



## Building bright futures

Your information will help us to provide data to the electricity industry that is unique and not available from other sources. Thank you for your involvement in this important study!

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- Objective of the Study:** To develop a labour market information system and subsequent web-based application that will provide accurate information and viable predictions of current and future labour supply and demand in the electricity sector.
- Use of Data from the Study:** The information from this study will be used to produce a web-based reporting tool that employers in the electricity sector can use to help plan their future HR requirements. Individual data pertaining to any specific firm will not be published.
- Who Should Complete the Survey:** Each regional office of an organization should complete a separate survey. This will ensure that data can be tabulated for each region of the country in the electricity industry.
- Sponsor of the Research:** The Electricity Sector Council, with funding provided by the Government of Canada, has commissioned a study to identify the current and future human resource needs of organizations in the electricity sector.
- Questions:** If you have any questions about the survey or the research in general, please call the survey coordinators at **1-800-665-5848**.
- How to respond:** You have a number of options for returning your survey:
- by **mail** using the enclosed postage-paid envelope
  - by **fax** toll-free at 1-888-384-2774
  - by **phone** using our toll-free number: **1-888-274-1700**

Please provide the name and job title of the person filling out this survey:

Name:  Mr.  Mrs.  Ms.  Dr. (First) \_\_\_\_\_ (Last) \_\_\_\_\_

Job Title: \_\_\_\_\_

Company name: \_\_\_\_\_

Email: \_\_\_\_\_ Phone \_\_\_\_\_

## DEFINITIONS OF OCCUPATIONS

This survey asks questions about the number of staff your organization employs in different occupational categories. The following definitions of non-support staff are intended as a guide to assist respondents in estimating the number of staff by occupation (for more information about common names for occupations, please see <http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml>).

### Occupation Name in Survey    Job Descriptions and Other Common Names for the Occupation

#### Managers/Supervisors

**Utilities Managers**                      Managers who plan, organize, direct, control and evaluate the operations of utility companies. They manage the operations of electrical power distribution systems including generating stations, transmission stations and distribution networks. They may also plan and direct the distribution activities of a municipal electrical power establishment. Also known as operations managers or electric power plant managers (National Occupational Classification 0912).

**Supervisors of Electricians & Supervisors of Electrical Power Line Workers**                      Includes supervisors of Electricians, Industrial Electricians, Power System Electricians, Electrical Power Line and Cable Workers and Maintenance Technicians. Also known as Foreman/Woman or Subforeman/Woman and Power Line Technician Foreman/Woman or Subforeman/Woman (NOC 7212).

#### Engineers/Engineering Technologists

**Electrical and Electronics Engineers**                      These engineers design, plan, research, evaluate and test electrical and electronic equipment and systems. Also referred to as design or process control engineers (NOC 2133).

**Mechanical Engineers**                      Mechanical engineers research, design and develop machinery and systems for power generation, heating, ventilating and air conditioning, transportation, processing and manufacturing. They also perform duties related to the evaluation, installation, operation and maintenance of mechanical systems. Also includes nuclear engineers (NOC 2132).

**Civil Engineers**                      Civil engineers plan, design, develop and manage projects for the construction or repair of buildings, powerhouses, earth structures, roads, airports, railways, rapid transit facilities, bridges, tunnels, water distribution and sanitation. Civil engineers may also specialize in foundation analysis, building and structural inspection, surveying, geomatics and municipal planning (NOC 2131).

## DEFINITIONS OF OCCUPATIONS, PART 2

(Continued) The following definitions are intended as a guide to assist respondents in estimating the number of staff by occupation:

