

## System(s) Operator Overview

(created based on secondary sources, reviewed by Educ taskforce)

- 1. Occupation title:** System(s) Operator
- 2. Other titles for same position:** Load Dispatcher, Transmission Operators, balancing authorities, reliability coordinators, interchange authorities
- 3. Generic job description:** Power distributors and dispatchers, also called *load dispatchers* or *systems operators*, work for utility companies, non-utility generators, and other companies that access the power grid. They control the flow of electricity through transmission lines to industrial plants and substations that supply residential and commercial needs for electricity. They monitor and operate current converters, voltage transformers, and circuit breakers. Dispatchers also monitor other distribution equipment and record readings at a map board—a diagram of the transmission grid system showing the status of transmission circuits and connections with substations and industrial plants. In doing this, they communicate closely with power plant operators, energy traders, and local utilities to route energy from generating stations to customers.

Dispatchers anticipate changes in power needs caused by weather, such as increased demand for power on a hot day or outages during a thunderstorm. They also react to changes in the structure of the grid due to transformer or transmission line failures and route current around affected areas. In substations, they operate and monitor equipment that increases or decreases voltage and they operate switchboard levers to control the flow of electricity in and out of the substations.

- 4. Level:**
- 5. Description of typical career path that includes this occupation:** From the CSR position, one may move laterally into a Billing Rep position or up into enhanced CSR roles such as Analyst; Quality Assurance Specialist; Trainer; Specialty Commercial; Team Leaders; and Manager.
- 6. Types of employers for this position:** Utility companies

- 7. Training/education/apprenticeship requirements for position:** Power distributors and dispatchers who are in positions in which they could affect the power grid must be certified by the North American Energy Reliability Corporation (NERC). There are three types of certification offered by NERC: reliability coordinator, transmission operator, and balancing authority. Each of these qualifies a worker to handle a different job function. Distributors and dispatchers who distribute power within local utilities generally do not need to be licensed or certified. A degree or certificate is not required by most companies for this position, but postsecondary education or training enhances employability of the candidate and potential for career mobility.
- 8. Related skill standards:** No industry –specific standards are currently available. Related occupational/functional standards include:  
[http://www.nrffoundation.com/Training\\_Certification/Cert\\_CSSSS.asp](http://www.nrffoundation.com/Training_Certification/Cert_CSSSS.asp)
- 9. Education programs currently available:** <http://incsys.com/doe.htm>
- 10. Related training offered within utilities (or other employers):** Monthly trainings offered on likely call topics such as high bills and seasonal issues.

Notes from Larry Kite telecom 8/22/11

Whether System Operator and Load Dispatcher are different jobs differs from utility to utility. Avista has them a separate jobs; Bonneville calls their Transmission Dispatchers System Operators.

Typically, System Operators (SO) work with 100,000+ volts and move power within and between entities. SO positions can be filled by Power Plant Operators, Line Workers, or Load Dispatchers.

Load Dispatchers (also called Transmission or Distribution Dispatchers) work with lower voltage and move power to end users. Can be hired from outside and trained on the job. Entry Dispatch position is on a par with Plant Operator or Line Worker apprenticeship positions.

Need to be willing to move to go into one of these positions. NW utilities pay almost double what is paid elsewhere in the country.

There are differing regulations between the two positions. Increased regulations and NERC requirements are creating a barrier to Line Workers moving in SO positions. Line

Workers or Plant Operators would bid into SO position and then try to pass test. Test has 65% pass rate. Person risks losing their original position if they don't pass the test within the expected timeframe.

**Career Progression:** Line Worker or Plant Operator Apprenticeship OR Entry level Load Dispatcher > System Operator (Typically, this is a top end, final position) > Training or Compliance Position (these positions are not represented but also not management).