

Transmission Pricing Advisory Group ::: Meeting number eleven

Venue ::: Meeting room 1, Electricity Authority

Time and date ::: 09:10 to 17:00 ::: 10 Aug 2011

## Minutes

### Present

#### Members

::: Graham Scott (Chair)  
 ::: David Reeve  
 ::: John Clarke  
 ::: Peter Calderwood  
 ::: John Woods  
 ::: Guy Waipara (from 9:20)  
 ::: Ray Deacon (from 12:40 to 3:45)

#### In attendance

::: Katherine Moore  
 ::: John Culy  
 ::: Bruce Smith (from 10:15)  
 ::: Peter Smith (to 3.35)  
 ::: Susie Kilty (parts of meeting)  
 ::: Tony Dellow (parts of meeting)  
 ::: Lee Wilson  
 ::: Phil Bishop (for GEM analysis discussion and part of HVDC analysis discussion)

The meeting opened at 09:10.

### 1 Welcome, introduction and apologies

Apologies received from Bruce Girdwood, Glenn Sullivan, and Bob Weir. Ray Deacon sent apologies as he could not attend the morning part of the meeting.

Bruce Girdwood e-mailed comments on economic and reliability transmission investments, quantitative modelling/issues arising from HVDC analysis submissions, HVDC cost allocation and regulatory context for transmission pricing.

The chair noted that although those members were not present the meeting there was still a quorum and TPAG needed to progress its work. The members present agreed to represent the views of these members, where possible.

### 2 Minutes, 1 Aug 2011 meeting

The minutes were approved with the following amendments:

- Section 3, paragraph 1, amend date to 15 July 2011.
- Section 3, paragraph 2, note that the Independent Review was provided to TPAG on 29 July 2011.
- Section 3, point (a), include following bullet: TPAG was created to serve to the EA Board and that the Board had issued a set of instructions in its letter from the CEO of 28 July and addressing the points raised in this letter should guide TPAG's future work programme.
- Section 3, The problem definition and 'market failure': Bullets 3 and 4 amended to read:

- There are different views among economists about how to characterise ‘market failure’, what causes market failures and how to remedy them.
- There is a need to look at the market failure that is driving opportunities for efficiency gains.
- Section 3, The Independent Review: Bullets 1,2, 3 and 4 amended to read:
  - The Independent Review is expansive and goes back to some very basic things that were considered two years ago. It is re-opening the problem from scratch and questioning whole market institutions not just transmission pricing.
  - A lot of the logic is around the paradigm of being in a world of voluntary transmission contracts, whereas we are in a world of central planning and compulsion. The TPM is an allocation methodology within this framework.
  - The table on p25/26 of the report and the checklist that follows are the heart of the report. TPAG should give consideration to all of the issues in the table and compare against its efficiency considerations. This member considered that TPAG had potentially considered the issues but treated or weighted them differently. The ‘no-worse-off’ might give most pause for thought, although the transition options are about trying to make sure consumers are no worse off.
  - There are some flaws and some major areas are out of scope.
- Section 3, The Independent Review, final bullet deleted as it repeated earlier statements.
- Attachment: second sentence deleted.

### 3 **Interests**

Susie Kilty reminded members to complete their disclosure of interests. The chair considered the 6 disclosures received in respect of Peter Calderwood, John Clarke, David Reeve, Glenn Sullivan, Guy Waipara, and John Woods.

The Chair noted that, in terms of section 68 of the Crown Entities Act, he considered it in the public interest to permit those members to act despite being interested, and confirmed that written permission would be provided.

### 4 **Structure of report/purpose of report**

TPAG agreed that the report to the Board should:

- be a self-contained document with all necessary analysis, but contain references to other documents if required;
- be clear about the scope of TPAG's role; and
- articulate different views where relevant.

### 5 **Statement of the problem**

Members discussed the importance of articulating the problem(s) effectively, noting that the description of the problem may be formulated by reference to the regulatory context, the market environment and the nature of the system.

