electricity
SECTOR COUNCIL
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POWERING UP THE FUTURE
2008 Labour Market Information Study

2004/2008 Labour Market Information Comparative Analysis Report

Funded by the Government of Canada's Sector Council Program

Canada

Table of Contents

Summary of Findings

The electricity sector is entering into a phase of both challenges and opportunities. Challenges include the large segment of the workforce that is due to retire within the next 10 years, coupled with increased competition from other employers (both within the sector and outside of the sector) to attract and retain the skilled people required to deliver on the country's increasing demand for electricity. Labour shortages are threatening industries across the country, and certain occupations are more at risk than others. In addition to the projected labour shortages, the electricity sector in Canada is moving into a new phase, whereby much of the existing infrastructure is either due for significant upgrades, or else complete replacement. In addition, the increasing demand for electricity further means that increased investment and capital expenditure will need to be put toward building new infrastructure altogether.

The opportunities for the electricity industry will lie in its ability to effectively and efficiently react to the above mentioned challenges. Rising to the challenges will help establishments ensure that they can continually provide both Canada and other countries a reliable supply of electricity, securing their place in the Canadian electricity market.

In 2004, R.A.Malatest & Associates was commissioned by the Canadian Electricity Association to conduct a study on the human resource needs of organizations in the electricity sector. The sector study was designed to provide a comprehensive overview of human resource issues, challenges and opportunities for the Canadian electricity sector.

In 2007, the ESC commissioned R.A. Malatest & Associates to undertake a similar study with the goal of providing up-to-date, focused, and relevant labour market information for industry stakeholders and employers. Projected labour shortages, which are the result of an aging workforce and an insufficient number of young workers coming up through the ranks, coupled with a hot economy and growing demand for electricity, has resulted in an urgent need for employers in the electricity sector to develop effective human resource strategies to recruit and retain a skilled workforce. Primary to this is providing employers with a better understanding of the existing trends within the electricity sector to enable them to gauge and plan for future human resource challenges and priorities.

The current analysis will provide employers and stakeholders in the sector with relevant and current trend data to help them make appropriate policy and human resource decisions. It should be noted however, that the data should be considered with caution, as in some cases the number of respondents is very low, and therefore cannot necessarily be considered as wholly representative.

Key Findings

The following is a summary of the key findings from the 2004/2008 Electricity Sector Labour Market Information Comparative Analysis:

Employment in the electricity sector grew by 10% between 2004 and 2008

Comparison of the reported number of employees by respondents who completed both the 2004 and 2008 Employer surveys shows a 10% increase in overall employment. The growth in employment cannot be attributed exclusively to either support staff or non-support staff growth. Nonetheless, the aggregate growth (support and non-support combined) reported by completers of both the 2004 and 2008 survey is consistent with the data from Statistics Canada's Labour Force Survey, which reported an 8% increase between 2003 and 2007.

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The workforce in the electricity sector is becoming slightly more diverse, but is not keeping pace with the overall labour force

The face of Canada's labour force is becoming increasingly diverse. Members of visible minority groups today comprise a larger proportion of the country's workforce than they did even 3 years ago. However, the electricity sector is not keeping pace with the increase. While the percent representation of visible minorities in the country's workforce increased by 2.8% between 2001 and 2006, their representation within the electricity sector increased by 0.9%.

On the other hand, Aboriginal peoples are more equally represented in the electricity sector, as a proportion of their overall labour force participation. Between 2001 and 2006, Aboriginal people's representation in the country's labour force increased by 0.4%, while their representation in the electricity sector's workforce increased by 0.7% - slightly more.

The most marked discrepancy continues to be gendered. While the representation of women in the electricity sector has increased and is showing signs of improvement, there remains a significant gap between the two genders. Of particular note however, is that of all the women who are employed in the electricity sector, a higher percentage are in the youngest age cohort (23%), compared with 19% of men. This signals a shift in the gender distribution.

The distribution of the electricity sector labour force show increased percentages of employees in both the oldest and youngest age groups

The workforce is naturally aging, but the sector is also hiring younger staff to regenerate the workforce. The age trends suggest that a portion of the increase in employment in the sector is a result of increased hiring of younger workers. The trend clearly shows that there is a block of employees who are moving through the age cohorts en masse. In 2004, the largest portion of employees were in the 35-44 age group. Today, the largest portion is in the 45-55 age group. This trend is reflective of the hiring boom that took place in the early 90s, when these same employees would have been in their 20s or 30s.

The small portion of employees who were under 35 in 2004, coupled with the significant decline in the portion who are now in the 35-44 age group further reflects the hiring freeze/ layoffs that occurred in the late 90s and early 2000s. These trends signal that there will be another big wave of retirements in the next 10 to 15 years, for which human resource officers can start planning today. Trend data already show that retirements are averaging about 3% per year, and are expected to increase to 5% per year over the next 5 years.

Establishments in the electricity sector reported hiring on average more apprentices, co-op students, and interns in the 2008 survey compared with 2004.

On average, employers who completed both the 2004 and 2008 surveys reported hiring more apprentices, co-op students, and interns in 2007 than in 2004. This trend is reflective of the labour shortages that many companies are experiencing, but it is also suggestive of the fact that employers are starting to take action to mitigate the skills shortages and knowledge gaps that are expected to occur as a result of retirements. One of the outcomes from the 2004 study was the concern with the amount of time it takes for an individual to become 'master of their trade', or to have the required skills and experience to be considered 'professional'. By giving new recruits a chance to gain experience, employers are not only establishing ties with the individual, but are also setting in motion the transfer of knowledge from one generation to the next.

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While employers are hiring more staff, they need to continue to put forth concerted efforts to ensure they fill the labour gap.

The trends in the data between 2004 and 2008 suggest that retirements will continue to be a threat in the long term. Thus, employers will have to continue to put efforts into hiring employees in order to keep employment levels relatively consistent over time.

Source of Findings

In 2004 and in 2008, R.A.Malatest & Associates conducted labour market information studies for the Canadian electricity sector[1]. Comparative analysis was done on the data and results from the 2004 and 2008 surveys in an effort to help human resource planners better understand the issues, challenges, and opportunities for the sector. The comparative analysis was commissioned with the intention of providing insight into the changing trends in order to assist planners to develop a forward-looking human resource strategy.

The results presented in this document are based on the following research activities:

- Review and recoding of data from the 2004 Primary Producer survey of 63 establishments;
- Review of data from the 2008 Employer survey of 87 employers;
- Review of secondary data sources, specifically Statistics Canada's Census data from 2001 and 2006, and Labour Force Survey data;
- Analysis of trends between the two survey years, including more specific analysis of the 31 completers who responded to both the 2004 and 2008 surveys.

[1] R.A.Malatest & Associates, (2004) Canadian Electricity Association *Human Resource Sector Study*, and (2007) Electricity Sector Council *Labour Market Information Project*.

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Section 1: Background

In 2004, R.A.Malatest & Associates was commissioned by the Canadian Electricity Association to conduct a study on the human resource needs of organizations in the electricity sector. The sector study was designed to provide a comprehensive overview of the human resource issues, challenges and opportunities for the Canadian electricity sector.

In order to address the issues of recruitment and retention that came to light from the 2004 study, the Government of Canada funded the establishment of the Electricity Sector Council in 2005. The ESC is a not-for-profit partnership between business, labour, education, and government. Its mission is to develop sector based initiatives and strategies designed to meet the human resource needs of the sector.

In 2007, the ESC commissioned R.A. Malatest & Associates to undertake a similar study to the 2004 study, with the goal of providing up-to-date, focused, and relevant labour market information for industry stakeholders and employers. Projected labour shortages, which are the result of an aging workforce and an insufficient number of young workers coming up through the ranks, coupled with a hot economy and growing demand for electricity, has resulted in an urgent need for employers in the electricity sector to develop effective human resource strategies to recruit and retain a skilled workforce. Primary to this is providing employers with a better understanding of the existing trends within the electricity sector to enable them to gauge and plan for future human resource challenges and priorities.

The current analysis is a comparison of the two human resources studies, and its purpose is to further provide employers and stakeholders in the sector with relevant and current trend data to help them make appropriate policy and human resource decisions. Analysis of the trends is necessary in order to track changes in the electricity sector's human resources profile. This report includes analysis of trends relating to specific demographic and hiring trends within the sector. Of particular relevance to employers is the change in the number of staff hired and employed in the industry. Additionally, understanding the trends in the age of employees in the sector's workforce provides employers and human resource planners insight into where the gaps are and where they might be in the next 5, 10, and 15 years, as each cohort gets older and moves into the next age category.

Another issue of concern among employers across the country is the challenge of increasing diversity within their workforce, and recruiting and retaining under-represented groups. A closer look at the trends in diversity within the electricity sector will help employers to plan their recruitment strategies accordingly, and better understand which pools of labour they are not fully accessing.

Employers will also benefit greatly from seeing changes made with regards to supporting and hiring graduates, trainees, and students. These individuals are the future workforce, and utilizing their skills and abilities will be instrumental in meeting the future demand for labour.

Finally, employers will find that being informed of retirement trends will also help them to plan for the future. Analyzing the trends to see if projected retirements actually occurred validates the projected retirements for the next 10 years and provides employers with the information necessary to implement long-term planning strategies.

