**The key ISP Scenarios**

**Step change – regarded most likely and consistent with 2 degrees warming**

**Hydrogen superpower – aggressive and consistent with 1.5 degrees warming**

**Progressive net zero – least aggressive looks like 2.6 degrees warming**

**Demand trace data**

**Regional files**

The files below provide draft regional demand traces, by components for each NEM region for both 10% and 50% probability of exceedance (POE) maximum demands and for 11 different reference years (2010-11 till 2020-21) by scenario.

Note that electricity demand for the production of both domestic and export hydrogen is not included in any of the components below for any scenario. Demand associated with hydrogen production is modelled separately according to the approach outlined in AEMO’s methodologies and IASR.

Each of the zipped regional files includes:

* OPSO: Contains half-hourly regional demand traces for operational demand (demand after the impact of rooftop PV and PVNSG). Note that operational demand on the forecasting portal includes demand from EVVPP which is not included in this trace component.
* OPSO\_PVLITE: Contains half-hourly regional demand traces for operational demand (demand before the impact of rooftop PV and PVNSG)
* OPSO\_MODELLING: Version of demand used in AEMO’s market modelling. OPSO\_MODELLING = OPSO – ICL + EVVPP.
* PV: Contains half hourly regional generation traces for rooftop PV
* PV\_TOT: Contains half hourly regional generation traces for all embedded PV, including rooftop PV and PVNSG. Generation from PVNSG can be found as PV\_NSG = PV\_TOT – PV.
* EV: Contains half hourly regional aggregate electric vehicle charging
* ESS: Contains half hourly regional aggregate customer installed battery charging/discharging. ESS is capturing the net impact of battery storages (charge – discharge). To remove ESS from OPSO you would subtract it: OPSO - ESS
* VTOH: Contains half hourly regional aggregate discharging from electric vehicles to homes (only used in the Step change scenario).
* EVVPP: Coordinated EV charging (targeting low demand periods, helping to lift minimum demand). Not reflected in demand traces
* ELECTRIFICATION\_BUS: Electrification impact on the business sector
* ELECTRIFICATION\_RES: Electrification impact on the residential sector
* ICL: Estimated interconnector losses (to allow netting off those if you are modelling interconnector losses in the market modelling).

**Subregional files**

In AEMO’s ISP modelling, Queensland and New South Wales were split into subregions be better capture the impacts of intraregional transmission bottlenecks. Modelling files are provided for these subregions for anyone looking to recreate AEMO’s modelling. Specifically, the following files are available (see above for explanations):

* OPSO\_MODELLING
* PV
* PV\_TOT

These are available for 10 different reference years (2010-11 till 2019-20) for the following subregions:

* New South Wales: Northern NSW (NNSW), Central NSW (CNSW), Sydney-Newcastle-Wollongong (SNW) and Southern NSW (SNSW).
* Queensland: Central-North Queensland (CNQ), Gladstone Grid (GG) and South Queensland (SQ).