# **A STEPPED FRAMEWORK:**

Consultation on proposed changes to the limits of work, registration requirements and endorsements for electrical workers







#### Role and functions of the Board

The Electrical Workers Registration Board (the Board) is established under section 148 of the Electricity Act 1992 (the Act). The Board's main functions are specified in section 149 of the Act. The Board currently has seven members, five of whom are registered electrical workers. The members are appointed by the Minister of Building and Construction.

The primary functions of the Board are to register and license electrical workers and ensure competency of those workers in order to promote public safety. This is carried out through ensuring a minimum standard of competence to be issued and retain a licence, and holding disciplinary hearings about complaints, prosecuting illegal prescribed electrical work and undertaking other activities that support safe and compliant prescribed electrical work.

The Occupational Licensing Team (OLT) is part of the Ministry of Business, Innovation and Employment (MBIE) and provides, among other things, key operational support for registering and licensing electrical workers on behalf of the Registrar, who is acting under delegation from the Board.

This document is also available on the EWRB website: www.ewrb.govt.nz



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## MESSAGE FROM THE BOARD

#### Kia ora koutou

It's our pleasure to consult with you on proposed changes to the way electrical workers are licensed, and the limits of work they are able to undertake.

Electrical workers are a valuable part of New Zealand's economy, contributing to both the construction and infrastructure sectors, as well as many of New Zealand's important industries.

The electrical worker sector is growing and we expect it to continue to increase. Over the last 10 years, an average of around 1,600 new electrical workers a year have registered from New Zealanders and overseas. There are about 49,000 registered electrical workers, with over 28,000 current practising licences.

As with any system, there are always ways to improve the electrical worker licensing system's effectiveness and the overall benefits to the sector. This discussion document outlines a number of proposed changes to the requirements for registration (including strengthening the character requirements for registration), the work that can be carried out by each class and introduces four new endorsements: Mains Parallel Generation Systems, Supervision, Medical

Cardiac Protected Electrical Area and Hazardous Areas.

The Board is excited about the opportunity to enhance the clarity and safety of the regime, ensuring that both members of the public continue to receive, and electrical workers continue to provide, safe, competent and trusted electrical work.

We encourage you to give us your feedback on the proposals outlined in this document, which will ensure the ongoing operational sustainability of the registration and licensing system for electrical workers.

### ABOUT THE CONSULTATION

The Electrical Workers Registration Board (the Board) welcome your written submissions on proposed changes outlined in the draft Gazette notices in Annex One and Two. These proposals:

- refine the way limits of work are described across the full range of registration classes administered by the Board
- strengthen the existing registration criteria by making adherence to the Fit and Proper Person Policy a constant condition of holding a licence
- adjust the registration requirements for Electrical Workers (EWs) in a select few licence classes to clarify progression pathways and
- introduce four new endorsements: Mains Parallel Generation Systems, Supervision, Medical Cardiac Protected Electrical Area, and Hazardous Areas.

Your feedback will be used to help the Board to make final decisions on changes to EW licensing.

A proposed timeline of the process is as follows:

The consultation process will be run by the Ministry of Business, Innovation and Employment (MBIE) on behalf of the Board. Submissions will be passed on to the Board together with submission analysis produced by MBIE.

Once the Board has considered all submissions, final proposals will be developed, and incorporated into a proposed Gazette notice. If the proposed Gazette notice is substantially different to the proposals consulted on in this document, the Board may carry out further consultations. The proposed Gazette notice will then need to be approved by the Board and the Minister for Building and Construction before being published.

To give the sector time to prepare for the implementation of any changes, different parts of the Gazette notices will come into force at different times after the Gazette notice is published. More information on the proposed transition timeframes can be found in the section "Proposed Implementation Timeframes" on page 11.

Consultation opens	Monday 20 September 2021
Consultation closes	Friday 29 October 2021
Summary of submissions produced. Proposals amended, final decisions on proposed changes made	19 November 2021  December Board meeting
Board approval of the Gazette notice/text	December 13 Board meeting
Gazette notice/text provided to Minister for consideration	December 2021

## **HOW TO USE THIS DOCUMENT**

This discussion document outlines the Board's proposals to modify the registration framework and Fit and Proper Person criteria. The full text of the draft Gazette notice including the Fit and Proper Person changes is available in Annex One. The full text of the draft Gazette notice including the registration requirements is available in Annex Two.

Questions are asked throughout the document for your consideration and feedback, and a complete summary of these questions can be found in the 'Summary of questions' section on pages 44-50.

You can answer as many or as few of the questions as you like, in relation to as many or as few registration classes as you like. You do not need to answer all of the questions if you do not wish to. The Board welcomes any other relevant comment or information that you wish to provide on the proposed changes.

#### **HOW TO HAVE YOUR SAY**

The Board would appreciate any comments about the implications and impact of the proposals in this discussion paper by Friday 29 October 2021.

#### Comments should be sent to:

The Registrar
Electrical Workers Registration Board
P O Box 10156
WELLINGTON

#### Or by e-mail to:

changes@ewrb.govt.nz

## **USE AND RELEASE OF INFORMATION**

#### Use of information

The information provided in the submissions will be used by the Board to make final decisions on changes to EW licensing. MBIE and the Board may contact submitters directly if clarification of any matters in submissions is required.

Except for material that may be defamatory, the Board may post PDF copies of submissions received to its website at <a href="https://www.ewrb.govt.nz">www.ewrb.govt.nz</a>. By making a submission, the Board considers that you have agreed to us posting your submission on its website, unless you clearly specify otherwise in your submission.

#### Release of information

Submissions are subject to the *Official Information Act* 1982. Please note as part of your submission if you have any objection to the release of any information in the submission, which parts you consider should be withheld, and include your reasons for withholding the information. MBIE will consider any objections you note and consult with you when responding to requests under the *Official Information Act* 1982.

Please indicate on the front of your submission if it contains confidential information and mark the text accordingly. If you wish to make a submission which includes confidential information, please send a separate version excluding the relevant information for publication on the <a href="https://www.ewrb.govt.nz">www.ewrb.govt.nz</a> website.

#### **Private information**

The *Privacy Act 2020* establishes certain principles with respect to the collection, use and disclosure of information about individuals by various agencies, including MBIE and the Board. Any personal information you supply as part of your submission will only be used to help inform the development of policy advice in relation to this review. Please clearly indicate in your submission if you do not wish your name to be included in any summary of submissions that may be published.

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## INTRODUCTION

## OVERVIEW OF THE ELECTRICAL WORKERS REGISTRATION AND LICENSING SYSTEM

The electrical workers registration and licensing system was launched in 1992 under the *Electricity Act 1992* (the Act). Its purpose is to promote safety for all New Zealanders by ensuring the competency of electrical workers.

The system is run by the Board with administrative support from MBIE. The system includes:

- approving providers for the examination of trainees who wish to become electrical workers
- receiving and authorising the registration of electrical workers
- issuing provisional licences and limited certificates to electrical workers
- ensuring registered electrical workers maintain an appropriate level of competency and
- exercising disciplinary powers and facilitating prosecutions when necessary.

The Act requires EWs to register and maintain a practising licence to carry out prescribed electrical work, unless they are authorised to do the work under a provisional licence, limited certificate or employer licence. The Board is empowered to stipulate specific requirements to register and maintain a practising licence. For example:

• To register as an EW, a person must have a certain level of experience and pass examinations approved by the Board.

- To obtain a practising licence, EWs must meet the minimum standards for registration that are set by the Board and satisfy the Board they are a fit and proper person to be issued with a practising licence.
- To renew their practising licence every two years to continue working as an EW, EWs must pass a Board-approved competence programme that is relevant to the class of registration held by them and that has been completed within the two years prior to renewal.

The Board may specify the electrical work that each licence class is permitted to perform. This is outlined in a notice in the *Gazette*<sup>1</sup>.

## Principles of the electrical workers registration and licensing system

The principles that guide the decisions of the Board when prescribing registration and licensing matters are<sup>2</sup>:

- to protect the health and safety of members of the public
- to promote the prevention of damage to property and
- to promote the competency of persons who do, or assist in doing, prescribed electrical work.

<sup>1</sup> The most recent Gazette notice issued in 2017 guides current licences and competency: https://gazette.govt.nz/notice/id/2017-go1984

<sup>2</sup> The Electricity Act 1992, s 87.

# WHY ARE THESE CHANGES BEING CONSIDERED?

The Board feels it is the right time to review the limits of work and the registration requirements for EWs - they were last updated in 2017.

#### Limits of work

The proposed limits of work align more closely to the risk levels outlined in the Electricity (Safety) Regulations 2010<sup>3</sup>. This alignment ensures that the limits of work are consistent with the Board's registration and licensing principles, particularly those that protect the health or safety of members of the public. Additionally, the Board believes that the simplicity of outlining the types of work a licence holder is <u>not</u> permitted to do, rather than describing the often vast range of work a license holder <u>is</u> permitted to do, will ensure the limits are easily understood by EWs and members of the public.

#### **Registration requirements**

The Board feels that the proposed changes to registration requirements will ensure that EWs are adequately trained, prepared and competent to undertake the full range of work that they are licensed to do, before moving on to more complex types of work. The changes require a previous registration as a condition of advancement allowing EWs to build competence progressively and consistently across all the limits of work.

#### Fit and Proper Person Policy change

The Board has also proposed that continuing to meet the requirements of the Fit and Proper Person Policy become a condition of holding a licence, by requiring EWs to report anything that may change their status as a fit and proper person. This ensures the Board can address questions of individual's fitness as events arise, rather than waiting for a relicensing round to occur. The proposal aims to encourage prompt resolution of questions of fitness, and should significantly enhance the effectiveness of the policy and provide further assurance to the public that licenced EWs meet the Board's standards as fit and proper persons to carry out licenced electrical work.

#### **Endorsements**

The Board is proposing to introduce four new endorsements: Mains Parallel Generation Systems, Supervision, Medical Cardiac Protected Electrical Area and Hazardous Area. This is to recognise the unique risks in working environments that include mains parallel generation systems, in medical cardiac protected electrical areas and hazardous areas, and to provide consistency across the supervision provided to trainees and apprentices.

 $<sup>3\ \</sup> Clause\ 6A\ \underline{https://www.legislation.govt.nz/regulation/public/2010/0036/latest/whole.html \#DLM2763620}$ 

### **GLOSSARY**

**Board approved training providers:** The Board is allowed to approve training providers who deliver courses that fulfil part of the registration requirements. A list of Board approved training providers can be found on the EWRB website.

**Electrical Appliance**: means any appliance that uses, or is designed or intended to use, electricity, whether or not it also uses, or is designed or intended to use, any other form of energy.

Electrical Installation: is defined by the *Electricity Act 1992* to mean—

- in relation to a property with a point of supply, all fittings beyond the point of supply that form part of a system that is used to convey electricity to a point of consumption, or used to generate or store electricity; and
- ii. in relation to a property without a point of supply, all fittings that form part of a system that is used to convey electricity to a point of consumption, or used to generate or store electricity; but

#### does not include any of the following:

- i. an electrical appliance:
- ii. any fittings that are owned or operated by an electricity generator and that are used, designed, or intended for use in or in association with the generation of electricity, or used to convey electricity from a source of generation to distribution or transmission lines:
- iii. any fittings that are used, designed, or intended for use in or in association with the conversion, transformation, or conveyance of electricity by distribution or transmission lines.

**Electrical Works:** means any fittings that are used, or designed or intended for use, in or in connection with the generation, conversion, transformation, or conveyance of electricity; but does not include any part of an electrical installation.

**Hazardous Area**: means an area in which an explosive atmosphere is present, in quantities that require special precautions for the construction, installation, and use of electrical equipment.

**Medical Cardiac Protected Electrical Area:** means a patient treatment area or other place labelled or specifically set aside to be used to undertake patient treatment.

**Mining Operation**: means the extraction of coal and minerals and the place at which the extraction is carried out; and includes any of the following activities and the place at which they are carried out:

- i. exploring for coal:
- ii. mining for coal or minerals:
- iii. processing coal or minerals associated with a mine:
- iv. producing or maintaining tailings, spoil heaps, and waste dumps:
- v. the excavation, removal, handling, transport, and storage of coal, minerals, substances, contaminants, and wastes at the place where the activities described in subparagraphs (i) to (iv) are carried out:
- vi. the construction, operation, maintenance, and removal of plant and buildings at the place where the activities described in subparagraphs (i) to (iv) are carried out:
- vii. preparatory, maintenance, and repair activities associated with the activities described in subparagraphs (i) to (iv); and

#### includes—

- i. a tourist mining operation:
- ii. a tunnelling operation; but

#### but does not include—

- i. exploring for minerals:
- ii. an alluvial mining operation:

- iii. a mining operation wholly on or under the seabed on the seaward side of the mean high-water mark:
- iv. a quarrying operation.

**Prescribed Electrical Work (PEW):** means electrical work prescribed in the Electricity (Safety) Regulations 2010 (ESR):

- 1. The following electrical work is prescribed electrical work, unless it is work described in clause 2:
  - a. the installation, connection, or maintenance of conductors used in works or installations:
  - the installation, connection, or maintenance of fittings where the fittings are connected, or intended to be connected, to conductors used in works or installations:
  - c. the connection or disconnection of fittings to or from a power supply, other than by means of a plug or pin inserted into a socket, or an appliance connector inserted into an appliance inlet:
  - d. the maintenance of appliances:
  - e. the testing of work described in paragraphs (a) to (d) that
    - i. is not work described in clause (2); and
    - ii. is required by these regulations; and
    - iii. is carried out for the purpose of compliance with these regulations:

- f. the certification of work described in paragraphs (a) to (d) that is not work described in clause 2:
- g. the inspection of work described in paragraphs(a) to (d) that
  - i. (i) is not work described in clause (2); and
  - ii. (ii) is required by these regulations; and
  - iii. (iii) is carried out for the purpose of compliance with these regulations:
- h. the supervision of any work described in paragraphs (a) to (d) that is not work described in clause 2.
- 2. The following electrical work is prescribed electrical work (regardless of whether it is work described in clause 2):
  - a. work done on bolted couplers and restrained couplers used or installed in a mining operation:
  - b. work done on installations, fittings, or appliances in an ERZ0 or ERZ1:
  - the connection, reconnection, or disconnection of bolted couplers and restrained couplers used or installed in a mining operation

## **SUMMARY OF PROPOSED CHANGES**

The Board is proposing a number of changes to the electrical workers framework in four broad areas. These are the Fit and Proper Person Policy, the Limits of Work, Registration Requirements and Endorsements.

