

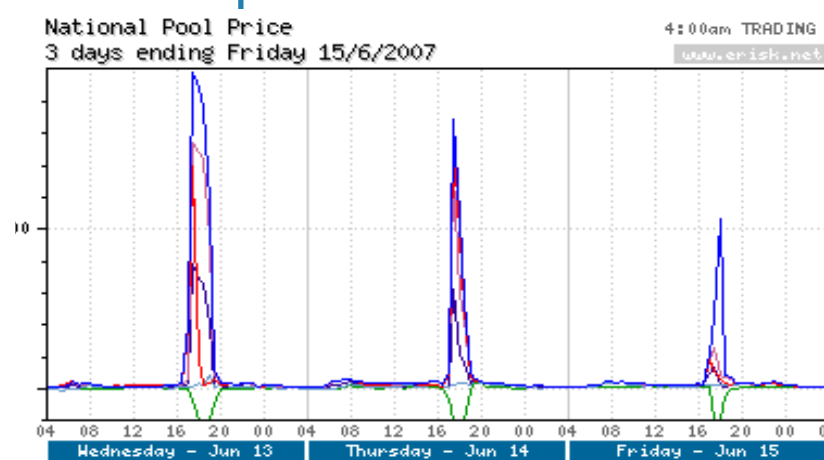
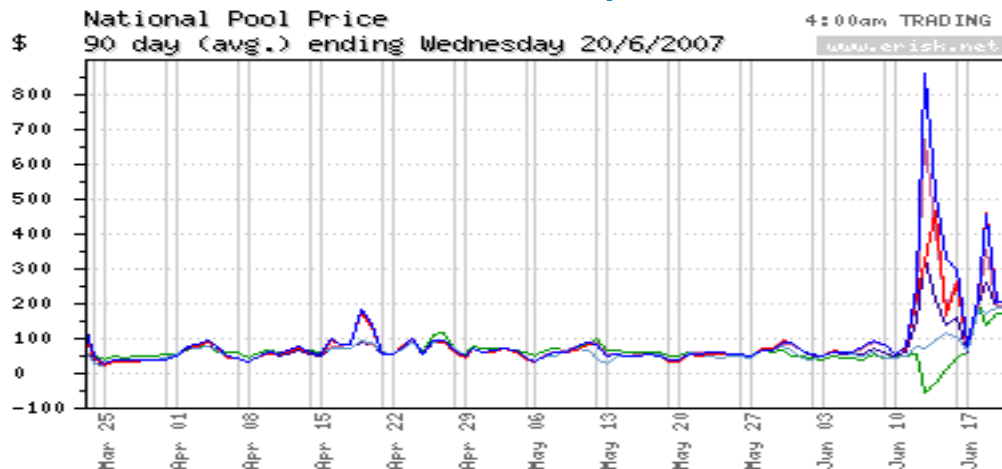
Kogan Creek comes online into high prices 13, 14, June, p8

Basslink touches 594MW as TasHydro bids minus prices, p5

High price is a market signal: market is working, says AER, p7

electricity week

EWN Publishing



- NSW disp Pool Price (\$)
- QLD disp Pool Price (\$)
- SA disp Pool Price (\$)
- Snowy disp Pool Price (\$)
- VIC disp Pool Price (\$)
- TAS disp Pool Price (\$)

Av.	High	Low	Peak	Offpk
97.59	865.36	28.53	140.87	61.75
86.08	468.69	27.06	117.96	59.76
66.09	194.15	26.98	83.09	52.91
88.01	674.73	28.98	119.51	62.01
75.89	335.87	26.41	100.30	56.18
65.40	204.13	-55.33	71.97	60.85

Av.	High	Low	Peak	Offpk
572.40	9936.37	50.45	850.48	108.94
320.40	7796.33	55.17	446.32	110.54
97.13	433.69	-32.84	114.49	68.20
423.90	7715.69	49.73	615.27	104.94
229.84	3928.81	31.36	321.06	77.81
-21.96	215.60	-999.95	-62.57	45.73

NEM goes loony as La Nina hits: \$10,000 in NSW; while Tas gives it away, for free

1 Wednesday 13 June brought a \$300 million spike of income to NSW State-owned generators in the second week of a La Nina storm crisis. The full-hedged Hydro-Tasmania was so keen to sell over Basslink, it bid negative prices on

most of its capacity; and on one day, last week arrived at a negative average pool price.

Drought and flooding rains together: Some small hydros began to flow - Shoalhaven, for example. The NSW coal plant appeared to have no problems despatching, from existing coal piles, despite *force majeure* declarations by three big NSW thermal coal suppliers. Snowy's bid tactics had changed to high-price-seeking ; it had only 8pc water available, but earned \$60m in pool price on 13 June.

In NSW parliament Treasurer Michael Costa - controller of State assets - maintained his love for coal assets; and approved two new coal mines and called the persistently civil Greens Senator, Sylvia Hales, an "Idiot" for raising pollution-control issues.

More at subscriber section of www.erisk.net

Published by EWN Publishing, PO Box 148, Balmain, NSW 2041. Ph: +612 9818 8877. Fax: +612 9818 8473. Editor: Laurel Fox-Allen.

Top average unit earner for NEM week 444: Hunter Valley, NSW at \$9420.63/MWh

EWN Publishing

2

TAS			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Liap/Way/Cat	\$120,170	17,080	\$7.04
Bell Bay Power	\$733,196	38,998	\$18.80
John Butters	\$310,957	18,666	\$16.66
Tungatinah	-\$31,923	12,030	-\$2.65
Poatina	\$190,183	29,715	\$6.40
Tarraleah	\$218,780	11,307	\$19.35
Reece	\$289,213	28,054	\$10.31
Cethana	-\$36,894	8,191	-\$4.50
Tribute	-\$71,759	6,098	-\$11.77
Lemonthyme/Wilmot	\$130,415	9,949	\$13.11
Trevallyn	-\$34,567	7,927	-\$4.36
Mackintosh	\$240,093	12,946	\$18.55
Bastyan	\$229,773	11,984	\$19.17
Woolnorth Wind	-	-	-
Gordon	\$330,173	40,026	\$8.25
Vic->Tas	\$524,226	10,621	\$49.36
Devils Gate	\$12,078	6,581	\$1.84
Fisher	\$199,145	7,284	\$27.34
Meadowbank	12887.2053	2753.795	\$4.68
Lake Echo	-	-	-
Repulse	-	-	-
Paloona	-	-	-
Cluny	-	-	-

Red carpet for NSW State gen: In just one day - 13 June - of a seven-day spike series, NSW state-owned generation earned about \$200 million.

Earnings on Wednesday, 13 June, were: Bayswater \$33,524,133, Liddell, \$37,141,208, Mt Piper, \$25,141,442, Wallerawang, \$9,907,590, Vales Point, \$13,961,237, Munmorah \$55,190,900 Eraring \$50,751,978 The spikes followed a winter demand surge - almost a record - and the NSW storm-damage blackouts of 7, 8, 9 June.

SA			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
North'n Power	\$7,382,238	89,161	\$82.80
Ladbroke	\$151,617	1,168	\$129.86
Osborne	\$2,032,812	25,284	\$80.40
Pelican Pt	\$6,212,243	73,717	\$84.27
Torrens Is. B	\$6,661,013	71,408	\$93.28
Vic->SA	\$1,178,408	11,302	\$104.26
MLink->SA	\$19,465	152	\$127.82
Torrens Is. A	\$1,198,309	12,256	\$97.77
Mintaro	-	-	-
Dry Creek	\$17,236	196	\$88.04
Playford	\$1,244,142	15,469	\$80.43
Snuggery	-	-	-
Pt Lincoln	-	-	-
Quarantine	-	-	-
Angaston Power	\$24,462	166	\$147.80
Hallett Power	\$674,453	6,507	-
Lonsdale	-	-	-
Terminal Storage	-	-	-
Lake Bonney Wind	-	-	-

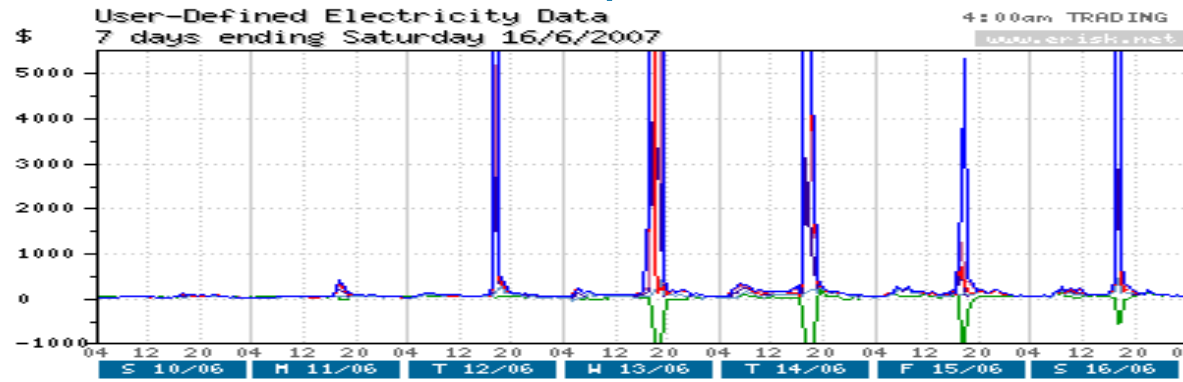
VIC			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Loy Yang A	\$55,977,381	333,775	\$167.71
Loy Yang B	\$28,219,775	176,116	\$160.23
Hazelwood	\$36,360,898	225,415	\$161.31
Yallourn	\$34,441,661	203,330	\$169.39
Anglesea	\$2,499,732	10,072	\$248.19
Energy Brix	\$3,486,422	22,361	\$155.92
Newport	\$9,221,586	52,547	\$175.49
MLink->Vic	\$2,437,742	11,015	\$221.31
SA->Vic	\$838,712	11,966	\$70.09
Snowy->Vic	-	-	-
Tas->Vic	\$11,633,891	55,590	\$209.28
Jeeralang	\$1,710,901	3,637	\$470.37
West Kiewa	\$1,156,298	4,411	\$262.15
Bairnsdale	\$2,343,537	14,020	\$167.16
Dartmouth	-	-	-
Eildon	-	-	-
Hume Vic	-	-	-
McKay Power	\$2,596,981	6,532	\$397.58
Clover	-	-	-
Valley Power	\$4,873,644	15,938	\$305.78
Rubicon	-	-	-
Laverton North	3947959.744	12546.085	-
Somerton Power	3277406.874	12021.435	-
Sunshine Energy	-	-	-
Longford	-	-	-

NSW			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Bayswater	\$94,154,853	265,180	\$355.06
Liddell	\$93,307,169	245,395	\$380.23
Mt Piper	\$68,381,590	188,826	\$362.14
Wallerawang	\$26,756,653	73,817	\$362.47
Vales Point	\$37,876,438	111,540	\$339.58
Munmorah	\$23,294,816	78,367	\$297.25
Eraring	\$134,912,752	373,281	\$361.42
Redbank	\$3,555,467	6,310	\$563.51
Smithfield	\$8,565,451	18,998	\$450.87
Snowy->NSW	\$142,554,759	204,719	\$696.34
Shoalhaven	\$5,528,517	10,107	\$546.99
Hunter Valley	\$28,733	3	\$9,420.63
Hume Hydro	-	-	-
Blowering	-	-	-
Northern Gas	-	-	-
Burrinjuck	-	-	-
Brown Mountain	-	-	-
Keepit	-	-	-
Broken Hill	-	-	-
Ergon Energy	-	-	-
DL Q->N	\$5,342,011	10,241	\$521.63
QLD->NSW	\$33,813,925	66,971	\$504.90
Pindari Hydro	-	-	-
West Nowra	-	-	-
Country En (NSW)	-	-	-

QLD			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Kogan Creek	\$4,418,817	12,323	\$358.59
Tarong	\$35,043,475	132,544	\$264.39
Millmerran	\$7,561,457	46,403	\$162.95
Swanbank	\$8,988,006	29,771	\$301.91
Stanwell	\$47,890,753	204,956	\$233.66
Callide B	\$26,033,016	116,219	\$224.00
Callide Power	\$33,158,211	147,037	\$225.51
Townsville	\$8,315,353	30,613	\$271.63
Gladstone	\$42,239,193	184,978	\$228.35
Collinsville	\$3,273,035	9,687	\$337.89
Swanbank C. D. E	\$12,707,992	49,494	\$256.76
Barcaldine	\$1,119,976	2,056	\$544.71
Callide A	-	-	-
Kareeya	\$3,090,384	13,543	\$228.19
Barron Gorge	\$1,125,037	1,726	\$652.00
Mt Stuart	\$4,156,381	3,105	\$1,338.56
Wivenhoe	\$6,935,256	22,624	\$306.55
Braemar Power	\$14,415,687	38,007	\$379.29
Mackay	-	-	-
Roma	\$1,210,985	827	\$1,463.77
Oakey	\$4,592,962	4,032	\$1,139.04
DL N->Q	\$3,985	23	\$171.32
NSW->QLD	\$325,112	3,059	\$106.27
Rocky Point	-	-	-
Tableland	-	-	-

the week in detail

EWN Publishing



- NSW disp Pool Price (\$)
- QLD disp Pool Price (\$)
- SA disp Pool Price (\$)
- Snowy disp Pool Price (\$)
- VIC disp Pool Price (\$)
- TAS disp Pool Price (\$)

	Avg.	High	Low	Peak	Offpk
NSW	344.59	9936.37	28.06	600.60	138.14
QLD	226.88	7796.33	27.50	348.52	128.78
SA	83.38	476.72	-32.84	99.73	70.19
Snowy	271.64	7715.69	28.94	448.38	129.11
VIC	160.61	3928.81	26.62	248.44	89.78
TAS	19.72	215.60	-999.95	-16.09	48.59

Week to Saturday, 16 June:

- NSW: Average price \$344.59/MWh, up 373 per cent on the spike-affected \$72.88/MWh the previous week, up 922 per cent on the \$33.73/MWh of the comparable week last year; maximum price \$9936.37/MWh for the 30-minute trading interval ended 1800EST Wednesday. Average demand 9725MW, up 2.8 per cent on the previous week, down 2.4 per cent on a year ago; maximum demand 12,795MW in the 1800EST Thursday interval, up 5.9 per cent on the 12,087MW the previous week.
- Victoria: Average price \$160.61/MWh, up 160 per cent on the spike-affected \$61.85/MWh the

previous week, up 362 per cent on the \$36.36/MWh of the comparable week last year; maximum price \$3928.81/MWh for the 30-minute trading interval ended 1800EST Wednesday. Average demand 6201MW, up 1.4 per cent on the previous week, down 0.9 per cent on a year ago; maximum demand 7763MW for the 1800EST Wednesday interval, up 2.8 per cent on the 7553MW the previous week.

