

On the Lines

NOVEMBER 2008

Earlier this year the Commission published its first newsletter on progress with various projects in the workplan, this second edition provides a further update. Significant work completed or commenced since the last edition includes:

- final sign off of the upgrade of the HVDC Pole 1 replacement
- completed consultation on the Market Design Review Options paper
- completed consultation on the Locational Price Risk paper
- consulted on and finalised a new Statement of Opportunities
- commissioned a new reconciliation system
- initiated a review of the performance of the market over winter
- called for applications for a provider of a joint consumer complaints resolution scheme with the Gas Industry Company.

In conjunction with this work have been the additional tasks related to dealing with low



Winter review

The Commission has initiated a review of how the electricity system coped with the low inflow winter and spring. The central focus of this review is the various policy settings and can they be improved.

Winter 2008 was marked by one of the lowest hydro lake inflows in history and that was on top of a dry autumn. Despite the pressures the system coped. However there were a range of concerns from consumers.

The initiative and cohesion amongst the industry to manage the situation was a significant feature of the winter. This enabled the Commission to stay in the background and, in the main, focus on its monitoring function. As storage approached the emergency zone, the Commission did

hydro inflows. The latter task was made easier due to the initiatives and high input from the industry.

With the decision made on the HVDC, \$1.9 billion of investments have now been approved. The focus is now on Transpower's across Auckland proposal. The Grid Upgrade Investment and Review Policy (GUIRP) is in place for the next round of smaller but nevertheless important investments. The common understanding, as the policy was jointly developed with Transpower, will enable an expeditious approach to the next round of investment proposals.

In 2007/08 the Commission carried out about 40 consultations. The demands this places on participants, other interested parties and the Commission are substantial. However, the pace of development in the sector is also substantial and progress needs to be made to meet the needs of various stakeholders.



Mervyn English General Manager

initiate the use of its load procurement authority but, as events unfolded, did not need to use it.

The review falls into two parts: establishing the facts and a review of and recommendations on the policy framework. An important consideration will be, are incentives aligned in the right way? Two external reviewers – David Hunt and John Isles – are interviewing selected industry people to gather information. They are expected to report back in December with an initial assessment of what happened and possible options for change. It is important to note that any changes that the Commission may initiate following the review, be it a rule or a policy, will go through full due process and consultation.



DSBF project update

An update report has been published on the demand-side bidding and forecasting (DSBF) proposal which, if finally implemented, will see greater centralised forecasting of demand by the System Operator.

At present, pre-dispatch schedules are developed by the System Operator based on estimates of demand every half hour at more than 250 locations and generator offers. Participants can react by committing additional generation or by preparing to reduce load and so new schedules are produced.

The Commission is proposing a new system where the System Operator would centrally forecast demand at most GXP's to improve the demand-side inputs into pre-dispatch scheduling. Central forecast of load is likely to be more accurate and would enable both generators and purchasers to manage their resources better and reduce the compliance burden associated with bidding.

This will require changes to the System Operator's computer systems. Coincidentally, an upgrade is underway, which includes changes to the scheduling and dispatch systems. As a result the DSBF proposal will not be implemented until after this computer system upgrade project is complete, probably not before 2010.

Given the time lag, the Commission intends to reflect any developments in the market between now and then, and submissions on the update report, in the proposal and carry out further consultation before making any recommendation for rule changes.

Other work which may impact the DSBF project includes work on wind generation forecasting arrangements and arrangements for providing wind-related pre-dispatch information. The market design project may also have implications for scheduling processes and the Commission also intends to conduct a review of dispatch arrangements and progress its pricing process improvements project.



Market design review options

The Commission is considering the range of submissions from stakeholders in response to the Market Design Review Options paper.

More than 25 submissions from individuals, groups and organisations representing industry and consumers were received. Following an issues paper released earlier in the year, submitters were asked to address options suggested around five key areas of concern to stakeholders:

- pricing and competition
- energy affordability
- the effectiveness of the energy-only market
- demand-side participation
- the availability of market information.

The Commission has been reviewing the submissions and intends to report back on the options it will pursue in a solutions paper that will be issued in the New Year. This timing will allow the consideration of any recommendations from the winter 08 review and any relevant outcomes from the Commerce Commission's investigation of the electricity market. These solutions will be finalised after consultation.



