

### INSIDE: Transmission firms compared New distribution, retailing policy forums

ewn publishing



## Ministers mull Black Friday post-mortem and promise new rules at work for Christmas

1

The Ministerial Council on Energy last week was briefed on the causes of the “Black Friday” blackouts, and issued a fresh promise - a new start-date - December 2004, for the:

- Australian Energy Market Commission (AEMC); and
- Australian Energy Regulator (AER).

(see charts inside)

### Regulatory developments last week:

- the ACCC issued its first *Electricity Regulatory Report* - covering the 2002/03 performance of Powerlink, TransGrid, SPI PowerNet, VENCORP and ElectraNet;
- the Ministerial Council on Energy, meeting in Adelaide on Friday 28 August, agreed to implement the first stage of the national framework for energy efficiency within the next three years; (see more inside)
- the new Distribution and Retailing policy was released for Public Consultation (see more inside);
- a Demand Side policy was released ( see details in *Electricity Week Demand Side* edition.)

## Winter prices down 5-23pc NSW, Vic, Qld; up 33pc in SA

Average prices fell by between 5-23 per cent in NSW, Victoria and Queensland and rose 33 per cent in South Australia to a \$25.37-\$34.82/MWh range for the three winter months of 2004.

**SA reverses position on 2003:** South Australia was price leader for winter 2004, a major reversal on winter 2003 when it was the

cont. page 3

### contents

- 3 Western Power blasts IRC over 7-week delay of Muja and Kwinana station disputes
- 4 AER, AEMC promised by Xmas
- 5 Ministers study entrails of six-station Hunter TransGrid crash
- 5 New Qld Energy Minister eyes radical energy board shakeup
- 5 CS Energy to sell six 66MW units from Swanbank A
- 6 AER perhaps most exciting & revolutionary energy reform since 1995: Ed Willet
- 7 ACCC compares NEM financial operation for transmission: EA refuses data
- 9 Powerlink CEO rejects new ACCC interconnector test
- 9 ACCC interconnection regulatory test decision to increase interstate connection & generation competition
- 10 NEMMCO releases interim network & FCAS constraint policy outline

Find out more at the subscriber section of [www.erisk.net](http://www.erisk.net)

Published by EWN Publishing, PO Box 1419, Rozelle, NSW 2039. Ph: +612 9818 8877. Fax: +612 9818 8473. Editor: Laurel Fox-Allen.

## Electricity in brief

**NEM's warm winter:** Demand was up, but prices were down 5-23 per cent in NSW, Vic, Queensland - but up 33 per cent in South Australia. The average demand for winter electricity topped 6000MW in Vic, and 9000 in NSW but price dropped everywhere except South Australia.

**Qld prices fall for winter:** Qld was the price trailer with 23pc fall in average winter price to \$25.37/MWh on highest percentage rise in winter demand.

**Qld steams in hot winter:** Queensland's driest and hottest winter in years: Almost all cities recorded 10 per cent less rain than expected.

**SA winter price surge:** The SA average price jumped by one-third in winter 2004 to \$34.82/MWh on slightly easier demand.

**NSW demand up, price down:** NSW breaks 9000MW barrier in average demand for winter 2004.

**Vic price down - a bit for winter:** Vic had the lowest drop in average price for winter 2004, down 5pc to \$27.52/MWh on 2.5pc rise in demand.

**Oil bottoms at \$US42.12:** Oil prices spiralled downward until

Wednesday as speculators sold off futures to avoid being trapped with expensive contracts.

**Oil jumps up on bad news:** The price moved up nearly \$US2 the next day when Yukos announced it could not meet back tax and Iraq closed the southern pipeline.

**Energy Australia won't play:** Energy Australia will not play the game. It has refused to supply the regulator with data on its transmission finances for the recent ACCC review.

**ACCC compares TNSPs:** The ACCC's comparison with financial forecasts offered by TNSPs for ACCC's revenue cap decisions covers information from Powerlink, TransGrid, SPI PowerNet, VENCORP; and ElectraNet. The ACCC ordered an increase of \$1.119 million in ElectraNet's MAR for 2004/05; and a reduction of \$75,037 in SPI PowerNet's maximum allowed revenue (MAR) for 2004/05. (*see inside*).

**Call to curb misuse of power:** The Energy Users Association of Australia (EUAA) has called for the new Australian Energy Regulator to be allowed to investigate and punish any misuse of market power by generators.

**Strike anger:** The new chief executive of Western Power, Tony Iannello, has launched a scathing attack on the Australian Industrial Relations Commission's handling of a strike by maintenance workers at two power stations in Western Australia,

**Electricity "keeps gas honest":** Electricity exerted an ongoing competitive pressure against natural gas because around 7 per cent of consumers changed appliances every year, the Productivity Commission said in its review of the gas regime.

**Generation to use more gas:** Electricity generation, mining and manufacturing were sectors in which the consumption of natural gas was forecast to increase significantly, the Productivity Commission was told.

**Labor energy policy criticised:** The Energy Users Association of Australia has expressed scepticism about Federal Labor's energy policy, including its promise of tougher merger laws to prevent further consolidation of the energy market and measures to encourage greater energy self-sufficiency. "There's a lot more higher priorities than that kind of stuff, such as how do you make sure that the generators are going to compete?"

executive director Roman Domanski said.

**LA Mayor green:** Los Angeles Mayor James Hahn has ordered the Los Angeles Department of Water and Power to stop studying construction of a third coal-fired generating unit at the massive Intermountain Power Project (IPP) facility. Hahn wants the resources committed to renewable energy.

**Swanbank A plant sale:** Qld's CS Energy has invited expressions of interest in the sale and removal of plant and machinery assets at the old Swanbank A power station.

**ENE profit up:** Energy Developments (ENE) reported a net profit after tax before specific items of \$18.6 million for the 2003-04 year, up 11 per cent on the previous corresponding period.

**Dispatch pricing rules review:** NEMMCO has initiated a consultation on a proposal for revision of dispatch pricing for dispatch intervals where there has been a manifestly incorrect input.

**Nuclear push starts:** An Australian scientist notes that with 40% of the world's uranium, Australia should be pushing for more atomic power.

Find out more at the subscriber section of [www.erisk.net](http://www.erisk.net)

Cont. from p. 1

price trailer. NSW was price leader in winter 2003 when average prices were in the range of \$26.23-\$38.50/MWh.

**What happened with demand:** Average demand rose between 2.5-3.2 per cent in NSW, Victoria and Queensland but was almost unchanged in South Australia at 1527MW compared with 1532MW.

**Milestones for NSW and Vic demand:** Both NSW and Victoria saw average demand go past milestones. In NSW, the winter average demand broke the 6000MW barrier to finish at 9132MW. In Victoria, winter average demand was up 147MW to break the 6000MW barrier at 6014MW.

**Reference: Analysis of average price and average demand figures for June, July, and August of 2003 and 2004 in Price/Demand section of Realtime NEM Data.** <http://www.erisk.net>

## Western Power blasts IRC over seven-week delay of Muja and Kwinana station disputes

3

The new chief executive of Western Power, Tony Iannello, made a scathing attack on the Australian Industrial Relations Commission's handling of a strike by maintenance workers at two power stations in WA, reported *The Australian Financial Review* (25/8/2004, p. 4).

## Top price for NEM week 22-28 August: Hallett Power at \$26.56/MWh

SA			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
North'n Power	\$1,963,927	87,141	\$22.54
Osborne	\$530,447	23,614	\$22.46
Ladbroke	\$303,494	13,498	\$22.49
Pelican Pt	-	-	-
Torrens Is. B	\$728,621	30,783	\$23.67
Vic->SA	\$1,449,712	63,066	\$22.99
MLink->SA	\$195,909	8,051	\$24.33
Torrens Is. A	\$110,581	4,593	\$24.08
Mintaro	-	-	-
Dry Creek	-	-	-
Playford	\$165,039	7,381	\$22.36
Snuggery	-	-	-
Pt Lincoln	-	-	-
Quarantine	-	-	-
Hallett Power	\$1,542	58	\$26.56
Lonsdale	-	-	-

VIC			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Loy Yang A	\$6,303,995	351,598	\$17.93
Loy Yang B	\$3,056,435	171,218	\$17.85
Hazelwood	\$4,453,341	247,056	\$18.03
Yallourn	\$4,260,692	238,673	\$17.85
Anglesea	\$479,479	26,880	\$17.84
Energy Brix	\$394,437	22,088	\$17.86
Newport	\$25,793	1,148	\$22.48
MLink->Vic	\$1,659	216	\$7.69
SA->Vic	-	-	-
Snowy->Vic	\$293,640	14,626	\$20.08
Jeeralang	-	-	-
West Kiewa	\$56,895	2,949	\$19.29
Bairnsdale	\$3,634	229	\$15.86
Dartmouth	\$193,216	9,844	\$19.63
Eildon	\$3	0	\$17.06
Hume Vic	-	-	-
McKay Power	\$17,681	808	\$21.87
Clover	-	-	-
Valley Power	\$329	19	\$17.14
Rubicon	-	-	-
Somerton Power	-	-	-
Sunshine Energy	-	-	-
Longford	-	-	-
Tramway Road	-	-	-
Toora Wind Farm	-	-	-

