

Meeting Date: 16 August 2023

## WORKFORCE MANAGEMENT

## SECURITY AND RELIABILITY COUNCIL

This paper introduces papers and presentations on the theme of workforce management. The secretariat has been asked to provide the SRC with material to support understanding of workforce management issues facing the sector and the work being done to ensure personnel are available to manage power system needs.

**Note:** This paper has been prepared for the purpose of the Security and Reliability Council (SRC). Content should not be interpreted as representing the views or policy of the Electricity Authority except where specifically noted.

# Workforce Management

## 1. Introduction

- 1.1. The SRC has asked the secretariat to provide information on workforce management, as part of the theme for this meeting.
- 1.2. The purpose of this theme is to give the SRC a clearer picture of how the sector, and those agencies that support it, are working to ensure there is the right mix of experienced personnel and fresh talent available. The expectation is this will be supported by collaboration and robust recruit and retention frameworks across the sector.
- 1.3. This paper introduces papers and presentations from:
  - a) Te Waihanga New Zealand Infrastructure Commission
  - b) Transpower (covering both the system operator and grid owner)
  - c) The Electricity Engineer's Association
  - d) The New Zealand Business Energy Council (including input from the Young Energy Professionals Network - YEPN)
  - e) University of Canterbury Engineering School
  - f) University of Auckland Engineering School
- 1.4. Also included is high-level information about the Authority's approach for its staff and initiatives from other parts of the sector.
- 1.5. Presenters were asked to consider the following issues, as they relate to the electricity sector:
  - a) an aging workforce,
  - b) the critical need for knowledge transfer to reduce knowledge loss and ensure appropriate levels of business continuity and understanding of risk,
  - c) younger industry talent moving offshore to pursue careers,
  - d) the need to encourage diversity to ensure an appropriate and more representative mix of future industry talent,
  - e) The biggest risk areas and some of the solutions being considered or implemented,
  - f) Any other information that would inform the SRC as to how the sector is managing workforce needs to ensure the security and reliability of the power system.
- 1.6. There are many and varied approaches to workforce management, considering each agency's needs, including their size and the role they perform in the sector.

## 2. The New Zealand Infrastructure Commission

- 2.1. The SRC has asked the secretariat to seek input from Te Waihanga New Zealand Infrastructure Commission for this meeting.

- 2.2. Te Waihanga is a key advisor to government, with the goal to 'lift the economic performance of New Zealand and improve the wellbeing of all New Zealanders.'
- 2.3. The presentation will focus on Te Waihanga's infrastructure pipeline, which is a tool designed to facilitate improved project planning, coordination and delivery within New Zealand's broader infrastructure system.
- 2.4. The presentation will give examples of how the tool operates and some of the key inputs and outputs it can deliver for the sector.
- 2.5. Te Waihanga's presentation will be included as Appendix A to this paper.
- 2.6. Due to workload and existing commitments, it may not be possible for Te Waihanga to have its presentation available for members pre-reading. Members will be notified in the event Te Waihanga's presentation is made available as a late paper via Diligent.

### **3. Transpower (grid owner and system operator)**

- 3.1. The secretariat has asked Transpower to present on the theme of workforce management. Transpower will provide a combined paper, representing both system operator and grid owner.
- 3.2. Transpower as a whole is undertaking a strategic workforce planning exercise to remain informed and prepare for the impact of longer-term trends and drivers. This takes into perspective recruitment, the skills/education required, and training and capability development.
- 3.3. The education and Training & Capability are covered through the Training & Capability stream of work Transpower has in place.
- 3.4. Transpower's presentation is included as Appendix B to this paper.

### **4. Electricity Engineer's Association (EEA)**

- 4.1. The EEA sees its role as providing the New Zealand electricity supply industry with expertise, advice and information on technical, engineering and safety issues affecting the electricity industry.
- 4.2. The EEA focuses on engineering, technical and health and safety and provides an 'electricity supply industry voice' to the Government, regulators, stakeholders, professional bodies and the media.
- 4.3. The EEA's presentation will include examples of its recent and future planned work on this theme.
- 4.4. The EEA's presentation will be included as Appendix C to this paper.

### **5. BusinessNZ Energy Council**

- 5.1. The BusinessNZ Energy Council (BEC) is a cross-section of leading energy sector business, government and research organisations, taking a leading role in creating a sustainable, equitable and secure energy future. BEC represents the World Energy Council in New Zealand.
- 5.2. The secretariat has asked BEC to draw on its knowledge and research base to give its view on workforce management and what is needed to address the workforce issues facing the sector.

5.3. The presentation will include input from the BEC-established Young Energy Professionals Network (YEPN) and give an indication of risk areas to focus on, and emerging solutions, where known.

5.4. BEC's presentation will be included as Appendix D to this paper.

## 6. University of Canterbury Engineering School

6.1. The University of Canterbury's Power Engineering Excellence Trust (PEET) is a not-for-profit organisation with an education and outreach function to support talent in the industry.

