contact

Submission to Transpower New Zealand Limited

Lower South Island
(Southland - Coastal Otago 110kV Network)
Reliability Investigation
Consultation Document: April 2009

From

Contact Energy Limited

13 May 2009

Introduction

Contact Energy Limited ("Contact") welcomes the opportunity to provide feedback to Transpower New Zealand Limited ("Transpower") on the Lower South Island Consultation Document: April 2009. Contact's feedback follows – in response to the questions raised in the document.

For any questions related to this submission, please contact:

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Some general comments in response to the Consultation Document:

- Contact has a significant interest in the Lower South Island (LSI) region – both as a generator and retailer and encourages Transpower to develop – and seek approval for - a long-term transmission plan for the LSI Region.

- Contact has had senior representatives and both the LSI regional forums and appreciates the opportunity to contribute to Transpower's regional planning.

- Contact supports Transpower's aim to ensure sufficient investment is made in the National Grid to meet the future needs of electricity consumers and participants in the electricity industry. Contact suggests this reliability investigation extends beyond the immediate LSI region described and should include capacity issues back to Twizel / Benmore.

- Contact recently made public announcements regarding the hydro-development schemes in the Upper Clutha and Lower Clutha areas. Please refer: http://www.contactenergy.co.nz/cluthahydro

- Contact frequently experiences operational constraints at times whenever Transpower removes circuits from the 110kV system. Not only can these outages impact on 220kV system capabilities, but these transmission outages often conflict with seasonal Clutha river flows, and low demand, and may result in unnecessary generation spill, or alternatively in a dry year, high demand and very low generation. This problem is complex and also subject to the actions of third parties (generation and Tiwai). This will be exacerbated in the future with likely wind generation developments - Mahinerangi, Project Hayes and Kaiwera Downs proposals.

- The recent global economic situation has cast a shadow over the future of Tiwai Point Aluminium Smelter operation and the re-starting of one of its pot-lines. This highlights the vulnerability of this region and dependence on such a single consumer. Therefore a "worst-case" scenario should be factored into load forecasts. Transmission upgrades will be driven by increasing generation exported from this region.

- The Roxburgh GXP / GIP is a critical "gate-way" to the region and Transpower should consider grid diversity at this point similar to GXP diversification undertaken at Otahuhu. Consideration should be given to provide for greater diversity from export from this region (perhaps a 220kV upgrade between Three Mile Hill and Livingstone).
- Under the Transmission Pricing Methodology the LSI region's RCPD is effectively masked by Tiwai Point demand, this coupled with high seasonal dairying loads (peaks in Sept-Nov), means that regional load management is not operated at times of national winter peak.
- Contact is currently in discussions with Transpower on installing a special protection scheme (generation run-back) to increase export from this region. This in itself highlights the urgency for a grid upgrade within, and out of, this region.
- Contact considers that the project to enable renewable generation should not be treated separately as any additional generation will impact on the overall future of the LSI region.
- Contact considers any non-transmission alternatives should be treated as a short-term solution and should not detract from the underlying transmission capacity requirements under all generation / load scenarios.

	Transpower's consultation Questions	Contacts feedback and comments
1	Are there any other development plan issues or considerations that should be incorporated into the analysis of the lower South Island Reliability project?	Development of further wind farms in this region. The Upper and Lower Clutha Hydro developments schemes should factored into any long-term generation forecasts. Potential changes under the TPM review may provide greater loactional signals for South Island generation development and in particular in the LSI region.
2	Do respondents consider that the demand assumptions are appropriate for this project?	The regional forums have been very thorough and feedback from local stakeholders would suggest the demand forecasts are reasonable. Greater emphasis is required on the generation forecasts and scenarios.
3	Do respondents consider that the generation assumptions are appropriate for this project?	See above. The Tuapeka Mouth Hydro option has not been noted in Table 3.
4	Are there any qualifying options which should be considered as part of Transpowers long list of options for the Lower South Island investigation project?	Contact has previously noted that it does not agree that Grid Support Contracts should be considered as long-term transmission alternatives. Contact has requested an immediate generation run-back scheme to increase generation export from the LSI region until a permanent transmission grid solution is in place. This is currently underway to be installed at Clyde (or Roxburgh).

	Transpower's consultation Questions	Contacts feedback and comments
		Contact believes that demand-side management at peak times is not consistent with national winter peak load-management by distributors and is an unintended outcome of the existing Transmission Pricing Methodology, i.e. distributors are only motivated to control load during the Sept-November period (for the LSI peaks) and not during winter peaks which is when generation and constraint issues are more likely to occur.
5	Do you consider that any of the identified options in Transpower's long list do not come within the definition of "alternative projects" as defined under the Rules; or are inconsistent with good electricity practice? Please explain.	No.
6	Do respondents consider this commensurate GIT approach to be reasonable for Transpower to apply when considering the lower South Island reliability project?	Yes.
7	Are there other market costs or benefits which should be reflected in the analysis?	The value of water spill as a result of transmission constraints.
8	Do respondents consider the Value of Lost Load (VoLL) is appropriate for valuing lost load in the lower South Island region?	No – it is too low. The VoLL figures appear to be outdated and in need of a revised assessment. The increase seems low compared to the increase in consumer tariffs over the same period and underestimates the true value of lost load (and more specifically to the dairying sector).