

Electricity prices

The IEA publication **Energy Balances of OECD Countries 2008** shows the increase in consumption in Australia since 1960 (p. II 34)

	1960	1970	1980	1990	2000	2005	2006	2007estimated
Electricity consumption (TWh)	18.8	45.2	86.9	144.3	192.6	229.7	234.6	242.1estimated

(TWh=terawatt hours)

The following information is from *Electricity Industry Restructuring: The State of Play*, written by Mike Roarty of the Parliamentary Library in 1998. This publication has some historical material on pricing:

The Electricity market

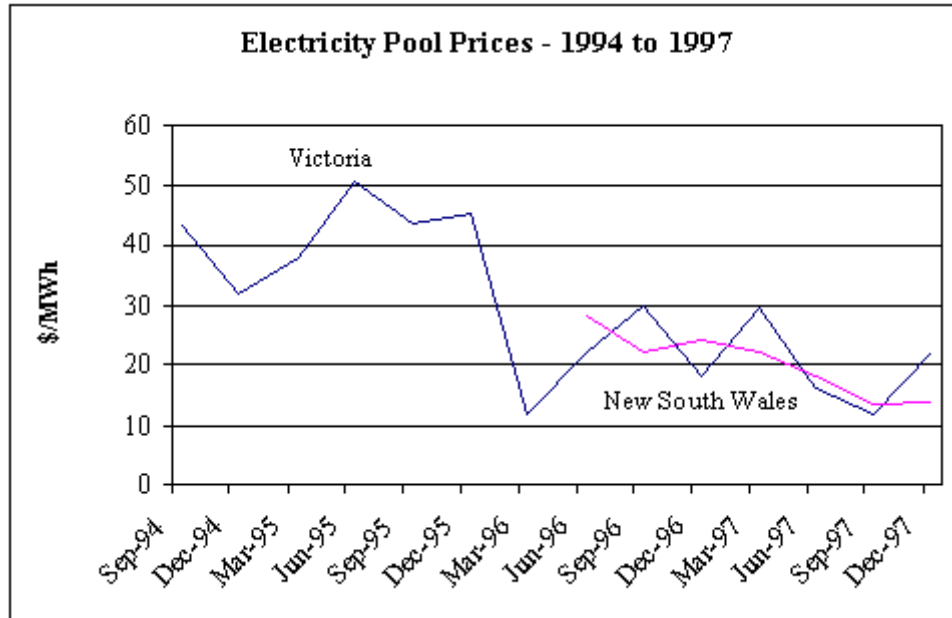
Prior to the early 1990s, the electricity industry was wholly state-owned and prices were regulated. Restructuring of the industry led to the creation of the National Electricity Market (NEM).

[The NEM began operating as a wholesale market for the supply of electricity to retailers and end-users in Queensland, New South Wales, the Australian Capital Territory, Victoria and South Australia in December 1998. Tasmania joined the NEM in 2005]

Electricity Prices

Electricity prices (Australian averages) declined appreciably over the period 1992 to 1997 during the period of the implementation of electricity restructuring and the development of the NEM from May 1994. The declining trend in electricity pool prices is shown for Victoria and New South Wales on a quarterly basis from 1994 to 1997 in Figure 2 in \$/MWh. Pool prices equate to the wholesale market and do not represent prices in most of the commercial or household markets. The alignment of pool prices in the two states closely parallel each other from June 1996 to December 1997. Following the alignment of the markets, the excess generating capacity in New South Wales has tended to depress the upward strength of the Victorian pool price during periods of peak demand whilst New South Wales is able to capitalise on the lower prices in Victoria during periods of low demand.

Figure 2: Electricity Pool Prices, 1994 to 1997



Source: Electricity Supply Association of Australia

Declining prices have also been aided by improvements in technology which have reduced operating costs. For example there have been significant improvements in coal handling systems and the preparation of coal prior to use in coal-fired plants.

NEMMCO (the National Electricity Market Management Company Limited) was established in 1996 to be the market operator of the NEM and operator of the power system that underpins NEM operation.

The following figures are from NEMMCO

Average annual prices (per financial year) in \$Mwh (megawatts per hour)

Year	NSW	QLD	SA	SNOWY	TAS	VIC
1998-1999	33.13	51.65	156.02	32.34		36.33
1999-2000	28.27	44.11	59.27	27.96		26.35
2000-2001	37.69	41.33	56.39	37.06		44.57
2001-2002	34.76	35.34	31.61	31.59		30.97
2002-2003	32.91	37.79	30.11	29.83		27.56
2003-2004	32.37	28.18	34.86	30.80		25.38
2004-2005	39.33	28.96	36.07	34.05	190.38	27.62
2005-2006	37.24	28.12	37.76	31.09	56.76	32.47
2006-2007	58.72	52.14	51.61	55.19	49.56	54.80

2007-2008	41.66	52.34	73.50	45.49	54.68	46.79
2008-2009	43.36	36.61	61.10		47.41	48.11

The COAG Energy Market Review “**Towards a truly national and efficient energy market**” (2002) states:

Demand has shown that it is relatively price inelastic in the immediate to short term. Large electricity users are generally not easily able to reduce competition at very short notice, due to the impact on their production processes, and are limited in how long they can remain operating with reduced supply...(p 175.)

Residential consumers do not see price signals:

Demand side responses are reliant on consumers having some visibility of the price of energy and being able to determine their responses to changes in price. This does not automatically mean that this must be in real time, but instead would most likely be in concert with an intermediary such as a retailer or aggregator who offered a product that valued interruptibility in return for a benefit of some type...

With around 50% of load subject to price control, the opportunity for an active demand side involvement by smaller consumers is significantly reduced, aside from traditional offerings such as off-peak hot water rates. Without the ability to differentiate products and prices in an openly competitive market, retailers are not able to offer these consumers products that will encourage appropriate demand curtailment at times of higher wholesale prices. (p 177)

Other documents which might be of interest:

Evaluating Energy Prices - Speech by M Keating, Chairman IPART (NSW), 20 Nov 2007

Chester, Lynne, **The parlous investment environment for Australian electricity generation and transmission**, International Association for Energy Economics, second quarter, 2008, pp. 29-35