- South Australia: Average price \$83.38/MWh, up 47 per cent on the spike-affected \$56.91/MWh the previous week, up 101 per cent on the spike-affected \$41.53/MWh of the comparable week last year, maximum price \$476.72/MWh for the trading interval ended 2230EST Saturday. Average

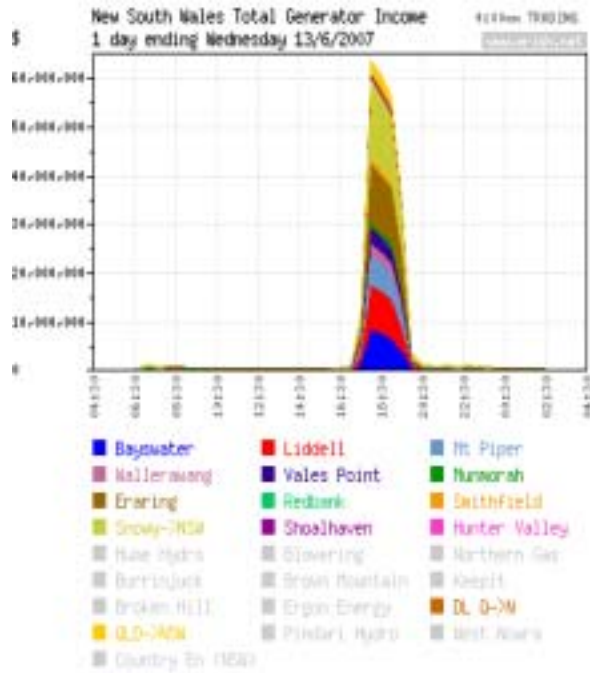
demand 1689MW, up 3.0 per cent on the previous week, down 2MW on a year ago; maximum demand 2313MW for the 1900EST Friday interval, up 5.9 per cent on the 2190MW the previous week.

- Queensland: Average price \$226.88/MWh, up 216 per cent on the spike-affected \$71.83/MWh the previous week, up 917 per cent on the \$22.31/MWh of the comparable week last year; maximum price \$7796.33/MWh for the trading interval ended 1800EST Thursday. Average demand 5659MW, down 1.3 per cent on the previous week, down 1.2 per cent on a year ago; maximum demand 7147MW for the 1800EST Thursday interval, up 1.5 per cent on the 7040MW the previous week.

- Tasmania: Average price \$19.72/MWh, affected by four consecutive days of negative prices, down 60 per cent on the spike-affected \$49.10/MWh the previous week, down 46 per cent on the \$36.83/MWh of the comparable week last year; maximum price \$215.60/MWh for the 2000EST Thursday interval while negative prices reached minus \$999.76/MWh on Wednesday, minus \$999.32/MWh on Thursday, minus \$999.95/MWh on Friday and minus \$542.15/MWh on Saturday. Average demand 1319MW, up 3.5 per cent on the previous week, up 3.6 per cent on a year ago; maximum demand 1642MW in the 0830 Thursday interval, up 5.1 per cent on the 1563MW the previous week.

3

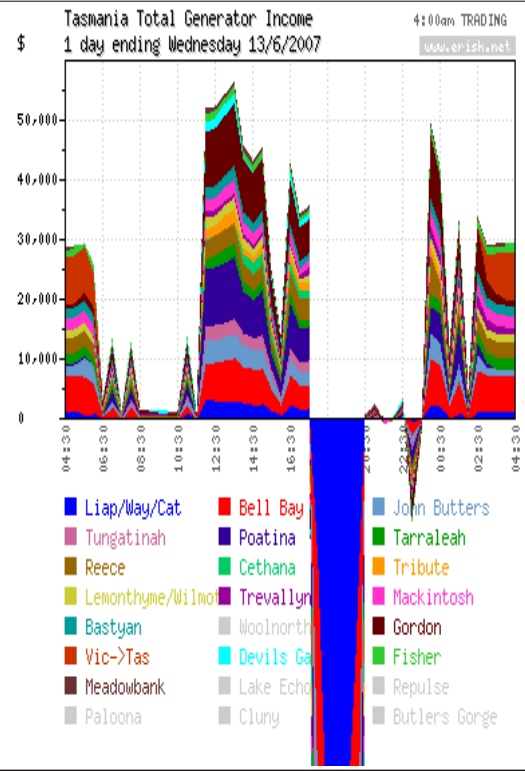
\$60 mil NSW spike 13 June



Lines, coal plant out: The NSW Mt Piper to Wallerawang 71 330kV line failed 12 June, and the State of NSW struck a \$10,000/MWh blackout price in peak winter demand. NSW ran out of peak load electricity on 13 June, as the flooding rains of La Nina stopped the NSW coal rail system; pits were flooded, trains not working; and high voltage lines, not operating.

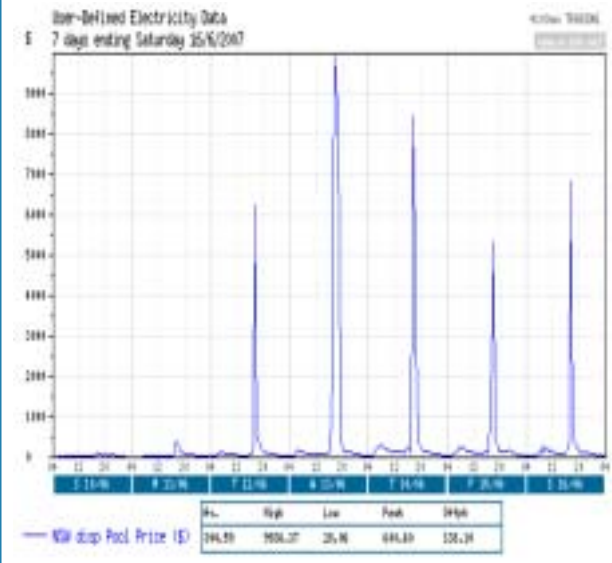
Weird weather gets weirder: Four Australian states had just experienced a record warm May, contributing to the warmest autumn on

Basslink sales tactic



Tasmania a toy market: Tasmania Hydro's traders were so keen to sell via Basslink, into the high NSW prices, last week, it bid negative prices (see above) when the NSW price was high; this assured dispatch via Basslink. This was possible as it is believed the all-state-owned Tasmania system was fully hedged between Tas Hydro and retailer Aurora, so domestic prices were not an issue. This was revealed by last week's negative prices on four consecutive days in Tasmania, which resulted in a minus average price on two of these days, dragging average price down 60 per cent to \$19.72/MWh. Tasmania also had spikes on three of the four days of negative prices with a top price of \$215.60/MWh.

NSW spikes for the week



record for eastern Australia. This was followed by very heavy rains as equatorial ocean temperatures cooled - the "La Nina" effect:

- BHPRio Tinto and Xstrata had declared *force majeure* on coal, to some NSW generators. Force majeure stopped shipments of thermal coal from NSW Mt Arthur mine to Macquarie Generation;
- Tasmania appeared to give electricity away for free, as all its units bid negative prices on some days - at the same time as the NSW price spikes, as Snowy electricity flowed North to the high NSW prices.

Mt Piper to Wallerawang out: A short notice outage of the Mt Piper to Wallerawang 71 330kV line in NSW, Tuesday, 12 June,

Interconnectors for week to 16 June: Basslink touches 594MW

EWN Publishing

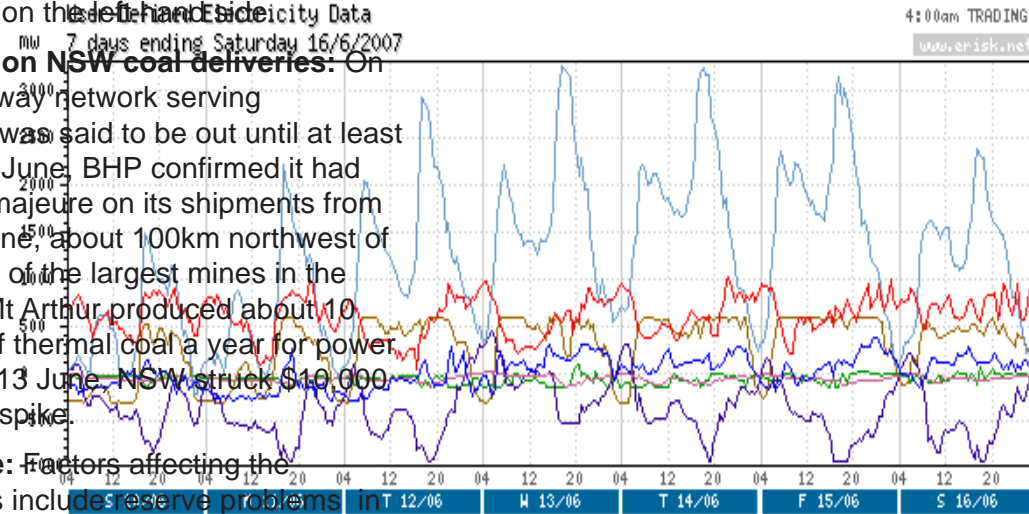
resulted in reduced interconnector transfer capacity. NEMMCO said the constraint had Snowy 1, QNI, the Victoria-South Australia Heywood and the NSW-Queensland Terranora interconnectors on the left hand side

Force majeure on NSW coal deliveries: On 12 June the railway network serving Newcastle Port was said to be out until at least 15 June. On 12 June, BHP confirmed it had declared force majeure on its shipments from the Mt Arthur mine, about 100km northwest of Newcastle. One of the largest mines in the Hunter Valley, Mt Arthur produced about 10 million tonnes of thermal coal a year for power generation. On 13 June, NSW struck \$10,000 in a five minute spike.

Friday, 15 June: Factors affecting the mainland spikes include reserve problems in NSW, transmission line outages, plus action to control accumulating negative settlement residues and equipment problems affecting transfer limits on interconnectors.

Minus \$6000 Vic- SA seventh time: Negative settlement residues twice exceeded minus \$6000 for transfers on Victoria to South Australia interconnectors on Saturday, 16 June - the seventh time this has happened since Tuesday. The first time was for three hours 10 minutes from 1005EST to 1315EST on Saturday.

\$10,000 price in NSW, sticks: NEMMCO advised that its review of the over-constrained dispatch and a price of \$10,000 published for the five-minute dispatch interval ending



	High	Low	Peak	Offpk	
DL N->Q disp Flow (mw)	-0.44	380	-300	-2.13	0.92
NSW,QLD disp Flow (mw)	612	1030	36.82	473	724
DL N->Q disp Flow (mw)	1223	3273	-231	1766	785
NSW,QLD disp Flow (mw)	-60.77	18.98	-143	-76.92	-47.75
DL N->Q disp Flow (mw)	-381	445	-950	-505	-281
NSW,QLD disp Flow (mw)	-64.29	80.55	-162	-74.10	-56.38
Basslink disp Flow (mw)	275	594	-320	446	138

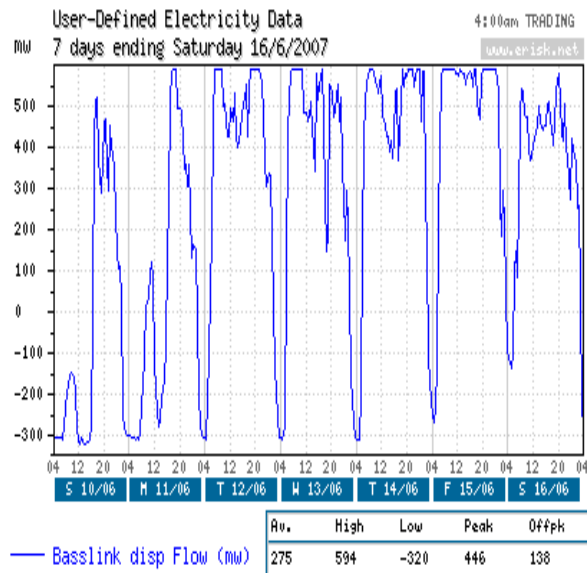
1750EST on Wednesday, 13 June, had not resulted in any change to the price.

Effect of Blackwall SVC: NEMMCO said in a market notice at 1742EST on Thursday, 14 June that updated advice was that the Blackwall static var compensator (SVC) in Queensland had reduced operating capability, but this did not have an impact on transfer

limits between NSW and Queensland provided there was at least one Braemar or Kogan Creek unit online. Kogan Creek was online for three days in the peak price of last week.

