



Hydro Tas may buy Basslink , plots to stop Alinta competing with Hydro; Bell Bay sale

1 The State of Tasmania was about to sell its generation assets. On 6 March new Hydro Tasmania chair David Crean met Energy Minister, David Llewellyn, to talk about Hydro Tasmania in pre-budget negotiations. In an extraordinary start to the heated bearings, Llewellyn berated political and media speculation about Hydro's financial strength as a "pattern of misinformation" that was malicious and inaccurate.

Green axis of evil: He claimed it was the result of "decades of animosity towards Hydro Tasmania" by the "deep greens" and their supporters in the media.

Crean revealed: The Hydro planned:

- **Basslink cable purchase:** Hydro Tasmania was contemplating buying the \$780 million Basslink cable, which it now pays UK utility National Grid between \$80-\$85 million a year to use.
- **Bell Bay for sale:** Hydro Tasmania was in talks with major Australian energy company Alinta about selling its gas boosters and gas generation turbines at Bell Bay, to ward off plans by Alinta to build a competing new power station.
- **What financial crisis?:** Denied that it was experiencing a major financial crisis.
- **Biased balance sheet:** Admitted its balance sheet was "stressed and stretched".
- **Increased debt:** Had increased its debt this year by \$23 million to \$1.2 billion.
- **Profit is a secret:** Refused to divulge if it would return a profit this year.
- **It's not a loss:** Slammed media reports of its \$148 million "loss" on Basslink hedging contracts.

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Top price for NEM week 429: Jeeralang at 175.35

TAS			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Liap/Way/Cat	\$546,032	11,397	\$47.91
Bell Bay Power	-	-	-
John Butters	\$528,917	11,156	\$47.41
Tungatinah	\$258,603	5,080	\$50.90
Poatina	\$1,200,954	25,346	\$47.38
Tarraleah	\$514,052	11,345	\$45.31
Reece	\$578,472	10,735	\$53.89
Cethana	\$184,198	3,292	\$55.95
Tribute	\$115,695	2,005	\$57.71
Lemonthyme/Wilmot	\$186,586	3,652	\$51.09
Trevallyn	\$220,267	4,647	\$47.40
Mackintosh	\$246,391	4,945	\$49.83
Bastyan	\$248,007	5,053	\$49.08
Woolnorth Wind	-	-	-
Gordon	\$2,574,842	56,803	\$45.33
Vic->Tas	\$1,545,827	37,472	\$41.25
Devils Gate	\$116,919	2,029	\$57.62
Fisher	\$89,987	1,644	\$54.74
Meadowbank	63808.89245	1469.765	\$43.41
Lake Echo	-	-	-
Repulse	-	-	-
Paloona	-	-	-
Cluny	-	-	-

New NEMMCO plan bans multiple sale of System Restart Services

SRA bidders lines must not share towers, switchyards or face bushfire, flood risks, said NEMMCO's (National Electricity Market Management Company) New System Restart Ancillary Service (SRAS). These new Quantity Guidelines contain a new rules for electrical diversity. The reason for the new rule

SA			
Generator	Income (\$)	Output (MWh)	Av Price (MWh)
North'n Power	\$4,080,372	88,826	\$45.94
Ladbroke	\$344,971	5,310	\$64.97
Osborne	\$1,255,123	25,800	\$48.65
Pelican Pt	\$3,231,404	65,357	\$49.44
Torrens Is. B	\$2,652,462	51,593	\$51.41
Vic->SA	\$914,629	18,580	\$49.23
MLink->SA	\$20,589	431	\$47.72
Torrens Is. A	\$941,531	14,001	\$67.25
Mintaro	\$78,635	638	\$123.28
Dry Creek	\$52,870	435	\$121.65
Playford	\$786,440	15,432	\$50.96
Snuggery	\$360	5	\$70.13
Pt Lincoln	-	-	-
Quarantine	\$272,399	3,578	\$76.13
Angaston Power	\$3,576	70	\$51.37
Hallett Power	\$373,779	4,254	-
Lonsdale	-	-	-
Terminal Storage	-	-	-
Lake Bonney Wind	-	-	-

VIC			
Generator	Income (\$)	Output (MWh)	Av Price (MWh)
Loy Yang A	\$16,525,797	326,075	\$50.68
Loy Yang B	\$9,063,439	176,179	\$51.44
Hazelwood	\$10,871,203	207,261	\$52.45
Yallourn	\$9,015,303	180,859	\$49.85
Anglesea	\$1,297,058	25,207	\$51.46
Energy Brix	\$1,204,505	23,366	\$51.55
Newport	\$87,467	2,225	\$39.31
MLink->Vic	\$261,199	3,371	\$77.48
SA->Vic	\$551,784	6,207	\$88.89
Snowy->Vic	\$4,129,563	67,093	\$61.55
Tas->Vic	\$1,391,147	13,065	\$106.48
Jeeralang	\$509,146	2,904	\$175.35
West Kiewa	\$53,807	548	\$98.11
Bairnsdale	\$483,281	6,469	\$74.70
Dartmouth	-	-	-
Eildon	\$60,558	640	\$94.68
Hume Vic	-	-	-
McKay Power	\$89,281	530	\$168.48
Clover	-	-	-
Valley Power	\$1,568,747	21,504	\$72.95
Rubicon	-	-	-
Laverton North	1028032.411	17679.25	-
Somerton Power	511908.7452	5064.53	-
Sunshine Energy	-	-	-
Longford	-	-	-

NSW			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Bayswater	\$20,147,061	344,899	\$58.41
Liddell	\$9,521,457	196,713	\$48.40
Mt Piper	\$11,334,437	189,720	\$59.74
Wallerawang	\$5,388,861	87,177	\$61.81
Vales Point	\$8,800,717	183,686	\$47.91
Munmorah	\$2,205,413	42,607	\$51.76
Eraring	\$20,545,513	364,579	\$56.35
Redbank	\$851,874	18,732	\$45.48
Smithfield	\$1,063,919	19,929	\$53.39
Snowy->NSW	\$6,233,363	35,897	\$173.64
Shoalhaven	\$299,650	10,099	\$29.67
Hunter Valley	-	-	-
Hume Hydro	-	-	-
Blowering	\$16,970	530	\$32.04
Northern Gas	-	-	-
Burrinjuck	-	-	-
Brown Mountain	-	-	-
Keepit	-	-	-
Broken Hill	-	-	-
Ergon Energy	-	-	-
DL Q->N	\$721,766	11,558	\$62.45
QLD->NSW	\$4,978,858	78,053	\$63.79
Pindari Hydro	-	-	-
West Nowra	-	-	-
Country En (NSW)	-	-	-

QLD			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Tarong	\$10,597,190	246,010	\$43.08
Millmerran	\$5,003,825	105,828	\$47.28
Swanbank	\$2,066,125	43,565	\$47.43
Stanwell	\$9,118,699	203,246	\$44.87
Callide B	\$4,547,171	103,869	\$43.78
Callide Power	\$5,788,032	125,465	\$46.13
Townsville	\$1,503,218	31,878	\$47.16
Gladstone	\$8,288,886	178,968	\$46.31
Collinsville	\$738,129	15,321	\$48.18
Swanbank C_D_E	\$2,224,408	47,217	\$47.11
Barcaldine	\$180,045	3,229	\$55.75
Callide A	-	-	-
Kareeya	\$557,941	13,054	\$42.74
Barron Gorge	\$414,131	9,663	\$42.86
Mt Stuart	\$10,503	187	\$56.24
Wivenhoe	\$172,247	2,765	\$62.30
Braemar Power	\$2,283,394	39,958	\$57.14
Mackay	\$150	3	\$60.16
Roma	\$142,817	1,356	\$105.36
Oakey	\$366	11	\$32.56
DL N->Q	-	-	-
NSW->QLD	\$5,990	333	\$17.99
Rocky Point	-	-	-
Tableland	-	-	-
Stapylton	-	-	-

was to lower risks of restart in catastrophic events which might need a whole grid re-start.

Only one per power station: The aim was to "avoid any potential single point of electrical failure substantially reducing the capability of SRAS to restart the power system". Therefore, there should only be a maximum of one SRAS procured from one power station. If the transmission lines connecting two power stations providing SRAS to their respective target power stations (to be restarted) were:

- sharing a common set of towers, the electrical diversity between the two SRAS will be insufficient;
- diversity will be satisfied only if these two transmission lines are on separate towers even though they might share a common transmission easement;
- diversity between the two SRAS may also be insufficient if the transmission lines connecting two power stations providing SRAS to their respective target power stations (to be restarted) are located in an area prone to natural hazards, such as bushfires or floods; and
- if the transmission lines connecting two restart sources pass through a common switchyard then the electrical diversity between the two SRAS will be treated as insufficient; or a
- common source or delivery system of fuel used by SRAS in an electrical sub-network.

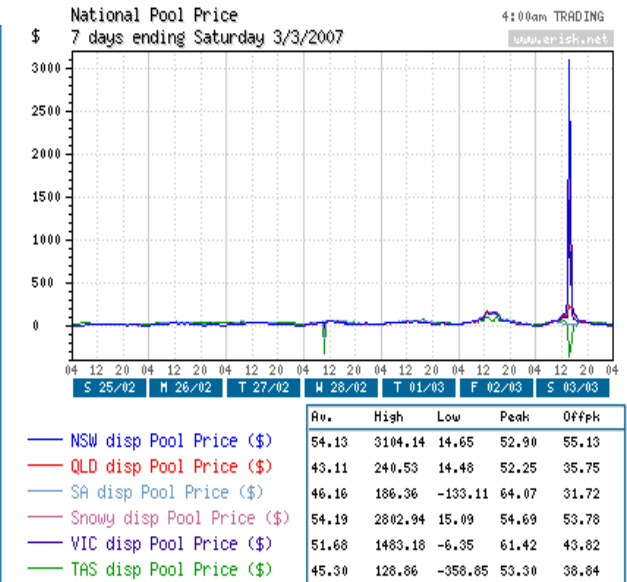
the week in detail

• **NSW:** Average price \$54.13/MWh, down nearly 2 per cent on the spike-affected \$55.07/MWh the previous week, up 147 per cent on the \$21.95/MWh of the comparable week last year; maximum price \$3104.14/MWh for the 30-minute trading interval ended 1500EST on Saturday. Average demand 9048MW, down 3.3 per cent on the previous week, up 6.5 per cent on a year ago; maximum demand 11,402MW in the 1600EST interval on Saturday, down 3.5 per cent on the 11,816MW the previous week.

• **Victoria:** Average price \$51.68/MWh, down 15 per cent on the spike-affected \$61.05/MWh the previous week, up 118 per cent on the spike-affected \$23.67/MWh of the comparable week last year; maximum price \$1483.18/MWh for the 30-minute trading interval ended 1500EST Saturday. Average demand 5998MW, down 8.9 per cent on the previous week, up 1.1 per cent on a year ago; maximum demand 7665MW in the 1530EST Friday interval, down 12.0 per cent on the 8713MW the previous week.

• **South Australia:** Average price \$46.16/MWh, down 32 per cent on the spike-affected \$67.62/MWh the previous week, up 67 per cent on the spike-affected \$27.68/MWh of the comparable week last year; maximum price \$186.36/MWh for the 30-minute trading interval ended 1330EST Friday. Average demand 1694MW, down 5.4 per cent on the previous week, up 6.6 per cent on a year ago; maximum demand 2766MW for the 30-minute interval ended 1630EST Friday, up 5.1 per cent on the 2632MW the previous week.

• **Queensland:** Average price \$43.11/MWh, down 7 per cent on the spike-affected \$46.16/MWh the previous week, up 114 per cent on the \$20.17/MWh of the comparable week last year; maximum price \$240.53/MWh for the trading interval ended 1500EST Saturday. Average demand 6428MW, up 6.3 per cent on the



previous week, up 6.8 per cent on a year ago; maximum demand 7933MW for the 1630EST Friday interval, up 9.1 per cent on the 7272MW the previous week.

