Enhance Your Solutions with Energy Exemplar Datasets

July 2021

Energy Exemplar





Energy Exemplar APAC Datasets



USE CASES FOR DATASETS

- Long term investment planning
- Economic dispatch and unit commitment
- Renewable energy integration with hydropower & other storage
- Maintenance and outage simulation
- Capacity expansion and upgrade
- Fuel contract (e.g., take or pay) and emissions
- Market sensitivities
- Impact of fuel price changes
- Generation by fuel type
- Asset Capacity factors
- Policy and Regulatory impact
- Renewable penetration
- For Bid-Based Models:
 - Customer can quickly plug own demand and bid assumptions
 - Appropriate for short-term price forecast
 - Test market price elasticity
 - Capture locational prices (Philippines and New Zealand)

Country-specific Datasets



Australia NEM (2021)

- Full list of generation, nodes & companies operating
- Solar & Wind ratings included
- One region and node for 5 regions
- New developments & ratings for existing generation for ten years
- Includes offer quantities & bids for generators (as published by AEMO)
- Renewables modelled to prevent unrealistically high dispatch
- Transmission limits modelled as per physical & system operator constraints
- · Bid-based model

Energy Exemplar



Australia WEM

- One region, 11 zones, 11 Nodes with 10 lines
- Load forecasting, generation profiles & maintenance, outage rates available
- All companies operating modelled
- Bid-based model



Japan

- Snapshot dataset updated as of 2020, with next update with FY2020 coming 6/2021
- Provides generation & associated fuel prices
- 10 regions for each grid zone, with modelled interconnects
- Bid based/Cost based dataset



Philippines

- 3 Regions (for each island group), 9 zones with 622 nodes
- Load forecasting, generation profiles & maintenance, outage rates available
- Full list of generation, nodes & companies operating
- Transmission & generation lines
- Bid-based model

Country-specific Datasets



- Snapshot dataset (no future generation or demand)
- Solar and Wind ratings included
- Provides generation and associated fuel prices
- Single region and node for the area
- Bid based/Cost based dataset



- New Zealand
- Bid based, three regions/three nodes with one node for each region
- Load forecasting, generation profiles and maintenance and outage rates available
- Offer limits implemented
- 40 years build-out



Singapore

- Full list of generation, nodes and companies operating
- Solar and Wind ratings included
- Single generation and demand node
- Cost-based dataset
- Bid based/Cost based dataset



Energy Exemplar Global Datasets



- North America WECC Zonal
- North America WECC Nodal
- North America El Zonal
- North America El Nodal
- North America ERCOT Zonal
- North America FRCOT Nodal
- Latin America Mexico
- Latin America Peru
- EMEA C&W Europe
- EMEA Great Britain
- EMEA Iberia
- EMEA Eastern Europe
- EMEA Southeast Europe



- North America WECC Zonal
- North America WECC Nodal
- North America El Zonal
- North America El Nodal
- North America ERCOT Zonal
- North America FRCOT Nodal



For more information, visit us at <u>www.energyexemplar.com/contact-us</u>