1.1 Purpose and Objectives of the Study

The purpose of this report is to provide a comparative analysis of the 2004 study with the 2008 study. The comparative analysis will highlight trends and changes that emerged between the 2004 and 2008 studies. It should be noted that comparison of the two studies will be limited to areas that were covered in the Employer surveys in both years.

The current analysis is designed to provide employers with a better understanding of the labour trends and human resource issues pertaining to the electricity sector. To meet these project objectives, the research team conducted a detailed review of the data obtained through the 2004 Canadian Electricity Association employer survey and the 2008 Electricity Sector Council employer survey.

1.2 Analysis and Methodology

In undertaking the comparative, key areas of interest were identified based on a review of the surveys from both years. Given that the 2008 survey was modified from 2004 in order to meet the objectives of the 2008 Labour Market Information project, not all employer survey questions were the same across the two surveys. In addition, among those questions that were similar, wording may have been different which resulted in differences in reporting of data by respondents.

A detailed review of the survey questions and reporting format was undertaken to determined the areas where more accurate and reliable analysis could be done. Where possible, the format of the data was changed in order to allow for analysis to be completed. For example:

- Some questions asked respondents to provide a percent for a given figure in the 2004 survey, and the 2008 survey asked for an exact number. For instance, the 2004 survey asked respondents to provide the number of non-support staff who were female, whereas the 2008 survey asked for a percentage for each occupational category. As part of the current analysis, conversions were completed in order to ensure comparability of the data.

- Modifications were made from 2004 to 2008 in terms of classification of support and non-support staff. The 2004 survey included some “key critical occupations” (such as accountants) as non-support staff, whereas the 2008 survey classified them as support staff. Where possible, 2004 data was recalculated, excluding the category of ‘other key critical occupations’ from non-support staff figures. It should be noted that as a result some of the numbers reported in the 2004 CEA report may differ slightly from those presented in this comparative analysis.

- Different occupations were included in the 2004 and 2008 surveys. For example, the 2004 survey included stationary engineers, but did not include many of the technologist occupations used in 2008.

It should be emphasized, that the data set from the 2004 employer survey was not as complete as the 2008 data set, and thus cannot necessarily be considered as representative of the 2004 universe. A reminder to readers is that the 2004 CEA report relied heavily on data from educational institutions and the employee survey. Therefore, if 2004 data presented in the current report differs from that presented in the 2004 CEA study, this is one possible explanation.

Highlighted below in Exhibit 1.1 are the completions by employer size and year, and the percent representation of employees within each of the two employer categories.

Exhibit 1.1:	**Employee Representation by Employer Size – 2004 and 2008 Responses**		
	Completions	**Employees Represented**	**Percent Representation**
2004			
Large Employers	30	44,443	92.2%
Small and Medium Employers and Employers whose primary business is not electricity	31	3,728	7.8%
Total	**63**	**48,171**	**100%**
2008			
Large Employers	23	72,622	94.8%
Small and Medium Employers and Employers whose primary business is not electricity	64	4,006	5.2%
Total	**87**	**76,628**	**100%**

Source: 2004 and 2008 Employer Surveys

Although the number of employees represented in the 2004 survey is slightly less than two thirds of those represented in the 2008 survey, interestingly the percent representation within each of the two employer categories (large and small) is very similar. However, as illustrated above, respondents in 2004 were more likely to be large employers than in 2008. In 2004, large employers made up 48% of respondents, whereas in 2008 they made up only 26%.

The following exhibit highlights the characteristics (large, small/medium employers) of only those employers who responded to both the 2004 and 2008 surveys.

Exhibit 1.2:	**Completions of both 2004 and 2008 Surveys by Employer Size**				
Employer Size	**Completions**	**Employees Represented (2004)**	**Employees Represented (2008)**	**Percent Representation (2004)**	**Percent Representation (2008)**
Large Employers	20	39,854	43,911	99.0%	99.0%
Small and Medium Employers and Employers whose primary business is not electricity	11	412	445	1.0%	1.0%
Total	**31**	**40,266**	**44,356**	**100%**	**100%**

Source: 2004 CEA and 2008 ESC Employer Surveys

As the table clearly indicates, the majority of respondents who completed both the 2004 and 2008 surveys are large employers, representing the vast majority of both completions (65%) and employees represented (99%).

1.3 Research Considerations

Given the relatively limited number of respondents who completed both the 2004 and 2008 Employer surveys, the analysis should be interpreted with some caution. Only 31 respondents completed both the 2004 and 2008 surveys, the majority of which were large employers, thus biasing the analysis toward more large employer trends rather than overall sector trends. In order to counter this bias, analysis was done comparing only those who completed both surveys, in addition to a general comparison of the overall responses.

1.4 Terms and Definitions

The following terms and phrases are used throughout the report. Definitions of these phrases, as they are understood in the current analysis, are provided below.

Aggregate Trends: These are trends that have been derived from conducting an overall comparison of the 2004 and 2008 surveys. Aggregate trends do not take into consideration the difference in the number and type of respondents – they simply provide a snapshot picture of the data that was collected in 2004 compared with that collected in 2008. Each section of the report generally starts with the aggregate trends in order to provide the overall context.

2004 and 2008 Responders: This group is composed of 31 employers who completed both the 2004 CEA Employer Survey and the 2008 ESC Employer Survey. It should be noted that although comparisons were done where possible, for this group, not all 31 completers provided data for a given question. Therefore, the number of respondents for certain questions may be smaller than 31.

1.5 Report Overview

The remainder of this report is divided into the following sections:

Section 2: context for the current study

Section 3: analysis of employment trends

Section 4: diversity and gender distribution within non-support occupations

Section 5: shifts in age demographics among non-support employees in the electricity sector

Section 6: differences in recruitment practices, such as number of co-op students, interns, summer students, and apprentices hired

Section 7: retirement trends and projections, including an analysis of the realization of projections made in 2004, and changes in pension eligibility

Section 8: concluding remarks and recommendations

It should be noted that while analysis of the separation rates would be both useful and informative for employers in the electricity sector, this piece of analysis was not possible due to the low number of respondents who provided this data in the 2004 survey. It was also not possible to compare the vacancy rates because there were too few respondents who provided data in the 2004 survey.

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Section 2: Context

2.1 Overall Employment Trends

A general comparison of total estimated sector employment reported in both the 2004 and 2008 employer surveys show a 17% increase in overall employment in the electricity sector. It should be noted that both the 2004 and 2008 reports estimated employment from the survey responses, and gave an estimate for the non-responders. The following exhibit details the estimated employment numbers for non-participants in the two survey years.

Exhibit 2.1: Overall Estimated Employment in 2004 and 2008

	2004			2008			% Change
	Initial Universe	Estimate for Non-Participants	Total Estimated Employment	Initial Universe	Estimate for Non-Participants	Total Estimated Employment	
Total	112	27,606	75,777	204	11,690	88,318	16.5%

Source: 2004 CEA LMI Report and 2008 ESC LMI Report

Overall, 2004 total employment in the sector was estimated at 75,777 employees. Estimates for 2008 employment include derived estimates for non-responders who completed the 2004 survey. For these establishments, employment numbers were estimated by applying the average percent change as reported by those who completed both the 2004 and 2008 surveys. Results from the 2008 survey yielded an estimate of 88,318 employees in the electricity sector in Canada.

Of particular note is that the sample frame in 2004 differed substantially from that in 2008. The 2004 sample was limited to members of the Canadian Electricity Association. The 2008 sample had a much larger base of electricity employers that included more small employers and employers whose primary business was not electricity generation, transmission, or distribution.

As illustrated in Exhibit 2.2 below, the number of employers responding to, and the number of employees represented in the 2008 survey is substantially more than for the 2004 survey. More employment estimates had to be done for companies in 2004 than in 2008 due to lower survey coverage (e.g., non-participation by Hydro Québec) in 2004. As illustrated below, 60% more employees were represented in the 2008 survey than in the 2004 survey.

Exhibit 2.2: Employment Numbers Reported in 2004 and 2008 Surveys

	2004 (n=63)	2008 (n=87)	%Change
Total	48,171	76,628	59.0%

Source: 2004 CEA Employer Survey and 2008 ESC Employer Survey

It should be noted that the classification of establishments changed slightly from 2004 to 2008. In 2004, establishments were identified either as primary or associate producers. Primary producers included major utilities that had significant generation, transmission and/or distribution operations. In addition, some smaller utilities that were members of the Canadian Electricity Association (CEA) were included in this group. Associate producers included smaller organizations as well as some establishments whose primary line of business was not in the electricity sector.

In the 2008 survey, establishments were simply classified as either large or small/medium sized employers as well as organizations whose primary business line is not electricity. For the purposes of analysis, a comparison was done to ensure that those who completed the 2004 survey and were classified as primary producers, were classified as large in the 2008 survey, and that those who were classified as associate in the 2004 survey were classified as small/medium in the 2008 survey. Comparison proved that all those companies who responded who were classified as primary producers were also classified as large, and the same was true for those who were classified as associate and small/medium. This made for relatively easy analysis comparing both groups across the two survey years.

2.2 Employment Reported in the 2004 and 2008 Surveys – Aggregate Trends

According to data from the Labour Force Survey, employment in the electricity sector grew an estimated 8% between 2003 and 2007, from 92,500 to 105,500. According to the estimates derived from the 2004 and 2008 Employer Surveys, overall employment in the sector increased by 17% between 2004 and 2008 (see Exhibit 2.1). As illustrated, the number of employers responding to, and the number of employees represented in the 2008 survey sample frame, are substantially more than for the 2004 survey. This could account for the large increase in estimated employment between 2004 and 2008. As illustrated below, 60% more employees were represented in the 2008 survey than in the 2004 survey.

