

# Power Plant Operators, Distributors, and Dispatchers

SOC: 51-8010 • Career Profile Report

## ■ Key Facts

**\$103,600**

Median Salary

**4,700**

Employment

**-10.0%**

Growth Rate

## ■ Requirements & Salary Range

**Education:** High school diploma

## ■ Automation Risk Assessment

**Medium Risk** - 38.0% probability of being automated in the next 10-20 years.

This job has some routine elements but still requires human judgment and interaction.

## ■■ Work-Life Balance

**4.9/10** - Fair work-life balance

## ■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.4/10	Investigative	5.0/10
Artistic	3.8/10	Social	4.6/10
Enterprising	4.0/10	Conventional	8.0/10

## ■ Top Skills Required

Communication skills, Detail oriented, Dexterity, Mechanical skills, Problem-solving skills

### ✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

### ■ Challenges

- Burnout Risk
- Rapid Technological Change

## ■ What They Do

Power Plant Operators, Distributors, and Dispatchers control and maintain **the machinery and systems that generate, transmit, and distribute electricity**. They monitor power plants, regulate electricity flow, and ensure a reliable energy supply. Their work is critical in utilities, energy production, and infrastructure maintenance.

This career is well suited for individuals who enjoy technical work, problem-solving, and monitoring complex systems.

## What Do Power Plant Operators, Distributors, and Dispatchers Do?

These professionals operate, control, and oversee power generation and distribution systems.

Common responsibilities include:

- Monitoring gauges, meters, and control panels to regulate electricity flow
- Starting, stopping, and adjusting generators and turbines
- Distributing electricity to substations and end users
- Responding to outages, equipment malfunctions, and emergencies
- Performing routine inspections and maintenance
- Recording operational data and reporting anomalies
- Ensuring compliance with safety and environmental regulations

## Key Areas of Power Operation and Distribution

Workers may specialize in specific functions or systems:

- Power Generation: Operating boilers, turbines, and generators
- Transmission and Distribution: Managing electricity flow through substations and networks
- System Monitoring and Control: Using control room technology to maintain grid stability
- Emergency Response: Addressing outages, system failures, or natural disasters
- Maintenance and Safety Compliance: Conducting inspections and following regulations

## Skills and Abilities Needed

These workers combine technical knowledge with attention to detail and problem-solving skills.

### ***Core Professional Skills***

### ***Personal Qualities That Matter***

## Education and Career Pathway

This role typically requires technical training and practical experience:

- High School Diploma or GED (minimum): Basic math, physics, and technical knowledge
- Vocational or Technical Training: Programs in electrical systems, power generation, or industrial technology
- On-the-Job Training: Learning equipment operation, safety procedures, and distribution systems
- Licensing or Certification (varies by state): Required for certain operators
- Continuous Learning: Staying updated on energy technology, safety, and regulations

## Where Do They Work?

They are employed in facilities that generate and distribute electricity:

- Power Generation Plants
- Electrical Utilities
- Transmission and Distribution Networks

- Industrial and Manufacturing Facilities
- Emergency and Grid Management Centers

Work environments include control rooms, plant floors, substations, and outdoor transmission sites.

## Is This Career Difficult?

This career requires technical expertise, vigilance, and problem-solving. Operators must manage complex systems, respond to emergencies, and maintain continuous power supply safely and efficiently.

## Who Should Consider This Career?

This career may be a strong fit if you:

- Enjoy technical and mechanical work
- Can analyze data and make quick, accurate decisions
- Are detail-oriented and safety-conscious
- Have problem-solving skills and the ability to work under pressure
- Want a career that ensures reliable energy supply for communities

## How to Prepare Early

- Take courses in physics, mathematics, and electrical technology
- Gain experience with mechanical or electrical systems through vocational programs
- Develop problem-solving, attention to detail, and safety awareness skills
- Explore internships or entry-level positions in power plants or utilities
- Stay informed on emerging energy technology, regulations, and industry best practices

**Power plant operators, distributors, and dispatchers maintain and control electricity generation and distribution, ensuring safe, reliable, and efficient energy delivery.**

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

Source: <https://www.bls.gov/ooh/production/power-plant-operators-distributors-and-dispatchers.htm>