

Electrical Power-Line Installers and Repairers

SOC: 49-9051 • Career Profile Report

■ Key Facts

\$92,560

Median Salary

127,400

Employment

+7.0%

Growth Rate

■ Requirements & Salary Range

Education: High school diploma

■ Automation Risk Assessment

Low Risk - 25.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

6.4/10 - Good work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.8/10	Investigative	7.4/10
Artistic	4.4/10	Social	5.6/10
Enterprising	4.6/10	Conventional	6.4/10

■ Top Skills Required

Ability to work at heights, Color vision, Interpersonal skills, Physical stamina, Physical strength, Problem-solving skills, Technical skills

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Electrical Power-Line Installers and Repairers install, maintain, and repair **electrical power systems, including high-voltage transmission and distribution lines**. They ensure the reliable delivery of electricity to homes, businesses, and industries. Their work is critical in utilities, energy production, and infrastructure maintenance.

This career is well suited for individuals who enjoy hands-on technical work, problem-solving, and working outdoors under various conditions.

What Do Electrical Power-Line Installers and Repairers Do?

These professionals build, inspect, and repair electrical power lines and equipment.

Common responsibilities include:

- Installing poles, towers, and electrical wiring
- Repairing and replacing damaged wires, transformers, and insulators
- Testing electrical systems for continuity and safety
- Climbing poles and using lifts or aerial devices to access lines
- Following safety procedures and using protective equipment
- Responding to power outages and emergency repairs
- Maintaining tools, equipment, and documentation of work

Key Areas of Power-Line Installation and Repair

Power-line workers may focus on specific systems or tasks:

- **Transmission Line Installation:** Building high-voltage lines for long-distance power delivery
- **Distribution Line Maintenance:** Maintaining local power distribution networks
- **Emergency Repairs:** Responding to outages and storm-related damages
- **Safety and Compliance:** Following electrical codes and occupational safety standards
- **System Testing and Troubleshooting:** Diagnosing and fixing faults in power lines and equipment

Skills and Abilities Needed

These workers combine technical knowledge with physical skill and problem-solving abilities.

Core Professional Skills

Personal Qualities That Matter

Education and Career Pathway

This role typically requires vocational training and apprenticeship:

- **High School Diploma or GED:** Basic math, physics, and technical knowledge
- **Apprenticeship or On-the-Job Training:** Paid hands-on training under experienced lineworkers
- **Certification or Licensing (varies by state):** Required for safety compliance and specialized work
- **Continuous Learning:** Staying current with electrical codes, safety regulations, and technology

Where Do Electrical Power-Line Installers and Repairers Work?

They are employed in industries that generate, transmit, or distribute electricity:

- Utility Companies
- Power Generation Plants
- Construction and Infrastructure Firms

- Telecommunications and Specialized Energy Services
- Emergency Repair and Maintenance Services

Work environments include outdoor locations, transmission towers, and electrical substations.

Is This Career Difficult?

This career is physically demanding and requires attention to safety and detail. Workers face hazards such as high voltage, heights, and adverse weather while ensuring uninterrupted power delivery.

Who Should Consider This Career?

This career may be a strong fit if you:

- Enjoy hands-on technical work
- Are physically fit and able to work at heights
- Have strong problem-solving skills
- Prioritize safety and accuracy
- Want a career essential to energy infrastructure and community services

How to Prepare Early

- Take courses in physics, mathematics, and electrical technology
- Explore vocational or technical programs in electrical systems
- Gain experience through apprenticeships or internships
- Develop physical stamina and safety awareness
- Learn to use electrical tools, testing equipment, and protective gear

Electrical power-line installers and repairers keep the lights on, maintaining and restoring power to homes and businesses while ensuring safety and reliability.

*Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O*NET*

Source: <https://www.bls.gov/ooh/installation-maintenance-and-repair/line-installers-and-repairers.htm>