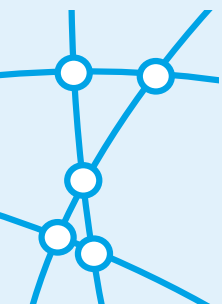
Commercial sector efficiency schemes


The Commission is forecasting significant electricity savings from its efficiency programmes with indications they are on track to exceed the target of 450 GWh of electricity savings and 87,000 tonnes of CO₂ reductions per annum by June 2010.

A significant portion of these savings are expected to be derived from the 11 new commercial sector programmes that the Commission has contracted this year. Providers can apply for part-funding for efficiency projects where there is a current barrier preventing them from proceeding.

Projects are assessed on a case-by-case basis. Typically service providers are required to identify a level of guaranteed electricity savings to be derived from a project and the Commission's funding is required to be repaid on a pro-rata basis if the savings are not achieved. The guarantees provide greater certainty when projecting future electricity savings from the Commission's programmes.

Projects approved include several hospitals, office buildings, a tertiary educational institute, and retail outlets where efficiency enhancements target measures such as upgrades of building management systems, lighting replacements, replacement of inefficient chiller systems, and installation of monitoring and targeting systems.





2008 SOO

The Commission has published the 2008 Statement of Opportunities (SOO), the second SOO it has produced, which takes a long term look at a set of possible developments in the New Zealand electricity system and features a range of possible scenarios.

Grid planning is Transpower's task and Transpower's Annual Planning Report is the primary document presenting a detailed forward looking view of grid development.

In contrast, the SOO is a high level source of independent information based on a set of possible future generation scenarios, and a range of opportunities for investment in the grid and alternatives are identified.

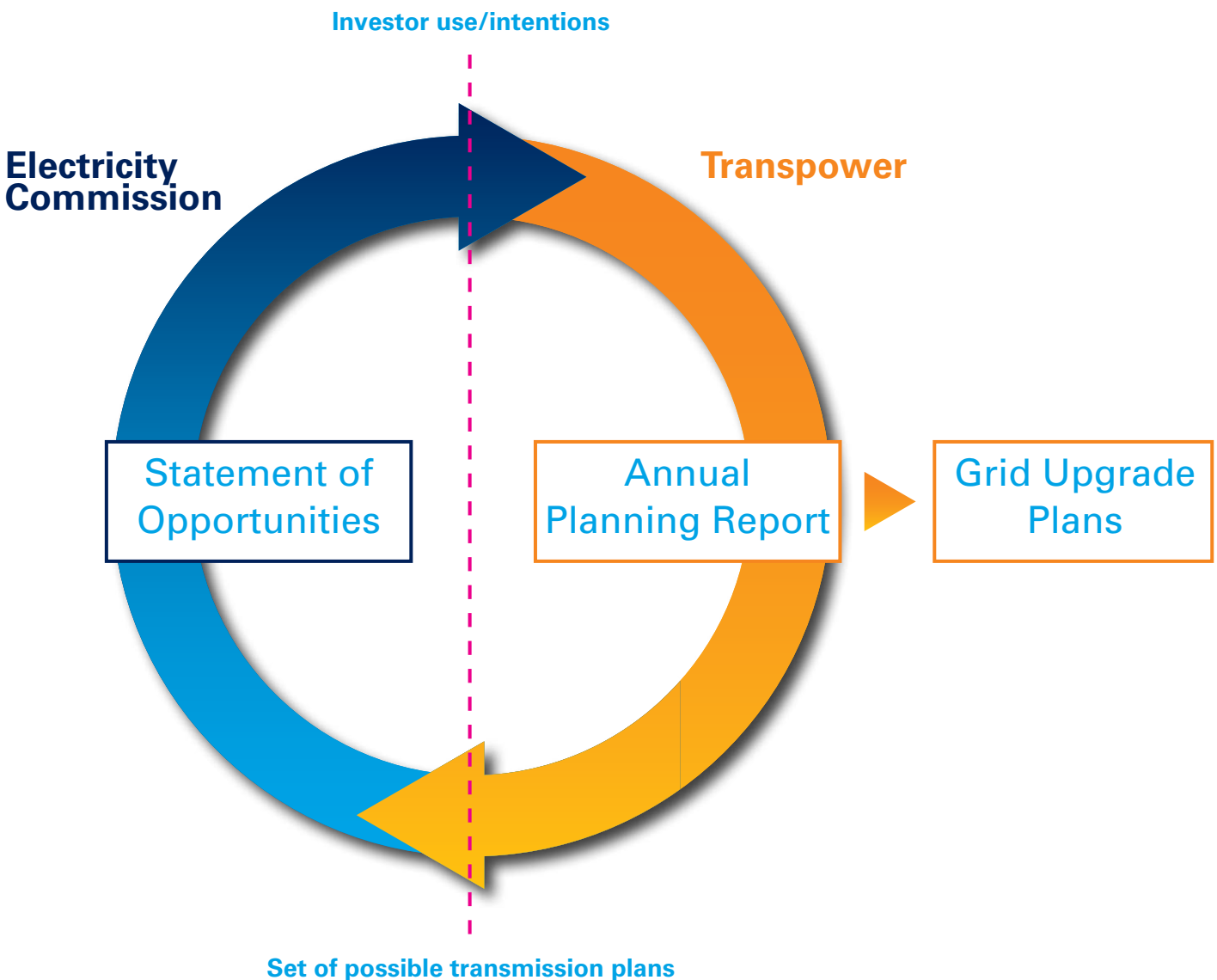
A high level of transparency regarding opportunities and possible futures ensure there is adequate independent information available to any interested party. Other useful associated information is the Centralised Data Set and the various models the Commission uses. This is all available to anyone via the Commission's website.