<b>Occupation Name in Survey</b>	<b>Job Descriptions and Other Common Names for the Occupation</b>
<b>Electrical and Electronics Engineering Technologists and Technicians</b>	Provide technical support and services in the design, development, testing, production and operation of electrical and electronic equipment and systems. Also known as electronics design technologists, electricity distribution network technologists (NOC 2241).
<b>Mechanical Engineering Technologists and Technicians</b>	Provide technical support and services in the design, development, testing and maintenance of machines, components, tools, heating and ventilation systems, power generation and power conversion plants, and manufacturing plants and equipment (NOC 2232)
<b>Civil Engineering Technologists and Technicians</b>	Provide technical support and services to scientists, engineers and other professionals, may develop engineering designs and drawings from preliminary concepts and sketches, conduct or supervise inspection and testing of construction materials (NOC 2231).
<b>Trades</b>	
<b>Power System Electricians</b>	Install, maintain, test and repair electrical power generation, transmission and distribution system equipment and apparatus. Also known as electricians/power electricians (NOC 7243).
<b>Electrical Power Line and Cable Workers</b>	Construct, maintain and repair overhead and underground electrical power transmission and distribution systems. Also known as Power Line Technicians, Cable Splicers, Trouble Technicians (NOC 7244).
<b>Power Systems Operators</b>	Monitor and operate switchboards and related equipment in electrical control centres to control the distribution of electrical power in transmission networks. They are responsible for coordinating and scheduling power loads and line voltages to meet demands during daily operations, system outages and repairs. Also known as Apprentice Power Dispatcher (NOC 7352).
<b>Power Station Operators</b>	Operate reactors, turbines, boilers, generators and other related equipment in electrical generating stations and substations. Also known as Diesel Station Operator, Electrical Station Operator, Nuclear Station Operator (NOC 7352).
<b>Millwrights or Industrial Mechanics</b>	Install, maintain, troubleshoot and repair stationary industrial machinery and mechanical equipment. This category includes mechanics, millwrights, plant equipment mechanics (NOC 7311).

## DEFINITIONS OF OCCUPATIONS, PART 3

(Continued) The following definitions are intended as a guide to assist respondents in estimating the number of staff by occupation:

**Occupation Name in Survey    Job Descriptions and Other Common Names for the Occupation**

### **Other Key Critical Occupations**

**Financial Auditors and Accountants**

Examine and analyze the accounting and financial records of individuals and establishments to ensure accuracy and compliance with established accounting standards and procedures. Accountants plan, organize and administer accounting systems for individuals and establishments (NOC 1111)

**Information Systems Analysts and Consultants**

Develop and implement information systems development plans, policies and procedures, and provide advice on a wide range of information systems issues (NOC 2171)

## YOUR COMPANY

Please Note: Non-support employees include management/supervisor, engineering/engineering technologists and trades staff but exclude secretarial, customer service, call centre, accounting, etc.

**A1. What is your organization's scope of operations?** (Use the location of your offices to establish the scope of operations. Check only one option)

- Local
- Provincial
- Regional (more than one province, but not national)
- National
- International

**A2. Is your office a branch or head office?**  
(Please check only ONE option)

- Head Office
- Branch Office – If a branch, in what province is your head office located?

**A3. How many seasonal staff do you employ (that work part of the year only)?**

All non-support employees   
(please see top of page for definition)

**A4. How many employees does your organization employ in total (full-time and part-time)?** Please exclude temporary staff.

Total employees in Canada:	
All non-support employees	
Support (Support staff includes Secretarial, Customer Service, Accounting, Call Centre, etc.)	

**A5. For organizations whose primary business is not electricity generation, transmission, or distribution, please indicate the number of employees employed by your organization related to electricity only.**

Total employees in Canada:	
All non-support employees	
Support (Support staff includes Secretarial, Customer Service, Accounting, Call Centre, etc.)	

**A6. In what business line of the electricity industry is your organization (please check all that apply)?**

<input type="checkbox"/>	Generation
<input type="checkbox"/>	Transmission
<input type="checkbox"/>	Distribution
<input type="checkbox"/>	Retail ("direct access", where consumers are able to purchase electricity directly from suppliers)
<input type="checkbox"/>	Renewables (wind, solar, geo-exchange)
<input type="checkbox"/>	Other (please specify: _____)

**A7. How many contractors or consultants (contracted externally with your organization) do you employ in the following employee categories (electricity business line only)?**

All non-support employees	
Support (Support staff includes Secretarial, Customer Service, Accounting, Call Centre, etc.)	

## YOUR EMPLOYEES

Please note, for organizations whose primary business is not electricity generation, transmission, or distribution, please indicate the number of employees related to electricity only (including employees related to the wholesale electricity market) for the remainder of the survey. . .

**ALSO NOTE:** For the remainder of the survey, please exclude seasonal staff who work only part of the year.

- B1. Please indicate how many employees you have in each of the following business lines.**  
Please exclude contractors and consultants contracted externally with your organization and employees outside of Canada, and please exclude seasonal staff who work only part of the year.

