

CLEAN ENERGY CAREER PATHWAYS CATALOG

Energy Transmission



CAREER
MAP



CAREER
LIST

Over 300 job descriptions for technical and specialty jobs in clean energy

Created for job-seekers, hiring managers, the existing workforce, and the public, ACP's **Clean Energy Career Pathways Catalog** presents over 300 job descriptions for technical and specialty jobs within the clean energy industry.

This catalog shows the upward mobility and opportunities that exist within the industry, alongside highlighting the skills and requirements necessary to work in these positions. The aim is to provide a better understanding of how existing transferrable skills could be applied to clean energy jobs or what a career progression within the workforce could look like.

This massive effort is meant to provide workers in other energy industries, veterans, and workers in underrepresented communities a better idea of the jobs available in clean energy, as well as support the industry with recruiting and retention.

Energy Transmission Career Pathways Catalog

This sector-specific catalog presents job descriptions in the Energy Transmission sector. For jobs within all sectors, [download the full PDF](#).

If you have questions about the catalog, please email workforcedev@cleanpower.org.



Career & Occupation Hierarchy

Clean Energy Occupations can be looked at across Clean Energy Sectors, Industry Segments, Industry Sub Segments, and Occupational Groups & Job Families. The catalog is organized by the hierarchy and groups represented here:

Clean Energy Sectors

- Solar
- Wind Onshore
- Offshore Wind
- Storage
- Transmission

LEVEL 1

Industry Segments

- Project Development (System Design)
- Operations & Maintenance
- Manufacturing
- Construction / Installation
- Research & Training

LEVEL 2

Industry Sub Segments

- Safety
- Engineering
- Management
- Maintenance & Repair
- Installation
- Services General
- Material Handling, Supply & Processing
- Fabricating/Forging/Manufacturing
- Construction Management
- Foundation Contractor
- General Contractor
- Heavy Equipment Supplier/Operator
- Transportation
- Logistics
- Operations
- Development & Planning
- Business Development / Sales
- Purchasing
- Education / Training

LEVEL 3

Occupational Groups/Job Families

[Groups may also include supervisor & manager roles]

- Inspectors & QC
- Technicians
- Project Managers & Construction Managers
- Electricians, Wires & Installers, including Repairers
- Equipment Operators
- General Laborers & Groundmen
- Maintenance
- Engineers
- Meteorology Specialists
- Remote Control Operators / Dispatchers
- Safety and Incident Investigations
- Assembly, Fabricating & Manufacturing Laborers
- Surveyors
- Logisticians & Warehouse
- Analysts / Specialists
- Buyers / Procurement
- Tradeworkers – Ironworker, Welder, CNC operator, Machinist
- Site Managers
- Truck Drivers
- Business Developers
- Planners
- Asset Managers
- Operations / Facility Managers
- Trainers
- Schedulers

LEVEL 4



Explanation of Career Maps

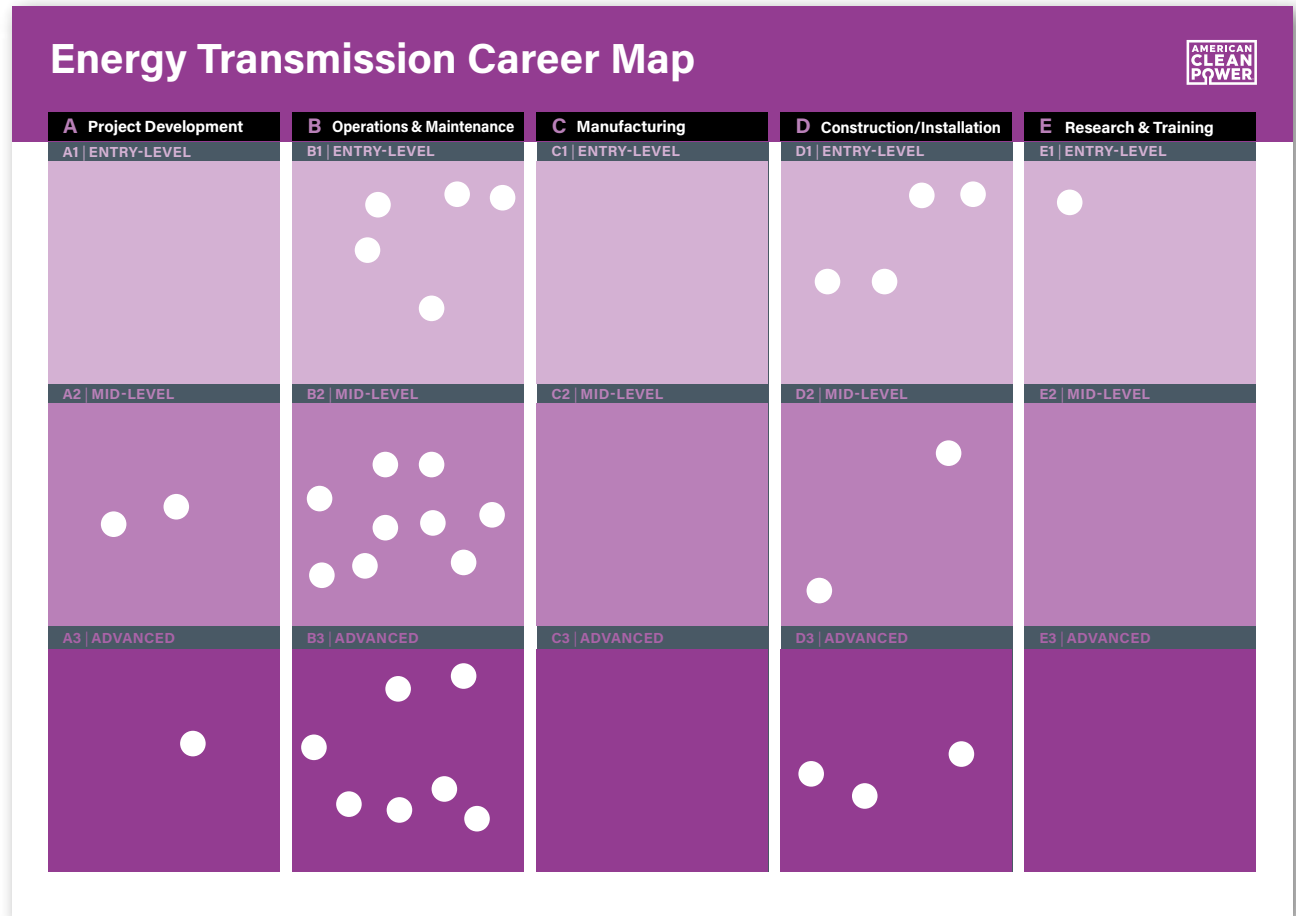
Each catalog includes an interactive Career Map that illustrates potential pathways for career growth within the Sector and within five specific Industry Segments.

