



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI



Electrical workers stepped framework consultation

Summary of submissions

Contents

Introduction	5
Submissions.....	5
Findings	6
Overall themes	6
Submissions in support of proposals	6
Submissions expressing some reluctance or hesitance to proposals	7
Submissions not in support of proposals	7
Responses to questions.....	10
General questions	10
Timing.....	11
Fit and proper person proposal	11
Registration Class Proposals.....	12
Electrical Appliance Serviceperson	13
Limits of work.....	13
Apprentice impact.....	14
Registration requirements	14
Electrical Service Technician	14
Limits of work.....	14
Apprentice impact.....	15
Registration requirements	15
Electrical Installer	16
Limits of work.....	16
Apprentice impact.....	16
Registration requirements	17
Electrical Engineer.....	17
Limits of work.....	17
Registration requirements	18
Electrician.....	19
Limits of work.....	19
Apprentice impact.....	19
Registration requirements	20
Electrical Inspector.....	20
Limits of work.....	20
Registration requirements	21
Associated Tradesperson	21
Limits of work.....	21

Registration requirements	22
Distribution Line Mechanic	22
Limits of work.....	23
Apprentice impact.....	23
Registration requirements	24
Transmission Line Mechanic	24
Limits of work.....	24
Traction Line Mechanic	25
Limits of work.....	25
Substation Maintainer.....	25
Limits of work.....	25
Cable Jointer.....	25
Limits of work.....	25
Endorsements	26
New Endorsements	26
Mains Parallel Generation Systems Endorsement	26
Limits of work.....	27
Impact of proposed changes	27
Registration requirements	28
Supervision Endorsement	29
Limits of work.....	30
Impact of proposed changes	30
Registration requirements	30
Medical Cardiac Protected Electrical Area Endorsement	31
Limits of work.....	32
Impact of proposed changes	32
Registration requirements	32
Hazardous Areas Endorsement.....	33
Limits of work.....	33
Impact of proposed changes	34
Registration requirements	34
Changes to current endorsements.....	34
Mining Endorsement.....	34
Limits of work.....	34
Impact on electrical workers	35
Registration requirements	35
Next Steps	36

Annex One: Summary of Questions 37
Annex Two: Proposed Timetable 40

Introduction

The Electrical Workers Registration Board (the Board) issued a consultation document on 20 September 2021 to seek feedback on its proposals for changes to electrical worker (EW) licensing. Consultation closed on 29 October 2021.

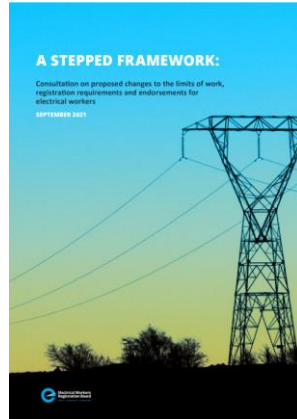


Image: Consultation document cover

The proposed changes related to three areas:

1. the requirements for registration (including strengthening the character requirements for registration)
2. the limits of work that can be carried out by each class; and
3. the introduction of four new endorsements: Mains Parallel Generation Systems, Supervision, Medical Cardiac Protected Electrical Area and Hazardous Areas.

Prompting questions were provided throughout the consultation document (see Annex One for the full list of questions). Some submitters addressed the questions and others provided general comment on the proposals. Some submissions only answered questions related to one area of the proposed changes.

The Ministry of Business, Innovation and Employment (MBIE) facilitated public consultation on behalf of the Board and has produced this summary of submissions for both the Board’s consideration and to share the consultation findings with the public.

Submissions

The consultation process resulted in a total of 85 submissions. 63 submissions were from electrical workers (EWs), five from representative bodies, six from training organisations and 11 other submissions¹.



63 Electrical Workers (74.1 % of total submissions)



Six Training Organisations (7.1 % of total submissions)



Five Representative Bodies (5.9 % of total submissions)



11 Other (12.9 % of total submissions)

¹ Submitters characterised as ‘other’ were those where the submitter did not identify themselves as an electrical worker or identify the organisation they were representing.

Note that not all submitters answered all questions and numbers of total responses vary throughout this document. Question one, the question asking for any general comments for the Board, attracted the most feedback with 57 responses provided. Questions regarding the introduction of the new endorsements also attracted a large amount of feedback with more than 30 responses for most of the individual questions.

Findings

Overall themes

Most submissions supported the intent of the changes. However, across all submissions, there were two opposing ideas expressed about the value of regulation. These were:

- more regulation will result in increased safety and competency; and
- there should be less regulation, as it does not fix the problem or impedes electrical workers in their work and career progression.

Submissions broadly held one of three positions outlined below (in support, reluctant or hesitant or not in support), and generally followed one or more of the themes outlined in those sections.

Submissions in support of proposals

Supportive submissions often touched on three elements, including safety, quality and competency, and additional endorsements/licensing. Additional details of each submission element and submission excerpts are included below in Table 1.

Table 1: Submissions in support of proposals

Supportive Submission Elements	Details	Submission Excerpts
Safety	Submitters felt that safety would be improved by the proposals	<i>The impacts are about safety not impacts on EWs.</i>
Quality and Competency	Submitters felt that quality and competency would be lifted by proposals	<i>It shouldn't have any impact on the Electrical workers as the people doing it should know what they are doing. It will get rid of the cowboys.</i>
Additional Endorsements/ Licensing	Submitters suggested additional classes of license or endorsement in key areas	<i>I support the proposed endorsements but feel strongly that an Industrial Environments and Machinery Control endorsement should be also be added.</i>

Submissions expressing some reluctance or hesitance to proposals

Submissions that expressed reluctance to either ‘fully support’ or ‘not support’ the proposals often touched on two elements: implementation considerations or the need for additional information. Additional details of each submission element and submission excerpts are included below in Table 2.

Table 2: Submissions expressing some reluctance or hesitance to proposals

Reluctant/Hesitant Submission Elements	Details	Submission Excerpts
Implementation considerations	Submitters supported the intent of proposed changes, but offered a range of considerations for how changes would need to be implemented	<i>There may be difficulty finding appropriate training providers and creating training and assessment materials. Due to a wide range of equipment, training needs to focus on concept, design and function rather than manufacturer delivered on a particular brand or maker.</i>
Additional detail	Submitters felt they had insufficient detail about implementation to support proposals or not	

Submissions not in support of proposals

Submissions that did not support the proposals often touched on five elements; principles around the Boards role, preference for self-selection of areas of work, alternatives to increase compliance, assertion that Standards are sufficient and barriers Additional details of each submission element and submission excerpts are included below in Table 3.

