

BLACKOUT BRIEF

LEVEL 1
TOASTERS
TURN-OFF



LEVEL 3

POLITICIANS
ARE
PEEVED



LEVEL 2

TRAFFIC
LIGHTS
GO LIMP



LEVEL 4

PROFITS ARE
PENALISED



SA's \$10,000/MWh breakfast blackout: anger as Pelican Point, Ladbroke crash follows week of six directions

1

On Monday 14 March, South Australia hit a market ceiling price of \$10,000/MWh, and 40 per cent of the state suffered a blackout. The blackout and peak price followed after a disturbance in the high-voltage network at Port Augusta - 300km north of Adelaide - which had disconnected the two transmission lines from Victoria into South Australia. Businesses and commuters faced chaos as not only toasters, but also traffic lights, failed.

Two states separate: Victoria and South Australia separated at 0642EST after problems between the Heywood Terminal Station (HYTS) and the South East Switching Station (SESS) caused NEMMCO to apply lack of reserve level 3 (LOR3).

Half hour price of \$6503.93/MWh: South Australia's breakfast blackout set a half hour price of \$6503.93/MWh, and set the SA average price up 414 per cent, and NSW, Victoria and Queensland up 4-14 per cent.

The story was: "A short-circuit near the Playford substation outside Port Augusta" had tripped the SA - Vic line, and Pelican Point and Ladbroke Grove crashed, and blacked 40 per cent of the state in the middle of breakfast toast. Energy Minister, Pat Conlon, warned the State Government's patience was running out. "We're extremely unhappy about what happened this morning," he said. "Straight out of the blue, weather conditions fine, no great demand, (the) power system goes down. Completely unacceptable."

Who earned what for the day:

- Northern Power \$1,802,831;
- Ladbroke \$26,797;
- Osborne, Dry Creek \$2508;
- Playford \$206,128;
- Snuggery \$0.00;

cont. page 7

contents

- 8 SA: Electrical Trades Union says ETSA had refused to negotiate on new pay award
- 9 CLP Power test of nerves: pays \$2.2bn for Vic, SA assets
- 10 Tripping of Pelican Point and Ladbroke Grove ignored in NEMMCO report
- 11 NEMMCO CEO somehow has all the facts: Hosking tells of generators tripping in SA
- 11 Friday, 11 March: Third successive day of spikes as SA price hit \$148.50/MWh in early afternoon trading session
- 11 Thursday, 10 March: Spikes to top of \$149.33/MWh in four 30-minute trading intervals in SA
- 12 WA 10 March: worst day of pole-top fires in decade as storms black more than 70,000 houses
- 12 SA House of Assembly passes bill on national electricity law with Minister thanking state Opposition, quoting Churchill

Find out more at the subscriber section of www.erisk.net

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

opinion

The Prodigious Prince of presdigation, Paul Panther-Price, attempts to purge a power problem....

ZIM ZAP ZOO! Fog and Possums! Darn! worked last time!



NEMMCO's jungle track

The new management of NEMMCO, under Hoskings, had removed excess political influence and hacked a path to clarity of process. But, in the turmoil of change, has NEMMCO now lost its way again? Markets work on information.

Markets fail where information does not flow. The forensics of the 14 March South Australian blackouts - described as the third in the same place, and the second in the same place at the same time in two successive years - sent the SA Minister into a rage. NEMMCO - in fear of fall-out - appeared to organise a deliberate fog. Public access to data was limited - but the NEMMCO CEO was unusually well informed when

interviewed by the ABC. When *Electricity Week* sought information from NEMMCO, the NEMMCO PR man Paul Panther-Price would not come to the phone.

An ABC report quoted the Electrical Trades Union state organiser Bob Donnelly as saying there would be "no more industrial action". Unions said the industrial action over the Leigh Creek coal mine and the Port Augusta power station had ended on 7 March.

An angry South Australian Minister for Energy ordered an inquiry into the blackout. ElectraNet denied the initial fault on 14 March was caused by supply loss as supply problems appeared in the south and the north of the state.

Minister for Energy, Patrick Conlon, pointed out this was the third blackout in three years stemming from the north - the Port Augusta network. "It has happened too many times, it's happening in the same place - it's simply not acceptable for them to come back with some lame excuse like fog or possums".

The same applies to the southeast region. Besides the frequency of problems, another factor that linked the two regions is the paucity of information provided in National Electricity Market Management Company (NEMMCO) market notices, and the market manager's inconsistent approach to releasing detailed information about the problems.

For example, the Heywood interconnector has been affected by frequent problems of "ageing infrastructure" in the state's southeast region. NEMMCO issued six directions in eight days related to this region. NEMMCO does not identify who has been directed or give any intelligible detail on the cause of the direction.

A highly placed industry source said the reason NEMMCO did not divulge the identity of the Code participants that it directed was that generators insisted this was confidential information.

It appeared NEMMCO ran for cover after the South Australia blackout, after the tripping of Pelican Point and Ladbroke Grove.

Electricity Week made unsuccessful attempts on Wednesday, 16 March to get NEMMCO's views on why the identity of those being directed in South Australia was not revealed in its market notices.

Three phone calls to Paul Panther-Price, manager, corporate relations and communications, were not returned.

When power stations go offline, the information should be available because it affects the market, and other participants have a right to know what is happening.

That's what markets provide - information. NEMMCO seems to realise this, because in a market notice (12628) later on Monday, 14 March it reported on two Northern Power Station units tripping and declared this a single credible contingency event.

If directions have to be made frequently to a generator because of recurring problems in a particular region, there is a prima facie case that something is wrong and indicates the need to examine if remedial action is required.

Another question that was going to be directed to Paul Panther-Price was the amount of compensation that had been paid as a result of this rash of directions. Two weeks after the 2 March direction (there was an earlier direction on 28 February), NEMMCO had not published any report. Clause 3.13.6 of the Code requires that NEMMCO "must, as soon as reasonably practicable after issuing a direction, publish a report", which outlines various factors relating to the issue of the direction.

Sometimes NEMMCO takes months. Markets work on information.

More information, please NEMMCO - or else all wonder in the fungle of the NEM.

Electricity in brief

\$10,000/MWh breakfast blackout: On Monday SA's \$10,000/MWh breakfast blackout created anger as Pelican Point, Ladbroke crash followed a week of six directions, as Synergen Power's 63MW capacity Snuggery was the target of NEMMCO orders. It was a woeful Monday for SA with the breakfast blackouts and a separation from Vic, LOR3 declared, VoLL override applied, \$6503.93/MWh spike and two big generator units tripped in one afternoon.

Data missing from NEMMCO reports: The tripping of Pelican Point and Ladbroke Grove were ignored in a Monday NEMMCO technical report.

Pelican Point details: A check of the generation details show that Pelican Point, the state's biggest power station, was generating 155MW in the 30-minute interval ended 0600EST on Monday, 14 March, dropping to 77.50MW in the 0700EST interval, zero in the 0730EST interval and 16.62MW in the 0800EST interval. Generation fluctuated between 6.67MW and 26.67MW in the intervals from 0830-1000EST.

Hosking gets special line to data: The NEMMCO CEO somehow had all the facts, while the NEMMCO PR man would not answer calls from *Electricity Week*.

75 flaming WA poles: WA blackouts followed as 75 poles burst into flames on 10 March: this led to blackouts for 70,000 households and businesses

across Perth which were without power as the pole-top fires overwhelmed emergency crews. The WA Coroner blamed Western Power for causing a blaze leading to two women's deaths last year - failure to act was 'inexcusable'.

WA Energy Minister role threat: The Energy Minister's job was under threat as the Chamber of Commerce slammed Gallop's decision to enlarge cabinet.

Who, me: The SA Electrical Trades Union rejected claims its work bans were harming the public, and said the problem was ETSA was unwilling to negotiate fair EBA. But ETSA Utilities slammed the Electrical Trades Union's work bans as "unhelpful and unnecessary", and as damaging business. ETSA Utilities warned of 100 job losses if work bans continue to threaten external contracts.

Tasmania Code changes: Code changes relating to limited regional recovery of regulation ancillary services costs followed a plan for Tasmania's entry to the National Electricity Market.

Monday 14 March: South Australia hit the market ceiling price of \$10,000/MWh, and 40pc of the state suffered a blackout.

Sunday, 13 March: Average prices were steady in NSW, up 1pc in Qld, down 5-12pc in VIC and SA to \$17.10-\$20.24/MWh range on falling demand.

Market report for week to 12 March: Prices dropped 6-13pc to \$16.50-\$26.72/MWh on huge demand drop: SA had three days of strikes and spikes.

Friday, 11 March: Average prices down 3-12pc to \$16.44- 32.56/MWh range on stronger demand: SA spike as Adelaide heat sent demand up sharply.

Thursday, 10 March: Spikes pushed up SA average price by 29pc as NSW, Vic and Qld all up 1pc to \$17.02-\$36.80/MWh range on firmer demand: Fourth direction of week to SA participant.

Tuesday, 15 March: the Spike-free SA average price dropped 84pc as NSW, Vic and Qld rise 13-20pc to \$20.19-\$27.20/MWh range on higher demand.

Wednesday, 16 March: Prices down 1-16pc to \$17.06-\$26.88/MWh range as demand plunges.

Electricity Bill passes SA House: Many and varied ideas about electricity were raised in the SA debate on the Bill. The opposition was doing its job to oppose - and argued the Basslink completion problems had removed the urgency for national electricity legislation.

NEM a dog's breakfast: SA had ended up in a situation called a national electricity market, but it's really a bit of a "dog's breakfast", an Independent MHA said in the SA electricity debate over the National Bill.

Vic rules SA: The new electricity law was drafted in Vic, even though SA was the lead legislator, said the opposition energy spokesperson. "This was not right; how could anyone read a 700-page exposure draft of national electricity rules supplied on 9 December with early January closing for comments." On a matter of great state

and national importance there were only 32 written submissions on the bill amending national electricity law and 15 of these were also made as in-person submissions, said the SA Labor member.

Bood sweat, tears and the NEM: The SA House of Assembly passed a bill on national electricity law with the Minister thanking the opposition and quoting Churchill on democracy.

NEM sales the stormy seas: The Bill to amend national electricity law was like launching a new ship: you wish it and all who sail in her well, an Independent told the SA Parliament.

NEM conundrum: The pressure on governments to keep the electricity price down worked against those wishing to invest in industry, said the same SA Independent.

Wind farms muck up SA stability: The concentration of wind farms in SA, built by Qld, NSW Govts, threatened state generation stability, said ESCOSA.

Wind to fight with coal in 10 years: Energy prices were to drop big time, cost-competitive with fossil fuels within 10-15 years, said the Aus Wind Energy Association.

Case to sign Kyoto: Kyoto ratification by Australia was to result in \$10bn investment in wind energy projects, said the Wind Energy Association.

CSIRO a bit confused: The CSIRO chief executives had focused on commercial outcomes for science, and the business was split on CSIRO's

ability to contribute and add value to operations.

Morale problems of CSIRO: Its "big hairy audacious goals" had turned into turantulas as CSIRO seethed with confusion and conflicting interests between science and revenue. The number of start-ups spun off from the CSIRO fell from 23 three years ago to six in 2003-04.

B2B or not to B2B: NECA planned changes to the National Electricity Code relating to NEMMCO's B2B communications: the ACCC invited comment.

ACCC starts new rules: The supplementary draft decisions on TransGrid and EnergyAustralia future capex were the first to be made under ACCC's new Statement of Regulatory Principles.

Broad blasts regulators: Paul Broad, ex-EnergyAustralia chief, was passionate about the need for more money for monopolies and opposed unelected regulators making political, social judgements.

More more and more: NSW, SA, Queensland, ACT distributors asked for \$12bn in capex, \$6.8bn opex to 2010: regulators allowed \$10bn, \$6.6bn.

NSW new coal record: The Port of Newcastle's coal exports hit a new monthly record of 7.415Mt in January, up 0.28Mt on previous best. NSW-Qld black coal is Australia's largest export, with total exports worth about \$10.8 billion in 2001-2002 investments.

NSW Coalition open warfare: Nationals threatened to run against Liberals in the next state election and Nationals' seat of Lachlan was abolished.

IPART think piece on embedded gen: The Independent Pricing and Regulatory Tribunal aimed to draft a National Code of Practice for Embedded Generation.

CLP buys Singapore assets: At Singapore Power's auction, Singapore Power was quitting the assets to appease ACCC concerns about its position as both a retailer and generator, but would keep distribution.

NSW: Govt flagged increased role for private sector in a \$30bn plan to rebuild state's dilapidated infrastructure, securing water, power supply.

CLP Power v ACCC: China Light and Power finalised the TXU purchase for \$2.13bn but could face a vertical integration fight with ACCC. CLP Power was soon to face a test of nerves over ACCC line on \$2.2bn TXU takeover. Standard & Poor's set Hong Kong power utility CLP on CreditWatch over A\$2 billion SPI merchant acquisition, after Hong Kong's CLP won a \$2 billion bidding war with Alinta for Singapore Power's TXU merchant energy division.

Garage sale: There were \$15 billion worth of gas pipeline, power generators and electricity and gas distribution networks sales in Australia over the past 12 months.