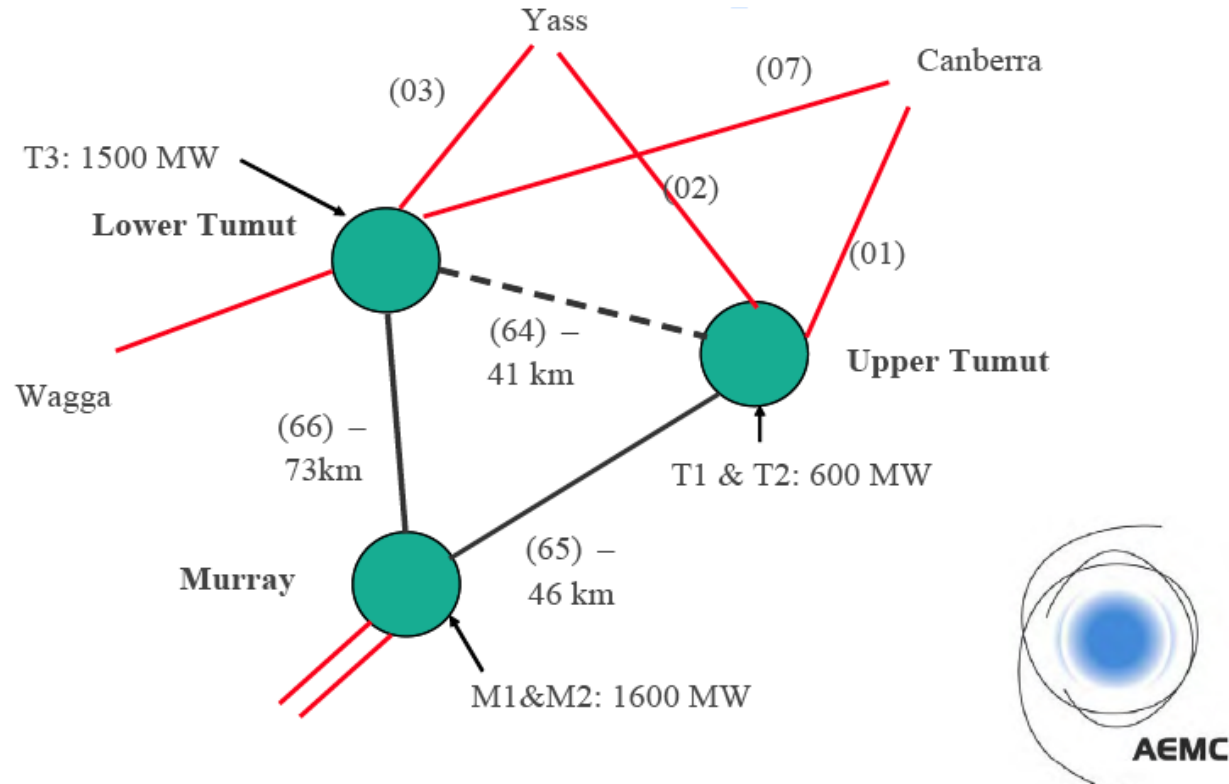
• **Tasmania:** Average price \$45.30/MWh, down 34 per cent on the spike-affected \$68.34/MWh the previous week, up 50 per cent on the spike-affected \$30.22/MWh of the comparable week last year; maximum price \$128.86/MWh for the trading interval ended 1630EST on Friday. Average demand 1098MW, down 9MW on the previous week, up 4.6 per cent on a year ago; maximum demand 1272MW, down 1.6 per cent on the 1293MW the previous week.

Case-by-case analysis: NEMMCO would assess whether the electrical diversity between two SRAS was sufficient on a case-by-case basis before procuring SRAS from the two power stations. Process to be followed by NEMMCO:

- Test 1 was designed to ensure that the procured SRAS is sufficient to simultaneously meet the system restart standard in all electrical sub-networks where infrastructure remains undamaged;
- Test 2 was designed to ensure that the procured SRAS is sufficient in an electrical sub-network even in circumstances where any one power station contracted to provide SRAS is unavailable or where any one facility within the electrical sub-network cannot be utilised. The flowcharts contained in Schedules 1 and 2 depict the process and must be read in conjunction with the system restart standard. [This section will be completed upon consultation with Consulted Persons in accordance with the Rules consultation procedures.

Reference: Power System Operations, National Electricity Market Management Company Limited, System Restart Ancillary Service Quantity Guidelines (SRAS Quantity Guidelines, Draft Version 0.1), 20 February 2007, p.10-11. This document is available at http://www.nemmco.com.au/ancillary_services/168-0063.pdf

Snowy: first region change since NEM start



NSW's Snowy Hydro share offered to Feds for \$1.3-1.5bn

NSW Premier, Morris Iemma, told *The Australian* (28/2/2007) he had offered NSW's majority share in Snowy Hydro Ltd to the federal Government, for what he described as a very reasonable price of \$1.3 billion to \$1.5 billion.

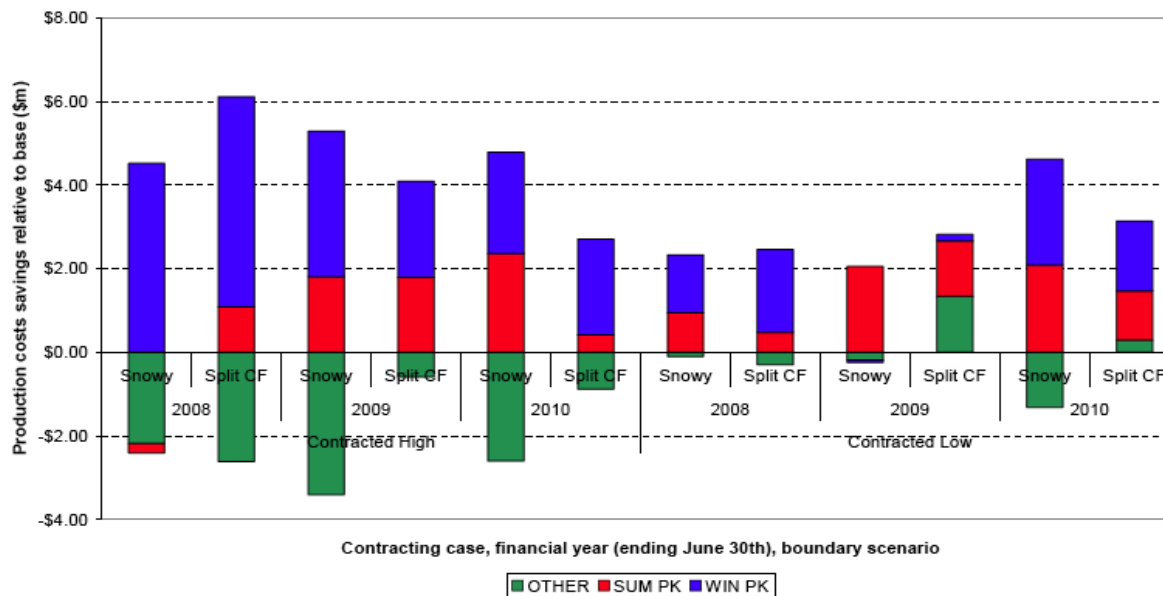
Region change before summer 2007/08: Almost all had agreed intra-regional congestion was a problem in the existing Snowy Region. Snowy Hydro's incentives to bid, induced NEMMCO intervention, and reduced competition in NSW.

Transcript of Australian Energy Market Commission Consultation Forum, Abolition of Snowy Region 22 February 2007.

Vic and NSW offer rejected: lemma said the issue of underinvestment in Snowy Hydro had not been resolved by John Howard's 11th-hour decision in June to abort privatisation of the scheme in which the three owners – the commonwealth, NSW and Victoria – would sell their holdings on the share market. He said NSW made an initial approach offering its stake in the fallout that followed the cancellation of the float, but federal Finance Minister, Nick Minchin, had rejected it out of hand. lemma on 27 February argued that – given that the Commonwealth's position was that the waters of the Murray-Darling must be centralised under Canberra's control – it would make sense for it to take over Snowy Hydro, which administers releases into the Murray. "It does naturally sit there at some point," lemma said. "It would be logical." Senator Minchin on 27 February confirmed that NSW had offered its share in Snowy Hydro to the federal Government last year, but said Howard remained resolutely opposed to buying the NSW and Victorian stakes.

lemma promises new minister: lemma announced a climate change strategy involving rebates for household water and power saving initiatives, a new senior ministry, and legal requirements for power utilities to have renewable energy account for 15 per cent of their sales by 2020. Speaking in the marginal Labor northern electorate of Tweed, lemma said households accounted for 20 per cent of greenhouse emissions, and there was a keen interest to help deal with global

NEM rules allow Snowy to keep NSW, Vic price high



Snowy region changes will lower pool price: Danny Price, Frontier Economics told the AEMC, 22 February 2007, NSW annual prices generally fell, in both contracting cases modelled for the two regional changes a "split regions", and 'abolition of Snowy region". The effect ranged from a few cents to \$5-10/MWh. The key impact was during extreme peak summer and winter periods. Vic price impacts were smaller, but impact was again driven by summer and winter extreme peaks. A large proportion of savings arose during particular market conditions - high summer NEM demand, especially in Vic and SA as Snowy finds it more difficult to make strategic behavior pay when its generation was priced at separate nodes, although still found it possible. Similar effects rose across other demand points where savings occurred. Conceptual analysis produced ambiguous findings - "there was too

much going on". The modelling period was - 2007/08 to 2009/10 inclusive Bidding Strategic plant included Snowy Hydro and key baseload and peaking plant in VIC, NSW and Qld - Most strategic plant could withhold 10-30pc, although Tumut and Murray were each allowed to offer 0-100pc in 12.5pc increments - All strategic plant was offered at SRMC except Snowy Hydro at \$1/MWh (energy was constrained across the entire year so SRMC was relatively unimportant) - Peaking plant bid was full capacity at 5 x SRMC

Transcript of Australian Energy Market Commission Consultation Forum, Abolition of Snowy Region 22 February 2007.

warming. "This is empowering families to tackle the greenhouse challenge themselves," he said. The \$310 million package would provide \$100 million of rebates of up to \$3000 to households, including up to \$1500 of an approved rainwater tank and \$1200 for an approved solar hot water system. Iemma also said that if Labor were re-elected he would appoint a minister for climate change, environment and water.

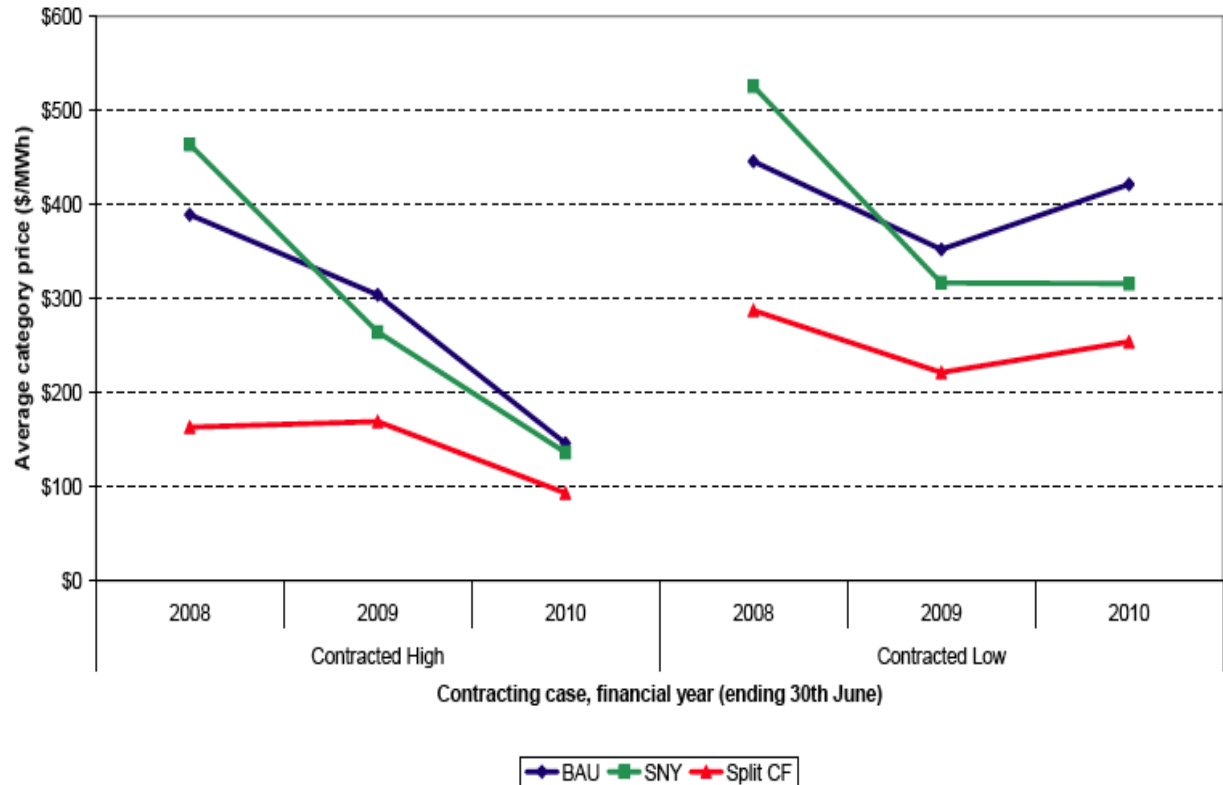
NEM configuration dilemma involving Snowy Region leads to suspension of unit auctions

In January 2007, the AEMC published a draft Rule determination and draft Rule which proposes to abolish the Snowy region by November 2007. The next settlement residue auction is scheduled to close on 15 March 2007, and would normally be auctioning units on interconnectors that would be impacted the draft Rule, NEMMCO noted.

Plan to split Snowy region in two: The Australian Energy Market Commission (AEMC) advised that it was also considering an alternative proposal which, if accepted, would replace the Snowy region with two new regions. The draft determination for this alternative proposal was not expected before 15 March 2007.

Auctions in Snowy-related unit categories suspended: Accordingly there was a high degree of uncertainty about the regional

Snowy market power reduction brings lower prices



Contracting high and low contracting cases: Danny Price, Frontier Economics told the AEMC, 22 February 2007, Snowy was modelled at 50-60pc, contracted with equivalent interregional hedges (IRSRs) and others, at 55-65pc (low) and 65-75pc (high) The Low contracting range was for NSW in early years to represent the state vesting contracts protection (ETEF). Snowy was assumed to contract 50/50 Vic/NSW (as in Southern Generators modelling). Production cost savings varied between \$1.8-\$3.5m p.a. Savings rose from increased the likelihood of Snowy offering more capacity into the

market during peak times, displacing mid-merit and peaking plant Lower average annual spot prices in NSW and, to a lesser extent, Vic Price impacts largely occurred during extreme summer and winter peak periods, and there was greater convergence between NSW and Vic prices over time.