#### FIT AND PROPER PERSON POLICY

The first proposal makes adhering to the Board's Fit and Proper Person Policy a constant condition of holding an electrical licence. It also requires EWs to report anything that might affect their ability to meet this requirement as soon as possible.

This would apply to licences (including relicensing) applied for after the Gazette notice comes into effect.

#### **LIMITS OF WORK**

The second set of proposals align the way limits of work are described with the risk levels outlined in the *Electricity (Safety) Regulations 2010*. This ensures that the limits are clear and concise, and outline the work an EW is allowed to undertake within their licence class.

#### **REGISTRATION REQUIREMENTS**

The third set of proposals adjusts the registration requirements for EWs in the following licence classes and endorsements:

- Electrical Appliance Serviceperson
- Electrical Service Technician
- Electrical Installer
- Electrical Engineer
- Electrician
- · Electrical Inspector
- Associated Tradesperson
- Restoration of Supply Endorsement and
- · Mining Endorsement.

In particular, the Board proposes to formalise the progression between Electrical Service Technician, Electrical Installer and Electrician by requiring the applicant to have held the class of registration before

the one they are applying for a minimum length of time before being eligible to progress under the experience pathway.

#### **ENDORSEMENTS**

The fourth set of proposals introduces four new endorsements: Mains Parallel Generation Systems, Supervision, Medical Cardiac Protected Electrical Area and Hazardous Area. This is to recognise the unique risks in working environments that include mains parallel generation systems, medical cardiac protected electrical areas, and hazardous areas, and to provide consistency across the supervision provided to trainees and apprentices.

In addition to these four broad sets of proposals, there are a small number of additional proposals to:

- merge the Electrical Appliance Service Person and Electrical Appliance Serviceperson (Endorsed) classes of registration
- merge the Distribution Line Mechanic and Distribution Line Mechanic (Endorsed) classes of registration and
- amend the Associated Tradesperson class to include eligibility for Licensed Building Practitioners.

The Board has considered implementation timeframes and proposes a staggered approach to implementation.

#### **General questions**

**Question 1:** Do you have any general comments or feedback on the proposals that you would like to share with the Board?

(Note: there is the opportunity to feedback on the individual proposals by registration class below)

# PROPOSED IMPLEMENTATION TIMEFRAMES

The Board proposes that the changes identified in the section above come into force over a staggered timeframe.

The Board proposes the changes to the limits of work and the Fit and Proper Person criteria come into force six months from the date the Gazette notices are published. From this date onwards, EWs will need to comply with the new limits of work in the registration classes they hold, and any newly issued licenses (including for those who are relicensed) will be subject to the new Fit and Proper Person requirements. The Board feels these changes are mostly technical in nature, and do not represent a substantial change to EW practice or process, but improve the clarity and safety of the regime. The Board will ensure EWs are updated on the new requirements through the Electron newsletter.

The Board then proposes that the registration requirements come into force 18 months after the publication of the Gazette notice. From this date onwards, trainees will not be permitted to start working towards the current registration requirements and must begin on the new progression framework.

This 18 month period will allow the Board and training providers to align their courses to ensure that the right

courses are available at the right times and that they cover the right content to allow trainees to complete their registration under the proposed new requirements.

Because a number of trainees will begin training towards becoming an EW under the current registration requirements, before the new regime is in force, some proposals will require a transition period to allow for those completing under the existing requirements to complete their registration under the current regime. The Board proposes that transition periods will be available for all EW's who began their training before the Gazette notice about registration requirements comes in to force (18 months after the date of publication).

The Board is proposing a tailored approach to transition periods for endorsements and specific registration classes. The Board believes these proposed timeframes will allow people already training towards these registration classes to complete their training under the existing regime before the changes come into effect. The length of the proposed transition periods are outlined below.

Registration class/endorsement	Time from date of publication of Gazette notice when new registration criteria will apply
All proposed endorsements	Two Years
Electrical Application Serviceperson Electrical Service Technician	Three Years
Electrical Installer	Four Years
Electrician	Five Years

#### PROPOSED TIMETABLE

Gazette notice published

New regime starts - EWs can start applying for new endorsements or registration using new criteria.

Six months after publication

Proposed new Limits of Work and Fit and Proper Person criteria changes come in to force

Eighteen months after publication

Trainees can no longer start working towards current registration requirements

Two years after publication

All applications for endorsements must meet new registration criteria

Three years after publication

All applications for Electrical Application Serviceperson and Electrical Service Technician registration classes must meet new registration criteria

Four years after publication

All applications for Electrical Installer registration classes must meet new registration criteria

Five years after publication

All applications for Electrician registration class must meet new registration criteria

Question 2: Do you think that these timeframes are reasonable? Why or why not?

**Question 3:** Do you agree with the proposed timeframes for implementation of the proposed changes? Why or why not?

# FIT AND PROPER PERSON CONDITION PROPOSAL

#### **Proposed Requirement**

All practising licences that are issued where applications are received after the publication of this notice are subject to the condition that the applicant meets and continues to meet the Board approved fit and proper person policy for the duration of the licence.

Should the applicant become aware that they no longer meet the criteria for being a fit and proper person, they must immediately notify the Board of this fact and provide information to satisfy the Boards subsequent inquiries, if any.

Where an applicant is determine to no longer meet the criteria to be considered a fit and proper person for holding a practising licence, and that person continues to practice under that licence, a disciplinary offence may occur to which the Board may consider further action.

#### What has changed?

The new condition of licence creates an enduring requirement for EWs to meet the approved Fit and Proper Person criteria for the duration of their license. It also creates a responsibility for the EW to notify the Board of any changes to their ability to meet the criteria. This allows fitness to be assessed as they arise rather than the current state of assessing these every two years at relicensing. It also strengthens reporting requirements to incentivise EWs to proactively report anything that might affect their status as a Fit and Proper Person. It does not change the substance of the current Fit and Proper Person Policy<sup>4</sup>.

**Question 4:** Do you support the proposed condition on newly issued practicing licences? Why or why not?

<sup>4</sup> The current Fit and Proper Policy can be viewed here: https://www.ewrb.govt.nz/assets/documents/rules-of-the-board/fit-and-proper-persons-rules.pdf

### REGISTRATION CLASS PROPOSALS

#### **ELECTRICAL APPLIANCE SERVICEPERSON PROPOSALS**

Under the proposed registration framework, the existing classes of Electrical Appliance Serviceperson and Electrical Appliance Serviceperson (Endorsed) would be merged to become a single class of registration.

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrical Appliance Serviceperson is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out maintenance work on an appliance
  - b. carrying out the disconnection or reconnection of fittings to or from a power supply, provided that the electrical rating is not greater than 250 volts and the work is required for the maintenance of an appliance
  - c. carrying out the testing and certification of work identified under b, provided that is their own work
- (2) Electrical Appliance Serviceperson is not permitted to:
  - a. carry out any PEW on installations and works
  - b. inspect PEW
  - c. carry out PEW in a medical cardiac protected electrical area unless they are authorised by the appropriate endorsement
  - d. carry out PEW in a mining operation, hazardous area or mains parallel generation system
  - e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
  - f. carry out PEW outside of their competence

#### What has changed?

The proposed new limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are permitted to do. This aligns the limits of work with the risk levels outlined in the Electricity (Safety) Regulations 2010.

As an Electrical Appliance Service Person, your limits of work remain limited to work carried out on appliances. However your limits of work would expand to include disconnecting and reconnecting of some fixed wired appliances.

**Question 5:** Do you support the proposed merging of the Electrical Appliance Serviceperson and Electrical Appliance Serviceperson (Endorsed) classes? Why or why not?

Question 6: Do you support the proposed changes to the limits of work? Why or why not?

#### **Registration Requirements**

#### **Proposed registration requirements**

Those seeking registration as an Electrical Appliance Serviceperson must have:

- 1. passed a Board-approved Electrical Appliance Serviceperson written theoretical examination;
- 2. passed a Board-approved Electrical Appliance Serviceperson practical examination;
- 3. completed 18 months practical training/experience in carrying out PEW that is satisfactory to the Board;

or, in place of (1) to (3) inclusive:

4. completed Board approved Electrical Appliance Serviceperson NZQA competency based training.

#### What has changed?

The coursework and experience requirements listed above are consistent with the existing time-based pathway for registration as an Electrical Appliance Serviceperson (Endorsed).

The proposed changes aim to provide a clearer progression pathway for those wanting to improve their skills and progress through the licence classes as well as providing consistency of training across all registered electrical workers.

**Question 7:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 8:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **ELECTRICAL SERVICE TECHNICIAN PROPOSALS**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrical Service Technician is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out low-risk PEW on installations excluding:
    - i. replacement of conductors in installations
    - ii. any work on a switchboard
    - iii. maintenance of any work included in regulation 6A(2) of the ESR
  - b. carrying out the maintenance of fittings in works excluding:
    - i. replacement of electric lines in works
  - c. carrying out any PEW on appliances
- (2) Electrical Service Technician is not permitted to:
  - a. carry out general or high-risk PEW on any installations
  - b. inspect PEW
  - c. carry out PEW in a hazardous area or medical cardiac protected electrical area unless they are authorised by the appropriate endorsement
  - d. carry out PEW in a mining operation or mains parallel generation system
  - e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
  - d. carry out PEW outside of their competence

#### What has changed?

The proposed new limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are permitted to do. This aligns the limits of work with the risk levels outlined in the Electricity (Safety) Regulations 2010.

As an Electrical Service Technician, this means that you can carry out low-risk work within the limitations outlined above, as long as you are competent to do so.

Question 9: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Electrical Service Technician must have:

- 1. passed a Board-approved Electrical Service Technician written theoretical examination;
- 2. passed a Board-approved Electrical Service Technician practical examination;
- 3. completed 2 years practical training/experience in the PEW of an Electrical Service Technician that is satisfactory to the Board provided that the 2 years practical training/experience includes at least six months of training/experience on multi-phase appliances or fittings or,

or, in place of (1) to (3) inclusive:

4. completed a Board approved Electrical Service Technician competency based training programme.

#### What has changed?

For Electrical Service Technicians, the experience requirement for registration has increased from 18 months to two years. The remaining coursework requirements for registration are consistent with the existing requirements.

The proposed changes aim to provide a clearer progression pathway for those wanting to improve their skills and progress through the license classes as well as providing consistency of training across all registered electrical workers.

**Question 10:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 11:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **ELECTRICAL INSTALLER PROPOSALS**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrical Installer is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out general and low-risk PEW on installations excluding maintenance of any work included in regulation 6A(2) of the ESR
  - b. carrying out any PEW on works and
  - c. carrying out any PEW on appliances.
- (2) Electrical Installer is not permitted to:
  - a. carry out any high-risk PEW
  - b. inspect PEW
  - c. carry out PEW in a hazardous area or medical cardiac protected electrical area unless they are authorised by the appropriate endorsement
  - d. carry out PEW in a mining operation or mains parallel generation system
  - e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - f. carry out PEW outside of their competence

#### What has changed?

The proposed new limits of work focus on risk-based limits to the work each licence class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are permitted to do. This aligns the limits of work with the risk levels outlined in the *Electricity (Safety) Regulations 2010*.

As an Electrical Installer, this means that you can carry out: low- and general-risk work, within the limitations outlined above, as long as you are competent to do so.

Question 12: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Electrical Installer must have:

- 1. passed a Board-approved Electrical Installer theoretical written examination;
- 2. passed a Board-approved Electrical Installer regulatory written examination;
- 3. passed a Board-approved Electrical Installer practical examination;
- 4. completed three years practical training/experience in carrying out PEW that is satisfactory to the Board; and
- 5. held an Electrical Service Technician class of registration for a period not less than 1 year.

or, in place of (1) to (5) inclusive:

6. completed a Board approved Electrical Installer competency based training programme.

#### What has changed?

The proposed registration requirements include a new requirement to have held registration as an Electrical Service Technician for one year before applying for registration as an Electrical Installer through the experience pathway.

The coursework and experience requirements listed above are consistent with the existing time-based pathway for registration as an Electrical Installer, with minor changes to allow the Board flexibility to approve different examinations and assessments if required.

The proposed changes aim to provide a clearer progression pathway for those wanting to improve their skills and progress through the licence classes as well as providing consistency of training across all registered electrical workers.

**Question 13:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 14:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **ELECTRICAL ENGINEER PROPOSALS**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrical Engineer is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out PEW on installations, works and appliances
- (2) Electrical Engineer is not permitted to:
  - a. inspect PEW
  - b. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system unless they are authorised by the appropriate endorsement
  - c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
  - d. carry out PEW outside of their competence.

#### What has changed?

The proposed new limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are able permitted to do. This aligns the limits of work with the risk levels outlined in the *Electricity (Safety) Regulations 2010*.

As an Electrical Engineer, this means that you can carry out authorised PEW within the limitations outlined above as long as you are competent to do so. As with the existing limits of work for Electrical Engineers, the Board will advise you of the limitations that apply to your licence at the time it is granted.

Question 15: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Electrical Engineer:

- are either a Qualified Engineer or a Chartered Professional Engineer with the same or substantially similar practical experience as a Qualified Engineer under the *Electricity Act 1992* as defined prior to 1 April 2010; or
- 2. must hold a Bachelor of Engineering (Electrical) qualification, Bachelor of Engineering Technology or a National Diploma in Engineering (Level 6); or
- 3. must hold an equivalent qualification as determined by either Engineering New Zealand or the New Zealand Qualifications Authority;

and, in addition to the above, must:

- 4. have passed a Board-approved Electrician regulatory written examination;
- 5. have passed a Board-approved Electrician practical examination; and
- 6. have completed not less than two years of practical experience in carrying out PEW that is satisfactory to the Board.

#### What has changed?

The proposed registration requirements for Electrical Engineer have been consolidated, but the coursework requirements are consistent with the current requirements. However, there has been an increase in the experience requirement from one year to two years to reflect the often limited exposure to prescribed electrical work Electrical Engineers may get. This change is intended to provide more clarity around the registration criteria and provide a clearer pathway for progression between classes.