On the Career Map, each occupation is represented by a clickable dot. Each sector's Career Map contains three Career Levels:

- Entry Level
- Mid-Level
- Advanced

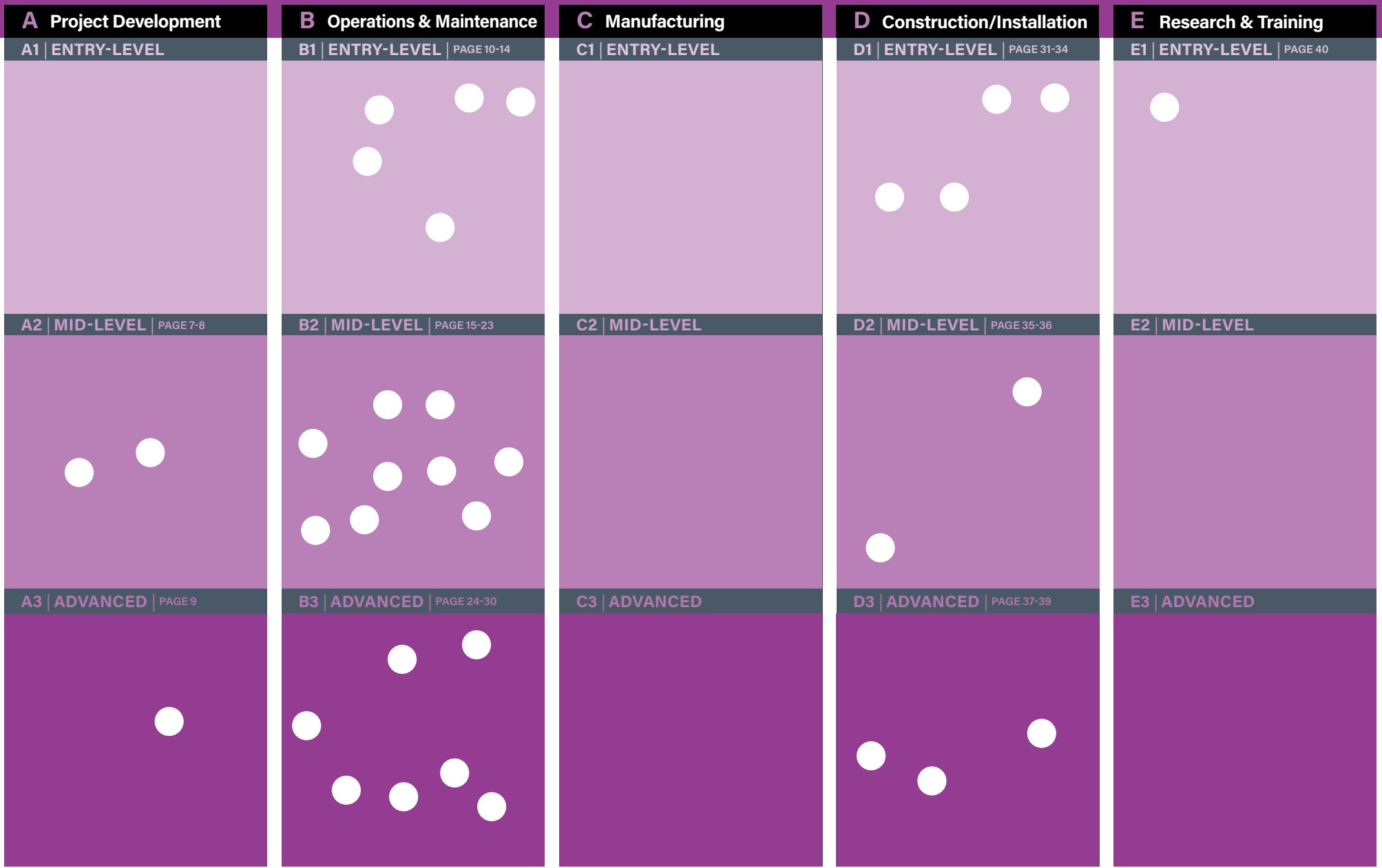
Dots placed in vertical lines or nearby spaces up through the career levels represent the career progression in a particular field or Industry segment.

Note: The vertical paths are not the only potential career options from any given occupation, since those who acquire further education and experience may also make cross-industry segment and sector moves. The more typical career moves from each occupation are outlined on each Occupation Description page.



Click on a career level in an industry segment and you will be taken to that section.

Energy Transmission Career Map



Click on a career level in an industry segment and you will be taken to that section.



Energy Transmission Career List

A Project Development

A1 | ENTRY-LEVEL |

- N/A

A2 | MID-LEVEL | PAGE 7-8

- Strategic Procurement Manager
- Transmission Line Engineer, Transmission Engineer, Electrical Power Engineer, Electrical Interconnection Engineer, Electrical Design Engineer

A3 | ADVANCED | PAGE 9

- Planner—Renewable Energy

B Operations & Maintenance

B1 | ENTRY-LEVEL | PAGE 10-14

- High Voltage Technician
- Operations Specialist I
- Power Distributor / Dispatcher, System Operator, Remote Control Operator
- Transmission Associate Technician, Mechanical Assistant
- Transmission Technician or Field Service Specialist

B2 | MID-LEVEL | PAGE 15-23

- Analyst
- Electrical Engineer—Powerhouse, Substation or Relay
- High Voltage Reliability Engineering Specialist
- Mechanical Engineer, Design Engineer, Product Engineer, Equipment Engineer
- Operations Specialist II
- Power and Transmission Scheduler
- Reliability Engineer
- Safety Manager I
- Safety Manager II

B3 | ADVANCED | PAGE 24-30

- Director Operations & Maintenance; Director O&M
- Director, Quality & Operations Support
- Director, Transmission
- Engineering Manager
- Operations Manager, O&M Manager, Site Manager, Facility Manager—Transmission
- Reliability Engineering Manager
- Transmission Manager, Transmission & Interconnection Manager, Transmission Operations Manager

C Manufacturing

C1 | ENTRY-LEVEL |

- N/A

C2 | MID-LEVEL |

- N/A

C3 | ADVANCED |

- N/A

D Construction/Installation

D1 | ENTRY-LEVEL | PAGE 31-34

- Commissioning Technician
- Construction Manager
- Electrical / Electronic Line Installer & Repairer, Journeyman Lineman—powerhouse, substation, relay (including lines & towers)
- Site Surveyor

D2 | MID-LEVEL | PAGE 35-36

- Buyer; Procurement Specialist; Procurement Associate
- Construction Manager II

D3 | ADVANCED | PAGE 37-39

- Commissioning Manager
- Construction Manager III
- Project Manager

E Research & Training

E1 | ENTRY-LEVEL | PAGE 40

- Technical Trainer, Technical Instructor

E2 | MID-LEVEL |

- N/A

E3 | ADVANCED |

- N/A

Click on a career level in an industry segment and you will be taken to that section.



Strategic Procurement Manager

DESCRIPTION

Lead and support the development of strategy for and the procurement of the key components that comprise projects and products, including energy Transmission solutions, tracking systems and other key technologies with a focus on energy Transmission. Perform technology evaluation that considers potential customers, financial structures, and strategic advantages; build specifications with the engineering teams; collaborate on project development and implementation. Maintain supplier relationships; conduct assessments of suppliers, maintain pricing roadmaps. Procure key components and create contracts with suppliers. Lead competitive RFP processes and manage contracting process. Interface with legal, development, engineering and construction on scope, specifications, testing, etc. Support projects and ongoing supplier management.

KNOWLEDGE/SKILLS

Knowledge of renewable energy industry, negotiations, contracting, quantitative and qualitative analysis.

REQUIREMENTS

Education/Training

Bachelor's degree. MBA or MS degree preferred.

Experience

At least 3 years experience in the energy field; experience in negotiations and analysis.

POSITION REPORTS TO

Director, Energy Transmission

CAREER PATH MOVES FROM THIS ROLE

Director of Transmission Operations or Engineering or Construction or Project Manager on other green energy systems (i.e. Solar)



Transmission Line Engineer

Transmission Engineer, Electrical Power Engineer, Electrical Interconnection Engineer, Electrical Design Engineer

DESCRIPTION

Plan routes for power transmission and follow environmental regulations and laws to ensure the development does not encroach on protected land. Evaluate interconnection standards and transmission feasibility, system impact and facility studies or testing new electrical components or designs. Examine maps and GIS files to ensure that the topography is suitable for the new power system. Check for utilities to ensure proper planning. Look for environmental issues, potential engineering safety hazards, and logistical problems. Ensure maximum efficiency from the finished product. May also be on site during a building phase to watch for potential problems that may not have been obvious during the research phase. The role is a mix of office based research and reporting and construction supervision. May also include working on transmission and/or distribution systems.

