

Distributed Energy Resources (DER)

Information disclosure for the period 1 October 2021 – 31 December 2021

Reporting requirement

- the number of DER connected to Endeavour Energy's distribution network 225,987
- the volume of electricity exported into Endeavour Energy's distribution network from DER 549552401.9 kWh
- 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 (Oct – Dec 21)
2530	185580355.7
2560	52969518.16
2571	44374070.69
2766	12682679.47
2765	6022435.979
2155	3900782.767
2762	3521554.376
2570	3457977.64
2769	3362044.816
2164	3310373.203

Number of units and/or systems	
Postcode	No. of systems
2155	6,825
2148	6,679
2765	6,621
2154	6,463
2153	6,084
2745	5,612
2763	5,350
2762	5,096
2769	4,948
2155	4,499

- the number of complaints from DER customers by reference to postcode relating to constraints impacting the export of electricity from DER 953 calls
- 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 No limits in addition to the NSW service and installation rules that are applied. This limit is for a 30kW system per customer.
- the number of DER customers that are actively being curtailed from exporting any electricity via a total static limit There is no active curtailment on any system other than the limits applied for installation size as a part of the Service and Installation Rules.
- the number of DER customers that are actively being curtailed from exporting some electricity via a partial static limit There is no active curtailment on any system other than the limits applied for installation size as a part of the Service and Installation Rules.
- 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 options) a) Opex - \$0.49m
b) Capex - \$1m

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.

<p>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.</p>
<p>Generating system means a system comprising one or more generating units with a total rating less than 30MW.</p>
<p>Generating unit has the same meaning given to that term in the National Electricity Rules.</p>
<p>Generator has the same meaning given to that term in the National Electricity Rules.</p>
<p>Partial static limit means the imposition of non-zero limits on the capability of the Generator to export to the grid.</p>
<p>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.</p>
<p>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.</p>
<p>Total static limit means the imposition of blanket limits on the capability of the Generator to export to the grid.</p>