**Question 16:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **ELECTRICIAN PROPOSALS**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrician is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out PEW on installations, works and appliances.
- (2) Electrician is not permitted to:
  - a. inspect PEW
  - b. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system unless they are authorised by the appropriate endorsement
  - c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - d. carry out PEW outside of their competence

#### What has changed?

The proposed new limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are able permitted to do. This aligns the limits of work with the risk levels outlined in the *Electricity (Safety) Regulations 2010*.

As an Electrician, this means that you can carry out: low-, general- and high-risk work, within the limitations outlined above, as long as you are competent to do so.

Question 17: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Electrician must have:

- 1. passed a Board-approved Electrician theoretical written examination;
- 2. passed a Board-approved Electrician regulatory written examination;
- 3. passed a Board-approved Electrician practical examination;
- 4. completed four years practical training and experience in carrying out PEW that is satisfactory to the Board; and
- 5. held an Electrical Installer class of registration for a period not less than one year.

or, in place of (1) to (5) inclusive:

6. completed a Board approved Electrician competency based training programme.

#### What has changed?

The proposed registration requirements include a new requirement to have held a registration as an Electrical Installer for one year before applying for registration as an Electrician through the experience pathway. The qualification pathway to registration remains the same as the existing system.

The coursework and experience requirements listed above are consistent with the existing time-based pathway for registration as an Electrician, with minor changes to allow the Board flexibility to approve different examinations and assessments if required.

The proposed changes aim to provide a clearer progression pathway for those wanting to improve their skills and progress through the licence classes, as well as providing consistency of training across all registered electrical workers.

**Question 18:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 19:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **ELECTRICAL INSPECTOR PROPOSALS**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Electrical Inspector is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out PEW on installations, works and appliances and
  - b. carrying out inspection and assessment of any PEW.
- (2) Electrical Inspector is not permitted to:
  - a. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system unless they are authorised by the appropriate endorsement
  - b. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
  - c. supervise a person to carry out an inspection of PEW or
  - d. carry out PEW outside of their competence.

#### What has changed?

The new proposed limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are permitted to do. This aligns the limits of work with the risk levels outlined in the *Electricity (Safety) Regulations 2010*.

As an Electrical Inspector, this means that you can carry out: low-, general- and high-risk PEW within the limitations outlined above, as long as you are competent to do so.

Question 20: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Electrical Inspector must have:

- 1. passed a Board-approved Electrical Inspector written examination;
- 2. passed a Board-approved Electrical Inspector practical examination;
- 3. completed not less than three years practical experience in carrying out PEW that is satisfactory to the Board and
- 4. either:
  - a. been registered as an Electrician or an Electrical Engineer with a limit of work equivalent to an Electrician for not less than three years or
  - b. immediately prior to the promulgation of the ESR been a Qualified Engineer under the *Electricity Act 1992* or a Chartered Professional Engineer with the same or substantially similar practical experience as a Qualified Engineer.

#### What has changed?

The proposed registration requirements for Electrical Inspectors are consistent with the current requirements and add the option for an Electrical Engineer holding a limit of work equivalent to an Electrician for not less than three years to be entitled to register as an Electrical Inspector.

The proposed changes aim to provide a pathway for Electrical Engineers who may have the requisite skills and knowledge to be able to register as an Electrical Inspector.

**Question 21:** Do you support the proposed changes to the registration requirements? Why or why not?

#### ASSOCIATED TRADESPERSON PROPOSALS

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Associated Tradesperson is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and appliances:
- a. the maintenance of appliances, associated with their trade provided that the electrical rating is not greater than 250 volts and 16 amperes and the work is required for the maintenance of an appliance and
- b. the disconnection or reconnection of fittings to or from a power supply provided the work is required to facilitate the work associated with their trade.
- (2) Associated Tradesperson is not permitted to:
  - a. carry out any high-risk or general PEW
  - b. carry out any PEW on works
  - c. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - e. carry out PEW outside of their competence.

#### What has changed?

The new proposed limits of work focus on risk-based limits to the work each class is allowed to do by outlining what EWs are not permitted to do. This is a change from the current limits of work, which specify types of prescribed electrical work that licence holders are permitted to do. This aligns the limits of work with the risk levels outlined in the *Electricity (Safety) Regulations 2010*.

As an Associated Tradesperson, you can carry out connection or disconnections of fittings under 250 volts and 16 amperes only in relation to your primary trade and within the limitations outlined above, as long as you are competent to do so.

Question 22: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as an Associated Tradesperson must have:

- 1. either:
  - a. registered and licensed as a plumber or a gasfitter or a plumber/gasfitter by the Plumbers, Gasfitters, and Drainlayers Board; or
  - b. licensed as a Licensed Building Practitioner by the Licensed Building Practitioner scheme and
- 2. passed a Board approved Associated Tradesperson written theoretical examination(s); and
- 3. passed a Board approved Associated Tradesperson practical examination.

#### What has changed?

The proposed registration requirements for Associated Tradesperson are consistent with the current course work requirements, with the added eligibility of those holding building practitioners' licences.

The proposed change aims to provide consistency across construction trades that interact with minor electrical work, giving each associated trade to have equal opportunity to carry out minor electrical work they encounter in their day-to-day operations.

**Question 23:** Do you support the proposed changes to the registration requirements? Why or why not?

#### DISTRIBUTION LINE MECHANIC PROPOSAL

Under the proposed registration framework, the existing classes of Distribution Line Mechanic and Distribution Line Mechanic (Endorsed) would be merged to become a single class of registration.

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Distribution Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
  - a. carrying out any PEW but only in relation to conductors used as electric lines that are part of distribution infrastructure up to and including 110kV and
  - b. carrying out any PEW for the restoration of supply.
- (2) Distribution Line Mechanic is not permitted to:
  - a. inspect PEW
  - b. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - d. carry out PEW outside of their competence.

#### What has changed?

The new proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work a Distribution Line Mechanic is not permitted to do provides a clearer illustration of the work that is able to be completed under this licence class.

**Question 24:** Do you support the proposed merger of the Distribution Line Mechanic and Distribution Line Mechanic (Endorsed) classes? Why or why not?

Question 25: Do you support the proposed changes to the limits of work? Why or why not?

#### **Proposed registration requirements**

Those seeking registration as a Distribution Line Mechanic must have:

- 1. passed Board-approved pre-moderated capstone tests; and
- 2. completed two years' experience in the work of a distribution line mechanic that is satisfactory to the Board; or, in place of 1 and 2 above:
- 3. completed a Board-approved Distribution Line Mechanic competency based training programme that incorporates the New Zealand Certificate in Electricity Supply Line Mechanic Distribution (Level 4).

#### What has changed?

The coursework and experience requirements listed above are consistent with the existing time-based pathway for registration as a Distribution Line Mechanic (Endorsed).

The proposed changes aim to provide a clearer progression pathway for those wanting to improve their skills and progress through the licence classes as well as providing consistency of training across all registered electrical workers.

**Question 26:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 27:** Do you support the proposed changes to the registration requirements? Why or why not?

#### TRANSMISSION LINE MECHANIC PROPOSAL

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Transmission Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and works:
  - a. carrying out any PEW but only in relation to fittings and lines used in transmission.
- (2) Transmission Line Mechanic is not permitted to:
  - a. inspect PEW
  - b. carry out any PEW on appliances
  - c. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - e. carry out PEW outside of their competence.

#### What has changed?

The proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work a Transmission Line Mechanic cannot carry out provides a clearer illustration of the work that can be completed under this licence class.

Question 28: Do you support the proposed changes to the limits of work? Why or why not?

#### TRACTION LINE MECHANIC PROPOSAL

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Traction Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
  - a. carrying out any PEW but only in relation to electric lines that form part of traction infrastructure.
- (2) Traction Line Mechanic is not permitted to:
  - a. inspect PEW
  - b. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - d. carry out PEW outside of their competence.

#### What has changed?

The proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work a Traction Line Mechanic cannot carry out provides a clearer illustration of the work that can be completed under this licence class.

Question 29: Do you support the proposed changes to the limits of work? Why or why not?

#### SUBSTATION MAINTAINER PROPOSAL

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Substation Maintainer is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
  - a. carrying out any PEW but only in relation to PEW within an substation that is associated with the core operating functions.
- (2) Substation Maintainer is not permitted to:
  - a. inspect PEW
  - b. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - d. carry out PEW outside of their competence.

#### What has changed?

The proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work a Substation Maintainer cannot carry out provides a clearer illustration of the work that can be completed under this licence class.

Question 30: Do you support the proposed changes to the limits of work? Why or why not?

#### **CABLE JOINTER PROPOSAL**

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) Cable Jointer is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and works:
  - a. carrying out any PEW but only in relation to the maintenance and joining of cables and work associated with the connection and disconnection and fittings of those cables.
- (2) Cable Jointer is not permitted to:
  - a. inspect PEW
  - b. carry out PEW on appliances
  - c. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
  - d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement or
  - e. carry out PEW outside of their competence.

#### What has changed?

The proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work a Cable Jointer cannot carry out provides a clearer illustration of the work that can be completed under this licence class.

Question 31: Do you support the proposed changes to the limits of work? Why or why not?

# **ENDORSEMENTS**

## **ENDORSED MAINS PARALLEL GENERATION SYSTEMS PROPOSALS**

Note: this is a proposed new endorsement.

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) A person holding a Mains Parallel Generation Systems endorsement is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out PEW on a mains parallel generation system in accordance with the limits of any class of registration that they may hold which is specified in (2).
- (2) The classes of registration for the purpose of (1)a. are:
  - a. Electrical Inspector
  - b. Electrician
  - c. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician).
- (3) A Mains Parallel Generation Systems endorsement does not permit a person to:
  - a. inspect PEW or
  - b. carry out PEW outside of their competence

## What is proposed?

This is a new endorsement that aims to reflect the unique nature of mains parallel generation systems and the knowledge and experience needed to work on these systems safely.

The proposed limits of work align closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. The emphasis on the work someone holding this endorsement is not permitted to do provides a clearer illustration of the work that can be completed under this licence class.

**Question 32:** Do you agree with the creation of the proposed Mains Parallel Generation Endorsement? Why or why not?

Question 33: Do you support the proposed limits of work? Why or why not?

# **Registration Requirements**

#### **Proposed registration requirements**

Those seeking an endorsement registration class for Mains Parallel Generation Systems must have:

- 1. held one of the following classes of registration for a period of not less than 2 years:
  - i. Electrical Inspector; or
  - ii. Electrician; or
  - iii. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician); and
- 2. adequate knowledge, training, skills, and experience satisfactory to the Board of:
  - i. the appropriate, design, control, protection, wiring system equipment; and
  - ii. installation requirements of energy systems including inverter systems for injection of electricity through an installation to a network; and
  - iii. the performance of safety functions required for mains parallel generation systems; and
  - iv. risk management.

# What is proposed?

The proposed registration requirements for Endorsed Mains Parallel Generation are new and have been created to align with the type of knowledge and experience the Board has determined is necessary to work safely with these systems.

**Question 34:** What impacts do you think these changes will have on EWs as they progress in their career?

**Question 35:** Do you support the proposed registration requirements? Why or why not?

### **ENDORSED MINING OPERATIONS PROPOSALS**

### **Limits of Work**

#### **Proposed Limits of Work**

- (1) A person holding a Mining endorsement is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out all PEW in a mining operation in accordance with the limits of any class of registration that they may hold which is specified in (2).
- (2) The classes of registration for the purpose of (1)a. are:
  - a. Electrical Inspector
  - b. Electrician
  - c. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician).
- (3) A Mining Endorsement does not permit a person to:
  - a. inspect PEW or
  - b. carry out PEW outside of their competence.

# What has changed?

The proposed limits of work align more closely to the risk levels outlined in the *Electricity (Safety) Regulations 2010*. There is no change to the substance of the limits of work, however the emphasis on the work an EW with a Mining endorsement cannot carry out provides a clearer illustration of the work that can be completed under this licence class.

**Question 36:** Do you support the proposed changes to the limits of work? Why or why not?

### **Registration Requirements**

#### **Proposed registration requirements**

Those seeking an endorsement for Mining Operations must have:

- 1. held one of the following classes of registration for a period of not less than 2 years:
  - I. Electrical inspector; or
  - II. Electrician; or
  - III. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician); and
- 2. completed not less than one year of practical experience in a mining operation or substantially similar practical experience satisfactory to the Board; and
- 3. adequate knowledge, training, skills, and experience satisfactory to the Board of:
  - I. the control of earth potential rise; and
  - II. the use of relocatable mining electrical equipment; and
  - III. the performance of safety functions required for mining activities and mining electrical equipment; and
  - IV. risk management.

# What has changed?

The proposed registration requirements for a Mining ndorsement have been consolidated into a simpler format, which covers the endorsement for both Electricians and Electrical Inspectors. This change is intended to provide more clarity around the registration criteria and provide a clearer pathway for obtaining this endorsement.

**Question 37:** What impacts do you think these changes will have on EWs as they progress in their career?

**Question 38:** Do you support the proposed changes to the registration requirements? Why or why not?

### SUPERVISION ENDORSEMENT PROPOSALS

Note: this is a proposed new endorsement.

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) A person holding a Supervision endorsement is limited, within any limitations, terms or conditions set by the Board, to:
  - a. supervising a Board-authorised person to carry out PEW in an area in which the supervisor is authorised and competent.
- (2) A Supervision endorsement does not permit a person to:
  - a. inspect PEW
  - b. supervise the carrying out of PEW outside of their competence

# What is proposed?

In order to provide consistency across the supervision provided to trainees and apprentices, the Board proposes implementing a Supervision endorsement in-line with the limits of work above.

The limits for the Supervisor endorsement do not entitle the holder to carry out any further PEW in addition to their base licence class.

This proposed endorsement would be a requirement for any EW wanting to supervise an unlicensed person carrying out PEW.

**Question 39:** Do you agree with the creation of the proposed Supervision endorsement? Why or why not?

Question 40: Do you agree with the proposed limits of work for this endorsement? Why or why not?