5

Basslink max near 600MW



30 join in bids for Basslink

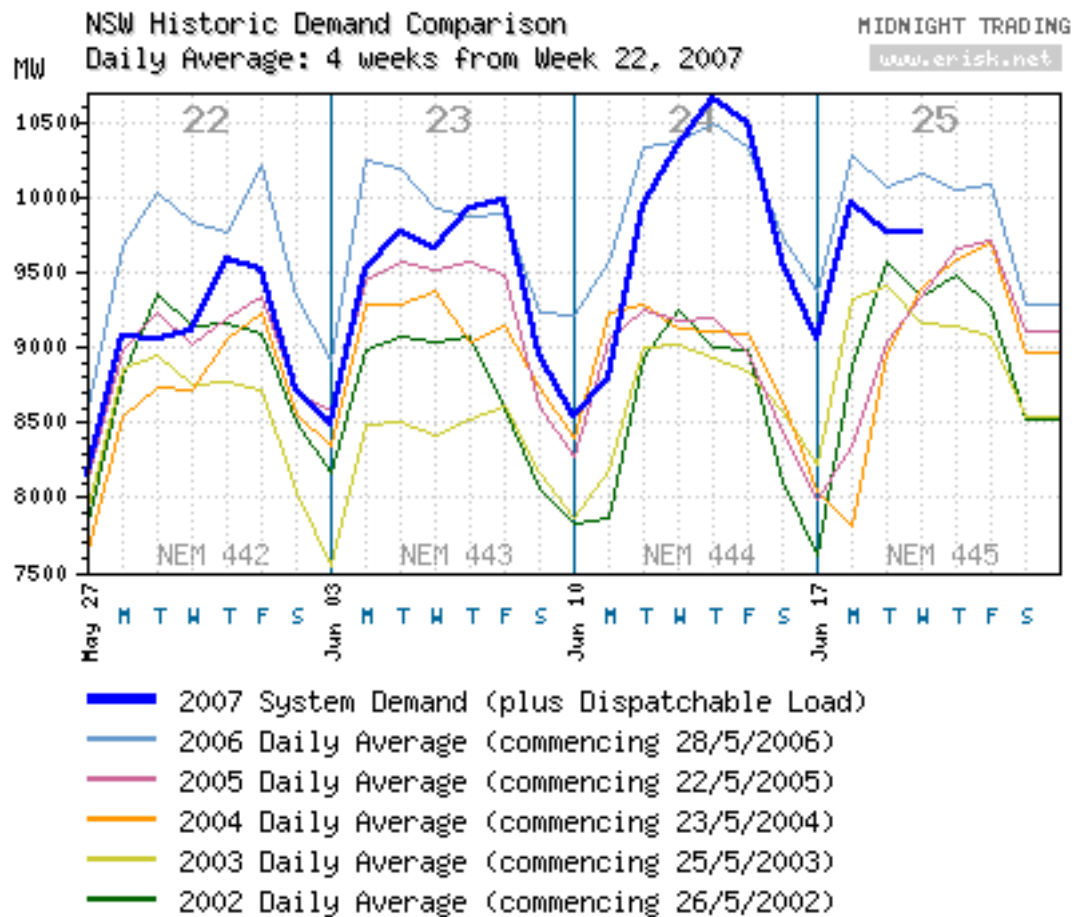
More than 30 parties are understood to have lodged preliminary bids late last week with the UK-based utility's adviser, Rothschild for Australia, despite controversy which has dogged Basslink since its commissioning in April 2006, reported *The Australian Financial Review* (4/6/2007, p.12).

6

Consortium: The interested bidders include:

- a consortium of APA Group and Macquarie Bank, Hastings Diversified Utilities Fund advised by UBS, IFM which has JPMorgan in its camp, as well as Transfield Services.
- Local financial players AMP and ANZ

NSW demand for week to 16 June



Infrastructure Services have also lodged first round offers, ahead of Rothschild culling the field to a short list in the next few weeks.

- Singapore Power-backed SP AusNet, Deutsche Bank-advised CKI/Spark

Infrastructure, and the Temasek Holdings infrastructure fund CitySpring Infrastructure Trust, which is being advised by Citigroup.

Southward Flow IRR Units: Notice was given by the Australian Financial Management Association Services regarding the Safety Net

Auction for 790 Basslink Southward Flow IRR Units scheduled. AFMA Services Pty Limited was the Auction Administrator for the Basslink Southward Flow IRR Safety Net Auction.

Safety Net Auction website <http://www.afmaservices.com/Auctions> Enquiries: For all enquiries please call (02) 9776 7916.

EWN Publishing

APA Macquarie Bank plan: bid for Basslink: then, IPO, with MurrayLink and DirectLink

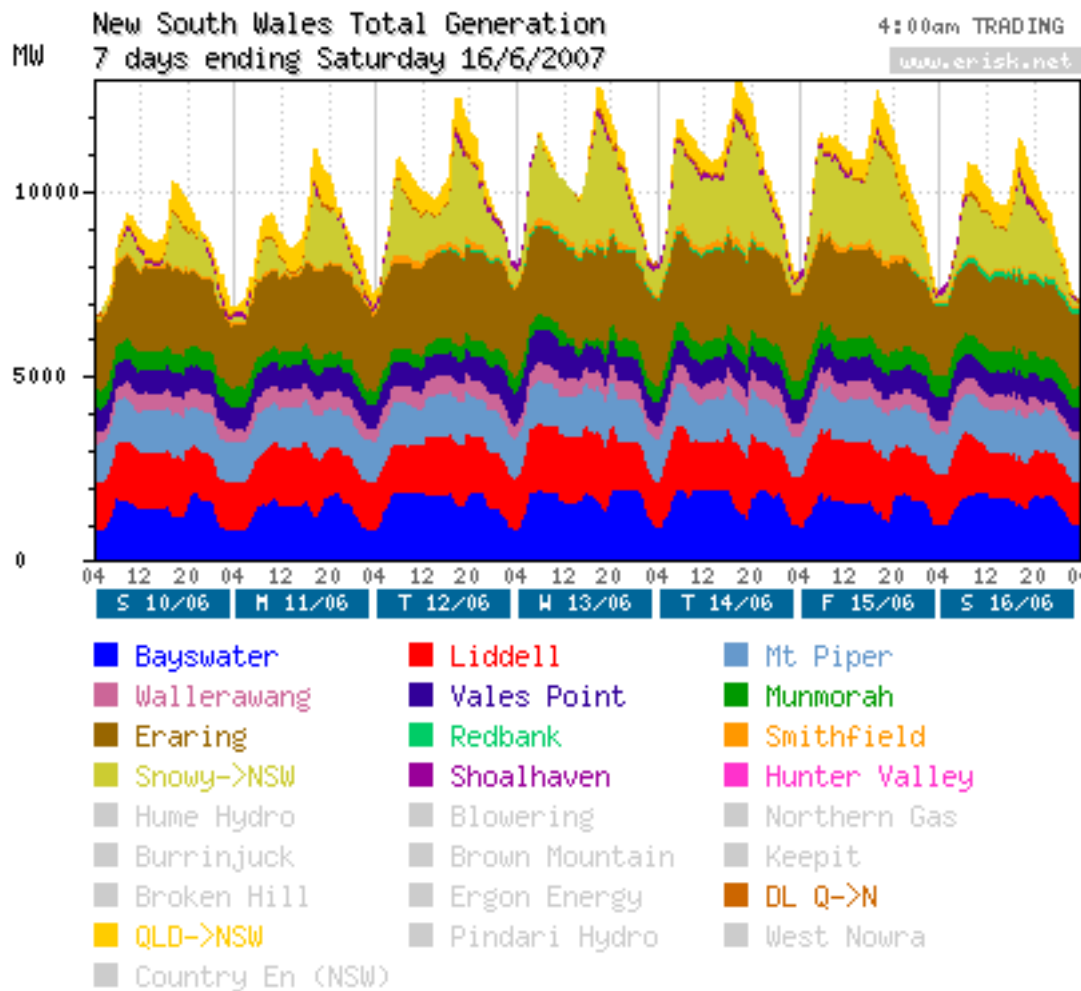
According to Vesna Poljak in *The Australian* (13/6/07, p.18), utilities owner APA Group - if it succeeded in buying the interconnector between Tasmania and the mainland - would list the regulated links on the ASX. Two weeks ago, APA raised \$US654 million (\$776 million) in a private placement.

Expected \$1b for Basslink: The former Australian Pipeline Trust was expected to bid over \$1 billion for National Grid's Basslink cable. If successful, this was likely to spin off a separate entity owning that asset, as well as MurrayLink and DirectLink.

7

APA and Macquarie Bank: It was understood that APA, which was working with Macquarie Bank on the bid for Basslink and the potential restructure, would either distribute shares in the new entity to existing investors or seek to sell a stake to a group of unlisted funds.

Snowy top dog: NSW generation for week of 16 June



APA also has Directlink and GasNet: APA was working with Macquarie on the bid for National Grid's Basslink cable and a potential restructure. In the past year alone, it bought Origin Energy's networks assets including a 17

per cent stake in Envestra - for \$556.5 million, purchased DirectLink for \$170 million and bought GasNet Australia Group for \$452 million.

\$US654m (\$776m) raised: DirectLink connected the NSW and Queensland power grids, while Murraylink, acquired in 2005, was a 180 kilometre cable joining Berri in South Australia and Red Cliffs in Victoria.

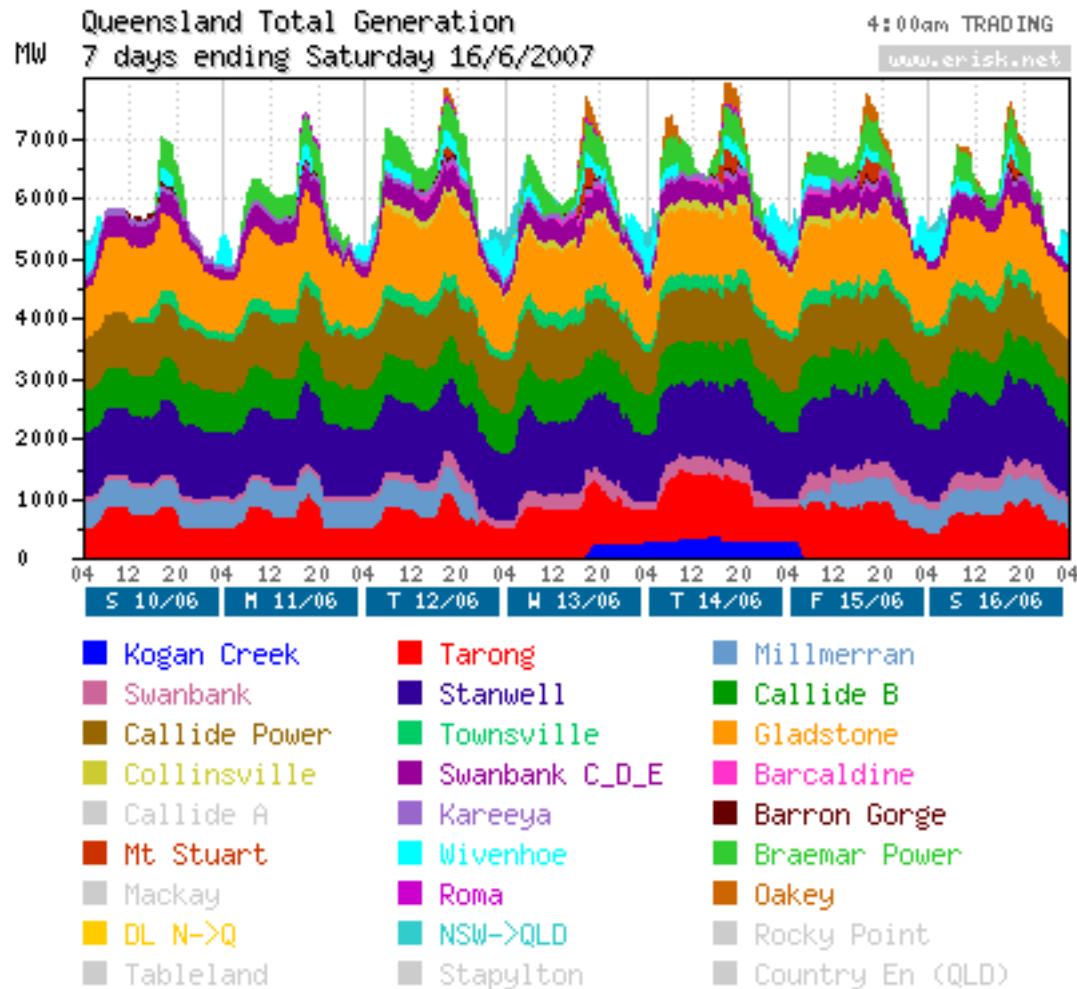
High price is a market signal: market is working says AER

Ed Willett, ACCC Commissioner and AER Member, in a presentation 6 June 2007 to the *EUAA Energy Price and Market Update Seminar Perspectives on energy prices*, said “Evidence points to the spot market reacting in a largely normal way to very tight supply conditions caused by drought, though the high prices in the forward contract market may not be fully explained by the drought”{.

Market power issues not shown: “Provided that sustained and substantial market power issues do not emerge, the NEM is well designed to deal with energy supply issues and problems at least cost. In May, the Ministerial Council on Energy reiterated its confidence in the market as the primary mechanism for dealing with supply, demand and energy constraint issues. The AER fully endorses this position”.

Normal market response: “Our market monitoring suggests that what we are seeing is mostly a normal market response to what we

Kogan Creek online into high prices 13, 14, June



hope is a short-term phenomenon. He said generator offers at prices below \$50 per megawatt hour down in total by around 5000 MW this year compared to 2006. This was he said ... consequences of prolonged

drought...but...there are some recent indications that the upward spiral may have peaked. Prices nonetheless remain volatile. In regard to the wholesale market, the AER monitors the compliance of market participants

with the *National Electricity Law* and Rules, and investigates and prosecutes breaches. This requires very close monitoring of wholesale market activity, including rebidding behaviour, and the conduct of around 24 compliance audits each year...The markets are in fact behaving largely as they should in the current environment.

The facts.