NSW			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Bayswater	\$7,409,930	403,623	\$18.36
Eraring	\$5,020,817	270,397	\$18.57
Mt Piper	\$3,509,322	188,259	\$18.64
Liddell	\$3,371,702	184,517	\$18.27
Vales Point	\$1,967,699	105,853	\$18.59
Wallerawang	\$2,314,277	125,968	\$18.37
Redbank	\$415,521	22,617	\$18.37
Smithfield	\$362,172	19,620	\$18.46
Snowy->NSW	\$915,730	49,672	\$18.44
Shoalhaven	-	-	-
Hunter Valley	-	-	-
Hume Hydro	-	-	-
Blowering	\$47	3	\$16.91
Munmorah	\$197,233	10,471	\$18.84
Northern Gas	-	-	-
Burrinjuck	-	-	-
Brown Mountain	-	-	-
Keepit	-	-	-
Broken Hill	-	-	-
Ergon Energy	-	-	-
Pindari Hydro	-	-	-
DL Q->N	-	-	-
QLD->NSW	\$566,096	29,339	\$19.29
West Nowra	-	-	-

QLD			
Generator	Income (\$)	Output (MWh)	Av Price (/MWh)
Tarong	\$4,546,873	248,710	\$18.28
Callide B	\$758,890	42,249	\$17.96
Stanwell	\$3,200,977	173,041	\$18.50
Gladstone	\$2,140,986	114,040	\$18.77
Callide Power	\$2,450,740	132,267	\$18.53
Swanbank	\$742,568	40,057	\$18.54
Collinsville	\$52,918	2,906	\$18.21
Millmerran	\$2,557,659	139,723	\$18.31
Swanbank C. D. E	\$353,645	18,875	\$18.74
Callide A	-	-	-
Kareeya	\$190,436	10,416	\$18.28
Barcardine	\$66,085	3,494	\$18.91
Barron Gorge	\$55,109	2,731	\$20.18
Mt Stuart	-	-	-
Wivenhoe	\$284,584	16,747	\$16.99
Townsville	-	-	-
Mackay	\$65	4	\$17.25
Roma	-	-	-
Oakey	\$51,390	2,357	\$21.80
DL N->Q	\$3,631	168	\$21.61
NSW->QLD	\$42,063	2,240	\$18.78
Rocky Point	-	-	-
Tableland	-	-	-

EWN publishing

## New energy regulatory structure

	NSW	Vic	SA	QLD	ACT	Tas	NT	WA
<b>Retail Pricing</b>	IPART	ESC	ESC OSA	Office of Energy	ICRC	OTTER/ GPOC	UC	ERA (proposed)
<b>Retail</b>	Australian Energy Regulator (including NEM and Gas Code regulation)						pending	pending
<b>Distribution</b>								
<b>Transmission</b>								
<b>Wholesale</b>								
<b>Competition Regulation</b>	Australian Competition and Consumer Commission							
<b>Code Changes</b>	Australian Energy Market Commission						pending	pending

**LEFT: AEMC and AER up by December:** The eighth Ministerial Council on Energy (MCE) meeting, Friday 27 August 2004, in Adelaide heard the energy market reform program was on track to enable the Australian Energy Market Commission (AEMC) and the Australian Energy Regulator (AER) fully operational by December 2004.

**First-round legislation:** The meeting noted significant progress made on implementation of the Council's energy market reform program, with the program on track for completion of the first round of national energy market legislation.

**AER, AEMC chairs:** Ministers received a progress report on the appointment of chairs to the AER and AEMC. MCE Ministers also unanimously agreed voting arrangements for Council decisions relating to the Australian Energy Market.

**How it works:** The Ministerial Council on Energy (MCE) is the national policy and governance body for the Australian energy market, including for electricity and gas, as outlined in the Council of Australian Governments (COAG) Australian Energy Market Agreement (AEMA) of 30 June 2004. Under the new regulatory regime, the ACCC will continue to perform its existing functions under the *Trade Practices Act*. These include:

- enforcement of *Part IV (Restrictive Trade Practices)*, including mergers);
- authorisation of conduct under *Part VII* that may otherwise contravene the *Trade Practices Act*, and
- approval of access codes and acceptance of access undertakings.

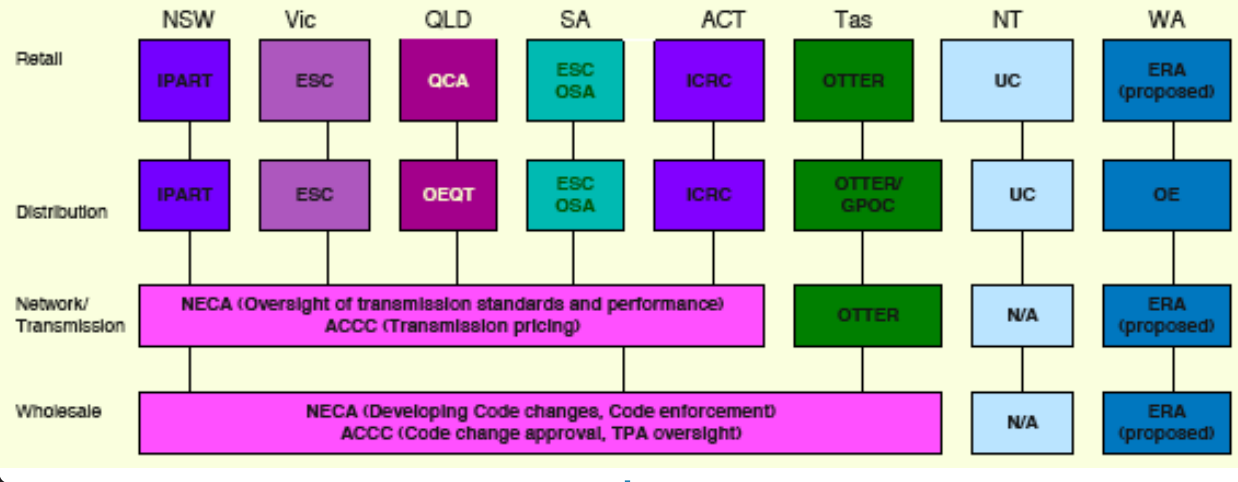
4

**Shocked and appalled:** "I am shocked and appalled at how long it took the commission to make a ruling in the dispute," he said. The strike at the Muja and Kwinana power stations entered a seventh week on Monday. The state utility recently advertised for workers to carry out the work in defiance of the Australian Manufacturing Workers Union. On Monday, 23 August, Western Power carried out a sweeping management reshuffle – its second this year.

### AER, AEMC promised by Xmas

**T**he MCE meeting on Friday 27 August 2004 in Adelaide heard that the energy market reform program was on track to enable the Australian Energy Market Commission (AEMC) and the Australian Energy Regulator (AER) to be fully operational by December 2004.

## Current regulatory structure: electricity



**Networks demand more money:** In SA, ETSA Utilities' proposed \$1.6 billion network upgrade drew particular flak.

### New Qld Energy Minister eyes radical energy board shakeup

Shortly after being sworn in as Australia's first stand-alone Energy Minister, John Mickel indicated he would review the make-up of the boards of Queensland's electricity companies, and consider radical alternatives to curb the state's spiralling demand for power, reported *The Courier-Mail* (27/8/2004, p. 1).

**PR gimmick scrapped:** Mickel hit the ground running, meeting energy chiefs and foreshadowing the appointment of a former senior bureaucrat to head the implementation of energy reforms. His first action, on 26 August, was to scrap an Energex plan to offer private briefings to MPs with the help of public relations firm the Rowland Communication Group.

### CS Energy to sell six 66MW units from Swanbank A

Queensland's CS Energy has invited expressions of interest in the sale and removal of plant and machinery assets at the Swanbank A Power Station. Swanbank A, a coal-fired station located near Ipswich in

**AER regulates transmission revenue:** The AER will assume the ACCC's current electricity transmission revenue regulation functions, and NECA's National Electricity Code compliance monitoring and enforcement functions.

5

**Distribution & Retailing from 2006:** During 2006, the AER will become responsible for the regulation of electricity distribution and retailing, other than retail pricing.

**Optional retail regulation:** Jurisdictions may transfer responsibility for regulation of retail prices to the AER.

### Ministers study entrails of six-station Hunter TransGrid crash

At the Ministerial Council meeting, NEMMCO presented a report on the Black Friday generator cascade in the NSW Hunter Valley. With brutal precision, it showed how Queensland prioritised households for automatic load dumping in such an eventuality. The first Queensland industrial user scheduled for load shedding was number 16 on the list.

south-east Queensland, includes six 66MW boilers, steam turbines and auxiliaries. The station ceased operation in June 2002 after approximately 36 years service. A site inspection must be carried out prior to lodging an EOI.

**Further information:** Ray Walters. Tel: (07) 3222 9339. Fax: (07) 3222 9527. CS Energy Ltd, GPO Box 769, Brisbane Qld 4001.

