

23 October 2025

Consultations

Energy Safe Victoria

By email [[consultations@energysafe.vic.gov.au](mailto:consultations@energysafe.vic.gov.au)]

**RE: Lineworkers and Cable Jointers Consultation Paper**

Dear Leanne,

Jemena appreciates the opportunity to contribute to the 'Lineworkers and Cable Jointers Consultation Paper'. We view this initiative as a valuable step toward establishing a licensing framework that delivers positive outcomes, aligns with the intent of licensing, and ensures no worker is unfairly disadvantaged.

The initial development and drafting of the Electricity Safety (Registration and Licensing) Regulations 2020 (Vic) led to imperfect definitions of the various roles within the electricity network workforce, broadly referred to as 'linework'. Jemena acknowledges that Energy Safe Victoria (ESV) has, in the past, collaborated with network operators and other industry stakeholders in efforts to ensure that Lineworkers and Cable Jointers operate in alignment with the original intent of the Licensing Regulations.

Sections 2.1 and 2.2 of the Consultation Paper highlight a common issue: the Licensing Regulations and the Order in Council (OiC) have produced outcomes that do not reflect the historically safe practices of Cable Jointers, Lineworkers, and Electricians. Specifically:

- a. It has been a longstanding industry practice for Cable Jointers to safely attach and terminate cables on poles as required.; and
- b. Lineworkers and Cable Jointers have long connected consumer mains to the network without the supervision of a licensed electrician or the need to issue a Certificate of Electrical Safety (COES).

Further detail and responses to the individual consultation questions are an attachment to this letter.

Kind Regards,



Jemena Electricity Network

## Section 2.1 – Class D Lineworkers and Class C Cable Jointers working on underground cables above ground

### 1. Are Class C Cable Jointers doing work tasks with high voltage MEC underground electric cables above ground? If they are, specify what worktasks.

Yes. Class C Cable Jointers carry out the following tasks, including but not limited to:

- Termination and connection of High Voltage (HV) and Low Voltage (LV) underground (UG) cables at a connection point up to but not including overhead conductors while maintaining Safe Approach Distances (SAD) on poles.
- HV Cable head terminations and connection on steel rack structures in zone and terminal stations
- Terminating UG cables to Elbow type connections in kiosk substations, HV ring main units and ground type transformers, and connecting to associated apparatus.
- Terminating UG cables to Elbow type connections (hybrid arrangement) on pole mounted hardware and connecting as required.
- Terminating, connecting and jointing of HV ABC (air insulated bundled cable) on cable support systems on cross arms and pole tops.
- Terminating and connecting UG cables into ground and pole mounted link boxes.
- Terminating and connecting UG cables in circuit breaker (CB) cubicles
- Network and service cable terminations and connections of UG cable in LV pillars.
- Standing public lighting poles and installing & repairing public lighting UG cable circuits.
- A full range of tests on HV and LV UG cables.

It is acknowledged that where cable jointing work begins and ends when working on poles has been a matter of dispute.

Recognising that one of the original objectives of the licensing framework was to ensure no worker would be disadvantaged, Jemena emphasises the importance of preserving the historical techniques and trade expertise of Cable Jointers. It is critical that these practices are not diminished due to potential ambiguities within the licensing framework. Furthermore, it is essential that Major Electricity Companies (MECs) and employers are not adversely affected by licensing restrictions that prevent competent workers from performing tasks within their capabilities.

Cable Jointers have long performed work on poles, including the raising and termination of cables. For LV applications, this typically involves terminating cables into appropriate LV isolating devices. In HV scenarios, it involves terminating cables and making connections either on suitable brackets or directly to HV switching devices, all while maintaining SAD and applying the necessary safety precautions.

Cable Jointers are trained and competent at terminating of UG cables. Through the licensing scheme a Lineworker without a Class C licence cannot perform this task and this is not disputed. Cable Jointers and Lineworkers are trained and competent in connecting to a cable termination and there should be no dispute about where cable jointing work ends on a pole, which is the point that a cable terminates on a pole. Cable connections can be made by a Class C or Class D licence holder outside the SAD of any overhead conductors.

**2. If you answered yes to 1, are Class C Cable Jointers adequately trained and qualified to do this work safely? Provide details.**

Yes. All VESI networks meet the standards described in the licensing regulations for Licence Class C work, Certificate III in ESI Power Systems Distribution Cable Jointing (or equivalent).

VESI establish the electives for cable jointing apprenticeships to ensure the most appropriate are selected. That information is published online at [vesi.com.au](http://vesi.com.au) and reproduced below:

VESI Cable Jointing apprentice elective units:

- UETDRDU007 Install and maintain underground public lighting
- UETDRDU011 Joint, terminate and maintain energised low voltage underground polymeric cable
- UETDRDU016 Lay power cables
- UETDRDU017 Locate faults in underground power cables
- UETDRIS018 Perform low voltage field switching operation to a given schedule

The apprentice and post-apprentice training pathways incorporate strict adherence to work health and safety regulations, codes of practice, and VESI standards.

