



# ANZSCO 2333-11 Electrical Engineer

## Tasmania January 2017

### Current labour market rating

No shortage

Previous labour market rating (April 2016)

No shortage

### Comments

*Recent research indicates the majority of employers in Tasmania filed their vacancies for electrical engineers, receiving a high number of qualified applicants per vacancy. The majority of vacancies surveyed were in the electricity supply industry.*

### Survey results<sup>1</sup>

- The Department of Employment survey of employers who had recently advertised for electrical engineers found 83 per cent of vacancies were filled within the survey period. This compares with an overall fill rate of 100 per cent last year and 71 per cent in 2015.
  - There was an average of 23.4 qualified applicants per vacancy with a majority of employers indicating qualifications in electrical engineering were essential.
  - An average of 1.2 applicants per vacancy were considered suitable by employers.
- Due to a disproportionate number of vacancies surveyed in the electricity supply industry, the research was supplemented with cold canvassing of organisations in other industries such as the professional, scientific and technical services and food product manufacturing. Additionally, vacancies were predominately located in the metropolitan areas and cold canvassing of organisations located in non-metropolitan areas was also conducted.
- Most vacancies were for full-time positions with employers requiring electrical engineers with a wide range of skill sets and experience.
  - Employers sought electrical engineers with several years' experience in areas such as utility engineering, supervisory control and data acquisition (SCADA), power stations and power generation systems, National Broadband Network (NBN), renewable energy technologies, food manufacturing production/processing and consulting.
- All employers received overseas applicants with the majority of employers excluding them due to the large number of qualified and experienced Australia-based applicants.
- The majority of employers were able to fill vacancies for electrical engineers without difficulty. Of the vacancies that remained unfilled, employers reported suitable applicants either withdrew from the recruiting exercise or remained with their existing employer.

---

<sup>1</sup> The methodology underpinning this research is outlined at Skill Shortage Research Methodology | Department of Employment - Document library, Australian Government and can also be accessed by the QR code.



### Unsuitable applicants

- Unsuitable applicants lacked the electrical engineering qualification or did not have sufficient experience or demonstrable skills in the specific industry sector or specialisation of electrical engineering required.

### **Demand and supply trends**

- Demand for electrical engineers is driven by factors such as economic growth, infrastructure development and construction activity and presents a mixed picture as outlined below.
  - Over the last few years, the electricity supply industry has been experiencing a decline; however, demand for electricity in Tasmania is forecast to grow over the next ten years, although at a subdued rate.<sup>2</sup>
  - The Department's 12 month average count of vacancies advertised online for electrical engineers show vacancy numbers have been slowly declining. There were 1.8 vacancies in February 2017 compared with a monthly average of 2.2 over the previous five years.<sup>3</sup>
  - Engineering construction activity has experienced strong growth in Tasmania with the value of building work done increasing by 33.3 per cent over the five years to December 2016.<sup>4</sup>
- University of Tasmania (UTAS) data shows there were 36 domestic engineering graduates in 2015, which is significantly less than the previous two which had 50 graduates. An average of about 47 domestic engineering students graduated from UTAS between 2010 and 2015 and 92.1 per cent of the engineering graduates were male.<sup>5</sup>

### **Other indicators and issues**

- In 2017, Engineering Australia launched a workforce plan for the state to promote careers in the industry and improve gender diversity among engineers in Tasmania.<sup>6</sup>
  - At the 2011 ABS Census, 93.7 per cent of electrical engineers were male.<sup>7</sup>

---

<sup>2</sup> Tasmanian Networks Pty Ltd (TasNetworks), *Annual Planning Report 2017*

<sup>3</sup> Department of Employment, *Internet Vacancy Index*, February 2017, 12 month moving average.

<sup>4</sup> ABS, *Engineering Construction Activity, Australia*, (Cat No. 8762), December 2016, trend

<sup>5</sup> University of Tasmania, unpublished data, 2010 to 2015

<sup>6</sup> Media Article, *Engineers start work on building Tassie careers*, The Mercury, 28/07/2017

<sup>7</sup> ABS, *2011 Population Census data*, Tasmania