## AER perhaps most exciting & revolutionary energy reform since 1995: ACCC's Ed Willett

The Australian Energy Regulator (AER) was perhaps the most exciting and revolutionary reform to energy regulation since the 1995 National Competition Policy agreement began the task of opening up Australia's state controlled gas and electricity monopolies, Commissioner Ed Willett, of the Australian Competition and Consumer Commission (ACCC), said in an address to the 2004 Energy Reform Summit in Sydney.

**Regulation "maturing":** Willett, one of two part-time members of the AER, said that as competition in the gas and electricity markets had matured, so regulation was also maturing - to further improve efficient investment and competition to the benefit of business, consumers and the nation.

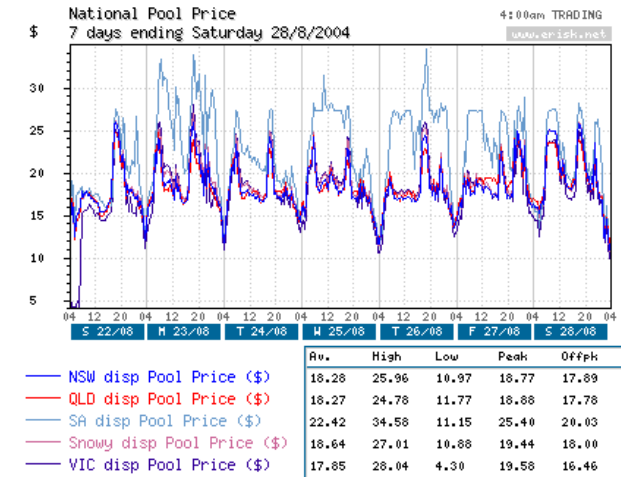
**Reference:** Address by Commissioner Ed Willett, ACCC, to 2004 Energy Reform Summit in Sydney on "The role of the ACCC in Australia's new regulatory regime". 25 August 2004. <http://www.accc.gov.au>

### the week in detail

- NSW:** Average price of \$18.28/MWh, down 28 per cent on the previous week's average of \$25.35/MWh, down 2 per cent on the average of \$18.65/MWh of the comparable week last year; maximum price \$25.96/MWh for the trading interval ended 1900EST Sunday, 22 August. Average demand 8366MW, down 10.1 per cent on the previous week, down 3.4 per cent on a year ago; maximum demand 10,458MW for the interval ended 1830EST Monday, 23 August, down 14.8 per cent on 12,293MW of the previous week. NSW imports from Snowy averaged 289MW, down 28.1 per cent on average imports of 402MW the previous week;

- Victoria:** Average price of \$17.85/MWh, down 26 per cent on the previous week's average of \$24.25/MWh, down 13 per cent on the average of \$20.47/MWh of the comparable week last year; maximum price \$28.04/MWh for the trading interval ended 1900EST Monday, 23 August. Average demand 5729MW, down 5.6 per cent on the previous week, down 1.8 per cent on a year ago; maximum demand 6820MW for the interval ended 1900EST Monday, 23 August, down 6.6 per cent on the 7300MW of the previous week. Net exports to Snowy averaged 199MW, up 107.3 per cent on average exports of 95.99MW the previous week;

- South Australia:** Average price of \$22.42/MWh, down 25 per cent on the previous week's average of \$29.74/MWh, up nearly 1 per cent on the average of \$22.28/MWh of the comparable week last year; maximum price \$34.58/MWh for the trading interval ended 1900EST Thursday, 26 August. Average demand 1393MW, down 7.7 per cent on the previous week, down 7.3 per cent on a year ago; maximum demand 1761MW for the 1930EST interval on



Monday, 23 August, down 13.6 per cent on the 2038MW of the previous week. Vic-SA disp flow averaged 375MW, up 13.0 per cent on the 332MW the previous week; Murraylink net flow averaged 46.95MW west, up from 26.92MW west the previous week; and

- Queensland:** Average price of \$18.27/MWh, down 22 per cent on the previous week's average of \$23.31/MWh, up 14 per cent on the average of \$16.05/MWh of the comparable week last year; maximum price \$24.78/MWh for the trading interval ended 2330EST Friday, 27 August. Average demand 5317MW, down 2.0 per cent on the week, up 3.1 per cent on a year ago; maximum demand 6473MW for the 1830EST interval Tuesday, 24 August, down 4.2 per cent on the 6755MW the previous week. QNI net flow averaged 161MW south, down 63.2 per cent on the 438MW south the previous week. Directlink averaged 1.00MW north, compared with 19.32MW south the previous week. Directlink did not record any flow from Sunday to Thursday inclusive.

## ACCC compares NEM financial operation for transmission: Energy Australia refuses data

The Australian Competition and Consumer Commission on Friday 27 August issued its first *Electricity Regulatory Report* covering the financial and operational performance of transmission network service providers in the NEM. The report details the performance of Powerlink, TransGrid, SPI PowerNet, VENCORP and ElectraNet for the 2002/03 reporting year.

**How it works:** The ACCC regulates the transmission revenues of eight TNSPs and the Murraylink Transmission Company and Transend. The transmission revenues of the latter two networks, however, were not regulated by the ACCC during the 2002/03 reporting year.

**Energy Australia holds out:** The revenues of Energy Australia were also regulated by the ACCC in 2002/03, ACCC Commissioner, Ed Willett, added. But as Energy Australia did not provide consent to disclose information, its details were not included in the report.

### All TNSPs average FY2003 performance:

- Interest cover: 1.6x;
- Return on assets: 7.4 per cent;
- Return on equity: 4.9 per cent;
- Gearing ratio: 61.7 per cent;

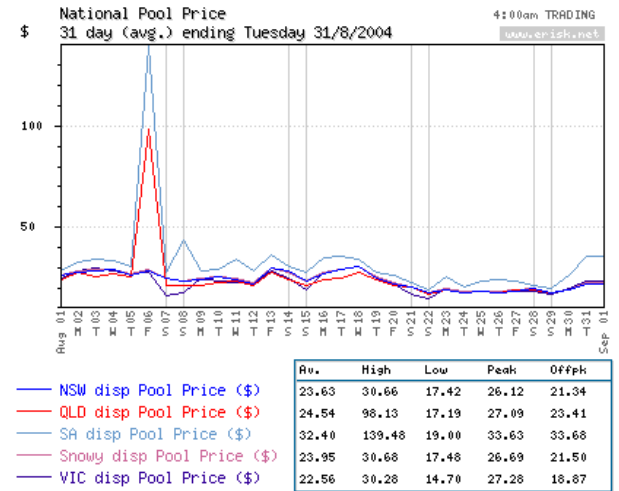
- Opex/line length (\$/km): 8106;
- Opex/RAB: 3.8 per cent;
- Opex/MW peak (\$/MW): 9589;
- Capex/RAB: 6.6 per cent;
- Capex/MW peak (\$/MW): 16929;
- Revenue/MW peak (\$/MW): 37866.

**Powerlink:** Powerlink recorded capex of \$200.4 million for 2002/03, which was \$21.4 million (11.9 per cent) higher than forecast for that year. It commented that higher than expected load growth in Queensland had driven an acceleration in the network development program.

**TransGrid 168.8pc over :** TransGrid recorded capex of \$243.6 million during 2002/03, which was \$151.4 million (162.8 per cent) higher than forecast. TransGrid commented that transmission is a capital intensive business and the return on capital and return of capital represents a far greater proportion of customer prices than does opex. Capital investment can be 'lumpy' due to the demands on the system created by continuing higher levels of load growth. It stated that further substantial upgrades are expected to be required in the foreseeable future.

**SPI PowerNet:** SPI PowerNet's capex was considerably less than the forecast for 2002/03. SPI PowerNet delivered \$36.4 million capex in-service for the year, which was \$36.7 million (50.2 per cent) less than the forecast figure of \$73.1 million. SPI PowerNet

## August in detail



• **NSW:** Average price \$23.63/MWh, down \$11.99 (34 per cent) on the average \$35.62/MWh of July, up \$4.05/MWh (21 per cent) on the average \$19.58/MWh of August 2003. Average demand 8951MW, down 391MW (4.2 per cent) on the 9342MW of July, up 112MW (1.3 per cent) on the 8839MW of August 2003.

• **Victoria:** Average price \$22.56/MWh, down \$8.81/MWh (28 per cent) on the average \$31.37/MWh of July, up \$2.43/MWh (12 per cent) on the average \$20.13/MWh of August 2003. Average demand 5969MW, down 96MW (1.6 per cent) on the 6065MW of July, up 110MW (1.9 per cent) on the 5859MW of August 2003.

• **South Australia:** Average price \$32.40/MWh, down \$7.06 (18 per cent) on the average \$39.46/MWh of July, up \$9.63/MWh (42 per cent) on the average \$22.77/MWh of August 2003. Average demand 1497MW, down 54MW (3.5 per cent) on the 1551MW of July, down 32MW (2.1 per cent) on the 1529MW of August 2003.

• **Queensland:** Average price \$24.54/MWh, down \$0.63/MWh (3 per cent) on the average \$25.17/MWh of July, up \$7.67/MWh (45 per cent) on the average \$16.87/MWh of August 2003. Average demand 5369MW, down 73MW (1.3 per cent) on the 5442MW of July, up 200MW (3.9 per cent) on the 5169MW of August 2003.

