



Are there alternatives?

If New Zealand is to have a secure electricity future, three things are needed: more generation, a stronger electricity grid, and improved energy efficiency.

A stronger grid will ensure that electricity, wherever it is generated, can get to where it is needed.

Don't we already have enough transmission lines?

New Zealand's core electricity grid was largely built in the 1950s and '60s. It continues to offer a reliable supply, but in some places it is nearing capacity. Transpower needs to provide more transmission capacity to cater for the increasing demand for electricity – and that means new transmission lines.

Is Transpower saying that upgrading the grid is the only solution?

No. Transpower believes that enhanced transmission is only part of the answer to New Zealand's future energy needs.

New generation sources and initiatives like improved energy efficiency are also required.

In other words, New Zealand needs to generate more electricity, and we need a stronger National Grid to get it to where it is used, and we need to use it more wisely.

Will upgrading the National Grid discourage the development of new generation?

No. By increasing the certainty that the electricity produced can get to where it is needed, a stronger National Grid should encourage the most economic generation proposals to proceed – wherever they may be located. A strong National Grid is also more likely to favour renewable energy sources (like geothermal, hydro and wind) that can not be transported to areas of demand to be generated.

How can Transpower announce a major grid upgrade when it doesn't know where new power stations may be built?

We have looked at a range of possibilities for future generation development, covering different locations, different fuels (coal, hydro, wind, gas etc) and different timings. From all these factors we have developed different future scenarios. In every one of these future scenarios an upgrade of the core electricity grid in the North Island is needed. In particular, a new transmission line would provide for generation anywhere near or south of Whakamaru, including the South Island.

Couldn't Auckland's need for more electricity be met by building a new generation plant in the Auckland region?

In planning to have a new transmission in place by 2011, Transpower has already taken into account committed plans for new generation, like Genesis Energy's planned e3p thermal plant at Huntly. It is possible that other power stations could be built in or close to Auckland. However, nothing is confirmed at the moment and demand for electricity is steadily increasing. Transpower can't take a 'wait and see' approach because of the time it takes to plan and build a new line.

Did Transpower look at alternatives to transmission?

In September 2004 Transpower issued a Request for Information (RFI), which helped identify and assess any non-transmission alternatives to the North Island Grid Upgrade project. There were no firm or viable options identified that would allow the new line to be delayed.

The Electricity Commission will determine whether the alternatives analysis undertaken by Transpower for the Amended Proposal is robust.

That is not to say that new investment is not happening. All New Zealand's generating companies are developing plans for new generation. But they've told us that their projects, if they proceed, are not a replacement for investment in transmission, and that upgrading the National Grid is essential to support the operation of an efficient electricity market in New Zealand.

For the Amended Proposal, Transpower also built on the work undertaken by the Electricity Commission to identify realistic transmission and generation options to assess further to ensure that the Amended Proposal represented the most cost effective option. This analysis can be found in the Amended Proposal submitted to the Electricity Commission. It confirms that the Transpower's North Island Grid Upgrade Project is cost effective against both generation and other transmission options.

Any viable and committed non-transmission alternatives could potentially delay the need for transmission investment for several years. It is important to recognise that this is a matter of timing – it does not remove the need for the new transmission line.

Who will decide whether Transpower's proposal is the best solution?

The Electricity Commission has this role. The Electricity Commission will assess whether the proposed investment as set out in the Amended Proposal submitted in October 2006 is necessary to maintain the reliability of the electricity grid and whether it meets the Grid Investment Test compared to alternatives.

For further information on Alternatives please check out our website (www.gridupgrade.co.nz) or phone the call centre (0800 33 88 66).