Business Line	Current full- and part-time employees (2007)	Anticipated number of employees (BOTH FULL AND PART-TIME)	
		In 2 years (2009)	In 5 years (2012)
Generation			
Transmission			
Distribution			
Retail ("direct access", where consumers are able to purchase electricity directly from suppliers)			
Renewables (wind, solar, geo-exchange)			
Other (please specify: _____)			
<b>Total</b>			

- B2. What percentage of your staff is female?**

Occupational Group	Female Staff
Managers/ Supervisors	%
Engineers/Engineering Technologists	%
Trades	%
Other Key Critical Occupations (financial auditors and information systems analysts/consultants)	%

**B3. Please fill in your current and forecasted employee numbers for the next two and five years in the following general categories. Again, for organizations whose primary business is not electricity generation, transmission or distribution, please fill in the number of employees related to electricity only. Please exclude contractors and consultants contracted externally with your organization and employees outside of Canada, and please exclude seasonal staff who work only part of the year.**

Occupational Category	Current full- and part-time employees (2007)	Current number of unfilled positions (FULL AND PART-TIME)	Anticipated number of employees (BOTH FULL AND PART-TIME)	
			In 2 years (2009)	In 5 years (2012)
<b>Managers/Supervisors</b>				
Utilities Managers (e.g., electric power plant manager)				
Supervisors of Electricians & Supervisors of Electrical Power Line Workers				
<b>Engineers/Engineering Technologists</b>				
Electrical and Electronics Engineers				
Mechanical Engineers				
Civil Engineers				
Electrical and Electronics Engineering Technologists and Technicians				
Mechanical Engineering Technologists and Technicians				
Civil Engineering Technologists and Technicians				
<b>Trades</b>				
Power System Electricians				
Electrical Power Line and Cable Workers				
Power Systems Operators				
Power Station Operators				
Millwrights or Industrial Mechanics				
All Other Trades (excluding the trade staff listed above)				
<b>Other Key, Critical Occupations.</b>				
Financial Auditors / Accountants				
Information Systems Analysts and Consultants				
<b>TOTAL (all trade, management, and engineering staff)</b>				
<b>Total Employees (ALL employees including support)</b>				

**B4. How many of your staff falls into the following age categories?**

<b>Occupational Group</b>	<b>Less than 35 years old</b>	<b>35 to 44 years of age</b>	<b>45 to 54 years of age</b>	<b>55 years or more</b>	<b>Total</b>
<b>Managers/Supervisors</b>					
Utilities Managers (e.g., electric power plant manager)					
Supervisors of Electricians & Supervisors of Electrical Power Line Workers					
<b>Engineers/Engineering Technologists</b>					
Electrical and Electronics Engineers					
Mechanical Engineers					
Civil Engineers					
Electrical and Electronics Engineering Technologists and Technicians					
Mechanical Engineering Technologists and Technicians					
Civil Engineering Technologists and Technicians					
<b>Trades</b>					
Power System Electricians					
Electrical Power Line and Cable Workers					
Power Systems Operators					
Power Station Operators					
Millwrights or Industrial Mechanics					
All Other Trades (excluding the trade staff listed above)					
<b>Other Key Critical Occupations</b>					
Financial Auditors / Accountants					
Information Systems Analysts and Consultants					

**B5. Please fill in the current and future estimated number of retirements as well as staff eligibility for retirement, and the percentage of staff who retire on eligibility for a full pension.**

Occupational Category	Number of Retirements (2006)	Estimated Number of Retirements (2009)	Estimated Number of Retirements (2012)	Number of Staff Eligible for Full Pension (2006)	Number of Staff Eligible for Partial Pension (2006)	% of Staff Who Retire on Full Eligibility
<b>Managers/Supervisors</b>						
Utilities Managers (e.g., electric power plant manager)						
Supervisors of Electricians & Supervisors of Electrical Power Line Workers						
<b>Engineers/Engineering Technologists</b>						
Electrical and Electronics Engineers						
Mechanical Engineers						
Civil Engineers						
Electrical and Electronics Engineering Technologists and Technicians						
Mechanical Engineering Technologists and Technicians						
Civil Engineering Technologists and Technicians						
<b>Trades</b>						
Power System Electricians						
Electrical Power Line and Cable Workers						
Power Systems Operators						
Power Station Operators						
Millwrights or Industrial Mechanics						
All Other Trades (excluding the trade staff listed above)						
<b>Other Key, Critical Occupations.</b>						
Financial Auditors / Accountants						
Information Systems Analysts and Consultants						
<b>TOTAL (trade, management and engineering staff)</b>						
<b>Total Employees (ALL employees including support)</b>						