### TNSP financial indicators for 2002/03

	Powerlink	TransGrid	SPI PowerNet	Electra Net
EBIT(PS)/ interest cover	2.2x	1.9x	1.8x	1.2x
Return on assets – actual	6.9%	6.3%	9.2%	8.6%
Return on assets – as per revenue cap	8.7%	10.1%	8.6%	10.0%
Return on equity	5.5%	4.2%	8.3%	(17.6%)
Gearing Ratio	49.3%	55.3%	69.8%	91.7%*

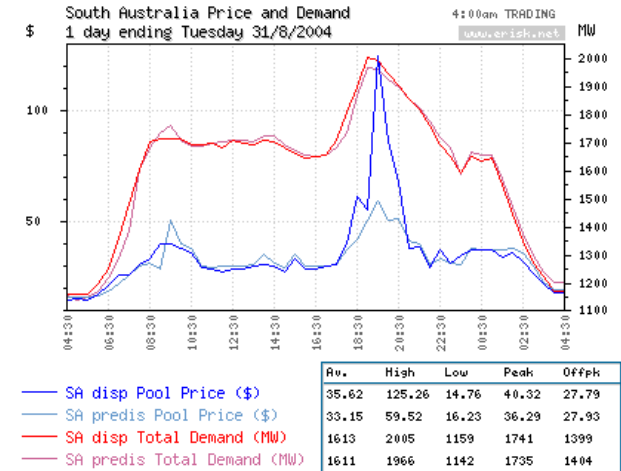
### TNSP operating ratios for 2002/03

	Powerlink	TransGrid	SPI PowerNet	Electra Net
Opex(PS)/line length (\$/km)	7333	9177	7890	7550
Opex(PS)/RAB (%)	3.4	4.3	2.9	5.1
Opex(PS)/MW peak (\$/MW)	11849	9228	6303	15093
Capex/RAB (%)	8.1	9.3	2.0	4.2
Capex/MW peak (\$/MW)	28301	19753	4439	12312
Revenue/MW peak (\$PS/MW)	49252	31625	32025	53747
Assets/MW peak (\$RAB/MW)	351222	213465	220773	294918

### TNSPs' capex for 2002/03: forecast/actual

\$ million (nominal)	Actual	Forecast	Variance (\$)	Variance (%)
TransGrid	243.6	92.7	151.4	162.8%
SPI PowerNet	36.4	73.1	(36.7)	(50.2%)
ElectraNet	34.4	35.5	(1.1)	(3.1%)
Powerlink	200.4	179.0	21.4	11.9%
<b>Total</b>	<b>514.8</b>	<b>380.3</b>	<b>134.5</b>	<b>35.4%</b>

### spike report



## Tuesday, 31 August: SA spike to \$125.26 for last winter day

A spike to \$125.26/MWh occurred in South Australia in the 30-minute interval ended 1930EST on Tuesday, 31 August, the last day of winter. The last day of winter ended with system-wide maximum demand up 563MW (2.2 per cent) to 26,045MW. South Australia remained price leader with Queensland taking over at the rear.

**LOR2 in SA for 54 hours:** NEMMCO advised in a market notice at 1035EST on Tuesday, 31 August that it had declared an actual lack of reserve level 2 (LOR2) for South Australia for the 54 hours from 1030EST on Tuesday until 1630EST on Thursday, 2 September. NEMMCO said it considered the occurrence of the critical single credible contingency during the planned outage of the Heywood-South East No.2 275kV line was likely to cause involuntary load shedding in South Australia. NEMMCO said there was adequate capacity reserve in South Australia. However, the reserve plant characteristics were such that involuntary load shedding might result following the loss of the parallel line.

commented that it has rearranged several large replacement projects in response to customer plans and internal capital requirements.

**ElectraNet:** ElectraNet's capex for 2002/03 was marginally lower than the forecast for that year. ElectraNet recorded capex of \$34.4 million which was \$1.1 million (3.1 per cent) lower than the forecast figure. ElectraNet commented that the marginally lower than forecast capex followed a later than expected ACCC revenue cap decision, which introduced delays into the development of plans to implement the capex program (approvals, service contracts etc.).

**Contact:** Ed Willett - Canberra, ACCC Commissioner, (02) 62431128.

## Powerlink CEO rejects new ACCC interconnector test

Influential Powerlink Queensland CEO Gordon Jardine has dismissed the ACCC's new cost/benefits test for interconnectors as being insufficient to generate the sought investment in interstate connectivity.

**Not "outcome-focused":** In a letter to *The Australian Financial Review* (26/8/2004, p. 59) Jardine argued that the new rules were insufficiently "outcome-focused". The new test would make only a marginal difference to allowable benefits.

**We want more:** The regulated rate of return set by the ACCC, moreover, was not very attractive, said Jardine. Almost all regulated transmission investment was "forced" investment to meet reliability standards, but investments in interstate interconnectors were discretionary, and required an attractive rate of return.

**For more information on the ACCC's Network Augmentation Test, download The ACCC's Review of the regulatory test final decision. The Frontier Economics report - Evaluating Interconnection Competition Benefits. and the Farrier Swier report - An analysis of competition benefits from <http://www.accc.gov.au>**

## ACCC interconnection regulatory test decision to increase interstate connection & generation competition

The final decision by the Australian Competition and Consumer Commission (ACCC) on the regulatory test would promote further interconnection between states and increase competition between generators, ACCC Commissioner Ed Willett said in an address to the 2004 Energy Reform Summit in Sydney.

**Test used to assess investments:** Willett, who will be one of two part-time members of the Australian Energy Regulatory Commission (AER), said the regulatory test was the cost-

benefit test used by transmission and distribution businesses to assess interconnectors and other network investments. It provided greater guidance on what should be included as a cost and a benefit.

**Optional add-on:** The decision outlined a workable methodology for the inclusion of competition benefits in the regulatory test, although the inclusion of these benefits was only an optional add-on which transmission network service providers could choose to pursue if they wished.

**Greater investment certainty:** The ACCC had also issued its draft statement of principles for the regulation of electricity transmission revenues (DRP). Its aim was to improve the climate for investment through greater certainty, improving incentives for efficiency, and providing greater transparency about transmission network performance.

**Incentive form of regulation:** Further, the ACCC was adopting an incentive form of regulation which aimed to encourage efficiency while balancing the provision of adequate service quality to consumers.

**Reference:** Address by Commissioner Ed Willett, Australian Competition and Consumer Commission (ACCC), to 2004 Energy Reform Summit in Sydney on "The role of the ACCC in Australia's new regulatory regime". 25 August 2004. Address: 470 Northbourne Avenue, Dickson. ACT. 2602. PO Box 1199, Dickson, ACT.

## NEMMCO releases interim network & FCAS constraint policy outline

**A** new document has been released outlining NEMMCO's policy on network constraint formulation until an overall solution is put in place.

**Togetherness:** It has been created, NEMMCO says, to bring together for convenience different aspects of policy on formulation of network and FCAS constraints that have been previously advised to the market through a number of different avenues.

**Overall solution to follow MCE review:** NEMMCO was aiming to put forward an overall solution once the Ministerial Council on Energy regional structure review had been completed.

**Further information:** Mark Miller, Head of Market Operations Performance. Phone: 1300 300 295. To view document "Policy on Network and FCAS Constraint Formulation" visit: [nemmco.com.au/operating/transmission/170-0030.htm](http://nemmco.com.au/operating/transmission/170-0030.htm)

## Sentinel fined \$180,000 for NSW electrocution death

**A** company based in Banksia, Sydney, was fined \$180,000 by the Industrial Relations Commission of NSW in Court Session, following the death by electrocution of a worker in 1999.

**Switchboard not isolated:** The court heard that on 22 January 1999, a worker was electrocuted while attempting to pull a cable from beneath the main switchboard of the Coles-Myer distribution centre at Smeaton Grange. Electrical power to the switchboard had not been isolated.

## Trumpeted Beattie \$2.7b extra capex revealed: Only \$205m is new Queensland spending

**P**remier Beattie has conceded that only \$205 million of the government's trumpeted extra \$2.7 billion in capital works spending on electricity over the next two years is new money. Apparently, Energex and Ergon pre-empted the review's findings in their Budget submissions, said *The Courier-Mail* (24/8/2004, p. 1).

**How the extra funds divide:** Energex will spend an extra \$187 million on capital works over the next two years, while Ergon will spend another \$18 million not outlined in the Budget. In operational expenditure, Energex will increase its annual spending by an average \$46 million, while Ergon will spend an average of another \$32 million.

**Staff top-ups:** Energex and Ergon will also get a 10 per cent boost in staff by mid-2006, reported *The Australian Financial Review* (23/8/2004). The Government said Energex's workforce would rise from 2530 to 2814 in 2006 and Ergon's from 4843 to 5300.

## New distribution and retailing policy for public consultation

**T**he Ministerial Council on Energy's (MCE) Standing Committee of Officials (SCO) has commenced a consultation process on the development of a national framework for electricity and gas distribution and retail (D&R) regulation.

