

Retail Competition Information Brief No. 4

National Electricity Market

What is the National Electricity Market (NEM)?

The NEM commenced in 1998 and covers New South Wales, Victoria, Queensland, the Australian Capital Territory and South Australia. Tasmania will become a participating jurisdiction in the NEM in May 2005.

The NEM allows trading in electricity between generators and wholesale customers, including electricity retailers. It establishes a common set of rules under which electricity can be traded both within and between States at a wholesale level and industry participants can obtain access to electricity transmission and distribution networks. It also facilitates competition at a retail level.

A number of mechanisms have been put into place to regulate the NEM and ensure that it runs efficiently, securely and safely, with the wholesale market being operated by the National Energy Market Management Company (NEMMCO) and supervised by the National Electricity Code Administrator Ltd (NECA) and the Australian Competition and Consumer Commission (ACCC).

How does the NEM operate?

Unlike other markets, electricity cannot be stored and it is impossible to distinguish which generator produced the electricity consumed by an individual customer. As a result, the wholesale market uses the concept of a pool in which electricity from generators is centrally dispatched to meet electricity demand.

In the NEM, retailers purchase the electricity that they sell to customers from NEMMCO through the wholesale pool, whilst generators sell directly to NEMMCO through the pool and are dispatched to meet customer demand, using, in general, the lowest priced generator first.

The wholesale price of electricity in the pool varies on a half-hourly basis, depending on the prices of bids submitted by generators and the level of customer demand for electricity in each half-hour period. As demand rises relative to supply, prices tend to increase (sometimes rapidly), and vice versa.

As the wholesale price (spot price) of electricity can be volatile, generators and retailers enter into financial contracts (hedge contracts) outside the pool. The financial contracts allow generators and retailers to manage the risks associated with fluctuations in half-hourly spot prices.

These financial contracts are totally separate from the spot market operated by NEMMCO, but perform an essential function by enabling retailers to manage price fluctuations and thereby offer customers greater price certainty.

Therefore, while the spot price fluctuates every half hour, the price offered by a retailer to its customer generally does not.

The prices charged for high voltage electricity transmission and low voltage distribution are regulated by the ACCC and State regulators respectively. The ACCC also regulates the manner in which generators and other participants can access transmission networks, and State Regulators regulate access to distribution networks.

Can I buy from the wholesale market instead of using a retailer?

Yes, but this is a business decision requiring some consideration. Most business customers will choose to buy their electricity from a retailer because of the complexities and costs involved in buying wholesale through the pool, and managing the resulting exposure to volatile pool prices.

What must I do if I wish to buy wholesale?

You must first register with NEMMCO as a Market Customer, and classify the point at which you take supply as a market load. To do so, you will need to satisfy NEMMCO that you are a contestable customer at that point, that you are able to satisfy certain prudential requirements set out in the National Electricity Code and there is appropriate metering and communications systems available. You will also need to establish an Austraclear account.

If you wish to buy wholesale, you will also have to manage price fluctuations to get the best price. You will need to recognise that an increase in pool prices could expose you to an increase in your electricity bill. You will need to explore buying financial hedges or managing your electricity consumption to minimise your exposure.

Buying wholesale requires close management of risk and good judgement.

The retail electricity market has already proven to be highly competitive, so deciding to perform this function yourself should be taken only after very careful consideration of the costs and benefits.

Where can I get further information?

More information on the NEM and its operation can be found at:

<http://www.nemmco.com.au>

<http://www.neca.com.au>

<http://www.accc.gov.au>