
16 ILFORD TRANSMISSION SUBSTATION

16.1 Ilford Transmission Network Status

Ilford Transmission Substation is supplied at 132kV from Transgrid's Mt Piper substation by a single tee off from Transgrid's feeder 94M and a single 60MVA 132/66kV transformer. Mt Piper 66kV bulk supply point provides backup supply to Ilford TS, through the 66kV network.

Ilford TS is summer demand peaking and is floated at 66kV. It supplies Bylong, Ilford Hall and Kandos zone substations owned by Endeavour Energy.

TransGrid has indicated that the capacity available to Endeavour Energy from line 94M Mt Piper-Beryl tee Mudgee tee Ilford, can be increased from the currently authorised 16MVA.

Feeder 841 from Ilford TS supplies Kandos ZS. Two 11kV feeders connect to circuit breakers X482 and 87222 are tail-ended onto 22/11kV auto-transformers.

The 66kV subtransmission system from Ilford TS is radial to Kandos ZS, and is backed up from Mt Piper 66kV BSP on feeder 828. Kandos ZS then supplies Bylong ZS on feeder 839. An outage of either: 132kV feeder 94M, 66kV feeder 841 or the single Ilford TS transformer, requires feeder 828 to supply the Ilford TS load via Kandos ZS.

There are two significant load applications NIL0208 (Kepco Coal Mine) and NIL0212 (Bowdens Silver Mine). Kepco Coal Mine load connection requires 66kV line augmentation from Ilford to Kandos, then onto Bylong. This is currently progressing. Bowdens Silver Mine is currently proposed to connect at 132kV Ilford TS busbar, effectively supplied from the Mt Piper 132kV system. Bowdens Silver Mine is not included in this study, as it only impacts the TransGrid 132kV system (via the Ilford TS 132kV busbar) and they have provided an approval for the additional load. More information will be available as these two applications progress.

There are no incomplete approved major projects to consider within the Ilford TS area.

16.2 Ilford Transmission Network Substation Rating Details

Zone Substation	Transformer Description (MVA)	Firm Transformer Capacity (MVA)	Installed Reactive Capacity (MVar)	Transformer Limitation (Year)
Ilford TS	1 x 60	Non Firm		Nil
Bylong	2 x 1.5	1.5		Nil
Ilford Hall	1 x 2.5	Non-firm		Nil
Kandos	2 x 5	5		Nil