- Over the past eight weeks or so, spot prices have been unusually high. Prices this quarter have averaged \$70 per megawatt hour compared to around \$25 in the same quarter last year. This is particularly unusual for autumn, when prices are normally subdued due to relatively low demand.
- In Queensland, for example, prices over the last two months have mostly been in a \$40-\$100 range, compared to around \$20 last year. It is worth noting that we are not seeing large spikes of \$5000 or above here. Rather, we are seeing persistently high but reasonably consistent prices.

Forward prices: These trends are flowing through to higher prices in the forward market for derivative contracts. Forward prices for base and peak contracts have risen for all quarters through to 2010. Prices are particularly high in Q3 and Q4 2007 normally relatively low price periods. Prices are also high in Q1 2008 most markedly in Queensland. There are signs of improvement from Q2 2008, which

continue into 2009 and 2010, allowing for the normal summer peaks.

For example, while the NSW forward curve is significantly higher than it was 12 months ago, it shows a gradual convergence back to more normal conditions over the next two or three years.

So, what is causing high prices?: “Demand is comparable to this time last year, so that is not a factor. Instead high prices over the last two months have been driven by tight supply conditions. The key factors are drought and maintenance.

Maintenance: Generators undertake most of their maintenance over autumn and spring when demand is relatively low. The data shows that generator capacity is lower than last year because more plant than usual is out for maintenance. About 700 MW more capacity than last year is out across the NEM (just over 1.5 per cent of NEM capacity). The majority of the reduction is for plant in New South Wales, although this has been partly offset by new capacity in Queensland (at Braemar). Users have expressed concerns that the high level of capacity down for maintenance cannot be justified. The AER is investigating this claim. Overall, however, maintenance has had some impact on spot market prices, but is a second order factor.

Drought: The key factor has been the drought. This has affected generating capacity in at least four regions of the NEM Snowy, Tasmania, Victoria and Queensland.

The most direct impact has been on hydro-generation in the Snowy, Victoria and Tasmania.

Low water levels in dams are reducing the amount of electricity that hydro generators can produce. Snowy is at less than 13 per cent capacity (which is around 8 per cent of active capacity).

Tasmanian hydro generation is at around 19 per cent of capacity, and Southern Hydro in Victoria is virtually out of water. As a digression, it is worth noting that the Basslink cable to Tasmania has significantly helped the situation in that state.

Imports into Tasmania since 2006 have totalled 14 per cent of Tasmanian demand.

Snowy output is around 13 per cent lower than in Q2 2006. The reduction is not as dramatic as might be expected. Snowy rarely operates near capacity but its costs have increased significantly.

Snowy is now pumping water to deliver around a third of its output, which has a direct cost of around \$43 per megawatt hour, and involves a 30 per cent efficiency loss.

Bidding changes: The hydro generators have responded by reducing the amount of electricity they dispatch at low to medium prices. Snowy has historically bid in significant capacity at \$20- \$50 per megawatt hour. But in May 2007 Snowy bid in 1400MW less capacity

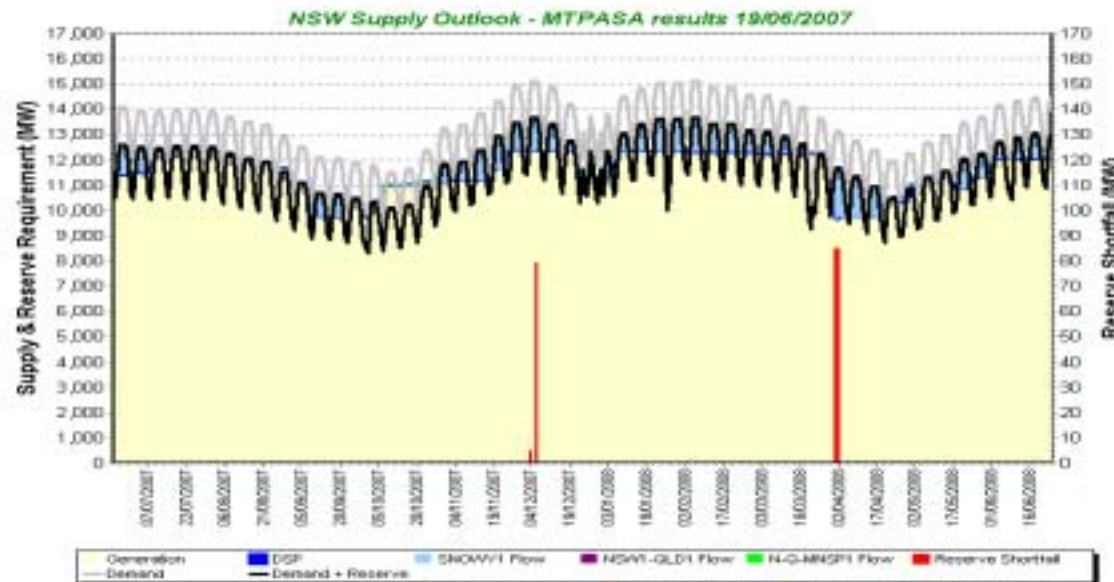
at under \$50 per MWh than it offered in May 2006. A similar story is evident for Tasmania and Southern Hydro. This has had flow-on effects across the NEM, with generator offers at prices below \$50 per megawatt hour down in total by around 5000 MW this year compared to 2006. This trend is also evident in daily offer prices, which show a significant reduction in low priced capacity from late March.

The change is most evident in the Snowy, Tasmania, Queensland and NSW, and encompasses hydro as well as coal plant.

The drought has also impacted on the availability of coal plant. In Queensland water shortages have reduced output by around 8 per cent of regional capacity mainly at Swanbank and Tarong.

Is market power an issue? In the current conditions there is the risk of market power issues emerging. The bidding data certainly shows that generators are responding to tight supply conditions by bidding into higher price bands. For generators that are constrained by water-related issues this may be a genuine reflection of higher costs. In addition, other generators that do not face cost pressures may be able to take advantage of the general shortage of low-cost generation by raising their bid prices. In the short term, this is a normal response in a competitive market, and provides signals for new investment in generation capacity. In the longer term a scenario of persistent high prices above new entrant costs with no investment

NEMMCO forecast shows no capacity shortage



response would raise serious market power concerns.

In the short to medium term the AER is monitoring two issues.

First, has there been a breach of the rebidding rules? The rebidding rules require the generators to bid in good faith. The AER monitors bidding and prices very closely and should pick up any contravention of the rules. The monitoring suggests that to date, bidding and price activity have been consistent with tight supply and cost conditions. So far the AER

has not detected any breaches. The new good faith provisions seem to be working reasonably well, and we have not seen evidence of unusual rebidding by generators. But this is an area that the AER will continue to monitor very closely over the coming weeks and months.

Second, the AER has not seen any evidence of collusion between generators. Any collusion would be a breach of section 45 of the TPA and would be prosecuted by the ACCC if evidence was available. The penalties under the TPA are substantial up to \$10 million.

Large increase in the cost of fresh water is unlikely to render some plants uneconomic, says AER

We are likely to see more price pressure than usual throughout this winter, said Ed Willett, ACCC Commissioner and AER Member, in a presentation 6 June 2007 to the *EUAA Energy Price and Market Update Seminar Perspectives on energy prices*.

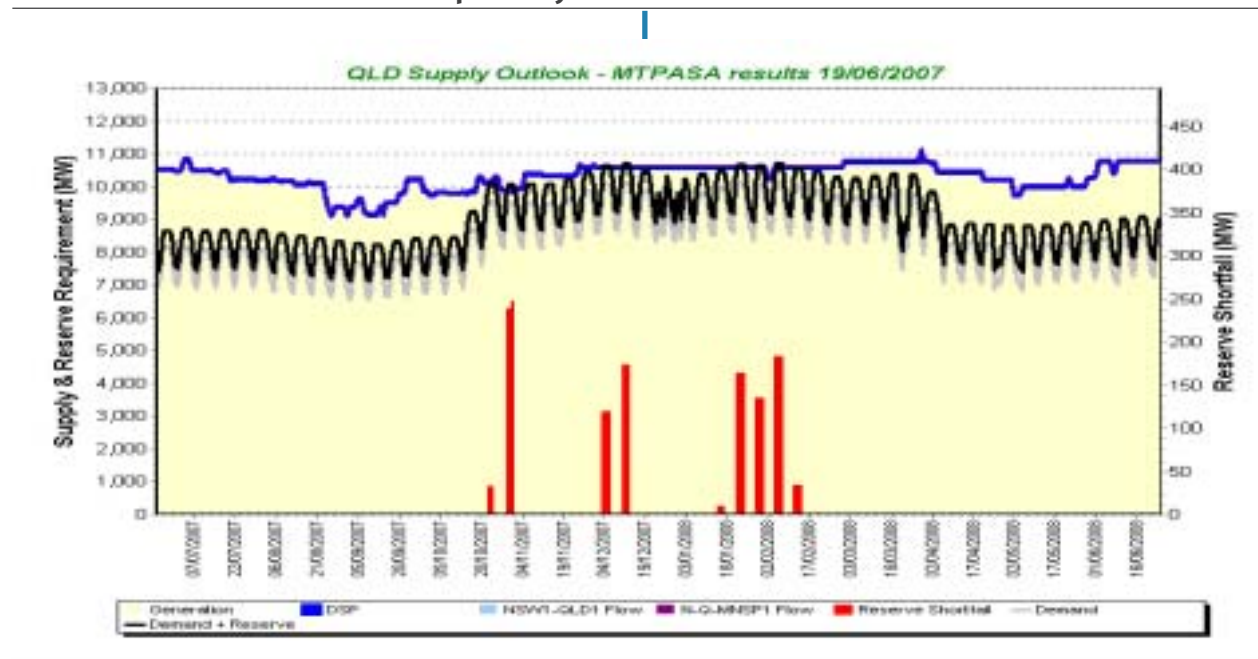
On the positive side, Kogan Creek in Queensland should come on line in the next few months. This will add around 750 MW of air cooled capacity, and should help ease conditions, especially in Queensland and NSW.

Looking ahead to 2008 some additional capacity should come on-line, including TRUenergys Tallawarra plant in NSW.

New water pipelines should also see some generation in Queensland come back on-line. Most of the energy constrained plants can still run at peak demand periods.

End of the free water era: The days of viewing water as a free good are over, and every market that relies on it is likely to face significantly higher costs in the future. Generators using water for cooling typically

Queensland capacity forecast



require around 2 kilolitres (about \$2 worth at current prices) per megawatt generated. Even a large increase in the cost of fresh water is unlikely to render these plants uneconomic.

Of course the very nature of drought raises challenges for investors. Quite simply, nobody knows how long the drought will persist. But we have seen some response already with Origin's announcement of an expansion of its Quarantine gas plant in South Australia and the Queensland governments announcement of new investment in water pipeline infrastructure. If high prices were to persist for extended periods without an appropriate

investment response or a normalisation of rainfall then the question of market power would need to be revisited" said Willett.

All Aus states agree to investigate mandatory energy efficiency for big and medium-sized power users

All Australian states had agreed to investigate the implementation of a mandatory energy efficiency program

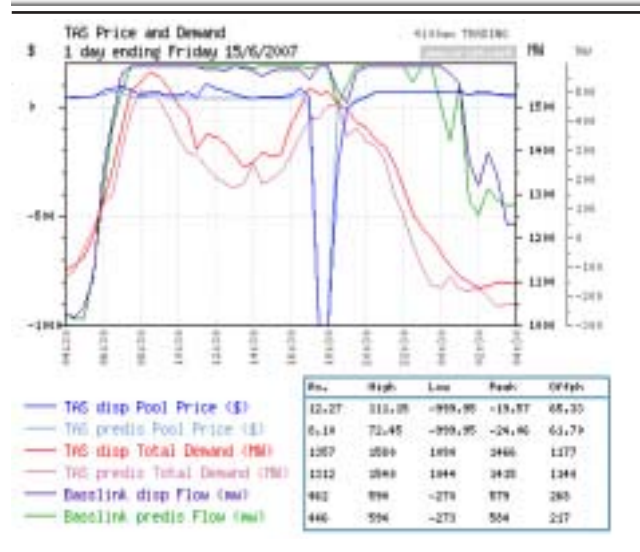
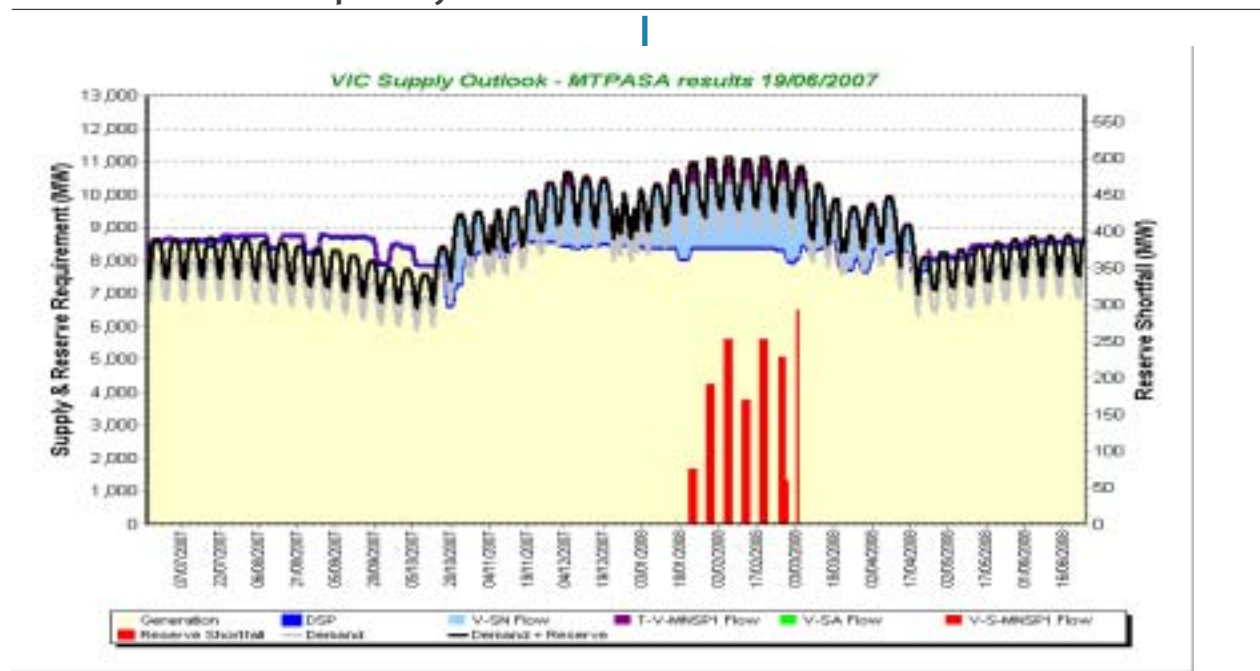
for big and medium-sized power consumers. The move was announced at a meeting of State and Federal Energy Ministers in Melbourne.