**Public forums:** A series of public forums will be held in September 2004 to brief interested parties on the D&R Issues Paper and to respond to questions on the Paper. The forums will be held as follows:

- Brisbane, Monday 13 September 10.00 am - 12.00 pm Stamford Plaza Hotel, Cnr Edward St and Margaret St., Brisbane City;
- Sydney, Tuesday 14 September 10.00 am - 12.00 pm The Composite Room, Sydney Masonic Centre, 279 Castlereagh St, Sydney;
- Melbourne, Wednesday 15 September 10.00 am - 12.00 pm Lumina Room, 8th Floor, Grand Hyatt Hotel, 123 Collins St, Melbourne;
- Adelaide, Thursday 16 September 2.00 pm - 4.00 pm Balcony 1 & 2, Hilton Adelaide, 233 Victoria Square;
- Hobart, Friday 17 September 10.00 am - 12.00 pm The Gretel Room, Hobart Function Centre, Elizabeth Pier, Hobart.

**Submissions on the D&R Issues Paper, and any other relevant matters, can be provided in writing and in**

electronic form by 29 October 2004 to: Manager – Energy Market Reform Team National Energy Market Branch Department of Industry, Tourism and Resources GPO Box 9839 Canberra ACT 2601, email: MCEMarketReform@industry.gov.au

ewn publishing

## MCE agrees to National Framework for Energy Efficiency: Buildings, consumer awareness, etc

At its meeting of 27 August 2004, the Ministerial Council on Energy (MCE) agreed to the implementation of nine policy packages constituting the first stage of the National Framework for Energy Efficiency (NFEE) within three years, and to the investigation of broad-based incentive measures that could be considered for inclusion in the second stage of NFEE in the context of the Productivity Commission inquiry into energy efficiency in 2005.

**Framework's nine stages:** The nine energy efficiency policy packages included in Stage One of the National Framework are:

**Residential buildings:** To improve the energy performance of the residential building stock over time and to inform consumer decision making, the package encompasses:

- nationally consistent minimum energy efficiency design standards for new homes, units and apartments;

11

## Constraint Library Changes Report for the week 23-29 August 2004

<p><b>23/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: Q-KMBG_7143                  Constraint Equation: Q_KMBG_7143                  Reason: Outage of 7143 Kamerunga Barron Gorge PS 132kV line</p>
<p><b>23/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: Q-KMBG_7184                  Constraint Equation: Q_KMBG_7184                  Reason: Outage of 7184 Kamerunga Barron Gorge PS 132kV line</p>
<p><b>23/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: Q-TR_OFFSET_-160 ..... Q-TR-OFFSET_-200, Q-TR_OFFSET_-250                  Constraint Equation: Q^AQCT_OFFSET_-160 ..... -250, Q^QML_OFFSET_-160 ..... -250, Q^QTB_OFFSET_-160.....-250, Q^QWP_OFFSET_-160.....-250, Q^TCT_OFFSET_-160.....-250, Q^TML_OFFSET_-160.....-250, Q^TTB_OFFSET_-160.....-250, Q^TWP_OFFSET_-160.....-250</p>
<p><b>24/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Reason: Extra offsets required for planned outages                  Constraint Set: S-TB_CB6536, F-S-TB_CB6536                  Constraint Equation: S&gt;V_TB_CB6536, V:S_TB_CB6536, V&gt;S_TB_CB6536, F_SS_TB_CB6536_L5, F_SS_TB_CB6536_L6, F_SS_TB_CB6536_L60, F_S+V_TB_CB6536_L5, F_S+V_TB_CB6536_L6, F_S+V_TB_CB6536_L60, F_V+S_TB_CB6536_L5, F_V+S_TB_CB6536_L6, F_V+S_TB_CB6536_L60, F_V+S_TB_CB6536_R5, F_V+S_TB_CB6536_R6, F_V+S_TB_CB6536_R60,                  Reason: Required for planned outage</p>
<p><b>25/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: Q-TR_OFFSET_-210, Q-TR_OFFSET_-220, Q-TR_OFFSET_-230, Q-TR_OFFSET_-240,                  Constraint Equation: Q^AQCT_OFFSET_-210 ..... -240, Q^QML_OFFSET_-210 ..... -240, Q^QTB_OFFSET_-210.....-240, Q^QWP_OFFSET_-210.....-240, Q^TCT_OFFSET_-210.....-240, Q^TML_OFFSET_-210.....-240, Q^TTB_OFFSET_-210.....-240, Q^TWP_OFFSET_-210.....-240                  Reason: Required for planned outage</p>
<p><b>27/08/2004: New Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: N-BLTU_97B, N-X_6_18, N-X_CB5012_CB5272, V-LY_TX, V-JL_JLA, V-JL_JLB, V-APPT, V-HWMW, V-LY_BUS4, V-LY_BUS2, V-HW_BUS1, V-HW_BUS2, V-HW_BUS3, V-HW_BUS4, V-MB_BUS1, V-MB_BUS2, V-JL_BUS1, V-JL_BUS2, V-YP_BUS1, V-YP_BUS2                  Constraint Equation: N_BLTU_97B, N_X_6_18, N_X_CB5012_CB5272, V_LY_TX, V_JL_JLA, V_JL_JLB, V_APPT, V_HWMW, V_LY_BUS4, V_LY_BUS2, V_HW_BUS1, V_HW_BUS2, V_HW_BUS3, V_HW_BUS4, V_MB_BUS1, V_MB_BUS2, V_JL_BUS1, V_JL_BUS2, V_YP_BUS1, V_YP_BUS2                  Reason: Required for planned outages</p>
<p><b>27/08/2004: Marked for Archival Constraint Set(s) and Constraint Equation(s)</b>                  Constraint Set: @LYGS_A, @LYGS                  Constraint Equation: @LYGS_A, @LYGS                  Reason: Superseded constraints marked for archival</p>
<p><b>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 ( <a href="http://www.nemmco.com.au/operating/systemops/3709.htm">http://www.nemmco.com.au/operating/systemops/3709.htm</a>) for more information on Generic Constraints. Refer also to the Constraint Naming Guidelines: <a href="http://www.nemmco.com.au/operating/transmission/200-0062.htm">http://www.nemmco.com.au/operating/transmission/200-0062.htm</a> and the Network and FCAS constraint formulation policy: <a href="http://www.nemmco.com.au/operating/transmission/170-0030.htm">http://www.nemmco.com.au/operating/transmission/170-0030.htm</a> Should you have any queries regarding the above please contact Ben Blake on 02 8838 5359</b></p>

- minimum energy efficiency design standards for major renovations; and
- mandatory disclosure of the energy performance of homes, units and apartments at the time of sale or lease.

**Commercial buildings:** To improve the energy performance of the commercial building stock over time and to inform owner and tenant decision making, the package will introduce:

- nationally consistent minimum energy efficiency design standards for new and refurbished buildings; and
- mandatory disclosure of building energy performance at time of sale or lease.

**Commercial/industrial energy efficiency:** To raise the awareness of senior management and motivate action, and to improve the skill base to identify energy efficiency opportunities, this package includes:

- the requirement for large energy consumers to undertake mandatory energy assessments and report on the energy efficiency opportunities that these identify, as announced in the Australian Government's Energy White paper; and
- nationally coordinated training and accreditation for energy auditors and energy performance contractors in conjunction with programs and protocols already in place.

**Government energy efficiency:** To demonstrate leadership to the business sector and wider community, governments will:

- develop nationally consistent standards for measuring and reporting on government energy efficiency programs;
- introduce public annual reporting by all jurisdictions on energy use and progress towards achieving the targets set for government agencies;
- establish minimum energy performance standards for government buildings; and
- develop best practice models for government departments to implement energy efficiency programs.

**Appliance & equipment energy efficiency:** To improve the energy efficiency of major energy using appliances and equipment, the National Appliance & Equipment Energy Efficiency Program (NAEEEP) for electrical products will be:

- broadened in scope to include mandatory minimum energy performance standards (MEPS) and labelling for gas products; and
- expanded through the introduction of new or more stringent MEPS for residential, commercial and industrial products, with a key focus on increasing the number of commercial and industrial products regulated.

**Trade and professional training:** To develop the capacity of the relevant professions and trades to identify opportunities and implement energy efficient solutions, the package will:

- undertake a nationally coordinated effort to integrate energy efficiency concepts into the courses for the key trades and professions that influence energy efficiency outcomes; and
- develop training and accreditation courses for practicing tradespersons.

**Commercial/industrial sector capacity:** To demonstrate the benefits of energy efficiency, build industry capacity to deliver energy efficient solutions, and reduce energy efficiency investment risks, the package will:

- develop a nationally coordinated program to generate highly visible examples of energy efficient equipment or processes in key industrial sectors and new or refurbished commercial buildings;
- link industry and government to key centres for leading edge energy efficiency research and development; and
- establish nationally coordinated energy efficiency best practice networks.

**General consumer awareness:** To raise the awareness of general consumers (householders and small business) and motivate energy saving actions, the package comprises:

- the requirement for energy retailers to provide benchmark data on energy bills;
- development of a nationally coordinated network to facilitate easy and timely access to high quality and relevant information;

- targeted promotional campaigns for specific energy efficiency issues; and
- the integration of energy efficiency concepts into the school curriculum.