CLP to new power: With CLP as owner of Yallourn Energy, it would gain 22 per cent of Victoria and 8 per cent of the NEM, so the CLP (China Light & Power)

bid for TXU gen and gas assets was likely to cause concerns at the Australian Competition and Consumer Commission.

Qld to sell assets: The State Energy Minister proposed private companies investing in Queensland electricity transmission, as the Kareeya-Innisfail coastal line via the Wet Tropics World Heritage Area was approved under the *Federal Environment Protection and Biodiversity Conservation Act*. The new line between Innisfail and Kareeya in the Cairns region was designed for: load expected to increase by more than 21 per cent over the next five years. The Qld Energy Minister claimed the north Queensland power supply line construction must begin by early next year and said the Cairns' a power supply was at risk due to federal failure to replace the rusty supply line.

Load bigger than Texas: Queensland may soon follow Texas at 90 per cent air-con saturation. This was a bit of a worry as NEMMCO had forecast an electricity shortage for Queensland in November 2005 - later this year. The Minister said Queensland would need private investment in transmissions and generation: it was predicted air-conditioning would spread from 36 to 56pc of homes, and state economic growth kept on at 4.25 per cent.

Iron ore up 70pc: Crude oil hit \$US51 a barrel, while copper hit a 16-year high and zinc advanced to an eight-year high. Gold rallied over \$US430 an ounce to a two-month high, and ABARE predicted 13pc production increase for northern NSW and parts of Queensland:

cotton and sorghum were big beneficiaries of summer rainfall and the March 2005 cotton futures closed at US44.95 cents a pound with a gain of 175 points for the week.

Coal exports up 50pc: The total value of Aus minerals, energy exports was forecast at \$82.6bn for 2005-06, including coal exports, up 51pc: according to *Australian Commodities*.

December rocket for coal: The Australian Bureau of Statistics provisional figures showed December coal exports were up 7.7 per cent to 19.77Mt.

US\$100/t for PCI: One Qld producer of low volatile PCI coal has agreed to US\$100/t price, but some Japanese mills holding out for a lower figure. But some Queensland coking coal producers feared the \$A's surge past US78c could erode their \$US price gains.

Coal fever: The RG Tanna Coal Terminal at Gladstone was to expand capacity to 60 Mtpy by the end of 2006 by an increase of conveyor belt speeds.

Pollies kill the messenger: The Qld State Govt attacked the press and said Energex's missing \$105 million was caused by dopey journos who can't do maths, but in a counter attack. *The Courier Mail* told the Premier to stop galloping around circles and get off his high horse, and journalists were not the enemy.

Mickel's gold plated way with words: Energy Minister John Mickel insisted Queensland's superior generation

capacity made it a major supplier of electricity to southern states, but we think he said this to disguise the fact that the state could not supply within the state as soon-to-depart Energex stand-in boss Jardine said it would be still six years and \$3 billion before Queensland got a power distribution network strong enough to cope with blackout-causing equipment failures.

QCA roars: The Queensland Competition Authority told Energex it was "considerably concerned" that Energex had underspent its operations and maintenance budget over the past five years, and stashed it into the profit accounts. Were all those managers on profit-sharing? QCA allowed \$2.6 billion in capital investment over the next five years.

Consensus among state regulators: The Qld Competition Authority rejected a Energex bid to spend \$3.4bn to 2010: the utility would have trouble ramping up resources', it said, and offered \$2.1bn instead. Across the nation, NSW, SA, Queensland, and ACT distributors asked for \$12bn in capex, and \$6.8bn opex to 2010: regulators allowed \$10bn, \$6.6bn, as the monopoly electricity distributors lobbied for more allowed capital expenditure from regulators, after NSW, SA, Qld, ACT "rejects \$2bn in capex".

Man with a plan: The Queensland Government's new infrastructure plan for the booming southeast region was ready for unveiling, in the third week of April. A critic - the Urban Development Institute of Australia - had previously said the draft SE Qld regional plan

contained flawed population and land-supply forecasts.

High CO2 in Qld natural gas: The Greenhouse Office reported high levels of CO2 in gas from Cooper-Eromanga, northeast SA, and southwest Queensland.

Mountain forests to die: Australian highland forests were among ecosystems at risk of "large or severe damage" from 1-2 degrees temperature rise, a UK conference was told.

Silly old Fed Agriculture Minister: We guess he did not read that ANSTO report which showed a direct relationship between trees cleared and a decline in rainfall levels. Truss was ridiculed over his claim that land clearing could go on for 300 years unabated in Qld with no problems. The winners would be those landholders who increased land value by clearing land. According to Truss-think, a form of economic growth. Then comes the drought and Truss pays drought subsidies. We encourage him to study the new books out which analyse the collapse of civilisations, like *Collapse: How Societies Choose To Fail Or Survive* - which was about how landscapes denuded by landclearing, erosion and salinisation by commercial agriculture could lead to sudden economic collapse, just like a stock market. Boom all the way until one day, bust.

More federal ploys for the boys: The Federal Transport Minister said funding for Brisbane Urban Connectors was stalled indefinitely until Queensland agreed to construction industry reforms.

Feds poke Qld polities: Eagerness to support the Federal National Senators who hold the balance of power in the Senate was shown when the Federal Finance Minister called for the Queensland Government to privatise electricity after the Energex scandal. Fed Treasurer, Costello, said it was the "greedy" Beattie's failure to cut taxes despite GST windfall. He called for power privatisation in Qld, more of it, that is.

Oil shale born again: Clutching its \$100m subsidy another of those seriously silly over subsidized Queensland projects - Queensland Energy Resources rock-squeezing oil shale plant was planned and an entirely new Stage 2 oil shale proposal, requiring a new environmental impact assessment. Greenpeace hailed the withdrawal of Stuart Shale Oil Stage 2 proposal, was stood firm on all future oil shale mining opposition.

China keeps on keeping on: The strong demand for energy, electricity and raw materials fuelled stronger than expected investment outside China.

Up 7.7 per cent to 19.77Mt: Australian Bureau of Statistics provisional figures showed December coal exports up 7.7 per cent to 19.77Mt.

NSW Xstrata Coal fined \$1.46m: Xstrata Coal companies were fined \$1.46m, managers \$102,000 for deaths of 4 miners in the Gretley disaster.

Japan price 100pc up in 2 years: The Aus thermal coal producers won \$US625m in price increases from

Japanese power companies: it was 100pc up in 2 years.

Bowen Basin the new wild west: All the cowboys rushed to stake a claim. Coal miner AMCI and partners was evaluating Isaac Plains & Broadleaf open-cast coking projects in the Bowen Basin.

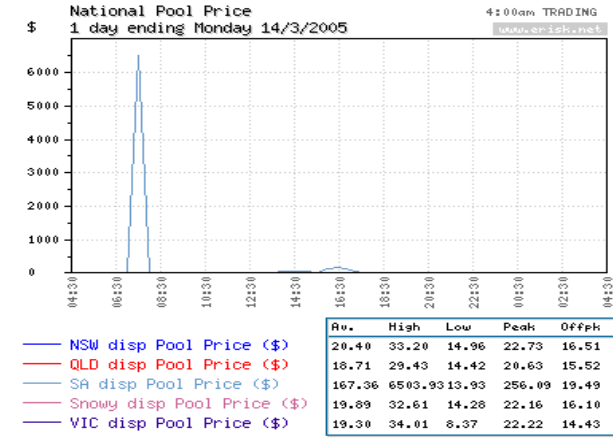
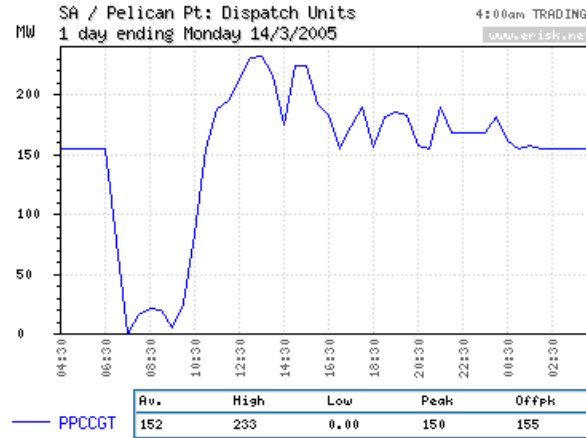
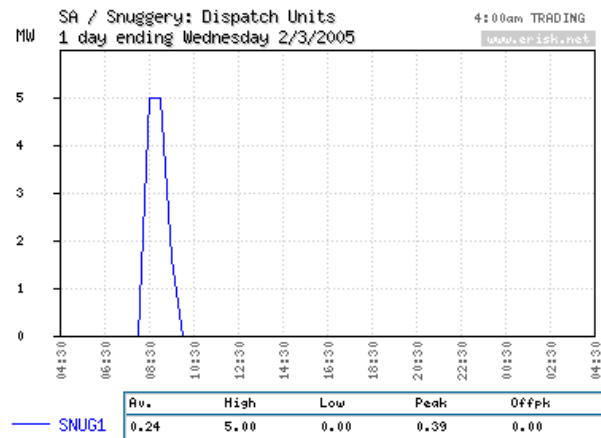
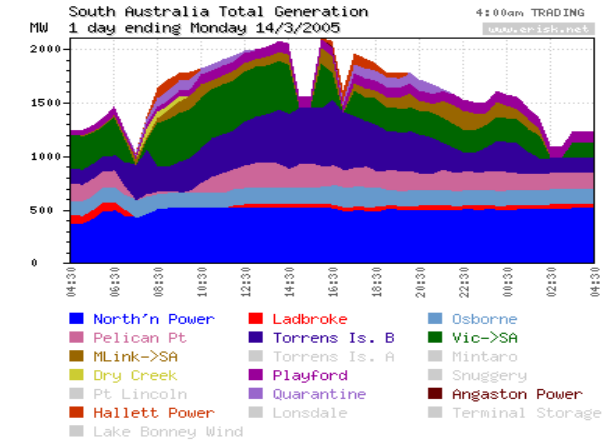
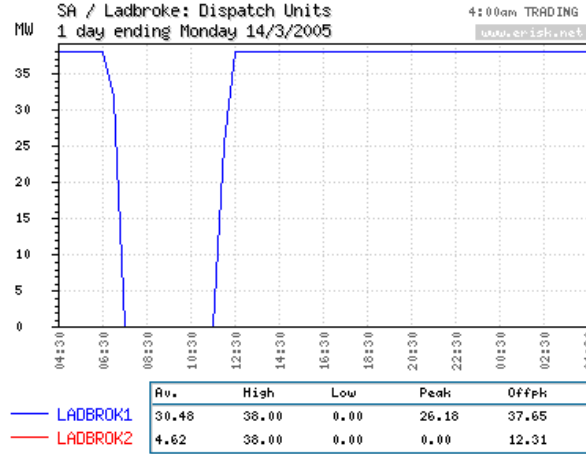
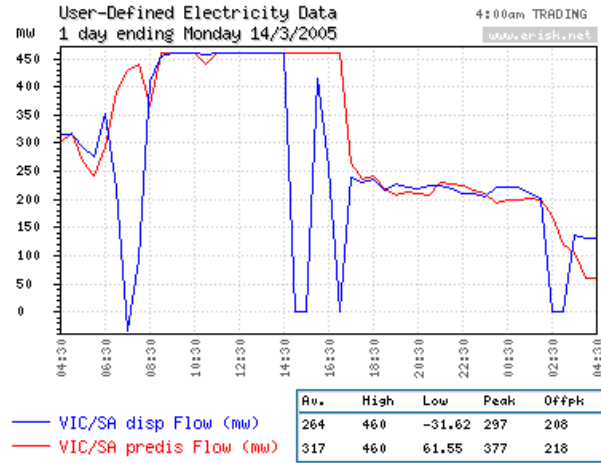
Macarthur \$23m profit in 6 months: Macarthur Coal recorded a \$23 million first half profit due to a strong mining performance, and Japanese price fixing.

Pacific National v QR: Pacific National claimed QR conduct was deceptive and misleading as the Pacific National-QR fight over access to the state's rail network, Acid Ridge lease cancellation, returned to Federal Court.

QFO has a fertilizer monopoly: WMC's monopoly fertilizer business QFO was the sole Australian producer of di-ammonium phosphate and mono-ammonium phosphate.

Coal may catch fire en route: In WA Griffin Coal dismissed fears its 600,000 tonnes in exports could combust en route due to high water content. Japanese electricity utilities' coal consumption was up 5.8 per cent to 76.637 Mt in 2004 on the back of new power units.

NZ: Pike River Coal was set to greenlight Paparoa coking project by May 2005 with hope of 1.2 Mtpy starting mid-2007.



SA hits market ceiling price of \$10,000/MWh: On Monday, 14 March, South Australia recorded a half hour price of \$6503.93/MWh spike and five minute prices of \$10,000, as NEMMCO applied the VoLL override after Vic-SA separated. South Australia recorded a spike to \$6503.93/MWh in the 30-minute trading interval ended 0730EST on Monday, 14 March - the period in which NEMMCO applied the Value of Lost Load (VoLL) override from 0710-0725EST.