2.3 Employment Numbers Reported by Respondents to both the 2004 and 2008 Surveys

In order to gain a more accurate picture of the change in employment between 2004 and 2008, analysis of only those companies who responded to both surveys was conducted. The exhibit below details the changes in employment.

Exhibit 2.3: Employment Numbers Reported by Responders to both 2004 and 2008 Surveys

	2004	2008	%Change
Total	40,266	44,356	10.1%

Source: 2004 CEA Employer Survey and 2008 ESC Employer Survey, n=31

Among those respondents who completed both the 2004 and 2008 surveys, the reported increase in employment rose from 40,266 to 44,356 over this period – an increase of 10%, which closely reflects the Labour Force Survey estimates of 8% between 2003 and 2007.

The following table summarizes the percentage change in electricity sector employment by size, among those who completed both the 2004 and 2008 surveys:

Exhibit 2.4: Change in Number of Employees Reported in the 2004 and 2008 Employer Surveys (Employers responding to both the 2004 and 2008 labour market surveys)

Size	Number of Employers Providing Data in 2004 and 2008	Percentage Change in Employment
Large	20	10.1%
Small/Medium	11	8.0%
Total	**31**	**10.1%**

Source: 2004 CEA and 2008 ESC Employer Surveys

3.1 Contract Staff

As highlighted in the 2008 ESC report, the number of contract staff hired on in the electricity sector is very high. Reproduced below is a table that illustrates the number of non-support staff who were hired as contractors in 2008.

Exhibit 3.1: Employee Status by Line of Business

Line of Business	Total Non-support Staff	Non-support contract Staff	
	Number of Employees	Number of Staff	As % of Non-support Employees
Generation	11,390	351	3%
Transmission	411	2	<1%
Distribution	3,423	135	4%
Retail	1	0	0%
Renewable	43	20	47%
Integrated	28,682	12,061	42%
Other	4,814	448	9%
Total*	**48,764**	**13,017**	**27%**

Source: 2008 ESC Employer Survey, n=87

According to the Department of Foreign Affairs and International Trade (DFAIT), there are more than 200 firms of consulting engineers and engineering contractors in Canada's electric power industry[2]. The largest companies are able to take on the role of an engineer-procure-construct (EPC) contractor. They provide services such as taking full responsibility for a plant's construction and start-up, generally on a fixed-price, turnkey basis, including design and procurement of subcontracted equipment and services, together with the construction and start-up risks[3]. The DFAIT website cites the following companies among the largest Canadian service providers active in power development:

- AMEC has 7000 employees and offices in 40 countries, and is a world leader in hydro-electric and thermal generation projects.
- SNC-Lavalin is one of the leading engineering and construction firms in the world, with over 8000 employees in offices in some 30 countries. SNC-Lavalin is involved in services, turnkey packages and ownership of power facilities.
- Acres International, a leader in hydro-electric developments, has a staff of 700, and currently has projects under way in more than 25.
- Dessau-Soprin, with nearly 1,000 employees, specializes in hydro-electric production, transmission and distribution, and environmental services.
- Canatom NPM, with 250 specialized employees, provides engineering, procurement and project management services to the nuclear sector.
- Teshmont, with 35 employees, is a one of a number of specialized smaller firms in the sector. Teshmont specializes in the installation of HVDC transmission systems.

While this list is not meant to be exhaustive, it illustrates that there are many contractors in Canada who are well trained and have the skills and abilities to work in the electricity sector.

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[2] http://www.dfait-maeci.gc.ca/trade/ner/electric-en.asp
[3] ibid.

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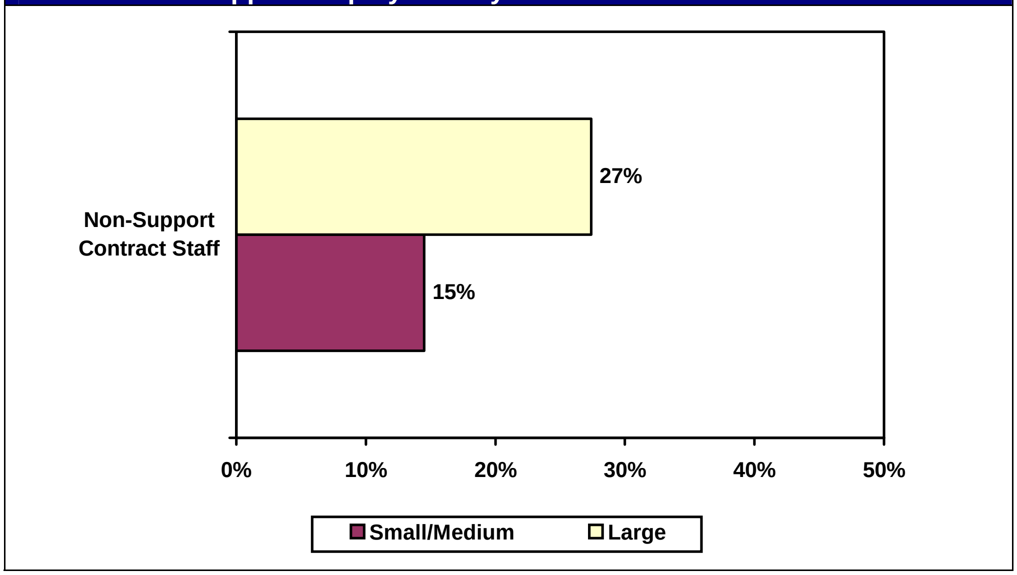
As discussed in the 2008 ESC report, integrated companies seem more likely to hire their non-support staff on contract. Possible reasons could include that since they are involved in more than one line of business they are not specialized in one area and therefore tend to contract out work wherever necessary. Hiring contractors allows companies the flexibility to respond to changing demand and market conditions. Additionally, these companies will also be more likely to move toward hiring specialized technical staff on contract in an attempt to increase profits, and mitigate the effects of labour shortages.

Exhibit 3.2: Non-Support Contract Staff as Percentage of Total Non-Support Employment by Establishment Size



Source: 2008 ESC Employer Survey, n=84

The 2004 survey asked respondents about the number of contract staff hired for non-support occupations. However, the data could not be analyzed due to very low response rates (the number of respondents varied from 2 to 12, depending on occupation). This does not mean that companies did not use contractors in 2004, but simply that they did not provide data. This could be because employers did not have any mechanisms in place to track the number of contract staff their company used. It is possible that this was the case, as one of the recommended strategies to mitigate the effects of an aging workforce was to "Establish a mechanism to monitor the number of contractors doing work for the industry, as this pool of workers represents a significant source of contingent labour for the industry". Given the number of respondents (84) who provided data for this question in the 2008 survey, we assume that employers may be acting on this particular recommendation.

While we cannot provide annual trend data for the number of contractors hired, there is a tendency among large companies to hire a larger percentage of non-support staff on contract, as presented in the exhibit above. Exhibits 3.1 and 3.2 illustrate that the highest percentage of non-support staff hired on contract was among large, integrated companies.

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Section 4: Employment Diversity in the Sector

Over the past several years, significant emphasis has been put on the importance of tapping into underutilized pools of labour, and increasing the number of new hires from traditionally under-represented populations. The populations that are typically identified as under-represented include women, Aboriginal people, immigrants, members of visible minority groups, and persons with disabilities.

4.1 Minority Groups and Aboriginal Peoples

Among the recommendations made in the 2004 Canadian Electricity Association Human Resource Study, was to adopt marketing and promotion campaigns to attract potential new hires from underutilized groups. Some of the strategies suggested to implement this recommendation were to work in collaboration with schools, educators, guidance counselors, and federal immigration offices, to increase the sector's profile among students and new Canadians, in addition to standardizing credential recognition and requirements.

Data from the 2004 CEA study revealed that only 2.3% of workers in the electricity sector were Aboriginal people. Similarly, according to Statistics Canada 2001 Census data, Aboriginal people accounted for 2.2% of employment in the sector. This figure was slightly lower than the national average in 2001, where Aboriginal people accounted for 2.6% of the Canadian workforce[4]. Today, both Aboriginal people and members of visible minority groups comprise a higher proportion of the country's labour force. As the figure below illustrates, both of these groups represent a higher proportion of the overall labour force in 2006 than in 2001.

Exhibit 4.1: Diversity Representation in the Electricity Sector

Characteristic	2001		2006	
	% in Labour Force	% in Sector	% in Labour Force	% in Sector
Aboriginal	2.6%	2.2%	3.0%	2.9%
Member of Visible Minority Group	12.6%	7.0%	15.4%	7.9%

Source: Statistics Canada 2001 and 2006 Census Data

A 2004 study conducted by the Conference Board of Canada predicted that by 2016, 18.4% of the country's labour force would belong to a visible minority group[5].

As the numbers above indicate, the electricity workforce under-represents the percentage of members of visible minority groups in the workforce. There seems to have been some changes made within the sector in terms of increasing the proportion of visible minorities in the workplace between 2001 and 2006. Employers in the electricity sector will need to continually make efforts to ensure that they target under-represented groups in recruitment initiatives and creates an environment that welcoming of members of visible minority groups.