**Finance sector awareness:** To increase the type and availability of finance products for energy efficiency, government agencies will work with the finance sector to:

- raise awareness of the opportunities for, and benefits of, energy efficiency investments; and
- provide tools for the valuation and risk assessment of proposals.

## Energy Users Association doubts Labor's energy policy

**E**ven before the federal election was called, the Energy Users Association of Australia - representing major energy consumers such as BHP Billiton, Boral and Comalco was expressing scepticism about the Labor Party's proposals to reform the energy sector.

**Higher priorities:** "There's a lot more higher priorities than that kind of stuff, such as how do you make sure that the generators are going to compete? How do you make sure that the monopoly [gas] pipelines don't rip customers off?" executive director Roman Domanski told *The Australian Financial Review* (25/8/2004, p. 8).

**Competition the aim:** Labor has also promised to create tougher merger laws to prevent further consolidation of the energy market is part of a so-called nation building plan to inject further competition into the sector and create jobs. The plan includes:

- a "use it or lose it policy" towards holders of licenses to tap Australian gas reserves;
- new measures, to be announced this month, to encourage oil companies to start converting their vast gas supplies into synthetic oil products as a cleaner, possibly even cheaper, substitute for a range of petroleum materials including petrol.

## Labor energy policy aims to maximise benefits to Aus community says Fitzgibbon

**L**abor energy spokesperson Joel Fitzgibbon said the Australian community "wants to know that the natural resources that it owns are being exploited in a manner that produces the maximum possible benefit for [them] rather than in a way that increases the bottom line of the companies that secure the rights to exploit those resources," *The Australian Financial Review* (25/8/2004, p. 8) reported.

**Promise to ratify Kyoto:** Labor has already promised that, in government, it would ratify the Kyoto Protocol and set up a carbon emissions trading scheme by 2010.

**Incentives:** Fitzgibbon admitted his was a heavy-handed approach to reshaping the energy industry, but flagged the possibility of generous incentives. Companies would be given guarantees that once the ACCC decided not to regulate a transmission asset, it would not be able to intervene in the future, the AFR said.

## NEMMCO proposes revision of dispatch pricing due to a "manifestly incorrect input": Submissions by 27 September

**N**EMMCO has initiated a consultation on a proposal for revision of dispatch pricing for dispatch intervals where there has been a manifestly incorrect input. The proposed process would result in the published prices for a dispatch interval being replaced by the prices from a previous dispatch interval.

**Submissions should reach NEMMCO by 5 p.m. on 27 September 2004. Further information: Mark Miller, 02 9239 9108, or visit <http://www.nemmco.com.au>**

## Transmission Outage Start Date 2 - 8 September 2004

ewn publishing

14

Station Name	Equipment Name	Equipment Ty	KV	Start Time	Status	Constraint Set ID
Munmorah 330kV	Munmorh MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 05:30:00	STLTP	N-MNSN_21
Sydney North 330kV	Sydney N MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 05:30:00	STLTP	N-MNSN_21
Tuggerah 330kV	Tuggerah MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 05:30:00	STLTP	N-MNSN_21
Callide 132kV	Callide Calvale 7161 132kV LINE	line	132	2004/09/02 06:30:00	STLTP	
Calvale 275kV	Calvale 2 288/138kV XFMR	xfmr2	288/138	2004/09/02 06:30:00	STLTP	
Sydney West 330kV	Sydney W 5 132kV CAP	cap	132	2004/09/02 07:30:00	STLTP	
Cherry Gardens 275kV	Cherry_Gdn Happy_Vly 275kV LINE	line	275	2004/09/02 07:30:00	STLTP	
Dederang 330kV	Dederang 3 330/240kV XFMR	xfmr2	330/240	2004/09/02 07:30:00	STLTP	I-HV_0600
Wagga 132kV	Wagga132 132 B1 132kV BUS	bus	132	2004/09/02 08:00:00	STLTP	
Kilburn 275kV	Kilburn Dry_Ck 66kV LINE	line	66	2004/09/02 08:30:00	STLTP	S_DRYCK104
North West Bend 132kV	N_W_B 6033 132kV CB	cb	132	2004/09/02 09:30:00	STLTP	
Heywood 500kV	Heywood S East 2 275kV LINE	line	275	2004/09/02 10:00:00	STLTP	F-I-HYSE
Heywood 500kV	Heywood S East 2 275kV LINE	line	275	2004/09/02 10:00:00	STLTP	I-HYSE_P
Callide 132kV	Callide Calvale 7161 132kV LINE	line	132	2004/09/03 06:30:00	STLTP	
Calvale 275kV	Calvale 2 288/138kV XFMR	xfmr2	288/138	2004/09/03 06:30:00	STLTP	
Munmorah 330kV	Munmorh Sydney W 26 330kV LINE	line	330	2004/09/03 07:15:00	STLTP	N-MNSW_26
Happy Valley 275kV	Happy_Vly E 275kV BUS	bus	275	2004/09/03 07:30:00	STLTP	
Happy Valley 275kV	Happy_Vly 4 275/66kV XFMR	xfmr2	275/66	2004/09/03 07:30:00	STLTP	
Tailem Bend 275kV	T_BEND 6535 275kV CB	cb	275	2004/09/03 09:00:00	STLTP	F-S-PATB
Tailem Bend 275kV	T_BEND 6535 275kV CB	cb	275	2004/09/03 09:00:00	STLTP	S-PATB
Tailem Bend 275kV	Tailem_Bnd Para 275kV 1 275kV LINE	line	275	2004/09/03 09:00:00	STLTP	F-S-PATB
Tailem Bend 275kV	Tailem_Bnd Para 275kV 1 275kV LINE	line	275	2004/09/03 09:00:00	STLTP	S-PATB
Tailem Bend 275kV	T_BEND 6596 275kV CB	cb	275	2004/09/03 12:30:00	STLTP	F-S-SETB
Tailem Bend 275kV	T_BEND 6596 275kV CB	cb	275	2004/09/03 12:30:00	STLTP	S-TBSE
Tailem Bend 275kV	Tailem_Bnd South_East 1 275kV LINE	line	275	2004/09/03 12:30:00	STLTP	F-S-SETB
Tailem Bend 275kV	Tailem_Bnd South_East 1 275kV LINE	line	275	2004/09/03 12:30:00	STLTP	S-TBSE
Nebo 275kV	Nebo 275kV 1 132kV BUS	bus	132	2004/09/06 00:00:00	SUBMIT	
Nebo 275kV	Nebo 275kV 1 288/138/19kV XFMR	xfmr3	288/138/19	2004/09/06 00:00:00	SUBMIT	
Belmont 275kV	Belmont 4 275kV CAP	cap	275	2004/09/06 08:00:00	SUBMIT	
Belmont 275kV	h3_belmt.cap 5842 cb	cb	275	2004/09/06 08:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Cplr 5042 cb	cb	275	2004/09/06 08:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8792 cb	cb	275	2004/09/06 08:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8802 cb	cb	275	2004/09/06 08:00:00	SUBMIT	
T146_oakey	T146_oakey Tangkam 7246 110kV LINE	line	110	2004/09/06 08:00:00	SUBMIT	
T146_oakey	T146_oakey Tangkam 7247 110kV LINE	line	110	2004/09/06 13:00:00	SUBMIT	