Transcript of Australian Energy Market Commission Consultation Forum, Abolition of Snowy Region 22 February 2007.

configuration of the NEM involving the Snowy Region that would influence the value of units in the Snowy Region related unit categories from Quarter 4 of 2007. The Settlement Residue Committee, in accordance with NEM Rule 3.18.5 (b) (1) has accepted a recommendation from NEMMCO; that the auction of units from and including Quarter 4 of 2007 on the four Snowy-related unit categories (Snowy-NSW, NSW-Snowy, Vic-Snowy and Snowy-Vic) be suspended in the 15 March auction.

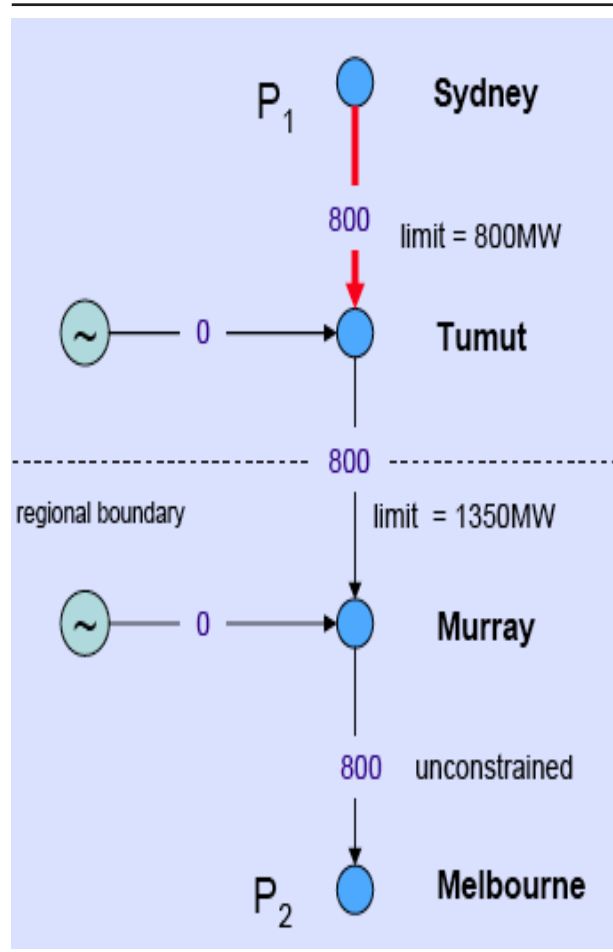
Details online: The full details of the unit category offers at the 15 March 2007 auction are available on NEMMCO's website at: <http://nemmco.com.au/settlements/notices.htm>. Contact: John Wormald, Head of Market Operations Performance, NEMMCO.

Two stations for SA: 450MW gas at Redbanks, near Mallala; 560MW for Altona

Two new power stations were planned for South Australia. Corporate firms Babcock & Brown and NP Power would this month apply to the Development Assessment Commission to build a 450MW gas-fired peaking Power station at Redbanks, near Mallala., endorsed by the State Government as a "public infrastructure development" under section 49 of the Development Act.

Mallala power station nine years away: A separate 560MW power station, valued at \$520 million, has been foreshadowed as part of Altona

Southern Generators explain how to hedge interconnectors



Line up the ducks for strip trade: Southern Generators lobby group representative, Roger Oakley Manager, Market Development LYMMCO told an AEMC meeting about the question of the Snowy region – to split or abolish – said: “what is the hurry? Lets keep the current arrangement running until we better understand all of the potential congestion management solutions.” He said there were three material congestion locations between Sydney and Melbourne, not one – so “to firm up SRA instruments, we need three interconnectors (that is the split region option) not one (Snowy abolition) a strip of 3 SRAs can be purchased in the auction as easily as a single SRA: three interconnectors does not imply higher transaction costs. As prices diverged only when interconnector flow was 1350MW therefore, NEMMCO issues 1350 SRA units each unit provided a firm 1MW of interregional hedge.

Buying a strip of SRAs: Pricing Complexity whether one, two or three interconnectors, a bidder just needs to decide what maximum price to pay for an SRA strip doesn't need to worry about pricing of individual components, just needs to analyse price differential between Sydney and Melbourne this is the case whether there are one, two or three interconnectors again, AEMC is incorrect in draft determination to say that pricing complexity increases Conclusions 3 interconnectors (split region) provide firmer hedging through SRA than a single interconnector (Snowy abolition) AEMCs modelling in the draft determination shows split region gives lowest trading risks AEMC rejection of split region because of supposed higher transaction costs is factually incorrect because it ignores the SRA linked bidding facility if alternative CM mechanisms did not exist, the split region option would best support inter-regional trading not Snowy abolition! But they do exist, and work to date.

Resources' \$3.9 billion proposal to produce petroleum and gas in the state's Far North. If approved, the new power stations would be among the state's five biggest generators. The Mallala power station would be operated by Port Augusta Power Station operator Flinders Power, a subsidiary of Babcock & Brown.

Gas via Moomba to Adelaide: The gas would be supplied through the Moomba to Adelaide gas pipeline which intersects the development site. The Altona Resources project involves three exploration licences covering 2500sq km in the northern portion of the Permian Arckaringa Basin. It would take between seven

and 10 years for the project to commence and would also need State Government approval. A spokesman for Mineral Resources Development minister Paul Holloway said the State Government was helping Altona Resources with its project.

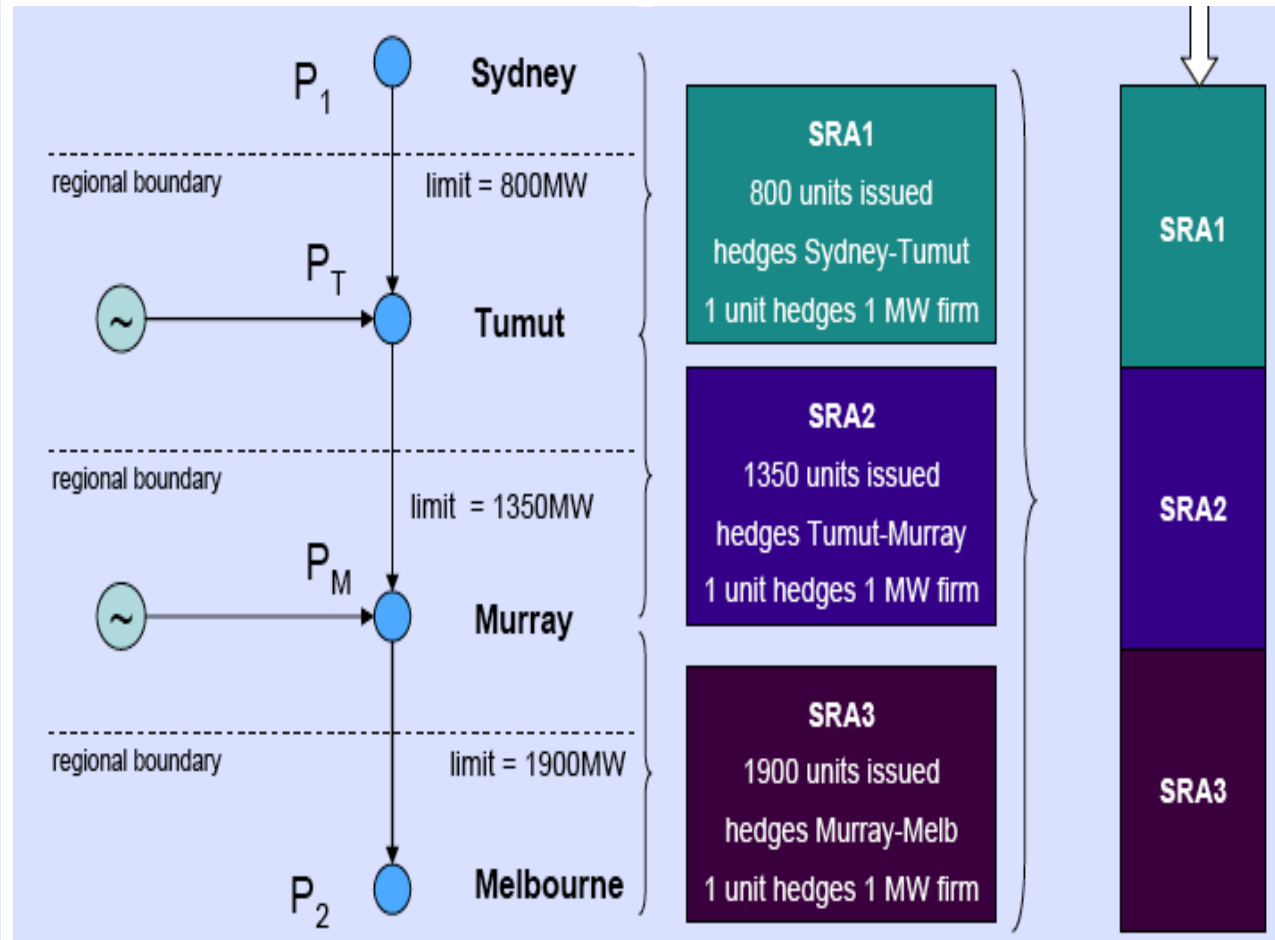
Transfield IPO: Kemerton and its stake in Loy Yang A

Transfield Services expected to complete the spin-off of its infrastructure division by the end of June after it reported the biggest jump in first half earnings within the company, according to *The Australian Financial Review* (27/2/2007, p.14).

Infrastructure fund for sale: Chief executive, Peter Watson, said the planned infrastructure fund, expected to raise more than \$300 million, might be sold as an initial public offering, although he did not rule out other options. "An IPO is clearly one of those but there are a number of others." Transfield planed to retain just under 50 per cent of the infrastructure fund, which would include assets such as the Kemerton Power Station and a stake in the Loy Yang A power station, which performed ahead of the company's own forecasts.

Profit falls while service demand rises: Net profit fell 5.8 per cent to \$22.7 million because of an \$11.1 million loss on interest rate swaps. Demand for services was buoyed by contract wins such as Horizon Power in Western Australia, Wal-Mart and Target in the United States as well as acquisitions.

A strip of 3 SRAs provides a firm Syd-Mel interregional hedge



Buying a strip of SRAs: Roger Oakley Manager, Market Development LYMMCO told an AEMC meeting a strip of 3 Settlement Residue Auctions (SRAs) provided a firm Sydney-Melbourne interregional hedge (IRH). To purchase a strip of SRAs, a bidder simply placed a single linked bid: e.g. for Q units of each of the three

SRA instruments at a bid price P depending upon clearing prices, bidder either receives a strip of Q units at a price less than P - or receives nothing many bidders do this already with current regions (for a strip of two SRAs) without trouble execution cost and risk same as for single interconnector or two interconnectors.

Contract and acquisition: The company had a joint venture with Flint Energy Services in Canada to provide asset management services in the oil sands market. This month it won a \$ 1.1 billion contract with producer Suncor Energy and agreed to buy industrial maintenance service provider TIMEC for \$US 100 million (\$126 million).

SA plans tariff subsidy of 44¢ per kWh for solar PV

Solar power might score near the top of any carbon-correctness measure but its potential to ease Australia's looming electricity shortages was its main selling point, according to BP Solar, the country's biggest producer of photovoltaic (PV) panels, reported *The Age* (05/03/2007, p.2).

Feed-in tariff to encourage usage:

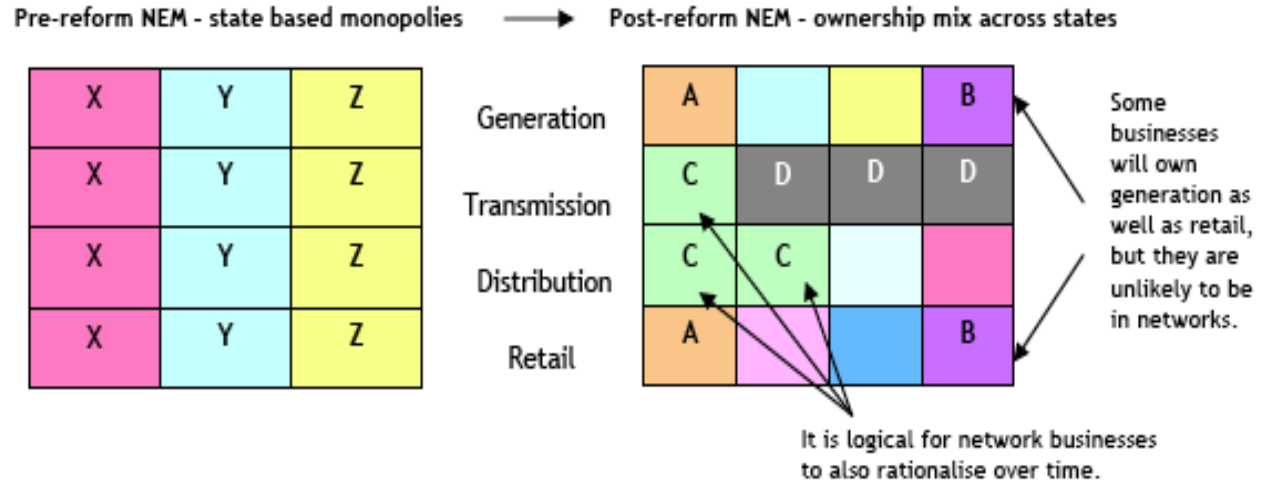
Households in Germany get paid a "feed-in tariff" equivalent to US55¢ (A70¢) per kilowatt hour, or about four to five times the retail rate, Mark Twidell, Vice President (Regional Director – BP Solar) said. Australian owners of PV panels could expect between 4¢ and 18¢ per kWh.

