

Bream Bay BESS – Improved Temporary Cable Trough Covers

Initial Mitigation:

Omexom Ltd and Kerr’s Construction are the contracted civil works providers for Transpower at Bream Bay Substation. Meridian’s 100MW BESS at Ruakaka Energy Park requires the installation of new 33kV switchgear and modifying the existing switchgear buildings on site. This involves the installation of new 33kV concrete cable troughs between the existing transformers and switchgear buildings.

The project team have been advised of issues with the supply of FRP cable trough lids for the new concrete troughs. The exposed cable troughs open the risk of site personnel tripping and falling into the troughs. They also provide little overhead protection for the new 33kV cables to be laid.

The initial protection was isolating the troughs with blue barriers and hazard beams. The team considered the level of protection not good enough and could be improved. The risk was still present for team members working inside the barriers.

Enhanced Mitigation:

An improved solution of temporary cable trough covers was developed via a team effort between Kerr’s Construction, Transpower and Quadcom. The temporary covers were made to fit using 21mm plywood and 4x2 timbers providing adequate temporary cable ventilation.



The concept design ensured the temporary covers were constructed in easily manageable sections and that team members could safely walk on them. This significantly reduced the risk of falling into the troughs with the bonus of keeping sections of the site clear and accessible.

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