Table 3: Submissions not in support of proposals

Unsupportive Submission Elements	Details	Submission Excerpts
Principles around the Board's role	Submitters felt that the Board was over-exercising its powers by proposing the changes and did not feel the consultation was being held in a way that enables genuine feedback to be provided from the sector	<i>Why have you made it so difficult to find the submission form? No I do not agree with this proposal. More red tape, more revenue gathering, more control. No thanks.</i>
Preference for self-selection of areas of work	Submitters wanted to be broadly credentialed on electrical work and have the ability to choose their own areas of work	<i>I am completely opposed to these proposed changes by the EWRB directly affecting my right to choose and limit the types of electrical work I wish to engage in. After being governed by the EWRB for this long, I feel it is completely dismissive by the EWRB of our ability to make our own decisions about which aspects of electrical work we choose to do and it seems to me that it's frankly another case of big brother wanting to take away, make choices for us and dictate to us what we can and can't do.</i>
Alternatives to increase compliance	Submitters offered other suggestions for tools to increase compliance/improve quality and competency	<i>Perhaps it would be more beneficial to include further training during apprenticeship stages to include this, rather than restricting the limitations of existing electricians? Perhaps imposing greater fines for those who make dangerous decisions and do not follow the standards? Perhaps invest in training where electricians are able to upskill should they feel the need to gain further knowledge.</i>

Table 3: Submissions not in support of proposals cont.

Unsupportive Submission Elements	Details	Submission Excerpts
Assertion that Standards are sufficient	Submitters felt that between the Standards and inspections, there were sufficient safeguards to ensure quality of work	<i>I do not support any endorsements as an electrician that cannot read a standard and apply it should not have been provided with a practicing licence.</i>
Barriers	Submitters were concerned that increased requirements would create barriers (cost, time and complexity) for electrical workers to qualify in particular areas or progress in their career. This was particularly so for small businesses and regional electrical workers	<p><i>As you say at the start of the proposal document, there are only 28,000 registered electrical workers currently practicing in NZ of which maybe half are electricians - we cannot afford to reduce this number available for different types of electrical work in regional NZ by creating more specialised types of registration. Where are the accident reports and disciplinary hearings to support the need for such a change?</i></p> <p><i>I do not support the proposed registration criteria. To gain these skills you will need to be working in the above field which without the endorsement you will not be eligible to. This will lead to qualified electricians working for apprentice wages to learn and as such there will be a stagnation of varied knowledge in the older generation not putting their skills to a new area of the trade.</i></p>

Responses to questions

The consultation document proposed a set of questions to guide feedback, which are provided in Annex One of this document. The responses to those questions are outlined in the following section.

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?

The consultation document asked submitters for any general comments or feedback on the proposals that they would like to draw to the Board's attention. Fifty-seven submitters responded, fourteen (25%) responded positively to the proposals and sixteen (28%) responded negatively. The other 27 (47%) responses either provided further suggestions or did not indicate whether they supported the proposals or not. Responses generally fell into the themes defined above.

Note that the position submitters may have taken in providing general comments and feedback regarding the proposals may not have been the position they took for each individual proposal in the following questions (ie they may have provided negative feedback regarding the consultation itself but agreed with the proposed changes in the limits of work for the classes).

Of those who responded negatively to the proposed changes, some questioned the need for the changes, asking what evidence the Board had that supported a need for the changes.

The thrust of the changes appears to be that the Board now feels that additional training is required to be able to carry out most of the work identified in Section 2(a) [sic - clause (2)(a) of regulation 6A] of the Electrical (Safety) Regulations 2010. However, no evidence is provided that this work is currently being carried out in an incompetent or unsafe manner. If it is not broken, what are you trying to fix?

Submitters also provided ideas for areas of improvement, such as:

- the development of a mobile app with the regulations for easy access
- the addition of additional endorsements, including: Industrial worker, refrigeration, machinery control and telecommunications
- ensure there is a thorough assessment process to ensure competency
- require that inspectors must hold the endorsement to inspect the work.

Timing

The Board asked submitters whether they thought the proposed timeframes for implementation were reasonable and if they agreed with them. The timeframes are shown in Annex Two².

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

Twenty-four submissions were received responding to whether the proposed timeframes were reasonable. Fifteen (62%) agreed to the proposed timeframes while five (21%) disagreed. The remaining four (17%) were neutral.

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

MBIE received twenty-four submissions about the proposed timeframes, with sixteen (66%) agreeing to the timeframes, four (17%) opposed, and four (17%) neutral or their position was unclear.

Of the sixteen who agreed with the timeframes, three noted that the timeframes would require a well-managed process to ensure implementation was possible on time and that current apprentices and trainees needed the ability to complete their current pathways.

Submitters who disagreed with the timeframes noted that either the proposed timeframes were too short and therefore not manageable, or that the COVID-19 pandemic is already putting pressure on electrical workers, making the timing for the consultation difficult.

Fit and proper person proposal

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

The Board asked submitters their views on the proposed change that would require electrical workers to hold fit and proper person status constantly through their licence period, rather than only declaring their fit and proper person status every two years when licenses are renewed.

In total, 35 submissions were received with 19 submitters (54%) agreeing to the proposal and 10 (29%) opposed to them. Three submitters (9%) expressed neutral views about the proposal, and three (9%) positions were unclear.

Those who agreed to the proposal believed that it would help manage the conduct of EWs and ensure integrity of EWs within the sector.

Of the ten submitters who opposed the change, and one who felt they had insufficient information to be able to comment, the concerns raised related to any fit and proper person requirement – rather than the need to sustain it through the license period.

Those opposed to any fit and proper person test objected because of concerns about equity issues including:

- people who had experienced health or social issues resulting in criminal charges (eg for those who received criminal charges from an inability to pay fines),

² We note that the proposed timeframe for implementation for Electrical Engineers was not included in the consultation document. We apologise for the error and note that the Board proposes to align that with the Electrical Appliance Serviceperson and Electrical Service Technician registrations.

- the right of a person not to be further punished if they had already completed their sentence, and
- a perception of unfair standards between what is required of other trades, eg plumbers. We note that a Fit and Proper Person test is required in the plumbing, gasfitter and drainlayer industries.

One submitter felt that they could not comment without some certainty about how determinations were made, who was involved in assessments and what support would be provided to electrical workers who did not meet the test

Some submitters did not seem to be aware that meeting a Fit and Proper Person test is already a requirement for licensing³. The proposed change requires that this status be maintained throughout the licence period or that the Board be notified if that status may have changed.