Led by WA: Western Australia will take a lead role in developing the design of the scheme, and investigation of the costs and benefits. Energy Minister Francis Logan said WA would consult widely with industry and other states before any proposed scheme was presented to a future meeting of Energy Ministers for debate and endorsement. Logan said a mandatory energy efficiency program was an important step towards reducing energy consumption and greenhouse gas emissions.

Benefits of scheme: He said there were a number of benefits from such a scheme, both for the company and for the environment. "The relevant businesses will be required to identify, evaluate and implement cost-effective energy saving opportunities," the Minister said. "Besides cutting their operating costs, this will also cushion them from the inevitable future increases in energy prices. It will also reduce their exposure to future carbon costs."

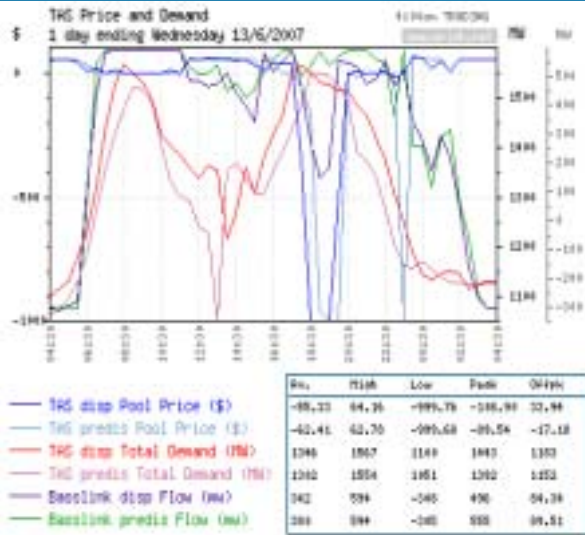
Consistency wanted: Logan said the Carpenter Government had committed to the program as part of its recently released Climate Change Strategy. "The Western Australian Government has undertaken to work with industry to develop a mandatory energy efficiency scheme that can be applied to large and medium-sized power consumers. But in developing the scheme, we realise that

Victoria capacity forecast



LEFT: Friday, 15 June: Negative prices continue in Tas for third day in row, with negative spikes reaching \$999.95/MWh Tasmania recorded minus spikes of between \$37.69/MWh and \$999.32/MWh on Thursday, 14 June. On the second day where negative prices resulted in a minus average price, Tasmania had five successive negative price intervals from 1730EST to 1930EST.

Reference: National Price for Tasmania for one day, Thursday 14 June, in Price/Demand section of Erisk Net; Realtime NEM Data. <http://www.erisk.net>

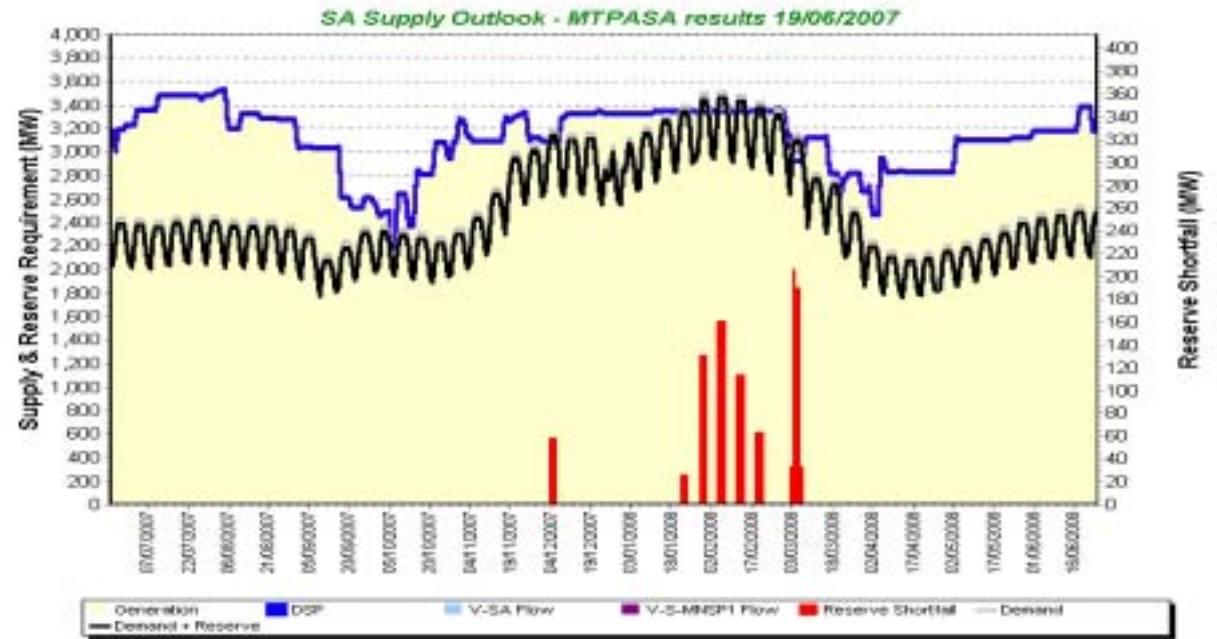


ABOVE: Wednesday, 13 June: Tas turns negative with minus \$999.76/MWh the highest in eight trading intervals of minus spikes. SA gets into act with one negative price of minus \$432.84/MWh. Tasmania recorded negative prices of between minus \$0.98/MWh and minus \$999.76/MWh in eight 30-minute trading intervals between 1800EST and 2330EST on Wednesday, 13 June. Early morning negativity: South Australia had one negative trading interval at 0600EST with a price of minus \$32.84/MWh.

a consistent approach is needed among the states, and at a national level. It is important that WA take a lead role in this investigation, and I intend to report on the progress of our work at the next meeting of Energy Ministers in Perth in November.”

Reference: Government of Western Australia, Department of the Premier and Cabinet. Ph: 9222 8950

SA capacity forecast



Winter demand spike as rain cuts supply; and Tasmania gives electricity away for free

Winter made its presence felt in the NEM capitals with minimum temperatures down on the low levels of the previous week, ranging from 1 degree in Adelaide, 2 degrees in Hobart, 3 degrees in Melbourne, 7 degrees in Sydney and 9 degrees in Melbourne. System-wide maximum



demand was up 1218MW (4.0 per cent) to 31,470MW, with rises of 708MW in NSW, 210MW in Victoria, 123MW in South Australia, 107MW in Queensland and 79MW in Tasmania.

Tasmania minus average: On Saturday, 16 June negative prices continued in Tasmania for the fourth successive day, reaching minus \$542.15/MWh.

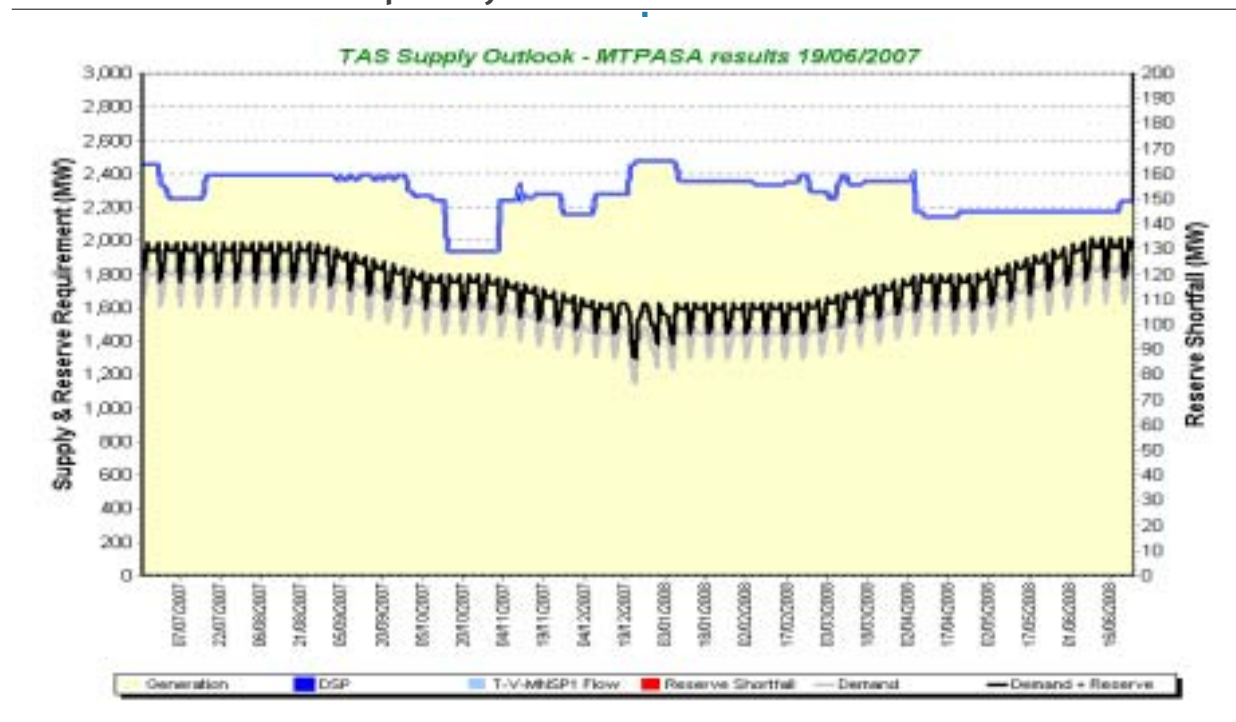
Fourth day in row: This was the fourth successive day of negative prices, which were smaller than those on Wednesday, Thursday and Friday when they reached minus \$999.76/MWh, minus \$999.32/MWh and minus \$999.95/MWh respectively.

Four evening trading intervals: The negative prices occurred in four successive 30-minute trading intervals between 1800EST and 1930EST.

Lack of LOR1 in NSW: Tuesday, 12 June was an eventful day which included:

- actual lack of reserve level one (LOR) for 45 minutes in NSW;
- an outage of the Mt Piper to Wallerawang 330kV line affecting four interconnectors;
- a negative price of \$6000 for transfers on the Heywood interconnector due to negative settlement residues accumulating in Victoria and Tasmanian lower regulation frequency control ancillary services (FCAS) being increased from 50MW to 100MW to control frequency to operating standards.

Tasmania capacity forecast



Winter demand spike: System-wide maximum demand of 30,936MW soared 3058MW (11.0 per cent) on the holiday Monday total, with big rises in all regions except Snowy.

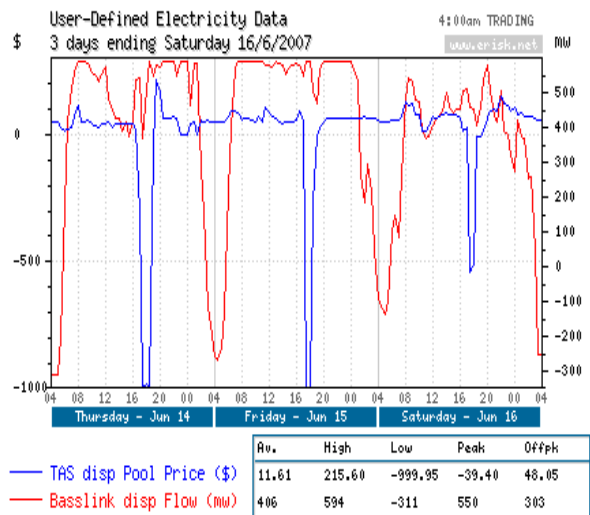
21 days in a row of spikes: The beat went on during the week and spikes on Sunday were the 21st in a row in NEM regions, made up of the last four days of May and all 17 days of June

Ha ha department: On 13 June NEMMCO reprimanded Victorian generating unit Yallourn 3 for not bidding the minus 242MW

it had said it would bid. Averages across the NEM ranged from a weird minus \$55.33/MWh to \$865.36. Half hour average spikes were \$433.69/MWh to \$9936.37, with 8 minus spikes in Tasmania

13 June positive and negative prices: Spikes between \$433.69/MWh and \$9936.37/MWh in mainland regions resulted in average prices rising 41-245 per cent in NSW, Victoria and Queensland, falling 6 per cent in South Australia due to the effect of a minus \$32.84/MWh price in an early morning trading interval and falling 198 per cent in Tasmania due to eight negative price