9

SA draws big plan: South Australian Government was now seeking comment on a possible feed-in tariff of 44¢ per kWh and Victoria was among other states considering such a plan.

BP dreams big: According to BP Solar: a nationwide tariff starting at 55¢ per kWh would:

Magic carpet: shifts in ownership in the NEM



Rubik cube: In the pre-reform NEM on the left of Figure 1, the market is comprised of regional state monopolies X, Y and Z that cover the full range of the energy value chain. They are not in competition with one another in any sense. In the post-reform NEM the same space has now been taken up by a combination of entities, which compete as noted above. Integration tends toward like with like on a competitive versus monopoly basis. Businesses A and B have chosen to specialise and vertically integrate across generation and retail (contestable), while businesses C and D specialise in network service provision (non-contestable) and have grown their businesses in these areas. The rest of the NEM is owned by a mix of parties who all bring to the market their

own commercial drivers and corporate approaches. The retail and generation sectors are intensely competitive. As can be seen from Figure 2 on the following page, customer churn in the key competitive states (Victoria and South Australia) has been high, generally at or above 20 per cent of customers. In generation, average electricity prices in the NEM have tended to be below new entrant generation prices, so generators are not extracting excessive rents. This would tend to indicate competition is working.

Origin Energy comment on the Issues Paper released by the Energy Reform Implementation Group (ERIG)

- cut the payback period for solar PV to 10 years;
- create 300 megawatts of electricity capacity within five years; and

- by 2010, 100,000 homes would have solar power, rising to 1 million homes by 2021, with 3200 megawatts of capacity.

Encouraging take-up: The recommended policy design would include a 5 per cent annual cut in the tariff to encourage early take-up.

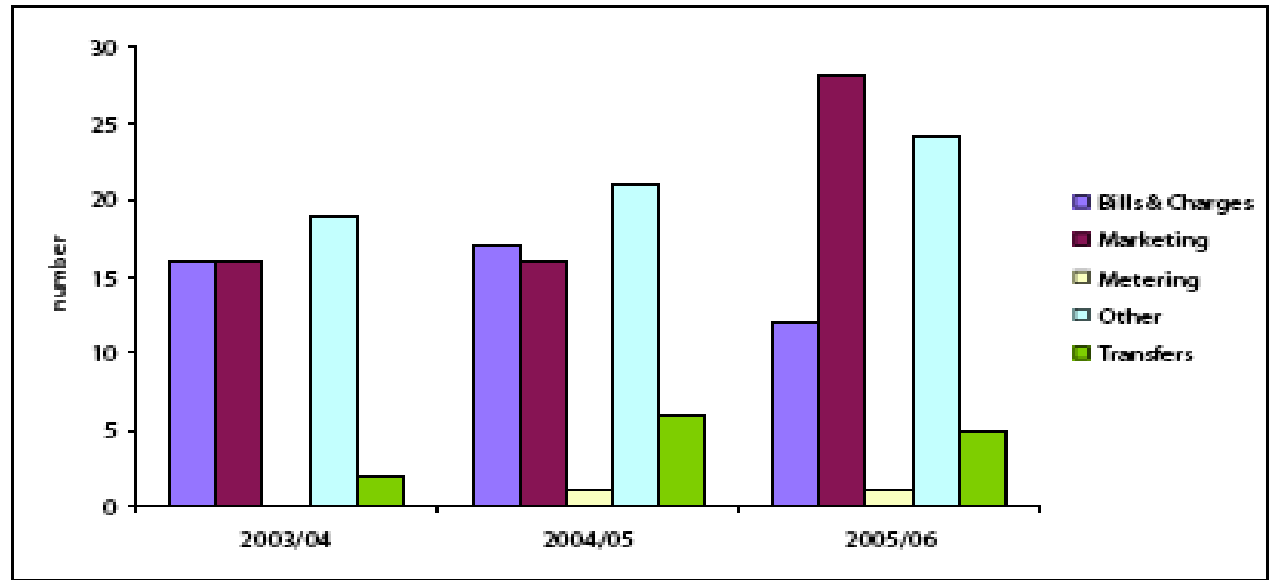
Power suppliers oppose subsidies: The main electricity suppliers, though, oppose mandated subsidies for solar PV. "We have to get to a point in this country where we're going to decide to deal with greenhouse in the least-cost way, or whether we're going to keep doing special deals for particular technologies," said Brad Page, Chief Executive of the Energy Supply Association of Australia. "At every turn, it looks like rent seeking by a couple of people in the solar industry, with marginal contribution to peak load," he said, noting that solar PV panels are likely to supply little power to meet peak needs during winter.

BP finds takers abroad: For now, BP Solar exports 80 to 90 per cent of its Australian production, generating \$100 million in overseas sales a year. It employs 300 people and another 500 indirectly.

10 Did govt suppress report tipping baseload solar thermal?

Greens Senator, Christine Milne, asked the Government whether its rejection of solar thermal technology was backed up by solid evidence, during Question Time in the Senate on 27 February 2007.

NSW retailer performance declines



But total obligations breached low: Overall, the Tribunal found that licensees breached a total of 115 obligations during 2005/06. This represents a slight reduction since last year; however, this reduction is largely attributable to the resolution of Australian Inland's distributor breaches as a result of its merger with Country Energy. The Tribunal found:

- most of the non-compliances reported were minor in nature, with minimal or no impact on customers, and in most cases licensees were quick to identify and address these incidents;
- while marketing activity increased significantly during 2005/06 and the number of marketing

breaches increased, the proportion of non-compliances with the potential to affect market confidence (such as non-compliance with aspects of the Marketing Code of Conduct and customer transfers without consent) remained low for the majority of retailers; and

- A number of breaches will be resolved with the implementation of accepted recommendations of the Disconnections and Move In/Move Out Working Groups.

IPART, Energy distribution and retail licences - Compliance report for 2005/06 - Report to the Minister for Energy 31 October 2006 www.ipart.nsw.gov.au/fo/xh/lf

PM statements backed up by research?

Milne said: "My question is to the Minister representing the Prime Minister, Senator Nick Minchin. Given the Prime Minister's statements that solar thermal technology

cannot provide baseload power and, on the other hand, that the pre- and post-combustion carbon capture and storage of carbon dioxide from coal-fired power stations will provide baseload power and save jobs in the power

stations in the Hunter Valley within 15 years, will the minister confirm that the Prime Minister or the government has research to underpin these statements?"

"No suitable geological storage structures" in Hunter Valley: "Will he make public the figures, plans or modelling that underpin where and how it is envisaged that pre and post carbon capture and storage will be implemented within 15 years in the Hunter Valley when no suitable geological storage structures exist?"

Nuclear option "clear": Minchin replied that "it is quite clear, and I am sure the Greens would acknowledge this, that baseload power to run factories around the country and homes and to provide on tap the sort of electricity which Australians now require is really only possible, without greenhouse gas emissions, from nuclear and clean coal".

Govt suppressed solar thermal research report? Milne added: "Mr President, I ask a supplementary question. I thank the minister for confirming that the government does not have any research or figures or modelling to underpin the claims about carbon capture and storage in the Hunter Valley. I ask the minister, and this probably goes to explaining why he does not understand the potential of solar thermal on baseload: why did the government suppress a research report from the CRC for Coal in Sustainable Development that said solar thermal could compete with coalfired power on baseload by 2013?"

NSW licensees - number of obligations breached

Licensee	Obligations breached 2004/05	Obligations breached 2005/06
<i>Electricity Retailers</i>		
ActewAGL	6	7
AGL Electricity	5	8
AGL Sales ¹	-	-
Australian Inland ²	6	-
Aurora Energy	-	-
Country Energy	2	2
Energy One	4	3
EnergyAustralia	7	14
Ergon Energy	1	1
Integral Energy	19	13
Jackgreen	-	5
Origin Energy	2	6
Powerdirect	3	3
Sun Retail ³	3	-
TRUenergy	1	8
TRUenergy Yallourn	-	-
TOTAL	59	70
<i>DNSPs</i>		
Australian Inland ²	31	-
Country Energy	2	2
EnergyAustralia	5	10
Integral Energy	6	3
TOTAL	44	15

Notes:

1. The legal name of AGL Victoria Pty Ltd was changed to AGL Sales Pty Ltd on 31 January 2006.
2. Australian Inland Energy & Water Infrastructure merged with Country Energy on 1 January 2005.
3. The legal name of Energex Retail Pty Ltd was changed to Sun Retail Pty Ltd on 10 May 2006.

Aqua-ammonia solvents failure report quashed? "Why does the government continue to this day to suppress a report that demonstrates that the government's much hoped for breakthrough with aqua-ammonia solvents in post carbon capture has been a complete failure? Will the government now produce a comprehensive list of research tasks and reports from that CRC so that the public can see what else the government is trying to hide about the promise of renewable energy and the problems with carbon capture and storage? Will you now release that list and the rest of the modelling?"

Renewable Energy Development Initiative grants: Minchin said: "There were lots of questions there and I will have a look at the Hansard and see what information I can supply to Senator Milne, particularly with respect to the CRC. For the record, I remind Senator Milne that a company, Solar Heat and Power – as she is pursuing the issue of solar thermal technology – was successful in gaining a Renewable Energy Development Initiative grant of \$3,254,028 in December 2005. To date, the government has paid 64 per cent of that grant. The company stated will retain the intellectual property developed so far and continue with Australian management.

"We are supporting alternative sources of energy": We are supporting that, but it is not at the proven stage. We are supporting alternative sources of energy, but the clear facts which for ideological reasons the Greens are incapable of recognising are that, for

NSW supplier obligations breached by category

Electricity Retail Licensees	Marketing		Billing		Transfers		Other	
	2004/05	2005/06	2004/05	2005/06	2004/05	2005/06	2004/05	2005/06
ActewAGL	5	8	-	-	-	1	1	-
AGL Electricity	-	2	3	3	-	1	2	2
Australian Inland	-	-	4	-	-	-	2	-
Country Energy	-	-	-	-	1	1	1	1
EnergyAustralia	3	2	1	4	1	1	2	7
Ergon Energy	-	-	-	-	-	-	1	1
Energy One	-	-	3	1	1	-	-	2
Integral Energy	7	4	2	2	1	-	8	7
Jackgreen	-	3	-	-	-	1	-	1
Origin Energy	1	5	-	1	1	-	-	-
Powerdirect	-	3	-	-	-	-	3	-
Sun Retail	-	-	3	-	-	-	-	-
TRUenergy	-	3	1	1	-	-	-	4
TOTAL	16	28	17	12	5	5	20	25

DNSP Licensees	Metering		Transfers		Other	
	2004/05	2005/06	2004/05	2005/06	2004/05	2005/06
Australian Inland	28	-	2	-	3	-
Country Energy	1	1	-	1	1	-
EnergyAustralia	2	2	-	-	3	8
Integral Energy	5	3	-	-	1	-
Total DNSPs	34	6	2	1	8	8

Australia to retain high living standards and jobs, the two main sources of zero emission technology available to produce baseload power are clean coal and nuclear, and it is about time they woke up".

Reference: Commonwealth of Australia, Senate, Hansard Proof, 27 February 2007, p.20-21. This document is available on <http://www.aph.gov.au/hansard/senate/dailys/ds270207.pdf>

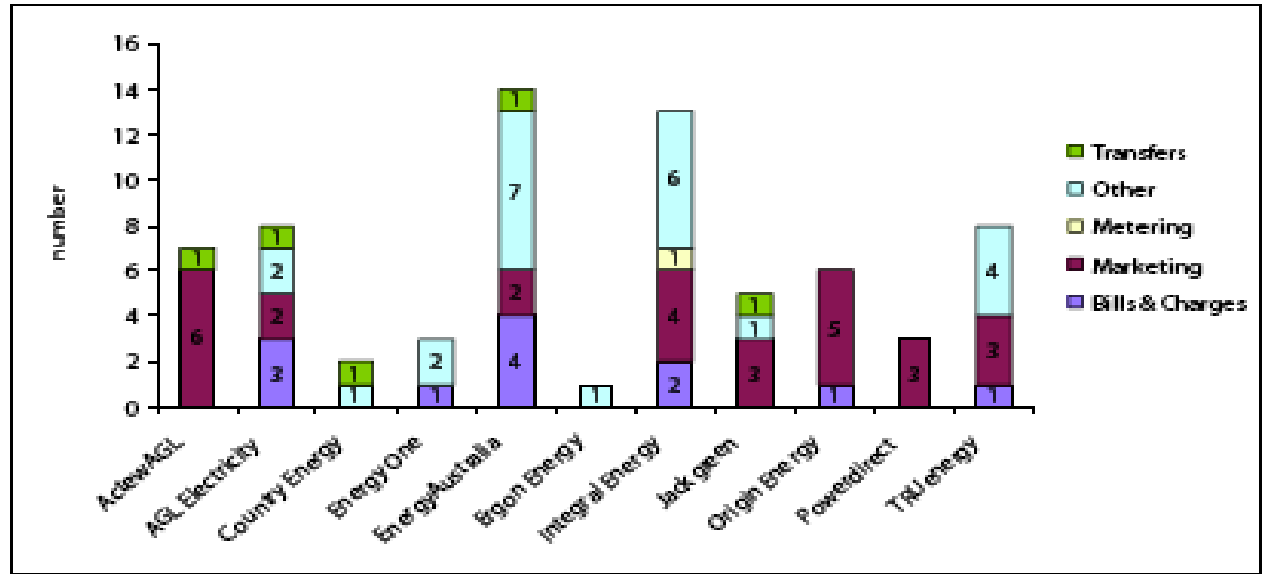
28 Feb: Rare supercell thunderstorm strikes Canberra; golf-ball-sized hailstone shower

The thunderstorm that struck Canberra on 28 February night was a rare and highly destructive type of storm, reported *The Canberra Times* (1/3/2007, p.1), quoting the bureau of Meteorology.