# **Registration Requirements**

### **Proposed registration requirements**

Those seeking an endorsement registration class for Supervision must have:

- a. held a particular class of registration for a period of not less than 2 years and
- b. adequate knowledge, training, skills, and experience satisfactory to the Board of:
  - i. the control of electrical hazards and
  - ii. the use of the Boards supervision policy and guides; and
  - iii. the performance of safe and compliant supervision functions in the workplace; and
  - iv. risk management.

# What is proposed?

The proposed registration requirements for this endorsement formalise the experience and knowledge required by electrical workers who are supervising trainees.

Question 41: What impacts do you think this endorsement will have on your business?

Question 42: Do you support the proposed registration criteria? Why or why not?

# MEDICAL CARDIAC PROTECTED AREAS ENDORSEMENT PROPOSALS

Note: this is a proposed new endorsement.

#### **Limits of Work**

#### **Proposed Limits of Work**

- (1) A person holding a Medical Cardiac Protected Electrical Area endorsement is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out all PEW in a medical cardiac-protected electrical area in accordance with the limits of any class of registration that they may hold which is specified in (2).
- (2) The classes of registration for the purpose of (1)a are:
  - a. Electrical Inspector
  - b. Electrician
  - c. Electrical Engineer
  - d. Electrical Installer
  - e. Electrical Service Technician
  - f. Electrical Appliance Serviceperson.
- (3) A Medical Cardiac Protected Area endorsement does not permit a person to:
  - a. inspect PEW
  - b. carry out PEW outside of their competence.

### Why has this been proposed?

Because of the unique risks associated with electrical work in a medical cardiac protected electrical area, the Board propose including an endorsement for this type of work to recognise the need for specialist training in this area.

The limits of work for the Medical Cardiac Protected Electrical Area endorsement entitle the holder to carry out any electrical work that they are entitled to do under their base registration in a Medical Cardiac Protected Electrical Area.

**Question 43:** Do you agree with the creation of the proposed Medical Cardiac Protected Electrical Area endorsement? Why or why not?

**Question 44:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

# **Registration Requirements**

#### **Proposed registration requirements**

Those seeking an endorsement registration class for Medical Cardiac Protected Electrical Area must have:

- a. held one of the following classes of registration for a period of not less than 2 years:
  - i. Electrical Inspector; or
  - ii. Electrician; or
  - iii. Electrical Engineer; or
  - iv. Electrical Installer; or
  - v. Electrical Service Technician; or
  - vi. Electrical Appliance Serviceperson; and
- b. completed not less than one year of practical experience in a Medical Cardiac Protected Electrical Area or substantially similar practical experience satisfactory to the Board; and
- c. adequate knowledge, training, skills, and experience satisfactory to the Board of:
  - i. the control of micro and macro shock hazards and
  - ii. the use of equipotential earthing protection and
  - iii. the performance of safety functions required for cardiac and body protected areas and medical equipment and
  - iv. risk management and inspection.

# Why has this been proposed?

The proposed registration requirements for this endorsement formalise the experience and knowledge required by electrical workers who are carrying out prescribed electrical work in a Medical Cardiac Protected Electrical Area.

Question 45: What impacts do you think this endorsement will have on your business?

**Question 46:** Do you support the proposed registration criteria for this endorsement? Why or why not?

## **HAZARDOUS AREA ENDORSEMENT PROPOSALS**

Note: this is a proposed new endorsement.

#### **Limits of Work**

### **Proposed Limits of Work**

- (1) A person holding a Hazardous Area endorsement is limited, within any limitations, terms or conditions set by the Board, to:
  - a. carrying out all PEW in a hazardous area in accordance with the limits of any class of registration that they may hold which is specified in (2).
- (2) The classes of registration for the purpose of (1)a. are:
  - a. Electrical Inspector
  - b. Electrician
  - c. Electrical Engineer
  - d. Electrical Installer
  - e. Electrical Service Technician.
- (3) A Hazardous Area endorsement does not permit a person to:
  - a. inspect PEW
  - b. carry out PEW outside of their competence.

# Why has this been proposed?

Because of the unique risks associated with electrical work in a hazardous area, the Board propose including an endorsement for this type of work to recognise the need for specialist training in this area.

The limits of work for the Hazardous Area endorsement entitle the holder to carry out any electrical work that they are entitled to do under their base registration in a hazardous area.

**Question 47:** Do you agree with the creation of the proposed Hazardous Area endorsement? Why or why not?

**Question 48:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

# **Registration Requirements**

#### **Proposed registration requirements**

Those seeking an endorsement registration class for Hazardous Areas must have:

- a. held one of the following classes of registration for a period of not less than 2 years:
  - i. Electrical Inspector; or
  - ii. Electrician; or
  - iii. Electrical Engineer; or
  - iv. Electrical Installer; or
  - v. Electrical Service Technician; and
- b. completed not less than one year of practical experience in a hazardous area or substantially similar practical experience satisfactory to the Board; and
- c. adequate knowledge, training, skills, and experience satisfactory to the Board of:
  - i. the control of the types and degree of explosion hazards; and
  - ii. the use of explosive-protection techniques; and
  - iii. the performance of safety functions are required for hazardous areas and explosion-protected electrical equipment; and
  - iv. risk management including safety assessment requirements.

# Why has this been proposed?

The proposed registration requirements for this endorsement formalise the experience and knowledge required by electrical workers who are carrying out prescribed electrical work in a Hazardous Area.

Question 49: What impacts do you believe this endorsement will have on your business?

**Question 50:** Do you support the proposed registration criteria for this endorsement? Why or why not?

# **SUMMARY OF QUESTIONS**

## **General Questions**

**Question 1:** Do you have any general comments or feedback on the proposals that you would like to draw to the Board's attention?

# **Implementation Timeframe**

**Question 2:** Do you think that these timeframes are reasonable? Why or why not?

**Question 3:** Do you agree with the proposed timeframes for implementation of the proposed changes? Why or why not?

# **Fit and Proper Person Proposals**

**Question 4:** Do you support the proposed condition on practicing licences? Why or why not?

# **Electrical Appliance Serviceperson**

**Question 5:** Do you support the proposed merger of the Electrical Appliance Serviceperson and Electrical Appliance Serviceperson (Endorsed) classes? Why or why not?

**Question 6:** Do you support the proposed changes? Why or why not?

**Question 7:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 8:** Do you support the proposed changes to the registration requirements? Why or why not?

#### **Electrical Service Technician**

**Question 9:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 10:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 11:** Do you support the proposed changes to the registration requirements? Why or why not?

### **Electrical Installer**

**Question 12:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 13:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 14:** Do you support the proposed changes to the registration requirements? Why or why not?

# **Electrical Engineer**

**Question 15:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 16:** Do you support the proposed changes to the registration criteria? Why or why not?

#### **Electrician**

**Question 17:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 18:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 19:** Do you support the proposed changes to the registration criteria? Why or why not?

# **Electrical Inspector**

**Question 20:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 21:** Do you support the proposed changes to the registration criteria? Why or why not?

# **Associated Tradesperson**

**Question 22:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 23:** Do you support the proposed changes to the registration criteria? Why or why not?

#### **Distribution Line Mechanic**

**Question 24:** Do you support the proposed merger of the Distribution Line Mechanic and Distribution Line Mechanic (Endorsed) classes? Why or why not?

**Question 25:** Do you support the proposed changes? Why or why not?

**Question 26:** What impacts do you think these changes will have on apprentices as they train to obtain their registration?

**Question 27:** Do you support the proposed changes to the limits of work? Why or why not?

# **Transmission Line Mechanic**

**Question 28:** Do you support the proposed changes to the limits of work? Why or why not?

# **Traction Line Mechanic**

**Question 29:** Do you support the proposed changes to the limits of work? Why or why not?

### **Substation Maintainer**

**Question 30:** Do you support the proposed changes to the limits of work? Why or why not?

# **Cable Jointer**

**Question 31:** Do you support the proposed changes to the limits of work? Why or why not?

# Mains Parallel Generation Systems Endorsement

**Question 32:** Do you agree with the creation of the proposed Mains Parallel Generation Endorsement? Why or why not?

**Question 33:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

**Question 34:** What impacts do you think these changes will have on EWs as they progress in their career?

**Question 35:** Do you support the proposed registration criteria? Why or why not?

# **Mining Endorsement**

**Question 36:** Do you support the proposed changes to the limits of work? Why or why not?

**Question 37:** What impacts do you think these changes will have on EWs as they progress in their career?

**Question 38:** Do you support the proposed changes to the registration criteria? Why or why not?

# **Supervision Endorsement**

**Question 39:** Do you agree with the creation of the proposed Supervision Endorsement? Why or why not?

**Question 40:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

**Question 41:** What impacts do you think this endorsement will have on your business?

**Question 42:** Do you support the proposed registration criteria? Why or why not?

# Medical Cardiac Protected Electrical Area Endorsement

**Question 43:** Do you agree with the creation of the proposed Medical Cardiac Protected Electrical Area Endorsement? Why or why not?

**Question 44:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

**Question 45:** What impacts do you think this endorsement will have on your business?

**Question 46:** Do you support the proposed registration criteria for this endorsement? Why or why not?

#### **Hazardous Area Endorsement**

**Question 47:** Do you agree with the creation of the proposed Hazardous Area Endorsement? Why or why not?

**Question 48:** Do you agree with the proposed limits of work for this endorsement? Why or why not?

**Question 49:** What impacts do you think this endorsement will have on your business?

**Question 50:** Do you support the proposed registration criteria for this endorsement? Why or why not?

#### **ANNEX ONE: DRAFT GAZETTE NOTICE – FIT AND PROPER PERSON**

#### Electricity (Prescribed Requirements for Practising Licences and Competence Programmes) Notice 2021

This notice is issued by the Electrical Workers Registration Board (the Board) pursuant to section 85 of the Electricity Act 1992, after the approval of the Minister of Building and Construction under section 89 and prescribes requirements for holding a practising licence and competence programmes for applicants and holders of certain licences under the Act.

Issued at Wellington this XX day of XX 2021.

DUNCAN CONNOR, Registrar of the Electrical Workers Registration Board.

#### **Notice**

#### 1. Title

This notice is the Electricity (Prescribed Requirements for Practising Licences and Competence Programmes) Notice 2021.

#### 2. Commencement

This notice commences X months from the date in which it is notified in the New Zealand Gazette.

#### 3. Practising licence terms and conditions - all classes of licence

Applicants for all classes of practising licence (including renewal) must comply with the terms and conditions set out in Schedule 1 of this notice.

#### 4. Competence programme requirements – all classes of licence

Applicants for all classes of practising licence (including renewal) must comply with the requirements set out in Schedule 2 of this notice.

5. Competence programme requirements (electrical safety) – all licensed persons not involved in high voltage installation

All persons not involved in high voltage installation must comply with the requirements set out in Schedule 3A of this notice.

6. Competence programme requirements (electrical safety) – all licensed persons involved in high voltage installation

All persons involved in high voltage installation must comply with the requirements set out in Schedule 3B of this notice.

#### 7. Revocation

The preceding notice titled **Electricity (Prescribed Requirements for Competence Programmes) Notice 2019** number **2019-go1762** dated 17 April 2019 and associated corrigendum notice number **2019-go2704** dated 17 June 2019 are revoked.

### Schedule 1

### Competence programme requirements – all classes of licence

For each class of registration, the terms and conditions that apply to all practising licences prescribed by the Board under the *Electricity Act section 85(1)* 

Registration class	Terms and conditions subject to which a licence is issued
All classes of registration	All practising licences whose applications are received after the publication of this notice are issued subject to the condition that the applicant meets and continues to meet the Board approved fit and proper person policy for the duration of the licence.  Should the applicant become aware that they no longer meet the criteria for being a fit and proper person, they must immediately cease to practice as a licensed person and immediately notify the Board of this fact and provide information to satisfy the Board's subsequent inquiries, if any.  A person who continues to practice in breach of this condition to remain a fit and proper person will commit a disciplinary offence under section 143(c) and Part 11 of the Electricity Act 1992 upon determination of the Board. A person who breaches such a condition must be investigated and, if found guilty of a disciplinary offence by the Board, may face disciplinary sanctions.

### Schedule 2

# Competence programme requirements – all classes of licence

For each class of registration, the minimum standards for registration prescribed by the Board under the *Electricity Act section* 85(1)

Registration class	Competence programme requirement
All classes of registration	Applicants for all classes of practising licence (including the renewal of practising licences) must have completed a competence programme within a period of two years immediately before the date of each application.  Competence programme is made up of Board approved courses of instruction in:  a. electrical safety; and  b. basic first aid and cardio-pulmonary resuscitation.  Subject material for the electrical safety aspect of competence programmes is set out in Schedules 3A and 3B of this notice.  Subject material for the basic first aid and cardio-pulmonary resuscitation aspect of competence programmes is:
	<ul> <li>a. instruction in cardio-pulmonary resuscitation that is provided to a level that would meet the standards taught and assessed by New Zealand Resuscitation Council Emergency Care Instructors (ECI) or an equivalent; and</li> <li>b. instruction in first aid that is provided in accordance with material published by either the New Zealand Red Cross or St John New Zealand.</li> </ul>

#### Schedule 3A

### Competence programme requirements (electrical safety) – all licensed persons not involved in high voltage installation

For each class of registration not relating to high voltage installation work, the subject matter of a competence programme for a practising licence prescribed by the Board under the *Electricity Act section 85(1)* 

The following subject material must be included in the electrical safety aspect of the competence programme for the respective practising licence classes where any person applying for a practising licence is engaged either full time or part time on low voltage electrical installations designed and constructed to AS/NZS 3000 and on electrical appliances that are supplied from such installations.