Registration Class Proposals

The Board asked submitters for their views on the proposed new limits of work, changes to the registration requirements, and apprentice impacts for each of the below electrical worker classes:

- Electrical Appliance Serviceperson
- Electrical Service Technician
- Electrical Installer
- Electrical Engineer
- Electrician
- Electrical Inspector
- Associated Tradesperson
- Distribution Line Mechanic
- Transmission Line Mechanic
- Traction Line Mechanic
- Substation Maintainer
- Cable Jointer

The proposal is risk-based and limit 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*.

The changes to registration requirements differ across each class. The proposed changes generally 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.

³ The Board's policy can be found here [Before you apply | Electrical Workers Registration Board \(ewrb.govt.nz\)](https://www.e wrb.govt.nz/Before-you-apply).

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?

The Board asked submitters about their views on changes to the Electrical Appliance Serviceperson class. The Board proposed merging the Electrical Appliance Serviceperson and the Electrical Appliance Serviceperson (Endorsed) classes.

28 submitters provided feedback on the proposal. Of those, 21 submitters (75%) agreed with the proposal to merge these classes. They believed that it made sense to merge the two classes as it would simplify limits and reduce the number of classes. One submitter supported the proposed merging as long as there was a guarantee that it would be a consistent change that couldn't be changed by future boards in two years' time.

Three submitters (11%) expressed neutral views, and four submitters' (14%) positions were unclear. Those submitters that were neutral about the proposal did so either as part of a general comment disagreeing with the consultation and its proposals as a whole or chose to answer all of the consultation questions but had no specific comments or views about electrical appliance service people.

Limits of work

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

The proposed changes mean that, for an Electrical Appliance Serviceperson, the limits of work remain limited to work carried out on appliances. However, the limits of work would expand to include disconnecting and reconnecting of some fixed wired appliances.

Twent-four submitters provided feedback on the proposal. Of those, 18 submitters (75%) agreed with the proposed changes to the limits of work. Submitters believed that the risk-based approach would be more practical and provide clarity of work though the simplification of the current limits, with one submitter stating:

A risk-based approach is far more practicable and much clearer in my view.

Of the three submitters (13%) that disagreed, one believed that a risk-based assessment is only as good as the persons carrying out the risk assessment. They believed that there should be a minimum level of quality control built into standard practice to ensure safety. The other submitter that disagreed did not believe that the current training time is sufficient to cover the additional knowledge and skills that would be required, stating:

...training time is insufficient to cover both plug-in appliances and permanently-wired appliances, also single and three phase appliances - you need to increase the training requirements, course length and assessment to cover this additional knowledge and skills...

Two submitters (8%) expressed neutral views about the proposed changes. One position expressed by a submitter (4%) was unclear.

Apprentice impact

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

Submitters were asked what impacts the changes would have on apprentices working to obtain their registration. MBIE received 20 submissions and of these, 10 submitters (50%) thought that there would be positive impacts to apprentices. The positive impacts identified included that as it would create an increase in skill and competence, as well as support a wider range of translatable skills that could lead to a larger scope of employment for apprentices in the future.

One submitter (5%) disagreed with the proposed changes, believing that it would mean a significant increase in the knowledge and skills required, increasing apprentice training time and assessment requirements. They believed for trainees' part-way through their training this would complicate their transition to the new system.

Four submitters (20%) believed the impacts would be neutral overall and five submitters' (25%) positions were unclear.

Registration requirements

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

The coursework and experience requirements listed 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.

Twenty submitters provided feedback on the proposal. Of those, 17 submitters (77%) agreed with the proposed changes to the limits of work. These submitters believed that the proposed changes to the registration requirements would help lift standards and support an increased skill level in the sector.

Three submitters (14%) disagreed with the proposal, one disagreed with changes to registrations in general (not specifically for Electrical Appliance Servicepersons), and two submitters' (9%) positions were unclear.

Electrical Service Technician

Limits of work

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

The proposed changes mean that an Electrical Service Technician can carry out low-risk work within the limitations outlined in the consultation document, as long as they are competent to do so.

Generally, submitters agreed with the proposal. Twenty-seven submissions were received. Of these, fourteen submitters (52%) agreed with the proposal with six (22%) disagreeing. Submitters who agreed believed that the proposed changes made sense as they were risk-based, practical changes and would encourage safer work practices.

One submitter agreed to the proposal but disagreed with the limits proposed for work on switchboards as they believe that the changes were either too vague or restricted.

Of those who disagreed, one believed that Electrical Service Technicians should not be able to work on switchboards other than with switchboard mounted devices. Another disagreed as they believed the bare minimum registration class able to do any prescribed electrical work (PEW) in an installation should only be an Electrician.

Four submitters (15%) expressed neutral views about the proposed changes while three submitters' (11%) positions were unclear.

Apprentice impact

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

Submitters were asked what impacts the changes would have on apprentices working to obtain their registration and 23 submissions were provided. Of these, 11 submitters (48%) agreed that there would be positive impacts for apprentices, and that the extra six months training is appropriate to cover the wider range of required skills and experience.

Four (17%) submitters did not agree. One believed that there wasn't anything new an apprentice could learn in two years that they couldn't do in 18 months. Another pointed out that by extending the training time, there would be longer wait periods before pay rises for employees.

One submitter highlighted that there could be both positive and negative impacts to apprentices, stating:

On the assumption that all electrical trainees including electrician need to take this path it would be good in the aspect that a person in training is struggling they will have achieved a step that allows them to carry on in the industry. However, with the same assumption this would mean they need to get appliance single phase experience to gain qualification, and this may not be possible as some apprentice struggle to get specific experience. If achieved under an NZQA Qualification problem may be eased however, in my experience there is no substitute for on job training. Another consideration is if a trainee has this qualification and is profitable, they may not get the chance to progress on to the next level.

Five submitters (22%) expressed neutral views about the proposed changes while three submitters' (13%) positions were unclear.

Registration requirements

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

It is proposed, for Electrical Service Technicians, that the experience requirement for registration increase from eighteen 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.

Twenty-four submitters provided feedback on the proposal. Of those, seventeen submitters (71%) agreed with the proposed changes to the limits of work and three submitters (13%) disagreed. Submitters believed that the proposed changes to the registration requirements made sense as they would strengthen base skills and experience. Those submitters who agreed with the proposal also expressed concerns, only agreeing in principle as long as the changes were made due to:

- there being a fair reason for the time increase, such as the Board felt experience was not being achieved in 18 months; or
- training and instruction will not be reduced by the proposed changes and the knowledge, skills, and experience of the electrician end-product will not be decreased.

Two submitters (8%) expressed neutral views to the proposed changes while two (8%) positions were unclear.

Electrical Installer

Limits of work

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

The proposed changes mean that an Electrical Installer can carry out low- and general-risk work, within the limitations outlined above, as long as they are competent to do so.

