



25 September 2020

Energy Safe Victoria
Regulatory Impact Statement and consultation
consultation@energysafe.vic.gov.au.

Re: Licensing of lineworkers

On behalf of Victorian electricity distribution networks, CitiPower, Powercor and United Energy, we are pleased to submit this response to the Regulatory Impact Statement for the Electricity Safety (Registration and Licensing) Regulations.

Our networks deliver safe, affordable and reliable power to more than 1.8 million homes and businesses located in regions spanning 64% of the state.

CitiPower and Powercor operate under an insourced resource model and directly employ over 450 registered lineworkers qualified through a four-year apprenticeship under an AQF Certificate III Power Systems – Distribution Overhead. Since 2001, we have accepted 429 apprentices and trainees and we currently have 54 apprentices across the business. Local service agents located within regional and remote towns and contracted to Powercor to provide additional local support, also employ registered lineworkers.

United Energy field operations are provided under a service agreement by Zinfra which employs registered lineworkers to perform all overhead and underground network maintenance, inspection, repair, connections and augmentation.

We recognise the intent of the regulation is to help improve the safety of anyone conducting works associated with electricity supply. Safety is our highest priority and a major focus of our annual investment in training, development, work practice improvement and standards enforcement to ensure the health and wellbeing of our employees, contractors and communities.

In summary:

- We support a pragmatic and cost effective solution to improve safety outcomes by introducing lineworker licensing where doing so is in the interests of our employees and customers.
- We do not support the introduction of elements of licensing which would materially disadvantage our existing lineworkers or which would result in negative impacts for our customers (lower reliability of supply, higher cost) in circumstances where the work is currently performed safely by workers who are trained and assessed as competent in the relevant tasks.

Yours sincerely



General Manager Electricity Networks
CitiPower, Powercor & United Energy

Response to RIS Questions

In general, do you agree the proposed Regulations are relevant and likely to be effective?

In the experience of CitiPower, Powercor and United Energy's operational leadership, training and health, safety and environment teams, the current regulations governing the AQF Certificate III Power Systems – Distribution Overhead and associated regular refresher training under the Victorian Electricity Supply Industry (VESI) requirements, are relevant and effective in ensuring the safe performance of high quality line work.

Our interpretation of the proposed Regulations is they potentially provide additional benefits in meeting the stated outcomes of safety and competency for some work types. These include:

- ensuring alignment with the majority of other jurisdictions
- establishing a broader regulatory framework to underpin well-established safe systems of work.

Do they adequately reflect changes in the electrical supply and installations industry?

Whilst changes in the generation and supply of electricity and how it is managed appear to be accelerating, we believe lineworker licensing would provide only minimal benefits in responding to and managing that change.

Our businesses evolved from the State Electricity Commission of Victoria which was established 100 years ago this year. Collectively, we have a long and successful history of introducing new technology, work practices and equipment as change occurs.

We take responsibility to invest in further training in line with technological advancements in the industry and new customer trends. For example, the installation, operation and regular inspection of Rapid Earth Fault Current Limiters (REFCLs) as a mandated bushfire safety device on our networks has resulted in extensive training for regionally based field crews including lineworkers.

Similarly, the rapid growth in solar PV installations within the Powercor network and introduction of smart inverters for solar PV installations has been supported by specialist training for our crews on network action required to enable solar exports.

This level of training already represents a significant investment of time and money in the capability of our lineworkers. The introduction of licensing would not change our approach to ensuring that our lineworkers are appropriately trained to safely perform the work they do.

Do they represent good practice in comparison to other jurisdictions?

We cannot speak with authority on the practice in other jurisdictions as our networks are Victorian-based only.

However, we can attest to the significance of establishing consistent licensing regulations across jurisdictions as an advantage for the deployment of resources via Orders in Council for mutual aid.

For example, in the case of natural disasters such as bushfires resulting in major impacts on electricity networks, the ability of our people to be deployed cross borders is often essential for supporting timely response and recovery for remote and regional communities.

In the past, we have found difficulty in initiating work in licensed jurisdictions because of inflexible approaches towards recognising historical qualifications. ESV's approach to establishing a level of licence consistency across jurisdictions is recognised as a strength in the proposed Regulations.

Are they likely to cause unintended consequences?