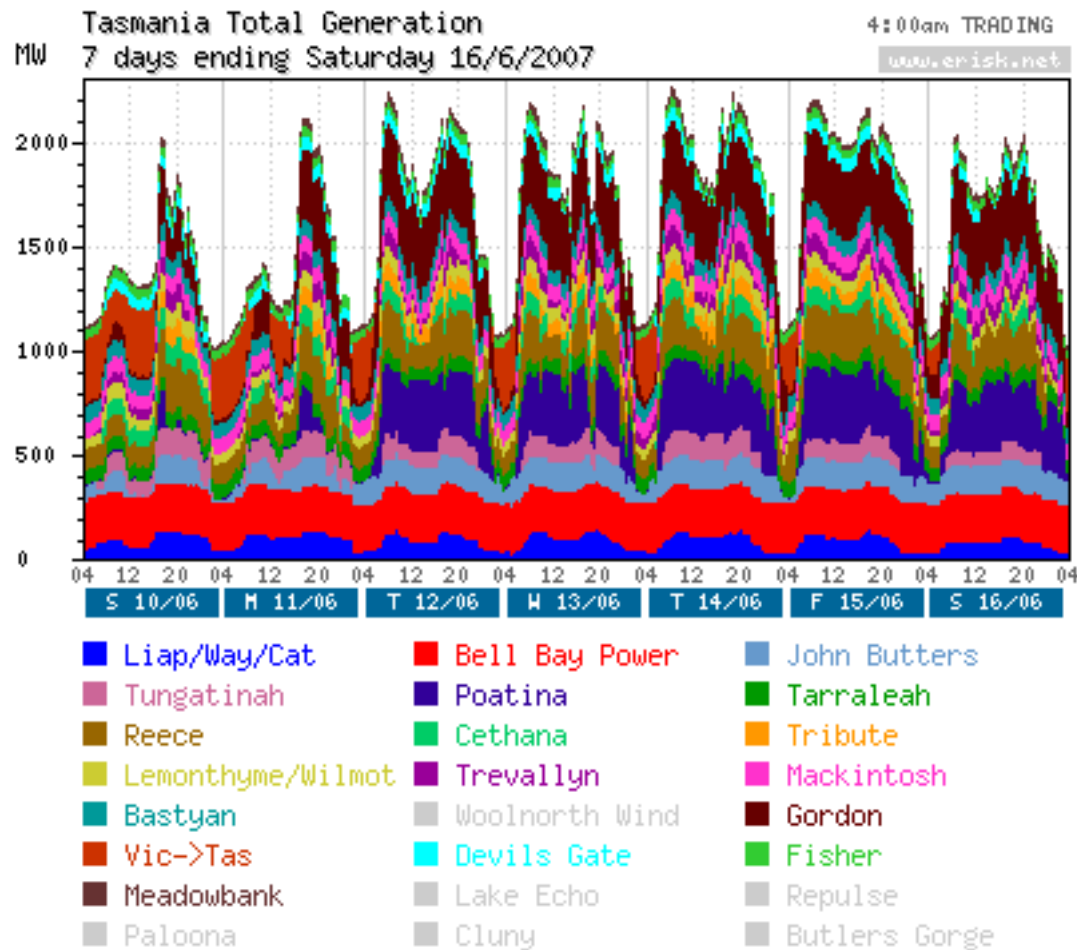
Tas negative prices



intervals with three of these ranging from \$999.73/MWh to \$999.76/MWh.

Actual low reserve blackouts for NSW: NSW was saved from bigger blackouts by a whisker; and the generators raked in the millions. NEMMCO advised that an actual lack of reserve level two (LOR 2) signals that involuntary customer load shedding triggered the largest single contingency which existed in NSW for one hour 10 minutes from 1730EST until cancelled at 1840EST on Wednesday, 13 June. NEMMCO said an LOR1 applied for three hours 20 minutes from 1710EST until cancelled at 2030EST. Maximum reserve shortfalls indicated a varying range from 148MW 697MW. NEMMCO said the PD PASA was forecasting the LOR1 would extend from

Tasmania's gift to the grid



1730EST to 2030EST.

\$10,000 energy dispatch price in NSW: NEMMCO advised in a correction market

notice at 1923EST on Wednesday, 13 June that an energy dispatch price of \$10,000 was published for NSW when over-constrained dispatch occurred in the 1750EST dispatch

interval. In the first market notice, NEMMCO said an energy dispatch energy price of minus \$1000 was published. NEMMCO said the \$10,000 price would be reviewed.

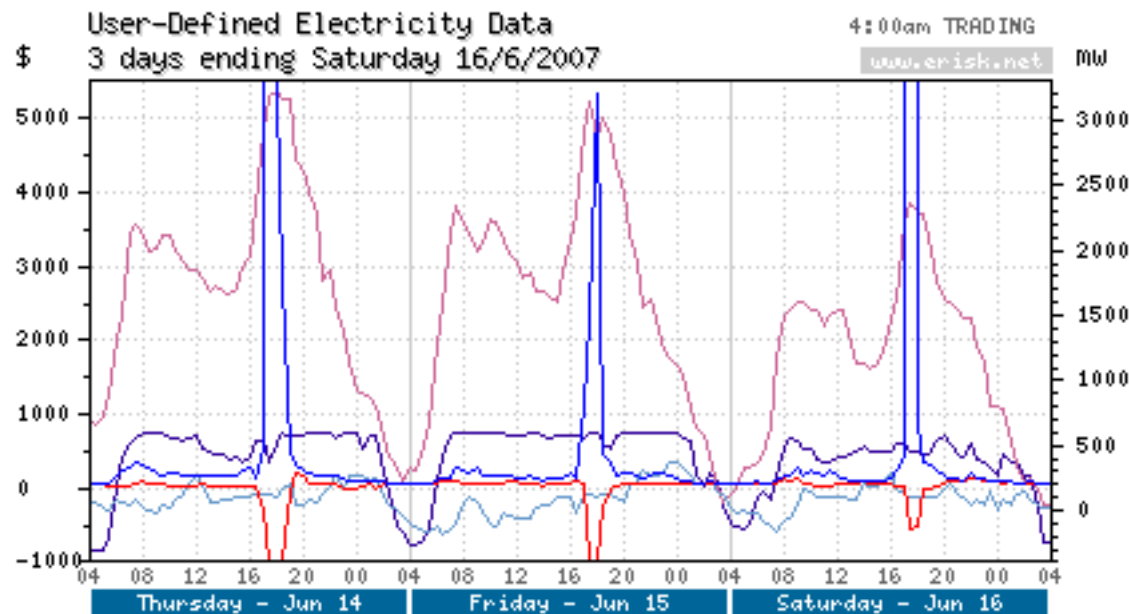
Minus \$6000 exceeded: Market outcomes resulted in the accumulation of negative settlement residues in Victoria exceeding minus \$6000 for transfer on the Victoria to South Australia Heywood and Murraylink interconnectors, NEMMCO said in a market notice at 1755EST on Wednesday, 13 June.

Outage of the Mt Piper to Wallerawang 71: The 330kV line was cut back to control post-contingent overloads in NSW and this resulted in reduced interconnector transfer capacity for six hours 10 minutes from 1720EST until the line returned to service at 2030EST on Wednesday, 13 June.

Constraints revoked on Basslink: NEMMCO said it had been advised that work on the network control system protection scheme (NCSPS) would not require constraints on Basslink and that it had revoked constraint set F-T-FCSPS on Wednesday, 13 June.

Delayed outage of Blackwall SVC begins: NEMMCO advised in a market notice at 1108EST on Wednesday, 13 June that the delayed planned outage of the Blackwall static var compensator (SVC) in Queensland began at 1105EST. It said constraint set Q-BK_VC, which had the QNI and Terranora interconnectors on the left hand side (LHS), was invoked from this time. In an update at 1618EST. NEMMCO said that although the

Tas negative bids match NSW spikes, Snowy flows



	Avg.	High	Low	Peak	Offpk
— NSW disp Pool Price (\$)	384.38	8461.50	50.45	615.92	219.00
— TAS disp Pool Price (\$)	11.61	215.60	-999.95	-39.40	48.05
— VIC/SA disp Flow (mw)	87.47	380	-175	69.14	101
— Snowy/NSW disp Flow (mw)	1522	3233	40.81	2192	1044
— Basslink disp Flow (mw)	406	594	-311	550	303

Blackwall SVC was remaining in service it had a reduced operating capability and the constraint set should be invoked from 1615EST until further notice.

Sunday, 17 June: Basslink fails: An operational failure of the Basslink interconnector between Victoria and Tasmania for one hour 25 minutes between 2330EST

and 0055EST on Monday, 18 June prevented it transferring outside the “no go” zone, reducing its transfer capacity.

Planned NSW transmission line outage cancelled: NEMMCO advised that the planned outage on Sunday, 17 June of the 74 Bayswater to Wallerawang 330kV transmission line in NSW was cancelled.

Origin contracts to build 640 MW baseload cycle gas

Origin was building the plant at Braemar, near Dalby. It had originally planned a similar project at its Spring Gully gas fields further north, but the cost of building a transmission line doubled. It acquired the Darling Downs site fully permitted when it bought Sun Retail.

Full capacity in 2010: The power plant would reach full capacity early in 2010, supplying enough electricity to serve about half the 800,000 retail customers Origin acquired when it bought Sun Retail from the Queensland government for \$1.2 billion in February. The announcement came nine days after Queensland Premier Peter Beattie said he was raising the state's target for gas-fired power generation from 13 per cent to 18 per cent of total electricity output.

\$500m for gas field developments: On 12 June, Origin signed contracts with contractors GE and CH2M Hill to build the power station for \$780 million. It was budgeting a further \$500 million for gas field developments and a pipeline to carry the fuel to the plant.

Report on impact of drought on electricity by NEMMCO was released on 25 May

In the Queensland Legislative Assembly (22/5/07), Geoffrey Wilson, the Member for Ferny Grove of the ALP and Minister for Mines and Energy said, "this drought was the worst in living memory and has put pressure on our most vital commodities: water and power, which go hand in hand. A report on the impact of the drought on electricity by the National Electricity Market Management Company (NEMMCO), was expected to be released on 25 May after the Ministerial Council on Energy had an opportunity to consider it.

Independent expert to check work: The state government was working with the power industry on ways to save water while at the same time maintaining a reliable and secure bulk electricity supply. The government would shortly appoint an independent expert to double-check the work that had been done. Wilson said: "This is about striking the right balance between providing a secure and reliable electricity supply and meeting the water needs of the people of southeast Queensland."

Power stations cut generation: Power stations were also playing their part. The Tarong Power Station made significant water savings by reducing its generation by 70 per

cent, the Tarong North Power Station would reduce its generation by 40 per cent, and the Swanbank site by 25 per cent. CS Energy also decided to further reduce Swanbank B's generation to two units for much of May to save more water.

Reference: First Session of the Fifty-Second Parliament
Record of proceedings, Tuesday 22 May, 2007, E-mail: hansard@parliament.qld.gov.au, Ph: (07) 3406 7314 Fax: (07) 3210 0182, http://www.parliament.qld.gov.au/hansard

Western Corridor Water Project: An army of 2500

In the Queensland Legislative Assembly (22/5/07), Jo-Ann Miller, the Member for Bundamba of the ALP asked the Premier to advise on the progress of key water supply projects being undertaken as part of the water grid. On 17 May, the Deputy Premier and Premier visited Caboonbah, near Esk, to review progress on the work. On site there were around six kilometres of pipe comprising 1,000 pipe lengths ready to be laid. Also on site were associated fittings, collars and rings. The advanced water recycling project would be the largest of its kind in Australia and the third largest in the world.

Magnum chain trencher equal to 70 Land Cruisers: The operation of the largest magnum chain trencher in Australia was also seen by the Premier and his Deputy. The T1660 magnum chain trencher was an 800-

horsepower machine measuring 16 metres long and weighing 143 tonnes, equivalent to about 70 Land Cruisers. An army of more than 2.5 thousand workers were busily building the grid.

Reference: First Session of the Fifty-Second Parliament Record of Proceedings, Tuesday 22 May, 2007, email: hansard@parliament.qld.gov.au, ph: (07) 3406 7314, fax: (07) 3210 0182, <http://www.parliament.qld.gov.au/hansard/>

Tuesday, 12 June: NEMMCO makes four changes in latest weekly forecast

The two omissions are November and December for South Australia in 2008 and the addition of May and June for South Australia in 2008. In the 12 June MT PASA, NEMMCO said the reliability results forecast low reserve condition (LRC) for a number of week days in the following months:

2007:

- Queensland: October, November and December;

2008:

- Queensland: January, February, October, November and December;
- NSW: April, November and December;
- South Australia: February, March, May and June; and
- Victoria and South Australia: January, February, March. October, November and

December.

2009:

- Queensland: January, February and March.
- NSW: January, February, March, May and June;
- South Australia: January and February; and
- Victoria and South Australia: January, February and March.

Fourth week in row for records as open interest contracts

The open interest of 38,700 contracts in the week ending Monday, 11 June was the fourth successive record week, the d-cypha Trade/Sydney Futures Exchange (SFE) said in a media release.

Increase of 579: The release said the 38,700 contracts, which equated to about 94.5 million megawatt hours (MWh), was up 579 (1.5 per cent) on the 38,121 contracts the previous week, which equated to 93.2 million MWh.

Drop in futures contracts trading: In a week ending with the Queen's Birthday holiday, trading in futures contracts (including caps futures) fell 891 (40.0 per cent) to 1337 on the 2228 the previous week.

Composition of futures contracts: The futures contracts traded during the week

comprised 1187 base futures (1703 the previous week), 90 peak futures (105) and 60 caps (420).

Calendar options slump: Calendar options traded for the week totalled 40, down 400 on the 440 the previous week. As with the previous week no quarterly options were traded and there were no exchange for physicals (EFP).

Block trades down 1020: The volume of block trades fell by 1020 ((48.9 per cent) to 1065 on the 2085 the previous week. Total MWh traded fell by 2,554,675 (44.6 per cent) to 3,172,560, from 5,727,235 the previous week.