KNOWLEDGE/SKILLS

Digital systems design, differential equations, electrical power circuits, power transmission.

REQUIREMENTS

Education/Training

Bachelor's degree in electrical or electronics engineering or related field.

Experience

Ideally at least 2-3 years' experience in energy transmission or distribution.

Credentialing Required/Optional

PE (Professional Engineer) This is not required for entry-level engineer roles but is required by some employers.

POSITION REPORTS TO

Engineering Manager

CAREER PATH MOVES FROM THIS ROLE

Senior Engineer or Lead Engineer



Planner—Renewable Energy

DESCRIPTION

Responsible for assessment and permitting of renewable energy facilities and associated storage and transmission infrastructure. Prepare proposals and provide direction for the development of environmental impact analysis documents, related technical studies, mitigation monitoring, exemptions/exclusions, and discretionary permit applications. Manage projects. Provide leadership for staff. Review field surveys and reports, cultural resources and geotechnical surveys and reports, air quality reports, wetland delineations (where applicable). Oversee preparation of environmental permit applications with various federal, state, and local agencies for a variety of project types/sizes.

KNOWLEDGE/SKILLS

NEPA practices and regulations. Environmental planning. Analysis of data/information, synthesis, and conclusion development. Writing various reports and documents. Constraint analysis. Developing mitigation measures. Reading and interpreting complex documents. Communication with varied groups, including leading meetings and presentations. Proficiency with MS Office suite (e.g., Microsoft Word, Microsoft Teams, Microsoft Project, Adobe Acrobat, Excel). Federal, state, and county permitting processes and applications. Federal and state habitat conservation planning programs.

REQUIREMENTS

Education/Training

Bachelor's degree in environmental science or related field required. Masters degree preferred. Training / education in a technical field such as air quality, hazardous materials or environmental law a plus.

Experience

Minimum 7 years of applicable professional experience. Minimum 5 years of demonstrated project lead experience. Minimum 3 years in renewable or traditional energy. Experience with environmental permitting for large, utility-scale renewable energy projects.

Credentialing Required/Optional

Industry-specific training (specialized field surveys methods, NEPA courses), certifications (e.g., PWS, CWB®, AICP, HAZWOPER), or species-specific handling permits a plus.

POSITION REPORTS TO

Director Environmental Assessment,
Permitting & Compliance

CAREER PATH MOVES FROM THIS ROLE

Director Environmental Assessment,
Permitting & Compliance



High Voltage Technician

DESCRIPTION

Provide electrical transmission, high voltage (HV), collection system, and substation support and emergency response. Lead maintenance, service, and repair of HV assets in conjunction with other technicians and HV Reliability Engineers. Perform testing, repairs, switching, and construction activities. Provide technical expertise for start-up and initial operating activities. Maintain HV spare parts inventory and warehouse. Perform HV switching. Operate heavy machinery—trucks, forklifts, aerial lifts, and overhead cranes. Report on inspections and maintenance. Perform substation and transmission inspections in accordance with compliance requirements. Work closely with site Operations Managers to ensure day-to-day reliability. Serve as the first responder for emergency and routine repairs on HV equipment. Provide remote HV support to the HV Reliability Engineers for troubleshooting, testing, and proof checking. Ensure adherence to safety requirements. Write reports and use root cause analysis.

KNOWLEDGE/SKILLS

Medium and high voltage substation electrical equipment, collection systems, transmission design, and operations; power factor test sets, AC/DC hi-pots, low res ohm meters. Electronic communication systems (SCADA), Order to operate (OTO) and Lock-out Tag-out (LOTO) procedures.

REQUIREMENTS

Education/Training

HS Diploma or equivalent, plus continuing education in the electro-mechanical field. Valid driver's license.

Experience

5+ years of relevant technical experience. Experience in power generation or distribution preferred.

Credentialing Required/Optional

Qualifications required to operate HV (high voltage) equipment.

POSITION REPORTS TO

High Voltage Operations Manager,
Regional Operations Manager

CAREER PATH MOVES FROM THIS ROLE

HV Reliability Engineer or Transmission Engineer



Operations Specialist I

DESCRIPTION

Support day to day Reporting, Performance, and Monitoring (RPM) Center Transmission activities, acting as the on-shift Operations Specialist for assets in the portfolio. Involved in monitoring of plant and system processes. Operate electrical and SCADA systems. Monitor critical elements in a complex and regulated system. Implement real-time actions to ensure the stable and reliable operation. Comply with applicable NERC Reliability Standards and regional rules and tariffs. Monitor and analyze available market information to identify dispatching and trading opportunities. Analyze and evaluate energy transactions.

KNOWLEDGE/SKILLS

Transmission technician knowledge. Plant and system processes, Operation of electrical and SCADA systems, Functional systems interactions.

REQUIREMENTS

Education/Training

Bachelor's degree or formal operations apprenticeship training or equivalent preferred.

Experience

Two years' experience in Operations or in a Transmission Technician Role is preferred. Competent technical knowledge of plant and system processes, and experience in operating electrical and SCADA systems.

Credentialing Required/Optional

Must obtain NERC RC certification within 12-months.

POSITION REPORTS TO

Operations Manager or RPM Manager

CAREER PATH MOVES FROM THIS ROLE

Operations Specialist II



Power Distributor / Dispatcher

Control Center Operator, Power System Operator,
Electrical System Operator

DESCRIPTION

Control the systems that generate, control the flow, and distribute electric power between power generation sites to substations and distribute to users/customers. Read charts, meters, and gauges to monitor voltage and electricity flows. Check equipment and indicators to detect evidence of operating problems. Monitor complex controls and intricate machinery to ensure that everything is operating properly. Adjust controls to regulate the flow of power. Start or stop generators, and other equipment as necessary. In exercising control, monitor and operate current converters, voltage transformers, and circuit breakers over a network of transmission and distribution lines. Prepare and issue switching orders to route electrical currents around areas that need maintenance or repair. Detect and respond to emergencies, such as transformer or transmission line failures, which can cause cascading power outages over the network. May work with plant operators to troubleshoot electricity generation issues.

KNOWLEDGE/SKILLS

Mechanical and analytical skills. Science, and math, especially algebra and trigonometry. Controlling and operating electrical power distribution. Once hired, long-term on-the-job training and technical instruction. Several years of onsite training and experience necessary to become fully qualified. Regular refresher training and updates.

REQUIREMENTS

Education/Training

HS diploma or equivalent. College or vocational school degree preferred (technical, math or science field).

Experience

0-2 years in power system operations, power production, control center, related energy operations, or technical field.

Credentialing Required/Optional

Power plant operators, distributors, and dispatchers who are in positions which could affect the power grid may need to be certified through the North American Electric Reliability Corporation's (NERC) System Operator Certification Program. PJM or other ISO Certifications, as required, or ability to obtain within 6 months.

POSITION REPORTS TO

Control Center Manager

CAREER PATH MOVES FROM THIS ROLE

Senior Control Center Operator, Control Center Manager, Power Marketing, Performance Management



Transmission Associate Technician

Mechanical Assistant

DESCRIPTION

Perform all preventive, scheduled, and unscheduled maintenance on mechanical equipment in safe & efficient manner. Read and follow work procedures, operation and maintenance instructions / manuals, blueprints and schematics. Provide assistance in troubleshooting, installing, replacing, and repairing transmission equipment and components. (This position is not qualified to independently perform Electrical technician work). Align machines and equipment, dismantle and move machinery / equipment. Perform work according to EHS practices, including LOTO procedures. Complete required reports and paperwork, including inputting information into a computer / device.