Blackouts after separation from Vic: South Australia began having blackouts when Victoria and South Australia separated at 0642EST after problems between the Heywood Terminal

Station (HYTS) and the South East Switching Station (SESS) caused NEMMCO to apply lack of reserve level 3 (LOR3).

Huge price jump: The price rose from \$16.60/MWh in the 0700EST trading interval to \$6503.93/MWh in the 0730EST interval before dropping back to \$14.59/MWh in the 0800EST interval.

Minor spikes in afternoon: South Australia experienced minor spikes in three trading intervals in the afternoon ranging from \$115.03-\$163.13/MWh. These seemed to be caused by the two Northern Power Stations tripping around 1530EST, with

NEMMCO declaring a single credible contingency event. It also invoked a constraint set from 1615EST until further notice.

How prices moved: Prices moved from \$38.28/MWh in the 1530EST interval to \$132.19/MWh in the 1600EST interval, to \$163.13/MWh in the 1630EST interval, to \$115.03EST in the 1700EST interval, before retreating to \$31.97/MWh in the 1730EST interval.

Reference: National Price for South Australia for one day, 14 March, in the Price/Demand section of Erisk Net - Realtime NEM Data. <http://www.erisk.net>

cont. page 1

- Pt Lincoln \$0.00;
- Quarantine \$22386.14;
- Angaston Power \$1024.18;
- Hallett Power \$16,668, and
- Lonsdale \$0.00.

ewn publishing

Sue them, says Minister: The state's Energy Minister, Patrick Conlon, said the government would not accept excuses from power companies and that if "cutting corners" had caused the outage, the utilities should expect people to sue over the incident. Power companies in South Australia (SA) could face fines of up to \$1 million if they were found responsible for a system failure.

North-south dialogue: Friday, 11 March was the third successive day of spikes as the SA price hit \$148.50/MWh. Thursday, 10 March spikes topped \$149.33/MWh in four 30-minute trading intervals in SA. In an ironic twist, the major blackout - 40pc of the state in South Australia on Monday, 14 March - came in the North of the state, as Pelican Point and Ladbroke Grove were tripped offline after an incident in the northern area of the state.

7

Mystery of southern directions: The week before, NEMMCO made six directions (between Wednesday 2 March and Tuesday 10 March in the state's southeast) to Synergen's Snuggery.

The story of 14 March blackout: An outage "tripped" the SA-Vic interconnector, which then

Top price for NEM week 6-12 March 2005: Angaston Power at \$78.34/MWh

SA			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
North'n Power	\$2,312,465	85,278	\$27.12
Ladbroke	\$202,051	7,736	\$26.12
Osborne	\$654,871	24,021	\$27.26
Pelican Pt	\$195,184	6,757	\$28.89
Torrens Is. B	\$1,359,731	44,205	\$30.76
Vic->SA	\$1,871,923	67,836	\$27.59
MLink->SA	\$277,652	10,061	\$27.60
Torrens Is. A	\$48,629	1,395	\$34.87
Mintaro	-	-	-
Dry Creek	\$1,650	25	\$66.01
Playford	\$35,028	1,455	\$24.07
Snuggery	\$1,721	67	\$25.55
Pt Lincoln	-	-	-
Quarantine	\$42,964	870	\$49.37
Angaston Power	\$903	12	\$78.34
Hallett Power	\$11,651	358	

VIC			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Loy Yang A	\$6,248,248	344,063	\$18.16
Loy Yang B	\$3,099,055	171,119	\$18.11
Hazelwood	\$4,238,518	229,997	\$18.43
Yallourn	\$3,912,638	217,375	\$18.00
Anglesea	\$486,749	26,880	\$18.11
Energy Brix	\$432,619	23,938	\$18.07
Newport	-	-	-
MLink->Vic	-	-	-
SA->Vic	-	-	-
Snowy->Vic	\$885,210	42,059	\$21.05
Jeeralang	-	-	-
West Kiewa	\$18,782	889	\$21.12
Bairnsdale	\$420	34	\$12.47
Dartmouth	\$20,830	1,115	\$18.68
Eildon	\$76,878	3,810	\$20.18
Hume Vic	\$83,168	4,597	\$18.09
McKay Power	-	-	-
Clover	-	-	-
Valley Power	\$4,067	188	\$21.68
Rubicon	-	-	-
Somerton Power	-	-	-
Sunshine Energy	-	-	-
Longford	-	-	-
Tramway Road	-	-	-
Toora Wind Farm	-	-	-

NSW			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Bayswater	\$5,447,955	300,251	\$18.14
Liddell	\$4,621,285	254,724	\$18.14
Mt Piper	\$3,114,476	169,628	\$18.36
Wallerawang	\$1,907,426	105,405	\$18.10
Vales Point	\$2,152,246	118,265	\$18.20
Munmorah	\$149,806	8,106	\$18.48
Eraring	\$4,388,949	238,215	\$18.42
Redbank	\$427,425	23,869	\$17.91
Smithfield	\$372,041	20,360	\$18.27
Snowy->NSW	\$1,033,913	59,307	\$17.43
Shoalhaven	\$103,433	6,185	\$16.72
Hunter Valley	-	-	-
Hume Hydro	-	-	-
Blowering	\$70,745	3,949	\$17.92
Northern Gas	-	-	-
Burrinjuck	-	-	-
Brown Mountain	-	-	-
Keepit	-	-	-
Broken Hill	-	-	-
Ergon Energy	-	-	-
Pindari Hydro	-	-	-
DL Q->N	\$31,066	1,594	\$19.49
QLD->NSW	\$1,693,256	93,660	\$18.08
West Nowra	-	-	-

QLD			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Tarong	\$4,809,107	292,957	\$16.42
Millmerran	\$2,351,477	143,137	\$16.43
Swanbank	\$736,705	44,030	\$16.73
Stanwell	\$3,321,488	199,425	\$16.66
Callide B	\$1,632,317	98,483	\$16.57
Callide Power	\$2,158,405	128,764	\$16.76
Gladstone	\$2,106,817	126,095	\$16.71
Collinsville	\$261,104	15,794	\$16.53
Swanbank C_D_E	\$557,851	32,549	\$17.14
Barcardine	-	-	-
Callide A	-	-	-
Kareeya	\$104,558	6,245	\$16.74
Barron Gorge	\$51,109	3,018	\$16.94
Mt Stuart	\$2,095	131	\$15.97
Wivenhoe	\$289,815	19,573	\$14.81
Townsville	\$359,183	21,605	\$16.62
Mackay	-	-	-
Roma	-	-	-
Oakey	-	-	-
DL N->Q	-	-	-
NSW->QLD	-	-	-
Rocky Point	-	-	-
Tableland	-	-	-

took two other South Australian power plants - Pelican Point and Ladbroke Grove - offline. This cut a total of 600MW of supply, or about 40 per cent of demand at that time in the morning.

Similar blackout this time last year: The state blackout came almost a year to the day after a similar incident, which also cut supply from the interconnector near the Playford substation.

Was it ancient assets: A study of the age of assets in December 2002 for the southeast, a discussion paper "Emerging transmission network limitations South Eastern South Australia Region" provided the followed age of assets as:

- Keith-Kinraig 132kV line, 30 years;
- Kinraig-Penola West 132kV line, 29 years;
- Penola West-Mt Gambier 132kV line, 29 years;
- Mt Gambier-Blanche 132kV line, 39 years;
- Blanche-Snuggery 132kV line, 41 years; and
- Snuggery-Keith 132kV line, 41 years.

SA: Electrical Trades Union says ETSA had refused to negotiate on new pay award

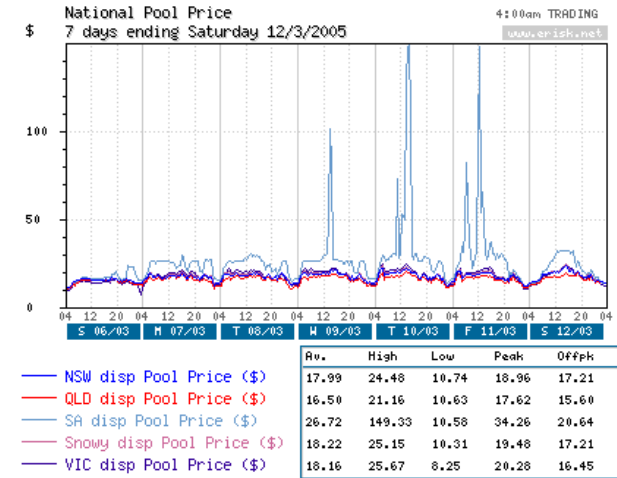
The Electrical Trades Union state organiser Bob Donnelly said ETSA was unwilling to negotiate a fair Enterprise

the week in detail

• **NSW:** Average price \$17.99/MWh, down 7 per cent on the \$19.38/MWh of the previous week, down 91 per cent on the spike-affected \$188.06/MWh of the comparable week last year; maximum price \$24.48/MWh for the 30-minute trading interval ended 1530EST on Saturday. Average demand 8326MW, down 3.1 per cent on the previous week, down 0.5 per cent on a year ago; maximum demand 10,062MW in the 1500EST interval on Wednesday, down 11.6 per cent on the 11,381MW of the previous week. Snowy-NSW exports averaged 352W, down 10.9 per cent on average exports of 395MW the previous week;

• **Victoria:** Average price \$18.16/MWh, down 13 per cent on the \$20.81/MWh of the previous week, down 13 per cent on the \$20.86/MWh of the comparable week last year; maximum price \$25.67/MWh for the 30-minute trading interval ended 0700EST on Thursday. Average demand 5616MW, down 2.1 per cent on the previous week, up 5.3 per cent on a year ago; maximum demand 6658MW for the 1600EST interval on Friday, down 19.8 per cent on the 8304MW of the previous week. Victorian imports from Snowy averaged 42.57MW, down 53.7 per cent on average imports of 91.97MW the previous week;

• **South Australia:** Average price \$26.72/MWh, down 13 per cent on the spike-affected \$30.87/MWh the previous week, down 62 per cent on the spike-affected average of \$69.51/MWh of the comparable week last year; maximum price \$149.83/MWh for the 30-minute trading interval ended 1500EST on Thursday. Average demand 1487MW, unchanged from the previous week, up 7.9 per cent on a year ago; maximum demand 2100MW for the 1630EST interval on Friday, down 11.9 per cent on the



2385MW of the previous week. Vic-SA flow averaged 398MW, up 5.9 per cent on the 376MW the previous week; Murraylink net flow averaged 58.59MW west, up from 46.22MW west the previous week; and

• **Queensland:** Average price \$16.50/MWh, down 6 per cent on the \$17.59/MWh the previous week, down 91 per cent on the spike-affected \$181.84/MWh of the comparable week last year; maximum price \$21.16/MWh for the trading interval ended 1430EST on Thursday. Average demand 5946MW, down 2.3 per cent on the previous week, down 0.5 per cent on a year ago; maximum demand 7076MW for the 1430EST interval on Monday, down 2.4 per cent on the 7252MW the previous week. QNI flow averaged 550MW south, down 11.7 per cent on the 623MW south the previous week. Directlink averaged 9.49MW south, down from 19.73MW south the previous week.



Bargaining Agreement, reported *The Advertiser* (7/3/2005, p.9), saying ETSA had refused to come to the negotiating table.

Industrial action: Industrial action in force included:

- no intrastate work, except for emergency breakdowns;
- no use of mobile phones, except for after-hours emergency response crews;
- no training for or use of the ElectraNet SA emergency restoration structures;
- no interstate work;
- no maintenance, installation or participation in any trial or implementation of the outage management system; and
- no disconnection of electricity.

Queensland ready to sell energy assets, says Minister

State Energy Minister, John Mickel, said the energy challenges facing Queensland would provide greater opportunities for private companies to consider investing in power transmission in the state, reported *The Australian Financial Review* (11/3/2005, p.15).

Opportunities for private investment soon:

The average household in Queensland now consumed about 590KW hours a month. "We are revising demand forecasts and all indications at the moment are that

opportunities for investment may arise sooner than previously predicted," Mickel said. "There are significant opportunities for Queensland to meet not only our own rapidly growing electricity needs, but also for our highly competitive and efficient generators to achieve the goal of becoming Australia's powerhouse."

NSW ready to sell assets, too

NSW Premier Bob Carr said public-private partnerships would be used as part of a plan to spend \$30 billion on infrastructure during the next four years, reported *The Australian Financial Review* (14/3/2005, p.8). The money would go towards improving Sydney's rail network, redeveloping hospitals, securing the state's power and water supply, building roads and upgrading TAFE colleges.

Business welcomes involvement: Most of the spending had already been announced and was simply repackaged as an "infrastructure plan".

