

Technical Bulletin

TB0354 – 3 Feeder RMUs in 22kV Areas

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Content Owner: Kieran Shanahan – Engineering Delivery Manager &
Gavin De Hosson – Network Planning Manager

Approved By: Peter Langdon – Head of Asset Planning & Performance

Purpose

To inform Level 3 ASP Designers and internal design teams of design impacts relating to 3 feeder (with fuse switch) RMUs used in padmount substations in 22kV areas.

Background

Due to the size of Endeavour's existing padmount footprint there is currently only 1 brand of 22kV switchgear that suits 3 feeder (with fuse switch) RMUs. This switchgear is 'SF6' based and is approaching end of production due to the international movement away from SF6.

Endeavour Energy has a goal to transition to 'non SF6' products across all ranges of switchgear as soon as supply markets have capacity. Whilst we are exploring options to address 'non SF6' and understanding various switchgear manufacturer product development timetables, a 'non SF6' solution for 3 feeder (with fuse switch) 22kV RMU matching our padmount footprint is not yet in sight.

In accordance with MDI0026 'Isolation points on the high voltage distribution network' and MDI0028 'Underground distribution network design' the planning of cross feeder/zone ties and automation requirements is an important element of improving network reliability and supply security for our customers, so whilst we negotiate the transition of switchgear manufacturers from 'SF6' products to 'non SF6' products it is necessary to make a change to our planning/design process.

Actions

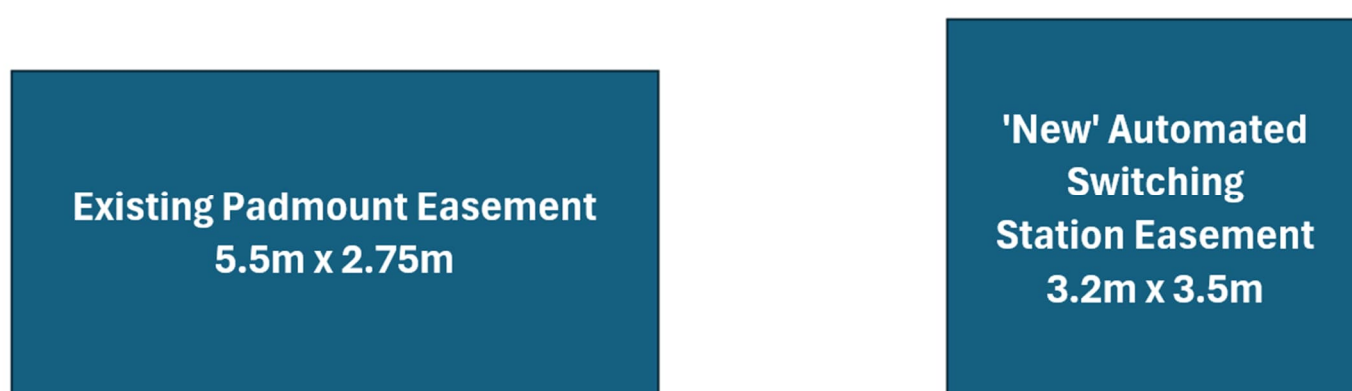
To continue providing cross feeder/zone ties in 22kV network areas in the absence of a 3 feeder RMU an adjacent Switching Station can provide a similar network outcome. In order to ensure proposed designs have sufficient provision to enable 3 feeder (with fuse switch) RMUs in 22kV areas the following actions will be implemented immediately for all new enquiries/applications from 1 October 2024:

- Where the Method of Supply identifies a need for a '**manual**' 3 feeder (with fuse switch) RMUs in 22kV areas – we **may** impose a switching station in addition to the padmount substation for this development.
- Where the Method of Supply identifies a need for an '**automated**' 3 feeder (with fuse switch) RMUs in 22kV areas – we **will** impose a switching station in addition to the padmount substation for this development. Refer Figure 1 below.

Noting that these switching station easements for the automated scenario will be required to be 3.2m x 3.5m to accommodate automation equipment and available switchgear (not the traditional 2.75m x 2.75m).

Level 3 ASP Designers are encouraged to engage earlier with Endeavour Energy through our Customer Network Solutions team and our existing application process.

Figure 1: Typical illustration for 'switching station' in 22kV areas



Implementation

The contents of this Technical Bulletin shall be implemented for all new enquiries/applications from 1 October 2024.

Impacted Standards

- MDI0026 'Isolation points on the high voltage distribution network'
- MDI0028 'Underground distribution network design'

Contacts

For further information contact:

Contact a Customer Network Engineer or else use the Customer Network Solutions main line 9853 7977.