Market design review

The electricity market has been operating for a decade now and the Commission is reviewing its design to see if changes can be made to improve its performance.

The review was prompted by a 2006 government review of the industry and market, which endorsed its basic structure but agreed that some opportunities for improvement should be pursued. In 2007 the Commission released an issues paper aimed at trying to identify these improvements.

The Commission is focusing on five key areas for the next stage of the review:

- Competition and prices
- Effectiveness of energy-only prices
- Availability of market information
- Demand-side participation
- Energy poverty

These will be examined in an options paper that will set out a range of ways that improvements can be addressed. This paper is expected to be released in May.

The five areas were chosen following submissions from consumers and other stakeholders.

Many were concerned about a perceived lack of competition, especially for residential customers. There was also concern whether energy-only prices help timely investment in capacity. Uneven availability of market information was believed to be affecting decision making, and many submitters commented that present arrangements disadvantage demand-side response relative to supply-side options. A number of submitters expressed concern about energy poverty for certain categories of consumer, especially those on low fixed incomes. This issue is also being looked at separately by other government agencies.

The Commission welcomes feedback on this work, as the review progresses.

For more information go to www.electricitycommission.govt.nz/opdev/wholesale/marketdesign/marketdesignreview

Industry following consumer guidelines

Electricity retailers are complying with revised guidelines on assisting vulnerable consumers, according to Commission monitoring, and there has been a significant and sustained reduction in the level of disconnections for non payment.

The guidelines were developed in 2006 and further reviewed in 2007 after public concern about power company disconnection processes. The Commission was asked by the Government to review compliance and recommend whether regulation was needed to force all companies to meet the guidelines.

The Commission recommended that regulation is not necessary as every electricity retailer is following the guidelines. The retailers took on the guidelines in good faith and have fully implemented them. To comply, retailers have made substantial changes to their systems and procedures.

Our preference is to develop voluntary measures wherever possible and we have been impressed by the industry's commitment and willingness to implement the guidelines. The Commission will continue to monitor compliance and is regularly publishing statistics relating to the guidelines.

For more information go to www.electricitycommission.govt.nz/opdev/retail/lowincome

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Notes from the Chair

Electricity Commission
Te Komihana Hiko

APRIL 2008

Chair Comment

I have been Chair of the Electricity Commission since October 2007 and in that short time a range of significant issues have come in front of the Commission. In the year ahead a high level of activity faces us.

Part of my learning has been getting out and speaking and listening to stakeholders from as many areas as possible. I intend to continue that over the coming year to understand your issues and to explain the Commission's role as a regulator and the activities it is undertaking.

We also have a number of new board members – David Bull, Linda Constable and Richard Bentley – all of whom have significant governance experience. We are all enjoying the challenge and the opportunity to be involved in such a vital sector at a key stage of its development.

Energy security and the adequacy of power supplies have been on everyone's minds recently. This has received a high level of attention at the Commission.

It is important to remember that the electricity system is designed to manage a range of uncertainties that can occur minute by minute, hour by hour every day of the year, as well as from one year to another – lines can fail, generators can suddenly 'trip' or become unavailable, demand can increase rapidly and we can go weeks without rain. Electricity companies have a range of tools they use to adjust to these changing circumstances.

One of the lessons from the last few months is that the system is designed to cope in times of such stress. It has never been designed to cope with every contingency and there have to be sensible trade offs. But rather than making us anxious, its recent performance should give us confidence in the level of reliability inherent in the system.

David Caygill

Supply security

The early months of the year have seen significant public debate about the power system as a number of issues have coincided. Some were planned, such as power plant maintenance, and some unexpected, such as lower than average rainfall and the early retirement of the New Plymouth power station.

The Commission has been watching the situation closely and talking to consumers and generators. We are confident that the system will continue to cope and that industry members are acting appropriately. The reserve power station Whirinaki has been providing additional power when needed, as it was designed to do.

History shows storage levels can quickly change, and that predicting lake inflows is risky. For example, one of the lowest 12 month lake inflows recorded was from March 2005 to March 2006. This did not cause any issues, showing that the electricity system can cope with extended periods of low rainfall. Lake levels changing should not cause anxiety about the fundamental soundness of the power system.