Reference: d-cypha Trade. 12 June 2007. Address: Level 32, ABN AMRO Tower. 88 Phillip Street. Sydney. NSW. 2000. Ph: (02) 8211 0615. Fax: (02) 8211 0640. <http://www.d-cypha.com.au>

Information Exchange Committee and Retail Market Election results

Mike Robson, Returning Officer at NEMMCO announced that the number of eligible nominees was equal to the number of vacancies in the following categories and NEMMCO therefore determined the following members elected:

Information Exchange Committee (IEC): Tony Pfeiffer, GM Regulatory Affairs, Ergon Energy Corp Ltd, as DNSP member, effective

1 July 2007;

Retail Market Executive Committee (RMEC):

Peter Bryant, GM Customer Services & Metering, Powercor Australia, as DNSP member, effective 1 July 2007;

Retail Members: Mark McCabe, Customer Transaction Services GM, Origin Energy, effective 4 June 2007 and Bruce Page, Regulatory Manager, TRUenergy, effective 1 July 2007.

Elections called to fill vacancies: The number of nominations received was greater than the number of vacancies for the remaining positions (one TEC Retailer member, one IEC Independent member and one RMEC Metering Provider member). In compliance with the IEC Election Procedures and RMEC Election Procedures, elections have been called to determine successful nominees for these three vacancies and a ballot paper and nominee supporting details have been distributed to eligible voters. Nominees for the vacancies were:

IEC Market Customer vacancy: (to be determined by registered Retailer participants);

Richard Brys, Chief Operating Officer, Energy One; and

Camillo D'Alessandro, Chief Executive Officer, Momentum Energy.

IEC Independent member vacancy: (to be determined by registered Retailer and DNSP participants)

Shaun Dennison, Director, Farrier Swier Consulting; and

Christine Thompson, Elite Sports & Leisure.

Metering Provider vacancy: (to be determined by registered Metering Provider participants)

Marco Bogaers, Managing Director, Metropolis Metering Assets; and

Charles Poppo, GM Regulatory and Business Strategy, Data & Measurement Solutions.

Elections closed 13 June 2007, 5pm. Mike Robson, Returning Officer, NEMMCO, Level 12, 15 Williams Street, Melbourne 3000, ph: (03) 9648 8728, fax: (03) 9648 8778, email: rmpmo@nemco.com.au

Transfield forecast: 8.1 per cent from 5 power stations, 2 water filtration plants

Transfield services Infrastructure Fund debut on the Australian Stock Exchange on 12 June saw shares closed up 170 at \$2.27 at 12 June - an 8 per cent premium to its \$2.10 offer price. The initial public offering raised about \$285 million

Portfolio: 5 power stations, 2 water filtration plants: Transfield recently acquired US-based oil and gas maintenance group Tiracc Holdings and bought contractor management group US Maintenance last year. The fund's portfolio comprised five power stations and two water filtration plants,

including the Collinsville and Townsville power stations in Queensland and the Loy Yang A power plant in Victoria.

Transfield with 49pc holding in fund: Transfield had a 49 per cent holding in the fund following completion of the offer and would maintain a material stake in the fund over the longer term. Based on the fund's application price, the group was forecasting a distribution yield of 7.7 per cent for fiscal 2007 and 8.1 per cent for fiscal 2008, with a medium term distribution growth target of 3 per cent a year. It was estimated the fund's pro-forma forecast earnings before interest, tax, depreciation and amortisation (after equity accounted investments) would be \$77.8 million in fiscal 2007 and \$79.2 million in fiscal 2008.

TRUenergy ups capacity at NSW Tallawarra gas-fuelled power station to 850MW

TRUenergy was in "advanced" talks with NSW Government planning officials to significantly increase capacity at its Tallawarra gas-fuelled power station Chief executive Richard McIndoe said the company was at an advanced stage of the process for getting permits for an open-cycle gas turbine project that would increase Tallawarra's capacity by about 450MW at times of peak demand. "We're quite advanced in the process of permitting the additional generation,"

McIndoe said. "We expect that the customer base is going to increase but we are also of the view that there is a requirement for more additional peaking capacity in the NSW market."

Snowy Hydro credit-rating down as drought hits: gen-capacity problems in NEM

Standard and Poor's issued a warning after Snowy Hydro affirmed it would defer dividend payments to its government shareholders and make adjustments to its hedging portfolios because of the dry conditions, reported *The Australian Financial Review* (7/6/2007, p.6).

Credit-rating down: "Snowy's credit rating has limited headroom at BBB level and is likely to be lowered if the drought continues or Snowy Hydro changes its financial policies in a way that does not match rating," Standard & Poor's said. Last month, the Victorian Government allowed Snowy to increase its use of gas-fired generation because of the emergency conditions caused by the drought. Last month's water levels were about 8 per cent of capacity from about 10 per cent.

Snowfalls the key: Snowfalls would provide a key indicator of water inflows for next year, amid concerns that continued low water levels would reduce generation capacity in the national electricity market. According to Fitch Ratings, the drought would significantly affect

retail competition as generation capacity was limited by the shortage of water, undermining the introduction of full retail contestability to the Queensland electricity market on 1 July.

NSW policy games: It might also affect the review of NSW's energy retail businesses because the wholesale prices would squeeze retail margins. "The NSW Government might delay any decision to privatise its energy retail businesses until wholesale prices return to normal in order to maximise the sale value," Fitch Ratings said. Forward hedge prices indicated the industry expected the effects of the drought to continue to 2009.

Switching bulbs to compact fluoro saves 100kg GHG for typical share-house

At home, the simplest thing tenants can do to immediately cut electricity use is to switch every lightbulb to a compact fluorescent lamp. The Australian Greenhouse office, which offers eco-living information for tenants at <http://www.greenhouse.gov.au>, said lighting accounts for about 12 per cent of household greenhouse emissions, reported *The Sydney Morning Herald* (8/5/2007, p.12).

\$72/year saving: Energy-efficient lightbulbs can reduce that by two-thirds. Rebecca Short of the North Sydney environmental services company LESS said that in a typical share house switching 12 bulbs to compact fluorescent bulbs saves about \$72 a year and

more than 100 kilograms of greenhouse gas.

ZigBee Alliance proposes global wireless standard to support smart energy grids

ZigBee Alliance members provide consumers, building owners and the energy industry with interoperable products and an open and interoperable standard connecting consumer and commercial devices to the utility grid, according to an Alliance statement.

Advanced metering: "The ZigBee Advanced Metering Infrastructure (AMI) Profile will take advantage of other ZigBee application profiles for Home and Commercial building automation products, filling a critical gap and integrating Home Area Networks (HAN), or in-premise networks, to smart energy grids. The ZigBee AMI Profile provides the critical "last foot" connection from a smart meter to existing ZigBee networks conducting home and commercial building automation.

Standards-based: "It also provides a standards-based approach for utility programs such as demand response and demand-based pricing programs which will drive global energy efficiency to unprecedented levels. In the US alone, progressive utility companies and state legislatures are expected to deploy new smart meters in approximately 30 million homes over the next few years. Southern California Edison selected ZigBee as the standard in its HAN

technology for its five million smart meter upgrade program. Many countries and US states are considering legislation to provide incentives and encourage the deployment of AMI to offset the predicted energy crunch, avoid building new power plants and help slow global carbon emissions.

Smart grids: “ZigBee HAN, or in-premise networks, enable two-way communication and control of ZigBee devices inside the home and serve as the key entry point for smart energy grids. This communication and control is possible because ZigBee is a global wireless language that connects dramatically different devices. Because ZigBee is a global wireless standard, it provides the scalability and reliability needed to support an infrastructure as demanding as smart energy grids. ZigBee links devices starting with the utility meter and reaches thermostats, household appliances, HVAC, pool pumps, water heaters, lighting systems and other household or building systems creating the HAN.

Utility companies: “For utility companies, ZigBee enables a standards-based approach to energy efficiency programs such as demand response, time-of-use pricing programs, energy monitoring, pay-as-you-use and net metering programs, enabling home owners use of distributed generation products like solar panels. These new energy management programs directly impact consumers and businesses as utilities grapple with meeting growing power demand while reducing the threat of rolling blackouts during peak usage

periods.

What is ZigBee? . The ZigBee Alliance membership comprises technology providers and original equipment manufacturers worldwide. Membership is open to all.

Reference: “ZigBee Sees Strong Growth for Energy Management and Efficiency Solutions”, 16 May 2007.
Contact: Kevin Schader, ZigBee Alliance, ph: +1-925-275-6672, email: kschader@inventures.com; or Tommy Tse, GolinHarris for the Zigbee Alliance, ph: +1-415-274-7915, email: ttse@golinharris.com <http://www.zigbee.org>

Consumer-law body questions Advocacy Panel policy

In an email to David Bremner, executive officer, National Consumers Electricity Advocacy Panel, the Consumer Action Law Centre (Consumer Action) responded to the National Electricity Consumers Advocacy Panel’s (the Panel) request for comments on two matters

- how the effectiveness of projects can be assessed; and
- whether or not the Panel should fund fixed costs in project budgets.

Capacity-building: As a long-term recipient of Panel funding, Consumer Action made the following comments: “The Panel has asked for views as to mechanisms and processes that will provide a fair and effective review of the effectiveness of capacity-building projects. Further, we note that the Panel has decided to

focus its reviews initially on capacity- building projects. The majority of such funded advocates relate to small end-user representatives, including from the Tasmanian Council of Social Service, the Alternative Technology Association, the Total Environment Centre, Consumer Action, the South Australian Council of Social Service, the Centre for Credit and Consumer Law and the Australian Council of Social Service. All of these bodies are not-for-profit organisations.

Funding uncertainty: “It is our view that requiring employee-advocates to play a central role in assessing the effectiveness of their advocacy, by responding to requests for comments from the Panel, has diverted the advocates from their central funded task of advocacy. Further, the Panel’s approach, which has resulted in funded positions being extended six months instead of a year, upsets the funding certainty required to enable advocates to undertake advocacy now and into the future. We note that the Panel’s decision to fund current employee-advocates for a six month period is also contrary to the decision made by the Panel last year to make annual funding grants for salaried positions.

Overall effectiveness: “Considering the above, we believe that an appropriate approach would be for the Panel to fund an external person or organisation to review the effectiveness of the Panel’s funding grants. Rather than focusing on any specific project or type of project, such a review should focus on the overall effectiveness of the Panel’s

funding. This could be done by undertaking an analysis of the activities undertaken as part of funded projects.

Examples given: “For example, the reviews could identify:

- the number of submissions made;
- forums conducted;
- consultation or networking events participated in;
- media undertaken; and
- meetings with government or regulatory officials.

Volunteers, pro-bono: “We note that much of this information is already provided to the Panel through reporting on funded projects.

Imputed costs in funding budgets: It also argue the decision not to allow the inclusion of imputed costs in funding budgets. “We believe that this unfairly undervalues the time and input of volunteers and/or organisation committee or board members who provide input into projects.

Perverse incentive: Given that volunteer, pro bono and in-kind support and input to a project makes a contribution to the overall realisation of the project, it is a necessary input even if it is not directly paid for in monetary funds. This means that if it were not provided on an imputed cost basis, it would necessarily need to be paid for otherwise by the applicant. In fact, by implementing a blanket policy excluding imputed costs from a project budget,

the Panel provides a perverse incentive for applicants to pay for such tasks to be undertaken instead, meaning they could then be included in project budgets and claimed from the Panel.”

Reference: Consumer Action Law Centre Request for comments: How can the effectiveness of projects be assessed? Fixed costs included in project budgets - should they be funded by the Panel 10 May 2007. Contact: Consumer Action Law Centre, Level 7, 459 Little Collins Street, Melbourne Victoria 3000, ph: (03) 9670 5088, fax: (03) 9629 6898, email: info@consumeraction.org.au <http://www.consumeraction.org.au>

ACCC’s defeat shows cartel cases succeed or fail depending on what is said in the witness box

According to Matthew Drummond, of *The Australian Financial Review*, 1/6/2007, p. 18, the Geelong case will have repercussions for Visy and they all have to do with how judges weigh up evidence. Five witnesses testified that phone calls were needed to coordinate price rises but the judge found they would have gone up anyway. In effect, while some of the retailers thought they had a cartel, the judge found it was not a very effective one. Then there was the problem of recalling six-year old phone calls.

- First, the Australian Competition and Consumer Commission’s (ACCC) defeat is an example of how, despite mountains of

documents showing coordinated price increases, cartel cases succeed or fail depending on what is said in the witness box; and

- Second, the petrol case shows how judges are cautious about accepting evidence from witnesses who have received leniency or immunity agreements - as have been given to Amcor executives. The judge discarded one petrol retailer’s witness statement because it conflicted with what he said in the box and he viewed his oral evidence as “more reliable than the words negotiated between his lawyers and those acting for the ACCC to satisfy [the] obligation” to cooperate with the ACCC;
- Third, and of considerable excitement to the Visy wrap, is that Justice Gray saw the empirical evidence of price movements and phone calls as more illuminating about what was really going on in the Geelong petrol market than what alleged cartel members said they thought was happening.

Kwinana costs: more than \$60/mWh, seeks subsidies

The cost of power from the proposed Kwinana station was more than \$60 a megawatt hour (mWh), compared with less than \$40/mWh for conventional coal fired operations and under \$50/mWh for open cycle gas turbines, reported *The Australian* (22/5/2007, p. 4).

\$25-30 a tonne carbon price: At this price a carbon price of \$25 to \$30 a tonne would be required to subsidise the Kwinana output cost, industry analysts suggested.

Kwinana not competitive: Hydrogen Energy chief executive Lewis Gillies said on 21 May that the project would not work if it had to compete directly with conventional power generation: "For the project to be economic and able to compete effectively in the electricity market, it would require appropriate policy support and appropriate regulatory environment which recognises and encourages the low-carbon benefits it can deliver.

EnergyAustralia plans to fix overloaded Revesby Zone Substation 11kV feeders by March 2008

EnergyAustralia's Final Report, Revesby Zone Substation Panel 18 Remedial Feeder Augmentation discussed the situation of the Revesby 132/11kV zone substation, commissioned in 1972 and equipped with one 37.5MVA transformer and one 36MVA transformer.