## STAFF TURNOVER

C1. We are interested in the portion of employees by key occupations that voluntarily left your organization in 2006 (quits initiated by the employee, excluding retirements or disability). The separation rate is defined as the following ratio:

$$\frac{\text{total number of voluntary (employee-initiated, excluding retirement, maternity, or disability) terminations of employment}}{\text{average number of employees with your organization over the course of the year}}$$

Number of Voluntary Separations (2006) by key occupation	Separation Rate (2006) %
<b>Managers/Supervisors</b>	
Utilities Managers (e.g., electric power plant manager)	
Supervisors of Electricians & Supervisors of Electrical Power Line Workers	
<b>Engineers/Engineering Technologists</b>	
Electrical and Electronics Engineers	
Mechanical Engineers	
Civil Engineers	
Electrical and Electronics Engineering Technologists and Technicians	
Mechanical Engineering Technologists and Technicians	
Civil Engineering Technologists and Technicians	
<b>Trades</b>	
Power System Electricians	
Electrical Power Line and Cable Workers	
Power Systems Operators	
Power Station Operators	
Millwrights or Industrial Mechanics	
All Other Trades (excluding the trade staff listed above)	
<b>Other Key, Critical Occupations.</b>	
Financial Auditors / Accountants	
Information Systems Analysts and Consultants	
<b>Total Employees (ALL employees including support)</b>	

**C2. Looking ahead to the future, given your changing workforce demographics/local labour market conditions, to what extent do you foresee the voluntary separation rate changing for the key occupations and your overall workforce?**

Occupation	Estimated separation rate in 2009			Estimated separation rate in 2012		
	No Change	Higher Rate	Lower Rate	No Change	Higher Rate	Lower Rate
	Please check which category applies)			Please check which category applies)		
<b>Managers/Supervisors</b>						
Utilities Managers (e.g., electric power plant manager)						
Supervisors of Electricians & Supervisors of Electrical Power Line Workers						
<b>Engineers/Engineering Technologists</b>						
Electrical and Electronics Engineers						
Mechanical Engineers						
Civil Engineers						
Electrical and Electronics Engineering Technologists and Technicians						
Mechanical Engineering Technologists and Technicians						
Civil Engineering Technologists and Technicians						
<b>Trades</b>						
Power System Electricians						
Electrical Power Line and Cable Workers						
Power Systems Operators						
Power Station Operators						
Millwrights or Industrial Mechanics						
All Other Trades (excluding the trade staff listed above)						
<b>Other Key, Critical Occupations as defined in B2 (please exclude support staff). Please specify.</b>						
Financial Auditors / Accountants						
Information Systems Analysts and Consultants						
<b>Total Workforce (all Employees)</b>						

## RECRUITMENT

**C3. Looking back at the last year (2006), please provide your best estimate as to the number of new hires in your organization and the “source” of new hires. Please refer to the following definitions:**

Post-secondary education graduates	Refers to new hires who recently (within the last year) graduated from a relevant post-secondary education program related to the electricity sector (i.e., Power Lineman, Electrical Engineer, etc.)
Recent Immigrants	Individuals who are foreign-trained and recently arrived in Canada within 24 months of being hired
Other electricity related organizations	Refers to the number of new hires that were previously employed in another electricity related industry prior to joining your organization
Other non-electricity related industries	Refers to the number of new hires that were previously employed in another non-electricity related industry prior to joining your organization
No previous work experience	Youth and/or other workers with no significant work experience
Other	All other new hires that are not covered by the above categories

Occupational Group	Total # of new hires (2006)	Estimated Recent PSE Grads	Recent Immigrants	Electricity Related	Non-Electricity Related	No Previous Work Exp.	Other	
<b>Managers/ Supervisors</b>								
Utilities Managers (e.g., electric power plant manager)		%	%	%	%	%	%	100%
Supervisors of Electricians & Supervisors of Electrical Power Line Workers		%	%	%	%	%	%	100%
<b>Engineers</b>								
Electrical and Electronics Engineers		%	%	%	%	%	%	100%
Mechanical Engineers		%	%	%	%	%	%	100%
Civil Engineers		%	%	%	%	%	%	100%
Electrical and		%	%	%	%	%	%	100%