KNOWLEDGE/SKILLS

Mechanical / technical general skills. Strong mechanical aptitude. Comfortable working in confined spaces. Able to lift repeated weight up to 50 lbs.

REQUIREMENTS

Education/Training

High school diploma. Valid driver's license.

Experience

0-1 year of relevant experience. Industrial maintenance desired. Operations and upgrade of equipment. Hands on mechanical position in industrial environment desired. Using handheld and power tools including mechanical troubleshooting equipment.

POSITION REPORTS TO

Electrical Technician, Field Technician, Maintenance or Operations Manager

CAREER PATH MOVES FROM THIS ROLE

Mechanical Technician, Other Technician Roles



Transmission Technician

Field Service Specialist

DESCRIPTION

Perform all preventive, scheduled, and unscheduled maintenance on mechanical equipment in safe & efficient manner. Read and follow work procedures, operation and maintenance instructions / manuals, blueprints and schematics. Troubleshoot, install, replace and repair transmission equipment and components. Troubleshoot complicated mechanical, hydraulic, and electrical problems and performance maintenance with transmission equipment / facility. Perform some diagnostic/troubleshooting electrical and mechanical analysis and equipment inspections. Write reports and procedures. Assist with installation and commissioning. Provide training and direction to others. Follow Environmental, Health & Safety (EHS) procedures.

KNOWLEDGE/SKILLS

SCADA or transmission management system; Mechanical, hydraulic, and electrical knowledge for troubleshooting, repair, installation, commissioning; EHS practices; PCAT and FCAT commissioning, electrical test equipment; electrical and mechanical schematics, project management, team leadership, using hand tools.

REQUIREMENTS

Education/Training

Depending on Level: HS Diploma or GED, Assoc degree or diploma in electrical or mechanical field, technician or technical field.

Experience

Depending on level of Technician (I-IV), 2+ to 4+ years' experience in construction, installation or commissioning, mechanical engineering helpful; maintenance experience. Preferably experience working around all levels of voltage.

Credentialing Required/Optional

Certified to perform commissioning on SCADA or transmission management system.

POSITION REPORTS TO

Engineer or Construction / Project / Commissioning Manager

CAREER PATH MOVES FROM THIS ROLE

Other Technician roles, Transmission Engineer, Construction Manager / Project Manager, Commissioning Manager



Analyst

DESCRIPTION

Perform regional energy transmission analysis to find regions with available transmission capacity for possible projects. Submit transmission requests to transmission providers. Analyze and comment on interconnection studies. Perform power flow analysis to estimate potential congestion and curtailment. Advise developers of potential transmission issues and make recommendations related to added project costs or upgrade requirements. Monitor regional transmission expansion activities. Make recommendations for strategic development based on transmission availability. Model and monitor transmission lines and services. Maximize revenue and efficiency for energy customers. Assist in the development of forecasts and pro-forma analyses.

KNOWLEDGE/SKILLS

Business analysis, power flow analysis, strategic business development, energy transmission. Knowledge of field applications is needed to translate the data to usable results and procedures for development and operations teams. Database structures, engineering calculations. Analyzing equipment performance and identifying performance issues using software tools. Performing calculations and collecting and analyzing data. Data analytics and statistics, building models.

REQUIREMENTS

Education/Training

Bachelor's degree in engineering or technical discipline; Masters degree preferred.

Experience

3+ years in asset management and/or field operations. 3+ years' experience in energy Transmission. Experience working with large data sets, conducting root cause analyses, and visualizing data in a variety of formats for identifying trends and outliers.

Credentialing Required/Optional

PE (Professional Engineer) a plus

POSITION REPORTS TO

Senior or Lead Analyst, Transmission Manager, Transmission Director

CAREER PATH MOVES FROM THIS ROLE

Senior or Lead Analyst, Transmission Manager, Project Manager



Electrical Engineer—Powerhouse, Substation or Relay

DESCRIPTION

Responsible for correct and safe performance of electrical equipment involved in Powerhouse, Substation or Relay – energy transmission. Support energization of new or modified equipment and testing activities. Direct phase-out activities and/or coordinate with appropriate personnel. Verify ready to start procedures are complete prior to energizing equipment. Coordinate with construction managers and operations managers on various new projects, upgrades, or modifications. Read electrical design documents and work with other personnel and vendors on maintaining energy transmission.

KNOWLEDGE/SKILLS

Control systems, protective relay systems, equipment inspection and test methods, electrical equipment, electrical engineering, reading schematics

REQUIREMENTS

Education/Training

Bachelor's degree (engineering) preferred or equivalent combination of training & experience.

Experience

3-5 years' experience replacing transmission line relays, writing up reports.

Credentialing Required/Optional

PE (Professional Engineer) preferred.

POSITION REPORTS TO

Transmission Manager, Transmission Director, Engineering Manager

CAREER PATH MOVES FROM THIS ROLE

Senior Electrical Engineer, Transmission Manager, Project Manager



High Voltage Reliability Engineering Specialist

DESCRIPTION

Provide electrical transmission, high-voltage (HV), collection system, and substation support. Provide feedback regarding electrical design, engineering, testing, and construction. Support and coordinate commissioning, start-up, and initial operating activities. Optimize scheduled maintenance with consideration of fuel resources, weather, and reactive maintenance activities. Report problems and update activities in SAP. Maintain inventory, inspection, and calibration of all tooling and equipment. Manage spare parts inventory. Perform safe switching and grounding of HV equipment. Develop and implement site betterment projects. Support and coordinate electrical equipment maintenance at company facilities with LOTO and outage planning. Serve as an example to others of safe work practices. Perform equipment inspections and testing and store the reports in respective depository to ensure compliance with applicable standards. Perform emergency and routine repairs. Train subordinates and other field personnel.

KNOWLEDGE/SKILLS

Medium and high voltage substation electrical equipment including relay protection systems, collection systems, transmission designs and operations. MS Office, project software, SEL equipment. Relay and protection fundamentals. Operation of capacitor banks, transformer load tap changers, circuit breakers, and motor/manually operated or disconnect switches.

REQUIREMENTS

Education/Training

Bachelor's degree in Electrical Engineering or equivalent combination of training & experience.

Experience

5+ years relevant technical experience. Experience with power generation or distribution preferred. Experience establishing High Voltage field service preferred.

Credentialing Required/Optional

Qualifications to operate HV (high voltage) equipment.

POSITION REPORTS TO

High Voltage Operations Manager, Regional Operations Manager

CAREER PATH MOVES FROM THIS ROLE

High Voltage Operations Manager, Project Manager



Mechanical Engineer

Design Engineer, Product Engineer, Equipment Engineer

DESCRIPTION

Design, develop, analyze and test Transmission equipment and products. Design mechanical and electromechanical systems and components for Transmission projects. Develop technical engineering drawings and models. Verify and check project layouts and drawings. Outline materials needed based on engineering and quality standards. Create new and improve upon existing energy Transmission designs to improve efficiency and reliability, and to reduce costs.

KNOWLEDGE/SKILLS

Project management, design for manufacturability (DFM) principles, mechanical and electromechanical assemblies & mechanisms, Energy transmission, 3D cad modeling and drawing creation using SolidWorks software, product design, quality control.

REQUIREMENTS

Education/Training

BS in Engineering or higher degree

Experience

Experience with design of mechanical or electromechanical transmission assemblies and mechanisms. Ideally 3D cad modeling and variety of software.