Most intense amid recent storm surge: "It was probably one of the most intensive storms we've seen," Kerm Batts, from the Canberra Meteorological Office, said. Canberra has become Australia's storm capital this season, with seven severe storms in two months. The bureau says there are probably more to come in autumn.

Supercell thunderstorm: On 28 February Canberra was hit with a rare rotating storm called a supercell thunderstorm - so rare that Canberra has not experienced one for at least a decade. Supercell storms are dangerous and

Obligations breached by category in NSW



powerful, and can cause tornadoes, winds of 200km/h, torrential rain and huge hailstones.

Warm air hovers above capital for three weeks: Manager of weather services for the bureau's NSW/ACT branch, Rob Webb, said the storm was caused by moist, warm air from the east, which had been sitting over the ACT for the past three weeks. This humid air had caused the regular thunderstorms of recent weeks. On the day the wind changed and cooler air arrived, which pushed the humid air rapidly up into an unstable atmosphere, causing the storm.

Hailstones form within 8km high swirl: The storm began to rotate about 9pm, turning it into a supercell thunderstorm. Hailstones were created in the minus 30 degree temperatures as the storm grew to a height of 8km.

5cm hailstones pelt city centre: When the hailstones fell to the ground in Canberra, they were up to 5cm in diameter. A huge damages bill and disruption to the city centre were among the fallout of the storm which forced the closure on 28 February of schools, government departments, the Australian National University and the city's biggest shopping precinct. Hailstones the size of golf

balls blocked drains, causing extensive flooding which collapsed ceilings of buildings and left their interiors water logged.

Climate change research loss as glasshouses shattered: Also closed was the ANU where 70 buildings were damaged and classes had been cancelled until Monday. Years of climate change research was feared lost, with glasshouses housing experiments at the university's plant culture facility shattered by the storm.

28 Feb: NSW lightning strike: 25000 homes left without power in Sydney suburbs

Powerlines were brought down at Heathcote and Leightonfield stations. Eleven schoolchildren at Heathcote station at the time of the lightning strike were treated for shock. About 25,000 homes were left without power in and around Bankstown, Collaroy, Fairfield, Lidcombe, Parramatta, Warragamba and Newcastle when a violent storm cell passed over Sydney. Lightning halted flights temporarily at Sydney airport and the rail network was badly hit in many areas, particularly on the South Coast. Across NSW, summer temperatures were about 1 degree celcius above average and up to 3 degrees above in parts of the Western slopes.

Canberra's stormiest month: 14 thunderstorms, twice as many 30-plus days as usual,

The *Canberra Times* (2/3/2007, p.5) reported February 2007 as Canberra's stormiest month on record. 14 thunderstorms were recorded at Canberra Airport, well above the average of three storms and beating the previous high of 12 in January 1999. And as summer came to an end, the climate-change debate heated up again, with the bureau announcing an almost record number of 30-degree-plus days and the third-hottest summer ever.

The states: The 2006-07 summer had a mean daily temperature of 21.8 degrees, well above the long-term average of 19.7 degrees. Daytime temperatures averaged a maximum of 29.5 degrees, 2.5 degrees hotter than usual, and 45 days topped 30 degrees, the second-highest number after the 51 days in 1990-91. While February copped a battering, the whole summer was a stormy one, with 20 thunderstorms compared with an average of 11. Usually warm temperatures have been recorded for eight months in a row, adding fuel to the climate-change debate. Canberra's hottest February day was on the 5th, when it reached 34.9 degrees. The average maximum for the month was 29 degrees, which had almost twice as many 30-degree-plus days as usual, with 14 compared with 8. On-again, off-again doona frustration was a result of very

mild nights that on average dropped to only 15.2 degrees, the warmest since February 2003 and well above the 13 degree average. The coolest was 11.3 degrees on the 13th.

5 March: Kattron records 60,000 strikes in NSW, 6000 alone in Sydney

Storms again lashed Sydney on the night of 5 March, with two men being struck by lightning, reported *The Daily Telegraph* (06/03/2007, p.3). The first victim was hit at Engadine and a postman was struck at Ambarvale in Sydney's southwest. The postman was thrown from his bike with the lightning setting fire to nearby trees. Lightning tracking company Kattron recorded 60,000 strikes in NSW on Sunday - 6000 in Sydney. Experts said the storms were the spectacular end to dry weather caused by the El Nino effect.

Tragedy revisited: The Nitscke family home at Malabar was struck on Sunday - almost 20 years to the day that lightning caused a fire that destroyed a quarter of their home. A second strike in between killed their pet bird. But each time the family has been lucky to escape unhurt.

A busy day for State Emergency Service: The State Emergency Service received more than 250 calls in Sydney during the storms. SES spokesperson, David Webber, said most

calls involved fallen trees and power lines, with 187 callouts in the Hornsby and Cherrybrook areas alone.

Fire crews fight it out: In Sunday's storms fire crews had 320 calls from Camden and Mt Druitt in the west to Double Bay and Bondi in the east. Lightning caused house roof fires in Gladesville, Leichhardt and Ashfield.

For some it's a blackout: About 1500 homes in Thornleigh and Pennant Hills were left without power for three hours after lightning hit power lines.

Rail services disrupted: Rail commuters faced lengthy delays after lightning damaged overhead wiring and signalling equipment at Mt Kuring-gai. The Western, North Shore, Northern and Newcastle and Central Coast railway lines were all disrupted, with buses replacing the train services between Hornsby and Cowan.

New energy market futures-trading rule delayed: May 31

The Australian Energy Market Commission, at the request of NEMMCO, has decided to delay commencement of the National Electricity Amendment (Reallocations) Rule 2007 from 22 February 2007 to 31 May.

Rule change: It has amended the final rule determination published on 15 February. The Commission also amended the

commencement date in the rule to be made, and gave notice under s.103 of the National Electricity Law of the making of the National Electricity Amendment (Reallocations) Rule 2007 No.1.

Adopted NEMMCO proposal: The Commission gave notice on 15 February, under section 102 of the National Electricity Law of its final rule determination, which includes the rule to be made, the National Electricity Amendment (Reallocations) Rule 2007. In making this final rule determination, the Commission has largely adopted NEMMCO's proposal, with some minor modifications to enhance and clarify operation of reallocations in the NEM.

Key elements of the rule to be made are:

- providing for a new category of registered participant – a reallocator;
- improving flexibility in reallocation procedures; and
- changes to prudential requirements.

Reasons: The final rule determination sets out the reasons for the Commission's decision. The Rule was made on 22 February 2007 and will commence operation on 31 May.

Reference: Australian Energy Market Commission, **Reallocations. Document available at <http://www.aemc.gov.au>**

Fridge-magnet energy policy: \$52.8m budget to tell folks how to save energy

The Australian Government would spend \$52.8m to tell domestic users how to save energy, reported *The Advertiser* (05/03/2007, p.14). The Small Business and Household Climate Change Action information campaign was announced by Environment and Water Resources Minister, Malcolm Turnbull, on Clean Up Australia Day 4 March. "If we have greener homes, we can contribute to a cooler planet," Turnbull said. "Just changing light bulbs to energy efficient compact fluorescent bulbs will reduce energy bills and greenhouse gas emissions," he added.

Mandatory cuts for big users: Large energy-using corporations must register now under new energy efficiency legislation, reported *The Australian Financial Review* (27/2/2007, p.6).

Users exceeding 0.5 petajoules per year must register: Corporations that used more than 0.5 petajoules (PJ) of energy in 2005-06 must register for the Australian Government's Energy Efficiency Opportunities program by 31 March 2007.

What 0.5PJ means: As a guide, 0.5PJ is approximately 139,000 megawatt hours of electricity, 9000 tonnes of LNG, 10,000 tonnes of LPG or 13 megalitres of diesel; or spending of approximately \$5-10 million on electricity, \$1.5-2.5 million on gas, or \$11-13 million on diesel (depending on prices).

Requirements apply to all sectors: The program applies to all large energy using corporations, including those in the mining, resource processing, manufacturing, transport, construction, retail, property, health and welfare, and finance sectors.

First assessment due June 2008:

Corporations are required to complete their first assessment by June 2008 and publicly report their assessment outcomes by December 2008.

Penalties for non-compliance: Penalties for non-compliance are provided for in the Energy Efficiency Opportunities Act 2006.

Contact information: Information on the program, including how to register, is available at <http://www.energyefficiencyopportunities.gov.au>. If you have any questions about the registration process or the program generally, 1300 799 186 or email at: energyefficiencyopportunities@industry.gov.au

Work out usage online: The energy calculator at <http://www.energyefficiencyopportunities.gov.au> will help you to calculate your corporation's energy use.

New coal generation with CO₂ dump cost: \$65/MWh, nuclear cost: \$45/MWh

The House of Representatives Standing Committee on Science and Innovation met on 4 December 2006. John Boshier,

Executive Director, on the National Generators Forum told the meeting: "All-absorbed nuclear cost at an attractive price; still cannot compete with coal ... We believe that the all-absorbed nuclear cost – the long-run marginal cost – is about \$45 per megawatt hour, which is very attractive but does not compete, obviously, with the \$32 per megawatt hour for baseload coal. Be aware that these technologies have particular niches. Nuclear and coal of this kind are baseload plants."

Someone else must pay: Boshier said: "Deep cuts in greenhouse gas emissions from electricity generation are possible but come at a significantly increased cost. For bulk baseload power, both nuclear and new coal technologies with carbon capture and storage provide the least-cost options, with gas and existing hydro fulfilling a peaking role and most other renewables – wind, for example – being used as they are available."

CCS half of total generation by 2050: Petro Georgiou, Committee Chair said: "Carbon capture and storage was limited to 200 million tonnes per year by 2050, or about half the 2050 business-as-usual emissions. That number basically is sourced from Peter Cook in the CO₂CRC. Assuming these build rate limitations:

- nuclear power could produce about 153 terawatt hours in 2050; and
- coal with carbon capture and storage could produce 200 terawatt hours – so that is more than nuclear – out of a total of some 514 terawatt hours.

In other words, carbon capture and storage is less than half of total generation. That is the build rate we have assumed."

Case for CO₂ dumps to compete with gas:

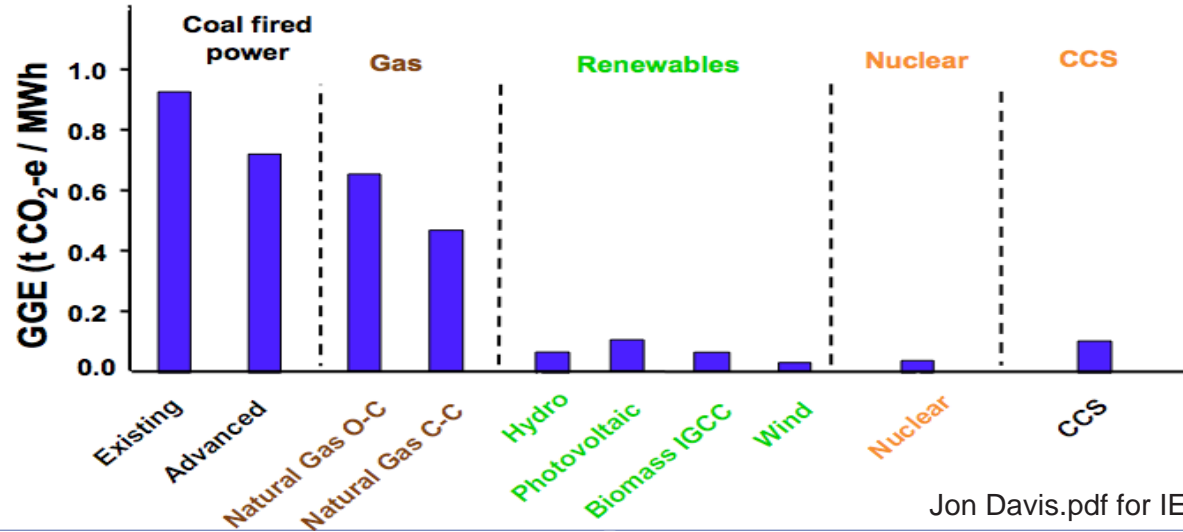
"If nuclear power is not allowed in the generation mix then gas based generation would increase from eight terawatt hours to 165 terawatt hours per year to fill the nuclear gap, and total coal would decline from 292 terawatt hours to 265. It is quite small. To conclude, at this early stage of development the investment risk of new coal based technology with carbon capture and storage is large. This risk can only be reduced through further research, development and demonstration prior to commercialisation. Government, we believe, has a key role in advancing these new low-emission technologies and the Generators."

Costs involved in adopting new technology: Harry Anthony Schaap, Policy Adviser, National Generators Forum said: "There are essentially four sets of costs involved:

- the capital cost of the plant;
- fuel cost;
- the operating cost; and
- the maintenance costs.

