Electric Vehicle (EV) Pole Mounted Charger Trial - Site Selection Guideline

UE-DSA-U-23-002

united energy

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Version	Amendment Overview	Author
1	Initial Version	Lindon Blakey, Asset Engineer Lindon Blakey Lindon Blakey (Nov 9, 2023 10:58 GMT+11) Nov 9, 2023

Contents

1. Purpose

The purpose of this document is to provide guidelines on where and how EV pole mounted chargers can be installed on UE poles as part of the UE EVX EV Charger Trial Project.

This document shall be reviewed regularly and amended as required to reflect changes in design and construction standards, the application of new technologies, or changes to network operations and field experience.

Any departure from this guideline shall be approved by the Project Team.

All enquiries relating to this document shall be directed to the email address shown below.

Email: primary.assets@ue.com.au

2. Scope

The scope of this document is limited to the selection of sites for the installation of EV chargers during the trial period of the EVX EV charger trial. The trial of EVX chargers installed on UE network is detailed in the project business case and scope documents. The UE project ID is UE-DSA-U-23-002.

This document primarily focuses on identifying suitable UE owned poles that can be used for installation of EV chargers, with the intention that installations will have minimal disruption to UE network operations. This document does not cover the identification of sites that are preferable for councils and vendors with consideration to customer demand.

This document and the FAA will determine the UE requirements that need to be met for the selection of sites for the installation of EV chargers on UE poles. The UE construction drawing UE10/4/151 will provide information on materials and construction requirements for the installation of the EV chargers.

The EV chargers will be treated as an LV metered supply. The installation of the EV chargers will be completed by the vendor of the chargers, and UE will provide a point of supply. The EV charger installations will comply with the requirements of the Victorian Service and Installation Rules (VSIR).

3. Objective

The objective of this guideline is to provide guidance to UE internal stakeholders, EV charger vendors, councils, registered electrical contractors and any other party that wants to install EV pole mounted chargers on UE poles.

Table 1: Terms and Definitions

Term	Definition
CHP	Cable Head Pole
DBYD	Dial Before You Dig
EV	Electric Vehicle
FAA	Facilities Access Agreement
HV	High Voltage
LV	Low Voltage
OH	Overhead
SubT	Sub Transmission
TSOW	Technical Scope of Work
UE	United Energy
UG	Underground
VSIR	Victorian Service and Installation Rules

4. Responsibilities

4.1 United Energy

UE shall be responsible for updating the criteria for site selection and other relevant documents, and informing EV charger vendor, councils, and any other relevant party of changes. UE will also be responsible for providing final approval for any proposed site where the EV charger vendor wishes to install a charger on a UE owned asset.

4.2 EV charger vendor

The EV charger vendor will be responsible for liaising with councils and finding appropriate locations to install EV chargers. The EV charger vendor will be required to make application via the FAA process for the installation of EV chargers on poles.

The EV charger vendor will be responsible for adhering to all relevant UE standards, including this site selection guideline, any relevant UE construction standards and drawings, and the relevant FAA agreements.

It is the responsibility of the EV charger vendor and council to consider the location, vicinity to homes, shops and access, the type of street parking and width of footpaths.

4.2.1 Impact on UE customers

With the EV charger vendor being the installer, owner, and operator of the EV chargers, it is the responsibility of the EV charger vendor to consult with local councils and other authorities, including residents on the impact of the installation of an EV charger on UE assets.

5. Pole Suitability

EV vendor is to select poles based on their requirements and councils, with the following UE requirements. Refer to Table 2 and Table 3 below.

Table 2: Pole Selection

Category	Detail	Preference
Streetlight	The location provides adequate artificial light in low-light.	Required - if lighting not available at chosen pole, choose a pole with a light, or apply to the Council to request a light to be installed.
Capacity	3 phase capacity available	Required
Pole condition	Serviceable pole based on most recent inspection results, and compliant with Site Selection Limitation for Pole Selection	Refer to Table 3
Attachments on the pole (Refer to Table 3 for specific exclusions)	A minimum 2.4m length of the pole is free from any attachment on one face, and this 2.4m length is no less than 2.4m above the ground, and no less than 1.2m below the lowest aerial conductor.	Adequate clearance between UE assets is required. Consultation with UE required for any assets that are not prohibited in Table 3. Also refer to UE10/4/151 for specific information.

Table 3: Site Selection Limitations for Pole Selection

Pole Type	Selection Limitation
Impacted By an Internal UE or Contestable Project	Consultation with UE required
Green (New) Pole	Preferred
Steel Public Lighting Pole	Prohibited
Stay or Pole with Support Wire Attached	Prohibited
Hv Poles (11kv And Above) with Existing Switches (Manual, Remote or Automatic)	Prohibited
Pole-Top Transformers	Prohibited
Pole with HV or LV Earthing Installed	Prohibited
Staked & Limited Life Poles (Marked with an X)	Prohibited
LV Fuses or Isolators	Consultation with UE required
LV UG/OH risers	Consultation with UE required
Transmission or HV UG/OH Riser (CHP) Or Earth Down Lead Cable Attached	Prohibited
Transmission or HV Earth Down Lead Cable Attached	Prohibited
HV Concrete pole	Prohibited
LV Concrete pole	Consultation with UE required
Poles with Distribution AMI (UE metering antennas) equipment installed	Prohibited
Poles with any third-party assets installed (Antennas, sensors, CCTV).	Consultation with UE required
Poles Located Within Zone Substations	Prohibited
Poles Within Ground Mounted Substations	Prohibited
Private poles owned by other authorities on which UE assets are installed unless the shared user has agreement from the pole owner.	Prohibited

Related Notes:

- Poles may be impacted by an internal UE or contestable customer project; further information can be sought from UE's Facilities Access Group.
- Poles that have existing LV fuses or isolators will require the design to consider the normal operation of such equipment by UE.
- If UE renders a specific pole unsuitable for installing a pole charger, EV vendor may suggest an alternate pole.
- Refer to UE drawing UE10/4/151 for specific information regarding preferred pole attachments and fittings, earthing requirements, clearances from UE assets, or construction details.

UE EV Charger - Site Selection Guideline

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