WEEKLY MARKET ANALYSIS

AUSTRALIAN ENERGY REGULATOR

20 July – 26 July 2008

Summary

Spot prices for the week on the mainland averaged between $73/MWh in Queensland and $84/MWh in South Australia and Victoria. These prices represent an increase in all regions compared to the previous week, primarily as a result of an unplanned network outage in the Latrobe Valley in Victoria on Wednesday evening that led to the spot price exceeding $8000/MWh for one trading interval. The AER will issue a separate report into the circumstances that led to the spot price exceeding $5000/MWh in accordance with clause 3.13.7 of the Rules. That report will also cover the issues associated with the high ancillary service costs that totalled in the order of $118 million.

The average spot price in Tasmania was $35/MWh, which was largely isolated from the high energy price on Wednesday.

In the financial markets, there was a slight increase in base contract prices in the eastern states for the 2008-09 financial year and a decrease for the 2009-10 financial year compared to the previous week.

Spot market prices

Figure 1 sets out the volume weighted average price for this week and the financial year to date across the NEM regions and compares them with price outcomes from the previous week and year to date respectively.

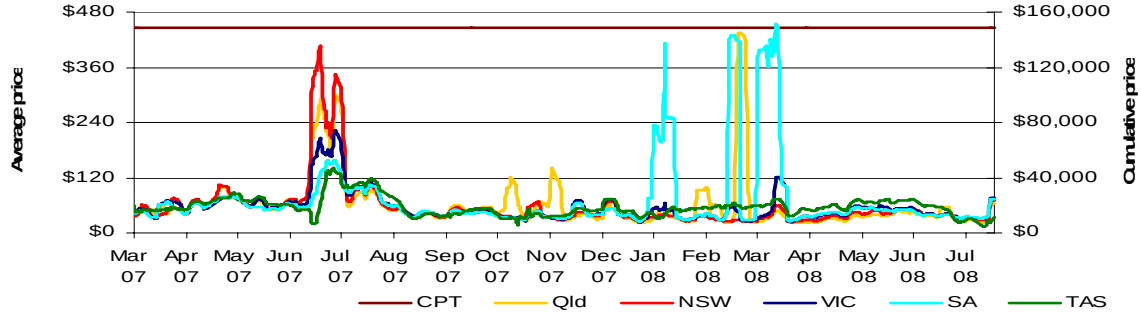
Figure 1: Volume weighted average spot price by region ($/MWh)

	Qld	NSW	VIC	SA	Tas
Ave price for 20 July – 26 July	73	80	84	84	35
Financial year to 26 July	40	45	47	49	26
% change from previous week*	214%	177%	162%	150%	150%
% change from year to date**	-50%	-49%	-50%	-49%	-75%

*The percentage change between last week's average spot price and the average price for the previous week.
**The percentage change between the average spot price for the current financial year to date and the average spot price over the similar period for the previous financial year

The AER provides further information if the spot price exceeds three times the weekly average. Details of these events are attached in Appendix A. Longer term market trends are attached in Appendix B. Figure 2 shows the seven day rolling cumulative price for each region together with the CPT (and the equivalent seven day time-weighted average price) for the last 15 months.

Figure 2: Seven day rolling cumulative price and CPT



Financial markets

Figures 3 to 10 show futures contract[1] prices traded on the Sydney Futures Exchange as at close of trade on Monday 28 July. Figure 3 shows the financial year base futures contract prices for the current year, the following two years, and the three year average. Also shown are percentage changes compared to a week earlier.

Figure 3: Base financial year futures contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Financial 2008-09	47	4%	46	2%	47	2%	54	0%
Financial 2009-10	53	-2%	49	-3%	62	-1%	52	0%
Financial 2010-11	46	0%	45	0%	54	0%	41	0%
Three year average	49	0%	47	0%	55	0%	49	0%

Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 4 shows the $300 cap contract price for the first quarter of 2009 and the 2009 calendar year and the change from the previous week.