Given the difficulty in forecasting all of the consequences of initiating such dramatic changes to how a class of worker is recognised by the state, there may be unintended consequences.

We believe the greatest risk of unintended and adverse consequences relates to:

1. prohibiting lineworkers from continuing to perform limited cable jointing tasks that they have been trained and assessed as competent to perform, and have performed safely for many years, which would have material consequences for their ongoing role and livelihood as well as the cost to customers of such works
2. any extension of the licensing regime to non-electrical work, such as civil and related works performed on distribution networks and including networks within residential estates
3. any extension of the licensing regime to non-electrical work such as crane activities associated with the installation electrical assets.

The most important aspect of dealing with unintended consequences is to recognise they were unintended and to therefore ensure the response is not excessive. For example, it does not stop an activity that has been safely performed (in some cases) for decades. A consultative approach towards resolving such issues is critical.

For example, whilst the Regulatory Impact Statement (see pages vi, 34, 38, 56) says licensed lineworkers would be able to carry out cable jointing work relating to distribution networks up to 66kV, this is not clearly reflected in the draft Regulations. This must be considered an unintended consequence if it reverses a long established work practice which since the 1970's, has ensured lineworkers have learnt limited cable jointing as part of their apprenticeship.

The AQF supports this pathway by offering combinations of units of competency from either different qualifications or different training packages to meet the needs of individuals, enterprises and industry sectors. These combinations of units are delivered via skill sets developed and accredited by training organisations. In effect they represent partial enrolment in a full qualification and when the competencies are successfully completed, a statement of attainment is issued. Third and fourth year apprentices engaged by CitiPower and Powercor participate in a rotation between rural and urban depot locations providing them with exposure to our diverse network assets and experience in performing a variety of work.

It is common for lineworkers to undertake limited cable jointing tasks. This work can range from emergency response needs, such as cable repairs, to planned work such as the installation of underground cables and with connection of new Underground Residential Development (URD) estates to the existing network.

For a network like Powercor which services a 145,651 kilometre square area with field operations crews in 14 depots and with over 7,000 km of underground distribution network, the flexibility to enable lineworkers to undertake these limited cable jointing tasks makes an enormous difference to

the speed of restoration of power supplies to our customers and the efficient, cost effective and timely delivery of customer initiated works.

Powercor has 98 lineworkers with training and accreditation in limited cable jointing tasks which represents 22% of our lineworkers. Removing the long-standing ability of lineworkers to undertake those limited cable jointing tasks would detrimentally impact on the ability of Powercor to maintain a safe, reliable and cost-effective supply of electricity, particularly in relation to fault restoration.

Furthermore, to discontinue this workforce capability would severely disadvantage the earning capacity of these workers and waste a substantial and long-term investment in their skill development.

Based on discussions with industry stakeholders and review of the draft Regulations, the current 98 lineworkers would be stranded from undertaking limited cable jointing tasks. This established and ongoing need would result in a requirement to acquire 98 more cable jointers through either upskilling or recruitment to support CitiPower and Powercor. This additional capability is not currently available within the Victorian employment market and would take many years to train.

Similarly, the Regulatory Impact Statement details (for example, on page 36) a range of activities that ESV considers should not be included in the defined scope of electrical linework, and it would be an unintended and adverse consequence if the Regulations did not accurately reflect this intention.

Do you have any other general comments on or views about the costs, benefits or impacts of the proposed Regulations?

We would like to take this opportunity to provide a number of observations regarding the proposed Regulations.

1. Outcomes (page 15): The objectives of the proposed Regulations include ensuring electrical inspection work and linework is being undertaken by competent persons with up-to-date skills. We suggest this should read: "...up-to-date skills and current capability".

Under the VESI principles, being up to date is one component of the training requirement. The second is that these capabilities are practised. For example, skills that are critical but not performed on a daily basis such as rescue techniques, need to be refreshed as well as up-to-date.

2. Industry Steering Committee (page 27): We note a Continuing Professional Development Steering Committee is being established to support the implementation of the proposed Regulations. Based on the Terms of Reference, the purpose of this committee is to "*provide advice to ESV on the development, implementation and evaluation of continuing professional development for all licence classes*" under the proposed Regulations.