The Commission will continue to monitor the state of the system and respond to any issues as we move into periods of higher power demand.

For more information go to www.electricitycommission.govt.nz/opdev/secsupply

Generation and demand scenarios

Later this year the Commission will issue its second Statement of Opportunities (SOO), which examines a range of scenarios for electricity demand and generation.

The SOO is one of the most important pieces of work done by the Commission. The scenarios look out 20 years and provide the basis against which we assess transmission projects.

While the Commission doesn't have a direct role in most industry investment decisions, the SOO provides useful information to industry and stakeholders that can aid their understanding of possible developments.

The SOO is usually prepared every two years; however this second version was delayed to ensure it could take into account the policy directions in the 2007 New Zealand Energy Strategy. As a result, one of the scenarios will be a 90% renewable one, reflecting the direction of the Energy Strategy.

For more information go to www.electricitycommission.govt.nz/opdev/modelling

Advanced meters

The Commission is working with the electricity industry to finalise guidelines to smooth the introduction of a new generation of advanced meters in a way that encourages increased competition for consumers.

Traditional meters use 100 year old technology that can only count how much power is used, not when. The new meters are electronic and can not only tell when power is used, but can allow retailers to signal to consumers when electricity is expensive, which could improve efficiency and reduce peak loads. Retailers can send messages to and get information from advanced meters automatically, removing the need for estimated accounts.

Retailers will be able to offer more choice and options such as savings (if customers move power use to low cost times), through tariffs that are more closely linked to the spot market price of electricity.

The guidelines ensure that all advanced meters will have common standards, meaning consumers can still switch retailers. Changing a meter can be complex and expensive and the Commission believes it is important that the new meters encourage competition rather than lock consumers into a single supplier.

For more information go to www.electricitycommission.govt.nz/opdev/retail/loadmgt

Wind

Electricity from wind farms is a growing source of energy for New Zealand but changes are needed in the way the electricity system operates if more of that energy is to be supplied.

Our system was designed around the way hydro, thermal and geothermal power stations operate. Wind farms perform in different ways and the more of them there are, the greater the potential for them to affect the system.

To understand and anticipate these issues, the Commission began a major wind generation integration project in 2005, which is almost complete. It produced a series of reports by local and international experts analysing the impact of more wind power and how to manage it. These reports, which have been widely consulted on with industry, show that New Zealand is learning from overseas experience, and that it is important to be ahead of the game. Some countries have had to halt wind farm development because their systems had not recognised these issues and made the changes needed ahead of time. This doesn't mean wind is getting preferential treatment, but nor will it be penalised because it works in a different way. Well handled, wind power will increase the generation options available to the country.

For more information go to www.electricitycommission.govt.nz/opdev/comqual/windgen

Grid upgrade process

Transmission is a major focus this year with the Commission expecting to review at least five major project proposals including:

- South Island West Coast
- North of Auckland and Northland
- Central North Island
- Lower South Island
- HVDC Pole 1 replacement

We have already approved $1.2 billion in transmission upgrades in the last three years and these new projects, if approved, will be worth an additional $1 billion.

The Commission uses a grid investment test to ensure the proposals are either needed to improve reliability or are justified on economic grounds. The test is still relatively new and we and Transpower are still learning about how to apply it.

To help improve the process we are developing a detailed grid upgrade investment review policy (GUIRP) that sets out the key steps involved. This is aimed at ensuring the process is efficient and should make it quicker. The Commission developed the GUIRP in conjunction with Transpower and it was recently published for comment so stakeholders can better understand the process.

Grid investments happen in large lumps and so can be very expensive. Consumers eventually bear the cost in their bills. Part of the Commission's role is to protect them from paying too much for power.

But the decisions are not always clear cut and can involve judgements about such things as demand growth and where power stations are likely to be built. They can be contentious and some affected stakeholders have gone to the courts to seek judicial review of two projects the Commission approved in 2007. The Commission won the first in the High Court – relating to the Otahuhu substation – although it has now gone to the Court of Appeal. The second challenge – to the North Island grid upgrade – is expected to be heard in the second half of this year.

For more information go to www.electricitycommission.govt.nz/opdev/transmis/