Registration class	Competence programme requirement
Electrical	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>The installation, operation and testing of residual current devices (RCCB, RCBO, SRCD and PRCD)</li> <li>Prospective short circuit currents</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> <li>Inspection of electrical fittings installed by others</li> <li>An update on changes to regulations and/or standards</li> </ul>
Electrician	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>The installation, operation and testing of residual current devices (RCCB, RCBO, SRCD and PRCD)</li> <li>Prospective short circuit currents</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> <li>Inspection of electrical fittings installed by others</li> <li>An update on changes to regulations and/or standards</li> </ul>

Electrical	• Supervision
Engineer	Earthing requirements as listed in AS/NZS 3000
	<ul> <li>The installation, operation and testing of residual current devices (RCCB, RCBO, SRCD and PRCD)</li> </ul>
	Prospective short circuit currents
	<ul> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> </ul>
	Inspection of electrical fittings installed by others
	<ul> <li>An update on changes to regulations and/or standards</li> </ul>
	The appears of the agent to regard to the agent to the ag
Electrical Installer	• Supervision
mstaner	Earthing requirements as listed in AS/NZS 3000
	<ul> <li>The installation, operation and testing of residual current devices (RCCB, RCBO, SRCD and PRCD)</li> </ul>
	Prospective short circuit currents
	<ul> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> </ul>
	Inspection of electrical fittings installed by others
	An update on changes to regulations and/or standards
Electrical Service	• Supervision
Technician	Earthing requirements as listed in AS/NZS 3000
	<ul> <li>Operation and operational testing of residual current devices (RCCB, RCBO, SRCD and PRCD)</li> </ul>
	Prospective short circuit currents
	Testing requirements in accordance with AS/NZS 3000 and AS/NZS 3760
	An update on changes to regulations and/or standards
Electrical Appliance	Supervision
Serviceperson	Earthing requirements as listed in AS/NZS 3000
	The purpose, usage and operational testing of residual current devices
	Prospective short circuit currents
	Testing requirements in accordance with AS/NZS 3000 and AS/NZS 3760

	An update on changes to regulations and/or standards
Associated Tradesperson	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>The purpose and usage of residual current devices</li> <li>Prospective short circuit currents</li> <li>Testing requirements in accordance with AS/NZS 3000 and AS/NZS 3760</li> <li>An update on changes to regulations and/or standards</li> </ul>
Traction Line Mechanic	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> <li>An update on changes to regulations and/or standards</li> </ul>
Distribution Line Mechanic	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> <li>An update on changes to regulations and/or standards</li> </ul>
Substation Maintainer	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> <li>An update on changes to regulations and/or standards</li> </ul>
Cable Jointer	<ul> <li>Supervision</li> <li>Earthing requirements as listed in AS/NZS 3000</li> <li>Testing and certification as listed in AS/NZS 3000, AS/NZS 3760 and the Electricity (Safety) Regulations 2010</li> </ul>

	An update on changes to regulations and/or standards
Endorsed Mining Operations	<ul> <li>Supervision</li> <li>The requirements of AS/NZS 3007</li> <li>The safety principles that apply to mining</li> <li>The performance of safety functions required for mining activities and mining electrical equipment</li> <li>An update on changes to regulations and/or standards</li> </ul>
Endorsed Hazardous Areas	<ul> <li>Supervision</li> <li>The requirements of AS/NZS 60079.0, 60079.11, 60079.14, 60079.17, 60079.18, 60079.29.2, 60079.35.1</li> <li>The safety principles that apply to hazardous areas</li> <li>The performance of safety functions required for hazardous areas</li> <li>An update on changes to regulations and/or standards</li> </ul>
Endorsed Medical Cardiac Protected Areas	<ul> <li>Supervision</li> <li>The requirements of AS/NZS 3003, 2500</li> <li>The safety principles that apply to medical cardiac protected areas</li> <li>The performance of safety functions required for medical cardiac protected areas</li> <li>An update on changes to regulations and/or standards</li> </ul>
Endorsed Supervision	<ul> <li>The principles that apply to supervising other workers</li> <li>The Board's published policies and guidelines on supervision practices</li> <li>Risk management considerations</li> <li>Site or job management functions to ensure safe working practices for people operating under supervision</li> <li>An update on changes to regulations and/or standards</li> </ul>
Endorsed Mains Parallel Generation Systems	<ul> <li>Supervision</li> <li>The requirements of AS/NZS 3000 and AS/NZS 4777.1</li> <li>The safety principles that apply to mains parallel generation systems</li> </ul>

•	The performance of safety functions required for mains parallel generation systems
•	An update on changes to regulations and/or standards

#### Schedule 3B

### Competence programme requirements (electrical safety) – all licensed persons involved in high voltage installation

For each class of registration relating to high voltage installation work, the subject matter of a competence programme for a practising licence prescribed by the Board under the *Electricity Act section 85 (1)* 

The following subject material must be included in the electrical safety aspect of the competence programme for the respective practising licence classes where any person applying for a practising licence is engaged either full or part time on works or high voltage electrical installations or on high voltage plant and equipment supplied from works or such installations:

Registration class	Competence programme requirement
Electrical	<ul> <li>Supervision</li> <li>Prospective short circuit currents</li> <li>Electrical safe distances and their application as listed in NZECP 34</li> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> <li>The installation, operation and testing of electrical protection equipment, including current and voltage transformers</li> <li>Testing and certification as listed in the Electricity (Safety) Regulations 2010</li> <li>Inspection of electrical fittings installed by others</li> <li>An update on changes to regulations and/or standards</li> </ul>
Electrician	<ul> <li>Supervision</li> <li>Prospective short circuit currents</li> <li>Electrical safe distances and their application as listed in NZECP 34</li> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> <li>The installation, operation and testing of electrical protection equipment, including current and voltage transformers</li> <li>Testing and certification as listed in the Electricity (Safety) Regulations 2010</li> <li>An update on changes to regulations and/or standards</li> </ul>

Electrical	Supervision
Engineer	Prospective short circuit currents
	Electrical safe distances and their application as listed in NZECP 34
	<ul> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> </ul>
	<ul> <li>The installation, operation and testing of electrical protection equipment, including current and voltage transformers</li> </ul>
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards
Electrical	Supervision
Installer	Prospective short circuit currents
	Electrical safe distances and their application as listed in NZECP 34
	<ul> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> </ul>
	<ul> <li>The installation, operation and testing of electrical protection equipment, including current and voltage transformers</li> </ul>
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards
Electrical	Supervision
Service Technician	Prospective short circuit currents
	Electrical safe distances and their application as listed in NZECP 34
	<ul> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> </ul>
	<ul> <li>The installation, operation and testing of electrical protection equipment, including current and voltage transformers</li> </ul>
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards

Transmission	Supervision
Line Mechanic	Coper rolls.
	Electrical safe distances and their application as listed in NZECP 34
	Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the
	use of bonding and equipotential zones to comply with regulation 8 of those regulations
	<ul> <li>Testing and certification as listed in the Electricity (Safety) Regulations 2010.</li> </ul>
	An update on changes to regulations and/or standards
	All update on changes to regulations and/or standards
Traction Line	• Supervision
Mechanic	Electrical safe distances and their application as listed in NZECP 34
	Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the
	use of bonding and equipotential zones to comply with regulation 8 of those regulations
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards
Distribution	Supervision
Line Mechanic	Electrical safe distances and their application as listed in NZECP 34
	Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the
	use of bonding and equipotential zones to comply with regulation 8 of those regulations
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards
Substation	Supervision
Maintainer	Electrical safe distances and their application as listed in NZECP 34
	Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the
	use of bonding and equipotential zones to comply with regulation 8 of those
	regulations
	Testing and certification as listed in the Electricity (Safety) Regulations 2010
	An update on changes to regulations and/or standards
Cable Jointer	Supervision
	Electrical safe distances and their application as listed in NZECP 34

	<ul> <li>Earthing requirements as listed in the Electricity (Safety) Regulations 2010 and the use of bonding and equipotential zones to comply with regulation 8 of those regulations</li> <li>Testing and certification as listed in the Electricity (Safety) Regulations 2010</li> <li>An update on changes to regulations and/or standards</li> </ul>
Endorsed Supervision	<ul> <li>The principles that apply to supervising other workers</li> <li>The Board's published policies and guidelines on supervision practices</li> <li>Risk management considerations</li> <li>Site or job management functions to ensure safe working practices for people operating under supervision</li> <li>An update on changes to regulations and/or standards</li> </ul>

#### **Explanatory Note**

This note is for explanatory purposes only.

The Electrical Workers Registration Board ("Board") has responsibility for the registration and licensing of electrical workers. Concurrent with the publication of this notice the Board published a notice prescribing the classes of registration for electrical workers including limits of work in respect of each class and minimum standards for registration ("Electricity (Prescribed Classes of Registration for Electrical Workers) Notice 2021"). That Notice changes some of the existing classes of registration and removes some classes of registration.

To align with those changes it is necessary that the requirements relating to the completion of competence programmes be amended. This Gazette Notice does not change the competence programme requirements. It only establishes the competence programme requirements for the new or changed classes of registration. These changes take effect immediately on publication of this notice.

This Notice also sets out terms and conditions to which practising licences are issued for all classes of registration. Specifically, this notice identifies that practising licences are issued subject to a condition that the holder of that licence continues to remain a fit and proper person according to the Board's policy, and that where that person is or may be no longer a fit and proper person, that they notify the Board immediately. This change applies to any practising licence applied for following the publication of this notice.

# **ANNEX TWO: DRAFT GAZETTE NOTICE - REGISTRATION REQUIREMENTS**

Electricity (Prescribed Classes of Registration for Electrical Workers) Notice 2021

This notice is issued by the Electrical Workers Registration Board (the Board) pursuant to sections 84, 85 and 86 of the Electricity Act 1992, after the approval of the Minister of Building and Construction under section 89 and prescribes classes of registration, prescribes electrical work that each class of registration is authorised to do and minimum standards for registration for each class of registration.

Issued at Wellington this XX day of XXXX 2021.

DUNCAN CONNOR, Registrar of the Electrical Workers Registration Board.

#### Notice

#### 1. Title

This notice is the Electricity (Prescribed Classes of Registration for Electrical Workers) Notice 2021.

#### 2. Commencement

This notice commences XX months from the date in which it is notified in the New Zealand Gazette.

#### 3. Interpretation

Terms used have the same meanings as those defined in either section 2 of the Electricity Act 1992, regulation 4 of the Electricity (Safety) Regulations 2010, or section 5 of the Electricity Industry Act 2010, unless the context requires otherwise.

**Definitions or acronyms not provided in** the Electricity Act 1992, Electricity (Safety) Regulations 2010, or Electricity Industry Act 2010.

PEW – means Prescribed Electrical Work as defined by the Electricity Act 1992 and the Electricity (Safety) Regulations 2010

ESR – means the Electricity (Safety) Regulations 2010

**Authorised** – means in relation to a person; one that holds a current practising licence issued by the Electrical Workers Registration Board that sets out the terms and conditions approving the holder to carry out that PEW.

**Restoration of supply** – means all PEW necessary to allow the safe reinstatement of a supply to an installation following a loss of supply due to a fault situation. This includes any work inside the MEN board on the consumers mains, including the fittings, but does not extend to sub-circuits and their protective devices. Sub-circuits may be isolated to allow for the safe restoration of supply.

Facilitate – means to assist or enable or allow a person to do something, to achieve a particular result

**Assess or assessment** – means the application of correct practices and procedures to evaluate and determine the safety and compliance of something against the essential standards, principles and practices necessary to achieve an accurate conclusion.

**Medical cardiac protected area** – means a patient treatment area that is classified as a cardiac-protected electrical area in accordance with the requirements of AS/NZS 3003

**Competent or competence** – means person is competent when they can demonstrate at any time they have the necessary knowledge, skills, experience, training and qualification to carry out the work safely and in compliance with the legislation and work standards applied by the industry.

**Traction** – means an electric traction system comprising of a network of conductors supplying electrical energy which is used for the propulsion of a vehicle that is required to be in continual contact with traction system in order to operate.

### 4. Classes of registration

The classes of registration are those set out in Schedule 1 of this notice.

#### 5. Prescribed electrical work

The prescribed electrical work that each class of registration is authorised to do or assist in doing when holding a practising licence is set out Schedule 2 of this notice.

#### 6. Minimum standards for registration

The minimum standards for each class of registration are those set out in Schedule 3 of this notice.

#### 7. Revocation

The preceding notice titled **Electricity (Prescribed Classes of Registration for Electrical Workers) Notice 2019** number **2019-go1760** dated 17 April 2019 and associated corrigendum notice number **2019-go2627** dated 17 June 2019 are revoked.

#### Schedule 1

Classes of registration designated by the Board under the *Electricity Act 1992, section 84 (1)(a)* 

Class of registration
Electrical Inspector
Electrician
Electrical Engineer
Electrical Installer
Electrical Service Technician
Electrical Appliance Serviceperson
Associated Tradesperson
Transmission Line Mechanic
Traction Line Mechanic
Distribution Line Mechanic
Substation Maintainer
Cable Jointer
Endorsed Mining Operations*
Endorsed Hazardous Areas *
Endorsed Medical Cardiac Protected Areas *
Endorsed Supervision *
Endorsed Mains Parallel Generation Systems *

<sup>\*</sup> These classes of registration include a requirement for a person to hold, and continue to hold, an appropriate pre-requisite class of registration.

