

*Loch Kemp Storage - EIA Report*

*Appendix 17.5: Noise Modelling of Associated Works  
(Switching Station)*

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**ash**

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# Noise Modelling of Associated Works (Switching Station)

## 1.1 Summary

1.1.1 Although not part of the Proposed Development, the proposed Associated Works in the form of a Switching Station located at the northeast of the site will generate a small amount of noise.

1.1.2 The equipment located within the 275kV switching station is generally very quiet, with sources likely to include:

- Air insulated facility which has less mechanical plant than a gas insulated facility (GIS)
- BUS switching equipment
- Control enclosures with ventilation and cooling
- Other enclosures with ventilation and cooling
- Shunt/Series reactors
- Capacitors
- Quad boosters

1.1.3 Noise is also generated by high voltage lines (HV) through Corona discharge, however when assessing this type of noise, typically study areas extend only up to 200m distant, which indicates that in this instance, set back distances of 550m are far enough away for there to be no impact from this type of source.

1.1.4 Circuit breakers generate some noise; however, it is a rare event and would not contribute to normal operating noise levels. Typically, the noise of circuit breakers is noticeable at the switching station boundary, however, would not have any impact at a setback distance of 550m.

1.1.5 The modelling shows that during normal operations, using high estimates of equipment noise more typical of a substation, the levels of noise impact to the nearest receptor are predicted to be no more than LaeqT 26dB. In practice they are likely to be at least 5 dB lower than this.

Figure 1

