

# Chart of Competency Power System Operator

Electricity Human Resources Canada is a non-profit organization supporting the human resources needs of the Canadian electricity sector.

### Our Vision

Keeping the lights on in Canada by preparing and empowering a world-class workforce for the entire electricity industry.

# Our Mission

Working to strengthen the ability of the Canadian electricity industry in meeting current and future needs for their workforce—one that is safety-focused, highly skilled, diverse and productive.

# Our Values

We are a values-driven organization, committed to the improvement of our sector, the growth of Canada's economy, and the stability of our power grid. Our core values are:

### Collaboration

Working with all stakeholders in Canada's electricity sector for our mutual benefit.

### Trust

Forging relationships and products built on unwavering integrity.

### Innovation

Leading the industry to be future-ready.



This Chart outlines the competencies (also known as skills and knowledge) that are performed by Power System Operators.

Power System Operators work in control centres to ensure the safe, reliable and efficient operation of the transmission and distribution system through the use of specialized tools and software.

Major Category	Competency Area	Competency Unit					
Transmission and Distribution	Operate Transmission System	Control transmission system	Complete transmission switching				
	Balance Energy in System	Balance load generation and interconnections	Monitor generation and interconnections for balancing area	Dispatch generation	Confirm electrical energy transactions		
	Operate Distribution System	Control distribution system	Monitor reliability of distribution system	Complete distribution switching	Coordinate distribution system operations with connecting systems	Manage distributed energy resources	Provide customer service
	Respond to Energy Emergencies	Respond to energy emergencies					
Safety	Maintain a Safe Working Environment	Follow safe work practices	Participate in safety meetings and emergency drills	lsolate component, equipment or system	Perform lock-out tag-out procedures		
		Use fall arrest equipment					
	Maintain a Sustainable Environment	Follow sustainable work practices					
	Respond to Emergencies	Respond to non-electrical emergencies	Participate in incident and accident investigations				
Security	Follow Security Practices	Follow security practices for physical work environment	Follow cybersecurity procedures				
Organizational Policies and Procedures	Follow Organizational Policies and Procedures	Follow organizational policies and procedures					
Information/Record Management	Complete Information/Record Management Tasks	Maintain technical information and data	Use information/ record management system for generation, transmission and distribution operations				
Information and Communication Technology Foundations	Use Digital Technology	Use communication applications	Use common software applications	Use navigation and mapping applications	Use digital mobile radios		
	Use Organization's ICT System	Use organization's ICT system					
Personal Competencies	Demonstrate Professionalism	Work as a member of a team	Develop professionally	Demonstrate professional and ethical conduct	Mentor/coach others	Manage stress	Manage time
	Communicate Effectively	Use active listening skills	Use speaking skills	Use writing skills	Negotiate with internal and external stakeholders	Conduct meetings and presentations	Exchange information with internal and external stakeholders

# National Occupational Standards (NOS)

NOS are voluntary guidelines that have been developed to provide businesses, educators, trainers, and job seekers with practical guidance.

## How are NOS used?

Employers, employees, and educational institutions can put NOS to a wide variety of uses supporting effective workforce planning.

- Support personnel certification or accreditation programs.
- Inform curricula for colleges and apprenticeships.
- Assist recruitment by informing job descriptions and providing a benchmark for employee appraisals.
- Identify career paths in order to promote employee retention.
- Help employers evaluate and determined the competencies of potential employees, including Internationally Trained Workers (ITWs).

Electricity Human Resources Canada has developed National Occupational Standards for a variety of occupations.

Visit **electricityhr.ca** for more information.