Among Aboriginal peoples, the proportion of their representation within the electricity sector is similar to their overall representation in the country's labour force. The data indicates that between 2004 and 2006 employers have increased the proportion of Aboriginal people they employ. Interestingly, the majority of educational institutions (70%) who were surveyed in 2008 reported that they had targeted recruitment strategies for under-represented groups, including Aboriginal students. Of those respondents who specified the targeted group, 63% mentioned Aboriginal people. This question was not asked of educational institutions in the 2004 CEA study, therefore it is not possible to determine

[4] Statistics Canada. Census 2001.
[5] The Conference Board of Canada. "Making a Visible Difference: The Contribution of Visible Minorities to Canadian Economic Growth". April 2004. P.3

the extent to which the reported recruitment strategies affected the increase in proportion of Aboriginal employees. However, interestingly, no educational institutions reported having specific strategies to recruit members of visible minority groups, although some had foreign credential recognition practices.

4.2 Women in the Electricity Sector

Overall, women still comprise only about a quarter of total employment in the sector. This was true in 2004, and remains true today, as reported in the 2006 Census.

However, there have been some improvements when we look at the gender distribution specifically in non-support occupations. In each of the occupational categories – managers, engineers, and trades – employers reported higher percentages of women in 2008 than in 2004. The following exhibit details the percentage of women represented within each of the non-support occupational groups.

Exhibit 4.2: Representation of Women in Non-Support Occupations in the Electricity Sector

Occupation	2004 % Representation	2008 % Representation*
Managers	11%	11%
Engineers	9%	13%
Trades	4%	5%

*These numbers are different than those presented in the 2008 ESC report. The percentages presented in the report were not weighted, and were consistent with the percentages reported by Statistics Canada. Given that the numbers reported in the 2004 report were weighted, the 2008 numbers were also weighted, by occupation group, to provide a more accurate comparison.

While the percentage of women who are Managers did not change between 2004 and 2008, there was a marked increase among engineer positions, and a slight increase in the trades. These increases signify either that employers are taking steps to specifically recruit women, or else they are putting extra effort into creating a welcoming environment. On the other hand, it is possible that more women are obtaining training in both the trades and engineering programs than in previous years. As mentioned earlier, 70% of educational institutions surveyed in the 2008 ESC study reported that they had strategies that target typically under-represented groups. In total, 70% of respondents who specified a practice mentioned targeting women. However, Engineers Canada reported that the proportion of female undergraduate engineering students declined consistently from 2002 to 2005, which represents a turnaround in a trend that saw female engineering enrolment grow for a full ten years prior to 2001[6]. This trend is reflective of the increase in female engineers, but it can also be expected that fewer female engineering students will be graduating over the next 5 year period, thus impacting the future number within the sector.

On the other hand, women's registration in the trades and in college programs has increased over the years. According to HRSDC, participation rates for women rose from 12% to 15% between 1990 and 2005, while rates for men rose from 11% to 13%. Furthermore, participation rates were higher among women than among men aged 18 to 24 for all years between 1990-1991 and 2005-2006[7].

[6] http://www.engineerscanada.ca/e/files/report_enrolment_eng.pdf
[7] Human Resources and Social Development Canada, http://www4.hrsdc.gc.ca/indicator.jsp?lang=en&indicatorid=55#MOREON_2

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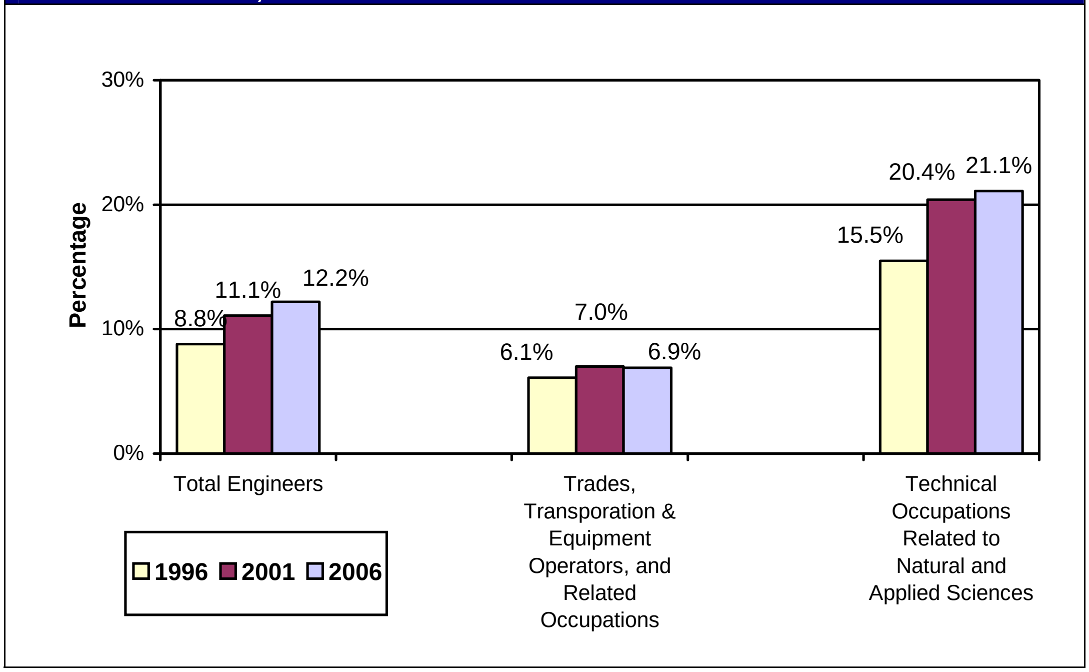
When examined over a 10 year period, between 1996 and 2006, women's participation is increasing. The following exhibit illustrates the percent representation of women in trades and engineering occupations.

Exhibit 4.3: Percent Representation of Women in Canadian Workforce – 1996, 2001, and 2006



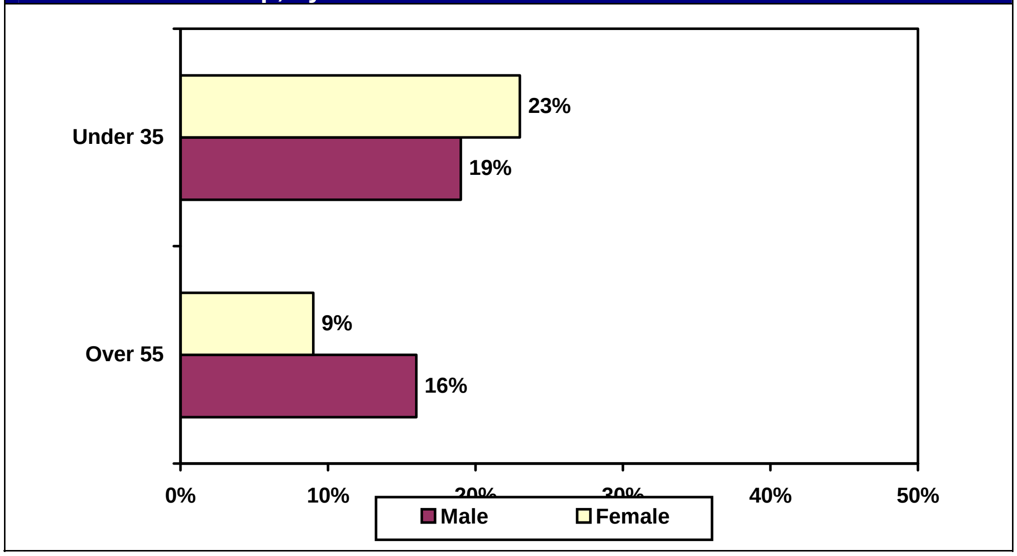
Source: Statistics Canada Census data, accessed through Canadian Coalition of Women in Engineering, Science, Trades and Technology[8]

According to the Government of Newfoundland and Labrador, women are entering into the trades in record numbers – not only in that province, but across the entire country[9]. This is due in part to a number of initiatives, including provincial grants and scholarships that are provided to women who want to enter into a trade field. Of particular interest, the Department of Education in Newfoundland and Labrador is involved in the second year of a contract with the International Brotherhood of Electrical Workers to promote the electrical field to women[10].

The initiatives to involve more women in the electricity sector seem to be working. According to data from the 2006 Census, 23% of women who are employed in the electricity sector are less than 35 years old. Among men, only 19% are less than 35 years old. This suggests that a number of new entrants into the sector are coming directly from educational training, and a higher percentage of them are women. The graph below illustrates the percent distribution:

[8] http://www.ccwestt.org/Statistics/tabid/59/ctl/Detail/mid/461/xmid/146/xmfid/11/Default.aspx
[9] http://www.releases.gov.nl.ca/releases/2008/edu/0116n03.htm
[10] ibid.

