

Lower South Island Power System Reliability

Transpower's role in developing the Grid

10 October 2008

TRANSPOWER



Investment Framework

- Transpower identifies investment needs & develops proposals to resolve need
- Submission to regulator for approval (Electricity Commission)
- If approved Transpower can recover investment through charges on all grid users
- Customers can ask Transpower to invest for their benefit – in which case they meet the cost directly



Types of investments

- Reliability – ensure demand can be met for credible scenarios and where cost of interruption exceeds cost of grid investment
- Economic – when the benefits of enabling additional generation are greater than the cost of building new grid
- Focus for this group is reliability. Critical inputs to justifying grid investment are:
 - The forecast of demand within the region into the future
 - The cost of interruption to supply for consumers



Reliability

- Ensuring local power system can meet demand for electricity in the region
 - For “credible power system events” – loss of some part of the system
 - When generation from power stations in the region is low
- New generation projects
 - Separate workstream (Transmission To Enable Renewables)
 - Lower SI TTER work currently on hold, awaiting outcome of other work. Plan to recommence in early 2009



Developing a upgrade proposal

- Confirm need – data on demand forecast, annual planning report analysis, regional grid plans, etc
- Long list of options – gather input from stakeholders
 - Some options may not be transmission
- Short list options – talk to stakeholders
 - More detailed analysis and costing
- Submit for approval to Electricity Commission



Acronyms

- How transmission investment is progressed is set out in Electricity Governance Rules (EGR's) Section that deals with transmission is known as "Part F".
- Grid Investments are subject to the Grid Investment Test set out in Part F of the rules – GIT.
- Transpower proposals to the Electricity Commission – Grid Upgrade Plans – GUP.
- Has only been in place 2-3 years – still learning our way.



Timeline

- Oct/Nov - Confirm inputs on demand and generation constraints.
- End Nov/early Dec - Meet to review and consider possible long list of solutions.
- Jan/Mar 09 - Finalise demand forecast and detailed studies on long list by Transpower.



Timeline

- April 09 – Meet and consult to identify short list options and review draft regional plan.
- June/July 09 - Finalise Grid Upgrade Proposal and regional plan – June/July 09.
- July 09 – Submission of GUP to EC for approval.
- Commitment to seeking your input and keeping stakeholders informed through the process.