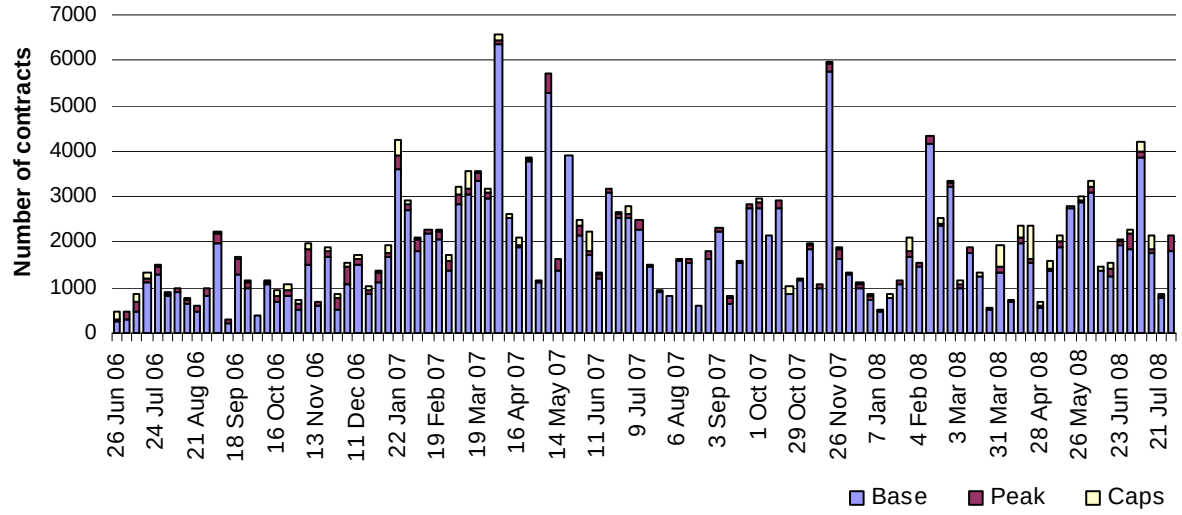
Figure 4: $300 cap contract prices ($/MWh)

	QLD		NSW		VIC		SA	
Q1 2009 price	38	0%	22	0%	23	1%	65	0%
Calendar 2009	15	0%	11	0%	11	1%	21	0%

Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 5 shows the weekly trading volumes for base, peak and cap contracts, the date represents the end of the trading week.

Figure 5: Number of exchange traded contracts per week

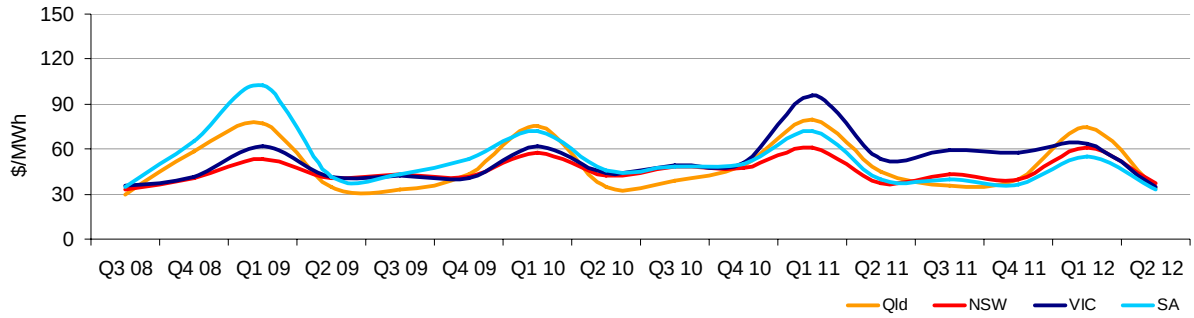


Source: d-cyphaTrade www.d-cyphatrade.com.au

[1] Futures contracts on the SFE are listed by d-cyphaTrade (www.d-cyphatrade.com.au). A futures contract is typically for one MW of electrical energy per hour based on a fixed load profile. A base load profile is defined as the base load period from midnight to midnight Monday to Sunday over the duration of the contract quarter. A peak load profile is defined as the peak-period from 7 am to 10 pm Monday to Friday (excluding Public holidays) over the duration of the contract quarter.

Figure 6 shows the prices for base contracts for each quarter for the next four years.