Capturing CO₂ will incur additional costs: "On the capital cost, a conventional pulverised supercritical plant comes in perhaps at \$1,200 per kilowatt, or \$1.2 billion per gigawatt, the sorts of numbers you are used to. That cost

IEA's simple-minder view of CO₂ production by techology



Jon Davis.pdf for IEA.

ewn publishing

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would roughly double to about \$2.2 billion per gigawatt for an integrated gasification plant. In other words, you get the plant already to capture the CO₂ but without the capture. If you wanted to capture the CO₂, you will have to add another \$300 million to \$500 million on top of that \$2.2 billion or \$2.3 billion. That is roughly the range of figures. Getting ourselves ready for that position is difficult," Schaap said.

CO₂ dumps \$15/MWh more than nuclear:

Schaap said "With a conventional plant, the current plant, if you build a new power station, it is about \$32 a megawatt hour. Without carbon capture and storage – we just go to the new next generation of technology – that cost

would increase to something like \$50 to \$52 a megawatt hour, which in capital terms is slightly higher than, but not significantly higher than nuclear. They sort of bounce around each other at that sort of level. When you add onto that the actual carbon dioxide capture treatment and storage, you have to add another \$15."

Reference: Commonwealth of Australia, Official Committee Hansard, House of Representatives, Standing Committee on Science and Innovation, Re: Geosequestration technology, Monday 4 December 2006, Canberra The internet address is: <http://www.aph.gov.au/hansard>. To search the parliamentary database, go to: <http://www.parlinfoweb.aph.gov.au>

Walker registers Australian Nuclear Energy, shortly after Howard's enthusiasm

In partnership with leading mining industry figures Robert Champion de Crespigny and Hugh Morgan, Ron Walker registered the company, Australian Nuclear Energy, on June 1, just two weeks after PM John Howard first declared his enthusiasm on a nuclear power industry and five days before he announced an inquiry to examine the issue, John Breusch and Mark Phillips wrote in *The Australian Financial Review* (28/2/2007, p.5).

Company denies proposals: Walker was chair of Fairfax Media, publisher of *The Australian Financial Review*. The company on 27 February issued a statement denying reports it had put forward any proposals to build nuclear power plants in Victoria and South Australia, saying it had been established "to examine potential commercial responses to future energy needs".

VIC & SA say no to nuclear power: Victorian Premier, Steve Bracks, and South Australian Premier, Mike Rann, said they would not allow nuclear power plants in their states. Bracks exploited the issue by introducing legislation for a rare state plebiscite should there be any federal plan to locate a nuclear power station in Victoria. He said the economics of nuclear power were such that it would cost twice as much to provide as conventional coal-fired electricity.

Allowing CO₂ dumps to double electricity price: expect a 20pc slump in use, say generators

The Commonwealth of Australia, Official Committee Hansard, 'House of Representatives, Standing Committee on Science and Innovation' was told by the National Generators Forum: "if you double the price, there will be a 20 per cent reduction, roughly, in its use. In our modelling, even at \$37 or \$40 a tonne of CO₂, the demand reduction – in other words, people responding to that price signal – is 10 per cent or about 50,000 gigawatt hours out of 500,000 gigawatt hours in 2050". Harry Anthony Schaap, Policy Adviser, National Generators Forum said that was the lobby groups model-results based on elasticity is of electricity supplies. Electricity "is like petrol – people will pay anything for petrol and people will virtually pay anything for electricity. Nevertheless, there is quite a minus point too, a per cent elasticity factor to electricity."

Reference: Commonwealth of Australia, Official Committee Hansard, House of Representatives, Standing Committee on Science and Innovation, Re: Geosequestration technology, Monday 4 December 2006, Canberra Monday, 4 December 2006. The internet address is: <http://www.aph.gov.au/hansard>. To search the parliamentary database, go to: <http://www.parlinfoweb.aph.gov.au>

Generator lobby: NETS brings potential windfall gains to the States; gains should flow to us

Once the National Emissions Trading Scheme (NETS) becomes reality, large sums of transfer payments to governments were likely to be involved. The Discussion Paper was essentially silent on potential windfall gains to the States. It canvassed the notion of assistance to low income households.

Who gets the money?: The National Generators' Forum (NGF) believes this is not appropriate. Rather, it should be clearly stated that the prime principle to be followed would be to use the proceeds of any scheme, which could amount to billions of dollars, to pursue lower emission pathways through investment in research and development.

How to give us money: "Even more important is investment in commercialisation and first-of-a-kind deployment. Other potential spending opportunities hinted at in the Discussion Paper may well have undesirable side-effects, such as actually stimulating energy use if funds were used as welfare payments".

Contact: John Boshier, Executive Director, National Generators' Forum, ph: (02) 6243 5120, fax: (02) 6243 5143, email: john.boshier@ngf.com.au website: <http://www.ngf.com.au> Reference: Submission from the National Generators' Forum Limited on the Discussion Paper – Possible Design for a National Greenhouse Gas Emissions Trading Scheme.

3 March: negative prices

Tasmania recorded negative prices of minus \$358.85/MWh and minus \$145.27/MWh in two successive 30-minute trading intervals on Saturday, 3 March.

Mid-afternoon intervals: The negative prices occurred in the 1500EST and 1530EST intervals.

Second day of negative prices: This was the second time this week that Tasmania posted negative prices. On Wednesday, Tasmania posted a negative price of minus \$303.27/MWh in the 1100EST trading interval. On that day South Australia posted a negative price of minus \$133.11/MWh and Victoria minus \$6.35/MWh in the same trading interval.

Reference: National Price for Tasmania for one day, Saturday 3 March, in Price/Demand section of Erisk Net – Realtime NEM Data.

2006/07 summer average prices up 3-17pc in Vic, SA and Tas, down 6.24pc in NSW, Qld

Average prices rose 3-17 per cent in Victoria, South Australia and Tasmania and fell 6-24 per cent in NSW and Queensland to a range of \$40.88 – \$54.00/MWh in summer 2006/07, compared to a range of \$37.52 – \$53.94/MWh in summer 2005/06.

Qld only region with lower demand:

Average demand rose between 0.9 per cent to 8.6 per cent in NSW, Victoria, South Australia and Tasmania and fell 4.6 per cent in Queensland in the 2006/07 summer compared to the 2005/06 summer.

Highest summer average price in Vic:

Victoria had the highest average price of \$54.00/MWh in the 2006/07 summer and NSW the lowest at \$40.88/MWh, while in the 2005/06 summer NSW had the highest average price at \$53.94/MWh and Tasmania the lowest at \$37.52/MWh.

Prices highest in January in 2006/07:

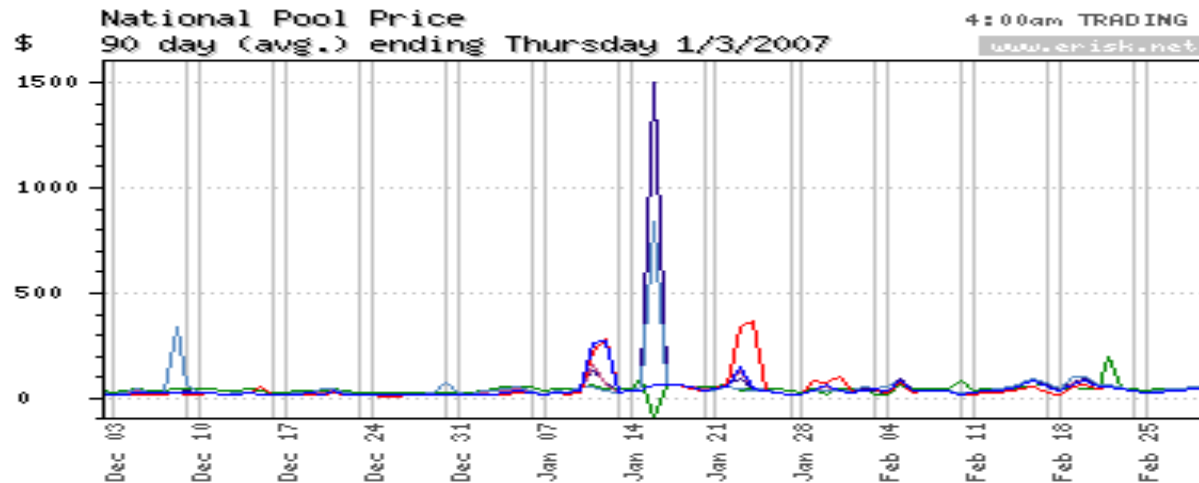
In the 2006/07 summer, January had the highest average prices in summer for NSW, Victoria, South Australia and Queensland while for Tasmania it was February. In the 2005/06 summer, December had the highest average prices for NSW, Queensland and Tasmania, January for South Australia and February for Victoria.

Most have highest demand in February:

With demand, February had the highest average in the 2006/07 summer for NSW, Victoria and South Australia while it was January for Queensland and December for Tasmania. In the 2005/06 summer, February had the highest average demand for NSW, Victoria, Queensland and Tasmania and January for South Australia.

Comparison of average prices and demand for two summers:

The following shows a comparison of average prices and average



—	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
40.55	277.52	13.90	59.95	24.04
44.12	365.25	12.97	71.34	21.75
52.90	838.51	11.92	82.70	26.93
38.26	159.72	13.31	53.36	25.31
54.18	1500.08	10.81	90.33	24.35
43.88	197.62	-98.51	51.47	36.93

demand for NSW, Victoria, South Australia, Queensland and Tasmania for the 2006/07 and 2005/06 summers:

- **NSW:** Average price \$40.88/MWh, down \$13.06/MWh (24 per cent) on the average \$53.94/MWh in the 2005/06 summer. Average demand 8794MW, up 75MW (0.9 per cent) on the 8719MW of the 2005/06 summer.
- **Victoria:** Average price \$54.00/MWh, up \$6.38/MWh (13 per cent) on the average \$47.62/MWh in the 2005/06 summer. Average demand 5856MW, up 214MW (3.8

per cent) on the 5642MW of the 2005/06 summer.

- **South Australia:** Average price \$52.68/MWh, up \$1.43/MWh (3 per cent) on the average \$51.25/MWh in the 2005/06 summer. Average demand 1596MW, up 126MW (8.6 per cent) on the 1470MW of the 2005/06 summer.
- **Queensland:** Average price \$43.97/MWh, down \$2.95/MWh (6 per cent) on the average \$46.92/MWh in the 2005/06 summer. Average demand 6071MW, down 294MW (4.6 per cent) on the 6365MW of the 2005/06 summer.

- **Tasmania:** Average price \$43.85/MWh, up \$6.33/MWh (17 per cent) on the average \$37.52/MWh in the 2005/06 summer. Average demand 1079MW, up 39MW (3.75 per cent) on the 1040MW of the 2005/06 summer.

Reference: Analysis of average prices and demand.

Secret electricity SCADA group to use US advice to build SCADA Information Portal

Energy Networks Australia has been invited to join the Supervisory Control and Data Acquisition, Community of Interest (SCADA Col) which is coordinated by the Infrastructure and Security Division of the Department of Communications, Information Technology and the Arts (DCITA) in Canberra.

Partnership: Formed in late 2004, the SCADA Col is a government industry partnership operating under the umbrella of the Attorney General's led Trusted Information Sharing Network (TISN). The group meets in closed session three to four times a year to share information on issues of common interest.

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Protecting infrastructure: The SCADA Col is a venter neutral forum exploring IT security issues which may adversely affect the protection of Australia's critical infrastructure. Membership includes representatives from energy (gas, power, pipelines); broadcasting; rail transport; water and waste treatment; and communications.

Reference: Projects include a proposal for a visit to the Idaho National Laboratories in the USA in late April or early May and development of a SCADA Information Portal due for completion in April. Ph: +612 6272 1555, Fax: +612 6272 1566. Web: <http://www.ena.asn.au>

Network owners lobby seeks national framework for "smart" meters

A national benefit cost assessment of smart meters was a key part of the Ministerial Council on Energy information paper on the smart meter roll-out, released in January. The information paper also allocated responsibility for any roll-out on the distribution business within network areas.

National "smart" framework: "A mandated roll-out of smart meters must be accompanied with adequate protections ensuring network businesses have certainty over their investments in smart meters, and can access potential network management benefits that smart meters may bring", said Andrew Blyth, Energy Networks Australia Chief Executive. "It will also be important to ensure that we achieve a national framework for smart meters, to avoid a 'rail gauge' problem arising just as the industry is moving to a national regulator."

April COAG meeting: "Energy network businesses are looking for clear direction from the April COAG meeting on the path ahead for smart meters and demand management

approaches, so that network businesses can get on with delivering efficient network services to customers", Blyth said.

ETSA Utilities performs 5.6pc over expectations; Spark posts net profit of \$25.88m

Chief Executive, Bob Stobbe, said Spark was also looking at Origin Energy's network assets and the Basslink connector between Tasmania and mainland Australia, which Britain's National Grid had pegged for sale, after listed entity Spark's ETSA Utilities performed 5.6 per cent above expectations in a year in which its parent company also beat its own forecasts, reported *The Advertiser* (27/2/2007, p.38). The parents are Cheung Kong Infrastructure Holdings and Deutsche Bank's RREEF. They planned 30 per cent of sales by 2010 from unregulated business. Spark invested in electricity distributors ETSA Utilities, Powercor and CitiPower, which posted combined sales 2.1 per cent higher than forecast. Spark shares added 2.5c to \$1.39. They have gained 16 per cent this year.

Electricity sales volume up 5pc: ETSA's electricity sales volume was 5 per cent above internal expectations in 2006 while before-tax earnings were 3.4 per cent better than planned, at \$462.6 million.

Transfield IPO moots \$300 million from Kemerton Power Station, Loy Yang A power stake

Transfield Services expected to complete the spin-off of its infrastructure division by the end of June after it reported the biggest jump in first half earnings within the company, according to *The Australian Financial Review* (27/2/2007, p.14).