Station Name	Equipment Name	Equipment Ty	KV	Start Time	Status	Constraint Set ID
Kerang 220kV	Kerang 220kV SVC	svc	220	2004/09/07 06:00:00	SUBMIT	
Kerang 220kV	Kerang 1 235/165/67kV XFMR	xfmr3	235/165/67	2004/09/07 06:00:00	SUBMIT	
Murray	M11 Murray-Murray 2 CB M112A	cb	330	2004/09/07 07:00:00	SUBMIT	
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2004/09/07 07:00:00	SUBMIT	
South Morang 500kV	S Morang Rowvill500 3 500kV LINE	line	500	2004/09/07 07:00:00	MTLTP	V-ROSM_P
Bendigo 220kV	Bendigo Kerang 220kV LINE	line	220	2004/09/07 07:06:00	MTLTP	V-BEKG
Middle Ridge 275kV	Middle Rdg Tangkam 731 110kV LINE	line	110	2004/09/07 07:30:00	SUBMIT	
Strathmore 275kV	h35_sthm. Cplr 5042 cb	cb	275	2004/09/07 08:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8402 cb	cb	275	2004/09/07 08:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8792 cb	cb	275	2004/09/07 08:00:00	SUBMIT	
Para 275kV	PARA 6509 275kV CB	cb	275	2004/09/07 08:30:00	SUBMIT	
Palmwoods 275kV	Palmwoods 1 132kV BUS	bus	132	2004/09/07 09:00:00	SUBMIT	
Palmwoods 275kV	Palmwoods 2 132kV BUS	bus	132	2004/09/07 09:00:00	SUBMIT	
Palmwoods 275kV	Palmwoods 2 132kV CAP	cap	132	2004/09/07 09:00:00	SUBMIT	
Torrens A Ps 275kV	TIPS_A AC2 275kV CB	cb	275	2004/09/07 09:00:00	SUBMIT	
Alcoa/portland 500kV	Alc/prtLnd Heywood 1 500kV LINE	line	500	2004/09/07 16:30:00	SUBMIT	
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2004/09/08 07:00:00	SUBMIT	
Calvale 275kV	Calvale 8811 275kV REACT	react	275	2004/09/08 07:00:00	SUBMIT	
South Pine 275kV	h2_spine.cplr 5062 cb	cb	275	2004/09/08 07:00:00	SUBMIT	
South Morang 500kV	S Morang Rowvill500 3 500kV LINE	line	500	2004/09/08 07:00:00	MTLTP	V-ROSM_P
Sydney South 330kV	Sydney S 1 16kV SYNC	sync	16	2004/09/08 07:30:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg Tangkam 731 110kV LINE	line	110	2004/09/08 07:30:00	SUBMIT	
Bouldercombe 275kV	h10_bcmb.cplr 5022 cb	cb	275	2004/09/08 08:00:00	SUBMIT	
Nebo 275kV	h11_nebo.cplr 5042 cb	cb	275	2004/09/08 08:00:00	SUBMIT	
Loganlea 275kV	Loganlea 5 110kV CAP	cap	110	2004/09/08 08:30:00	SUBMIT	
Brinkworth 275kV	BRINKW 6528 275kV CB	cb	275	2004/09/08 08:30:00	SUBMIT	
Brinkworth 275kV	Brinkworth TF 3 275/132/11kV XFMR	xfmr3	275/132/11	2004/09/08 08:30:00	SUBMIT	
Snuggery 132kV	Snuggery TF 4 132/33/11kV XFMR	xfmr3	132/33/11	2004/09/08 08:30:00	SUBMIT	
Torrens A Ps 275kV	TIPS_A AW2 275kV CB	cb	275	2004/09/08 09:00:00	SUBMIT	
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-CNKV_6
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-DTKV_18
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-X_6_18
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-CNKV_6
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-DTKV_18
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 10:00:00	MTLTP	N-X_6_18
Strathmore 275kV	h35_sthm. Fdr 8402 cb	cb	275	2004/09/08 12:00:00	SUBMIT	
Brinkworth 275kV	BRINKW 6528 275kV CB	cb	275	2004/09/08 16:30:00	SUBMIT	

## Transmission Outage End Date 2 - 8 September 2004

ewn publishing

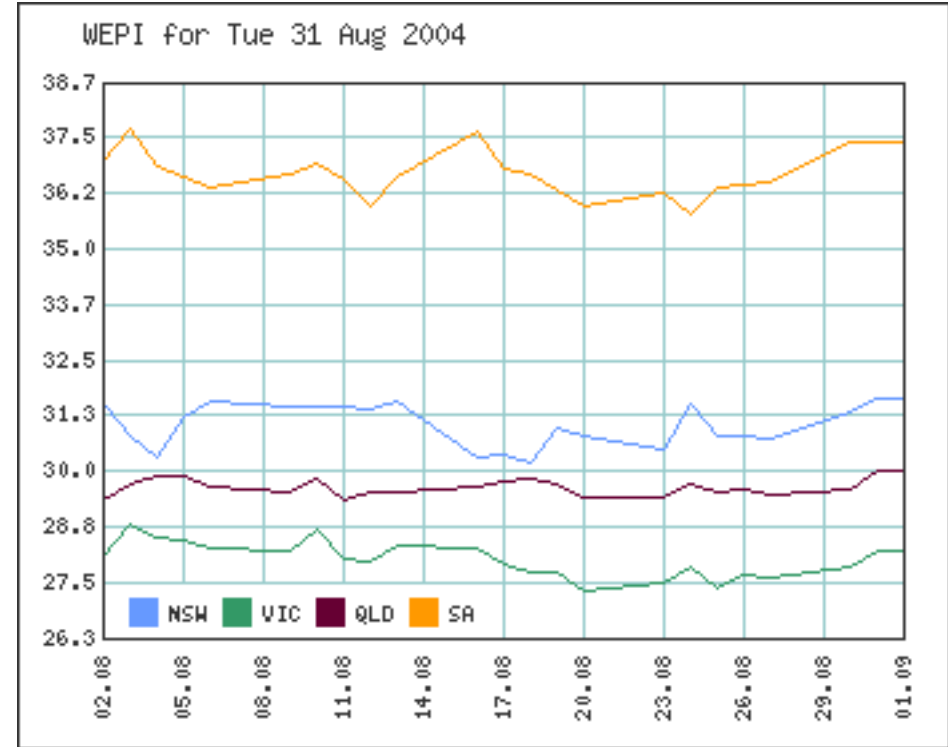
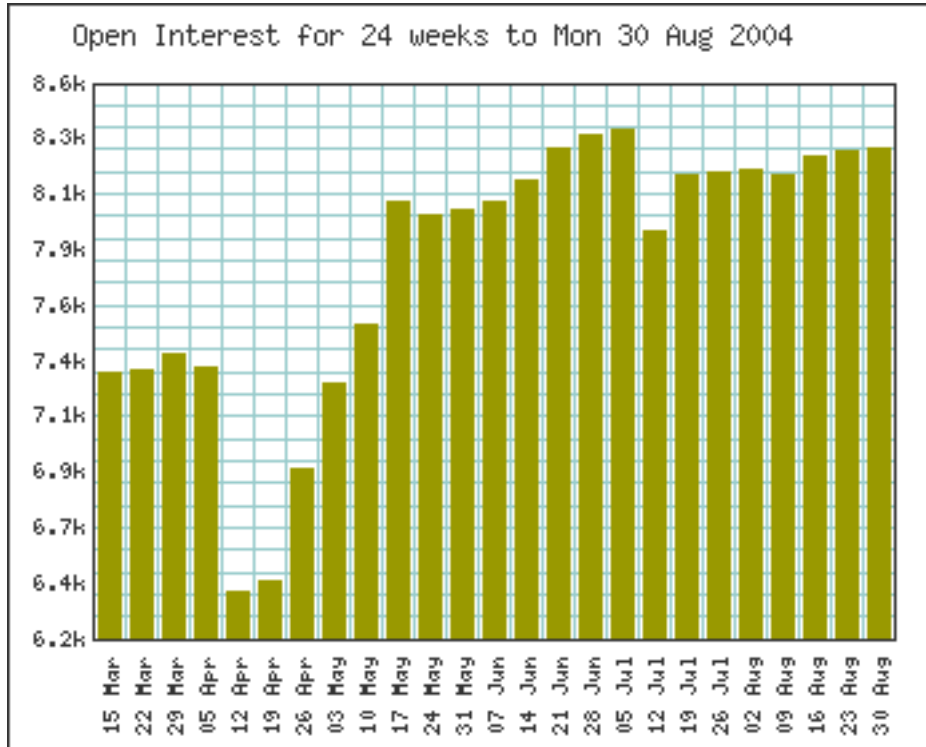
Station Name	Equipment Name	Equipment Type	KV	End Time	Status	Constraint Set ID
Heywood 500kV	Heywood S East 2 275kV LINE	line	275	2004/09/02 13:00:00	STLTP	F-I-HYSE
Heywood 500kV	Heywood S East 2 275kV LINE	line	275	2004/09/02 13:00:00	STLTP	I-HYSE_P
Sydney West 330kV	Sydney W 5 132kV CAP	cap	132	2004/09/02 15:00:00	STLTP	
North West Bend 132kV	N_W_B 6033 132kV CB	cb	132	2004/09/02 15:30:00	STLTP	
Wagga 132kV	Wagga132 132 B1 132kV BUS	bus	132	2004/09/02 16:00:00	STLTP	
Hazelwood Ps 220kV	Hazelwd PS mwts/mps ln 220kV	cb	220	2004/09/02 16:00:00	PTP	
South East 275kV	South_East Heywood. 2 275kV LINE	line	275	2004/09/02 16:30:00	PTP	F-I-HYSE
South East 275kV	South_East Heywood. 2 275kV LINE	line	275	2004/09/02 16:30:00	PTP	I-HYSE_P
Dederang 330kV	Dederang 3 330/240kV XFMR	xfmr2	330/240	2004/09/02 16:30:00	STLTP	I-HV_0600
Callide 132kV	Callide Calvale 7161 132kV LINE	line	132	2004/09/02 17:00:00	STLTP	
Calvale 275kV	Calvale 2 288/138kV XFMR	xfmr2	288/138	2004/09/02 17:00:00	STLTP	
Brinkworth 275kV	BRINKW 6527 275kV CB	cb	275	2004/09/02 17:00:00	PTP	
Kilburn 275kV	Kilburn Dry_Ck 66kV LINE	line	66	2004/09/02 17:00:00	STLTP	S_DRYCK104
Munmorah 330kV	Munmorh 5012 330kV CB	cb	330	2004/09/02 17:30:00	PTP	
Munmorah 330kV	Munmorh 5212 330kV CB	cb	330	2004/09/02 17:30:00	PTP	
Munmorah 330kV	Munmorh MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 17:30:00	STLTP	N-MNSN_21
Sydney North 330kV	Sydney N MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 17:30:00	STLTP	N-MNSN_21
Tuggerah 330kV	Tuggerah MunSyNTu-T 21 330kV LINE	line	330	2004/09/02 17:30:00	STLTP	N-MNSN_21
Cherry Gardens 275kV	Cherry_Gdn Happy_Vly 275kV LINE	line	275	2004/09/02 17:30:00	STLTP	
Tailem Bend 275kV	T_BEND 6535 275kV CB	cb	275	2004/09/03 12:30:00	STLTP	F-S-PATB
Tailem Bend 275kV	T_BEND 6535 275kV CB	cb	275	2004/09/03 12:30:00	STLTP	S-PATB
Tailem Bend 275kV	Tailem_Bnd Para 275kV 1 275kV LINE	line	275	2004/09/03 12:30:00	STLTP	F-S-PATB
Tailem Bend 275kV	Tailem_Bnd Para 275kV 1 275kV LINE	line	275	2004/09/03 12:30:00	STLTP	S-PATB
Munmorah 330kV	Munmorh Sydney W 26 330kV LINE	line	330	2004/09/03 15:15:00	STLTP	N-MNSW_26
South Pine 275kV	h2_spine.fdr 8252 cb	cb	275	2004/09/03 16:00:00	STLTP	
Rowville 500kV	Rowvill500 A1 500/220kV XFMR	xfmr2	500/220	2004/09/03 16:30:00	PTP	V-ROTX_P
Bayswater 330kV	Bayswtr330 5012 330kV CB	cb	330	2004/09/03 17:00:00	PTP	
Murray	M13 Murray-Murray 2 CB M132B	cb	330	2004/09/03 17:00:00	PTP	
Callide 132kV	Callide Calvale 7161 132kV LINE	line	132	2004/09/03 17:00:00	STLTP	
Calvale 275kV	Calvale 2 288/138kV XFMR	xfmr2	288/138	2004/09/03 17:00:00	STLTP	
Happy Valley 275kV	Happy_Vly E 275kV BUS	bus	275	2004/09/03 17:00:00	STLTP	
Happy Valley 275kV	Happy_Vly 4 275/66kV XFMR	xfmr2	275/66	2004/09/03 17:00:00	STLTP	
Happy Valley 275kV	H_VALL 6525 275kV CB	cb	275	2004/09/03 17:30:00	PTP	
Tailem Bend 275kV	T_BEND 6536 275kV CB	cb	275	2004/09/03 18:30:00	PTP	F-S-TB_CB6536
Tailem Bend 275kV	T_BEND 6536 275kV CB	cb	275	2004/09/03 18:30:00	PTP	S-TB_CB6536
Tailem Bend 275kV	T_BEND 6596 275kV CB	cb	275	2004/09/03 18:30:00	STLTP	F-S-SETB
Tailem Bend 275kV	T_BEND 6596 275kV CB	cb	275	2004/09/03 18:30:00	STLTP	S-TBSE
Tailem Bend 275kV	Tailem_Bnd South_East 1 275kV LINE	line	275	2004/09/03 18:30:00	STLTP	F-S-SETB
Tailem Bend 275kV	Tailem_Bnd South_East 1 275kV LINE	line	275	2004/09/03 18:30:00	STLTP	S-TBSE
Playford A + B Ps 275kV	Playfod_PS 2 275/11kV XFMR	xfmr2	275/11	2004/09/04 17:00:00	PTP	