Exhibit 4.4: Percent Representation of Employees within the Given Age Group, by Gender



Source: Statistics Canada 2006 Census

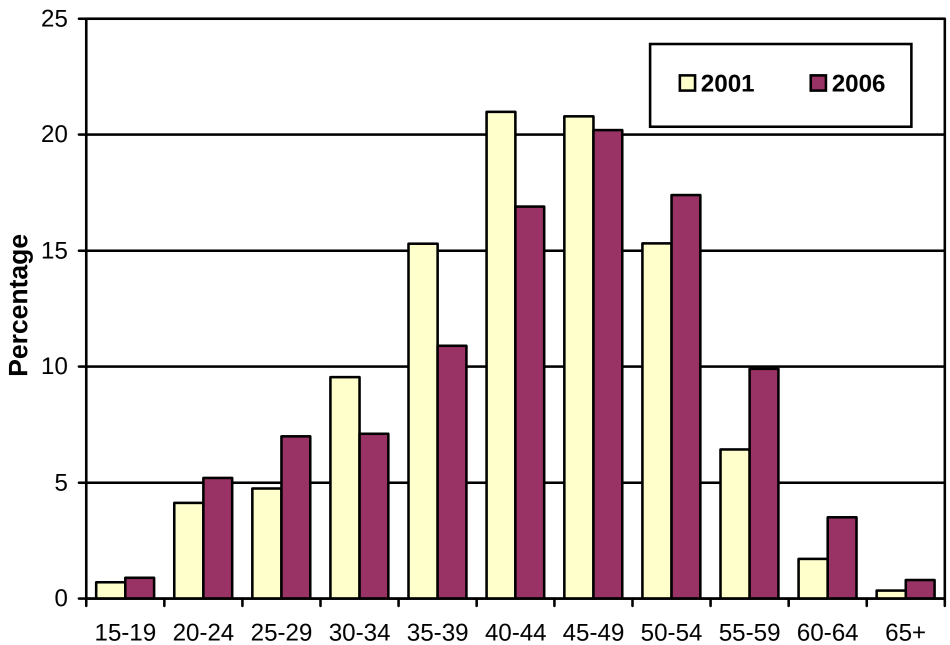
Given the overall trends of increased participation by women in trades related training programs, it can be expected that more women will have the skills and training necessary to work in trades occupations in the electricity sector. Thus, while the sector is making headway in terms of the number of women employed in non-support occupations, it remains necessary for employers to continually strive to make their workplaces welcoming and attractive to women.

Section 5: Age of Non-Support Staff

5.1 Age Trends of Non-Support Staff

Data from the 2001 and 2006 Censuses indicate that there are increasing percentages of employees in both the oldest age cohorts and the youngest age cohorts in Canada's electricity sector. Exhibit 5.1 below illustrates the overall age distribution among employees in the electricity sector. As can be gleaned from the graph data, there is a growing bulge of employees in the 50+ age groups and the younger than 30 age groups, with the percentage of those in the middle age groups declining.

Exhibit 5.1: Age Composition of the Canadian Electricity Sector (2001 and 2006)



Source: 2001 and 2006 Census Data

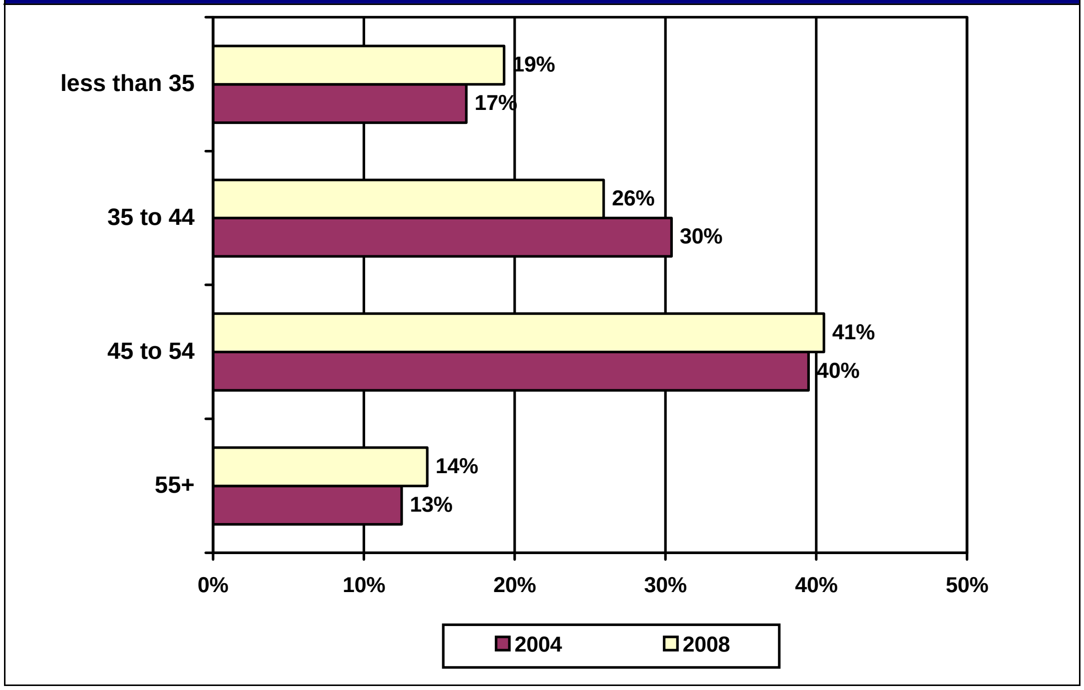
Understanding the general trends and changes in the age of employees in the electricity sector can be very helpful and beneficial for employers and human resource planners in designing effective strategies to recruit and retain their employeesand to plan for the next wave of retirements and hiring. The exhibit above suggests that companies are either going through a hiring frenzy, or else they are in a hiring freeze. While there is no single identifiable cause for this (trends in the sector, economics, technology trends, employment rates, etc), seeing the general trends in the age profiles of current employees in the sector can be helpful. Looking at the trends depicted above, we can track the movement of employees through each age group, and better estimate the next big wave of retirements. This helps companies plan for future hiring and staffing needs.

Among the 17 strategies suggested in the 2004 CEA report to mitigate the negative economic impacts of the predicted loss of workers due to retirement, was the recruitment and training of replacement staff prior to the actual retirements. The above data suggests that employers are beginning to heed this call, and they are starting to 'bulk up' their younger workforce.

Both the 2004 and 2008 Employer surveys asked respondents to provide either a number or a percentage of their employees who currently fall within a given age bracket. The data from the 2008 survey was more detailed and asked about the ages of employees for each occupation, whereas the 2004 survey only asked about the ages of managers, engineers, and trades people. In order to conduct an accurate analysis, the 2008 data was aggregated by occupation group.

The following exhibit illustrates the differences in age of non-support staff reported by employers in the 2004 and 2008 surveys[11].

Exhibit 5.2: Age Profile of Non-Support Employees Reported by Employers



Source: 2004 CEA and 2008 ESC Employer Surveys

The most noteworthy changes are among the less than 35 age group and the 35 to 44 age group. While the differences in the percentages are slight, they suggest that overall, employers are hiring younger employees, possibly as a proactive strategy to address both current labour needs and to build future capacity within their companies.

As the following exhibits illustrate, among non-support occupations there are higher percentages of employees in the two extreme age cohorts – younger than 35 and older than 55 – reported in 2008 than in 2004. This is consistent with the general demographic trends that suggest employees are getting older, and that employers in the electricity sector are starting to put forth a concerted effort into hiring younger employees as a means of securing future labour.

5.2 Age by Occupational Group

Detailed analysis was done by occupational group to compare changes in the percent of employees within each age cohort. Among managers, there were few remarkable differences in age reported by employers. The most notable changes seem to be among those who are less than 35.

[11] No adjustments were made to account for the inclusion of 'other key critical occupations' because the format of reporting of the data did not allow for this breakdown.

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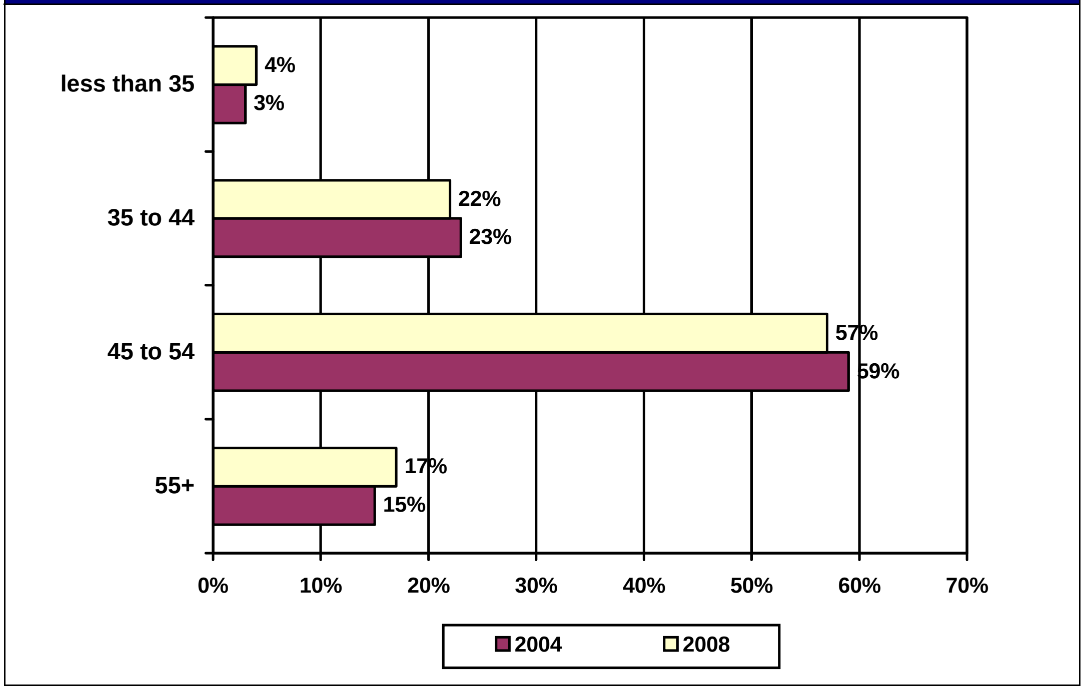
Exhibit 5.3: Age Profile of Managers Reported by Employers



Source: 2004 CEA and 2008 ESC Employer Surveys

As the exhibit above illustrates, while the percent of managers who fall within the 55+ age group is increasing there are fewer who are in the middle two age categories. This trend towards a higher percent of older managers is indicative of the general trend of the aging workforce, but the higher percent of managers in the younger cohort also suggests that employers are taking action to fill these key positions with younger employees.