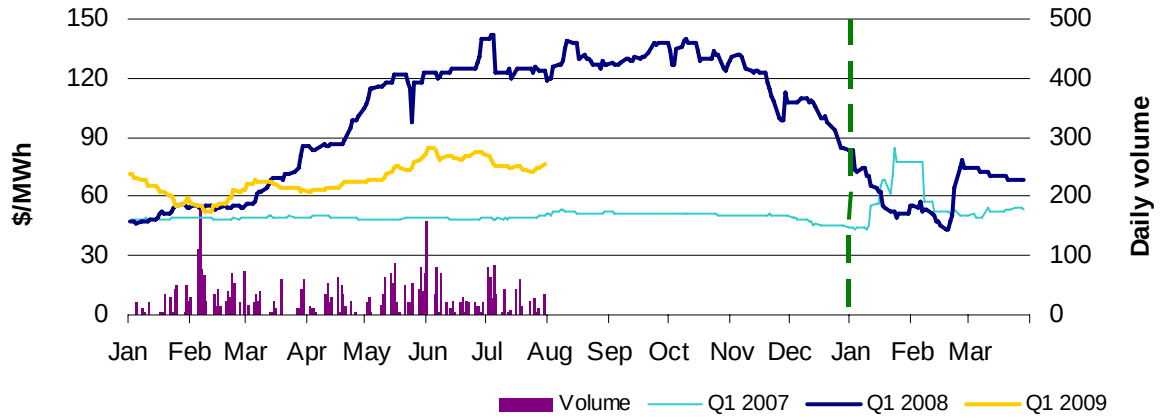
Figure 6: Quarterly base future prices 2008 - 2012



Source: d-cyphaTrade www.d-cyphatrade.com.au

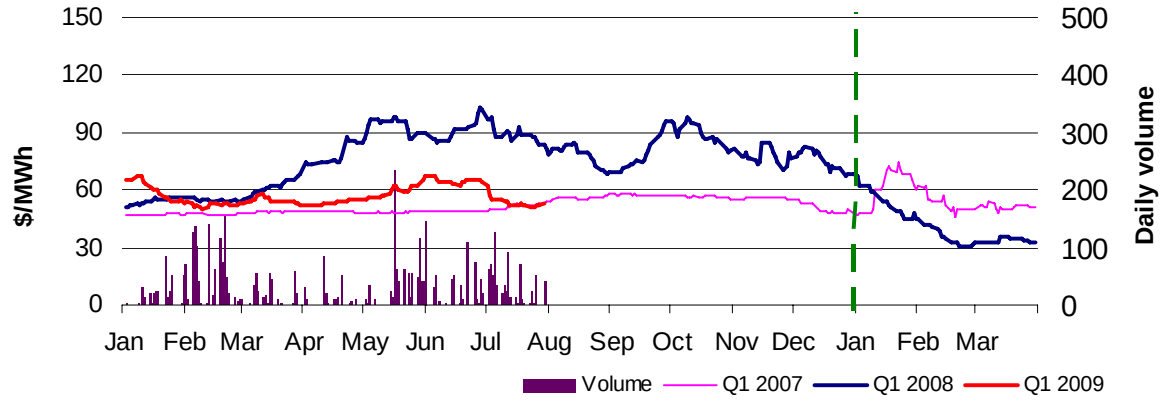
Figures 7-10 compares for each region the closing daily base contract price for the first quarter of 2007, 2008 and 2009. Also shown is the daily volume of Q1 09 base contracts traded. The vertical dashed line signifies the start of the Q1 period.

