

# Technical Bulletin

## TB 0352 – Easements for LV Batteries

**Date:** 31/07/2024

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### Purpose

This technical bulletin informs our internal staff and Authorized Service Providers (ASPs) about the easement requirements for LV Batteries.

### Background

The introduction of LV Batteries serves to improve the reliability and resilience of Endeavour Energy's grid of the future. They are intended to provide:

- **Network Support** - To support the network by reducing peak demand (forecast overloading), improving solar hosting capacity, or solving quality of supply issues.
- **Community Batteries** - This is a metered version that is used for purposes of both, network support, and market services, allowing both benefits to be achieved.

As with other network assets all new/proposed Endeavour Energy Network owned LV Batteries, which are "not constructed on public roads, an easement in favour of Epsilon Distribution Ministerial Holding Corporation (EDMHC) must be created in accordance with the requirements of" MDI0044.



Photo: Pixii PowerShaper  
100kWh 40kVA output



Photo: Rolls Royce 'MTU'  
445kWh up to 200kVA output



Photo: EcoJoule 'EcoStore'  
85kWh 40kVA output (Gen 2)

### Actions

#### MDI0044 Revision to Clause 5.3

The following rows will be added to table 1 in clause 5.3.2.

|                 | Voltage         | Asset Type                        | Construction              | Minimum Easement (m) |
|-----------------|-----------------|-----------------------------------|---------------------------|----------------------|
| Overhead Assets | Low Voltage ABC | OH Supply to Pole Mounted Battery | Span length < 40m         | 4.0 m                |
| Other           | Low Voltage     | Pole Mounted Battery              | Standard (~85kWh / 40kVA) | 7.5 x 7.5 m*         |
|                 |                 | Ground Mount Battery              | Medium (~100kWh / 40kVA)  | 5.5 x 2.75 m*        |
|                 |                 |                                   | Large (~445kWh / 200kVA)  | 5.5 x 4.8 m*         |

\*Refer to clause 5.3.7 for additional easement requirements for low voltage batteries.

#### MDI0044 New Clause - 5.3.7 Low Voltage Batteries

Commercial low voltage batteries are in a phase of rapid development and have not yet reached full product maturity. Consequently, approved solutions may vary in size and form factor. It is imperative for designers to ensure that easements are appropriately sized to maintain sufficient operating clearances and accommodate two points of access and egress for personnel access. Personnel access requirements shall include:

- An access route at least 1.2m wide shall be provided to the BESS.
- An aisle shall be:
  - o No smaller than 750mm wide on the sides of the batteries with no doors.
  - o No smaller than 600mm wide on sides of the batteries with doors in the open position (or removable parts in position).

##### 5.3.7.1 Ground Mounted LV Battery

The minimum easement for the associated underground cables shall be as per Clause 5.3.2 Table 1 – Minimum easement widths.

##### 5.3.7.2 Pole Mounted LV Battery

The standard battery LV overhead span must not be greater than 40m from the low voltage mains. Where this is achieved, the minimum easement for the LV overhead span shall be 4m wide for the remaining length of the span (beyond the primary Pole Mounted battery easement). Refer to annexure 4.

Where the LV overhead span limit of 40m is exceeded, an additional pole shall be installed to reduce span length/s to less than 40m or else the standard Overhead easement requirements of Clause 5.3.1 must be applied.



## MDI0044 Revision to annexure 4 A4.4 Pole mounted battery easement

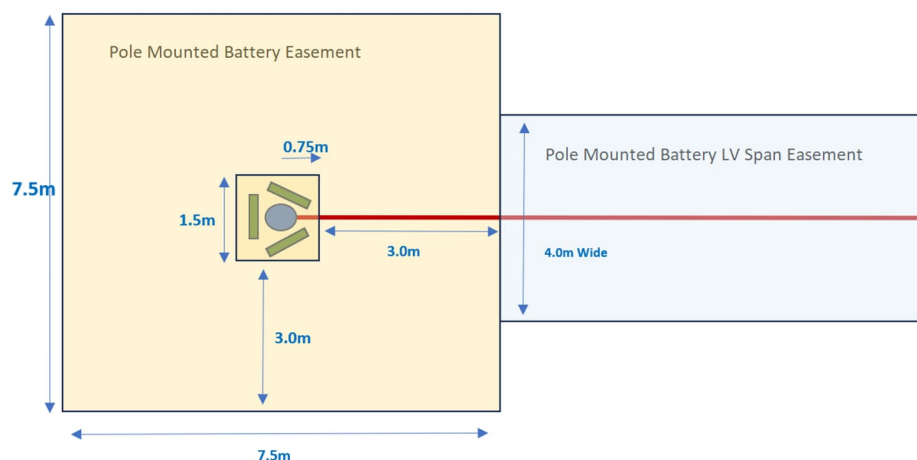


Figure 1: Pole Mounted Battery easement diagram (LV Span < 40m).

## A4.5 Ground mounted battery easement

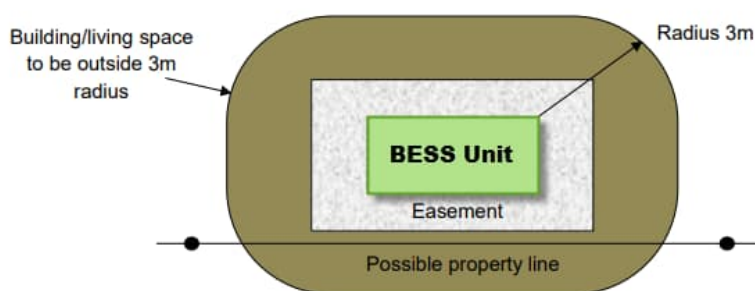


Figure 2: Minimum clearance to building/living areas

## Implementation

The contents of this Technical Bulletin shall be implemented immediately for all LV Battery installations.

The other core elements of MDI0044 apply to LV Battery easements including 'Assets in Special Areas' as outlined in clause 5.4 and 'Easement Creation and Terms' as outlined in clauses 5.5 and 5.6.

## Impacted Standards

The contents of this technical bulletin will be included in the next update of:

- MDI 0044

## Contacts

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