Twenty-five submitters provided feedback on the proposal. Of those, 13 submitters (52%) agreed with the proposed changes to the limits of work. Submitters believed that the risk-based approach would be more practical and provide clarity of work through simplification.

Of the five submitters (20%) who disagreed, most disagreed on the principle that the electrical installer class was either unnecessary or should be further limited in the types of work they could undertake, such as no light fixtures or servicing anything with permanent wiring.

Two submitters (8%) expressed a neutral view about the proposed changes while five submitters' (20%) positions were unclear.

Apprentice impact

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

Submitters were asked what impacts these changes would have on apprentices working to obtain their registration. MBIE received twenty-one submissions and of these seven submitters (33%) agreed that the proposed changes would provide clearer pathways for progression and encourage apprentices to improve their skills and qualifications.

Three submitters (14%) disagreed with the proposed changes. The comments made in disagreement align with those raised in the sections above for electrical installers.

One submitter highlighted the need for continued training past the apprenticeship stage, stating:

...it is important that persons holding either of these registrations who wish to articulate upward to electrician do not cease their on-the-job training or polytechnic courses designed to provide them with the required knowledge and skills of an electrician...

Six submitters (29%) expressed neutral views about the proposed changes while five submitters' (24%) positions were unclear.

Registration requirements

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

The proposed registration requirements include a new requirement Electrical Service Technicians to hold their registration for one year before being eligible to register as an Electrical Installer through the experience pathway. The coursework and experience requirements listed 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.

MBIE received 21 submissions providing feedback on the proposal. Of those, 11 submitters (50%) agreed with the proposed changes to the limits of work. Submitters believed that the proposed changes to the registration requirements would help lift competency in the class.

Six submitters (27%) disagreed with the proposal. One disagreed with changes to registrations in general while others were similar to submissions disagreeing with the changes to the limits of work, in that they disagreed with this class altogether.

Four submitters (18%) expressed neutral views about the proposed changes while one submitter's (5%) position was unclear.

Electrical Engineer

Limits of work

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

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

Generally, submitters supported the proposal. MBIE received 32 submissions. Of these nineteen submitters (59%) agreed with the proposal and six disagreed (19%). Submitters who agreed believed that the changes would provide clarity about the boundaries of work for this class. One submitter agreed conditionally, believing that there would need to be further checks in place on the competency of engineers doing PEW.

Of the six who disagreed, one did believe that the proposed limits of work for electrical engineers should be expanded further to enable them to inspect PEW including in high-risk areas and supervise a person to carry out PEW. Most who did not support the proposed changes, believed that an electrical engineer has not been trained to have the skill set to carry out electrical work.

Three submitters (9%) expressed neutral views about the proposed changes while four submitters' (13%) positions were unclear.

Registration requirements

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

The proposed registration requirements for Electrical Engineer have been consolidated, but the coursework requirements are consistent with the current requirements. Additionally, 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.

Generally, submitters agreed to the proposed changes. MBIE received 34 submissions. Of these twenty-one (62%) agreed with the changes and eight disagreed (24%). Submitters who agreed supported the need for an increase in practical experience requirements; however, some suggested the timeframe be extended further to three years as two years is still too short.

The eight who disagreed either believed that the current requirements were already adequate and did not need to be extended a year. They believed that the timeframes were unreasonable or disagreed with changes to registration requirements in general, not just for electrical engineers. One submitter explained further:

... the time-based approach is unusable for practicing engineers (design consultants, site managers, project managers, plant engineers, and project engineers). Engineers can dedicate some work and personal time to professional development and training, though the current requirement is an onerous burden. Increasing hours worsens this. The current time requirement is nearly impossible for practicing engineers to achieve.

One submitter disagreed with the proposed changes as they thought that the rationale for the changes was unclear, and they believed that what constitutes practical experience must be clearly defined before they could determine whether the proposed changes were reasonable.

Two submitters (6%) expressed neutral views about the proposed changes while three submitters' (9%) positions were unclear.

Electrician

Limits of work

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

The proposed changes mean that an Electrician can carry out: low-, general- and high-risk work, within the limitations outlined in the consultation document as long as they are competent to do so.

Thirty-six submitters provided feedback on the proposal. Of those, 21 (58%) submitters agreed with the proposed changes to the limits of work. Submitters believed that the risk-based approach would be more practical and provide clarity of work through simplification. One submitter added, however, that the competency requirements would need to be reviewed in order to ensure practitioners are paying proper attention to their competency and professional development. Other submitters also agreed that controls to measure competency were required.

Of the twelve submitters (33%) that disagreed, one submitter believed the changes would limit opportunities for trained electricians to change which field they work in. This was echoed by another submitter that the proposal removes certain areas of work. Others did not support the need for an endorsement to supervise, believing being registered for two years would be sufficient.

One submitter (3%) expressed a neutral view about the proposed changes, while two submitters' (6%) positions were unclear.

Apprentice impact

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

Submitters were asked what impacts the changes would have on apprentices working to obtain their registration. MBIE received twenty-eight submissions, and of these, ten submitters (36%) agreed that the proposed changes would provide clearer pathways for progression and strengthen the skills of apprentices. One submitter who agreed to the proposal raised a concern that the changes did not provide enough time to allow for the higher-level training and practical component needed to qualify as an Electrician.

Five submitters (18%) disagreed with the proposed changes. One submitter thought the length of time required to become a registered electrician would deter apprentices. Another saw the changes as the introduction of more obstacles to becoming an electrician, stating:

This seems like an extraordinary longwinded process and not one that encourages people to this industry.

Seven submitters (25%) expressed neutral views about the proposed changes while the views of six (21%) submitters were unclear.

Registration requirements

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

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.

Generally, submitters agreed to the proposed changes. MBIE received twenty-seven submissions, fifteen (56%) supported the proposed changes and six (22%) disagreed.

Some disagreed with the inclusion of the installer qualification, believing that it either does not add meaningful benefit to the electrical worker or limits the progression of the trainee in their development. One submitter raised this concern, adding that it only benefits employers as it provides a reason to keep wages lowered for an additional year. Another added that the added requirements create additional barriers for those wishing to become electricians.

One submitter proposed a maximum training period to encourage progression as some trainees are not completing their apprenticeships in a timely manner.

Four submitters (15%) expressed neutral views about the proposed changes while two submitters' (7%) positions were unclear.

Electrical Inspector

Limits of work

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

The proposed changes mean that an Electrical Inspector can carry out: low-, general- and high-risk PEW within the limitations outlined above, as long as they are competent to do so.