Credentialing Required/Optional

May require engineering license, PE Professional engineer

POSITION REPORTS TO

Engineering Manager or Director

CAREER PATH MOVES FROM THIS ROLE

Engineering Manager or Director,
Materials Scientist



Operations Specialist II

DESCRIPTION

Support day to day Reporting, Performance, and Monitoring (RPM) Center Transmission activities, acting as the on-shift Operations Specialist for assets in the portfolio. Involved in monitoring of plant and system processes. Operate electrical and SCADA systems. Monitor critical elements in a complex and regulated system. Implement real-time actions to ensure the stable and reliable operation. Comply with applicable NERC Reliability Standards and regional rules and tariffs. Monitor and analyze available market information to identify dispatching and trading opportunities. Analyze and evaluate energy transactions.

KNOWLEDGE/SKILLS

Transmission technician knowledge. Plant and system processes, Operation of electrical and SCADA systems, Functional systems interactions.

REQUIREMENTS

Education/Training

Bachelor's degree or formal operations apprenticeship training or equivalent preferred.

Experience

3-4 years' experience in Operations or in a Transmission Technician Role is preferred. Competent technical knowledge of plant and system processes, and experience in operating electrical and SCADA systems.

Credentialing Required/Optional

Must obtain NERC RC certification within 12-months.

POSITION REPORTS TO

Operations Manager or RPM Manager

CAREER PATH MOVES FROM THIS ROLE

Operations Manager or RPM Manager



Power and Transmission Scheduler

DESCRIPTION

Manage real-time operations including forecasting, scheduling of generation resources, scheduling of contract purchases and sales, real-time purchases and sales of energy/capacity and procurement and management of transmission resources. Monitor real-time transmission positions, analyze forecasts and market obligations to optimize transmission redirects, transmission purchases, and scheduling coordination. Record transactions in relevant deal capture system. Maintain summary of available transmission reservations; manage reservations including performing trans-assignments and redirects as needed. Coordinate with the control center to ensure proper real-time monitoring and alarming of key scheduling, tagging and transmission parameters. Work with analysts to develop tools that track and analyze current and anticipated transmission outages as well as forecasts.

KNOWLEDGE/SKILLS

Maintain understanding of the energy markets where Company assets are located and understand commercial practices as they relate to managing merchant power pricing and scheduling.

REQUIREMENTS

Education/Training

Bachelor's degree preferred in technical / analytical field. Minimum HS diploma.

Experience

Minimum 1+ year of experience related to energy dispatch and/or hourly trading preferred. Recent college graduates with relevant technical / analytical field will be considered.

POSITION REPORTS TO

Scheduling Manager, Power Manager

CAREER PATH MOVES FROM THIS ROLE

Scheduling Manager, Control Center Supervisor, Remote Control Operator



Reliability Engineer

DESCRIPTION

Assess transmission technical performance and reliability. Identify opportunities for improvement, and recommend remediation actions for operations.

Conduct failure mode and effect analysis, root cause assessments, equipment troubleshooting, and system impact studies. Support field operations by performing studies in response to major component and systemic equipment failures. Use information / data to evaluate the future risk to transmission lines.

KNOWLEDGE/SKILLS

Rotational, generational, and power converter equipment knowledge. Reading and understanding plans, specifications, drawings, and technical documents. Assessing performance and reliability. Conducting failure mode and effect analysis, root cause assessments, equipment troubleshooting, and system impact studies. Analyzing and synthesizing data.

REQUIREMENTS

Education/Training

Bachelor's degree in mechanical, civil, or electrical engineering, OR demonstration of equivalent work experience is required as a minimum.

Experience

2-3 years' experience in reliability or design engineering. Renewable energy power operations or Electric Utility operations preferred.

POSITION REPORTS TO

Engineering Manager

CAREER PATH MOVES FROM THIS ROLE

Engineering Manager, Project Manager



Safety Manager I

DESCRIPTION

Participate in planning, organizing and implementing safety programs for construction projects while ensuring compliance with federal, state and corporate environmental, health and safety regulations. Develop project specific HSE programs and procedures through interface and teamwork with Project / Operations management/supervisory personnel. Maintain Accountability Programs on all projects for safety-related issues and work with supervision to ensure uniform application of safety related discipline. Serve as a mentor to other HSE professionals. May be the lead safety manager on a small project. Coordinate and present safety training to support the company and client requirements. Participate in EHS project risk assessments. Assist with conducting accident, near miss, and damage investigations with Root Cause Analysis. With oversight, develop and monitor EHS performance, progress, preventive and corrective action plans.

KNOWLEDGE/SKILLS

MSHA/OSHA regulations and hazard recognition, record keeping and injury management. Environmental, Health & Safety policies and procedures. Managing safety of work sites, mitigating identified safety hazards. Managing people, including contractors. Reviewing technical and EHS training reports. Developing and implementing safety training, and safety alerts. Auditing work sites for EHS program effectiveness. Supporting injured workers. Case management. Developing, implementing and maintaining an effective site-specific safety/EHS plan.

REQUIREMENTS

Education/Training

High school diploma or GED.

Experience

Minimum of 1 year of construction safety management experience. Demonstrated ability to provide a high level of safety leadership to both management and technicians.

Credentialing Required/Optional

Certified Hygiene Safety Technician (CHST) preferred. CPR/First Aid certification.

POSITION REPORTS TO

EHS Senior Leadership or a Group/Senior Safety Manager

CAREER PATH MOVES FROM THIS ROLE

Senior Safety Manager, Safety Manager II



Safety Manager II

DESCRIPTION

Plan, organize and implement the company safety programs. Demonstrate management skills and the ability to manage all aspects of a project safety program. Develop project specific HSE programs and procedures through interface and teamwork with Project / Operations management/supervisory personnel. Maintain Accountability Programs on all projects for safety-related issues and work with supervision to ensure uniform application of safety related discipline. Be the lead safety manager on a project. Serve as a mentor and manage other direct report safety/EHS managers. Demonstrate skills of a Safety Manager III by progressively increasing responsibility and authority. Develop and facilitate EHS project risk assessments. Lead and conduct accident, near miss, and damage investigations with Root Cause Analysis. Develop and monitor EHS performance, progress, preventive and corrective action plans.

KNOWLEDGE/SKILLS

MSHA/OSHA regulations and hazard recognition, record keeping and injury management. Environmental, Health & Safety policies and procedures. Managing safety of work sites, mitigating identified safety hazards. Managing people, including contractors. Reviewing technical and EHS training reports. Developing and implementing safety training, and safety alerts. Auditing work sites for EHS program effectiveness. Supporting injured workers. Case management. Developing, implementing and maintaining an effective site-specific safety/EHS plan.

REQUIREMENTS

Education/Training

Associates / Bachelor's degree.

Experience

Minimum of 3 years of construction experience managing safety. Demonstrated ability to provide a high level of safety leadership to both management and technicians.

Credentialing Required/Optional

Certified Hygiene Safety Technician (CHST) preferred. Or other BCSP certification preferred. Certification as an OSHA, MSHA. CPR/First Aid instructor preferred.

POSITION REPORTS TO

EHS Senior Leadership

CAREER PATH MOVES FROM THIS ROLE

EHS Senior Leadership



Director, Operations & Maintenance

Director O&M

DESCRIPTION

Manage overall strategic and operational activities for O&M projects in energy transmission. Manage scheduled and unscheduled maintenance work, out of scope transactional work and inspection work. Monitor subcontractors with regard to crane, mechanical, electrical and other work. Develop mid-term and long-term strategic plans for all O&M site operations. Include business plans, hiring strategies, development of strategic capabilities, and contributions to new site setup.

