment including resolving electrical, mechanical, and hydraulic malfunctions. Solar technicians would be responsible for the installation or repair of solar energy systems designed to collect and store solar energy for incorporation into the energy grid. Energy storage technicians would be responsible for the installation or repair of energy storage systems (like battery storage) designed to collect and store energy for dispatch into the energy grid. Electric Vehicle work would be focused on infrastructure development (charging stations, grid modification planning). Biofuels work would be focused on extraction, natural gas conversion, and power generation emanating from waste dumps and plant based alternative fuels. Utility of the Future work would be focused on the use of advanced meter data and other advanced technology in the planning of next generation utility operation.

Titles could include: wind farm support specialist, wind technician, wind turbine service technician, solar technician, solar system installer, energy storage technician, renewable energy technician, advanced meter technician, and electric vehicle mechanic.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
49-9081	Wind Turbine Service Technicians
47-4099	Solar Thermal Installers and Technicians
47-2230	Solar Photovoltaic Installers
49-2096	Electronic Equipment Installers and Repairers, Motor Vehicles (EV related)
49-3023	Automotive Service Technicians and Mechanics (EV related)

#### **Data Scientists**

This job category is responsible for the statistical analysis of large data sets and the application of machine learning and artificial intelligence.

## **CEWD Workforce Planning Demographic Job Category and Business Unit Definitions**

Titles could include data scientist, predictive analytics specialist, machine learning specialist, ML engineer, and artificial intelligence specialist.

<b><u>SOC Code</u></b>	<b><u>Description</u></b>
15-2020	Mathematicians
15-2040	Statisticians
15-2050	Data Scientists

## CEWD Workforce Planning Demographic Job Category and Business Unit Definitions

### **Engineers (reported within every Business Unit above)**

This job category focuses on systems, processes, equipment, and facilities involved in electric and natural gas production, delivery and energy services businesses. This job category includes people involved in planning, research, design, development, construction, installation, and operation of equipment, facilities, and systems for the safe, reliable, and economic generation/supply, transmission, distribution, consumption, and control of electricity and natural gas.

A requirement of this category is a bachelors, masters, or Ph.D. in any engineering discipline from an accredited four-year university.

Titles could include engineer, lead engineer, consulting engineer, principal engineer, director of transportation engineering, engineering manager or supervisor, and associate engineer.

Titles would not include engineering support, engineering helper, drafting technicians.

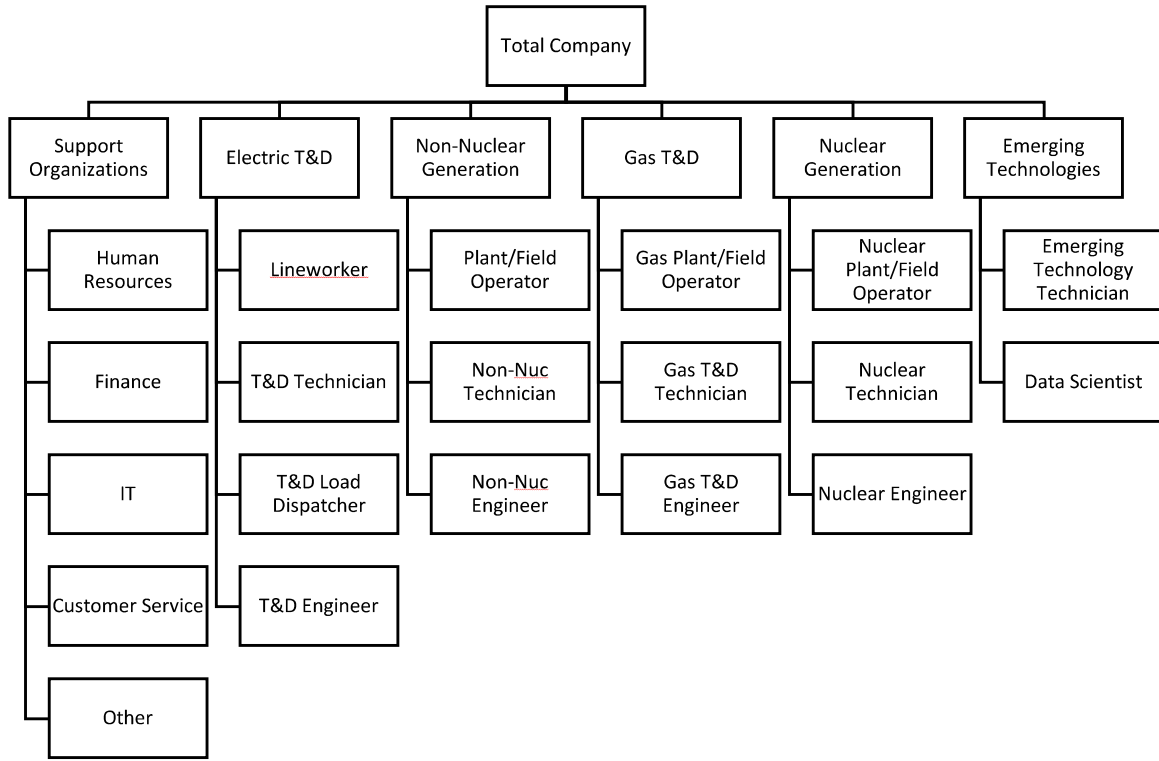
<b><u>SOC Code</u></b>	<b><u>Description</u></b>
11-9041	Engineering Managers
17-2071	Electrical Engineers Power Systems Engineer Energy Transmission Engineers
17-2141	Mechanical Engineers
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors (Included on EMSI Report but not CEWD's)
17-2041	Chemical Engineer
17-2051	Civil Engineers
17-2081	Environmental Engineers
17-2161	Nuclear Engineers
17-2072	Electronics Engineers, Except Computer
17-2112	Industrial Engineers
17-2131	Materials Engineers
17-2171	Petroleum Engineers
17-2199	Engineers, All Other

\*The 2018 Standard Occupational Classification (SOC) system is a [federal statistical standard](https://www.bls.gov/soc/) used by federal agencies to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. All workers are classified into one of 867 detailed occupations according to their occupational definition. To facilitate classification, detailed occupations are combined to form 23 major groups, 98 minor groups, and 459 broad occupations. Detailed occupations in the SOC with similar job duties, and in some cases skills, education, and/or training, are grouped together. For more detail definitions go to <https://www.bls.gov/soc/>.

# CEWD Workforce Planning

## Demographic Job Category and Business Unit Definitions

### Energy Workforce Job Alignment



**NOTE:** Each business unit includes **ALL** full-time personnel involved in the work described within that business. All supervisory and management, clerical, and support personnel should be included in that business unit.