Generally, submitters agreed with the proposed changes. Of the thirty-two submissions received, seventeen (53%) agreed to the changes while nine (28%) disagreed. Those who supported the changes believed that it made sense to align the limits of work with the *Electricity (Safety) Regulations 2010*. They believe that it will mandate specific competencies in areas of inspection. Submitters also raised that it may have the consequences of limiting inspectors' ability to move into new areas dependant on ability to gain equivalent experience or what type of training is required. This point was also raised by those who disagreed with the proposed changes. One submitter stated:

...there are not enough electrical inspectors in NZ to water them down into these specialisations and will lead to either less work being inspected or higher cost of getting work done legally in the remote parts of the country.

One submitter proposed that there is merit in electrical inspectors carrying out assessments for the practical content of the inspector's course.

Two submitters (6%) expressed neutral views about the proposed changes while four submitters' (13%) positions were unclear.

Registration requirements

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

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.

Twenty-three submitters provided feedback about the proposal. Of those, eighteen submitters (78%) agreed with the proposed changes to the limits of work and four submitters (18%) disagreed with the proposal. Generally, submitters agreed with the proposed changes. Those who didn't raise concerns regarding electrical engineers becoming inspectors as they did not believe that they held the correct level of practical work experience. One submission was more specific, stating:

We are vehemently against the proposal that there is no 3-year requirement to carry out any electrical work prior to being an electrical inspector, for a qualified engineer.

One submitter (4%) expressed neutral views to the proposed changes.

Associated Tradesperson

Limits of work

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

The proposed changes mean that an Associated Tradesperson can carry out connection or disconnections of fittings under 250 volts and 16 amperes only in relation to their primary trade and within the limitations outlined, as long as they are competent to do so.

There was no consensus among submitters for the proposed limits of work for associated trades people. Of the twenty-five submissions received, eleven (44%) agreed and ten (40%) disagreed. Those who agreed believed the changes were necessary and would increase safety, with one response stating:

...a structured system like this increases electrical hazard awareness and encourages safe controls to be used.

Those who disagreed raised concerns on how competence would be measured for the tradesperson to be able to disconnect or reconnect fittings. Some disagreed believing that the limits of work should only include disconnecting fittings, not reconnecting. Others disagreed with this inclusion at all, believing there is risk for them to go beyond the limits of work, stating:

...the scope of work is too broad for somebody may have no electrical experience, and able to sit a one-week course and sit an exam.

Two submitters (8%) expressed neutral views about the proposed changes while two submitters' (8%) positions were unclear.

Registration requirements

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

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 equal opportunity to carry out minor electrical work they encounter in their day-to-day operations.

There was no consensus among submitters. MBIE received 26 submissions, 11 (44%) agreed with the proposed changes, and 11 (44%) disagreed. One submitter who agreed did so on the condition that the requirements ensure the safety of electrical systems and that the associated tradesperson registering are required to take appropriate training and approvals.

Those submitters who disagreed believed that the limit of work was too vague and leaves it too open to interpretation. They also suggested that only plumbers or gasfitters should be able to register as they believe that they have similar levels of competency, but not licensed building practitioners.

Two submitters (8%) expressed neutral views about the proposed changes while one submitter's (4%) position was unclear.

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?

The Board asked submitters about their views on changes to the Distribution Line Mechanic class. The Board proposed merging the Distribution Line Mechanic and the Distribution Line Mechanic (Endorsed) classes.

Generally, submitters agreed with the proposed merging of the two classes. Of the twenty-seven submitters that provided feedback on the proposal, eighteen submitters (67%) agreed with the proposed changes to the limits of work and three submitters (11%) disagreed with the proposal.

Of the submitters who agreed with the proposal, one did so on the grounds that distribution line mechanics should be permitted to carry out such PEW on consumers' premises that is necessary to restore the electricity supply to the premises.

Those who disagreed believed that merging the classes would create safety risks for workers due to some electrical workers believing they are able to perform the work previously covered by the endorsement without the training. They were also concerned about the impact this would have on employers who would have to regulate that kind of behaviour.

One submitter who disagreed with the merging suggested that the registration classes should be aligned with both the voltages and the assets worked on, they stated:

The skills required of a Distribution Line Mechanic have typically been on voltages 66kV and below, and predominantly on pole structures. However, EDB's now have voltages up to and including 66kV supported by both pole structures and steel lattice tower structures, which require a wider range of skills. The tower line skills used to be specific to those who worked on the Transpower network (Transmission) when only they owned these types of assets. The registration classes should be aligned with both the voltages worked on and the types of asset the workers are competent to work on – not the definitions of Transmission and Distribution.

Two submitters (7%) expressed neutral views about the proposed changes while four submitters' (15%) positions were unclear.

Limits of work

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

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.

MBIE received 23 submissions about this proposal. Of those, fifteen submitters (65%) agreed with the proposed changes to the limits of work and two submitters (4%) disagreed with the proposal. The submitters who agreed believe that the proposed changes will minimise any uncertainty in limits of work but highlighted that training may need to extend passed the point of entry to ensure capability.

One submitter suggested the limits of work should include PEW on private services cables/mains cables between point of supply and distribution network fuses.

Five submitters (22%) expressed neutral views about the proposed changes while one submitter's (4%) position was unclear.

Apprentice impact

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

Submitters were asked what the impacts the changes would have on apprentices working to obtain their registration and 19 submissions were provided. Of these, nine submitters (47%) agreed and responded that the proposed changes would provide clearer pathways for

progression and professional development. One submitter who agreed raised the point that although it will increase the duration of the training pathway, the changes will produce a much higher level of competence for line mechanics.

One submitter (5%) disagreed with the proposed changes because they believed that the registration requirements would be unachievable for most apprentices. The two qualifications require over 3,000 hours of learning and could not be achieved in the stated period. They believed that apprentices would not achieve this due to the lack of on-job exposures and lack of time to meet the board's requirements.

Six submitters (32%) expressed neutral views about the proposed changes while three submitters' (16%) positions were unclear.

Registration requirements

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

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.

Eighteen submitters provided feedback on the proposal. Of those, 13 submitters (72%) agreed with the proposed changes to the limits of work. No submitters disagreed with the proposal. The submitters agreed to the intent to achieve a greater consistency of training across the country and the reducing of confusion between classes.

Four (22%) submitters expressed neutral views to the proposed changes while one submitter's (6%) position was unclear.

Transmission Line Mechanic

Limits of work

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

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.

Twenty-four submitters provided feedback on the proposal. Of those, twelve submitters (50%) agreed with the proposed changes to the limits of work and two submitters (8%) disagreed with the proposal.

The submitters that disagreed believed that there was not enough distinction between transmission and distribution line mechanics to justify it as a separate class.