CLP Power test of nerves: pays \$2.2bn for Vic, SA assets

Hong Kong's biggest power utility, CLP, won the bid for Singapore Power's TXU merchant energy division. CLP agreed to pay \$2.2 billion for the assets. The ACCC's attempt, although unsuccessful, to block Australian Gas Light's move to buy 32 per cent

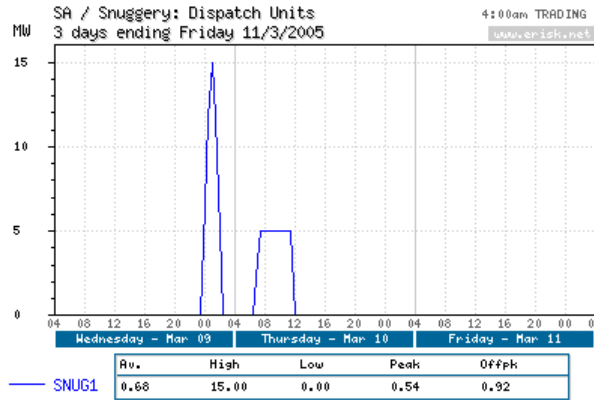
of the Loy Yang A generator, showed how seriously the regulator viewed retail-generation tie-ups. While CLP's Yallourn was smaller than Loy Yang A, it was 100 per cent owned. As a result, it would be hard to isolate energy sales from generation, as AGL had to do with Loy Yang, because ultimate power and ownership of any entity created for the purpose would rest with CLP, reported *The Age* (9/3/2005, p. B3).

The acquisition: CLP Holdings' prospective acquisition of SPI's merchant energy business should ensure that the company was better positioned in the Australian market, with merchant generation assets balanced by ownership of an energy retailer. SPI's merchant energy business consisted of:

- Australia's fifth largest energy retailer with 1.1 million customers throughout the states of Victoria, New South Wales, South Australia, and Queensland;
- a 1,280-megawatt (MW) gas-fired power station;
- a gas storage facility; and a
- 33 per cent stake in a gas transmission pipeline between the states of Victoria and South Australia.

Australian assets: CLP Holdings planned to operate these assets in conjunction with its existing Australian asset, Yallourn Energy, a 1,480MW coal-fired power station. The acquisition was expected to create financing and operating CLP on CreditWatch: Standard

& Poor's Ratings set CLP Holdings Ltd (CLP Holdings) and its subsidiary, CLP Power Hong Kong Ltd, on CreditWatch with negative implications.



Synergen Power's 63MW capacity Snuggery station the target of NEMMCO directions

An analysis of the technical information available from NEMMCO on generation indicated last week's directions were issued to Synergen Power's 63MW capacity Snuggery power station, which is in a strategic position in the region.

10

Snuggery came online soon after: For example, the 2 March direction lasted 73 minutes from 0755EST to 0908EST. On that date, the 30-minute generation statistics show Snuggery did not have any output until 0800EST. Snuggery then operated in the 0830EST, 0900EST and 0930EST intervals.

Snuggery again in the picture: In the 181 minute direction on Thursday 3 March between 0919-1220EST, Snuggery did not operate in the 0900EST interval. It then operated in the intervals between 0930-230EST intervals, with its output in the 0930EST indicating a late start in that interval, consistent with a direction that was issued at 0919EST.

Ditto on 9 March and 10 March: In the Wednesday 9 March direction lasting for 51 minutes from 0105-0156EST, Snuggery is shown as coming online on the 0100EST interval and going offline in the 0230EST interval. In the Thursday, 10 March direction lasting from 0005-0230EST, Snuggery came back online in the 30-minute interval ended 0030EST and went offline in the 30-minute interval ended 0300EST. In the Thursday, 10 March direction lasting for four hours 56 minutes from 0704EST until 12000EST, Snuggery came back online in the 30-minute interval ended 0730EST and went off in the interval ended 1230EST.

Some extra information in a market notice: The market notice (12614) on this direction contained more information than is usually found in matters relating to market interventions. The intent of these notices seem to be to obfuscate more than to inform. This notice said: "The direction will enable NEMMCO to maintain power system security in the South Australia region South East 132kV network by eliminating post contingent overloads on the Keith-Snuggery 132kV Line for the loss of the Mt Gambier-SESS (South East Switching Station) 132kV line."

Tripping of Pelican Point and Ladbroke Grove ignored in NEMMCO technical report

Another question *Electricity Week* wanted to ask Paul Panther-Price was why there was no market notice about the Pelican Point and Ladbroke Grove power plants being taken offline by the trip of the Heywood interconnector on Monday, 14 March. There was nothing about Pelican Point in any market notice that day, and the reference to Ladbroke Grove in that day's market notices were to its two units each being non-conforming for 38MW between 0655-0715EST for a bid update not being received. Maybe, that is NEMMCO code for the generators tripping!

Pelican Point details: A check of the generation details show that Pelican Point, the state's biggest power station, was generating 155MW in the 30-minute interval ended 0600EST on Monday, 14 March, dropping to 77.50MW in the 0700EST interval, zero in the 0730EST interval and 16.62MW in the 0800EST interval. Generation fluctuated between 6.67MW and 26.67MW in the intervals from 0830-1000EST.

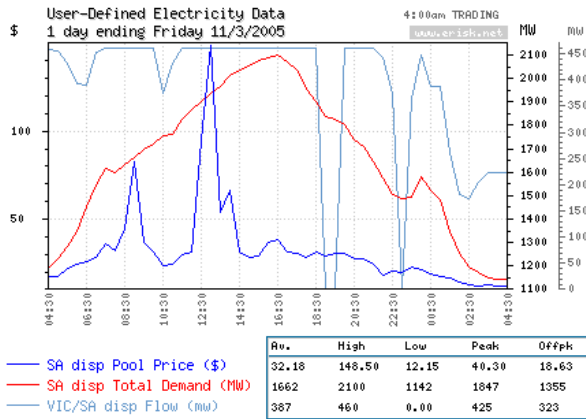
NEMMCO CEO somehow has all the facts: Hosking tells of generators tripping in SA

Interestingly, in an interview on the ABC's *The World Today* on Monday, 14 March, Les Hosking, managing director of NEMMCO, said: "Well, it was a power line, power disturbance that occurred which caused the main interconnector between Victoria and South Australia to trip, and that lost 440 megawatts of power. That trip caused two generators to also trip, so in total 600 megawatts of power was unavailable to South Australia for around about one hour. That's about 40 per cent of the entire South Australian load."

Coyness blown aside by news reports: Hosking did not name the generators, but they were identified in newspaper reports as Ladbroke Grove and Pelican Point.

Friday, 11 March: Third successive day of spikes as SA price hit \$148.50/MWh in early afternoon trading session

The predispatch at 0604EST on Friday came within 50 cents of predicting the spike to \$148.50/MWh in the 30-minute trading interval ended 1300EST on Friday, 11 March. NEMMCO predicted a top price of \$149.00/MWh.



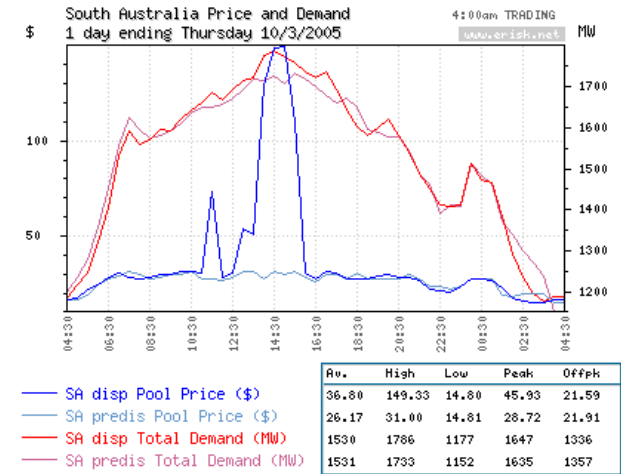
Adelaide swelters: The spike came as Adelaide's top temperature reached 35 degrees (two degrees higher than predicted and six degrees above Thursday's top). Tops of 35 degrees are forecast to continue in Adelaide on each day until Monday, and fall back to 32 degrees on Tuesday.

Other spikes during week: Friday's spike followed spikes to \$102.00/MWh on Tuesday and \$149.33/MWh on Thursday.

Reference: National Price for South Australia for one day on Friday, 11 March in Price/Demand section of Erisk Net - Realtime NEM Data. <http://www.erisk.net>

Thurs, 10 March: Spikes to top of \$149.33/MWh in four 30-minute trading intervals in SA

Spikes between \$109.67-\$149.33/MWh occurred in four 30-minute trading intervals in South Australia on Thursday 10 March.



How prices moved: The price shot up from \$50.50/MWh in the 1330EST interval to \$129.33/MWh in the 1400EST interval.

Prices in the following intervals were: 1430EST - \$149.00/MWh, 1500EST - \$149.33/MWh, 1530EST - \$109.67/MWh, and 1600EST - \$30.67/MWh.

Second spike day in row: This was the second successive day of spikes in South Australia. There was a spike to \$102.00/MWh in the 30-minute trading interval ended 1430EST on Wednesday.

Reference: National Price for South Australia for one day on Thursday, 10 March in Price/Demand section of Erisk Net - Realtime NEM Data. <http://www.erisk.net>

WA 10 March: worst day of pole-top fires in decade as storms black more than 70,000 houses

Seventy thousand households and businesses across Perth were without power as 75 pole-top fires overwhelmed emergency crews. After a rainstorm caused the city to suffer its worst day of pole-top fires in a decade, reported *The Australian* (11/3/2005, p.4).

Power cuts a major source of disruption:

The Whitford City shopping centre in Perth's northern suburbs was without power for about two hours, causing major disruptions to retail outlets.

Failure to act inexcusable: Coroner:

Coroner Alastair Hope described Western Power's failure to act after previous fires as inexcusable. He recommended the state-owned utility take urgent steps to prevent another tragedy. The fire, which destroyed about 20,000ha of farmland and national park, and caused millions of dollars in damage, started under a Western Power line near Tenterden - about 350km southeast of Perth - on 27 December 2003.

Underslung earth wire clashed with line:

The coroner found the fire started when dry stubble was lit by a hot metal globule which fell to the ground after an underslung earth wire clashed with a live power line. Similar

conductor incidents caused fires in 1983, 1991, 2000 and 2002. He said a report prepared by Energy Safety after the fire in 2000 - which almost destroyed the town of Mt Barker - revealed strikingly similar circumstances to the blaze at Tenterden.

Management aware of problem: "I am satisfied Western Power management was aware of the problems in the region but had not acted in a timely way to address them," he said. "If Western Power had acted to insert an additional pole to reduce the bay length (as it did after the fire), I am certain the conductors would not have clashed and there would have been no disastrous fire and no deaths."

SA House of Assembly passes bill on national electricity law with Minister thanking state Opposition, quoting Churchill

The bill to amend the national electricity law passed South Australia's House of Assembly four days earlier than forecast, said the Minister for Energy, P. F. Conlon, after the third reading vote.

End of debate: After the debate on the National Electricity (South Australia) (New National Electricity Law) Amendment Bill 2005 to amend the *National Electricity (South Australia) Act 1996*, Conlon thanked the opposition for its assistance.

Long and slow process did not occur: He would put on the record that he might have done the opposition an injustice, because he was advised earlier today that this would be a very long and slow process and he complained to *The Australian Financial Review* about that.

Glad that forecast wrong: He would correct those comments because the bill had actually passed four days earlier than his forecast. He was very glad that what he was told this morning was not the case.

Important piece of reform: Conlon said the bill was a very important piece of reform. He understood all the reservations about this method of legislation but, to achieve some uniformity of approach in a major, national concern, this was the only way to approach it in a federal system.

Reference: Hansard for SA House of Assembly on 1 March 2005. Pages 1772-1800. Debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the National Electricity (South Australia) Act 1996. <http://www.sa.gov.au>

32 written submissions on bill amending national electricity law and 15 of these also made in-person submissions

A total of 32 written submissions on the bill to amend the national electricity law were received, Michael O'Brien (ALP, Napier) said in the debate on the amending bill.

Opportunity for verbal submission: In the debate on *the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005* to amend the *National Electricity (South Australia) Act 1996*, O'Brien said those who made submissions were given the opportunity to make an in-person verbal submission.

Consultation process: He said 15 of these in-person submissions were made. The reforms within the bill had resulted from a consultation process with industry participants and other stakeholders.

Important governance problems: The bill would make important governance reforms to the National Electricity Market (NEM) by separating high-level policy and direction, rule making and market development, and economic regulation and rule enforcement.

Quality to be strengthened and improved: By doing this, the bill would strengthen and improve the quality, timeliness, and national character of the governance and economic regulation of the NEM.

Cost and complexity to be lowered: In turn, this should lower the cost and complexity of regulation facing investors, enhance regulatory certainty, and lower barriers to competition.

Reference: Hansard for South Australian House of Assembly on 1 March 2005. Pages 1772-1800. Debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the National Electricity (South Australia) Act 1996. <http://www.sa.gov.au>

700-page exposure draft of national electricity rules supplied on 9 Dec with early January closing for comments

An exposure draft of the national electricity rules released on 9 December last year was nearly 700 pages long, the South Australian Opposition spokesperson on energy, Wayne Matthew, said in the second reading debate on amending legislation for the new national electricity law.

Not much time to study draft: In opening the Opposition debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the *National Electricity (South Australia) Act 1996*, Matthew said the closure for consultation on this exposure draft was early in January.

