



# Jemena Electricity Networks (Vic) Ltd

## Response to the Price Reset Regulatory Information Notice

Written Response 4.4.7

Information for the 2026-2031 Regulatory RIN



## 4.4.7 Replacement Capital Expenditure Modelling

4.4.7 In relation to information provided in *Workbook 1 – Forecast, regulatory template 2.2* and with respect to the AER’s repex model, provide:

- (a) For individual asset categories in each asset group set out in the regulatory templates, provide in a separate document:
- (i) a description of the asset category, including:
    - (A) the assets included and any boundary issues (i.e. with other asset categories);
    - (B) an explanation of how these matters have been accounted for in determining quantities in the age profile;
    - (C) an explanation of the main drivers for replacement (e.g. condition); and
    - (D) an explanation of whether the replacement unit cost provides for a complete replacement of the asset, or some other activity, including an extension of the asset’s life (e.g. *pole* staking) and whether the costs of this extension or other activity are capitalised or not.

### 4.4.7 (a)(i)(A)

JEN’s asset categories are aligned with asset categories defined in Appendix F of the reset RIN.

Asset categories are described in their respective Asset Class Strategies included as part of our Regulatory Proposal with the relevant sections identified below.

Asset Group	Asset Class Strategy
Poles	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.1 – Poles</li> </ul>
Pole Top Structures	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.2 – Pole Top Structures</li> </ul>
Overhead Conductors	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.3 – Conductors and Connectors</li> </ul>
Underground Cables	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.4 – Underground Distribution Systems</li> </ul>
Service Lines	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.8 – LV Overhead Services</li> </ul>
Transformers	<i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i> <ul style="list-style-type: none"> <li>• Section 4.5 – Pole Type Transformers</li> <li>• Section 4.6 – Non-Pole Type Distribution Substations</li> </ul>

Asset Group	Asset Class Strategy
	<p><i>JEN - RIN - Support - Electricity Primary Plant Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.1 - Zone Substation Transformers and</li> <li>Section 4.4 - Zone Substation Instrument Transformers.</li> </ul>
Switchgear	<p><i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.7 - Overhead Line Switchgear</li> <li>Section 4.11 - HV Outdoor Overhead Fuses</li> <li>Section 4.13 - Automatic Circuit Reclosers</li> </ul> <p><i>JEN - RIN - Support - Electricity Primary Plant Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.2 - Zone Substation Circuit Breakers</li> <li>Section 4.3 Zone Substation Disconnectors and Buses</li> </ul>
Public Lighting	<p><i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.9 – Public Lighting</li> </ul>
SCADA, Network Control and Protection Systems	<p><i>JEN - RIN - Support - Secondary Plant Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.1 – Protection and Control Equipment</li> <li>Section 4.2 – DC Supply Systems</li> <li>Section 4.3 – Zone Substation SCADA and Communication Systems</li> <li>Section 4.4 – Operational Technology</li> </ul> <p><i>JEN - RIN - Support - Electricity Measurement Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.2 – Power Quality Meters</li> </ul>
<p>Other</p> <p>The asset group 'Other' includes the following asset categories: Zone Substation Property, Capacitor Banks, Earthing Systems, Surge Arresters and Capital Recoverable Works.</p> <p>As required by the Schedule 2.16(b) Kiosk Transformer Refurbishment has been included under this category.</p>	<p><i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.10 – Earthing</li> <li>Section 4.12 - Distribution Surge Arresters</li> </ul> <p><i>JEN - RIN - Support - Electricity Primary Plant Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.5 - Zone Substation Capacitor Banks</li> <li>Section 4.6 – Zone Substation Buildings and Grounds</li> <li>Section 4.7 - Zone Substation Earthing Systems</li> </ul> <p><i>JEN - RIN - Support - Electricity Distribution Asset Class Strategy - 20250131</i></p> <ul style="list-style-type: none"> <li>Section 4.6 – Non-Pole Type Distribution Substations</li> </ul>

#### 4.4.7 (a)(i)(B)

Individual asset age profiles have been provided for all of the Asset Categories with the exception of the additional categories displayed as 'Other' that were added by JEN as described in response to section 6.1(a)(i)(A).

