

Managing electricity price risk

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Information on alternatives for buying electricity that can help you manage electricity spot price risk

How do you purchase electricity?

Most electricity consumers purchase electricity from a retailer at set retail prices. However, some consumers purchase electricity on terms where the price is not determined by a retailer but is instead linked (in part or total) to wholesale prices also known as spot prices.

In the wholesale market, prices are determined for each half-hour, with the spot price fluctuating to reflect the prevailing supply and demand situation. For example, if electricity demand is low or if the lakes feeding hydro power stations are full, spot prices can be low. The converse can also be true.

If you wish to know more about electricity and how the wholesale electricity market works, visit www.ea.govt.nz/about-us/documents-publications/electricity-nz.

Buying electricity at wholesale market or spot prices is not necessarily a quick and easy money saver. If you are already or are considering purchasing at prices related to spot prices, there are things you need to consider.

Are you aware of your risk exposure?

It is important to understand the risks involved in buying electricity at wholesale market and spot prices.

Experience shows that some consumers have not understood these risks – see the quotes below.

“It had refused to pay its latest bill, which leaped to \$11,000 from a monthly average of \$2,300.”

Hotel, *NZ Herald*

“Very high spot prices were having a big impact on the company’s costs.”

Manufacturer, *Nelson Mail*

How volatile are spot prices?

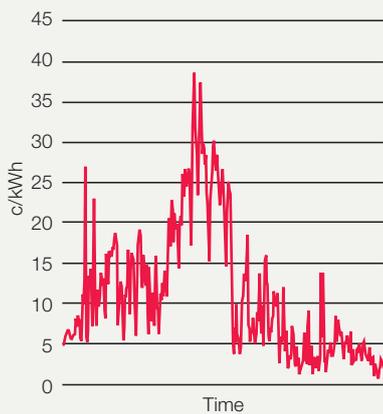
Electricity spot markets are widely considered to be among the most volatile of all markets.

Any buyer that purchases all its electricity at spot prices must be able to tolerate very large increases in its electricity costs from time to time.

Could your business survive electricity costs 65% above average? That was the case for consumers purchasing electricity at spot prices in 2008 if they didn’t take other steps to reduce their risk exposure.



Spot price risk



Risk reduction tools

Fixed price supply contracts

Pass risk on to a retailer

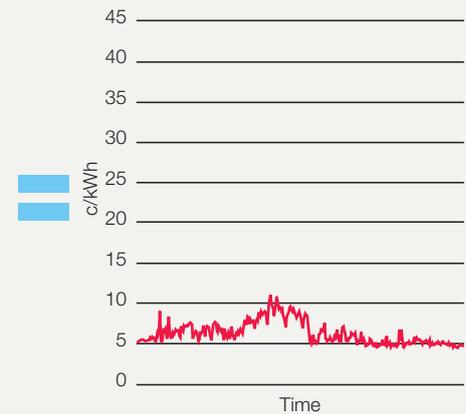
Financial contracts (hedges)

Contracts for differences
Futures contracts
Options contracts

Physical arrangements

Reduce consumption
Increase generation
Switch to back-up generation

Net risk exposure



How can you gauge your risk exposure?

If you are considering buying your electricity under a contract linked to spot prices, you are strongly recommended to seek advice from a financial adviser. There are also some simple checks you can undertake to help gauge your risk.

One check is to apply a stress test. In essence, this involves calculating the increase in your electricity costs under hypothetical scenarios of high spot prices. If the resulting increase is unacceptable, you should look to reduce your net exposure to spot prices.

To apply a stress test, you can use the stress tests that the Authority publishes at www.ea.govt.nz/industry/security-of-supply/stress-testing-regime/stress-tests.

There are things you can do to reduce your risk exposure

There are options available to reduce your net risk exposure to an acceptable level, including:

- passing the risk on to your retailer by purchasing some or all of your electricity at a fixed price basis
- purchasing an insurance-style financial contract to provide protection against high spot prices
- actively reducing your consumption during periods of high spot prices.

You need to balance the risks and rewards of spot price exposure to a level that is suitable for your business. The best approach to risk management for you may be different to the best approach for other consumers.

The Electricity Authority wants to help consumers understand their risks

The *Managing electricity price risk* guide will help you understand the pros and cons of buying electricity at spot prices compared with other alternatives and outline the purchasing options available to help reduce spot price risk.

The guide covers:

- the different ways of buying electricity
- wholesale market spot price volatility
- how spot price volatility affects consumers
- how consumers can limit electricity price risk
- how to choose the most appropriate level of risk
- the link to the stress testing regime
- what principles should govern choices about risk
- how to get more information and help on electricity price risk issues.

You can find the guide at www.ea.govt.nz/consumer/guides.

For a printed version, please contact the Electricity Authority at info@ea.govt.nz or phone 04 460 8860.

Contact information

Electricity Authority, Te Mana Hiko, Level 7, ASB Bank Tower, 2 Hunter Street
PO Box 10041, Wellington 6143, New Zealand
TEL + 64 4 460 8860 FAX + 64 4 460 8879 EMAIL info@ea.govt.nz
www.ea.govt.nz

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