Schedule 2
For each class of registration, the Prescribed Electrical Work specified by the Board under the *Electricity Act 1992, section 84(1)(b)* 

Class of registration	Limits of work
Electrical Inspector	(1) Electrical Inspector is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out PEW on installations, works and appliances
	b. carrying out inspection and assessment of any PEW
	(2) Electrical Inspector is not permitted to:
	a. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system unless they are authorised by the appropriate endorsement
	b. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	c. supervise a person to carry out an inspection of PEW
	d. carry out PEW outside of their competence
Electrician	(1) Electrician is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out PEW on installations, works and appliances
	(2) Electrician is not permitted to:
	a. inspect PEW
	b. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or
	mains parallel generation system unless they are authorised by the appropriate endorsement
	c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	d. carry out PEW outside of their competence
Electrical Engineer	(1) Electrical Engineer is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out PEW on installations, works and appliances
	(2) Electrical Engineer is not permitted to:
	a. inspect PEW
	<ul> <li>carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system unless they are authorised by the appropriate endorsement</li> </ul>
	c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	d. carry out PEW outside of their competence
	a. carry cuts an entire compacting
Electrical Installer	(1) Electrical Installer is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out general and low-risk PEW on installations excluding maintenance of any work included
	in regulation 6A(2) of the ESR
	b. carrying out any PEW on works
	c. carrying out any PEW on appliances
	(2) Electrical Installer is not permitted to:
	a. carry out any high-risk PEW
	b. inspect PEW
	c. carry out PEW in a hazardous area or medical cardiac protected electrical area unless they are
	authorised by the appropriate endorsement
	d. carry out PEW in a mining operation or mains parallel generation system
	e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement

Class of registration	Limits of work
	f. carry out PEW outside of their competence
Electrical Service Technician	(1) Electrical Service Technician is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out low-risk PEW on installations excluding:
	i. replacement of conductors in installations
	ii. any work on a switchboard
	iii. maintenance of any work included in regulation 6A(2) of the ESR
	b. carrying out the maintenance of fittings in works excluding:
	i. replacement of electric lines in works
	c. carrying out any PEW on appliances
	(2) Electrical Service Technician is not permitted to:
	a. carry out general or high-risk PEW on any installations
	b. inspect PEW
	<ul> <li>c. carry out PEW in a hazardous area or medical cardiac protected electrical area unless they are authorised by the appropriate endorsement</li> </ul>
	d. carry out PEW in a mining operation or mains parallel generation system
	e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	f. carry out PEW outside of their competence
Electrical Appliance Serviceperson	(1) Electrical Appliance Serviceperson is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out maintenance work on an appliance
	<ul> <li>carrying out the disconnection or reconnection of fittings to or from a power supply, provided that the electrical rating is not greater than 250 volts and the work is required for the maintenance of an appliance</li> </ul>
	c. carrying out the testing and certification of work identified under b, provided that is their own work
	(2) Electrical Appliance Serviceperson is not permitted to:
	a. carry out any PEW on installations and works
	b. inspect PEW
	c. carry out PEW in a medical cardiac protected electrical area unless they are authorised by the appropriate endorsement
	d. carry out PEW in a mining operation, hazardous area or mains parallel generation system
	e. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	f. carry out PEW outside of their competence
Associated Tradesperson	(1) Associated Tradesperson is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and appliances:
	a. the maintenance of appliances, associated with their trade provided that the electrical rating is not greater than 250 volts and 16 amperes and the work is required for the maintenance of an appliance
	<ul> <li>the disconnection or reconnection of fittings to or from a power supply provided the work is required to facilitate the work associated with their trade</li> </ul>
	(2) Associated Tradesperson is not permitted to:
	a. carry out any high-risk or general PEW
	b. carry out any PEW on works
	c. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system

Class of registration	Limits of work
	d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement e. carry out PEW outside of their competence
Transmission Line Mechanic	(1) Transmission Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and works:
	a. carrying out any PEW but only in relation to fittings and lines used in transmission
	(2) Transmission Line Mechanic is not permitted to:
	a. inspect PEW
	b. carry out any PEW on appliances
	c. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
	d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	e. carry out PEW outside of their competence
Traction Line Mechanic	(1) Traction Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
	a. carrying out any PEW but only in relation to electric lines that form part of traction infrastructure
	(2) Traction Line Mechanic is not permitted to:
	a. inspect PEW
	b. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
	c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	d. carry out PEW outside of their competence
Distribution Line Mechanic	(1) Distribution Line Mechanic is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
	<ul> <li>carrying out any PEW but only in relation to conductors used as electric lines that are part of distribution infrastructure up to and including 110kV</li> </ul>
	b. carrying out any PEW for the restoration of supply
	(2) Distribution Line Mechanic is not permitted to:
	a. inspect PEW
	b. carry out any PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
	c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	d. carry out PEW outside of their competence
Substation Maintainer	(1) Substation Maintainer is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations, works and appliances:
	a. carrying out any PEW but only in relation to PEW within an substation that is associated with the core operating functions
	(2) Substation Maintainer is not permitted to:
	a. inspect PEW
	b. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system

Class of registration	Limits of work
	c. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement
	d. carry out PEW outside of their competence
Cable Jointer	(1) Cable Jointer is limited, within any limitations, terms or conditions set by the Board, to doing the following on installations and works:
	<ul> <li>carrying out any PEW but only in relation to the maintenance and joining of cables and work associated with the connection and disconnection and fittings of those cables</li> </ul>
	(2) Cable Jointer is not permitted to:
	a. inspect PEW
	b. carry out PEW on appliances
	c. carry out PEW in a mining operation, hazardous area, medical cardiac protected electrical area or mains parallel generation system
	<ul><li>d. supervise a person to carry out PEW unless they are authorised by the appropriate endorsement</li><li>e. carry out PEW outside of their competence</li></ul>
Endorsed Mining Operations	(1) A person holding a Mining Endorsement is limited, within any limitations, terms or conditions set by the Board, to:
	a. carrying out all PEW in a mining operation in accordance with the limits of any class of registration that they may hold which is specified in (2)
	(2) The classes of registration for the purpose of (1)a are:
	a. Electrical Inspector
	b. Electrician
	c. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician)
	(3) A Mining Endorsement does not permit a person to:
	<ul><li>a. inspect PEW</li><li>b. carry out PEW outside of their competence</li></ul>
Endorsed Hazardous Areas	(1) A person holding a Hazardous Area Endorsement is limited, within any limitations, terms or conditions set by the Board, to:
	<ul> <li>carrying out all PEW in a hazardous area in accordance with the limits of any class of registration that they may hold which is specified in (2)</li> </ul>
	(2) The classes of registration for the purpose of (1)a are:
	a. Electrical Inspector
	b. Electrician
	c. Electrical Engineer
	d. Electrical Installer
	e. Electrical Service Technician
	(3) A Hazardous Area Endorsement does not permit a person to:
	<ul><li>a. inspect PEW</li><li>b. carry out PEW outside of their competence</li></ul>
Endorsed Medical Cardiac	(1) A person holding a Medical Cardiac Protected Area Endorsement is limited, within any limitations,
Protected Areas	terms or conditions set by the Board, to:

Class of registration	Limits of work
	a. carrying out all PEW in a medical cardiac-protected electrical area in accordance with the limits of any class of registration that they may hold which is specified in (2)
	(2) The classes of registration for the purpose of (1)a are:
	a. Electrical Inspector
	b. Electrician
	c. Electrical Engineer
	d. Electrical Installer
	e. Electrical Service Technician
	f. Electrical Appliance Serviceperson
	(3) A Medical Cardiac Protected Area Endorsement does not permit a person to:
	a. inspect PEW
	b. carry out PEW outside of their competence
Endorsed Supervision	(1) A person holding a Supervision Endorsement is limited, within any limitations, terms or conditions set by the Board, to:
	<ul> <li>a. supervising a Board-authorised person to carry out PEW in an area in which the supervisor is authorised and competent</li> </ul>
	(2) A Supervision Endorsement does not permit a person to:
	a. inspect PEW
	b. supervise the carrying out of PEW outside of their competence
Endorsed Mains Parallel Generation Systems	(1) A person holding a Mains Parallel Generation Systems Endorsement is limited, within any limitations, terms or conditions set by the Board, to:
	<ul> <li>a. carrying out PEW on a mains parallel generation system in accordance with the limits of any class of registration that they may hold which is specified in (2)</li> </ul>
	(2) The classes of registration for the purpose of (1)a are:
	a. Electrical Inspector
	b. Electrician
	c. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician)
	(3) A Mains Parallel Generation Systems Endorsement does not permit a person to:
	a. inspect PEW
	b. carry out PEW outside of their competence

## Schedule 3

For each class of registration, the minimum standards for registration prescribed by the Board under the Electricity Act section 85(1)

Class of registration	Minimum standards for registration
All classes of registration	Every person seeking registration in any Class of Registration is required, as a prerequisite, to have satisfactorily completed instruction in safe working practices, testing, basic first aid, and cardio-pulmonary resuscitation as approved by the Board.

Class of registration	Minimum standards for registration
	A person may concurrently hold registration in more than one class of registration.
Electrical Inspector	<ol> <li>Those seeking registration as an Electrical Inspector must have:         <ol> <li>passed a Board-approved Electrical Inspector written examination;</li> <li>passed a Board-approved Electrical Inspector practical examination;</li> <li>completed not less than three years practical experience in carrying out PEW that is satisfactory to the Board;</li> <li>and either:</li></ol></li></ol>
Electrician	<ol> <li>Those seeking registration as an Electrician must have:         <ol> <li>passed a Board-approved Electrician theoretical written examination;</li> <li>passed a Board-approved Electrician regulatory written examination;</li> <li>passed a Board-approved Electrician practical examination;</li> <li>completed four years practical training and experience in carrying out PEW that is satisfactory to the Board; and</li> <li>held an Electrical Installer class of registration for a period not less than one year.</li> </ol> </li> <li>or, in place of (1) to (5) inclusive:         <ol> <li>completed a Board-approved Electrician competency based training programme.</li> </ol> </li> </ol>
Electrical Engineer	<ol> <li>Those seeking registration as an Electrical Engineer:         <ol> <li>are either a Qualified Engineer or a Chartered Professional Engineer with the same or substantially similar practical experience as a Qualified Engineer under the Electricity Act 1992 as defined prior to 1 April 2010; or</li> </ol> </li> <li>must hold a Bachelor of Engineering (Electrical) qualification, Bachelor of Engineering Technology or a National Diploma in Engineering (Level 6); or</li> <li>must hold an equivalent electrical engineering qualification that is satisfactory to the Board;</li> <li>have passed a Board-approved Electrician regulatory written examination;</li> <li>have passed a Board-approved Electrician practical examination; and</li> <li>have completed not less than two years of practical experience in carrying out PEW that is satisfactory to the Board.</li> </ol>
Electrical Installer	Those seeking registration as an Electrical Installer must have:  1. passed a Board-approved Electrical Installer theoretical written examination;  2. passed a Board-approved Electrical Installer regulatory written examination;  3. passed a Board-approved Electrical Installer practical examination;  4. completed three years practical training/experience in carrying out PEW that is satisfactory to the Board; and  5. held an Electrical Service Technician class of registration for a period not less than 1 year.  or, in place of (1) to (5) inclusive:  6. completed a Board-approved Electrical Installer competency based training programme.

Class of registration	Minimum standards for registration
Electrical Service	Those seeking registration as an Electrical Service Technician must have:
Technician	<ol> <li>passed a Board-approved Electrical Service Technician written theoretical examination;</li> </ol>
	<ol> <li>passed a Board-approved Electrical Service Technician practical examination;</li> </ol>
	3. completed 2 years practical training/experience in the PEW of an Electrical Service Technician that is satisfactory to the Board provided that the 2 years practical training/experience includes at least six months of training/experience on multi-phase appliances or fittings; or, in place of (1) to (3) inclusive:
	4. completed a Board-approved Electrical Service Technician competency based training programme.
Electrical Appliance	Those seeking registration as an Electrical Appliance Serviceperson must have:
Serviceperson	1. passed a Board-approved Electrical Appliance Serviceperson written theoretical examination;
	<ol> <li>passed a Board-approved Electrical Appliance Serviceperson practical examination;</li> </ol>
	<ol> <li>completed 18 months practical training/experience in carrying out PEW that is satisfactory to the Board;</li> </ol>
	or, in place of (1) to (3) inclusive:
	4. completed a Board-approved Electrical Appliance Serviceperson competency based training programme.
Associated	Those seeking registration as an Associated Tradesperson must have:
Tradesperson	<ol> <li>either:</li> <li>a. registered and licensed as a plumber or a gasfitter or a plumber/gasfitter by the Plumbers,</li> <li>Gasfitters, and Drainlayers Board; or</li> </ol>
	b. licensed as a Licensed Building Practitioner by the Licensed Building Practitioner scheme; and
	passed a Board approved Associated Tradesperson written theoretical examination; and
	passed a Board approved Associated Tradesperson practical examination.
Transmission Line	Those seeking registration as a Transmission Line Mechanic must have:
Mechanic	1. passed a Board-approved Transmission Line Mechanic examination; and
	<ol><li>completed two years' experience in the work of a transmission line mechanic that is satisfactory to the Board;</li></ol>
	or, in place of 1 and 2 above:
	3. completed a Board-approved Transmission Line Mechanic competency based training programme.
Traction Line	Those seeking registration as a Traction Line Mechanic must have:
Mechanic	1. passed a Board-approved Traction Line Mechanic examination; and
	2. completed two years' experience in the work of a Traction Line Mechanic that is satisfactory to the Board;
	or, in place of 1 and 2 above:  3. completed a Board-approved Traction Line Mechanic competency based training programme.
Distribution Line	Those seeking registration as a Distribution Line Mechanic must have:
Mechanic	1. passed a Board-approved Distribution Line Mechanic examination; and
	2. completed two years' experience in the work of a distribution line mechanic that is satisfactory to the Board
	or, in place of 1 and 2 above:  3. completed a Board-approved Distribution Line Mechanic competency based training programme.
Substation	Those seeking registration as a Substation Maintainer must have:
Maintainer	passed a Board-approved Substation Maintainer examination; and
	2. completed three years' experience in the work of a Substation Maintainer that is satisfactory to the Board; or, in place of 1 and 2 above:

Class of registration	Minimum standards for registration
	completed a Board-approved Substation Maintainer competency based training programme.
Cable Jointer	Those seeking registration as a Cable Jointer must have:  1. passed a Board-approved Cable Jointer examination; and 2. completed two years' experience in the work of a Cable Jointer that is satisfactory to the Board; or, in place of 1 and 2 above: 3. completed a Board-approved Cable Jointer competency based training programme.
Endorsed Mining Operations	Those seeking an endorsement registration class for Mining Operations must have:  1. held one of the following classes of registration for a period of not less than 2 years:  a. Electrical inspector; or  b. Electrician; or  c. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician); and  2. completed not less than one year of practical experience in a mining operation or substantially similar practical experience satisfactory to the Board; and  3. adequate knowledge, training, skills, and experience satisfactory to the Board of:  a. the control of earth potential rise; and  b. the use of relocatable mining electrical equipment; and  c. the performance of safety functions required for mining activities and mining electrical equipment; and  d. risk management.
Endorsed Hazardous Areas	Those seeking an endorsement registration class for Hazardous Areas must have:  a. held one of the following classes of registration for a period of not less than 2 years:  i. Electrical Inspector; or  ii. Electrical Engineer; or  iv. Electrical Installer; or  v. Electrical Service Technician; and  b. completed not less than one year of practical experience in a hazardous area or substantially similar practical experience satisfactory to the Board; and  c. adequate knowledge, training, skills, and experience satisfactory to the Board of:  i. the control of the types and degree of explosion hazards; and  ii. the use of explosive-protection techniques; and  iii. the performance of safety functions are required for hazardous areas and explosion-protected electrical equipment; and  iv. risk management including safety assessment requirements.
Endorsed Medical Cardiac Protected Areas	Those seeking an endorsement registration class for Medical Cardiac Protected Area must have:  a. held one of the following classes of registration for a period of not less than 2 years:  i. Electrical Inspector; or  ii. Electrical; or  iii. Electrical Engineer; or  iv. Electrical Installer; or  v. Electrical Service Technician; or  vi. Electrical Appliance Serviceperson; and  b. completed not less than one year of practical experience in a medical cardiac protected area or substantially similar practical experience satisfactory to the Board; and  c. adequate knowledge, training, skills, and experience satisfactory to the Board of:

Class of registration	Minimum standards for registration	
	i. the control of micro and macro shock hazards; and	
	ii. the use of equipotential earthing protection; and	
	iii. the performance of safety functions required for cardiac and body protected areas and medical equipment; and	
	iv. risk management and inspection.	
Endorsed	Those seeking an endorsement registration class for Supervision must have:	
Supervision	a. held a particular class of registration for a period of not less than 2 years; and	
	b. adequate knowledge, training, skills, and experience satisfactory to the Board of:	
	i. the control of electrical hazards; and	
	ii. the use of the Boards supervision policy and guides; and	
	iii. the performance of safe and compliant supervision functions in the workplace; and	
	iv. risk management.	
Endorsed Mains	Those seeking an endorsement registration class for Mains Parallel Generation Systems must have:	
Parallel Generation	a. held one of the following classes of registration for a period of not less than 2 years:	
Systems	i. Electrical Inspector; or	
	ii. Electrician; or	
	iii. Electrical Engineer (where the Board specified limits of work are substantially equivalent to that of an Electrician); and	
	b. adequate knowledge, training, skills, and experience satisfactory to the Board of:	
	i. the appropriate, design, control, protection, wiring system equipment; and	
	<ul> <li>ii. installation requirements of energy systems including inverter systems for injection of electricity through an installation to a network; and</li> </ul>	
	iii. the performance of safety functions required for mains parallel generation systems; and	
	iv. risk management.	