We support the establishment of this advisory committee and the role it can play in ensuring effective skills maintenance and development. We are concerned however, the proposed member organisations do not include representatives of the primary industry body responsible for competency standards in the ESI (VESI Skills Committee) or the distribution networks which are major employers of the licence holders (including electricians) under the Regulations. This is essential for ensuring the committee outcomes in terms of defining skills and knowledge gaps, are accurately identified.

CitiPower, Powercor and United Energy would welcome the opportunity to nominate representatives to participate in this committee to ensure future CPD requirements for lineworkers, cable jointers and other relevant licensed trades engaged by our business, are effective, appropriate and pragmatic.

3. Workforce summary (page 31): We question the accuracy of the comment that the 187 cable jointers with Certificate III or equivalent are all with distribution businesses. An analysis of VESI data indicates there are 19 different employers of certified cable jointers and only one is an MEC.

This number is significant in relation to identifying the potential demand for training and licensing for cable jointers as a result of any new Regulations.

4. Reporting breaches (page 32): The summary of benefits of licensing lineworkers includes making it compulsory for lineworkers to report breaches of safety standards. For clarity, this report should be made to their employers who would then follow established practices for ESV notifications in line with compliance requirements.
5. Lineworkers from overseas (page 37): The proposed regulation and process to treat overseas qualified lineworkers as a licensed lineworker is in line with the current VESI model and supported.
6. Evaluation (page 63): A mid-term review in 3 to 5 years is proposed to be conducted. While the evaluation is said to be against safety and financial objectives, the commentary puts significant influence on evaluating the CPD requirements.

We recommend this evaluation be based purely on safety performance. Baseline measures to support this evaluation should be established in 2020 to ensure the test of the Regulations is against the safety criteria established for each licence class.

For example, on page 7, reference is made to about 90% of deaths associated with electricity supply network in the past 19 years involving contact with overhead electrical conductors. On page 9 this is further refined as being caused when “*working on or near energised overhead conductors*”. It would be more accurate to describe these as “working in the vicinity of powerlines” given that MEC workers are the smallest cohort.

Evaluating any future action under the Regulations needs to be planned based on the specific areas of risk and relevant licence classes.

We suggest it is the role of the CPDSC to continuously evaluate the effectiveness and delivery of CPD requirements.

Do you support introduction of skills maintenance and development requirements for electricians in Victoria?

For clarity, we support the introduction of skills maintenance and development requirements for electricians (RECs). But we do not support Option 3 (page 25) requiring skills maintenance for all licence holders from 2028 or the recommended requirement for a course for skills maintenance for lineworkers (page 29). This ignores the fact that licensed lineworkers engaged by distribution networks and MECs already undergo long established, effective annual refresher training programs under VESI to ensure skills maintenance.

We expect ESV is able to demonstrate electricians (other than those working for network operators) who have been licensed for decades but who have done no additional learning or development. In this instance, a CPD scheme may improve safety outcomes and compliance to current regulations and codes of practice.

To this point, any CPD scheme should be limited to safety performance improvement and regulatory compliance. To target skills improvement would require significant development in a broad range of work tasks and it is not clear to MEC's if that effort would result in skills improvement.

Skills maintenance for Distribution and Transmission Lineworkers and licensed electricians within the VESI is the role of the MECs. We therefore believe VESI training programs should be formally acknowledged by ESV as meeting any skills maintenance and CPD requirements.

Network operators have an outstanding record of maintaining skills in safety critical aspects of work and of training personnel in new techniques and equipment. This area is closely reviewed by ESV in the management of the Electricity Safety Management Scheme (ESMS) for each distribution business. Examples over the last two decades include:

- establishing the VESI refresher training guideline, matrix and framework
- establishing the ESI Skills Passport subsequently replaced by and improved via the ESI Worker system
- implementing HV Live work as a standard skill
- expanding HV Operator skills to the majority of lineworkers
- transitioning from polarity to neutral supply testing
- rolling out AMI meters and subsequent new and adjusted metering and testing training requirements
- rolling out GFN/REFCL technology and subsequent changes to HV Live work
- introducing new equipment such as pole mounted capacitor banks, blue tooth portable gang disconnect units and capacitive balancing units
- accelerating the installation of telecommunication equipment on or near network assets.