Example of poor consultation: Matthew said he was giving this as an example of just how poor the consultation was in relation to time. "This exposure draft was floated to industry on 9 December in the lead-up to the busiest period of the year. Anger can be understood: It was an unfinished exposure draft and industry had to work with this massive unfinished document. Industry could not be blamed for being angry about the small length of time they had to obtain information about this".

Regulations obtained only last week: Matthew said that in relation to the regulations

he obtained a copy of them only last week. The regulations were important for stakeholders because the legislation depended heavily on these regulations.

Concern on consultation process: It was imperative that the regulations were available. That was why there had been so many groups concerned about the consultation process.

Reference: Hansard for South Australian House of Assembly on 1 March 2005. Pages 1772-1800. Debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the National Electricity (South Australia) Act 1996. <http://www.sa.gov.au>

Bill to amend national electricity law, like launching a new ship: you wish it and all who sail in her well, SA Parliament told

The situation with the bill to amend the national electricity law was a bit like the launch of a big ship: you wished her and all those who sailed in her well, R. B. Such (Independent, Fisher) a former Liberal, said in the debate on the bill.

Not brave enough to be convinced on bill: In the debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the *National Electricity (South Australia) Act 1996*, Such said he wished the bill well, but was not brave enough to be convinced that it was the answer

to what Mr and Mrs Average were experiencing in their domestic dwellings at the moment in terms of high electricity prices.

High prices likely to continue: He thought those high prices were likely to continue and hence the need to focus on using electricity wisely, conserving as much as possible and developing sound alternatives in regard to green energy.

Inadequate research: He thought the tragedy that South Australians found themselves about being competitive was that hindsight showed more and more it was the wrong decision. Hindsight showed more and more that it was a very bad decision based on inadequate research and consideration and driven purely by an ideological hatred of any enterprise that was in the hands of government.

Electricity Trust was in customer hands: The irony was that the Electricity Trust, as it was formulated, was in the hands of the customers. That was Playford's dream. (Sir Thomas Playford, a long-serving Liberal Premier of the state). The customers owned it and benefited from it. It funded itself and its infrastructure, such said.

Paying the price for folly: "Now we have a situation where many businesses cannot afford to get connected to the grid; shopping centres cannot afford to be connected," Such added. "We are paying the price for what, in effect, was the folly of the Olsen government."

Bill commended: However, Such said he commended this bill and trusted it delivered what its creators hoped.

Reference: Hansard for South Australian House of Assembly on 1 March 2005. Pages 1772-1800. **Debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the National Electricity (South Australia) Act 1996.** <http://www.sa.gov.au>

Pressure on governments to keep electricity price down works against those wishing to invest in industry, says MP

The pressure on all governments in Australia to keep the price of electricity down worked against those wanting to invest and make money out of creating, generating and distributing electricity, R. B. Such (Independent, Fisher) a former Liberal, said in the debate on a bill to amend the national electricity law.

Inherent dilemma: In the debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the *National Electricity (South Australia) Act 1996*, Such said this was the inherent dilemma in this whole approach to providing electricity in Australia, or that part of Australia that could be in something approximating a market.

Bill results unknown: He did not honestly know if the substance of this bill would achieve any significant benefit in terms of customers and consumers or in terms of price, quality, reliability, safety and security of electricity services.

Hopes on NEM efficiency: He did not know if it would make the so-called National Electricity Market (NEM) more efficient, but hoped it would. He also hoped it would improve the quality, timeliness and national character of the electricity market.

Industry needs to be dynamic: Such said one thing that must be avoided was ending up with something that was overly bureaucratic, that became the heavy hand on an industry which had to be dynamic and able to change.

Reference: Hansard for South Australian House of Assembly on 1 March 2005. Pages 1772-1800. **Debate on the National Electricity (South Australia)(New National Electricity Law) Amendment Bill 2005 to amend the National Electricity (South Australia) Act 1996.** <http://www.sa.gov.au>

Code changes relating to regulation ancillary services costs after Tasmania's entry to National Electricity Market

The ACCC has granted authorisation, without alteration, as foreshadowed in a draft determination, to code changes relating to limited regional recovery of regulation ancillary services costs, following Tasmania's entry to the National Electricity Market.

Takes into account matters raised on 2 Feb: This determination takes into account matters raised in response to the draft determination

released on 2 February 2005. The determination and any submissions received are available on the ACCC's website: <http://www.accc.gov.au> A person dissatisfied with the final determination may apply to the Australian Competition Tribunal for its review.

Reference: Electricity Group. Phone: (03) 9290 1968.

ewn publishing

NECA seeks changes to National Electricity Code: B2B

The Australian Competition & Consumer Commission (ACCC) seeks comments on amendments to the National Electricity Code. Proposed changes relate to B2B communications. The National Electricity Code Administrator (NECA) lodged the applications for authorisation (Nos A90958, A90959 and A90960) of amendments to the code. The proposed code changes relate to the business to business (B2B) communications processes between distribution network service providers and retailers operating in the national electricity market (NEM).

Comment on anti-competitive detriments:

To assist the ACCC's consideration of these applications, interested parties are invited to comment on the potential anti-competitive detriment and public benefit associated with the proposed amendments to the code.

Central electronic hub: The proposed code changes provide for a central electronic hub and for the introduction of standardised B2B

Region Summary Report for the week 27 February - 5 March 2005

NSW		
Energy Sent out	1195839.67 (MWh)	\$23,182,102.97
Energy Purchased	-1330790.10 (MWh)	(\$26,622,518.02)
Energy Imported from QLD1	103254.86 (MWh)	\$2,035,463.08
Energy Imported from SNOWY1	73466.47 (MWh)	\$1,347,237.33
Energy Exported to QLD1	0.00 (MWh)	\$0.00
Energy Exported to SNOWY1	-6142.74 (MWh)	(\$145,526.30)
Surplus on import from QLD1		\$149,908.17
Surplus on import from SNOWY1		\$32,865.38
Surplus on export to QLD1		\$0.00
Surplus on export to SNOWY1		\$1,939.61
Regional Excess Generation		\$0.00
Regional Reserve Trading		\$0.00
Market Intervention Compensation		\$0.00
Regional Admin Price Compensation		\$0.00
Settlement Surplus Account		(\$203,240.94)
Total Ancillary Service Payment		\$365,440.64

QLD		
Energy Sent out	1078104.44 (MWh)	\$18,449,345.60
Energy Purchased	-939029.73 (MWh)	(\$17,150,329.21)
Energy Imported from NSW1	0.00 (MWh)	\$0.00
Energy Exported to NSW1	-106435.61 (MWh)	(\$1,885,554.91)
Surplus on import from NSW1		\$0.00
Surplus on export to NSW1		\$149,908.17
Regional Excess Generation		\$0.00
Regional Reserve Trading		\$0.00
Market Intervention Compensation		\$0.00
Regional Admin Price Compensation		\$0.00
Settlement Surplus Account		(\$586,538.52)
Total Ancillary Service Payment		\$756,254.08

SA		
Energy Sent out	175962.54 (MWh)	\$5,989,787.38
Energy Purchased	-239438.59 (MWh)	(\$7,953,519.65)
Energy Imported from VIC1	66215.42 (MWh)	\$1,949,964.16
Energy Exported to VIC1	-0.17 (MWh)	(\$4.69)
Surplus on import from VIC1		\$416,481.19
Surplus on export to VIC1		\$0.00
Regional Excess Generation		\$0.00
Regional Reserve Trading		\$0.00
Market Intervention Compensation		\$0.00
Regional Admin Price Compensation		\$0.00
Settlement Surplus Account		(\$13,772.80)
Total Ancillary Service Payment		\$71,354.61

Snowy		
Energy Sent out	89499.33 (MWh)	\$2,082,555.78
Energy Purchased	-3988.03 (MWh)	(\$70,289.94)
Energy Imported from NSW1	5787.33 (MWh)	\$147,465.91
Energy Imported from VIC1	36540.45 (MWh)	\$572,107.74
Energy Exported to NSW1	-72321.21 (MWh)	(\$1,314,371.95)
Energy Exported to VIC1	-54919.22 (MWh)	(\$1,412,779.81)
Surplus on import from NSW1		\$1,939.61
Surplus on import from VIC1		\$19,245.13
Surplus on export to NSW1		\$32,865.38
Surplus on export to VIC1		\$317,269.10
Regional Excess Generation		\$0.00
Regional Reserve Trading		\$0.00
Market Intervention Compensation		\$0.00
Regional Admin Price Compensation		\$0.00
Settlement Surplus Account		\$4,687.72
Total Ancillary Service Payment		\$502,578.90

VIC		
Energy Sent out	919964.63 (MWh)	\$18,783,900.32
Energy Purchased	-838737.65 (MWh)	(\$18,796,282.38)
Energy Imported from SA1	0.00 (MWh)	\$0.00
Energy Imported from SNOWY1	52884.66 (MWh)	\$1,730,048.91
Energy Exported to SA1	-72185.36 (MWh)	(\$1,533,478.27)
Energy Exported to SNOWY1	-38159.32 (MWh)	(\$552,862.61)
Surplus on import from SA1		\$0.00
Surplus on import from SNOWY1		\$317,269.10
Surplus on export to SA1		\$416,481.19
Surplus on export to SNOWY1		\$19,245.13
Regional Excess Generation		\$0.00
Regional Reserve Trading		\$0.00
Market Intervention Compensation		\$0.00
Regional Admin Price Compensation		\$0.00
Settlement Surplus Account		(\$368,674.03)
Total Ancillary Service Payment		\$108,965.89

Data on Demand: Two methods

CSV files are available, for whole year data sets at www.erisk.net/DOD (data on demand service) for all data plus revenue by unit, and transmission flows and general NEM data. Pay by download using a credit card. Easy to access 1- 90 day charts and graphs also appear at <http://www.erisk.net>.

procedures to the code. Interested parties may also comment on the proposed code changes in relation to the access code, should they be authorised.

Submissions can be sent electronically to: electricity.group@acc.gov.au Alternatively, written submissions or submissions on disk, in Word 7.0 compatible format, can be sent to: Sebastian Roberts, general manager, regulatory Affairs - Electricity. Adress: ACCC, PO Box 1199, Dickson ACT 2602; A copy of the proposed changes to the code is available from the ACCC's web site: <http://www.accc.gov.au>; and closing date for submissions is 31 March 2005.

Supplementary draft decisions on TransGrid, EnergyAustralia future capex first to be made under ACCC new Principles

The Australian Competition and Consumer Commission (ACCC) supplementary draft decisions released in the first week of March on the future capital expenditure (capex) allowance for NSW transmission network service providers (TNSPs), TransGrid and EnergyAustralia, are the first to be made under the Statement of Regulatory Principles released by the ACCC in December 2004.

Investment certainty: In a statement accompanying the draft decisions, ACCC Commissioner Ed Willett said the new regime provided an upfront capex allowance before the TNSP made its investment decision, thus providing investment certainty.

Constraint Library Changes Report for the week 7-13 March 2005

<p>7/03/2005: New Constraint Set(s) and Constraint Equation(s) Constraint Set: S-POR01_10 15 20 25 30 35 40 45 S-MINTARO_30 35 40 45 50 55 60 65 70 75 80 85 S-SNUG1_10 15 20 25 30 35 40 45 50 55 60 Constraint Equation: S_POR01_10 15 20 25 30 35 40 45 S_MINTARO_30 35 40 45 50 55 60 65 70 75 80 85 S_SNUG1_10 15 20 25 30 35 40 45 50 55 60 Reason: Constraints required for Network Support agreements in SA</p>
<p>8/03/2005: New Constraint Set(s) and Constraint Equation(s) Constraint Set: S-POR01_05 S-SNUG1_05 Constraint Equation: S_POR01_05 S_SNUG1_05 Reason: Constraints required for Network Support agreements in SA</p>
<p>10/03/2005: Modified Constraint Set(s) and Constraint Equation(s) Constraint Set: Q-NIL Q-BRTX1-2 Constraint Equation: Q>BRTX1-2 Reason: Update constraint for additional cap banks in SEQ area following advice of pending outage of Braemar 120 MVAR cap bank</p>
<p>11/03/2005: New Constraint Set(s) and Constraint Equation(s) Constraint Set: N-YS_TX1 Constraint Equation: N>YSTX1_A Reason: Required for planned outage</p>
<p>11/03/2005: Modified Constraint Set(s) and Constraint Equation(s) Constraint Set: V-DDSH Constraint Equation: V>SMLDDSH Reason: Removed lower capping of 0 revised descriptions added ST PASA RHS</p>
<p>11/03/2005: New Constraint Set(s) and Constraint Equation(s) Constraint Set: N-YS_TX2 Constraint Equation: N>YSTX2_A Reason: Required for planned outage</p>
<p>Please note that the Effective Date indicates the new/updated Constraint is available from that date it may not necessarily be invoked until a later time. Refer to the System Operating Procedure SO_OP3709 (http://www.nemmco.com.au/powersystemops/3709.htm) for more information on Generic Constraints. Refer also to the Constraint Naming Guidelines: http://www.nemmco.com.au/dispatchandpricing/200-0062.htm and the Network and FCAS constraint formulation policy: http://www.nemmco.com.au/dispatchandpricing/170-0030.htm Should you have any queries regarding the above please contact Ben Blake on 02 8838 5359</p>