Occupational Group	Total # of new hires (2006)	Estimated Recent PSE Grads	Recent Immigrants	Electricity Related	Non-Electricity Related	No Previous Work Exp.	Other	
Electronics Engineering Technologists and Technicians								
Mechanical Engineering Technologists and Technicians		%	%	%	%	%	%	100%
Civil Engineering Technologists and Technicians		%	%	%	%	%	%	100%
<b>Trades</b>								
Power System Electricians		%	%	%	%	%	%	100%
Electrical Power Line and Cable Workers		%	%	%	%	%	%	100%
Power Systems Operators		%	%	%	%	%	%	100%
Power Station Operators		%	%	%	%	%	%	100%
Millwrights or Industrial Mechanics		%	%	%	%	%	%	100%
All Other Trades (excluding the trade staff listed above)		%	%	%	%	%	%	100%
<b>Other Key, Critical Occupations</b>								
Financial Auditors / Accountants		%	%	%	%	%	%	100%
Information Systems Analysts and Consultants		%	%	%	%	%	%	100%
<b>Total (all trade, management and engineering staff)</b>								
		%	%	%	%	%	%	100%
<b>Total Employees</b>								
		%	%	%	%	%	%	100%

**C4. Have you hired Temporary Foreign Workers (TFWs) in the past? If no, please indicate whether you plan to in the future.**

Yes

No, but plan to in the future

No, and do not intend to hire TFWs in the future

**C5. Are there any other employers with which you compete to hire the same pool of labour (e.g., engineers, trade staff)?** If yes, please check all the types of employers below that apply.

- Other utilities
- Contractors
- Employers in other Industries (please check the specific industry that applies)
- Oil and Gas
- Construction
- Other – Please specify which industry:\_\_\_\_\_

**C6. Please identify any recruitment challenges that you face as an organization.**

No identified challenges

\_\_\_\_\_

\_\_\_\_\_

**APPRENTICESHIP OR APPRENTICESHIP EQUIVALENT**

**D1. We are interested in the extent to which your organization supports apprenticeship for several key trades. Please provide information as to the number of apprentices in your organization in 2006, the number currently employed (2007) and projections for 2009, by key occupation.**

Key Trades	Total Apprentices / Apprenticeship Equivalent Trainees		
	2006	2007	2009*
Power System Electricians			
Electrical Power Line and Cable Workers			
Power System Operators			
Power Station Operators			
<b>Total – all apprenticeable trades</b>			

\*Projected

**D2. What barriers, if any, does your organization encounter in terms of utilizing a apprenticeship model to train employees in your organization? Please check.**

- 1. No Barriers
- 2. Yes – Please explain.

\_\_\_\_\_

\_\_\_\_\_

3. Not applicable – we do not have apprenticeable occupations

**PRE-EMPLOYMENT TRAINING**

E1. How many co-op students, interns, and summer students did your organization employ in 2006, currently (2007), and how many do you project you will employ in 2009?

	Number employed		
	2006	2007	2009*
Co-op students			
Interns			
Summer students			

\*Projected

**OTHER HUMAN RESOURCE ISSUES**

F1. Have any emerging/changing technologies impacted the skills/occupations that your organization requires? If so, please describe the technology and the impact on your organization.

No

Yes - Please explain.

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F2. Is your organization planning on redefining any of its job descriptions or occupations? If yes, please explain how you are planning on redefining the job descriptions.

No

Yes - Please explain.

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F3. On average, how many overtime hours are worked per month in each of the following staff categories?

Occupational Group	Average number of overtime hours worked per month
Managers/ Supervisors	
Engineers/Engineering Technologists	
Trades	
Other Key Critical Occupations	

## CONCLUSION

**G1. What labour market information would you find useful as an employer? Would there be particular tools that would help you with your human resource planning?**

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**G2. Are there any other major occupations that you would like the Electricity Sector Council to collect information on and produce statistics on?**

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**THANK YOU FOR COMPLETING THIS IMPORTANT SURVEY.**

**YOUR PARTICIPATION IS VERY MUCH APPRECIATED!**