Note that the definition of the qualification leads one to question why the licence class for Cable Jointers is titled Class C Lineworker. This is interpreted by many to be a lesser class of Lineworker which is considered a slight by the many expert Cable Jointers in Victoria. In other jurisdictions, the classification is Cable Joiner or Electrical Joiner

**3. If you answered yes to 1, would there be unsafe outcomes or other practical implications if Cable Jointers were not permitted to do this work? Provide details.**

Yes. Whilst some Lineworkers are qualified to work on XLPE cables, qualified Cable Jointers are the most expert and experienced at terminating and handling all cable types, whether that be on poles, structures or ground mounted electrical equipment.

Not permitting Cable Jointers to perform this work would have very significant impacts including:

- Compromised health and safety by increasing the exposure of less expert personnel to cable jointing tasks.
- Risk of work not meeting a suitable technical standard (almost certain in the case of cable joints and terminations).
- Poor techniques and methods, e.g. mishandling cables and compromising bend radius
- In turn potentially leading to more frequent supply disruptions for customers
- Fewer specialist jointing resources across the industry
- Increased project delivery timeframes leading to increased network augmentation and customer project costs.

**4. Have you experienced any issues or lack of clarity regarding the distinction between what work tasks Class D Lineworkers and Class C Cable Jointers are licensed to do? If so, provide examples.**

Yes. While VESI networks have interpreted the licensing regulations as best possible, it is acknowledged that other stakeholders may hold a differing views in the following areas:

- Whether Cable Jointers can terminate and connect HV cables above ground.
- The boundary between UG and overhead work when cables transition on poles.
- Servicing tasks, particularly in pillars or when consumer cables are connected directly to a kiosk or indoor substation.
- Raising, attaching and terminating UG cables directly onto poles.
- The installation of streetlight poles/columns and their subsequent connection to UG supply cables.

5. Further to guidance on what work Class C Cable Jointers may do with underground cables above ground, is additional guidance needed on the licensing framework for Class D Lineworkers and Class C Cable Jointers? If so, provide details.

Yes. Areas for clarification include:

- Clarification for all stakeholders that the erection of poles does not constitute electrically licensed work. This also applies to the installation of public lighting columns and the attachment of associated hardware including energising and testing luminaires.

NOTE: Cable Jointers undertake UETDRDU007 Install and maintain underground public lighting and Lineworkers Dist. undertake UETDRIS013 Install and maintain public lighting systems or previous equivalents which includes the above tasks.

- Clarification to all stakeholders that metering tasks are unlicensed work and that this extends to Class C Cable Jointers where they hold the relevant Units of Competency for energy metering.

Section 2.2 – Effective supervision requirements for Class D Lineworkers and Class C Cable Jointers

6. Are Class D Lineworkers and Class C Cable Jointers appropriately skilled and experienced to safely undertake work on underground consumer mains without the supervision of a licensed electrician? Refer to specific work tasks in your answer and provide details.

Yes. Class D Lineworkers and Class C Cable Jointers are both appropriately skilled and experienced to safely undertake work on underground consumer mains without the supervision of a licensed electrician as both licence classes require:

- Completion of a 4-year training contract.
- Certificate III in relevant ESI qualifications for Class D and Class C.
- Competency in jointing, terminating, and connecting underground cables.

They are trained in safe work practices, installation supply connection testing and procedures, and rescue procedures.

It is important to note that the effective supervision requirements outlined in Order in Council G51 are not limited to UG consumer mains. The OiC clearly describes other scenarios e.g.

- A. *the repair or replacement, for the purpose of restoring electricity supply to a consumer, of apparatus installed at the junction between a MEC's conductors and the consumer's conductors or on a panel provided solely for a MEC's metering and control equipment."*

And goes further in the Conditions to specifically point out paragraph (A).

These other situations are described in the examples below and the response throughout section 2.2 address all scenarios where MEC workers may work on consumer mains.

Consumer mains can be metered or unmetered and are defined:

1. In G51 as *"the conductors between the point of supply and the main switchboard"*; and
2. In the Victorian Service & Installation Rules (VSIR) and the Victorian Electricity Supply Industry (VESI) Installation Supply Connection Tests and Procedures (ISCTP) as *"the conductors installed between the point of supply/consumer terminals and the main switchboard."*

Point of Supply (POS) is defined:

1. In the Electricity Safety Act 1998 (Vic) as:
  - (a) *in relation to a low voltage electric line, means—*
    - (i) *in the case of an underground line (unless subparagraph (iii) applies), the point at which that line crosses the boundary of the land; and*
    - (ii) *in the case of an overhead line (unless subparagraph (iii) applies), the first point of connection of that line on the land, being either—*