16

Station Name	Equipment Name	Equipment Type	KV	End Time	Status	Constraint Set ID
Nebo 275kV	Nebo 275kV 1 132kV BUS	bus	132	2004/09/06 04:00:00	SUBMIT	
Nebo 275kV	Nebo 275kV 1 288/138/19kV XFMR	xfmr3	288/138/19	2004/09/06 04:00:00	SUBMIT	
T146_oakey	T146_oakey Tangkam 7246 110kV LINE	line	110	2004/09/06 12:00:00	SUBMIT	
Belmont 275kV	Belmont 4 275kV CAP	cap	275	2004/09/06 12:30:00	SUBMIT	
Belmont 275kV	h3_belmt.cap 5842 cb	cb	275	2004/09/06 12:30:00	SUBMIT	
Strathmore 275kV	h35_sthm. Cplr 5042 cb	cb	275	2004/09/06 16:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8792 cb	cb	275	2004/09/06 16:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8802 cb	cb	275	2004/09/06 16:00:00	SUBMIT	
T146_oakey	T146_oakey Tangkam 7247 110kV LINE	line	110	2004/09/06 17:00:00	SUBMIT	
Alcoa/portland 500kV	Alc/prtlnd Heywood 1 500kV LINE	line	500	2004/09/06 17:00:00	STLTP	F-I_TL_0600
Alcoa/portland 500kV	Alc/prtlnd Heywood 1 500kV LINE	line	500	2004/09/06 17:00:00	STLTP	V*HYBT
Alcoa/portland 500kV	Alc/prtlnd Heywood 1 500kV LINE	line	500	2004/09/06 17:00:00	STLTP	V*HYCPBT
Palmwoods 275kV	Palmwoods 1 132kV BUS	bus	132	2004/09/07 14:00:00	SUBMIT	
Palmwoods 275kV	Palmwoods 2 132kV BUS	bus	132	2004/09/07 14:00:00	SUBMIT	
Palmwoods 275kV	Palmwoods 2 132kV CAP	cap	132	2004/09/07 14:00:00	SUBMIT	
Torrens A Ps 275kV	TIPS_A AC2 275kV CB	cb	275	2004/09/07 16:00:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg Tangkam 731 110kV LINE	line	110	2004/09/07 17:00:00	SUBMIT	
Alcoa/portland 500kV	Alc/prtlnd 1 500kV REACT	react	500	2004/09/07 17:00:00	PTP	
Alcoa/portland 500kV	Alc/prtlnd Heywood 1 500kV LINE	line	500	2004/09/07 17:00:00	SUBMIT	
South Morang 500kV	S Morang Rowvill500 3 500kV LINE	line	500	2004/09/07 17:00:00	MTLTP	V-ROSM_P
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2004/09/07 17:30:00	SUBMIT	
Strathmore 275kV	h35_sthm. Cplr 5042 cb	cb	275	2004/09/08 12:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8402 cb	cb	275	2004/09/08 12:00:00	SUBMIT	
Strathmore 275kV	h35_sthm. Fdr 8792 cb	cb	275	2004/09/08 12:00:00	SUBMIT	
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-CNKV_6
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-DTKV_18
Dapto 330kV	Dapto Kng Vly PS 18 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-X_6_18
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-CNKV_6
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-DTKV_18
Kangaroo Valley Ps	Kng Vly PS Canberra 6 330kV LINE	line	330	2004/09/08 15:00:00	MTLTP	N-X_6_18
Loganlea 275kV	Loganlea 5 110kV CAP	cap	110	2004/09/08 15:00:00	SUBMIT	
Sydney South 330kV	Sydney S 1 16kV SYNC	sync	16	2004/09/08 15:30:00	SUBMIT	
Snuggery 132kV	Snuggery TF 4 132/33/11kV XFMR	xfmr3	132/33/11	2004/09/08 15:30:00	SUBMIT	
Bouldercombe 275kV	h10_bcmb.cplr 5022 cb	cb	275	2004/09/08 16:00:00	SUBMIT	
Nebo 275kV	h11_nebo.cplr 5042 cb	cb	275	2004/09/08 16:00:00	SUBMIT	
Torrens A Ps 275kV	TIPS_A AW2 275kV CB	cb	275	2004/09/08 16:00:00	SUBMIT	
Brinkworth 275kV	BRINKW 6528 275kV CB	cb	275	2004/09/08 16:30:00	SUBMIT	
Brinkworth 275kV	Brinkworth TF 3 275/132/11kV XFMR	xfmr3	275/132/11	2004/09/08 16:30:00	SUBMIT	
Middle Ridge 275kV	Middle Rdg Tangkam 731 110kV LINE	line	110	2004/09/08 17:00:00	SUBMIT	
South Morang 500kV	S Morang Rowvill500 3 500kV LINE	line	500	2004/09/08 17:00:00	MTLTP	V-ROSM_P
Wagga 330kV	Wagga 3 132kV CAP	cap	132	2004/09/08 17:30:00	SUBMIT	

D-cypha Weekly Report

EWN Publishing



Trading Summary for week ending Monday 30/08/04

- Futures contracts traded this week = 10
  - Base = 0
  - Peak = 10
- Options contracts traded this week = 0
- Volume of EFP trades this week = 0
- Volume of BTF trades this week = 0

- Futures & Options contracts traded to date = 21,701
- Open Interest as at COB Monday 30/08/04 = 8,388 lots

**Average volume**

- Average daily volume FY04-05 = 34
- August 2004 average daily volume = 29
- July 2004 average daily volume = 39
- June 2004 average daily volume = 48

**Activity**

- Volume on the bid and offer, counted at 4.00pm on 30/08/04= 625 lots.
- Brokers with active orders this week include: CSFB, ICAP, JP Morgan, Man Financial and Prebon.
- Bids and offers consistently quoted across all four states in Quarterly and Cal/Fin Year Strip Products and in the Custom Market.

18