Transmission Outage Start Date 17-23 March 2005

Station Name	Equipment Name	Equipment Type	KV	Start Time	Status	Constraint Set ID
Sydenham 500kV	Sydenham mlts 2 In/smts 2 line	cb	500	2005/03/17 06:16:00	PTP	
Moorabool 500kV	Moorabool hys 2 In 2 bus	cb	500	2005/03/17 06:48:00	PTP	
Morphett Vale East 275kV	Mprht_VI_E_Cherry_Gdn 275kV LINE	line	275	2005/03/17 12:30:00	PTP	
Morphett Vale East 275kV	Mprht_VI_E_3 275/66kV XFMR	xfmr2	275/66	2005/03/17 12:30:00	PTP	
Kemps Creek 500kV	Kemps Ck 372B 330kV CB	cb	330	2005/03/18 05:39:00	PTP	
Kemps Creek 500kV	Kemps Ck 5 330kV REACT	react	330	2005/03/18 05:39:00	PTP	
Kemps Creek 500kV	Kemps Ck 1 16kV SVC	svc	16	2005/03/18 05:39:00	PTP	N-KC_VC_1
Kemps Creek 500kV	Kemps Ck 1 16kV SVC	svc	16	2005/03/18 05:39:00	PTP	N-KC_VC_2
West Melbourne 220kV	W Melbourne 3 4 220 kV bus tie	cb	220	2005/03/18 06:02:00	PTP	
Dumaresq 330kV	Dumarsq330 3 330kV REACT	react	330	2005/03/18 07:00:00	PDLTP	
Para 275kV	PARA 6116 132kV CB	cb	132	2005/03/18 07:00:00	PTP	
Lefevre 66kV	LE_FEV 5065 66kV CB	cb	66	2005/03/18 08:00:00	PDLTP	
Lefevre 66kV	Lefevre 5 275/66/11kV XFMR	xfmr3	275/66/11	2005/03/18 08:00:00	PDLTP	
Fishermans Bend 220kV	Fshms Bnd W Melbourne 2 220kV LINE	line	220	2005/03/18 08:30:00	PDLTP	
Palmwoods 275kV	Palmwoods 1 275kV BUS	bus	275	2005/03/18 14:30:00	PDLTP	Q-TR_OFFSET_-50
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PDLTP	Q-TR_OFFSET_-50
Palmwoods 275kV	h9_plmwd.fdr 8102 cb	cb	275	2005/03/18 14:30:00	PDLTP	Q-TR_OFFSET_-50
Eildon Ps 220kV	Eildon PS 1 220kV BUS	bus	220	2005/03/19 05:30:00	SUBMIT	
South Morang 500kV	S Morang 1 500kV BUS	bus	500	2005/03/19 05:30:00	SUBMIT	
Liverpool 330kV	Liverpool A 330kV BUS	bus	330	2005/03/19 06:00:00	STLTP	
Middle Ridge 275kV	Middle Rdg 1 110kV BUS	bus	110	2005/03/19 06:00:00	STLTP	Q-H14MR_50MVAR_CAP
Middle Ridge 275kV	Middle Rdg 1 110kV CAP	cap	110	2005/03/19 06:00:00	STLTP	Q-H14MR_50MVAR_CAP
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/19 06:00:00	SUBMIT	
Davenport 275kV	Davenport E 275kV BUS	bus	275	2005/03/19 07:00:00	SUBMIT	
Davenport 275kV	DAVENP 6560 275kV CB	cb	275	2005/03/19 07:00:00	SUBMIT	
Davenport 275kV	DAVENP 6563 275kV CB	cb	275	2005/03/19 07:00:00	SUBMIT	
Davenport 275kV	DAVENP 6566 275kV CB	cb	275	2005/03/19 07:00:00	SUBMIT	
Davenport 275kV	DAVENP 6589 275kV CB	cb	275	2005/03/19 07:00:00	SUBMIT	
Davenport 275kV	DAVENP 6591 275kV CB	cb	275	2005/03/19 07:00:00	SUBMIT	
Para 275kV	PARA 6117 132kV CB	cb	132	2005/03/19 07:00:00	SUBMIT	
George Town	GeorgeTown B 220kV BUS	bus	220	2005/03/19 07:00:00	SUBMIT	
George Town	GeorgeTown Comalco 4 220kV LINE	line	220	2005/03/19 07:00:00	SUBMIT	
Liverpool 330kV	Liverpool B 330kV BUS	bus	330	2005/03/19 09:30:00	STLTP	
George Town	GeorgeTown A 220kV BUS	bus	220	2005/03/19 18:00:00	SUBMIT	
George Town	GeorgeTown Comalco 4 220kV LINE	line	220	2005/03/19 18:00:00	SUBMIT	
George Town	GeorgeTown B 220kV BUS	bus	220	2005/03/20 05:00:00	SUBMIT	
Eildon Ps 220kV	Eildon PS 2 220kV BUS	bus	220	2005/03/20 05:30:00	SUBMIT	
Moorabool 500kV	Moorabool Sydenham 2 500kV LINE	line	500	2005/03/20 05:30:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg 4 110kV BUS	bus	110	2005/03/20 06:00:00	STLTP	Q-H14MR_50MVAR_CAP
Middle Ridge 275kV	Middle Rdg 2 110kV CAP	cap	110	2005/03/20 06:00:00	STLTP	Q-H14MR_50MVAR_CAP
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/20 06:00:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 1 220kV LINE	line	220	2005/03/20 06:00:00	SUBMIT	
Para 275kV	PARA 6117 132kV CB	cb	132	2005/03/20 07:00:00	SUBMIT	
George Town	GeorgeTown Comalco 5 220kV LINE	line	220	2005/03/20 07:00:00	SUBMIT	
Cardwell 132kV	Cardwell 1 132/22kV XFMR	xfmr2	132/22	2005/03/20 07:30:00	STLTP	Q-IHTV_7132
Townsville 132kV	t145_tv.fdr 71322 cb	cb	132	2005/03/20 07:30:00	STLTP	Q-IHTV_7132
Townsville 132kV	t145_tv.fdr 71332 cb	cb	132	2005/03/20 09:30:00	STLTP	Q-IHTV_7133
Townsville 132kV	Townsville 72772 132kV CB	cb	132	2005/03/20 14:00:00	STLTP	Q-TVAS_7277
George Town	GeorgeTown Comalco 5 220kV LINE	line	220	2005/03/20 18:00:00	SUBMIT	
Moorabool 500kV	Moorabool Sydenham 1 500kV LINE	line	500	2005/03/21 05:30:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/21 06:00:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 1 220kV LINE	line	220	2005/03/21 06:00:00	SUBMIT	
Ingleburn 330kV	Ingleburn Sydney S 78 330kV LINE	line	330	2005/03/21 06:30:00	STLTP	N-IGSS 78
Davenport 275kV	Davenport E 275kV BUS	bus	275	2005/03/21 07:00:00	STLTP	
Davenport 275kV	DAVENP 6560 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	
Davenport 275kV	DAVENP 6563 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	
Davenport 275kV	DAVENP 6566 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	
Davenport 275kV	DAVENP 6589 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	
Davenport 275kV	DAVENP 6591 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	
Tailem Bend 275kV	Tailem Bnd 64 275kV CAP	cap	275	2005/03/21 07:00:00	STLTP	S-TB_CP

No ACCC assessment after investment:

There was no ACCC assessment of a TNSP's investment after it had been completed.

Deadline for submissions: The draft decisions related only to future capex by TransGrid and EnergyAustralia. The ACCC was calling for submissions on these draft decisions, with the deadline being 24 March.

Final decision likely in April: A final decision on TransGrid and EnergyAustralia would be issued in April. The final decisions on each would be made after comments and submissions on these supplementary draft decisions had been considered.

Reference: Supplementary draft decision on NSW and Australian Capital Territory transmission by Australian Competition and Consumer Commission (ACCC) on TransGrid and EnergyAustralia network revenue cap and forward capital expenditure (capex) 2004/05-2008/09. 2 March 2005. Address: 470 Northbourne Avenue, Dickson. ACT. 2602. PO Box 1199, Dickson, ACT. 2602. Phone: (02) 6243 1111. Fax: (02) 6243 1123. <http://www.accc.gov.au>

Station Name	Equipment Name	Equipment Type	KV	Start Time	Status	Constraint Set ID
Tailem Bend 275kV	T_BEND 6597 275kV CB	cb	275	2005/03/21 07:00:00	STLTP	S-TB_CP
Poatina	Poatina Palmerston 3 220kV LINE	line	220	2005/03/21 07:00:00	STLTP	
Happy Valley 275kV	Happy Vly 3 275/66kV XFMR	xfmr2	275/66	2005/03/21 07:30:00	STLTP	
Yass 330kV	Yass 330kV Marulan 5 330kV LINE	line	330	2005/03/21 08:00:00	STLTP	N-MNYS 5
Liapootah	Liapootah A 220kV BUS	bus	220	2005/03/21 08:30:00	STLTP	
Shepparton 220kV	Shepparton 3a/3b 66kV cap bank	cb	66	2005/03/21 08:30:00	SUBMIT	
Chapel Street	ChapelSt A 110kV BUS	bus	110	2005/03/21 09:00:00	STLTP	
Murray	330kV A Bus 1-2 Section CB 5102	cb	330	2005/03/21 09:30:00	STLTP	H-MSBT
Cranbourne 220kV	Cranbourne E Rowville 2 220kV LINE	line	220	2005/03/22 05:00:00	SUBMIT	
Cranbourne 220kV	Cranbourne Tyabb 2 220kV LINE	line	220	2005/03/22 05:00:00	SUBMIT	
South Morang 500kV	S Morang Sydenham 1 500kV LINE	line	500	2005/03/22 05:45:00	SUBMIT	
Templestowe 220kV	Templestow 22kV SYNC	sync	22	2005/03/22 05:45:00	RESUBMIT	
Tungatinah	Tungatinah LakeEcho 1 110kV LINE	line	110	2005/03/22 06:00:00	SUBMIT	
Waddamana	Waddamana LakeEcho 1 110kV LINE	line	110	2005/03/22 06:00:00	SUBMIT	
Waddamana	Waddamana LakeEcho 1 110kV LINE	line	110	2005/03/22 06:00:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/22 06:00:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 2 220kV LINE	line	220	2005/03/22 06:00:00	SUBMIT	
Moorabool 500kV	Moorabool gts 2 In/a1 xfmr 220kV	cb	220	2005/03/22 06:00:00	SUBMIT	
Lismore 330kV	Lismore 1 132kV CAP	cap	132	2005/03/22 06:30:00	STLTP	
Regentville 330kV	Regentvill 1 132kV CAP	cap	132	2005/03/22 06:30:00	STLTP	
Tomago 330kV	Tomago 5422B 330kV CB	cb	330	2005/03/22 06:30:00	STLTP	
Dederang 330kV	Dederang shts 220kV In	cb	220	2005/03/22 06:30:00	SUBMIT	
Hazelwood Ps 220kV	Hazelwd PS hwts 1 In 220kV	cb	220	2005/03/22 06:30:00	RESUBMIT	
Murray	66 Murray-Lower Tumut CB 662A	cb	330	2005/03/22 07:00:00	STLTP	
Boyne Island 275kV	Boyne Isld 2 275/132kV XFMR	xfmr2	275/132	2005/03/22 07:00:00	SUBMIT	
Wurdong 275kV	Wurdong Boyne Isld 866 275kV LINE	line	275	2005/03/22 07:00:00	SUBMIT	
Davenport 275kV	Davenport W 275kV BUS	bus	275	2005/03/22 07:00:00	SUBMIT	
Davenport 275kV	Davenport Cultana 275kV LINE	line	275	2005/03/22 07:00:00	SUBMIT	
Tailem Bend 275kV	T_BEND 6594 275kV CB	cb	275	2005/03/22 07:00:00	SUBMIT	
Chapel Street	ChapelSt A 220kV BUS	bus	220	2005/03/22 07:00:00	SUBMIT	
Richmond 220kV	Richmond B1 220/66kV XFMR	xfmr2	220/66	2005/03/22 07:00:00	SUBMIT	
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2005/03/22 07:30:00	STLTP	
Port Macquarie 132kV	Prt Macqur Taree 964 132kV LINE	line	132	2005/03/22 08:00:00	SUBMIT	
Tailem Bend 275kV	Tailem_Bnd 64 275kV CAP	cap	275	2005/03/22 08:00:00	STLTP	S-TB_CP
Tailem Bend 275kV	T_BEND 6595 275kV CB	cb	275	2005/03/22 08:00:00	SUBMIT	
Tailem Bend 275kV	T_BEND 6597 275kV CB	cb	275	2005/03/22 08:00:00	STLTP	S-TB_CP
North West Bend 132kV	N_W_B 6021 132kV CB	cb	132	2005/03/22 08:30:00	STLTP	
North West Bend 132kV	N_W_B 6022 132kV CB	cb	132	2005/03/22 08:30:00	STLTP	
North West Bend 132kV	N_W_Bend 1 132/66/11kV XFMR	xfmr3	132/66/11	2005/03/22 08:30:00	STLTP	
Tailem Bend 275kV	T_BEND 6596 275kV CB	cb	275	2005/03/22 09:00:00	SUBMIT	
Chapel Street	ChapelSt A 110kV BUS	bus	110	2005/03/22 09:00:00	SUBMIT	
North West Bend 132kV	N_W_B 6024 132kV CB	cb	132	2005/03/22 09:30:00	STLTP	
North West Bend 132kV	N_W_B 6025 132kV CB	cb	132	2005/03/22 09:30:00	STLTP	
North West Bend 132kV	N_W_Bend 2 132/66/11kV XFMR	xfmr3	132/66/11	2005/03/22 09:30:00	STLTP	
Broadsound 275kV	Broadsound 1 275kV BUS	bus	275	2005/03/22 10:00:00	STLTP	
Gordon	Gordon ChapelSt 1 220kV LINE	line	220	2005/03/22 10:00:00	SUBMIT	
North West Bend 132kV	N_W_B 6023 132kV CB	cb	132	2005/03/22 10:30:00	STLTP	
Hazelwood 500kV	Hazelwood 2 500kV BUS	bus	500	2005/03/23 05:30:00	SUBMIT	
South Morang 500kV	S Morang Sydenham 1 500kV LINE	line	500	2005/03/23 05:45:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/23 06:00:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 2 220kV LINE	line	220	2005/03/23 06:00:00	SUBMIT	
Sydney West 330kV	Sydney W 3 132kV CAP	cap	132	2005/03/23 06:30:00	STLTP	
Tomago 330kV	Tomago 942A 330kV CB	cb	330	2005/03/23 06:30:00	STLTP	
Dederang 330kV	Dederang shts 220kV In	cb	220	2005/03/23 06:30:00	SUBMIT	
Marulan 330kV	Marulan 42 330kV CB	cb	330	2005/03/23 07:00:00	STLTP	
Davenport 275kV	Davenport W 275kV BUS	bus	275	2005/03/23 07:00:00	SUBMIT	
Davenport 275kV	Davenport Cultana 275kV LINE	line	275	2005/03/23 07:00:00	SUBMIT	
Richmond 220kV	Richmond B2 220/66kV XFMR	xfmr2	220/66	2005/03/23 07:00:00	SUBMIT	
Port Macquarie 132kV	Prt Macqur Taree 964 132kV LINE	line	132	2005/03/23 08:00:00	SUBMIT	
Broadsound 275kV	Broadsound 2 275kV BUS	bus	275	2005/03/23 08:30:00	MTLTP	
Para 275kV	Para 275kV 61 275kV CAP	cap	275	2005/03/23 09:00:00	MTLTP	S-PA_CP
Para 275kV	Para 275kV 1 275kV SVC	svc	275	2005/03/23 10:00:00	MTLTP	S-PA_VC 1
Para 275kV	Para 275kV 2 275kV SVC	svc	275	2005/03/23 11:00:00	MTLTP	S-PA_VC 1
Liapootah	Liapootah A 220kV BUS	bus	220	2005/03/23 11:00:00	SUBMIT	
Palmerston	Palmerston B 220kV BUS	bus	220	2005/03/23 11:00:00	SUBMIT	
Liapootah	Liapootah B 220kV BUS	bus	220	2005/03/23 14:00:00	SUBMIT	