Five scenarios were presented in the 250 page document. The scenarios have been designed to encompass the range of uncertainty, and are not a central forecast of investments. Although each scenario is intended to be plausible, none represents a 'most likely' future scenario.

The scenarios are also used to test the costs and benefits of any transmission investment so are a starting point for investment analysis, but can be altered if circumstances change, as is being done in Transpower's current Wairakei ring proposal.

The energy and peak demand forecasts presented differ significantly from those presented as part of the initial SOO in 2005. A complete review of the energy demand forecasting process has been carried out, and projections of long-term demand growth lowered as a result. The approach used for peak demand forecasting has also been substantially revised.

A full copy of the SOO is available on the Commission's website – www.electricitycommission.govt.nz/opdev/transmis/soo





Part D review

The Commission is beginning a review of part D of the Electricity Governance Rules to ensure they keep pace with the developments in metering capability, services and standards that have occurred over the last decade.

Part D covers the rules around the installation, testing, certification, monitoring, logging and maintenance of meters. The accuracy of clearing, settlement, billing and ultimately consumer invoicing, are dependent on the integrity of the metering and data handling processes.

The trend is towards an infrastructure where meter reads are recognised electronically within back office software, and the owner of the metering equipment may well be a different party to the operator of the communications and back office system. Key rules within part D are considered

outdated. Current obligations within part D are also posing challenges around compliance and issues have arisen as a result of ambiguities and responsibilities that are difficult for participants to manage.

To start the process the Commission has issued a discussion paper to facilitate a sound scope for the project. The operational efficiency of the data chain needs to be reassessed as well as which participants should have obligations under the rules while still encouraging innovation.

The intention is that any obligations created are pragmatically placed and enforceable. The final scope for the review project will be decided following consultation and is expected to be finalised by the end of this year.



Grid upgrades approved

	Date approved	(million)
Tactical Transmisssion Upgrade (TTUs)		\$117.79
Grid Development Proposals (GDPs) 1-11		\$104.82
HVDC Interim Grid Expenditure (IGE)	12 Dec 05	\$6.30
Auckland CBD Cable Ducts IGE	21 Dec 05	\$7.81
Auckland CBD Cable Ducts IGE Stage II	13 Oct 06	\$9.36
Haywards-Takapu Road thermal upgrade and terminal equipment upgrade	6 Dec 06	\$2.00
Upper South Island DSP trial for grid support contracts	26 Jun 07	\$8.27
Upper South Island Reactive Support	29 May 08	\$70.00
North Island Grid Upgrade (NIGU) Proposal	5 Jul 07	\$824.00
Otahuhu substation diversity proposal	30 Aug 07	\$99.00
Central North Island thermal upgrades	24 Apr 08	\$18.00
West Coast Upgrade Project	7 July 08	\$19.00
HVDC Upgrade	25 Sept 08	\$672.00

Grand total approved \$1,958.35 million