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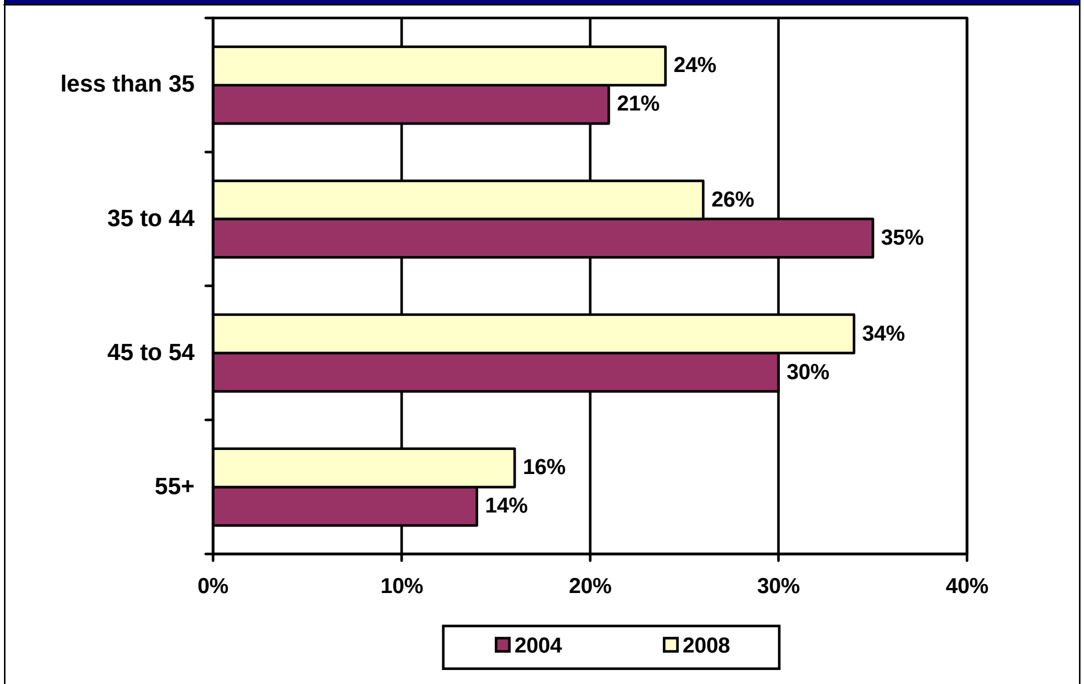
Among engineers, the most marked difference between the 2004 and 2008 distributions was in the 35-44 year old cohort. All other cohorts showed slight increases in percentage of employees, with the exception of the aforementioned group. As illustrated in the exhibit below, while each of the other three cohorts increased by 2% to 4%, those in the 35-44 year old cohort decreased by almost 10%. This is particularly striking. Although in 2004 this group represented the majority of engineers, many of them were likely in their early 40s, and are now part of the next age cohort. The percentages suggest a similar trend for engineers in the 2004 45-54 age cohort – a significant number were in their 50s, and have now moved even closer to retirement age.

Exhibit 5.4: Age Profile of Engineers Reported by Employers



Source: 2004 CEA and 2008 ESC Employer Surveys

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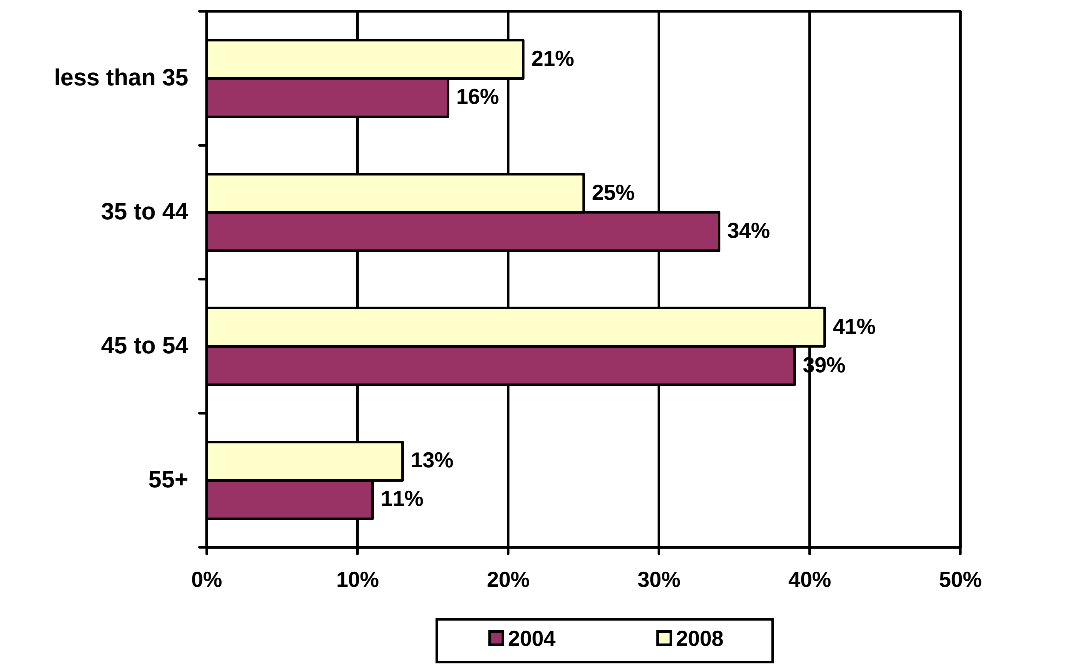
A similar trend is observed among employees in the trades. A higher percentage of employees are in the older and younger age groups, with markedly fewer in the 35-44 age cohort.

Exhibit 5.5: Age Profile of Trades Workers Reported by Employers



Source: 2004 CEA and 2008 ESC Employer Surveys

Looking at the general trends, we can see a large group of employees moving through each age group. In 2004 these employees were in their early 40s. Today, this group of employees has moved into their late 40s, as illustrated in the Exhibit above. The large group of employees in this age group (45 to 54) is reflective of a hiring trend that likely occurred in the late 80s and early 90s, when these people were in their early 20s. The shrinking percentage of employees who are now in the 35 to 44 age group is reflective the subsequent hiring freeze experienced in the industry throughout the rest of the 90s.

Whenever the sector experiences large volumes of new recruits, these recruits might fill the immediate gap, but they will also leave behind yet another gap when they retire. Looking at the trend in the proportion of employees in each of the age groups between 2004 and 2008, it is clear that many establishments in the electricity sector will continue to face the threat of large numbers of retirees, as the bulk of the workers who are in their late 40s and early 50s move into the next age cohort, and become eligible for their pension.

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Section 6: Recruitment: (Co-op, Intern, Summer Students, and Apprentices)

6.1 Co-op Students, Interns, Summer Students, and Apprentices Hired

The employer survey in both 2004 and 2008 asked respondents specifically about the number of co-op students, interns, summer students, and apprentices they hired in the last year. A comparison of the 2004 data with the 2008 data shows that there was a slight decline in the average number of co-op students, summer students, and apprentices hired per company, and only a slight increase in the average number of interns hired per company. The Exhibit below illustrates these findings.

Exhibit 6.1: Number of Co-op Students, Interns, Apprentices and Summer Students Hired in Previous Year– Overall

Hire	2004 Survey total (n=30-31)	2004 Survey average number per company responding	2008 Survey total (n=55-72)	2008 Survey average number per company responding	% change in average
Co-op Students	579	19.3	1,201	16.7	-13.5%
Interns	41	1.4	157	2.8	100%
Summer Students	596	19.2	1,207	16.8	-12.5%
Apprentices	1,394	45	2,333	36.5	-18.8%

Source: 2004 and 2008 Employer Surveys

It should be noted that these are the aggregate trends, and for this particular analysis does not provide an accurate picture. Readers are reminded that large employers made up a larger portion of completers in 2004 than in 2008. It is therefore not surprising that on average more co-op and summer students, and apprentices per company were hired in 2004 than in 2007 due to the larger companies (on average) responding to the 2004 survey. Thus, in order to present a more accurate trend, comparison of only the 2004 and 2008 respondents is presented below.

6.1.1 Respondents to both 2004 and 2008 Surveys

Looking exclusively at those employers who responded to both the 2004 and 2008 surveys (again, bearing in mind that they are almost exclusively large employers) the numbers show different trends. Overall, employers reported an average increase of 100% for hiring interns. As the exhibit below illustrates, when looking exclusively at employers who completed the survey in both years this percent is markedly higher, at 333%.