Infrastructure fund for sale: Chief Executive, Peter Watson, said the planned infrastructure fund, expected to raise more than \$300 million, might be sold as an initial public offering, although he did not rule out other options. "An IPO is clearly one of those but there are a number of others." Transfield planed to retain just under 50 Per cent of the infrastructure fund, which would include assets such as the Kemerton Power Station and a stake in the Loy Yang A power station, which performed ahead of the company's own forecasts.

Profit falls while service demand rises: Net profit fell 5.8 per cent to \$22.7 million because of an \$11.1 million loss on interest rate swaps. Demand for services was buoyed by contract wins such as Horizon Power in Western Australia, Wal-Mart and Target in the United States as well as acquisitions.

B&B hives off EcoGen and Redbank power stations; prepares to split energy D&T

B&B Infrastructure had been looking at splitting its energy distribution and transmission assets away from its transport infrastructure assets, reported *The Australian Financial Review* (27/2/2007, p.20).

Substantial fundraising: B&B Infrastructure was expected to announce an equity placement and hybrid capital raising aggregating around \$400 million, with the prospect flagged in a research note by Wilson HTM. The funds would help finance the recent \$US2.2 billion (\$2.8 billion) acquisition of US energy transmission and distribution utility NorthWestern Energy. B&B Infrastructure's security price rose from around \$1.50 in August to \$1.925 on 26 February.

Shares sales and reinvestment: In recent months, B&B Infrastructure had sold its interests in the Ecogen and Redbank power stations in Australia for \$85 million, sold its remaining stake in listed sister fund B&B Wind Partners for \$81 million, raised \$67 million in a share purchase plan and was expected to raise \$34 million from investors reinvesting the interim dividend of 7¢ a security.

Origin net profit up 8.8pc to \$285.8m; revenue down to \$2.9bn

Oorigin's net profit in the six months to December 31 rose 8.8 per cent to \$285.8 million as revenue fell slightly to about \$2.9 billion because of lower wholesale power prices, reported *The Australian Financial Review* (1/3/2007, p.17).

Earnings up 9pc to \$639.6 million: Earnings before interest, tax, depreciation and amortisation rose 9 per cent to \$639.6 million, driven by improved performances in Origin's exploration and production, retail and generation businesses.

Origin mulls sell-offs: Grant King, Managing Director, said Origin expected to make a decision on the sale of its unwanted networks businesses - stakes in gas distributor Envestra and the SEA Gas pipeline and an asset management business - later this month after receiving interest from a number of potential buyers.

NEMMCO: Qld transfers of large electricity customers down for February

Queensland transfers of large electricity customers on to market contracts dropped sharply in February 2007

following a large rise in January 2007, according to the latest transfer statistics issued by the National Electricity Market Management Company (NEMMCO).

Down 139 on January: The 85 transfers in February were down 139 (62.1 per cent) on the 224 transfers in January.

Up 43 on February 2006: However, February's transfers were up 43 (102.4 per cent) on the 42 transfers in February 2006.

Total transfers at 6260: The 85 transfers in February took total transfers to 6260, compared to 6175 at the end of January and 4782 at the end of February 2006.

Must use more than 160MWh a year: In Queensland, large customers (those using 160 megawatt hours a year or more) can choose their retailers. Full retail contestability (FRC) does not apply in Queensland for domestic customers using less than 160MWh a year.

Reference: National Electricity Market Management Company (NEMMCO) retail transfer statistical data for large Queensland customers for February 2007 6 March 2007. Address: Level 16, 461 Bourke Street, Melbourne, Vic 3000. Phone: (03) 9648 8777. Fax: (03) 9648 8778.

NEMMCO: Vic transfers of small electricity customers continue upward trend with total of 54,664 in February

The 54,664 Victorian transfers of small electricity customers in February 2007 were up 1263 (3.4 per cent) on the 53,401 in January, according to the latest National Electricity Market Management Company (NEMMCO) transfer figures.

Higher than any month in 2006: Like January 2007, the February total was higher than any month in 2006, when the highest monthly total was October's 51,046.

13,522 more than February 2006: The February 2007 transfers to market contracts were up 13,522 (32.9 per cent) on the 41,142 in February 2006.

Small customer transfers now 1,825,760: February's transfers took the total of small electricity customer transfers to 1,825,760 compared to 1,771,096 at the end of January and 1,241,589 at the end of February. (See Note at end of table.)

Large customer transfers continue to fall: Transfers of large electricity customers continued to fall in February with the total of 119 being down 217 (64.6 per cent) on the 336 in January. They were up 18 (17.8 per cent) on the 101 in February 2006.

Large transfers now total 22,217: The January transfers of large customers took the total to 22,217, compared to 22,098 at the end of January. Transfers of large electricity customers at the end of February 2006 totalled 18,251.

Combined total at 1,847,977: The combined total of transfers of small and large electricity customers at the end of February was 1,847,977 compared to 1,793,194, at the end of January.

How customers are classified: NEMMCO said the transfers represented the total for both small and large national meter identifier (NMI) figures. A small NMI is classified as having less than 160MWh of consumption a year while a large NMI is a customer having more than 160MWh consumption a year.

Reference: National Electricity Market Management Company (NEMMCO) MSATS (market settlement and transfer solutions) retail transfer statistical data for customers in Victoria for February 2007. 6 March 2007. Address: Level 16, 461 Bourke Street, Melbourne. Vic. 3000. Phone: (03) 9648 8777. Fax: (03) 9648 8778. <http://www.nemmco.com.au>

NEMMCO: 33,286 transfers of small NSW electricity customers

Transfers of small electricity customers jumped sharply in February, rising 4436 (15.4 per cent) to 33,286 compared to 28,850 in January, according to NEMMCO figures.

Highest month in 2006 was May's 32,564: The February total of 33,286 was higher than any month in 2006, with May's 32,564 being the top month.

Up 9602 on February 2006: The 2007 February transfers were up 9602 (40.5 per cent) on the 23,684 transfers in February 2006.

Total small customer transfers at 880,127: Total small customer transfers at the end of February was 913,413, compared to 880,127 at the end of January and 565,137 at the end of February 2006.

Transfers of large customers plunge: Transfers of large electricity customers plunged 591 (88.1 per cent) to 80 in February, compared to 671 in January. February's transfers's were down 6 (7.0 per cent) on the 86 in February 2006.

Total for large customers now 22,911: The transfers in January 2007 took the total of large customer transfers to 22,911.

Combined transfers now 936,324: The combined total of small and large customer transfers at the end of February was 936,324, compared to 902, 958 at the end of January and 585,333 at the end of February 2006.

How customers are classified: NEMMCO said the transfers represented the total for both small and large national meter identifier (NMI) figures. A small NMI is classified as having less than 160MWh of consumption a year while a large NMI is a customer having more than 160MWh consumption a year.

Reference: National Electricity Market Management Company (NEMMCO) MSATS (market settlement and transfer solutions) retail transfer statistical data for customers in NSW for February 2007. 6 March 2007. Address: Level 16, 461 Bourke Street, Melbourne. Vic. 3000. Phone: (03) 9648 8777. Fax: (03) 9648 8778. <http://www.nemmco.com.au>

Electricity tariffs in Australian jurisdictions range from \$65 to \$147/MWh

Electricity tariffs in 2004/05 and 2005/06 varied from \$65 to \$147 a megawatt hour (MWh), the Productivity Commission showed in its report on "Potential benefits of the National Reform Agenda (NRA)".

How the table was compiled: In a table in the report on average electricity tariffs, cost components and shares, 2004/05 and 2005/06, the Productivity Commission said its material on tariff by component and using region was based on extrapolation of 2003/04 tariff data from the Electricity Supply Association of Australia (ESAA) to the reference period using ABS electricity consumer and producer price indexes.

Tasmania the lowest, Northern Territory the highest: The table showed the various total tariffs as: Tasmania \$65/MWh; NSW \$86/MWh; Queensland \$88/MWh; Victoria \$102/MWh, Australian Capital Territory \$106/MWh; Western Australia \$116/MWh; South Australia \$138/MWh; and Northern Territory \$147/MWh.

Australian average at \$95/MWh: The Australian average weighted by the quantities of electricity consumption in the individual jurisdictions was \$95/MWh.

Breakdown of costs into components: The table showed the components of the total tariff by generation, transmission and distribution, and retail. Transmission was given separately for the NEM regions but not for the other jurisdictions.

Reference: Report by Productivity Commission on "Potential benefits of the National Reform Agenda (NRA)". 28 February 2007. Address: Level 3, Nature Conservation House, Corner Emu Bank and Benjamin Way, Belconnen. ACT. 2617. PO Box 80, Belconnen. ACT. 2616. Phone: (02) 6240 3200. Fax: (02) 6240 3399. <http://www.pc.gov.au>

Spikes in the 2006/07 summer were generally lower than the 2005/06 summer

The analysis shows that 73 of the 128 spikes in the 2006/07 summer were between \$100-\$200/MWh compared to 38 of the 120 spikes in this range in the 2005/06 summer.

More over \$1000/MWh in 2005/06 summer: In the 2006/07 summer there were 25 spikes in the \$1000-\$10,000/MWh range, compared to 36 in the 2005/06 summer.

More spikes on fewer days: There were 38 days of spikes in the 90 days of the 2006/07 summer with a combined total of 128 spikes,

compared to 47 days of spikes with a combined total of 120 spikes in the 2005/06 summer.

Reference: Top prices above \$100/MWh for NSW, Victoria, South Australia, Queensland, Snowy and Tasmania on a daily basis in the summer months of February, January and December in 2005/06 and 2006/07 as shown in National Prices in Price/Demand in Erisk Net – Realtime NEM Data.

8 of 65 spikes in NEM regions in February had prices exceeding \$1000/MWh, compared to 14 of 57 spikes in January

The combined total of 65 spikes on 15 days in the six National Electricity Market (NEM) regions in February 2007 had eight top prices between \$1000/MWh and \$4332.13/MWh, an analysis of spikes showed.

Spikes bigger in January: This compares to a combined total of 57 spikes in the NEM regions in January on 17 days, with 14 top prices between \$1000/MWh and \$10,000/MWh.

Eight spikes above \$1000/MWh in February 2006: The combined total of spikes in February 2006 was 19 on 10 days, with eight top prices between \$1000/MWh and \$9738.95/MWh.

Reference: Maximum prices above \$100/MWh in NSW, Victoria, South Australia, Queensland, Snowy

and Tasmania for February 2007, January 2007 and February 2006 as shown in National Prices in Erisk Net – Realtime NEM Data.

15 spike days in NEM regions for February with top prices from \$101.63/MWh to \$4332.13/MWh: 14 in SA

Spikes occurred on 15 of the 28 days in February 2007, compared with 17 of the 31 days in January, an analysis of spikes showed.

Combined total of 65 for regions: The combined total of spike days in the six NEM regions in February was 65, with top prices ranging from \$101.63/MWh to \$4332.13/MWh. Only the top price for a region is used on any day with spikes, defined as prices above \$100/MWh.

Fewer spikes in January, but top price higher: In January, there were spikes on 17 days with a combined total of 57 spikes in the six regions, with prices ranging from \$100.07/MWh to \$10,000/MWh.

Few spikes in February 2006: In February 2006 there were spikes on 10 totals with a combined total of 19 spikes in the regions, with prices ranging from \$100.52/MWh to \$9738.91/MWh.

SA has most spike days: South Australia had spikes on 14 days in February 2007, with Victoria next on 12 days. In January 2007,

South Australia and Queensland had the equal highest number of spike days at 11 each. In February 2006, Queensland had the most spike days at six.

Reference: Maximum prices above \$100/MWh in NSW, Victoria, South Australia, Queensland, Snowy and Tasmania for February 2007, January 2007 and February 2006 as shown in National Prices in Erisk Net – Realtime NEM Data. <http://www.erisk.net>

Avg prices down 20-49pc in mainland in February and up 19pc in Tas to range of \$37.63-\$52.87/MWh

Average prices fell 20-49 per cent in NSW, Victoria, South Australia and Queensland and rose 19 per cent in Tasmania to a range of \$37.63-\$52.87/MWh compared to a range of \$44.40-\$91.47/MWh in January, an analysis of monthly price and demand figures showed.

Demand up everywhere but Queensland: Average demand in February rose 2.2 per cent to 9.9 per cent in NSW, Victoria, South Australia and Tasmania in February and fell 2.3 per cent in Queensland compared to January.

Tasmania goes from lowest average price to highest: Tasmania reversed its position from having the lowest average price in January of \$44.40/MWh to having the highest in February of \$52.87/MWh.

SA only other region with average above \$50:

Average prices for the other regions in February were: NSW \$44.81/MWh (\$55.93/MWh in January); Victoria \$47.51/MWh (\$91.47/MWh); South Australia \$52.84/MWh (\$66.48/MWh); and Queensland \$37.63/MWh (\$73.70/MWh).

Queensland down on February 2007, others all up:

South Australia and Tasmania were up 63-68 per cent on the February 2006 average prices while NSW, Victoria and Queensland were down 15-31 per cent.

AER: 1112MW of Vic generation capacity not presented in high-priced trading interval on day of power crisis

A total of 1112MW of capacity was not presented during a high-priced trading interval on the day of Victoria's power crisis on 16 January, the Australian Energy Regulator (AER) said in its first report on events of the day.

13 per cent of total capacity: The report said this represented 13 per cent of the 8470MW generating capacity in Victoria.

