

Spot prices greater than \$5000/MWh



Tasmania: 1 June 2009

Introduction

The AER is required to publish a report covering the circumstances in which the spot price exceeds \$5000/MWh.¹ That report should:

- describe significant factors contributing to the spot price exceeding \$5000/MWh, including withdrawal of generation capacity and network availability;
- assess whether rebidding contributed to the spot price exceeding \$5000/MWh;
- identify the marginal scheduled generating units; and
- identify all units with offers for the trading interval equal to or greater than \$5000/MWh and compare these dispatch offers to relevant dispatch offers in previous trading intervals.

Assessment

On 1 June 2009, the spot market price in Tasmania reached \$9159/MWh for the 10 am trading interval. The high spot price was primarily a result of Hydro Tasmania rebidding around 960 MW of capacity from prices below \$300/MWh to prices above \$9000/MWh.

Hydro Tasmania is able to set the price in Tasmania, even at moderate levels of demand.

Generator offers and rebidding

At 8.56 am, for the 10 am to 1 pm trading intervals, Hydro Tasmania shifted between 968 MW and 1041 MW of capacity across its portfolio from prices below \$300/MWh to prices exceeding \$9000/MWh. The reason given was “portfolio optimisation”. There was only 20 MW of available generation capacity in Tasmania priced between \$290/MWh and \$9450/MWh, which led to volatile pricing during this period.

Changes to network availability

At 8.49 am NEMMCO invoked a constraint to manage an unplanned outage of the Chapel Street – New Norfolk 110kV line. This constraint reduced dispatch of generation at Lake Echo, Meadowbank, Tarraleah and Tungatinah down from forecasts of 192 MW four hours ahead to 130 MW for the 10 am trading interval. The constraint was revoked at 12.30pm.

Imports along Basslink into Tasmania were 300 MW higher than forecast four hours ahead. At the time of the high price, flow from Victoria to Tasmania was at the 375 MW limit set by Tasmania’s Frequency Control System Protection Scheme.

Actual and forecast demand

Figure 1 shows that actual demand and available capacity were close to forecast.

Figure 1: Actual data and NEMMCO forecasts for 10 am trading interval

1 June 10 am	Actual	4 hr forecast	12 hr forecast
Demand (MW)	1348	1358	1312
Spot Price (\$MWh/h)	9159	59	50
Available capacity (MW)	1984	1984	1984

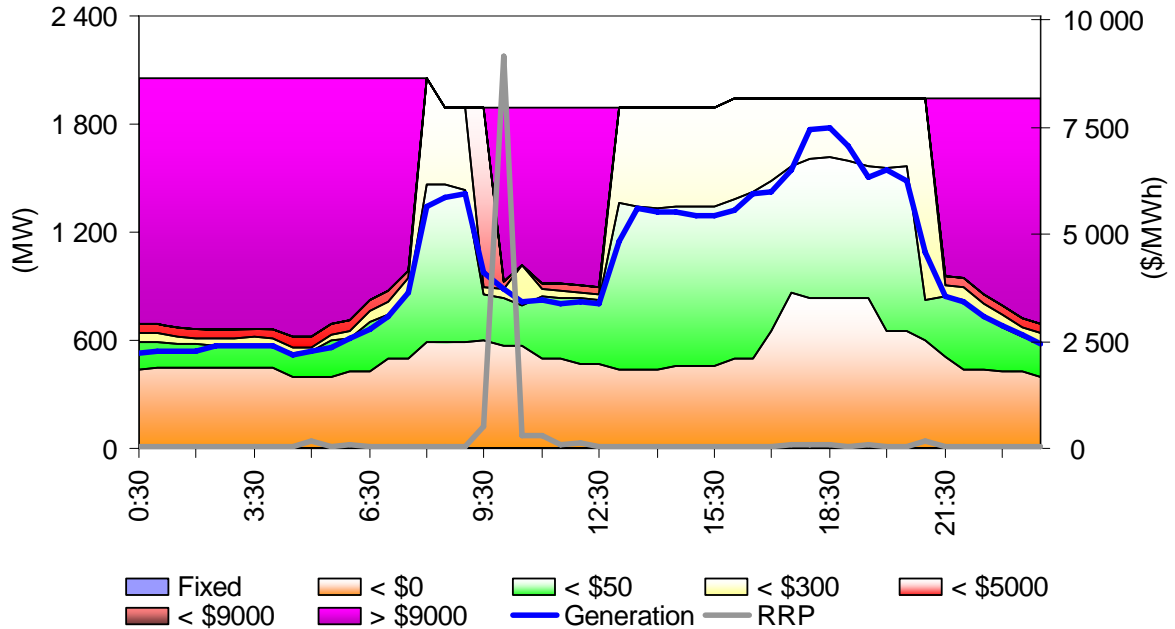
**Australian Energy Regulator
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¹ Pursuant to clause 3.13.7 (d) of the Electricity Rules

Appendix A – Closing bids

Figure A1 shows the half hour closing bids for Hydro Tasmania’s portfolio. It also shows the generation output and the spot price (RRP).

Figure A1: Hydro Tasmania closing bid prices, dispatch and spot price on 1 June



Appendix B – Price setters for 1 June 2009

Figure B1 identifies the trading interval in which the spot price exceeded \$5000/MWh. Each five minute dispatch interval price and the generating units involved in setting the energy price, as published in the market systems, are shown. This information is published by NEMMCO/AEMO². Also shown is the energy or ancillary service offer price involved in determining the dispatch price together with the quantity of that service and the contribution to the total energy price. The 30-minute spot price is the time weighted average of the six dispatch interval prices.

Figure B1: Monday 1 June 10 am – Tasmania

Time	Dispatch price	Participant	Unit	Service	Offer price	Marginal change	Contribution
09:35	\$9992.24	Hydro Tasmania	REECE2	Energy	\$9992.24	1.00	\$9992.24
09:40	\$9992.24	Hydro Tasmania	REECE2	Energy	\$9992.24	1.00	\$9992.24
09:45	\$9992.24	Hydro Tasmania	REECE2	Energy	\$9992.24	1.00	\$9992.24
09:50	\$9992.22	Hydro Tasmania	TRIBUTE	Energy	\$9992.22	1.00	\$9992.22
09:55	\$9992.22	Hydro Tasmania	TRIBUTE	Energy	\$9992.22	1.00	\$9992.22
10:00	\$4995.20	Hydro Tasmania	MACKNTSH	Energy	\$4995.20	1.00	\$4995.20
		Hydro Tasmania	MACKNTSH	Raise 6 sec	\$2.00	-0.14	-\$0.29
		Hydro Tasmania	GORDON	Raise 6 sec	\$2.00	0.14	\$0.29
Spot price	\$ 9159/MWh						

1 NEMMCO first published details on how the price is determined, for every dispatch interval, in June 2004. Documentation of this process can be found at <http://www.nemco.com.au> or <http://www.aemo.com.au>