6.2. PEET members represent a cross-section of participants and consultants, including the EEA and Transpower.

6.3. PEET collaborates with Canterbury's Electric Power Engineering Centre (EPECentre) to support its activities in the electricity sector including generation, transmission, distribution, contracting, consulting and manufacturing.

6.4. The centre's focus is to "inspire and enable tomorrow's power engineering talent by sharing responsibility, knowledge and opportunity across the industry and academia."

6.5. The University of Canterbury's presentation is included as Appendix E to this paper.

## 7. University of Auckland Engineering School

7.1. The University of Auckland has undertaken a range of initiatives to gain an understanding of what attracts students to engineering, including power system engineering.

7.2. The University's presentation and background material summarises available pathways, and experiences from individuals. It includes information on historical trends and work to attract talent and diversity.

7.3. Members are encouraged to ask additional questions, for example the impact of immigration constraints and overseas initiatives to attract talent.

7.4. The University of Auckland's presentation is included as Appendix F to this paper.

## 8. Further background material

### **The Government's employment strategy**

8.1. In 2019, the government released its employment strategy. The aim of the strategy is to 'support New Zealand to become a productive, sustainable and inclusive economy that raises the wellbeing of New Zealanders.'

8.2. The structure of the employment strategy 'provides an overarching framework to guide complimentary government work programmes'. A key tenet of this framework is to build a skilled workforce.

8.3. In July 2022 New Zealand Immigration implemented the Accredited Employer Work Visa programme to encourage hiring New Zealanders first and protect migrant workers. This included a faster, streamlined application process and new residence categories for highly skilled, hard-to-fill occupations.

- 8.4. It is anticipated the New Zealand Energy Strategy, led by MBIE, will include updated strategies relevant to the sector. As noted in recent announcements, MBIE is scheduled to consult widely on feedback and findings from phase 1 later this year.

### **The Electrical Workers Registration Board**

- 8.5. The Electrical Workers Registration Board (EWRB) has a range of functions under the Electricity Act 1992. These include designating classes of work and prescribing minimum standards of training for each class.
- 8.6. The registration system prescribes terms and conditions for registration and how overseas qualifications, certificates and registration are recognised in New Zealand.
- 8.7. The EWRB is considering a new learning management system, to allow new ways and means of delivering competence programmes. This is due for consultation in 2023, ahead of developing detailed proposals. This will likely include a 'stepped licensing' approach, which offers a pathway through licensing that mirrors the risk-based approach to prescribed electrical work.
- 8.8. In agreement with Standards NZ, electrical workers have access to an online standards library, with a suite of 93 current and critical industry relevant standards (and 425 documents available in total).
- 8.9. The EWRB annual report for 2022<sup>1</sup> provides a breakdown on licenced electrical workers and their geographical distribution.

### **The Authority's approach to its workforce**

- 8.10. While it is not the Authority's function to regulate workforce management for the sector, the secretariat considered the Authority's workforce approach as relevant to the SRC's theme for the meeting.
- 8.11. The Authority's approach to workforce management is designed to ensure the right talent mix to drive strategic capabilities. The Authority's operating model looks at short term (<6 month) and longer term (2+ years) time horizons across the areas of:
- a) Talent planning
  - b) Learning and upskilling
  - c) Employee experience; and
  - d) Work environment
- 8.12. The Authority's turnover rate has fallen from 39% in 2021/22 to 29% in 2022/23. The Authority works hard to manage staff retention and several initiatives have contributed to a reduction in staff turnover. Examples of these strategies supporting this include:
- a) increasing leadership capabilities.
  - b) becoming an immigration accredited employer.
  - c) providing opportunities for internal promotions.
  - d) progression and succession planning.

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<sup>1</sup> <https://www.ewrb.govt.nz/about-us/our-board/annual-reports/>

- e) opportunities for stretch assignments, mentoring and formal training for groups and individuals.
- f) ensuring there are feedback and engagement opportunities for all employees.
- g) enhancing our employee value proposition to increase our competitiveness in a challenging recruitment market.
- h) improving our office working environment.

8.13. While the SRC has not sought a dedicated Authority presentation for this theme, representatives from the Authority's People and Capability team can be available if required.

## Questions for the SRC to consider

The SRC is asked to consider the following general questions.

- Q1. What further information, if any, does the SRC wish to have provided to it?**
- Q2. From your own experience, what are member views on what the sector and agencies within it need to focus on?**
- Q3. What advice, if any, does the SRC wish to provide to the Authority?**

**Appendix A: New Zealand Infrastructure Commission**

**Appendix B: Transpower**

**Appendix C: Electricity Engineers' Association**

**Appendix D: BusinessNZ Energy Council**

**Appendix E: Auckland Engineering School**

**Appendix F: Canterbury Engineering school**