Five submitters (21%) expressed neutral views to the proposed changes while the views of five submitters' (21%) positions were unclear.

Traction Line Mechanic

Limits of work

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

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.

Twenty-two submitters provided feedback on the proposal. Of those, eleven submitters (50%) agreed with the proposed changes to the limits of work and one (4%) submitter disagreed with the proposal. Five submitters (23%) expressed neutral views to the proposed changes while five submitters' positions (23%) were unclear.

Those who agreed believed that the changes provide clarity for the limits proposed.

Substation Maintainer

Limits of work

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

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

Twenty-two submitters provided feedback on the proposal. Of those, thirteen submitters (59%) agreed with the proposed changes to the limits of work and one submitter disagreed (5%) with the proposal. Four submitters (18%) expressed neutral views to the proposed changes while four submitters' (18%) positions were unclear.

Two submitters believe that the phrase 'core operating functions' is open to interpretation and recommended it be defined further.

Cable Jointer

Limits of work

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

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

Twenty-two submitters provided feedback on the proposal. Of those, thirteen submitters (59%) agreed with the proposed changes to the limits of work and one submitter (5%) disagreed with the proposal. Those who agreed believed that the proposed changes provide additional clarity for the class limits.

Four submitters (18%) expressed neutral views to the proposed changes while four submitters' (18%) positions were unclear.

Endorsements

The Board proposed four new endorsements and changes to one existing endorsements. Each of these are described below, but some themes were also noted across the endorsement questions, described below.

Across all endorsement areas there were some common themes with submissions often falling into one of two groups that took opposing views on the proposed changes:

1. Those supporting the endorsements as a way to ensure a level of quality and safety and sometimes suggesting additional endorsements were needed.
2. Those who felt endorsements were limiting on electrical workers meaning the scope of what they could do was smaller, or they felt that the Board should trust that they are competent.

New Endorsements

Mains Parallel Generation Systems Endorsement

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

The Board proposed the creation of a new endorsement to reflect the unique nature of mains parallel generation systems and the knowledge and experience needed to work on those systems safely.

Of the 46 submissions received, 29 submitters (63%) agreed with the proposal to create a Mains Parallel Generation Systems Endorsement and 11 submitters (24%) opposed it. Two (4%) submitters expressed neutral views to the proposed changes while four submitters' (9%) positions were unclear.

Generally, agreement was because submitters felt it would (1) improve safety (both for customers and EWs), (2) elevate quality and competency of EWs, or (3) create a clearer career progression pathway for EWs. One submission stated:

There are too many people out there not knowing how to install solar. You can see what is the result of poor installs in Australia by unlicensed / trained solar installers. Systems failing, roof top fires and in some cases whole houses burning down. It shouldn't have any impact on the Electrical workers as the people doing it should know what they are doing. It will get rid of the cowboys...

Of the 11 respondents who opposed the endorsement, many either felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs including through additional costs (time and money) being imposed or additional burden to moving into new parts of the sector. Submitters noted the cost impacts would be experienced by individual EWs and the firms that employ them. Comments aligning with these views included:

I feel the emphasis and categorising the electrical license will not change what we face on the day to day in the field but incur more costs to the company or license holder... It feels to me the basics are broken and nothing seem to be implemented to rectify this matter...The financial pressures on small businesses with H&S compliance, additional leave grants from the government, Covid material cost increases, shipping pricing costs and now potential licensing endorsements could tip some companies over the edge.

...there are only 28,000 registered electrical workers currently practicing in NZ of which maybe half are electricians - we cannot afford to reduce this number available for different types of electrical work in regional NZ by creating more specialised types of registration. Where are the accident reports and disciplinary hearings to support the need for such a change?

Limits of work

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

Of the 36 submissions, 20 submitters (56%) supported the proposed limits of work. Of the seven (19%) who did not support the limits of work, almost all did not support the endorsement at all. Two submitters (6%) expressed neutral views to the proposed changes while seven submitters (19%) positions were unclear.

One submitter raised concerns that the limits were unclear.

Impact of proposed changes

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

When asked specifically 'what impacts do you think these changes will have on EWs as they progress in their career?' fourteen (47%) responses indicated a positive impact and seven (23%) a negative impact. Six submitters (20%) expressed neutral views to the proposed changes while three submitters' (10%) positions were unclear.

Comments reflected the themes above.

Registration requirements

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

Of the thirty-two submissions received, nineteen (59%) agreed with the proposed registration requirements and nine (28%) did not. One submitter (3%) expressed neutral views to the proposed changes while three submitters (9%) positions were unclear.

Most submitters supported the proposed registration requirements. Three submitters disagreed with the requirement to hold a class of registration for not less than two years. One of these noted that this requirement meant that the total period for this endorsement was six years – which seemed too long for them.

Two others observed that having held a licence for not less than two years does not demonstrate the required competency either because a person could have gained sufficient experience during their training licence or had no experience in these systems at all. They stated:

...Someone can be registered for two years and never work on or with a parallel generation system. The bottom line is the electrical worker's capability and not the duration of their registration.

Two submitters were concerned that the way the Board planned to assess whether an EW has 'adequate knowledge, training, skills and experience' was not clearly defined.

One submitter felt that the registration requirements limited EWs' ability to gain experience in mains parallel generation systems, stating:

To gain these skills you will need to be working in the above field which without the endorsement you will not be eligible to. This will lead to qualified electricians working for apprentice wages to learn and as such there will be a stagnation of varied knowledge in the older generation not putting their skills to a new area of the trade.

Submitters queried whether there were alternatives to introducing a new endorsement and suggested:

- including further training during apprenticeship stages to include this, rather than restricting the limitations of existing electricians
- imposing greater fines for those who make dangerous decisions and do not follow the standards
- invest in training where electricians are able to upskill should they feel the need to gain further knowledge.

Submitters provided the following suggestions for the Board to consider in implementing this endorsement:

- Establish a training organisation – similar to Australia's
- There may be difficulty finding appropriate training providers and creating training and assessment materials due to a wide range of equipment. Training needs to focus on

concept, design and function, rather than manufacturer delivered on a particular brand or maker.

- Keep it simple to apply for the endorsement – don't make it a difficult administrative task. Some submitters suggested this should occur with industry consultation.
- Ensure there is a thorough assessment process to ensure competency
- Include AS/NZS 5033 and 5139 because they are part of the high-risk mains parallel system
- Consider all kinds of mains parallel installation types. The proposal only has inverter (4771), but there are engine driven alternator installations covered by other standards (3010)
- Should be assessed against AS/NZS 3000.
- Should be a thorough vetting procedure to assess competencies
- Limits of work should:
 - specify all PV systems and give more clarification in the regulations. Many unregistered persons are installing off grid PV and as they are keeping the DC voltages below the PEW limits, they consider it to not be PEW and are not even electricians. Now is the perfect time to ensure good regulation before many more non-compliant systems are built
 - state somewhere that it includes PV, Motor Generator back-up supplies, small hydro and private wind generation to make the boundaries or scope of work clearer.
- Require that inspectors must hold the endorsement to inspect the work.

