Electrical Power-Line Installers and Repairers

SOC: 49-9051 • Career Profile Report

■ Key Facts

$92,560	127,400	+7.0%
Median Salary	Employment	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 typically perform the following tasks: • Adhere to safety practices and procedures, such as checking equipment regularly and erecting barriers around work areas. • Drive vehicles equipped with tools and materials to job sites. • Open switches or attach grounding devices to remove electrical hazards from disturbed or fallen lines or to facilitate repairs. • Climb poles or use truck-mounted buckets to access equipment. • Install, maintain, and repair electrical distribution and transmission systems, including conduits, cables, wires, and related equipment, such as transformers, circuit breakers, and switches. • Inspect and test power lines and auxiliary equipment to locate and identify problems, using reading and testing instruments. • Coordinate work assignment preparation and completion with other workers. • Replace or straighten damaged poles. • String wire conductors and cables between poles, towers, trenches, pylons, and buildings, setting lines in place and using winches to adjust tension. • Attach cross-arms, insulators, and auxiliary equipment to poles prior to installing them. • Dig holes, using augers, and set poles, using cranes and power equipment. • Travel in trucks, helicopters, and airplanes to inspect lines for freedom from obstruction and adequacy of insulation. • Identify defective sectionalizing devices, circuit breakers, fuses, voltage regulators, transformers, switches, relays, or wiring, using wiring diagrams and electrical-testing instruments. • Install watt-hour meters and connect service drops between power lines and consumers' facilities. • Test conductors, according to electrical diagrams and specifications, to identify corresponding conductors and to prevent incorrect connections. • Place insulating or fireproofing materials over conductors and joints. • Splice or solder cables together or to overhead transmission lines, customer service lines, or street light lines, using hand tools, epoxies, or specialized equipment. • Trim trees that could be hazardous to the functioning of cables or wires. • Pull up cable by hand from large reels mounted on trucks. • Lay underground cable directly in trenches, or string it through conduit running through the trenches.