What do you consider would be the main benefits and impacts of such skills requirements?

This question can only be answered when the subject matter and potential courses are known. At this time, not enough information has been provided to make a definitive judgement on any potential benefits.

Is skills development, in addition to skills maintenance, important for electrical safety? Is the proposed approach to skills maintenance and development likely to be effective in ensuring adequate skills and capability, and therefore in supporting improved safety?

Yes, but like all training, relevance is critical. We create and deliver relevant training to our field workforce. However, we are concerned that if regulated, such training content may be controlled by a committee of predominantly external stakeholders who will have less focus on ensuring that training is relevant and effective than it is training for training's sake.

Compliance related training for lineworkers is delivered under a well-established and comprehensive program managed by VESI. This is effective in sustaining a high level of capability amongst our lineworkers. The fact that our compliance with these requirements is a condition of our Network Operator licenses is a strong incentive to ensure it is delivered effectively.

Underpinned by state and national training standards, our commitment to safe work practices and compliance are cornerstones of our safety framework that are recorded in our ESMS.

This level of training already represents a significant investment of time and money in the capability of our lineworkers. We are concerned that any increase in regulated training requirements may lead unnecessarily to lost productivity and higher labour costs which would be borne by end-use customers.

Is the proposed scope of work for linework appropriate?

The scale of work activities undertaken by lineworkers is far broader than electricians and includes live and de-energised electrical work, switching, heavy construction, metering, cable jointing, operating plant and equipment, and traffic control.

We caution the definition may still be unclear to some stakeholders particularly in regard to the lack of clarity about common assets such as poles and structures. If included, such terminology may lead to unintended consequences as previously described. For example, it could imply that crane operators who stand poles may need to be licensed as lineworkers.

Additional scope recommended

We believe the scope and exclusions for linework is appropriate in the proposed Regulations with one addition. It should allow trained and licensed lineworkers to perform cable jointing, in the manner explained in the Regulatory Impact Statement.

It is critical this long established work practice which has been established since the 1970's be continued to ensure lineworkers learn limited cable jointing as part of their apprenticeship.

The importance of maintaining this work practice cannot be overstated and for it to be discontinued as a result of implementing a licensing regime would seem to go against one of the oft stated principles that no worker would be disadvantaged by the scheme.

The following additional text as a new description 4 under the D Class licence in Part A, Schedule 3 would help resolve this unintended consequence:

- 4 electrical linework where the lineworker holds the competencies to undertake limited cable jointing, terminating, disconnecting and connecting.*

We highly recommend that this or similar wording is included in Schedule 3 to address this issue.

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For a network like Powercor which services a 145,651 kilometre square area with field operations crews in 14 depots, the flexibility to enable regionally based lineworkers to undertake these limited cable jointing tasks makes an enormous difference to the speed of restoration of power supplies to our customers and the efficient and timely delivery of customer initiated works.

To discontinue this workforce capability would severely disadvantage the earning capacity of these workers, waste a substantial and long term investment in skills development and inconvenience customers.

Based on discussions with industry stakeholders and the draft Regulations, we estimate 98 more cable jointers would be required in the Network Services team supporting CitiPower and Powercor. This additional capability is not currently available within the Victorian employment market and would take many years to train to the levels of expertise held by the current (civil) workforce.

Option 1 (page 34) Licensing all underground cable works

We support the ESV position outlined in this option that licensing all underground cable works would result in unnecessary licensing requirements for a number of tasks that are currently done by other skilled, competent or qualified workers.

In particular, we are concerned that imposing additional licensing costs for training, skills development and registration on cable haulers would lead to unintended consequences in relation to Urban Residential Developments (URD).

A current inquiry by the Essential Service Commission of Victoria is investigating issues related to timely negotiated electricity connections. We have contributed to this inquiry in line with our role in supporting Victoria's growth through URD. Since the last ESCV review in 2018, CitiPower and Powercor have improved service delivery for connecting new developments in Melbourne's greenfield areas while retaining a focus on safety. A typical timeline for a new connection has been reduced from 364 to 193 days from the time the developer lodges an application with us to receiving the Statement of Compliance. The number of days our services are involved has been reduced from 67 to 23 days at different stages of this connection process.