Supervision Endorsement

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

The Board proposed the creation of a new endorsement to provide consistency across the supervision provided to trainees and apprentices.

The submissions indicated that there are mixed feelings within the sector about the proposed creation of the supervision endorsement. Of the 45 submitters, 22 (49%) agreed with the proposal to create the endorsement, while 20 (44%) did not. One submitter (2%) expressed neutral views to the proposed changes while two submitters' (4%) positions were unclear.

Generally, agreement was because submitters felt that specialist skills and experience were required to be an effective supervisor and mentor and the endorsement would be an effective way to acknowledge these skills. Some submitters cautioned that application for the endorsement would need to be simple to reduce the strain on the sector. One submission stated:

Supervision of trainees, let alone a lot of registered workers is a specialized area requiring particular skill sets that do not naturally occur. Apart from the obvious considerations such as safety and good working practice, the Supervisors role as a Senior Trades Person will definitely need to embed a good deal of learning facilitation end even teaching as key task areas. Properly skilled and qualified supervisors are a vital element in increasing the knowledge base and skills of the electrical workers as supervised.

One submitter proposed the endorsement should be limited to persons working on works, electricians, electrical inspectors carrying out electrical work, electrical appliance servicemen and electrical service technicians. They believed that it is unlikely that engineers, associated trades people and electrical installer would only have limited practical experience, not enough to supervise others.

Those who opposed the endorsement felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs including through additional costs (time and money) being imposed or additional burden to moving into new parts of the sector. Additionally, they believe that the introduction of the supervision endorsement will negatively impact smaller companies and their ability to get apprentices. Alternatively, they suggested instead of an endorsement, supervision should be performable for those electrical workers that had three to five years post registration experience.

This will lead to fewer small company's getting apprentices and there for fewer apprentice roles.

Limits of work

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

More submitters supported the proposed limits of work than didn't with 32 submissions total. Fifteen (47%) agreed with the proposed limits and eleven (34%) did not. Three submitters (9%) expressed neutral views to the proposed changes while three submitters' (9%) positions were unclear.

Of those who did not support the limits of work, almost all did not support the endorsement at all or were concerned that the introduction of the endorsement, and its associated limits, would have negative effects on their business. One was concerned that the limits were too vague.

Impact of proposed changes

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

Of thirty submissions, eight (27%) responses indicated a positive impact, ten (33%) a negative impact and nine (30%) expressed neutral views. Three submitters' (10%) positions were unclear. Comments reflected the themes above.

Registration requirements

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

There was no consensus amongst submitters regarding the proposed registration criteria. Of the 30 submissions received, 12 (40%) agreed with the proposed criteria and 13 (43%) did not. Three submitters (10%) expressed neutral views to the proposed changes while two submitters' (7%) positions were unclear.

Of those who agreed to the proposed registration criteria, most agreed that it would improve the quality of supervision and who can carry it out. One submitter cautioned that transitioning to the endorsement may hamper training for existing registered electrical workers.

One submitter that agreed to the proposed criteria proposed that the time required for a supervisor to have “held a particular class of registration for a period of not less than two years” should be increased to three years. A submitter disagreed with the proposal as they also believed it should be three years, not two.

Two submitters disagreed with the criteria as they believed that supervision should be a management function, not an endorsement, stating:

Although appreciating the desirability that persons carrying out the supervision of the work of others should have supervisory knowledge and skills to supervise effectively, we would be most reluctant to see the EWRB impose that requirement on the electrical industry, including the ESI. Supervision is essentially a management function and needs to be addressed by the management of each company in the electrical industry as it considers appropriate.

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?

The Board proposed the creation of a new endorsement to recognise the need for specialist training due to the unique risks associated with electrical work in a medical cardiac protected electrical area.

Generally, submitters agreed with the creation of the new endorsement. With thirty-six submissions total, twenty-three (64%) agreed to the proposed new endorsement, and nine (25%) disagreed. Three submitters (8%) expressed neutral views to the proposed changes while one submitter’s (3%) position was unclear.

The submitters that agreed, generally did so as they felt that more controls were necessary in medical areas as they could be highly dangerous and required specialist skills to work in them. They stated:

Supportive, as certain concepts such as earthing in cardiac environments can be quite complex. There is little room for error in such environments so the more controls in place the better.

Those who opposed the endorsement felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs including through additional costs (time and money) being imposed or additional burden to moving into new parts of the sector.

Some submitters suggested that this endorsement should be extended to include body protected areas as well.

Limits of work

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

More submitters supported the proposed limits of work than didn't with 25 submissions total. Eighteen (18%) agreed with the proposed limits, five (20%) did not and two submitters (10%) expressed neutral views to the proposed changes.

Of those who did not support the limits of work, almost all did not support the endorsement at all or were concerned that the introduction of the endorsement, and its associated limits, would have negative effects on their business.

Impact of proposed changes

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

Of twenty-five submissions, nine (36%) responses indicated a positive impact, six (24%) a negative impact and nine (36%) expressed neutral views. One submitter's (4%) position was unclear. Comments reflected the themes above.

Registration requirements

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

Generally, submitters agreed with the proposed registration criteria. Of the twenty-three submissions received, fourteen (61%) agreed with the proposed criteria and six (26%) did not. One submitter (4%) expressed neutral views to the proposed changes while two submitters' (9%) positions were unclear.

Of those who agreed to the proposed registration criteria, most agreed that it was necessary as there was a general lack of knowledge amongst electrical workers in this area. One submitter agreed but with the suggestion that an electrical worker should need to prove competence first, they noted:

Yes, we agree due to the hazardous nature of this work, it should only be carried out by those endorsed to do so – this is a similar philosophy to the current Mining Endorsement.

One submitter agreed with the requirements except for the need for one years' experience, reasoning that many electrical workers would struggle to achieve continuous experience in this area.

Of those who opposed the proposed registration requirements, two disagreed with the time requirements set for registration, suggesting having to be registered for two years in a specific class was too long and instead having one years' practical experience should be enough to prove competence. Alternatively, the electrical worker being able to demonstrate they required knowledge should also suffice. They stated:

If a registered EW in the classes listed can demonstrate that he/she has the required knowledge the endorsement should be issued regardless of time served. There will be EW that have carried out this type of work during their training and are therefore competent to carry out PEW in these areas. To expect these people to wait 2 years post qualification to gain the endorsement may result in these people losing these skills rather than ensuring competence.