Figure 7: Queensland Q1 2007, 2008 and 2009



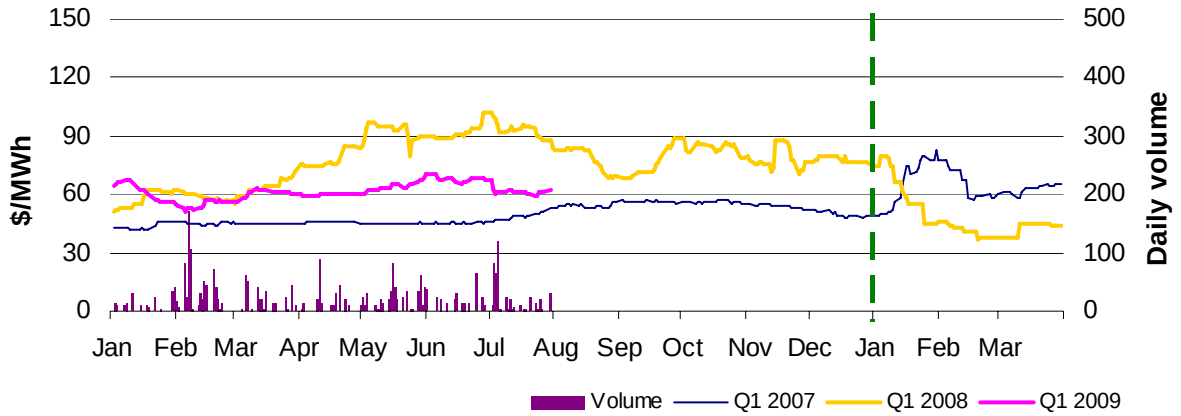
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 8: New South Wales Q1 2007, 2008 and 2009



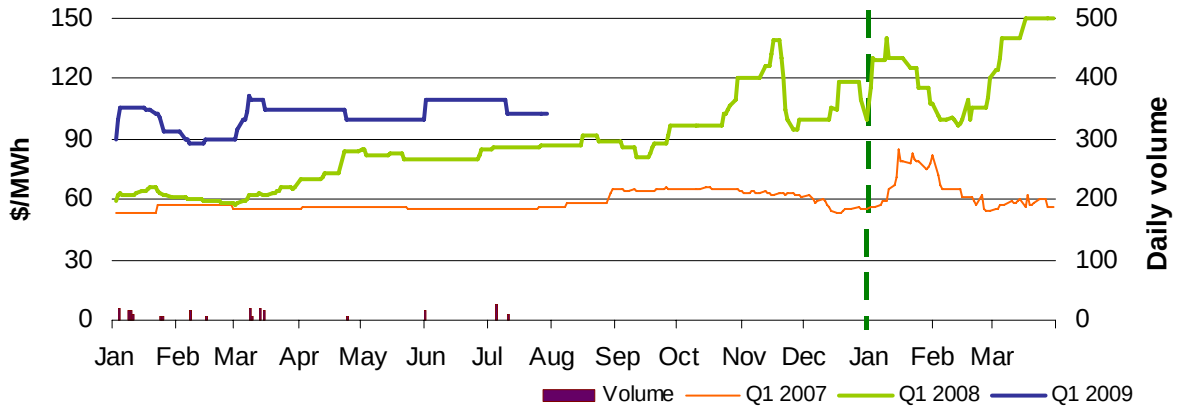
Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 9: Victoria Q1 2007, 2008 and 2009



Source: d-cyphaTrade www.d-cyphatrade.com.au

Figure 10: South Australia Q1 2007, 2008 and 2009



Source: d-cyphaTrade www.d-cyphatrade.com.au

Spot market forecasting variations

The AER is required by the National Electricity Rules to determine whether there is a significant variation between the forecast spot price published by NEMMCO and the actual spot price and state why the AER considers that the significant price variation occurred. It is not unusual for there to be significant variations as demand forecasts vary and as participants react to changing market conditions. There were 34 trading intervals where actual prices significantly varied from forecasts[2] throughout the week. This compares to the weekly average in 2007 of 125 counts. Reasons for these variances are summarised in Figure 11[3].

Figure 11: Reasons for variations between forecast and actual prices

	Availability	Demand	Network	Combination
Price is higher than forecast	9%	41%	12%	1%
Price is lower than forecast	36%	0%	0%	0%

2 A trading interval is counted as having a variation if the actual price differs significantly from the forecast price either four or twelve hours ahead.

3 The table summarises (as a percentage) the number of times when the actual price differs significantly from the forecast price four or twelve hours ahead and the major reason for that variation. The reasons are classified as availability (which means that there is a change in the total quantity or price offered for generation), demand forecast inaccuracy, changes to network capability or as a combination of factors (when there is not one dominant reason). An instance where both twelve and four hour ahead forecasts differ significantly from the actual price will be counted as two variations.