#### **Explanatory Note**

This note is for explanatory purposes only.

The Electrical Workers Registration Board ("Board") has responsibility for the registration and licensing of electrical workers. This notice sets out the classes of registration, the prescribed electrical work those classes are authorised to carry out when holding a practising licence and the minimum standard to obtain a registration in a particular class.

Concurrent with the publication of this notice the Board published a notice that prescribes requirements for competence programmes for applicants and holders of certain licences under the Electricity Act 1992 ("Electricity (Prescribed Requirements for Practising Licences and Competence Programmes) Notice 2021").

#### **ANNEX THREE: CURRENT GAZETTE NOTICES**

# Prescribed Classes of Registration for Electrical Workers Including Limits of Work in Respect of Each Class and Requirements/Standards for Registration

The Electrical Workers Registration Board ("Board") has responsibility for the registration and licensing of electrical workers. The Gazette Notice titled "Prescribed Classes of Registration for Electrical Workers Including Requirements/Standards for Registration, and Limits of Work in Respect of Each Class", published in the

<u>New Zealand Gazette</u>, 1 April 2010, No. 39, page 1098, provided for the classes of registration for electrical workers, the requirements/standards for registration, and limits of work in respect of each class of registration. That notice is hereby revoked.

In accordance with sections 84, 85, and 86 of the Electricity Act 1992 ("Act"), the Board gives notice of the following:

- The classes of registration under section 84(1)(a) of the Act are those set out in Table One of this notice; the requirements/standards for registration under sections 85 and 86 of the Act in each of the classes of registration are those set out in Table Two of this notice;
- the types of prescribed electrical work each class of registration is authorised to do, or assist in doing (when licensed) under section 84(1)(b) of the Act are set out in Table Three of this notice; and
- The commencement of this notice is six months from the date this notice is gazetted.

#### **Definitions**

Terms used in this notice that are defined in either the Electricity Act 1992 or the Electricity (Safety) Regulations 2010 have the meanings provided in those legislative instruments.

**PEW** means prescribed electrical work as defined in the Electricity (Safety) Regulations 2010.

Qualified Engineer means a person who, by reason of qualifications in electrical engineering:

is registered under the Engineering Associates Act 1961 and was so registered immediately before 1 April 1993; or was registered under the Engineers Registration Act 1924 immediately before 1 April 1993 and was also so registered immediately before the end of the transitional period (as defined in section 4 of the Chartered Professional Engineers of New Zealand Act 2002).

Chartered Professional Engineer means a person entitled to that designation under the provisions of the Chartered Professional Engineers of New Zealand Act 2002.

#### Table One - Classes of Registration and Licence

Class of Registration Prior to this Notice	Class of Registration	
Electrical Inspector (Options 1, 2 and 3)	Electrical Inspector (Options 1 and 2) Electrical Inspector (Endorsed Mining)	
Electrician	Electrician	
	Electrician (Endorsed Mining)	
Electrical Engineer (Options 1, 2 and 3)	Electrical Engineer (Options 1 and 2)	
Electrical Installer	Electrical Installer (Options 1 and 2)	
Electrical Service Technician	Electrical Service Technician (with wider limits)	
Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect)	Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect)	
Electrical Appliance Serviceperson	Electrical Appliance Serviceperson	
Associated Tradesperson	Associated Tradesperson	

Class of Registration Prior to this Notice	Class of Registration

Line Mechanic	Transmission Line Mechanic Traction Line Mechanic Distribution Line
	Mechanic
	Distribution Line Mechanic (Endorsed)
	Substation Maintainer
Cable Jointer	Cable Jointer

#### Table Two - Requirements/Standards for Registration

Registration Class	Requirements/Standards for Registration
All classes of registration	Every person seeking registration in any class of registration is required, as a prerequisite, to have satisfactorily completed instruction in safe working practices, testing, basic first aid, and cardio-pulmonary resuscitation as approved by the Board.  A person may concurrently hold registration in more than one class of registration.
Electrical Inspector	Those seeking registration as an Electrical Inspector (Options 1 and 2) must fulfil all of the requirements of one of the following options:  Option 1:
	<ol> <li>passed a Board-approved Electrical Inspector written examination;</li> <li>passed a Board-approved Electrical Inspector practical examination or practical assessment;</li> <li>been registered as an Electrician for not less than three years; and completed not less than three years practical experience in carrying out PEW that is satisfactory to the Board; or</li> </ol>
	Option 2:
	<ol> <li>passed a Board-approved Electrical Inspector written examination;</li> <li>passed a Board-approved Electrical Inspector practical examination or practical assessment; and</li> <li>is either a Qualified Engineer or a Chartered Professional Engineer with the same or substantially similar practical experience as a Qualified Engineer under the Electricity Act 1992 as defined prior to 1 April 2010, and has completed not less than three years practical experience in carrying out PEW that is satisfactory to the Board.</li> </ol>

Registration Class	Requirements/Standards for Registration
Electrical Inspector (Endorsed Mining)	Those seeking registration as an Electrical Inspector (Endorsed Mining) must fulfil all of the requirements of one of the following options:  Deption 1:  a. been registered as an Electrical Inspector;  b. have completed not less than one year of practical experience in a Mining Operation or substantially similar practical experience satisfactory to the Board; and  c. have adequate knowledge, training, skills, and experience satisfactory to the Board of:  i. the control of earth potential rise;  ii. the use of relocatable mining electrical equipment;  iii. the performance of safety functions required for mining activities and mining electrical equipment; and iv. risk management.  Deption 2:  a. have passed a Board-approved Electrical Inspector written examination;  b. passed a Board-approved Electrical Inspector practical examination or practical assessment;  c. been registered as an Electrician for not less than three years and completed not less than three years of practical experience in a Mining Operation or substantially similar practical experience satisfactory to the Board and  d. have adequate knowledge, training, skills, and experience satisfactory to the Board of:  i. the control of earth potential rise;  ii. the use of relocatable mining electrical equipment;  iii. the performance of safety functions required for mining activities and mining electrical equipment; and iv. risk management.
Electrician	Those seeking registration as an Electrician must have:  a. passed a Board-approved Electrician theoretical written examination; b. passed a Board-approved Electrician regulatory written examination; c. passed a Board-approved Electrician practical examination or three stage practical assessments; and d. completed four years practical training and experience in carrying out PEW that is satisfactory to the Board;  pr, in place of (a)—(d) inclusive:  e. completed a Board-approved Electrician competency-based training programme.

Registration Class	Requirements/Standards for Registration
Electrician (Endorsed Mining)	Those seeking registration as an Electrician (Endorsed Mining) must have:
	a. passed a Board-approved Electrician written examination;
	b. passed a Board-approved Electrician regulatory written examination;
	c. passed a Board-approved Electrician practical examination or practical assessment;
	d. completed four years practical training and experience, of which not less than one year of practical experience is in a Mining Operation or substantially similar operation, that is satisfactory to the Board; and
	<ul> <li>e. have adequate knowledge, training, skills, and experience satisfactory to the Board of:</li> <li>i. the control of earth potential rise;</li> <li>ii. the use of relocatable mining electrical equipment;</li> </ul>
	iii. the performance of safety functions required for mining activities and mining electrical equipment; and iv. risk management;
	pr, in place of (a)–(e) inclusive:
	<ul> <li>f. completed a Board-approved Electrician competency-based training programme; and</li> <li>g. have adequate knowledge, training, skills, and experience satisfactory to the Board of:         <ol> <li>i. the control of earth potential rise; and</li> <li>ii. the use of relocatable mining electrical equipment;</li> <li>iii. the performance of safety functions required for mining activities and mining electrical equipment; and</li> </ol> </li> </ul>
	iv. risk management.

Electrical Engineer	Those seeking registration as an Electrical Engineer must fulfil all of the requirements of one of the following
	pptions:
	Option 1:
	a. is either a Qualified Engineer or a Chartered Professional Engineer with the same or substantially similar practical experience as a Qualified Engineer under the Electricity Act 1992 as defined prior to 1 April 2010; or
	Option 2:
	a. holds a Bachelor of Engineering (Electrical) qualification or a National Diploma in Engineering (Electrotechnology) (Level 6), or New Zealand Certificate in Engineering (Electrical); or
	b. an equivalent qualification as determined by either the Institution of Professional Engineers of New Zealand or the New Zealand Qualifications Authority;
	and, in addition to Option 1(a) or Option 2(a) or (b):
	c. passed a Board-approved Electrician regulatory written examination;
	d. passed a Board-approved Electrician practical examination or three stages of practical assessments; and e. completed not less than one year of practical experience in carrying out PEW that is satisfactory to the Board.
	e. Completed not less than one year of practical experience in earlying out ( Ew that is satisfactory to the Board.

Registration Class	Requirements/Standards for Registration
Electrical Installer	Those seeking registration as an Electrical Installer must fulfil all of the requirements of one of the following options:  Option 1:
	<ul><li>a. passed a Board-approved Electrical Installer theoretical written examination;</li><li>b. passed a Board-approved Electrician regulatory written examination;</li></ul>
	c. passed a Board-approved Electrician practical examination or three stage practical assessments; and d. completed two years practical training/experience in carrying out PEW that is satisfactory to the Board;
	pr, in place of (a)–(d) inclusive:
	e. completed an Electrical Installer competency-based training programme.
	Option 2:
	a. immediately prior to the promulgation of the Electricity (Safety) Regulations 2010 (i.e. 1 April 2010) was an Electrician (Limited).

Electrical Service	Those seeking registration as an Electrical Service Technician must have:
Technician (with wider limits)	<ul> <li>a. passed a Board-approved Electrical Service Technician written theoretical examination;</li> <li>b. passed a Board-approved Electrical Service practical examination or practical assessment; and</li> <li>c. completed 18 months practical training/experience in the PEW of an Electrical Service Technician that is satisfactory to the Board provided that the 18 months practical training/experience includes at least six months of training/experience on multi-phase appliances or fittings;</li> </ul>
	pr, in place of (a)–(c) inclusive:
	d. completed a Board-approved Electrical Service Technician competency-based training programme.
Electrical Appliance Serviceperson (Endorsed to	Those seeking registration as an Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect) must have:
Disconnect and Connect)	a. passed a Board-approved Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect) written theoretical examination;
	b. passed a Board-approved Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect) practical examination or practical assessments; and
	c. completed 18 months practical training/experience in carrying out PEW that is satisfactory to the Board;
	pr, in place of (a)–(c) inclusive:
	d. completed Board-approved Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect) NZQA competency-based training (if available).

Registration Class	Requirements/Standards for Registration
-1	
Electrical Appliance Serviceperson	Those seeking registration as an Electrical Appliance Serviceperson must have:
	<ul> <li>a. passed a Board-approved Electrical Appliance Serviceperson written theoretical examination;</li> <li>b. passed a Board-approved Electrical Appliance Serviceperson practical examination or practical assessment; and</li> <li>c. completed 18 months practical training/experience in carrying out PEW that is satisfactory to the Board;</li> </ul>
	pr, in place of (a)–(c) inclusive:
	d. completed a Board-approved Electrical Appliance Serviceperson NZQA competency-based training programme.

Associated	Those seeking registration as an Associated Tradesperson must have:
Tradesperson	<ul> <li>a. obtained registration from the Plumbers Gasfitters and Drainlayers Board as a plumber or a gasfitter or a plumber/gasfitter;</li> <li>b. passed a Board-approved Associated Tradesperson written theoretical examination(s); and</li> <li>c. passed a Board-approved Associated Tradesperson practical examination or practical assessment(s).</li> </ul>
Transmission Line Mechanic	Those seeking registration as a Transmission Line Mechanic must have:
Wicerianic	a. passed Board-approved pre-moderated capstone tests; and
	b. completed two years' experience in the work of a transmission line mechanic that is satisfactory to the Board;
	or, in place of (a) and (b):
	c. completed a Board-approved Transmission Line Mechanic competency-based training programme that incorporates the New Zealand Certificate in Electricity Supply in Transmission Line Maintenance (Level 4).
Traction Line	Those seeking registration as a Traction Line Mechanic must have:
Mechanic	a. passed Board-approved pre-moderated capstone tests; and
	b. completed two years' experience in the work of a Traction Line Mechanic that is satisfactory to the Board;
	or, in place of (a) and (b):
	c. completed a Board-approved Traction Line Mechanic competency-based training programme that incorporates a Traction Line Mechanic Qualification (Level 4).