Hazardous Areas Endorsement

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

The Board proposed the creation of a new endorsement to recognise the need for specialist training in this area due to the unique risks associated with electrical work in a hazardous area.

Generally, submitters agreed with the creation of the new endorsement. With 37 submissions total, 25 (66%) agreed to the proposed new endorsement, and 10 (26%) disagreed. Two submitters (5%) expressed neutral views to the proposed changes while one submitter's (3%) position was unclear.

Submitters agreed because they felt it would improve awareness of what a hazardous area could be. Submitters agreed that hazardous areas represented a higher level of risk relative to general electrical work and there should be a recognise method to evaluate competence. Their views included:

The proposed endorsement reflects the very unique nature of Hazardous Areas and has been necessary for a long time.

Supportive, as certain concepts such as zonings can be quite complex. There is little room for error in such environments so the more controls in place the better.

Those who opposed the endorsement felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs including through additional costs (time and money) being imposed or additional burden to moving into new parts of the sector. Submitters noted the cost impacts would be experienced by individual EWs and the firms that employ them.

Limits of work

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

More submitters supported the proposed limits of work than didn't with thirty-one submissions total, twenty (69%) agreed with the proposed limits and eight (28%) did not. One submitter's (3%) position was unclear.

Of those who did not support the limits of work, almost all did not support the endorsement at all. Some disagreed as they believed the current limits required further defining as not all hazardous areas are equal.

Impact of proposed changes

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

Of twenty-eight submissions, ten (36%) responses indicated a positive impact, six (21%) a negative impact and nine (32%) expressed neutral views. Three submitters' (11%) positions were unclear. Comments reflected the themes above.

Registration requirements

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

Generally, submitters agreed with the proposed registration criteria. Of the twenty-six submissions received, sixteen (62%) agreed with the proposed criteria and seven (27%) did not. One submitter (4%) was neutral to the proposed changes while two submitters' (8%) positions were unclear.

Of those who agreed to the proposed registration criteria, most agreed that the proposed registration requirements will improve the quality and standard of work done on hazardous areas, with one submitter believing that the endorsement would make those who meet the required standard more valued in the sector. Another submitter agreed to the requirements but proposed that it should include attainment of a relevant unit standard as per AS/NZS4761.

Those who opposed the endorsement felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs. One submitter stated:

I do not support the proposed registration criteria. To gain these skills you will need to be working in the above field which without the endorsement you will not be eligible to. This will lead to qualified electricians working for apprentice wages to learn and as such there will be a stagnation of varied knowledge in the older generation not putting their skills to a new area of the trade.

Changes to current endorsements

Mining Endorsement

The Board also proposed changes to the current Mining endorsement. Specifically, to the limits of work and to the registration requirements for the endorsement. The Board also asked for feedback regarding the effects any changes would have on the careers of EWs.

Limits of work

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

More submitters supported the proposed limits of work than didn't with twenty-four submissions total, fifteen (62%) that agreed with the proposed limits and four (17%) that did

not. Four submitters (17%) expressed neutral views to the proposed changes while one submitter's (4%) position was unclear.

Those who agreed believed that due to the nature of the work, specialist knowledge and skills were required, and the endorsement helped ensure that those who did not hold the endorsement would not undertake to do the work covered by it.

Of those who did not support the limits of work, almost all did not support endorsements at all or were concerned that the proposed limits, would have negative effects on the availability of electrical workers and on their business.

Impact on electrical workers

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

Of the twenty-four submissions received, nine (38%) responses indicated a positive impact, five (21%) a negative impact and seven (29%) expressed neutral views. Three submitters (13%) positions were unclear.

The submissions indicated that there were mixed feelings within the sector about the effects the changes to the mining endorsement would have on electrical workers. Some concerns raised were:

The proposed changes, if embodied into the training material and course syllabus for the endorsement can have nothing but a positive impact on the EW's as they qualify for the endorsement.

These changes will have financial implications on every electrical worker and be career and progression limiting.

Registration requirements

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

Generally, submitters agreed with the proposed changes to the registration criteria. Of the twenty-five submissions received, fourteen (56%) agreed with the proposed criteria and seven (28%) did not. Two submitters (8%) expressed neutral views to the proposed changes while two submitters' (8%) positions were unclear.

Those who agreed with the proposed changes believed as mining operations could be dangerous and EWs receiving the endorsement need the experience laid out in the registration requirements to be competent.

One submitter that agreed with that changes suggested a need to improve the scope of competency training for people holding endorsements, stating:

I feel more needs to be done around the competence training for people holding endorsements. I am currently mining endorsed and work in the mining industry but every competence course I have attended is always focused around domestic installations and/or service work/ test tag.

Those who did not agree with changes as they felt that an endorsement was not necessary, that they should be trusted to be competent in all areas of electrical work or that it could create barriers for EWs with one submitter believing the appropriate AS/NZS standards should be followed and there was no need for another tier of electrical workers. Some responses stated:

If a registered EW in the classes listed can demonstrate that he/she has the required knowledge the endorsement should be issued regardless of time served.

We cannot afford to reduce this number available for different types of electrical work in regional NZ by creating more specialised types of registration. Where are the accident reports and disciplinary hearings to support the need for such a change?

Next Steps

This summary of submissions has been shared with the Board, along with the submissions (anonymised where this was requested) to support the Board in their deliberations about the changes.

Annex One: Summary of Questions

General and Fit and Proper
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?
Limits of work
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?
Electrical Service Technician
Question 9: Do you support the proposed changes to the limits of work? Why or why not?
Electrical Installer
Question 12: Do you support the proposed changes to the limits of work? Why or why not?
Electrical Engineer
Question 15: Do you support the proposed changes to the limits of work? Why or why not?
Electrician
Question 17: Do you support the proposed changes to the limits of work? Why or why not?
Electrical Inspector
Question 20: Do you support the proposed changes to the limits of work? Why or why not?
Associated Tradesperson
Question 22: Do you support the proposed changes to the limits of work? 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?
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

Limits of work
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?
Endorsements
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?
Registration requirements
Electrical Appliance Serviceperson
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 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 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 16: Do you support the proposed changes to the registration criteria? Why or why not?
Electrician
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 21: Do you support the proposed changes to the registration criteria? Why or why not?
Associated Tradesperson
Question 23: Do you support the proposed changes to the registration criteria? Why or why not?
Distribution Line Mechanic
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?

Annex Two: Proposed Timetable