KNOWLEDGE/SKILLS

Strong business acumen, ability to run O&M projects as a business. Highly familiar with site management structure in the US for complex technical projects in the clean power industry. Strong knowledge and appreciation of the technical, commercial, and political aspects driving the energy transmission and renewables industry.

REQUIREMENTS

Education/Training

Bachelor's degree in relevant discipline or similar degree/ experience required.

Experience

Minimum 5 years' experience Energy Transmission Service Operations with project planning, execution, and history of improvements.

POSITION REPORTS TO

Vice President Operations, VP Transmission Business

CAREER PATH MOVES FROM THIS ROLE

Vice President Operations, VP Transmission Business



Director, Quality & Operations Support

DESCRIPTION

Standardize and strengthen the company’s quality, environmental, and health & safety approach. Contribute to the quality culture throughout the company. Develop, document, and implement technical documentation, training programs and quality policies to facilitate continuous improvement and the development of a solid QHSE framework. Ensure that subject matter experts review the project specifications, engineering design, and OEM requirements and identify all Quality Control requirements. Train others and manage project QC inspections and documentation to verify compliance with construction or operations Quality Plan(s). Ensure that projects and processes are in line with statutory obligations.

KNOWLEDGE/SKILLS

Business development, site assessments and quality checks. Setting scopes and cost bases for service contracts. Optimizing Operation IT programs, managing and administering subcontractors and partner contractors, conducting investigations, analyzing and reporting findings. Developing and monitoring quality performance. Preventative and corrective action plans.

REQUIREMENTS

Education/Training

Bachelor’s degree required. Master’s degree is preferred.

Experience

10+ years’ of management experience.

POSITION REPORTS TO

Vice President Operations, VP Transmission Business

CAREER PATH MOVES FROM THIS ROLE

Vice President Operations, VP Transmission Business



Director, Transmission

DESCRIPTION

Oversee regional transmission screening analysis to find regions with available transmission capacity for possible projects. Review power flow analysis to estimate potential congestion and curtailment. Advise developers of potential transmission issues and make recommendations related to added project costs or upgrade requirements. Coordinate project design, materials, and contract management for transmission projects. Monitor regional transmission expansion activities and make recommendations for transmission ownership and/or long-term transmission service rights on merchant transmission projects. Participate in the planning strategy for development, advising the team of transmission availability.

KNOWLEDGE/SKILLS

Laws and regulations related to Transmission. Transmission systems operation.

REQUIREMENTS

Education/Training

Bachelor's or Master's degree in Business or Energy Management.

Experience

10-15 years in the power industry; helpful to have related real estate sales, development or leasing.

POSITION REPORTS TO

Senior Director—Transmission or VP Operations

CAREER PATH MOVES FROM THIS ROLE

Senior Director—Transmission or VP Operations



Engineering Manager

DESCRIPTION

Provide engineering expertise and general support to the onsite operations and maintenance teams. Ensure there's a successful operations strategy. Implement processes and procedures. Lead and develop the engineering team to work on engineering solutions. Read and interpret documents such as operating and maintenance instructions, procedures manuals, blueprints and schematics. Write reports and correspondence. Solve complex problems in various situations. Make presentations to customers and at trade shows. Conduct root cause analysis and support troubleshooting, fault analysis and technical investigations. Lead development of upgrades. Ensure repairs are performed according to standards and procedures. Develop and implement strategic and tactical plans.

KNOWLEDGE/SKILLS

Engineering expertise. Implementing and advising on operations strategy. Implementing processes and procedures. Leading and developing people. Developing engineering solutions. Reading and interpreting documents such as operating and maintenance instructions, procedures manuals, blueprints and schematics. Writing reports and correspondence. Solving complex problems. Making presentations to customers and at trade shows. Conducting root cause analysis and technical investigations. Leading development of upgrades.

REQUIREMENTS

Education/Training

Bachelor's degree in Electrical Engineering or related field.

Experience

Minimum of 3 years of transmission technical experience. Collaboration with and leadership of other teams. Experience with various equipment manufacturers, platforms, systems and components. Experience with system design and development of upgrades.

Credentialing Required/Optional

PE (Professional Engineer) certification may be required.

POSITION REPORTS TO

Director of Operations

CAREER PATH MOVES FROM THIS ROLE

Director of Operations, Project Manager



Operations Manager

Transmission & Interconnection Manager,
Transmission Operations Manager

DESCRIPTION

Lead all aspects of electrical interconnection, delivery strategies, strategic transmission acquisition and analysis for company generation and transmission projects. Assess transmission opportunities, prepare and file interconnection documents and manage the Company's overall transmission positions. The position will be responsible for analysis that informs the company's view and forecast of congestion on various transmission systems. Track transmission projects and overall transmission development within the various markets. Assist Development, Regulatory, Construction, Engineering, Operations, and Dispatch teams with multiple aspects of project development, design and operation. Develop and maintain strong working knowledge of regional transmission systems and providers. Participate in and act as an advocate for the company and the industry in the transmission regulatory process.

KNOWLEDGE/SKILLS

Transmission systems. Construction and field experience. Developing power flow base cases and evaluating results. Leadership and technical experience in the power generation, renewable energy industry, electrical marine lines, military operations or related fields. Experience with mechanical and electrical troubleshooting and maintenance.

REQUIREMENTS

Education/Training

Bachelor's degree in electrical engineering with emphasis on Power Systems is required. Thorough knowledge of FERC transmission tariffs and interconnection processes.

Experience

Minimum 4 years transmission and interconnection experience. Construction and field experience. Developing power flow base cases and evaluating results.

Credentialing Required/Optional

Professional Engineering (PE) Registration encouraged.

POSITION REPORTS TO

Director O&M (Operations & Maintenance),
Regional Operations Manager, Asset
Manager/Director

CAREER PATH MOVES FROM THIS ROLE

Director O&M (Operations & Maintenance),
Regional Operations Manager, Asset
Manager/Director, Director, Transmission



Reliability Engineering Manager

DESCRIPTION

Deliver reliability analytics to the organization. Provide leadership and expertise to the reliability team, which is responsible for development of the reliability analytics for installed energy components, new products under development, and quality issues in the field. Coordinate with other areas across the organization to develop reliability models that provide cost projections to assess and manage cost risk for transmission assets. And work cross-functionally to develop a strategy that supports risk management through reliability modeling. Track and trend reliability predictions compared against actuals and targets. Provide input in new product development through reliability modeling that may foster design trade-off decisions. Improve analytics tools to provide reliability insights specific to components, suppliers, and failure modes in order to properly develop and prioritize productivity & repairs projects.

KNOWLEDGE/SKILLS

Reliability modeling techniques and technologies, problem solving; Reliasoft, JMP, and/or SAS modeling software, R or Python programming language

REQUIREMENTS

Education/Training

Bachelor's degree in Engineering, Physics, Chemistry, Mathematics, or Computer Science

Experience

Minimum 7 years' experience, including technical and leadership experience. Transmission experience in design, installation, operation and maintenance.

POSITION REPORTS TO

Reliability Director, Head of Transmission

CAREER PATH MOVES FROM THIS ROLE

Reliability Director, Installation or Design Engineer



Transmission Manager

Transmission & Interconnection Manager,
Transmission Operations Manager

DESCRIPTION

Lead all aspects of electrical interconnection, delivery strategies, strategic transmission acquisition and analysis for company generation and transmission projects. Assess transmission opportunities, prepare and file interconnection documents and manage the Company's overall transmission positions. The position will be responsible for analysis that informs the company's view and forecast of congestion on various transmission systems. Track transmission projects and overall transmission development within the various markets. Assist Development, Regulatory, Construction, Engineering, Operations, and Dispatch teams with multiple aspects of project development, design and operation. Develop and maintain strong working knowledge of regional transmission systems and providers. Participate in and act as an advocate for the company and the industry in the transmission regulatory process.