Demand and bidding patterns

The AER reviews demand, network limitations and generator bidding as part of its market monitoring to better understand the drivers behind price variations. Figure 12 shows changes to the offer price and available capacity of generation in each region for the on-peak periods only[4]. For example, in Queensland 352 MW less capacity was offered at prices less than $20/MWh this week compared to the previous week. Also included is the change in average demand during peak periods for comparison.

Figure 12: Changes in available generation compared to the previous week during peak times

$/MWh	<20	Between 20 and 50	Total availability	Change in average demand
Queensland	-352	117	-189	265
New South Wales	542	-52	532	700
Victoria	-26	67	154	213
South Australia	52	2	113	161
Tasmania	-174	-146	4	72
Total	42	-12	614	1,411

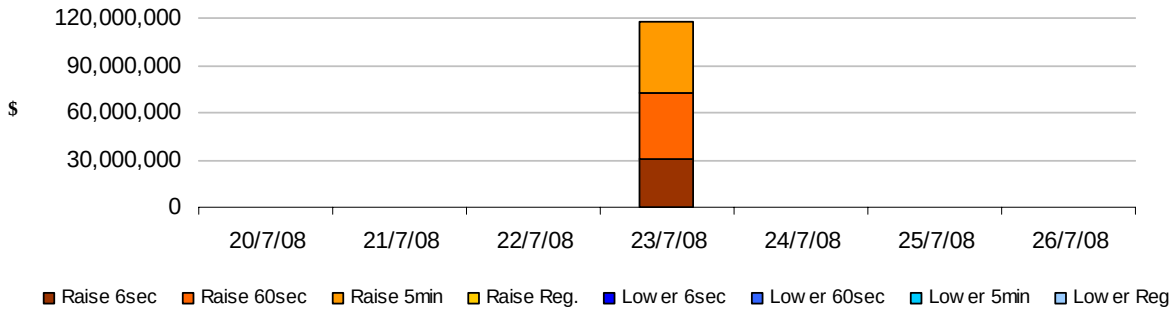
Ancillary services market

The total cost of ancillary services on the mainland for the week was $114 million or 35 per cent of turnover in the energy market – the highest-ever. Almost the entire cost accrued during Wednesday's high price event. Ancillary service constraints were invoked at 5.55 pm that saw the requirement for raise services significantly increased from 800 MW to around 4000 MW to manage the loss of generation in the Latrobe Valley. These constraints were revoked at 10.05 pm. There were 28 dispatch intervals between 6 pm and 10.05 pm where the price of Raise 6 second, Raise 60 second and Raise five minute frequency services all exceeded $9600/MW.

The total cost of ancillary services in Tasmania for the week was $4 million or 44 per cent of the turnover in the Tasmanian energy market with almost all accruing during Wednesday's events.

Figure 13 shows the daily breakdown of cost for each frequency control ancillary service.

Figure 13: Daily frequency control ancillary service cost



Australian Energy Regulator
August 2008

[4] Peak period is defined as between 7 am and 10 pm on weekdays, which aligns with the SFE contract definition.

National: Spot prices within the national market are regularly aligned with conditions in one region reflected across all others. There were six occasions where the price generally aligned across all mainland regions and the prices were greater than three times the weekly average price. In the following table the New South Wales spot price has been used as a proxy national price under these conditions as New South Wales is located in the centre of the NEM.

Wednesday, 23 July

6:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	1808.50	105.03	90.12
Demand (MW)	32 128	32 181	31 233
Available capacity (MW)	38 149	38 474	39 023
6:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	8454.96	147.10	100.00
Demand (MW)	32 379	32 668	31 746
Available capacity (MW)	38 367	38 485	39 019
7:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	324.34	147.10	147.10
Demand (MW)	32 211	32 632	31 892
Available capacity (MW)	38 457	38 466	38 621
7:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	358.77	104.76	100.00
Demand (MW)	31 787	32 031	31 244
Available capacity (MW)	38 219	38 357	38 577
8:30 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	237.18	81.93	49.93
Demand (MW)	31 090	31 069	30 470
Available capacity (MW)	37 788	38 086	38 466
9:00 pm	**Actual**	**4 hr forecast**	**12 hr forecast**
Price ($/MWh)	611.30	51.51	42.68
Demand (MW)	30 140	30 375	29 960
Available capacity (MW)	37 037	38 096	38 466