The above improvements within CitiPower and Powercor have been made with a 'safety first' principle with improvements made without compromise to the quality and standards of work undertaken in all parts of the connection process.

We are concerned that at a time when the industry is under pressure to deliver improvements in timeliness and efficiency to the process for electricity connections for URDs, the requirement for additional training costs as well as increased labour costs, which may well be foreshadowed as a result of more qualified cable haulers, will have a negative impact. It is foreseeable that additional training and licensing will furthermore bring about constraints to current efficient methods of constructing underground residential estates, detrimentally impacting timelines.

Should other licence categories be considered?

For clarity in future versions of the regulations, cable jointers should be classified as a standalone class of licence. However, as stated above, this should not impact on the ability of lineworkers to continue to perform limited cable jointing tasks that they are trained and assessed as competent to perform.

Can stakeholders suggest ways to streamline or improve licence application or renewal process?

We are currently working with ESV to undertake a bulk uploading of data to streamline the initial licensing process for lineworkers.

The subsequent renewal of a licence becomes a matter for ESV and each individual. It is noted that 21(2)(a) of the Licensing regulations requires that an email address and telephone number must be supplied. There is no doubt these will both allow improved communication and easier licence renewal.

Should the decision to take out Public Liability Insurance be left to the licence holder to make, rather than making it compulsory through the regulations?

We support the proposal to make Public Liability Insurance compulsory through the Regulations. Given the nature of the work we conduct, there is an obligation for any Registered Electrical Contractor to be insured for the potential risks to public safety, property and appliances or equipment.

Do you agree that ESV should recover its costs through fees on electrical workers? If not, how else should ESV recover these costs?

We support Option 2 as described in the proposed Regulations for full cost recovery: *“the full cost of ESV’s regulatory activities related to the Regulations are reflected in fees paid by registered and licensed electrical workers; no additional costs to distribution companies.”*

As regulated businesses, all operational costs for distribution networks such as CitiPower, Powercor and United Energy are subject to approval by the Australian Energy Regulator every five years. This determines the revenue we are able to recover from customers. The aim of the AER is to set network prices so energy consumers pay no more than necessary for the safe and reliable delivery of electricity services.

The levies payable by distribution networks to ESV to ensure it is self-funded, are already part of this cost model.

We do not agree there should be additional costs to distribution companies. This would be contrary to the principles of fairness and user-pays that underscore our regulatory framework. If levies from distribution businesses were increased, then customers would ultimately be charged to cover the greater costs. This would potentially include funding the costs of licensed lineworkers employed on transmission networks, engaged as contractors working on private installations and even potentially, licensed RECs that operate across borders.

All other comparable industry sectors operate models where the license holder pays the cost. For example, the Victorian Building Authority does not charge builders or developers for the cost of licensing plumbers.

Accordingly, we consider the license as an arrangement between ESV and each licensed worker. The full cost recovery for implementing the licensing program should be achieved via the fees paid directly by registered and licensed electrical workers.

Is there merit in recovering some costs through an annual fee on electrical workers? Could this be administered easily?

In the RIS, this is described as: *“Charging lower fees for new and renewed registrations/licences and recovering the remainder through an annual fee would better match fees to the timing of costs.”*

We tested this concept with a few of our lineworkers. Their response was that an annual fee rather than a 5-year renewal would be perceived as costing more. The proposed cost to renew a licence every 5-years was not considered a burden and comparable to other similar processes such as drivers licenses.

What should be the minimum qualifications for a lineworker licence?

Historically in Australia, lineworkers were trained under various state or company enterprise-based systems. In 1995 the Australian Qualification Framework (AQF) was introduced to underpin a national system of qualifications encompassing higher education and vocational education and training. For lineworkers, this system resulted in the qualification Certificate III in ESI Distribution

The implementation of the AQF was not a retrospective requirement, nor did it make previously issued qualifications redundant. Therefore it is essential to ensure that whilst the current Certificate III qualification is the standard, that equivalent historical qualifications must be recognised.

The VESI have published a guideline for evidence of lineworker qualifications which offers further advice and can be found at the following link:

http://www.vesi.com.au/files/SkillsandTraining/Qualification_Evidence/Evidence_Lineworker_Qualifications_Victoria_V1.pdf