Transmission Outage End Date 17-23 March 2005

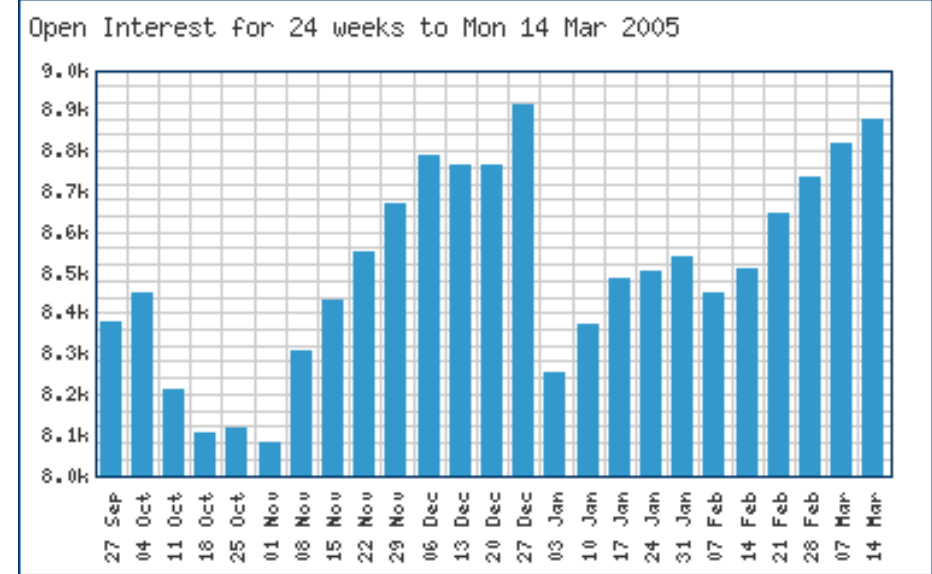
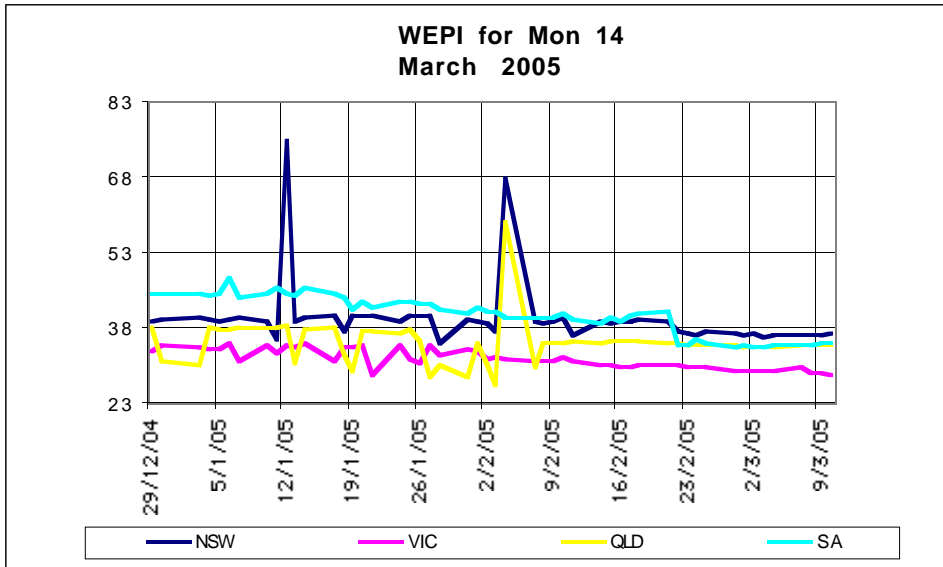
ewn publishing

Station Name	Equipment Name	Equipment Type	KV	End Time	Status	Constraint Set ID
Fishermans Bend 220kV	Fshmsns Bnd W Melbourn 2 220kV LINE	line	220	2005/03/18 09:30:00	PDLTP	
Dumaresq 330kV	Dumarsq330 3 330kV REACT	react	330	2005/03/18 14:00:00	PDLTP	
Kemps Creek 500kV	Kemps Ck 372B 330kV CB	cb	330	2005/03/18 14:30:00	PTP	
Kemps Creek 500kV	Kemps Ck 1 16kV SVC	svc	16	2005/03/18 14:30:00	PTP	N-KC_VC_1
Kemps Creek 500kV	Kemps Ck 1 16kV SVC	svc	16	2005/03/18 14:30:00	PTP	N-KC_VC_2
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-H40WU_120MVAR_CAP
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-PW_120CP
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-TR_OFFSET_-30
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-TR_OFFSET_-40
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-TR_OFFSET_-50
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-TR_OFFSET_-60
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 14:30:00	PTP	Q-TR_OFFSET_-70
Kemps Creek 500kV	Kemps Ck 5 330kV REACT	react	330	2005/03/18 15:00:00	PTP	
Wurdong 275kV	h40_wurd.fdr 8712 cb	cb	275	2005/03/18 15:00:00	PTP	
Lefevre 66kV	LE FEV 5065 66kV CB	cb	66	2005/03/18 15:00:00	PDLTP	
Lefevre 66kV	Lefevre 5 275/66/11kV XFMR	xfmr3	275/66/11	2005/03/18 15:00:00	PDLTP	
Para 275kV	PARA 6116 132kV CB	cb	132	2005/03/18 15:00:00	PTP	
West Melbourne 220kV	W Melbourn 3 4 220 kV bus tie	cb	220	2005/03/18 15:00:00	PTP	
Moorabool 500kV	Moorabool hys 2 In 2 bus	cb	500	2005/03/18 15:30:00	PTP	
Sydenham 500kV	Sydenham mlts 2 In/smts 2 line	cb	500	2005/03/18 15:30:00	PTP	
Nebo 275kV	Nebo 1 18kV REACT	react	18	2005/03/18 17:00:00	PTP	
Playford A + B Ps 275kV	PLAY BL1 275kV CB	cb	275	2005/03/18 17:00:00	PTP	
Palmwoods 275kV	Palmwoods 1 275kV BUS	bus	275	2005/03/18 18:00:00	PDLTP	Q-TR_OFFSET_-50
Palmwoods 275kV	Palmwoods 3 275kV CAP	cap	275	2005/03/18 18:00:00	PDLTP	Q-TR_OFFSET_-50
Palmwoods 275kV	h9_plmwd.fdr 8102 cb	cb	275	2005/03/18 18:00:00	PDLTP	Q-TR_OFFSET_-50
Liverpool 330kV	Liverpool A 330kV BUS	bus	330	2005/03/19 08:00:00	STLTP	
Liverpool 330kV	Liverpool B 330kV BUS	bus	330	2005/03/19 11:00:00	STLTP	
Morphett Vale East 275kV	Mrpht_VI_E Cherry_Gdn 275kV LINE	line	275	2005/03/19 15:00:00	PTP	
Morphett Vale East 275kV	Mrpht_VI_E 3 275/66kV XFMR	xfmr2	275/66	2005/03/19 15:00:00	PTP	
Para 275kV	PARA 6117 132kV CB	cb	132	2005/03/19 15:00:00	SUBMIT	
South Morang 500kV	S Morang 1 500kV BUS	bus	500	2005/03/19 15:15:00	SUBMIT	
Davenport 275kV	Davenport E 275kV BUS	bus	275	2005/03/19 16:30:00	SUBMIT	
Davenport 275kV	DAVENP 6560 275kV CB	cb	275	2005/03/19 16:30:00	SUBMIT	
Davenport 275kV	DAVENP 6563 275kV CB	cb	275	2005/03/19 16:30:00	SUBMIT	
Davenport 275kV	DAVENP 6566 275kV CB	cb	275	2005/03/19 16:30:00	SUBMIT	
Davenport 275kV	DAVENP 6589 275kV CB	cb	275	2005/03/19 16:30:00	SUBMIT	
Davenport 275kV	DAVENP 6591 275kV CB	cb	275	2005/03/19 16:30:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg 1 110kV BUS	bus	110	2005/03/19 17:00:00	STLTP	Q-H14MR_50MVAR_CAP
Middle Ridge 275kV	Middle Rdg 1 110kV CAP	cap	110	2005/03/19 17:00:00	STLTP	Q-H14MR_50MVAR_CAP
Eildon Ps 220kV	Eildon PS 1 220kV BUS	bus	220	2005/03/19 17:00:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/19 17:30:00	SUBMIT	
George Town	GeorgeTown B 220kV BUS	bus	220	2005/03/19 18:00:00	SUBMIT	
George Town	GeorgeTown Comalco 4 220kV LINE	line	220	2005/03/19 18:00:00	SUBMIT	
George Town	GeorgeTown A 220kV BUS	bus	220	2005/03/19 20:00:00	SUBMIT	
George Town	GeorgeTown Comalco 4 220kV LINE	line	220	2005/03/19 20:00:00	SUBMIT	
George Town	GeorgeTown B 220kV BUS	bus	220	2005/03/20 07:00:00	SUBMIT	
Cardwell 132kV	Cardwell 1 132/22kV XFMR	xfmr2	132/22	2005/03/20 09:30:00	STLTP	Q-IHTV_7132
Townsville 132kV	t145_tv1.fdr 71322 cb	cb	132	2005/03/20 09:30:00	STLTP	Q-IHTV_7132
Townsville 132kV	t145_tv1.fdr 71332 cb	cb	132	2005/03/20 11:30:00	STLTP	Q-IHTV_7133
Para 275kV	PARA 6117 132kV CB	cb	132	2005/03/20 15:00:00	SUBMIT	
Townsville 132kV	Townsville 7272 132kV CB	cb	132	2005/03/20 16:00:00	STLTP	Q-TVAS_7277
Eildon Ps 220kV	Eildon PS Mt Beauty 1 220kV LINE	line	220	2005/03/20 16:30:00	SUBMIT	
Moorabool 500kV	Moorabool Sydenham 2 500kV LINE	line	500	2005/03/20 16:30:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg 4 110kV BUS	bus	110	2005/03/20 17:00:00	STLTP	Q-H14MR_50MVAR_CAP
Middle Ridge 275kV	Middle Rdg 2 110kV CAP	cap	110	2005/03/20 17:00:00	STLTP	Q-H14MR_50MVAR_CAP
Eildon Ps 220kV	Eildon PS 2 220kV BUS	bus	220	2005/03/20 17:00:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/20 17:30:00	SUBMIT	
George Town	GeorgeTown Comalco 5 220kV LINE	line	220	2005/03/20 18:00:00	SUBMIT	
George Town	GeorgeTown Comalco 5 220kV LINE	line	220	2005/03/20 20:00:00	SUBMIT	