Exhibit 6.2: Number of Co-op Students, Interns, Apprentices and Summer Students Hired – 2004/2008 Respondents

Hire	2004 Survey total (n=20)	2004 Survey average number per company responding	2008 Survey total (n=19-25)	2008 Survey average number per company responding	% change in average
Co-op Students	513	25.7	811	33.8	31.5%
Interns	38	1.8	149	7.8	333%
Apprentices	560	28	759	33	17.9%
Summer Students	1,321	66	903	36.1	-45.3%

Source: 2004 and 2008 Employer Surveys

Comparison of the data suggests that between 2004 and 2008, large employers were less likely to hire summer students, but more likely to hire co-op students, interns, and apprentices. Overall, the

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average number of apprentices hired increased by almost 20% among employers who responded to both surveys.

In order to determine the full extent of the reasons and determining factors for hiring or not hiring co-op and summer students, interns, and apprentices, more focused research needs to be done. In the meantime, employers in general in the electricity sector seem to be showing an increased average between 2004 and 2008 for hiring incidence for all groups, with the exception of summer students.

6.2 New Hires and Vacancies

Further to the analysis of recruitment is the number of new hires taken on by employers in the industry. Both survey years asked employers about the number of new staff they hired in the previous year. However, although the 2008 survey asked employers specifically about the source of their new hires, the 2004 survey did not.

Accordingly, analysis of recruitment practices was limited to comparing the number of new non-support staff hired, and the number of co-op students, interns, summer students, and apprentices hired. Both survey years asked respondents to report on the total number of new hires in the previous year, within each group. To allow for a more accurate comparison, averages were determined based on the number of employers who provided data for the question. This was done since reporting strictly on the numbers would have inevitably shown a disproportionate increase as more employers responded to the 2008 survey.

6.2.1 Aggregate Analysis

Analysis of the recruitment practices reported by employers revealed some interesting changes and trends between 2004 and 2008. Overall, employers who responded to the 2004 survey reported hiring 1,464 new non-support staff in the last year. Based exclusively on the number of respondents who provided data (n=60), companies averaged just over 24 new non-support hires in 2003. Respondents to the 2008 survey reported hiring 1,048 new non-support staff. Based exclusively on the number of respondents who provided data (n=71) this averaged out to just under 15 new non-support staff per company in 2006. Readers should be reminded that the 2004 survey included 'other key critical occupations' which were not included in the 2008 survey. The format of the 2004 survey is such that the figures for these occupations cannot be excluded. However, if these occupations are included in the totals for the 2008 survey results, the total number of new hires is 1,425 – still fewer than reported in the 2004 survey, and still a lower average (20 per company reporting) than reported in 2004.

The Exhibit below presents a comparison of the findings. It should be noted that the figures presented below for the 2007[12] new hires includes those hired in 'other key critical occupations' since it was not possible to exclude these occupations from the 2004 data.

Exhibit 6.3: Total and Average Number of Non-Support Staff Hired in the last year as reported in 2004 and 2008

Year Reporting	Total	Average
2004 (n=60*)	1,464	24
2008 (n=71*)	1,425	20
% Change	**-2.6%**	**-16.6%**

*Note: the 'n' includes only those employees who provided data, and not the entire survey sample

[12] A reminder to readers: 2007 data was reported in 2008.

Again, caution should be taken when interpreting these results as the figures present only a snapshot of the number of hires in a given year. Furthermore, differences may be due to the larger average company size in 2004. Therefore, while there may have been more non-support new hires reported in 2004 than in 2008, it cannot be assumed that this is reflective of the overall employment figures for the sector, or even growth of employment within the sector. Furthermore, the classification of non-support staff in 2004 included more occupations than in 2008, which would further account, in part for this decrease.

6.2.2 Respondents to both 2004 and 2008 Surveys

In order to provide a more accurate picture of the change in number of new hires, the exhibit below details the total number of new hires reported by respondents in both 2004 and 2008

Exhibit 6.4: Total and Average Number of Non-Support Staff Hired in the last year as reported in by Respondents of both 2004 and 2008 Surveys

Year Reporting	Total	Average
2004 (n=30)	1,013	34
2008* (n=31)	919*	30
% Change	**-9.3%**	**-11.7%**

Source: 2004 CEA and 2008 ESC Employer Surveys
*Note: the total for 2008 includes 'other key critical occupations' because this group could not be excluded from the 2004 data. Thus, in order to present a more accurate picture, these occupations were included here. The total number excluding 'other key critical occupations' is 823.

These numbers suggest that employers are not hiring enough new employees to replace the retiring staff. However, readers are again reminded that the classification of non-support staff differed from 2004 to 2008. Referral to Exhibit 2.3 shows that overall employment increased by 10% among this group. Nonetheless, these figures serve as a caution for employers to ensure they keep hiring enough non-support staff.

An important note for consideration is that there is no account here for the number of vacancies for non-support occupations. As reported in the 2008 ESC report, the total number of vacancies estimated for non-support occupations among 87 respondents in 2008 was 1,358, yielding a vacancy rate of 3.2% for non-support occupations.

The exhibit below has been reproduced from the 2008 report for ease of reference.

Exhibit 6.5: Vacancy Rates by Occupational Group

Occupation Group	Vacancies	Currently Employed	Vacancy Rate
Managers	**132**	**5,941**	**2.2%**
Utilities Mangers	57	2,714	2.0%
Supervisors of Electricians and Line Workers	75	3,227	2.3%
Engineers and Technicians/ Technologists	**405**	**12,466**	**3%**
Electrical Engineers	95	3,775	3.6%
Mechanical Engineers	60	1,603	2.3%
Civil Engineers	15	633	3.9%
Electrical Technicians/Technologists	157	3,913	3.3%
Mechanical Technicians/Technologists	57	1,694	2.4%
Civil Technicians/Technologists	21	848	3.5%

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Exhibit 6.5: Vacancy Rates by Occupational Group			
Occupation Group	**Vacancies**	**Currently Employed**	**Vacancy Rate**
Trades	**821**	**22,599**	**3.5%**
Power System Electricians	184	4,699	3.8%
Electrical Power Line and Cable Workers	320	6,231	4.9%
Power Systems Operators	48	1,232	3.8%
Power Station Operators	98	3,372	2.8%
Millwrights/ Industrial Mechanics	116	2,982	3.7%
Other trades	55	4,083	1.3%
Total*(n=87)	**1,358**	**41,006***	**3.2%**

Source: 2008 ESC employer survey

In 2004, there were only 155 vacancies reported by employers. However, it should be noted that the number of respondents who provided data for vacancies for each occupation ranged from 2 to 15. Therefore, these data cannot be considered as representative, and cannot be compared with the 2008 data.

Section 7: Retirements and Pension Eligibility

Both the 2004 and 2008 employer surveys asked respondents about the number of retirements they had in the previous year, in addition to the number of non-support staff who were eligible for either partial or full pension in the last year. While the 2008 survey asked respondents to provide data for each occupation, the 2004 survey only asked about non-support staff in general. Therefore, a comparison can only be made between non-support staff in general as opposed to specific occupations. It should also be noted that it was not possible to exclude the 'other key critical occupations' figures from the 2004 data, since respondents were not asked about each occupation.

7.1 Retirements

Both the 2004 CEA report and the 2008 ESC report presented the estimated number of retirements by line of business. The 2004 survey asked respondents to estimate the number of retirements between 2004 and 2009, and between 2004 and 2014. These estimates were divided by 5 and 10 respectively in order to facilitate comparison with the 2008 estimates. The following exhibit combines the findings as reported in both reports.

Exhibit 7.1: Estimated Non-Support Retirements – by Business Line

Business Line	Actual Retirements in 2006	Estimated % to retire in 2009		Estimated % to retire in 2012	
	2006 actual retirements	2004 estimates**	2008 estimates	2004 estimates**	2008 estimates
Generation	1.7%	2.5%	3.4%	2.4%	5.3%
Transmission	1.4%	6.9%	12.4%	5.5%	14.7%
Distribution	1.2%	1.7%	6.4%	1.7%	8.7%
Integrated	2.8%	3.3%	4.9%	3.5%	6.2%
Total*	**2.4%**	**3.1%**	**4.7%**	**3.0%**	**6.2%**

Source: 2004 CEA and 2008 ESC Employer Surveys
* Too few employees were reported for the "other" business line to report this figure. As a result, the columns will not sum to the total row.
** The 2004 data was originally presented as a cumulative percent over the time period. In order to present the data in a consistent fashion, totals are presented as an average per year.

The data from the 2004 survey is fairly consistent with that from the 2008 survey. In 2004, employers estimated that within 5 years (2005-2009), 16% of their staff would retire, which averages out to 3% per year, only slightly lower than the actual percent reported to have retired in 2006, as reported in the 2008 survey. Respondents to the 2004 survey further estimated that within the next 10 years (2004-2014), almost 30% of their employees would retire. By 2008, employers had increased their estimations made in 2004, from an estimated 3% retirement in 2012 to 6% retirement. Retirements continue to be estimated to be most significant among transmission companies.

Comparison of the data collected in 2004 with that collected in 2008 suggests that employers are fairly accurate in their estimations for retirements and retirement trends. This is important to highlight, as it lends credibility to the findings and the accuracy of the data.