KNOWLEDGE/SKILLS

Transmission systems. Construction and field experience. Developing power flow base cases and evaluating results. Energy interconnection. Forecasting. Regulations related to energy transmission. Energy transmission design.

REQUIREMENTS

Education/Training

Minimum 4 years transmission and interconnection experience. Construction and field experience. Developing power flow base cases and evaluating results.

Experience

Bachelor's degree in electrical engineering with emphasis on Power Systems is required. Thorough knowledge of FERC transmission tariffs and interconnection processes.

Credentialing Required/Optional

Professional Engineering (PE) Registration encouraged.

POSITION REPORTS TO

Director, Transmission

CAREER PATH MOVES FROM THIS ROLE

Director, Transmission; Director Operations & Maintenance



Commissioning Technician

DESCRIPTION

Work with team to perform required system inspections on utility energy Transmission. Perform visual and mechanical inspections and electrical testing to specifications of construction documents, prior to energization date. Document all inspection findings and test results, and communicate the findings and test results with Commissioning Lead. Document and assist with transmission system trouble shooting and corrective actions. Oversee third party testing and inspections. (Transformers, audits, cable tests, Fiber optics, etc.) Ensure site documentation is prepared for upcoming sites. Ensure proper use of PPE and conformity to safety procedures. Care for tools and report any missing or broken tools and needed supplies to Lead.

KNOWLEDGE/SKILLS

Transmission systems, use of multi-meter, reading and using electrical single-line and three-line diagrams, safe work practices, visual and mechanical inspections and electrical testing.

REQUIREMENTS

Education/Training

HS Diploma or equivalent. Training in transmission systems preferred.

Experience

Minimum 1 year transmission installation experience.

POSITION REPORTS TO

Commissioning Manager

CAREER PATH MOVES FROM THIS ROLE

Commissioning Engineer



Construction Manager

DESCRIPTION

Responsible for directing, planning, and managing transmission construction project(s) on jobsite. Oversee all construction contracts within area of responsibility, and supported by Site Teams. Monitor and oversee construction activities and personnel. Keep Superintendent II and Construction Manager II informed of overall construction activity progress and performance. Monitor and review construction performance indicators. Manage construction package elements of procurement process. Follow all health and safety procedures.

KNOWLEDGE/SKILLS

Business development, transmission systems, estimating, construction management, electrical systems and SCADA, planning, procurement, health & safety, MS Office, reading and interpreting blueprints, procedures, government regulations, presentations to management and public groups, writing reports, managing construction crew, interpreting technical instructions using math, algebra & geometry.

REQUIREMENTS

Education/Training

Bachelor's degree (BS) in Construction management, engineering or related field; equivalent combination of education and experience).

Experience

Three years of construction industry experience / knowledge of construction techniques, estimating and construction management.

POSITION REPORTS TO

Project Manager or Director of Transmission Projects

CAREER PATH MOVES FROM THIS ROLE

Construction Manager II or Project Manager or Superintendent



Electrical / Electronic Line Installer & Repairer

Journeyman Lineman—powerhouse, substation, relay (including lines & towers)

DESCRIPTION

Line installers and repairers install or repair electrical power systems, specifically working with power lines and towers on powerhouse, substation or relay. Install, maintain, or repair the power lines that move electricity. Identify defective devices, voltage regulators, transformers, and switches. Inspect and test power lines and auxiliary equipment. String power lines between poles, towers, and buildings. Climb poles and transmission towers and use truck-mounted buckets to get to equipment. Line workers face hazards on the job, including high-voltage electricity, and working at great heights. The work also can be physically demanding. Although most work full time during regular business hours, some work irregular hours on evenings, nights, weekends, and holidays when needed. Journeyman Linemen may supervise Apprentice Linemen.

KNOWLEDGE/SKILLS

Long-term on the job training. Repair or replace complex electrical lines and equipment. Electrical systems and the appropriate tools needed to fix and maintain them. Troubleshooting skills—must diagnose problems in increasingly complex electrical systems. Able to lift heavy tools, cables, and equipment on a regular basis.

REQUIREMENTS

Education/Training

HS Diploma; algebra and trigonometry. Technical knowledge of electricity or electronics from military service, vocational programs, or community colleges can also be helpful. Electrical trade school community college courses, or 2-year degree in electrical / electronics can be helpful.

Experience

None or Apprenticeship as Lineman before or just after job hire.

Credentialing Required/Optional

May require "Journeyman Lineman" credential.

POSITION REPORTS TO

Electrical Engineer Powerhouse, Substation or Relay (Transmission Line Engineer)

CAREER PATH MOVES FROM THIS ROLE

Electrical Engineer Powerhouse, Substation or Relay (Transmission Line Engineer)



Site Surveyor

DESCRIPTION

Perform miscellaneous duties across the project to include surveying, quality control, and scheduling. Survey and inspect site readiness and capabilities for projects. Conduct land title surveys, topographic surveys, boundary surveys, and construction-staking and as-built surveys. Prepare legal descriptions. Coordinate with crews and technicians. Perform quality control of field activities, project deliverables and related calculations.

KNOWLEDGE/SKILLS

Surveying, Quality Control, Calculations/Math, GIS & mapping, LIDAR, Auto-CAD.

REQUIREMENTS

Education/Training

High School diploma; some positions may require Bachelor's degree.

Experience

2 years Surveying, Quality Control.

Credentialing Required/Optional

Licensed professional surveyor.

POSITION REPORTS TO

Engineering, Project Manager

CAREER PATH MOVES FROM THIS ROLE

Senior Surveyor



Buyer

Procurement Specialist, Procurement Associate

DESCRIPTION

Provide commercial support to pre & post award projects and report to the assigned Procurement Manager or Director of Procurement. Prepare and issue RFP equipment packages to suppliers. Work with engineering to answer RFP questions. Receive and evaluate proposals. Negotiate pricing with suppliers. Work closely with engineering project management, scheduling, legal and insurance. Secure completed purchase requisition and purchase terms and conditions, and confirm final purchase order. Monitor, support and administer all issued purchase orders. Manage stakeholder & supplier interaction. Assist in schedule development for project proposals. Assist estimating with equipment scope and price.

KNOWLEDGE/SKILLS

Oral and written communication, Engineering, construction industry standards, specifications and organizations. RFP and contracting process for purchasing from suppliers. Negotiating. Problem solving.

REQUIREMENTS

Education/Training

4-year college degree in business field or combination of education and experience. Additional financial, business or legal degree and additional transmission training needed for advancement.

Experience

Minimum 3 years' experience in procurement (preferably with engineering or construction industries).

POSITION REPORTS TO

Senior Buyer or Procurement Manager or Director

CAREER PATH MOVES FROM THIS ROLE

Senior Buyer, Procurement Manager or Director



Construction Manager II

DESCRIPTION

Responsible for directing, planning, and managing transmission construction project(s) on jobsite. Oversee all construction contracts within area of responsibility, and supported by Site Teams. Monitor and oversee construction activities and personnel. Keep Superintendent II and Construction Manager II informed of overall construction activity progress and performance. Monitor and review construction performance indicators. Manage construction package elements of procurement process. Follow all health and safety procedures.

KNOWLEDGE/SKILLS

Business development, transmission systems, estimating, construction management, electrical systems and SCADA, planning, procurement, health & safety, MS Office, reading and interpreting blueprints, procedures, government regulations, presentations to management and public groups, writing reports, managing construction crew, interpreting technical instructions using math, algebra & geometry.

REQUIREMENTS

Education/Training

Bachelor's degree (BS) in Construction management, engineering or related field; equivalent combination of education and experience).