7343MW presented: On 16 January, 7343MW of capacity was presented in Victoria at 1500EST, the high-priced trading interval. At the same time, 3140MW (96 per cent) of the 3260MW capacity in South Australia was presented.

Vic spot price was \$9585.48/MWh: The spot price in Victoria at 1500EST was \$9585.48/MWh and \$6048.52/MWh in South Australia.

Three generators not available: The report showed that three generators with 260MW of capacity were not available – the 46MW capacity Morwell 2, the 58MW capacity Hume, the 156MW capacity Dartmouth (a hydro plant that had low dam levels at the time).

Yallourn 4 on planned outage: The 355MW capacity Yallourn 4 was shut on 10 January for a planned outage and did not return to service until 20 January.

Newport back at 1700EST after NEMMCO direction: The 475MW capacity Newport did not bid into the market and came back on the grid at 1700EST following a direction from the National Electricity Market Management Company (NEMMCO).

SA's Playford offered 85MW less than summer rating: In South Australia around 120MW of total capacity was not presented during the high priced period. The most significant reduction was at the Playford power station which offered an availability of 155MW for the 1500EST trading interval, 85MW less than its summer rating.

Reference: First report by Australian Energy Regulator (AER) on pricing around the Victorian bushfires and the failure of the state's largest electricity transmission network on 16 January 2007. 21 February. Address: Level 11, The Tower, 360 Elizabeth Street, Melbourne Central. Melbourne. Vic. 3000. GPO Box 520, Melbourne. Vic. 3001. Phone: (03) 9290 1444. Fax: (03) 9290 1457. <http://www.aer.gov.au>

1721 futures contracts traded in week to 26 February, d-cypha Trade summary shows

A total of 1721 contracts were traded in the week to Monday, 26 February, the d-cypha Trade/Sydney Futures Exchange (SFE) weekly summary showed.

Less than half record total: This was way below the record of 4366 contracts traded in the week ending 22 January, 2007.

Types of contracts: The 1721 contracts were made up 1360 base futures, 245 peak futures and 116 caps.

Open interest records: It said open interest (including caps and options) continued to set records with 28,760 (57,520 buy and sell sides) at the close of business on 26 January involving a total of around 65.1 million megawatt hours (MWh).

Statistics for the week: The summary showed:

- 1721 futures contracts were traded.
- 150 calendar options were traded.
- quarterly options were traded.
- volume of exchange for physicals (EFP).
- 1270 volume of block trades.
- Total MWh traded for week of 4,782,837.
- Open interest (including caps and options) of 28,760 contracts at close of business, involving about 65.1 million MWh.

Reference: Trading summary for week to 26 February for electricity futures operated by d-cypha Trade. Address: Level 32, ABN AMRO Tower. 88 Phillip Street. Sydney. NSW. 2000. Phone: (02) 8211 0615. Fax: (02) 8211 0640. <http://www.d-cypha.com.au>

AER issues first electricity market Compliance Bulletin

The Australian Energy Regulator (AER) issued its first electricity market Compliance Bulletin titled "Complying with dispatch instructions".

First compliance bulletin: The aim of this and future compliance bulletins was to provide guidance on the AER's interpretation of specific provisions within the rules to assist participants in the market understand their obligations. An understanding of the AER's approach would provide greater transparency, certainty and predictability for market participants and reduce compliance costs.

31 Oct 2005 outage incident: The issuing of this bulletin follows from an incident in New South Wales on 31 October 2005 when lightning caused an outage in NSW. This gave rise to a number of compliance issues, including generator obligations to follow dispatch instructions. Clause 4.9.8 (a) of the National Electricity Rules (the Rules) stated that a registered participant must comply with a dispatch instruction given to it by NEMMCO unless to do so would, in the registered participant's reasonable opinion, be a hazard

to public safety or materially risk damaging equipment.

Confusion over NEMMCO instructions

responses: On the other hand, Clause 3.8.23 allows NEMMCO to declare a generator non-conformance if it fails to respond to dispatch instructions within a reasonable time. The Rules establish obligations on generators to follow the dispatch instructions, but how closely dispatch instructions should be followed has been subject to different interpretations. At times some generators have dispatched more than instructed for commercial reasons.

Non-compliance chaos warning: The AER was of the view that there were risks to system security if generators failed to accurately follow instructions and that the market rules establish a clear obligation for compliance in this area. The compliance bulletin provides guidance on generator obligations to follow dispatch instructions. The AER would closely monitor outcomes and would investigate and consider all available enforcement options where a generator failed to follow instructions including, where appropriate, infringement notices and legal proceedings.

New "materiality" test: However the AER is effectively introducing a "materiality" test, as exact compliance is not physically possible. The regulator would not pursue departures that occur despite best endeavours. The nature and extent of the breach, the impact, the circumstances and other factors such as the pattern of the participant's previous

behaviour would be considered. The AER compliance bulletin is available at: <http://www.aer.gov.au>

Tolerance levels: Q1: Brian Spalding, NEMMCO, stated that the compliance bulletin would have some form of tolerance around the actual compliance requirements and asked whether the AER would expect those to be a different tolerance to those which NEMMCO uses in its procedures. Brian also stated that NEMMCO has automated its non-conformance notices. A: Sebastian Roberts, AER, replied that it would be different from the NEMMCO non-conformance thresholds – much lower. It is about a material departure. AER would look into all of the circumstances but it should be reasonably straightforward to administer.

Chapter 3, 4 differences: Q2: Alex Cruickshank, AGL Hydro Partnership, sought clarification with regard to the two relevant areas in the Rules: chapter 3 specifies the procedure for NEMMCO which allows them to manage system security when there has been an issue, and chapter 4 regarding managing compliance. A: Sebastian Roberts, AER, replied that the AER treats the two chapters as independent. When there's a non-conformance issue, Chapter 3 provides a mechanism for NEMMCO to handle that. It is quite distinct from Chapter 4.

Clarification needed on breach

identifications: Q3: Alex suggested that it would be better for NEMMCO to notify participants if there's a problem – any issues with system security so that corrections can be

made, instead of waiting until later. A: Sebastian Roberts pointed out that it is an enforcement issue for the AER and that the AER needs to interpret the provision and provide clarity on how the market can identify the breach and pursue them.

Reference: Minutes of National Market Information Forum - No. 76, held on 14 December 2006, conducted from Melbourne to Sydney, Brisbane, Canberra, Hobart And Adelaide, p.4-5.

20 November 2006: SP AusNet trip of Vic line coincident with opening of a 500kV remote operated isolator at the Rowville 500kV switch yard, around 20km away

Unbalanced readings could have caused the protection system to trip on 20 November 2006 reported SP AusNet, as the disturbance record of the X protection relay current transformers showed that a strong direct current transient was present at the time of tripping. The restricted earth fault protection responds to the external sum of current through the high voltage and neutral current transformers. The protection system settings were tested, by SP AusNet, after the incident and found to be correct. Though the relay settings in the protection system were found to be correct, SP AusNet believed that the current readings from the current

transformers, for this transient, may not have been balanced.

- At 05:22 hrs (Eastern Standard Time) on 20 November 2006, the No.1 220/66kV transformer at Cranbourne Terminal Station (CBTS) was tripped by its earth fault protection. The transformer's protection system also tripped the No.1 CBTS 220kV bus to which the transformer was connected with only an isolator.
- At 05:22 hrs (Eastern Standard Time) on 20 November 2006, the No.1 220/66kV transformer at Cranbourne Terminal Station (CBTS) was tripped by the restricted earth fault element of the transformer X protection.
- The transformer Y protection did not operate. The design of the CBTS No.1 220/66kV transformer connection to the No.1 CBTS 220kV bus is through an isolator, the transformer's protection system operated to trip the No.1 CBTS 220kV bus by opening the circuit breakers on the doubleswitched 220kV lines to Tyabb (two lines) and the CBTS 500/220kV transformer.
- The circuit breaker connecting the No.1 220/66kV transformer to the CBTS 66kV bus was also opened. The lines disconnected from the No.1 CBTS 220kV bus remained connected to the No.2 CBTS 220kV bus. See Figure 1 below for connection details.

Cause of the transient not yet known: This trip was coincident with the opening of a

500kV remote operated isolator at the Rowville 500kV switch yard, around 20km away. The restricted earth fault elements in the transformer X-protection for both the No.1 and No.2 220/66kV CBTS transformers would remain out of service pending outcomes from further investigation by SP AusNet. Additional current transformer performance testing of the No.1 and No.2 220/66kV CBTS transformers would be carried out by SP AusNet at a later date.

Reference: National Electricity Market Management Company Limited, Power System Incident Report, Loss of Cranbourne, No. 1 220kV Bus, 20 November 2006, p.1-4. Prepared by: System Operations Planning and Performance, Version No: 1.0. This document is available at <http://www.nemmco.com.au>

Singapore Power-Babcock & Brown suspected of joint \$9 billion bid for Alinta

Singapore Power planned to join Babcock & Brown in a \$9 billion bid for Alinta. A Bloomberg report sourced to "three people familiar with the transaction" said the offer "may" be submitted before March 12, reported *The Australian* (06/03/2007, p.19).

Bid price pegged at \$18.23/share: "The Singapore-Babcock bid, worth about \$18.23 a share, would be 29 per cent above Alinta's close on March 2" said the report, which noted that banks had been invited to tender for Singapore Power's half-share of the funding for the acquisition.

B&B, Singapore Power deny claims: A Babcock spokeswoman issued a statement saying the "article issued today speculating on B&B's involvement in a bid valuing Alinta at \$9 billion is without foundation". A spokesperson for Singapore Power laughed and declined to comment.

Bidders eye Alinta's asset management operations: Analysts believe the part of Alinta's business most in demand from potential bidders was the asset management operation. Besides six electricity plants, Alinta owns the Eastern gas pipeline, was a gas wholesaler in the eastern states and a wholesaler and retailer in its home base of Western Australia.

Alinta denies involvement: Alinta on 5 March vigorously denied that the Bloomberg story emanated from the company or its corporate advisers. "Alinta restates the advice it provided the market on February 28 that a number of expressions of interest have been received in relation to the possible sale of Alinta," the company said in a stock exchange statement. "Alinta reiterates that no binding bids have been received and there is no certainty that any will be received."

Burke's portfolio: Macquarie Bank, Pacific Hydro and Epic Energy, energy unions ... and the list goes on

According to *The Australian* (06/03/2007, p.4), National firms, not just those from the West, had turned to the lobbying power of the former Labor premier, his former minister, Julian Grill, and ex-Liberal senator Noel Crichton-Browne. The list obtained by *The Australian* included WA Trotting Association, the Australian Hotels Association, Broome Airport, Fortescue Metals, Cazaly Resources, Griffin Energy, Murchison Metals and Croesus Mining.

Managing Industrial Relations: The lobbyist had kept a regular stream of union work working on campaigns and mediating disputes for the Australian Workers Union, the Construction Forestry Mining and Energy Union, Australian Services Union and the Transport Workers Union.

Wings far and wide: Macquarie Bank, its subsidiary property developer Urban Pacific, Australand, Pacific Hydro and Melbourne-based Epic Energy had all hired them. Macquarie, for example, was understood to be looking at expanding its Lime Taxis to Perth, a source close to the lobbyists said.

Burke connection may cost dearly: The resignation of Human Services Minister, Ian Campbell, on Saturday had been forced by the

strength of the federal Government's pursuit of Kevin Rudd last week, when Treasurer, Peter Costello, said anyone who had contact with Burke was compromised. Campbell fell on his sword for a meeting last year with Burke over a matter affecting the WA Turf Club, which was revealed in *The Weekend Australian*.

Energy reform lobbying: According to David Crowe, political correspondent in *The Australian Financial Review* (06/03/2007, p.4), the West Australian Liberal Party collected tens of thousands of dollars from businessmen who paid retainers to disgraced former premier Brian Burke, linking the branch to individuals that Treasurer Peter Costello had labelled morally compromised. Burke and Grill had been acting for Stowe since at least 2002, when they began lobbying the state government over electricity reform, a big issue for Stowe's coal-mining interests.

Other customers: Other clients of Burke & Co. included:

- Portman Mining Mansfield Holdings;
- Kimberley Diamond Echelon Resources;
- Broome Airport BGC (Len Buckeridge);
- Norwest Pearls West Australian Trotting Association;
- David Lombardo Australian Hotels Association;
- Griffin Coal;
- Pacific Hydro;
- Murchison Metals;

- CFMEU; and
- Croesus Mining.

Bugged: CCC taps phones of 79 people, including public servants, politicians and police

West Australian trade union heavy-weight Kevin Reynolds questioned how members of the Labor Party's Left faction knew to stop taking calls from disgraced former premier Brian Burke as telephone taps were put in place by the state's Crime and Corruption Commission, reported *The Australian* (27/2/2007, p.4).

Investigators bug 79 people: Investigating whether Burke and his business partner Julian Grill had improperly influenced public officials, the CCC secretly recorded calls to and from the private homes and mobile telephones of at least 79 West Australians, including public servants, politicians and police.

Recording fells three ministers: The captured conversations – recorded over the past 14 months – have led to the sacking of three cabinet ministers – Police Minister John D'Orazio in May, Small Business Minister Norm Marlborough Reynolds in November and Environment Minister Tony McRae over the weekend.

State Attorney-General in the loop on recordings: Attorney-General Jim McGinty – a key member of the Left faction – is the only state government minister the CCC has to advise about planned surveillance. The CCC also advises federal Attorney-General, Philip Ruddock, about planned phone taps and bugs.