- (A) *if the line is carried onto the land by one or more poles, the first pole on the land carrying that line;*
- (B) *if the line is connected directly to premises on the land, that connection to the premises; or*
- (C) *if it is not possible to determine a point of supply in accordance with sub-subparagraph (A) or (B), the point at which the line crosses the boundary of the land; and*
- (iii) *in the case of a line connected to company assets, the point at which the line is connected to the company assets; and*
- (b) *in relation to a high voltage electric line, means the point agreed between the relevant distribution company or the relevant transmission company and the customer supplied by that electric line;*

2. In the VSIR and the VESI ISCTP as:

*“the point at which the electricity Distributors service cable or supply main connects to the consumer’s terminals.”*

Specifically, a POS can be:

- a) A service pit or pillar
- b) A fused mains junction box attached to the customers premises
- c) A fused overhead line connector box or fused switch attached to an MEC pole
- d) The LV terminals in a kiosk substation
- e) An LV panel at an indoor substation
- f) Any variation of high voltage connection on either a pole, ring main unit or at an indoor location

Examples of specific work types include:

- a) Electricity Safety (General) Regulations 2019, r.303(1) and (2) mandate that service lines are protected by devices to isolate each of the active conductors. These are most commonly fuses installed at the point of supply for an installation. In the majority of cases the fuse is supplied by the MEC.
  - a. For the majority of overhead services, the fuse is in a carrier mounted on the installation that connects the consumer mains with the service line.
  - b. For an underground service, the fuse is in a carrier mounted on the meter panel that protects the electrical installation from upstream events.
- b) Many commercial/industrial connections are made by connecting consumer mains with energised MEC conductors in pillars.
- c) 95% of underground connections are made by connecting consumer mains with energised MEC UG lines in a service pit (the point of supply).
- d) Large consumer mains can be connected directly to dedicated circuits on energised kiosk type or indoor substations.
- e) Meters supplied and installed by the MEC are connected to consumer mains on the meter panel.
- f) Neutral Supply Testing involves testing consumer mains.

In most cases, the connection between consumer mains and the MEC network is carried out while the network cables or assets are energised. Regulation 509 outlines specific circumstances under which an electrician can carry out energised work. Whilst testing connections may meet that regulation, the actual work of connecting premises to networks does not, meaning that this is work that electricians are not licensed to perform, nor are they authorised by MECs to work on network assets. Therefore, the assumption that they should supervise these tasks lacks practical and regulatory logic.



It is apparent that to meet the requirement of the Electricity Safety Act and Electricity Safety (General) Regulations 2019, that this attempt at mandating supervision was necessary. However, it also clearly highlights errors that pre-existed the licensing of Lineworkers in regard to how the connection of consumer mains to MEC networks can be made if neither party is licensed to work on both the consumer mains and the MEC network.

There are instances where licensed electricians working for the MEC make new connections (>100A) and work on consumer mains, however this raises the question of whether they can 'effectively supervise' themselves.

**7. Are there any practical issues or challenges resulting from the requirement for Class D Lineworkers and/or Class C Cable Jointers to be under the effective supervision of a licensed electrician when they are jointing, transition jointing, terminating or connecting underground consumer mains? Provide details**

Yes. The most significant challenge is that if enforced there would simply not be enough electricians in Victoria to supervise the work as described in OiC G51. Enforcement would need to address not only new connections, but also all other work types e.g. faults and network maintenance. For example, a single crossarm or pole change can have up to 8 services that must be disconnected and reconnected and tested; all of those connections are to consumer mains.

A typical new connections work crew completes approximately 7 connections per day. If a COES framework was implemented, each of those work crews would require an electrician to supervise them performing work that they are qualified to do, and that the electrician is not.

A detailed analysis of how many electricians would be required across Victoria has not been undertaken but estimates are in the range of 200-250. This resource challenge clearly would deliver huge delays to the service guarantees that are required in customer charters and the Essential Service Commission Distribution Code.

**8. Are there any safety risks if Class D Lineworkers and/or Class C Cable Jointers perform jointing, transition jointing, terminating or connecting of underground consumer mains without the effective supervision of a licensed electrician? Provide details**

No. The risk is negligible as there are currently around 3 million installation connections in Victoria, the vast majority of which involved MEC workers or contractors working on consumer mains by connecting them to MEC networks. At no point has this work been supervised by an electrician, clearly demonstrating that safety has been effectively managed without such supervision.

**9. Do you have any other comments on the Exemptions Order as it applies to Class D Lineworkers and Class C Cable Jointers?**

Yes. The Exemptions Order should be reviewed to:

- Reflect current training and competency standards.
- Remove unnecessary supervision requirements for qualified workers, whilst connecting consumers mains and luminaires.
- Clarify scope of permitted work and COES responsibilities.

**10. Do you have any comments on the requirements for a COES to be completed when Class D Lineworkers or Class C Cable Jointers carry out work on underground consumer mains in accordance with the Exemptions Order? Provide details**

There has never been a requirement to issue a COES for work performed either on a network, or for connecting an installation to a network.

The preceding responses demonstrate that these activities have been performed safely and effectively under existing practices. Given this history, there is no reasonable justification for introducing a COES requirement in this context.