These prices followed an unplanned network outage between Hazelwood and Loy Yang in the Latrobe Valley at the time of high winter demand. Up to 1000 MW of generation at Loy Yang was constrained and Basslink limited to zero. Five minute prices in Tasmania fell to the price floor. Ancillary services at the time of this event cost $118 million, the highest ever. The AER will issue a separate report into the circumstances that led to the spot price exceeding $5000/MWh and high ancillary service costs in accordance with clause 3.13.7 of the Rules.

Tasmania: There was one occasion where the spot price in Tasmania was greater than three times the Tasmania weekly average price of $35/MWh.

Wednesday, 23 July

10:00 pm	Actual	4 hr forecast	12 hr forecast
Price ($/MWh)	828.22	42.51	51.44
Demand (MW)	1493	1474	1486
Available capacity (MW)	2163	2163	2163

Conditions at the time saw demand and available capacity close to that forecast four and twelve hours ahead.

At 10 pm the interaction between the Basslink no-go zone, and the frequency and energy markets saw the dispatch price reached $4961/MWh.

There was no significant rebidding.

Appendix B: Detailed NEM Price and Demand Trends

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Table 1: Financial year to date spot market volume weighted average price

Financial year	QLD	NSW	VIC	SA	TAS
2008-09 ($/MWh) YTD	40	45	47	49	26
2007-08 ($/MWh) YTD	80	89	95	97	106
Change	-50%	-50%	-51%	-49%	-75%
2007-08 ($/MWh)	58	44	51	101	57

Table 2: NEM turnover

Financial year	NEM Turnover* ($, billion)	Energy (TWh)
2008-09 YTD	$0.7	16
2007-08	$11.1	208
2006-07	$12.7	206
Change (2006-07 to 2007-08)	-12%	0.8%

* estimated value

Table 3: Recent monthly and quarterly spot market volume weighted average price and turnover

Volume weighted average ($/MWh)	QLD	NSW	SNOWY	VIC	SA	TAS	Turnover ($, billion)
Mar-08	31	37	29	65	325	57	1.12
Apr-08	29	34	28	41	44	56	0.60
May-08	41	47	36	56	53	68	0.87
Jun-08	43	44	28	44	42	57	0.77
Jul-08	40	45	-	47	49	26	0.69
Q2 2007	119	146	-	99	83	74	3.26
Q2 2008	38	42	-	47	46	61	3.36
Change	-68%	-71%	-	-52%	-44%	-18%	

Table 4: ASX energy futures contract prices at 28 July

	QLD		NSW		VIC		SA	
Q1 2009	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Price on 21 Jul ($/MW)	34	45	39	57	40	56	42	62
Price on 28 Jul ($/MW)	35	46	41	57	42	56	42	62
Open interest on 28 Jul	2132	144	2050	161	1546	444	145	0
Traded in the last week (MW)	76	0	120	85	64	0	0	0
Traded since 1 Jan 08	3922	312	4426	168	2852	625	205	0
Settled price for Q1 08($/MW)	68	97	32	42	43	65	152	322

Table 5: Changes to availability of low priced generation capacity offered to the market

Comparison:	QLD	NSW	SNOWY*	VIC	SA	TAS	NEM
May 08 with May 07							
MW Priced <$20	526	570	-74	-84	0	-71	866
MW Priced $20 to $50	89	277	419	-62	-42	25	707
June 08 with June 07							
MW Priced <$20	307	376	-25	-58	-70	-405	125
MW Priced $20 to $50	302	438	299	104	44	95	1284
July 08 with July 07							
MW Priced <$20	520	873	-	-14	27	564	1970
MW Priced $20 to $50	384	-779	-	288	169	118	180

*For comparative purposes Snowy generation for July 2007 and 2008 has been incorporated into New South Wales and Victoria