Peak load supply not possible: Revesby was supplied via two underground 132kV feeders originating from Transgrid's Sydney South Bulk Supply Point (BSP). The 11kV feeder supplied from panel 18 at Revesby

zone was potentially loaded above Energy Australia's service standard at times of peak load under non-contingent network conditions. Due to this level of loading, an outage of panel 18 feeder would result in the load being unable to be supplied via alternative supply paths. Action was required to ensure loading on the 11kV feeders remains within the service standard.

Demand management not feasible: An assessment of Demand Management opportunities in the Revesby area was carried out in May 2007. The Demand Management screening test concluded that the proposed 11kV distribution development for Revesby could not be cost-effectively deferred in the required timeframe. Hence Demand Management was not a feasible option.

Supply from surrounding 11kV feeders: The surrounding 11kV feeders from Revesby zone were heavily loaded, which would require upgrading or replacement work as well as transferring the load from panel 18 across to these nearby feeders. This did not address the limiting section of copper cable on the panel 18 feeder. Intuitively, such a supply option was more costly than the preferred option described below and was not considered further.

Option 1: Replace limiting sections of 11kV feeder on panel 18. This option would involve replacing the limiting sections of 11kV cable along the panel 18 feeder route. Utilisation of the panel 18 feeder was significantly reduced

after the completion of the works associated with this option. The total estimated capital cost of this option was \$1.10M. The Net Present Cost (NPC) was \$1.06M.

Option 2: New feeder from Revesby to Milperra Industrial Park. This option would involve the development of a new feeder from Revesby zone to the vicinity of Milperra Industrial Park to the north of the zone. In conjunction with augmentation works, this new feeder would help relieve panel 18 by establishing two lightly loaded 11kV feeders to supply the industrial area. The total estimated capital cost of this option was \$2.20M. The Net Present Cost (NPC) was \$2.12M.

Option 1 preferred: Option 1 was the least cost option for all analysed scenarios and was thus the recommended course of action to be taken by EnergyAustralia. EnergyAustralia intended to replace the limiting sections of copper cable along the 11kV feeder emanating from Revesby zone panel 18. This work was forecast to be completed by March 2008.

Energy Australia plans for Galston, NSW 132/11kV Zone Substation, requests DSM

EnergyAustralia put forth two feasible augmentation options for the development of a Galston 132/11kV Zone Substation:

- Option 1 - 11kV distribution works to defer development of 132/11kV Galston zone substation; and
- Option 2 - Development of a 132/11kV Galston zone substation.

Sydney's North West area power supply:

The North West area included the region from Sydney North Bulk Supply Point (BSP) in the north, north-east to Berowra and south to Pennant Hills and was part of Hornsby Shire council. The area was relatively geographically isolated, bordering Ku-ring-gai Chase National Park and other bushland. The Sydney to Newcastle Freeway and the Pacific Highway run through the area. The Galston / Dural area was part of North West area and lies on the boundary of EnergyAustralia's and Integral Energy's supply area. This area received supply from three 132/11kV zone substations - Berowra, Hornsby and Pennant Hills. These three zone substations were supplied via a 132kV ring network from TransGrid's Sydney North BSP.

Bushfires and vegetation issues: The combined length of these feeders was 43.4km and consisted of steel tower and timber pole type construction. The firm capacity of the 132kV ring network is 220MVA limited by feeder bay rating at TransGrid's Sydney North BSP (feeder only limitation is 239MVA). This area was susceptible to bushfires and vegetation issues. Continued residential and commercial development was anticipated in the Galston / Dural areas. These loads were

presently supplied mainly from Hornsby and Pennant Hills zone substations and were located at large distances from the zone substations. Hence, it was uneconomical to supply increased demand from these substations due to the magnitude of load and distances involved.

Forecast loading to exceed feeder: These zones supply an extensive load area and hence, voltage regulation issues were experienced on parts of the 11kV distribution network. These three zone substations supply the suburbs of Galston, Dural, Glenhaven, Berowra, Berowra Waters, Hornsby, Pennant Hills, Arcadia, Cowan, Brooklyn, Mt Kuring-gai, Westleigh, Normanhurst, Asquith, Thornleigh and Beecroft. The combined loading on Berowra, Hornsby and Pennant Hills zone substations was forecast to exceed the feeder bay rating at TransGrid's Sydney North BSP in summer 2007/08 and winter 2009 and was forecast to exceed the feeder (250 & 251) rating in summer 2009/10 and winter 2012. The provision of further network capacity to the Galston / Dural area would require the construction of new large network assets.

Zone Substations: Supply to the area was normally provided by the following zone substations:

- **Berowra Zone Substation:** Berowra 132/11kV zone substation was 34 years old equipped with two 37.5MVA, 132/11kV transformers. The substation was constructed to its ultimate 132/11kV

transformer capacity. The firm rating of Berowra zone substation was 21.7MVA in summer and 23.1MVA in winter limited by the emergency rating of 11kV transformer tails. Following the planned upgrade of Berowra zone substation by replacement of the 11kV switchgear in mid 2007, the firm rating would increase to 44.7MVA and 48.0MVA in summer and winter respectively. Work was presently in progress to install a 132/66kV transformer to provide an additional supply point to Railcorp.

- **Hornsby Zone Substation:** Hornsby 132/11kV zone substation was 30 years old equipped with two 50MVA, 132/11kV transformers. The firm rating of Hornsby zone substation was 64.4MVA in summer and 67.6MVA in winter, limited by the emergency rating of zone transformers. After the installation of a third transformer in mid 2007, the firm rating of the Hornsby zone substation would increase to 114.3MVA in summer and winter.
- **Pennant Hills Zone Substation:** Pennant Hills 132/11kV zone substation was 23 years old equipped with two 45MVA and one 50MVA, 132/11kV transformers. The firm rating of Pennant Hills zone substation was 111.1MVA in summer and 114.3MVA in winter limited by emergency rating of the transformer in summer and 11kV switchgear in winter. The substation was constructed to its ultimate three transformer capacity.

Proponents encouraged to submit proposals:

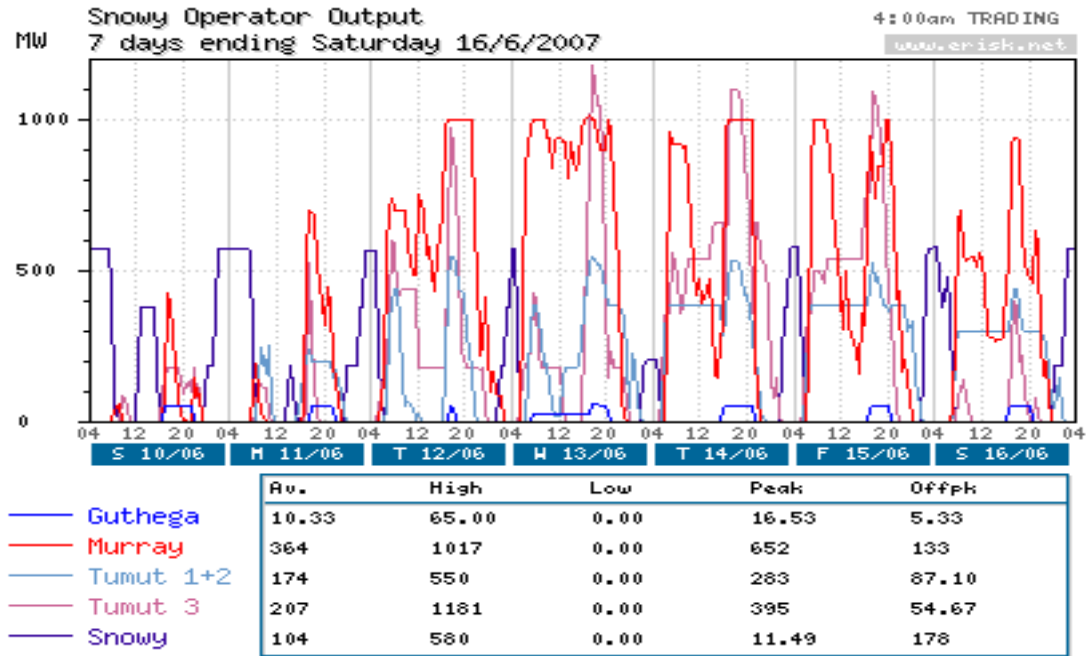
The proposed investment was driven by 132kV network loading and uneconomic 11kV distribution works due to large distances from the load centre to zone substations. EnergyAustralia has recently undertaken customer power factor correction program equating to 1.6MVAR resulting in a peak demand reduction of 0.7MVA at the time of critical loading.

Demand reduction of 3.2MVA before summer 2009/10 was required to defer the Galston project by 1 year.

In November 2006, a DM screening test indicated it might be possible to defer the development of 132/11kV Galston zone substation using DM alternatives and launched an investigation to identify if this was the case. A review of demand management opportunities was presently in progress. Proponents of demand management or local generation projects which may delay the onset of the network limitations described above were encouraged to submit those proposals.

Comments and alternative options invited:

Accordingly, subject to comments received during consultation, EnergyAustralia favoured Option 2. Contact: Comments on this consultation, including proposals for alternative options must be in the form of written submissions, which may be in hard copy or suitable electronic format and must be provided by 25th July 2007. Proposals or other enquiries should be directed to the contact listed below: John Hele, Acting Manager; Network



Investment, GPO Box 4009, Sydney 2001, ph: (02) 9269 2862, fax: (02) 9269 4696, email: jhele@energy.com.au
 Reference: EnergyAustralia, Consultation Paper: Development of Galston 132/11kV Zone Substation, 25 May 2007

EnergyAustralia plans 132/33kV Substation on Kooragang Island, for 40 NSW industrial customers

The Waratah 132/33kV Subtransmission Substation (STS) supplied the western areas of Greater Newcastle and serviced Mayfield, Shortland, and Wallsend zone substations and provided supply to

industrial customers on Kooragang Island via the Kooragang West Switching Station (SWS) as well as a dedicated direct supply for some industrial customers.

Kooragang West services 40 industrials:

Kooragang Island was supplied via a 33kV predominantly overhead feeder network from Kooragang West SWS and services approximately 40 industrial customers. The majority of these were industrial and bulk handling facilities with demands of less than 2MVA each. The largest existing customers included a coal terminal with a maximum demand of approximately 29MVA and a chemical plant with a demand of approximately 13MVA.

Replacement project with 4 options: A large proportion of the network in the area was aged and requires replacement; however there were capacity, load growth and reliability issues that also needed to be addressed. A project to replace Mayfield zone with a new 132/11kV zone has been committed, with the following options:

- Option 1 - Development of a new 132/33kV Subtransmission Substation (STS) on Kooragang Island and 132/11kV zone at Jesmond;
- Option 2 - Development of new 132/33kV STS on Kooragang Island, and two 132/11kV zones at Callaghan and Elmore;
- Option 3 - Development of an 132/33/11 hybrid STS and zone substation at Callaghan and a 132/11kV zone at Elmore; and
- Option 4 - Development of an 132/33/11 hybrid STS and zone substation at Callaghan and a 33/11kV zone at Elmore.

Option 1 most favourable: The results of the sensitivity analysis indicated that Option 1 - Development of a 132/33kV STS on Kooragang Island and a 132/11kV zone at Jesmond was the least cost option under all sensitivity scenarios. The development of 132/33kV Kooragang zone substation was the least cost option under all sensitivity scenarios. This was also the most strategically preferred option due to its close proximity to the load

centre and catering for possible significant development of the Kooragang Island industrial estate. In addition, it would address a large proportion of the aged asset issues in the area, providing significant reliability improvements to existing industrial customers on Kooragang Island.

Comments on proposal invited: Accordingly, subject to comments received during the consultation period, EnergyAustralia favoured proceeding with Option 1. Comments on this consultation, including proposals for alternative options must be in the form of written submissions, which may be in hard copy or suitable electronic format and must be provided by 16 July 2007. Proposals or other enquiries should be directed to the contact listed below: John Hele, Manager; Capital Development, GPO Box 4009, Sydney 2001, ph: (02) 9269 2862, fax: (02) 9269 4696, email: jhele@energy.com.au Reference: EnergyAustralia, Consultation Paper, "Development of a 132/33kV Substation on Kooragang Island", 15 May 2007, website: <http://www.energy.com.au/energy/ea.nsf/Content/Network+National+Electricity+Code+Consultation>

Centennial Coal has gained NSW government approval for the \$9 bn Anvil Hill mine in the Hunter Valley

Centennial Coal had gained NSW government approval for the controversial \$9 billion Anvil Hill mine in the upper Hunter Valley, overriding strong concerns from environmentalists, residents, and the local tourist, wine and stud industries, reported *The Australian Financial Review* (8/6/

07 pg. 4).

Mine to produce 220m tonnes of coal: NSW Planning Minister Frank Sartor approved the project after considering, and dismissing, the greenhouse effects of burning the 220m tonnes of coal to be generated over the life of the mine - as required by a landmark court decision last year.

Hopes pinned on Anvil: The Anvil Hill project was crucial for Centennial Coal, which has suffered production problems at several of its other pits over the past two years and has been selling stakes in mines to finance the new project.

Greenhouse gases no reason to reject: The mine was now due to open in 2009. Centennial shares gained 8 per cent yesterday to close at \$3.39. Last November, student Peter Gray won a *Land and Environment Court* challenge forcing the NSW government to consider the greenhouse effect of the mine. Sartor, who also approved Ellembey Resources' Abel coal mine in the Hunter last week, pointed out that the open-cut Awaba proposal in Lake Macquarie had been refused. "Stopping Anvil Hill would not stop greenhouse gases globally," he said. "The buyers would source coal elsewhere and NSW would suffer a penalty without a benefit.." Gray has not given up; "There are countless things we can do to stop it," he said. "There is already a Federal Court challenge under the (*Commonwealth Environmental Protection and Biodiversity Act.*"