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Examining the data exclusively in terms of the percentage of non-support staff that retired in 2003 (as reported in the 2004 survey) and 2006 (as reported in the 2008 survey) shows a slight increase. In total, results from the 2004 survey showed that 2.2% of non-support staff retired in 2003. In 2006, this percentage crept up to 2.4%. The following exhibit presents the data as reported by employers in the surveys.

Exhibit 7.2: Retirement trends as reported in the 2004 and 2008 surveys

	Number of Non-Support Staff*	Number of Retirements	% Representation of the Current Workforce
2004 (n=49)	21,273	475	2.2%
2008 (n=82)	42,350	999	2.4%

*note: only those respondents who provided data for both having non-support employees and experiencing retirements were included

As the above data suggests, retirements increased overall among non-support staff by 0.2% from 2003 to 2006. However, it should be noted that there were significant differences in terms of the types of companies responding in 2004 and 2008. The following section presents a comparison of responders to both 2004 and 2008 surveys.

7.1.1 2004 and 2008 Survey Respondents

Looking exclusively at those who responded to both the 2004 and 2008 surveys, respondents to the 2004 survey reported 440 non-support retirements in 2003. These same respondents reported 477 non-support retirements in 2006, which represents an 8.4% increase between 2003 and 2006.

In the 2004 survey, respondents were asked to estimate the number of retirements they expected among their non-support staff in the next five years (between 2004 and 2009). In total, respondents reported that they expected 15.5% of their non-support staff to retire between 2004 and 2009. Interestingly, this estimate was fairly accurate. Over the five-year period, this estimate works out to 3% non-support staff retirement per year, which is very close to the percentage that was reported to have actually retired in 2006 as reported in the 2008 survey. While the slight discrepancy between the estimated percentage and the actual percentage might simply be due to human error, there are other factors that might have contributed to the slightly lower than expected retirements. Employers may have taken the threat of retirements seriously and provided incentive packages to encourage potential retirees to stay on the job a little longer. They may also have offered potential retirees more flexible work schedules or new training opportunities to engage them in other aspects of the electricity sector.

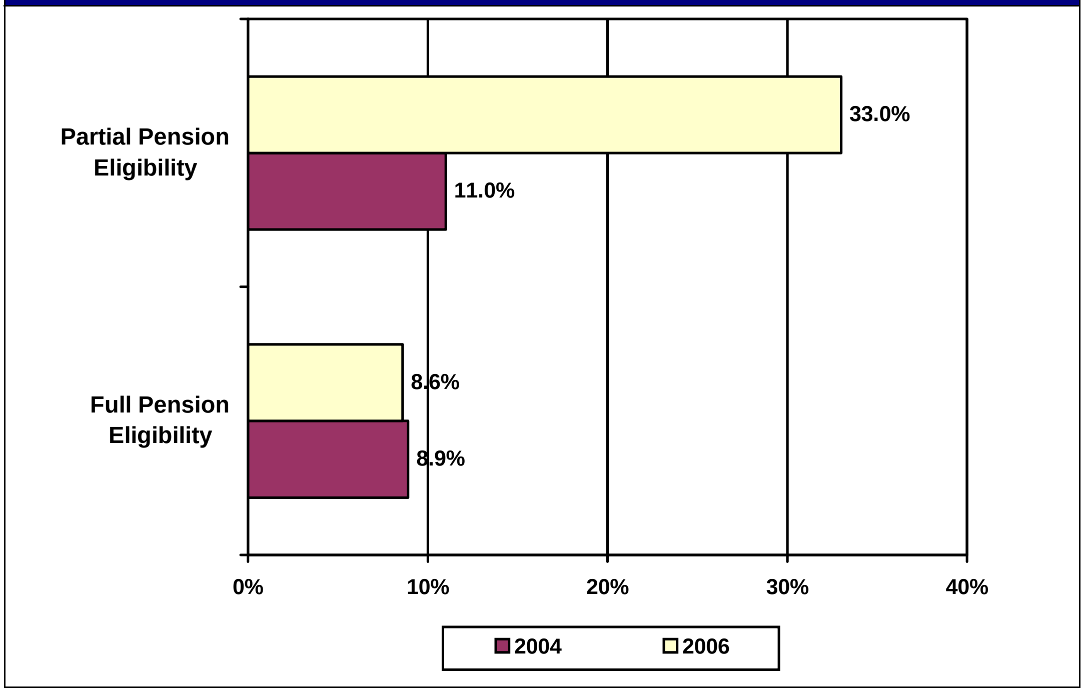
7.2: Full and Partial Pension Eligibility

One aspect that increases the threat of retirements is the number or percentage of non-support staff who are coming up to pension eligibility – either full or partial. Although pension eligibility is not the only determining factor as to whether or not an employee will choose to retire, it can play a significant role, especially among non-support staff whose occupations can be physically demanding.

In 2004, respondents were asked to report on the number of non-support staff eligible for their full and partial pension in the previous year. They were also asked to provide estimates for the next 5 years – between 2004 and 2009.

In 2004, respondents estimated that 8.9%[13] of their non-support employees were eligible for their full pension in the previous year. In the 2008 survey, respondents reported that 8.6%[14] of their non-support staff were eligible for their full pension in the previous year. More significantly however, is that in 2004, 11% (n=28) were eligible for a partial pension in the previous year, compared with 33% (n=49) who were eligible in 2006. The following exhibit provides an illustrative depiction of the change in pension eligibility, as reported in the 2004 and 2008 Employer surveys.

Exhibit 7.3: Percent of Non-Support Staff with Pension Eligibility



Source: 2004 CEA and 2008 ESC Employer Surveys, n=32 (2004) and n=49 (2008) full pension; n=28 (2004) and n=49 (2008) partial pension.

These data are reflective of the age trend that shows there are more employees entering the 45 to 54 age group, and that employees in their late 40s and early 50s are likely to be eligible for their partial pension. Pension plans differ greatly from one organization to the next, which makes it difficult to comment conclusively n the specifics of pension eligibility. Eligibility can be based on years of contribution, age of employee, or some combination of the two. The rules and policies followed by each organization are unique to that establishment. Furthermore, some establishments provide further compensation for employees who choose to continue to work beyond their 'full-pension eligibility, which would affect whether or not an employee chooses to retire.

[13] n=32, based on respondents who provided data for both number of non-support employees and number of non-support employees eligible for full pension

[14] n=49, based only on respondents who provided data for the non-support staff and pension eligibility

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Section 8: Concluding Remarks and Recommendations

Looking at the overall general trends from 2004 to 2008, it is clear that a significant portion of the workforce in the electricity sector is moving closer to retirement age; however, the trend also shows an increasing proportion of younger workers. Opportunities within the sector lie in the ability of both establishments and human resource planners to creatively utilize the skills and abilities of people to react to the sector's changing environmental and demographic landscape.

Future human resources requirements also depend on future technological requirements. Although data that specifically relates to energy efficiency, alternative energy, or renewable energy, was not collected in either the 2004 or 2008 Employer surveys, the production of environmentally friendly or 'green' electricity is growing in popularity in Canada as more provincial governments implement policies and initiatives that target these practices. As mentioned earlier, significant investments in new capital and existing infrastructure will be necessary over the next decade.

On-going planning, recruiting, training and hiring of new employees

The electricity sector could benefit greatly from implementing on-going recruitment campaigns. Although the need for labour is often contingent on market demands, regardless of economic conditions, Canadians will always need electricity; as will the rest of the developed world. Thus, planners should be able to consider the age trends presented in the current report, and plan for the next phase of retirements. Planners will also be able to see where there will be gaps in labour and skills, by tracking the movement of people through the age groups.

Retention strategies that target specific age groups

Data from the 2004 and 2008 Employer surveys show that there is a growing proportion of employees who are in the youngest and oldest age cohorts. Priorities among these two age generations differ greatly[15]. Therefore, there is no 'one size fits all' strategy to retain good employees. Managers and supervisors will need to keep abreast of the demographic trends and the differences in expectation among the various age groups, if they are to effectively manage and retain their staff.

The data also show that more employees are eligible for their partial pension, which means that these same employees will soon be eligible for their full pension, thus increasing the threat of retirements in the near future. However, it is difficult to draw conclusions about pension eligibility, as each establishment has its own set of rules or guidelines to determine not only who is eligible, but also what full and partial pension means. Planners will need to determine where best to expend their resources – retaining older workers, recruiting and training a new set of employees, or some combination of the two.

Recruitment and retention strategies that appeal to diversity groups – human resource strategies will need to branch out beyond mainstream appeal

The increasing representation of minority groups and immigrants within Canada's labour force signals a required shift in recruitment and retention strategies among human resource planners in the electricity sector. A comparison of the 2004 data with the 2008 data shows a 2.8% increase overall in representation of visible minority groups in the labour force, with only a 0.9% increase in representation within the sector. This suggests the sector is not keeping pace with the national labour force. A comparison of Aboriginal representation shows that while the percent representation in the labour force increased by 0.4%, Aboriginal representation increased in the sector by 0.7%.

[15] Human Resource Executive Online http://www.hreonline.com/HRE/story.jsp?storyId=10815657

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Human resource planners would benefit greatly from implementing recruitment practices that foster diversity and present a multicultural work environment. However, employers also need to be prepared to adapt their retention strategies accordingly.

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