# 2015 ELECTRICITY STATEMENT OF OPPORTUNITIES

The 2015 <u>Electricity Statement of Opportunities</u> uses current information provided by industry to report on the adequacy of existing and committed electricity supply in the National Electricity Market to meet the maximum demand and annual consumption forecasts detailed in AEMO's 2015 <u>National Electricity Forecasting</u> <u>Report</u> over the next ten years (2015–16 to 2024–25). Check out AEMO's <u>Interactive Planning Map</u> for more detailed supply and generation information.

# NEM-SIDE GENERATION AND PROJECT CAPACITY BY GENERATION TYPE (MEGAWATTS)

CONFIRMED

**PROPOSED** 

The table below shows the current capacity of existing, committed, publically announced and withdrawn project capacity by generation type, as at 1 July 2015.



These withdrawals are in addition to availability changes of the Collinsville, Daandine, Mackay GT, Mt Stuart, Munmorah, Swanbank E, Tarong and Wallerawang power stations, previously reported in the 2012, 2013 and 2014 ESOOs.

For more information about the status of generation projects, visit AEMO's Generation Information page.









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## COAL

Conventional coal fired power stations using brown or black coal as a fuel source.

# **COMBINED-CYCLE GAS TURBINE**

Uses both a gas turbine and steam created from waste heat in a separate turbine to produce more electricity from the same fuel than a traditional open-cycle plant.

## **OPEN-CYCLE GAS TURBINE**

A combustion turbine where air is sucked into the engine intake and then compressed. The compressed air is ignited using fuel in the combustion chamber and the hot exhaust gases produced drive the 'gas' turbine rotating at a high speed to produce electricity.

#### GAS OTHER

Gas fired steam turbine or reciprocating engine powered generators using natural gas or biogas as a fuel source.

#### SOLAR

Energy from the sun used to produce electricity from either solar thermal or photovoltaic (PV) technology.

# WIND

A wind farm generating electricity using wind as an energy source.

# WATER

Generation from either hydro turbine generators or energy from the ocean. Hydroelectric generation uses the power of pressurised, flowing water to drive a turbine connected to a generating unit.Ocean energy uses ocean waves, tidal currents, or ocean thermal energy to generate electricity.

#### BIOMASS

Energy crops, or fuel crops, are grown to produce biomass for fuel. Can also include the bi-produce of food crops or timber production.

#### **GEO-THERMAL**

Geothermal energy resources are associated with high temperature granites, andlower-temperature geothermal resources in aquifers deep in sedimentary basins.

#### OTHER

Conventional steam turbine or reciprocating engine powered generators using diesel or non-biomass municipal industrial waste as a fuel source.

# **ABOUT AEMO**

This infographic has been developed by the independent Australian Energy Market Operator (AEMO), using information from the 2015 Electricity Statement of Opportunities published in August 2015.

AEMO plans, develops, and operates markets that are responsive to energy sector needs and support investment for the long-term benefit of Australian consumers.

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