Experience

Five years in a supervisory role of construction industry including construction techniques, estimating and construction management.

POSITION REPORTS TO

Project Manager or Director of Transmission Projects

CAREER PATH MOVES FROM THIS ROLE

Construction Manager III or Project Manager or Superintendent



Commissioning Manager

DESCRIPTION

Oversee regional installation and commissioning operations from the transmission project kickoff through customer acceptance. Responsible for planning, checking, quality assurance, monitoring, evaluation, and preparation of commissioning reports to management. Staff, train, and manage transmission commissioning team personnel. Create guidelines and procedures to ensure all project activities are completed according to a standard process, project plan and budget. Conduct routine audits as necessary. Interact with engineering to troubleshoot any technical issues. Manage budgets.

KNOWLEDGE/SKILLS

Electrical and mechanical theory. Team supervision. Budgeting procedures. Commissioning operations and practices for Transmission projects. Interpret engineering drawings.

REQUIREMENTS

Education/Training

Bachelor's degree in electrical engineering, electronics engineering or technical related field and five to seven years of experience.

Experience

5-7 years' experience with power generation equipment and commissioning procedures. Construction and commissioning experience in structural assembly, electrical protection and control systems related to the site work.

Credentialing Required/Optional

Optional: REP—Renewable Energy Professional and Certified Energy Manager from the Association of Energy Engineers (aeecenter.org)

POSITION REPORTS TO

Director, Transmission Commissioning;
Director, Transmission

CAREER PATH MOVES FROM THIS ROLE

Project Manager—Commissioning, Director,
Transmission Commissioning



Construction Manager III

DESCRIPTION

Responsible for directing, planning, and managing transmission construction project(s) on jobsite from inception to completion. Responsible for overall direction and evaluation. Oversee all construction contracts within area of responsibility, and supported by Site Teams. Monitor and oversee construction activities and personnel. Keep Superintendent II and Construction Manager II informed of overall construction activity progress and performance. Monitor and review construction performance indicators. Manage construction package elements of procurement process. Follow all health and safety procedures.

KNOWLEDGE/SKILLS

Business development, transmission systems, estimating, construction management, electrical systems and SCADA, planning, procurement, health & safety, MS Office, reading and interpreting blueprints, procedures, government regulations, presentations to management and public groups, writing reports, interpreting technical instructions using math, algebra & geometry, supervising construction crew, construction tools, machinery methods & procedures, forecasting for projects.

REQUIREMENTS

Education/Training

Bachelor's degree (BS) in Construction management, engineering or related field; equivalent combination of education and experience).

Experience

Seven years in a supervisory role of construction industry including construction techniques, estimating and construction management.

POSITION REPORTS TO

Project Manager or Director of Transmission Projects

CAREER PATH MOVES FROM THIS ROLE

Director of Transmission Projects



Project Manager

DESCRIPTION

Manage transmission projects to ensure projects are completed within scope, on schedule, and within budget. Work closely with vendors and personnel to engineer, design, site, permit and construct assigned projects. Manage all aspects of projects including the coordination of regulatory approvals, and interface with regulators, local elected officials and town department managers. Ensure all aspects of projects are documented and completed according to company policies and all regulations and laws. Manage financial risk exposure and ensure timely communication and reporting with management including project scope, budget and schedule. Integrate and manage a cross-functional team to achieve project goals including the team's development of a project plan, schedule, communication plan and control methodology. Manage the planning, engineering, siting/permitting, procurement, construction, commissioning and close out project phases. Manage execution of the project plan and project change control management. Coordinate development of project budget. Coordinate environmental assessment and the necessary regulatory approvals (federal, state and local) needed to begin construction. Mentor Associate Project Managers.

KNOWLEDGE/SKILLS

Investigating and solving problems, analyzing data, writing effective reports and making presentations. Managing time, setting and managing priorities. Running meetings, motivating others. Managing multiple transmission projects concurrently. Engineering / technical knowledge (analytical).

REQUIREMENTS

Education/Training

Bachelor's degree in Engineering (preferred). Bachelor's degree in Finance, Business or equivalent degree considered OR equivalent experience.

Experience

Minimum 5-10 years related experience. Experience with project management methodologies.

Credentialing Required/Optional

PE (Professional Engineer) and project management (PMP) certification are highly desirable.

POSITION REPORTS TO

Manager of Transmission Projects,
Manager-Construction—Transmission

CAREER PATH MOVES FROM THIS ROLE

Manager of Transmission Projects,
Manager-Construction—Transmission,
Manager Commissioning



Technical Trainer

Technical Instructor

DESCRIPTION

Educate employees about energy transmission in various technical topic areas related to processes, equipment, environment, resources, etc. Facilitate classroom training and on the job coaching for businesses, colleges or learning providers. Continue to develop knowledge regarding changes and industry updates, and update training to reflect this. Use field experience to provide real-life scenarios and discussion. Develop training programs, guides, assignments and skill assessments/evaluations. Instruct training and conduct demonstrations on equipment. Supervise trainees in the safe use of equipment and walk-through of procedures. Assess skills, evaluate performance and monitor trainee progress. If applicable, develop relationships with other businesses to provide training experiences for students.

KNOWLEDGE/SKILLS

Training & communicating on technical topics. Developing training curriculum. Writing procedures and instructions. Creating successful learning environments, and developing variety of methods of teaching topics so students can learn in ways that work for them. Developing and using JPM's (job performance measures). Evaluating / assessing skills.

REQUIREMENTS

Education/Training

Bachelor's degree preferred, but may not be required.

Experience

Minimum 2 years in the topic area in which Trainer will be providing training.

Credentialing Required/Optional

Requirements for licensing and certification vary by state.

POSITION REPORTS TO

Training Manager

CAREER PATH MOVES FROM THIS ROLE

Training Manager, Operations Manager

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Research and Report Completed by:
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Thank You to Research Contributors:

Acciona	GE Renewable Energy	Pattern Energy
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Deutsche Windtechnik	Martin Up Consulting	Wanzek
Duke Energy	Olsson	

Additional Research Sources listed on following page.

For questions about this report, please contact Tom Vinson at tvinson@cleanpower.org



American Clean Power Occupations & Career Maps

Additional Research Sources:

BLS – Bureau of Labor Statistics

CANWEA “A Roadmap to Standardized Core Competencies for Wind Turbine Technician Training”

Department of Energy (DOE) <https://www.energy.gov/eere/education/explore-clean-energy-careers-0>

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Energy Futures Initiative (EFI) <https://energyfuturesinitiative.org>

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Get Renewable Energy Jobs <http://www.getrenewableenergyjobs.com>

Green Citizen <https://greencitizen.com/renewable-energy-jobs/>

Greener Choices – Solar Energy Jobs <https://www.greenerchoices.org/solar-energy-jobs/>

Illinois Solar Energy Association <https://www.illinoissolar.org/jobs>

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Interstate Renewable Energy Council (IREC) <https://www.irecsolarcareermap.org>

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Midwest Renewable Energy Association (MREA) (solar) <https://www.solarenergyjobs>

National Association of State Energy Officials (NASEO) <https://www.naseo.org>

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Solar Energy Industries Association (SEIA) <https://www.seia.org/tags/workforce-development>

US Energy Jobs <https://www.usenergyjobs.org/>



American Clean Power is the voice of companies from across the clean power sector that are powering America's future, providing cost-effective solutions to the climate crisis while creating jobs, spurring massive investment in the U.S. economy and driving high-tech innovation across the nation. We are uniting the power of America's renewable energy industry to advance our shared goals and to transform the U.S. power grid to a low-cost, reliable, and renewable power system. Learn more about the benefits clean power brings to America at www.cleanpower.org.



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