Asset age profiles are derived as described in the Basis of Preparation for each of JEN's annual Category Analysis RIN responses (template 5.2 – Age Profile).

#### 4.4.7 (a)(i)(C)

Asset condition is the primary asset replacement driver. The following table provides a high level summary of the specific replacement programs by Asset Group. Further details about the replacement drivers can be found in the Asset Class Strategies (as identified in response to subsection (A) above).

Asset Group	Condition-based replacement	Risk-based program
Poles	✓ poles ✓ undersize pole replacement	✓ reinforced pole replacement
Pole Top Structures	✓ wooden crossarms	✓ HV and sub-transmission wooden crossarms in geographical areas that have been assessed as prone to pole top fires
Overhead Conductors	✓ conductors and connectors	✓ HV and LV line clash mitigation
Underground Cables	✓ underground cables and terminations	✓ trifurcating box replacement
Service Lines	✓ "non-preferred" service lines	
Transformers	✓ distribution and zone substation	
Switchgear	✓ distribution and zone substation	
Public Lighting	✓ public lighting poles and luminaires	
SCADA, Network Control and Protection Systems	✓ relays and DC systems	
Other The asset group 'Other' includes the following asset categories: Zone Substation Property, Capacitor Banks, Earthing Systems, Surge Arresters	✓ except where the project is part of capital recoverable works such as elective undergrounding and service relocations	

#### Notes:

- Condition based replacement refers to asset replacement where condition is the primary driver i.e. assets are in a poor condition with a high risk of failure, and are planned to be replaced prior to failure occurring.
- Risk based programs refer to condition driven replacement designed to mitigate safety hazards for example, fire hazards.

#### 4.4.7 (a)(i)(D)

Replacement unit costs for each asset group are described in the table below:

Asset Group	Explanation
Poles	<p>Pole replacement unit cost includes replacement of the pole and an average number of crossarms on a pole.</p> <p>Pole staking refers to structural reinforcement of a limited life or an unserviceable pole. Expenditure and volumes are separately reported for these two activities.</p>
Pole Top Structures	<p>Replacement unit cost provides for a complete replacement of the crossarm and insulator set.</p> <p>Where insulators are replaced without replacing the crossarm then the insulators are reported separately and have a separate unit cost.</p>
Overhead Conductors	<p>Replacement unit cost provides for a complete replacement of the conductor and associated connectors.</p> <p>Where connectors or LV spreaders are replaced without replacing conductor then the connectors and LV spreaders are reported separately and have a separate unit cost.</p>
Underground Cables	<p>Replacement unit cost provides for a complete replacement of the asset.</p> <p>Surge Diverters are reported as separate asset categories and have a separate unit cost.</p> <p>HV and LV underground cable terminations are reported as separate asset categories and have a separate unit cost.</p>
Service Lines	<p>Replacement unit cost provides for a complete replacement of the asset.</p> <p>The following assets are excluded as separate asset categories and have a separate unit cost:</p> <ul style="list-style-type: none"> <li>- Overhead to Underground Service replaced with Underground</li> <li>- Pillar to Pillar</li> </ul>
Transformers	<p>Replacement unit cost provides for a complete replacement of the asset. Kiosk transformer refurbishment is capitalised.</p>
Switchgear	<p>Replacement unit cost provides for a complete replacement of the asset.</p>
Public Lighting	<p>Replacement unit cost provides for a complete replacement of the asset.</p>
SCADA, Network Control and Protection Systems	<p>Replacement unit cost provides for a complete replacement of the asset.</p>
Other	<p>Replacement unit cost provides for a complete replacement of the asset.</p>
The asset group 'Other' includes the following asset categories: Zone Substation Property, Capacitor Banks, Earthing Systems, Surge Arresters	