Registration Class	Requirements/Standards for Registration
Distribution Line Mechanic	Those seeking registration as a Distribution Line Mechanic must have:  a. passed Board-approved pre-moderated capstone tests; and b. completed two years' experience in the work of a distribution line mechanic that is satisfactory to the Board; or, in place of (a) and (b): c. completed a Board-approved Distribution Line Mechanic competency-based training programme that incorporates the New Zealand Certificate in Electricity Supply Line Mechanic Distribution (Level 4).
Distribution Line Mechanic (Endorsed)	Those seeking registration as a Distribution Line Mechanic (endorsed) must have:  a. passed Board-approved pre-moderated capstone tests; and b. completed two years' experience in the work of a distribution line mechanic that is satisfactory to the Board;  or, in place of (a) and (b):  c. completed a Board-approved Distribution Line Mechanic competency-based training programme that incorporates the New Zealand Certificate in Electricity Supply Line Mechanic Distribution Level 4);  and, for (a) and (b) together or (c) alone:
Substation Maintainer	<ul> <li>d. completed a Board-approved Fault Response competency-based training programme that incorporates the New Zealand Certificate in Electricity Supply in Fault Response and switching (Level 4).</li> <li>Those seeking registration as a Substation Maintainer must have:         <ul> <li>a. passed Board-approved pre-moderated capstone tests; and</li> <li>b. completed three years' experience in the work of a Substation Maintainer that is satisfactory to the Board;</li> </ul> </li> </ul>
	or, in place of (a) and (b):  c. completed a Board-approved Substation Maintainer competency-based training programme that incorporates the New Zealand Certificate in Electricity Supply Substation Maintenance (Level 4).

Registration Class	s Requirements/Standards for Registration				
Cable Jointer	Those seeking registration as a Cable Jointer must have:				
	<ul><li>a. passed Board-approved pre-moderated capstone tests; and</li><li>b. completed two years' experience in the work of a Cable Jointer that is satisfactory to the Board;</li></ul>				
	or, in place of (a) and (b):				
	c. completed a Board-approved Cable Jointer competency-based training programme that incorporates either the National Certificate in Cable Jointing (Level 3) or the New Zealand Certificate in Electricity Supply (Cable Jointer High Voltage) (Level 4).				

## Table Three – Limits of Work by type of PEW

Legislative provision: Electricity (Safety) Regulations 2010	Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 1(a)	The installation, connection, or maintenance of conductors used in works or installations (excluding PEW in a Mining Operation).	<ul> <li>Electrical Inspector – Options 1 and 2</li> <li>Electrical Inspector (Endorsed Mining) – Options 1 and 2 Electrician</li> <li>Electrician (Endorsed Mining)</li> <li>Electrical Engineer – Option 1</li> </ul>
		Electrical Engineer – Option 2 in those areas only where their competency has been satisfactorily demonstrated to the Board
		Electrical Installer – Option 1 in those areas only where their competency has been satisfactorily demonstrated to the Board
		Electrical Installer – Option 2 provided that they do not receive any assistance from an unlicensed person
		<ul> <li>Transmission Line Mechanic but in relation only to conductors used as electric lines 66kV and above</li> </ul>
		Traction Line Mechanic but in relation only to conductors used as electric lines that form part of traction infrastructure
		Distribution Line Mechanic but in relation only to conductors
		<ul> <li>used as electric lines that are part of distribution infrastructure up to and including 110kV</li> </ul>
		<ul> <li>Distribution Line Mechanic (Endorsed) but in relation only to conductors used as electric lines that are part of distribution infrastructure up to and including 110kV, and to any type of PEW relating to the restoration of supply to an installation where their competency has been satisfactorily demonstrated to the Board</li> </ul>

Substation Maintainer but in relation only to PEW within a substation
Cable Jointer but in relation only to the joining of cables

Legislative provision Electricity (Safety) Regulations 2010	:Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 1(a)	The installation, connection, or maintenance of conductors used in works or installations in a Mining Operation.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and 2</li> <li>Electrician (Endorsed Mining)</li> </ul>
Schedule 1 Clause 1(b)	The installation, connection, or maintenance of fittings where the fittings are connected, or intended to be connected, to conductors used in works or installations (excluding PEW in a Mining Operation); and work done on installations, fittings, or appliances that are intended solely for connection to, or are associated solely with, electricity supplies not exceeding extra-low voltage and are in a hazardous or medical area.	<ul> <li>Electrical Inspector Options 1 and 2</li> <li>Electricial Inspector (Endorsed Mining) Options 1 and 2</li> <li>Electrician</li> <li>Electrician (Endorsed Mining)</li> <li>Electrical Engineer – Option 1</li> <li>Electrical Engineer – Option 2 in those areas only where their competency has been satisfactorily demonstrated to the Board</li> <li>Electrical Installer – Option 1 in those areas only where their competency has been satisfactorily demonstrated to the Board</li> <li>Electrical Installer – Option 2 provided that they do not receive any assistance from an unlicensed person and in relation only to hazardous areas where their competency has been satisfactorily demonstrated to the Board</li> <li>Electrical Service Technician</li> </ul>
		<ul> <li>Transmission Line Mechanic but in relation only to electric lines of 66kV and above, but not in relation to extra-low voltage in a hazardous or medical area</li> <li>Traction Line Mechanic but in relation only to fittings used with electric lines that form part of traction infrastructure but not in relation to extra-low voltage in a hazardous or medical area</li> <li>Distribution Line Mechanic but in relation only to fittings used with electric lines that are part of distribution infrastructure up to and including 110kV, and not in relation to extra-low voltage in a hazardous or medical area</li> </ul>
		Distribution Line Mechanic (Endorsed) but in relation only to fittings used with electric lines that are part of distribution infrastructure up to and including 110kV, and any type of PEW relating to the restoration of supply to an installation where their competency has been satisfactorily

		demonstrated to the Board, but not in relation to extra-low voltage in a hazardous or medical area
		Substation Maintainer but in relation only to fittings in a substation and not in relation to extra-low voltage in a hazardous or medical area
		Cable Jointer but in relation only to fittings of cables
		Limits of Work for Each Class of Licence
		Electrical Inspector (Endorsed Mining) Options 1 and 2  Electrician (Endorsed Mining)
l acidativa provision	Time of DENA	
Legislative provision Electricity (Safety) Regulations 2010	a ype of PEW	
Schedule 1 Clause 1(b)	The installation, connection, or maintenance of fittings where the fittings are connected, or intended to be connected, to conductors used in works or installations in a Mining Operation.	

Legislative provisior Electricity (Safety) Regulations 2010	n:Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 1(c)	The connection or disconnection of fittings to or from a power supply, other than by means of a plug or pin inserted into a socket, or an appliance connector inserted into an appliance inlet (excluding PEW in a Mining Operation).	<ul> <li>Electrical Inspector Options 1 and 2</li> <li>Electrical Inspector (Endorsed Mining) Options 1 and 2</li> <li>Electrician</li> <li>Electrician (Endorsed Mining)</li> <li>Electrical Engineer – Option 1</li> <li>Electrical Engineer – Option 2 in those areas only where their competency has been satisfactorily demonstrated to the Board</li> </ul>
		Electrical Installer – Option 1 in those areas only where their competency has been satisfactorily demonstrated to the Board
		<ul> <li>Electrical Installer – Option 2 provided that they do not receive any assistance from an unlicensed person</li> <li>Electrical Service Technician</li> </ul>
		<ul> <li>Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect) provided that the electrical rating is not greater than 250 volts</li> <li>Associated Tradesperson (all classes) provided that the electrical rating is not greater than 250 volts and 16 amperes but in relation only to their associated trade and in those areas only where their competency has been satisfactorily demonstrated to the Board</li> <li>Transmission Line Mechanic but in relation only to connections to or from electric lines 66kV or above</li> </ul>
		Traction Line Mechanic but in relation only to connections to or from electric lines that form part of traction infrastructure
		Distribution Line Mechanic (Endorsed) but in relation only to connections to or from electric lines that are part of distribution infrastructure up to and including 110kV and any type of PEW relating to the restoration of supply to an installation where their competency has been satisfactorily demonstrated to the Board
		<ul> <li>Substation Maintainer but in relation only to connections to or from substation fittings</li> <li>Cable Jointer but in relation only to connections of cables</li> </ul>

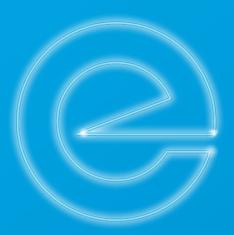
Legislative provision Electricity (Safety) Regulations 2010	:Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 1(c)	The connection or disconnection of fittings to or from a power supply, other than by means of a plug or pin inserted into a socket, or an appliance connector inserted into an appliance inlet in a Mining Operation.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and 2</li> <li>Electrician (Endorsed Mining)</li> </ul>
Schedule 1 Clause 1(d)	The maintenance of appliances (excluding PEW in a Mining Operation).	Electrical Inspector (Endorsed Mining) Options 1 and 2 Electrician     Electrician (Endorsed Mining) Electrical Engineer — Option 1     Electrical Engineer — Option 2 in those areas only where their competency has been satisfactorily demonstrated to the Board Electrical Installer — Option 1 in those areas only where their competency has been satisfactorily demonstrated to the Board Electrical Installer — Option 1 provided that they do not receive any assistance from an unlicensed person     Electrical Service Technician     Electrical Appliance Serviceperson (Endorsed to Disconnect and Connect)     Electrical Appliance Serviceperson provided that the electrical rating is not greater than 250 volts and are supplied by a plug and flexible cord     Traction Line Mechanic but in relation only to appliances connected directly to electric lines that form part of traction infrastructure  Distribution Line Mechanic but in relation only to appliances connected directly to electric lines that are part of distribution infrastructure up to and including 110kV  Distribution Line Mechanic (Endorsed) but in relation only to appliances connected directly to electric lines that are part of distribution infrastructure up to and including 110kV and any type of PEW relating to the restoration of supply to an installation where their competency has been satisfactorily demonstrated to the Board  Substation Maintainer but in relation only to substation appliances

Legislative provision Electricity (Safety) Regulations 2010	n:Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 1(d)	The maintenance of appliances in a Mining Operation.	Electrical Inspector (Endorsed Mining) Options 1 and 2 Electrician     (Endorsed Mining)
Schedule 1 Clause 1(e)	The testing of work described in Schedule 1 clause 1(a)—1(d) excluding PEW in a Mining Operation that:  i. is not work described in Schedule 1 clause (2)(a)—(c); ii. is required by these regulations; and iii. is carried out for the purpose of compliance with the Electricity (Safety) Regulations.	<ul> <li>Electrical Inspector (Options 1 and 2) in respect of the PEW of other authorised persons</li> <li>All classes of licence provided that they are authorised to carry out the type of PEW and it is their own PEW they are testing Distribution Line Mechanic and Distribution Line Mechanic (Endorsed) may also test at the point where polarity to the installation can be confirmed</li> </ul>
Schedule 1 Clause 1(e)	The testing of work described in Schedule 1 clause 1(a)–1(d) in a Mining Operation that:  i. is not work described in Schedule 1 clause (2)(a)–(c); ii. is required by these regulations; and iii. is carried out for the purpose of compliance with the Electricity (Safety) Regulations.	Electrical Inspector (Endorsed Mining) Options 1 and 2 Electrician (Endorsed Mining)
Schedule 1 Clause 1(f)	The certification of work described in Schedule 1 clause (1)(a)–(1)(d) excluding PEW in a Mining Operation.	All classes of licence provided that they are authorised to carry out the type of PEW
Schedule 1 Clause 1(f)	The certification of work described in Schedule 1 clause (1)(a)–(1)(d) in a Mining Operation.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and</li> <li>Electrician (Endorsed Mining)</li> </ul>

Legislative provision Electricity (Safety) Regulations 2010	Type of PEW	Limits of	Work for Each Class of Licence
Schedule 1 Clause 1(g)	The inspection (and assessment under regulation 75 of the Electricity (Safety) Regulations 2010) of work described in Schedule 1 clause 1(a)—1(d) excluding PEW in a Mining Operation that:  i. is not work described in 2(a)—(c); ii. is required by the Electricity (Safety) Regulations; and iii. is carried out for the purpose of compliance with the Electricity (Safety) Regulations.	•	Electrical Inspector Options 1 and 2 Electrical Inspector (Endorsed Mining) Options 1 and 2
Schedule 1 Clause 1(g)	The inspection (and assessment under regulation 75 of the Electricity (Safety) Regulations 2010) of work described in Schedule 1 clause 1(a)–1(d) in a Mining Operation that:  i. is not work described in 2(a)–(c); ii. is required by the Electricity (Safety) Regulations; and iii. is carried out for the purpose of compliance with the Electricity (Safety) Regulations.	•	Electrical Inspector (Endorsed Mining) Options 1 and 2
Schedule 1 Clause 1(h)	The supervision of any work described in Schedule 1 clause 1(a)–1(d) excluding PEW in a Mining Operation.	•	All classes of licence provided that they are authorised to carry out the type of PEW

Schedule 1 Clause  (1)(h)  The supervision of any work described in Schedule 1 clause  1(a)–1(d) in a Mining Operation.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and 2 Electrician (Endorsed Mining)</li> </ul>
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Legislative provision: Electricity (Safety) Regulations 2010	Type of PEW	Limits of Work for Each Class of Licence
Schedule 1 Clause 2(a)	Work done on bolted couplers and restrained couplers used or installed in a Mining Operation.	Electrical Inspector (Endorsed Mining) Options 1 and 2 Electrician     (Endorsed Mining)
Schedule 1 Clause 2(b)	Work done on installations, fittings, or appliances in an ERZO or ERZ1.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and 2 including inspection</li> <li>Electrician (Endorsed Mining)</li> </ul>
Schedule 1 Clause 2(c)	The connection, reconnection, or disconnection of bolted couplers and restrained couplers used or installed in a Mining Operation.	<ul> <li>Electrical Inspector (Endorsed Mining) Options 1 and</li> <li>Electrician (Endorsed Mining)</li> </ul>



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