

Department of Homeland Security and Department of Energy Request for Information
March 18, 2020

Critical Energy Workers

ESCC teams convened expert owner/operators across the electricity-sub-sector and natural gas mid-stream and downstream.

A wide variety of **Critical Energy Workers** are on the front lines at generation/transmission/distribution owners and operators across Investor-Owned, Public Power, Cooperative, Merchant and Federal Government models, as well as RTOs/ISOs, and natural gas extraction, transmission, delivery and processing.

There are dozens, if not hundreds, of roles and job functions. Our March 18 submission is meant to identify some of the most important roles and functions, and to flag some planning considerations for the future in related sectors that support energy delivery.

The term “workers” should be generally understood to include contractors, as it takes many partners to operate our nation’s energy systems.

The following offers three tiers of Electricity Sub-sector workers, followed by a short summary of worker roles and responsibilities in natural gas delivery.

Tier 1 – Essential Electricity Infrastructure Workers

Electricity Sub-sector workers provide essential services including but not limited to:

Monitor, operate, maintain, restore or protect electric power generation, transmission, and distribution systems, along with related systems, including energy management and cyber and physical security.

Electricity Sub-sector titles and job functions include:

Cleaning Crews

Call Center and Dispatch operations

Operators – applies to Generation, Transmission and Distribution

Bulk Power Control Room / Center Operators

Reliability Engineers

Instrument & Control Technicians

Fuels (Equipment Operators)

Supervision / Management

Fleet Operators

Logistics (shipping and receiving)

IT and OT Technology Staff – for EMS (Energy Management Systems) and Supervisory Control and Data Acquisition (SCADA) systems, and utility data centers

Communications Personnel supporting Utility Private Networks and interface with commercial Telecommunications providers

Cybersecurity engineers; cybersecurity risk management

Physical Security

Distribution and Transmission Line Crews

Distribution and Transmission Engineers

Substation technicians and engineers for switching and troubleshooting

Vegetation Management Crews and traffic workers who support

Environmental Remediation/Monitoring technicians

Instrumentation, Protection, and Control Technicians

Nuclear fuel fabrication and delivery; spent fuel canister delivery; radioactive waste shipment/transportation

Tier 2 – 3 Essential Electricity Infrastructure Workers

Any Tier 2 or 3 personnel could become Tier 1 depending on circumstances. For example, if line crews need rapid fitting out with PPE to move into a quarantined area to perform essential system repairs, warehouse workers suddenly become Tier 1.

Chemical / Lab Technician

Maintenance (Mechanical, Electrical) and Warehouse Workers

Materialman (warehouse)

Contractors – Ash handling, emergency maintenance repair, critical commodities, OEM

Other support – Engineer, Specialist, Accounting

Natural Gas Sub-sector Functions include:

Manage fuel storage and distribution required to support electricity generation and Maintain natural gas storage systems

Monitor/maintain flow/pressure of natural gas through a distribution system

Repair gate stations, distribution lines

Locate and mark underground facilities and protect natural gas infrastructure in public rights of way

Supervision and Management

Future Considerations

As planning and response for the pandemic stretches into the future, we encourage government's analysis of pandemic planning to include the many other related fields that are integral to energy delivery and how those critical workers impact reliable electric and gas service.

Areas of concern in an extended pandemic may include:

- Construction, especially at the bulk power level
- Fuel sourcing and other commodities needed to ensure operations, including across upstream, midstream and downstream natural gas
- Metals and mining
- Water
- The chemical sector.