Distributed Energy Resources (DER)

Information disclosure for the period 1January to 31 March 2024

Endeavour Energy is disclosing information on the DER connections to the electricity network in line with the requirements of the IPART request for quarterly information disclosure.

Reporting requirement	
• the number of DER connected to Endeavour Energy's distribution network	289,790
• the volume of electricity exported into Endeavour Energy's distribution network from DER	406,879,281kWh

- the top ten areas by postcode in Endeavour Energy's distribution district that have the highest levels of DER penetration by reference to volume of electricity exported and number of units and/or systems

Volume of electricity exported	
Postcode	MWh exported (Jan – Mar 24)
2765	18,641,328
2155	15,451,474
2570	14,204,507
2767	13,422,325
2170	12,488,614
2766	12,095,685
2540	11,538,749
2560	11,008,104
2153	8,450,793
2747	8,121,011

Number of units and/or systems	
Postcode	No. of systems
2155	10,367
2765	9,671
2170	9,611
2560	9,328
2540	8,304
2570	8,245
2153	6,832
2747	6,395
2148	6,119
2145	6,014

• the number of complaints from DER customers by reference to postcode relating to constraints impacting the export of electricity from DER	52
• the number of complaints from customers without DER affected by voltage issues or exceedance of thermal capacity limits due to DER	0
• the number of customers that are subject to static limits on Endeavour Energy's distribution network due to DER	70,674

• the number of DER customers that are actively being curtailed from exporting any electricity via a total static limit	12,506
• the number of DER customers that are actively being curtailed from exporting some electricity via a partial static limit	0
• the level of operating and capital expenditure by Endeavour Energy that is primarily for the purpose of addressing network constraints on DER exports (including reasons for expenditure[1] options)	$1,053,376.38

For the purposes of this report, the definitions for Distributed Energy Resources are taken from IPART's Electricity networks reporting manual - Distribution reliability and performance reporting dated June 2021.

DER means distributed energy resources comprising small generating units and generating systems located on the customer's side of the metering installation that export electricity into the licence holder's distribution network. For the purpose of this reporting manual, it excludes electric vehicles and their charging infrastructure.
Generating system means a system comprising one or more generating units with a total rating less than 30MW.
Generating unit has the same meaning given to that term in the National Electricity Rules.
Generator has the same meaning given to that term in the National Electricity Rules.
Partial static limit means the imposition of non-zero limits on the capability of the Generator to export to the grid.
Small generating unit means a generating unit: (a) with a nameplate rating that is less than 30MW; and (b) which is owned, controlled or operated by a person that AEMO has exempted from the requirement to register as a Generator in respect of that generating unit.
Thermal capacity limit means the maximum electrical current that, under ambient conditions, can be carried by the distribution feeder, without exceeding the thermal limits of the feeder.
Total static limit means the imposition of blanket limits on the capability of the Generator to export to the grid.

[1] The figure above looks at projects including:
CAPEX: LV Network Batteries, Dynamic Operating Envelopes, Quality of Supply Investigations, LV Reactive Augments
OPEX: Solar complaints, Distribution Sub Tap Changes, PQ Investigations