Station Name	Equipment Name	Equipment Type	KV	End Time	Status	Constraint Set ID
Yass 330kV	Yass 330kV Marulan 5 330kV LINE	line	330	2005/03/21 12:00:00	STLTP	N-MNYS 5
Chapel Street	ChapelSt A 110kV BUS	bus	110	2005/03/21 13:15:00	STLTP	
Liapootah	Liapootah A 220kV BUS	bus	220	2005/03/21 14:00:00	STLTP	
Ingleburn 330kV	Ingleburn Sydney S 78 330kV LINE	line	330	2005/03/21 14:30:00	STLTP	N-IGSS 78
Tailem Bend 275kV	Tailem Bnd 64 275kV CAP	cap	275	2005/03/21 14:30:00	STLTP	S-TB CP
Tailem Bend 275kV	T BEND 6597 275kV CB	cb	275	2005/03/21 14:30:00	STLTP	S-TB CP
Murray	330kV A Bus 1-2 Section CB 5102	cb	330	2005/03/21 15:00:00	STLTP	H-MSBT
Cranbourne 220kV	Cranbourne 2 220kV BUS	bus	220	2005/03/21 15:30:00	PTP	
Davenport 275kV	Davenport E 275kV BUS	bus	275	2005/03/21 16:30:00	STLTP	
Davenport 275kV	DAVENP 6560 275kV CB	cb	275	2005/03/21 16:30:00	STLTP	
Davenport 275kV	DAVENP 6563 275kV CB	cb	275	2005/03/21 16:30:00	STLTP	
Davenport 275kV	DAVENP 6566 275kV CB	cb	275	2005/03/21 16:30:00	STLTP	
Davenport 275kV	DAVENP 6589 275kV CB	cb	275	2005/03/21 16:30:00	STLTP	
Davenport 275kV	DAVENP 6591 275kV CB	cb	275	2005/03/21 16:30:00	STLTP	
Eildon Ps 220kV	Eildon PS Mt Beauty 1 220kV LINE	line	220	2005/03/21 16:30:00	SUBMIT	
Moorabool 500kV	Moorabool Sydenham 1 500kV LINE	line	500	2005/03/21 16:30:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/21 17:30:00	SUBMIT	
Tailem Bend 275kV	T BEND 6594 275kV CB	cb	275	2005/03/22 08:00:00	SUBMIT	
Tailem Bend 275kV	T BEND 6595 275kV CB	cb	275	2005/03/22 09:00:00	SUBMIT	
North West Bend 132kV	N W B 6021 132kV CB	cb	132	2005/03/22 09:30:00	STLTP	
North West Bend 132kV	N W B 6022 132kV CB	cb	132	2005/03/22 09:30:00	STLTP	
North West Bend 132kV	N W Bend 1 132/66/11kV XFMR	xfmr3	132/66/11	2005/03/22 09:30:00	STLTP	
Tailem Bend 275kV	T BEND 6596 275kV CB	cb	275	2005/03/22 10:00:00	SUBMIT	
North West Bend 132kV	N W B 6024 132kV CB	cb	132	2005/03/22 10:30:00	STLTP	
North West Bend 132kV	N W B 6025 132kV CB	cb	132	2005/03/22 10:30:00	STLTP	
North West Bend 132kV	N W Bend 2 132/66/11kV XFMR	xfmr3	132/66/11	2005/03/22 10:30:00	STLTP	
Gordon	Gordon ChapelSt 1 220kV LINE	line	220	2005/03/22 10:30:00	SUBMIT	
Tungatinah	Tungatinah LakeEcho 1 110kV LINE	line	110	2005/03/22 11:00:00	SUBMIT	
Waddamana	Waddamana LakeEcho 1 110kV LINE	line	110	2005/03/22 11:00:00	SUBMIT	
North West Bend 132kV	N W B 6023 132kV CB	cb	132	2005/03/22 11:30:00	STLTP	
Broadsound 275kV	Broadsound 1 275kV BUS	bus	275	2005/03/22 13:00:00	STLTP	
Chapel Street	ChapelSt A 110kV BUS	bus	110	2005/03/22 13:00:00	SUBMIT	
Lismore 330kV	Lismore 1 132kV CAP	cap	132	2005/03/22 14:00:00	STLTP	
Port Macquarie 132kV	Prt Macqur Taree 964 132kV LINE	line	132	2005/03/22 14:00:00	SUBMIT	
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2005/03/22 14:00:00	STLTP	
Regentville 330kV	Regentvill 1 132kV CAP	cap	132	2005/03/22 14:30:00	STLTP	
Tailem Bend 275kV	Tailem Bnd 64 275kV CAP	cap	275	2005/03/22 14:30:00	STLTP	S-TB CP
Tailem Bend 275kV	T BEND 6597 275kV CB	cb	275	2005/03/22 14:30:00	STLTP	S-TB CP
Murray	66 Murray-Lower Tumut CB 662A	cb	330	2005/03/22 15:00:00	STLTP	
Tomago 330kV	Tomago 5422B 330kV CB	cb	330	2005/03/22 15:00:00	STLTP	
Poatina	Poatina Palmerston 3 220kV LINE	line	220	2005/03/22 15:00:00	STLTP	
Tungatinah	Tungatinah LakeEcho 1 110kV LINE	line	110	2005/03/22 15:00:00	PTP	
Hazelwood Ps 220kV	Hazelwd PS hrts 1 In 220kV	cb	220	2005/03/22 15:00:00	RESUBMIT	
Dederang 330kV	Dederang shts 220kV In	cb	220	2005/03/22 15:30:00	SUBMIT	
Boyne Island 275kV	Boyne Isld 2 275/132kV XFMR	xfmr2	275/132	2005/03/22 16:00:00	SUBMIT	
Wurdong 275kV	Wurdong Boyne Isld 866 275kV LINE	line	275	2005/03/22 16:00:00	SUBMIT	
Richmond 220kV	Richmond B1 220/66kV XFMR	xfmr2	220/66	2005/03/22 16:00:00	SUBMIT	
South Morang 500kV	S Morang Sydenham 1 500kV LINE	line	500	2005/03/22 16:00:00	SUBMIT	
Davenport 275kV	Davenport W 275kV BUS	bus	275	2005/03/22 16:30:00	SUBMIT	
Davenport 275kV	Davenport Cullana 275kV LINE	line	275	2005/03/22 16:30:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 2 220kV LINE	line	220	2005/03/22 16:30:00	SUBMIT	
Cranbourne 220kV	Cranbourne E Rowville 2 220kV LINE	line	220	2005/03/22 17:00:00	SUBMIT	
Cranbourne 220kV	Cranbourne Tyabb 2 220kV LINE	line	220	2005/03/22 17:00:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/22 17:30:00	SUBMIT	
Para 275kV	Para 275kV 61 275kV CAP	cap	275	2005/03/23 09:45:00	MTLTP	S-PA CP
Para 275kV	Para 275kV 1 275kV SVC	svc	275	2005/03/23 10:45:00	MTLTP	S-PA VC 1
Para 275kV	Para 275kV 2 275kV SVC	svc	275	2005/03/23 11:45:00	MTLTP	S-PA VC 1
Port Macquarie 132kV	Prt Macqur Taree 964 132kV LINE	line	132	2005/03/23 14:00:00	SUBMIT	
Liapootah	Liapootah A 220kV BUS	bus	220	2005/03/23 14:00:00	SUBMIT	
Sydney West 330kV	Sydney W 3 132kV CAP	cap	132	2005/03/23 14:30:00	STLTP	
Marulan 330kV	Marulan 42 330kV CB	cb	330	2005/03/23 15:00:00	STLTP	
Tomago 330kV	Tomago 942A 330kV CB	cb	330	2005/03/23 15:00:00	STLTP	
Liapootah	Liapootah H152 220kV CB	cb	220	2005/03/23 15:00:00	PTP	
Dederang 330kV	Dederang shts 220kV In	cb	220	2005/03/23 15:30:00	SUBMIT	
Chapel Street	ChapelSt A 220kV BUS	bus	220	2005/03/23 16:00:00	SUBMIT	
Moorabool 500kV	Moorabool gts 2 In/a1 xfmr 220kV	cb	220	2005/03/23 16:00:00	SUBMIT	
Richmond 220kV	Richmond B2 220/66kV XFMR	xfmr2	220/66	2005/03/23 16:00:00	SUBMIT	
South Morang 500kV	S Morang Sydenham 1 500kV LINE	line	500	2005/03/23 16:00:00	SUBMIT	
Davenport 275kV	Davenport W 275kV BUS	bus	275	2005/03/23 16:30:00	SUBMIT	
Davenport 275kV	Davenport Cullana 275kV LINE	line	275	2005/03/23 16:30:00	SUBMIT	
Eildon Ps 220kV	Eildon PS Mt Beauty 2 220kV LINE	line	220	2005/03/23 16:30:00	SUBMIT	
Broadsound 275kV	Broadsound 2 275kV BUS	bus	275	2005/03/23 17:00:00	MTLTP	
Liapootah	Liapootah Palmerston 2 220kV LINE	line	220	2005/03/23 17:00:00	PTP	
Liapootah	Liapootah B 220kV BUS	bus	220	2005/03/23 17:00:00	SUBMIT	
Palmerston	Palmerston B 220kV BUS	bus	220	2005/03/23 17:00:00	SUBMIT	
Dederang 330kV	Dederang Shepparton 220kV LINE	line	220	2005/03/23 17:30:00	SUBMIT	

D-cypha Weekly Report

EWN Publishing



Trading Summary for week ending 14/03/05

- Futures contracts traded this week = 90
 - Base = 75
 - Peak = 15
 - Caps = 0
- Options contracts traded this week = 0
- Volume of EFP trades this week = 0
- Volume of BTF trades this week = 0
- Total MWh traded this week = 191,325

• Futures & Options contracts traded to date = 26,850

• Open Interest as at COB Monday 14/03/05 = 8,998 lots

Average volume

- Average daily volume FY04-05 = 37
- March 2005 average daily volume = 35
- February 2005 average daily volume = 42
- January 2005 average daily volume = 25

Activity

- Volume on the bid and offer counted at 4.20pm Monday 14/03/05 = 760.
- Brokers with active orders this week include: CSFB, FIMAT, ICAP, JP Morgan and Man Financial.
- Bids and offers have been consistently quoted across all four states in Quarterly and Cal/Fin Year Strip Products.

Source: D-cypha.

not a subscriber? subscribe today!

ewn publishing

Yes! I wish to subscribe to: (tick appropriate boxes)

Weekly Publications

- Electricity Week* (inc. MR & Green Pages) \$1,320.00 p.a.
- Gas Week* \$1,320.00 p.a.
- Green Markets* \$1,320.00 p.a.
- Global Green Markets* NEW!!! \$1,320.00 p.a.
- Energy Risk Weekly* \$1,204.50 p.a.
- Electricity Week Queensland* \$1,320.00 p.a.
- The Water Report* \$1,320.00 p.a.
- Water Markets Week* \$660.00 p.a.

Daily Publications

- Energy Daily* (includes data and graphs) \$1,754.50 p.a.
- Water Daily* (includes data and graphs) \$1,754.50 p.a.

Websites

- www.erisk.net (Subscribers only \$2,035*) \$4,070.00 p.a.
- eWeather website (Subscribers only \$2,035*) \$4,070.00 p.a.

* Discounted subscriber rate only applies in conjunction with newsletter subscription for same registered user.

All prices quoted are GST inclusive. A surcharge will be added if paid by credit card. These rates are for Single User Licences for use in Australia only and are subject to compliance with our Terms and Conditions of Subscription (see <http://www.erisk.net/terms>). For Multi User or International subscription rates, email subs@erisk.net

Subscriber details

Name of Recipient: _____
Title/Postition: _____
Company: _____
Email address: _____@_____
Phone: (____) _____ Fax: (____) _____
Invoicing Address: _____

Payment details

Pay later. Please send me an invoice. I realize I will not receive my first edition until payment is received.

Pay now to ensure immediate start. Please bill my credit card. I am aware of the surcharge that will be added to the amount (in brackets).

Mastercard (1.53%) Visa (1.53%) Amex (2.83%)

Card name: _____

Card no:

Exp date: / Signature: _____

Fax form to:

Email subs@erisk.net or call (02) 9818 8877 for further information.

02 9818 8473