Members held an extensive discussion on how the problem(s) should be described. In summary, the members discussed the following points:

- The relevance to the problem statement of changes in the regulatory context, the problems of a contract model for transmission investment and New Zealand's departure from a contractual model for transmission investments.
- The role of the GIT and the TPM in responding to the problems of the contractual model.
- That TPAG had considered an option that would involve aspects of a contracting option. Earlier (pre-TPAG) analysis also considered options that might mirror the effects of a contractual arrangement and that might help take account of inadequacies in existing locational signals.
- The limitations in the scope of TPAG's analysis.
- The ancestry of TPAG's analysis (including reports by Frontier and NERA), which investigated fundamental problems with transmission pricing.
- The potential problem in providing efficient locational signalling, noting that there are costs and benefits in providing additional locational signals. For example the HVDC charge, which could be a locational signal if SI generation is less valuable, but may be choking off use of the link.
- The GIT, in effect, provides locational signals for generators.
- The rules do not preclude merchant transmission.
- Part of the problem may be a systematic error due to the operation of the GIT process, especially with respect to decisions about reliability investments. For example, in making a decision to invest in an economic transmission investment, Transpower and the Commerce Commission will need to look at the trade-off between transmission investment and access to cheaper power. There is a different dynamic in looking at reliability investment decisions. Participant behaviour will influence what is decided, plus there are bigger risks, due to politics surrounding the decisions and prudence.
- Is there a signal that improves the GIT results? The SOO has a role in improving the GIT results and opportunities for participants to provide good information to the decision-making process; the market has influence in what goes into the SOO.
- The nature of any problems: are they market or regulatory failures or inefficiencies (or a mixture). In the case of the HVDC charge the problem may be a regulatory failure, because the failure may be in a regulated allocation.

## 6 HVDC analysis issues

John Culy presented work undertaken to consider HVDC analysis issues raised by submitters. The presentation is available at: <http://www.ea.govt.nz/document/14581/download/our-work/advisory-working-groups/tpag/10Aug11/>

TPAG members discussed the following issues:

### **The appropriate assumptions for the calculations of increased investment costs**

TPAG discussed what might be the most realistic assumption for the effective HVDC charge (counterfactual 1, 2 or 3) and the appropriate assumption to make on which projects Meridian can develop. TPAG agreed that it should present a range of options, but that counterfactual 2, assumption B on slide 8 of the presentation is the most realistic. TPAG agreed that the report should give some illustrations of what the

assumptions and counterfactuals mean.

One member who has previously been strongly in favour of counterfactual 1 (an effective HVDC costs of \$35/kW/year) noted that counterfactual 1 may now not be the correct one to use.

### **Competitive advantage**

TPAG agreed that it should include discussion of the impacts of a competitive advantage to Meridian as it is an important issue and one that the Authority will need to consider. The effects of competitive advantage are important as competition at the margin (amongst new entrants) is important. TPAG members considered that there is enough evidence that there is a competition issue but it is hard to calculate the impacts of competitive advantage.

### **Flow-through of new entrant prices to forward contract prices**

TPAG agreed to include a narrative account in its report on the link between LRMC and contract prices, and the link between LRMC and spot prices. Members recognised that there is uncertainty in how changes in LRMC flow through to prices but there is some evidence and logic that there should be some flow through.

TPAG members discussed possible reasons behind the price differences between NI and SI (slide 21), noting that there is limited liquidity for 2013-14. The price difference may reflect the HVDC charge maintaining new entry costs in the SI above those in the NI. It may also reflect the risks of SI hydro-shortages and the increased risks of constraints (both on the HVDC link and on Bunnythorpe - Haywards) which cause higher lake storage which in turn may be influenced by the HVDC charge.

The risk premiums mean that projects can potentially make money earlier if they can supply during the high risk times – ie during dry years.

Members discussed the relevant points in Bruce Girdwood's email distinguishing between a short term price effect from the HVDC charge which increases the LRMC in the SI and a longer term investment efficiency effect.

One member noted that Grant Read and the University of Canterbury may have looked at the link between LRMC and contract prices and spot.

### **Allocative gain and net transfers from generators to consumers**

Members discussed the possibility that allocative gains could be more significant if price reductions flow through to consumers earlier than TPAG's earlier analysis suggested.

### **Use of heuristics**

TPAG agreed that the report should describe the way uncertainties are taken account of in the report to the Board.

## **7 Draft note on the distinction between economic and reliability investment**

TPAG agreed that the report to the Board should include explanation of the distinction between economic and reliability investments.

Members discussed the broad differences between the two types of investment. On the core grid there is a deterministic standard (n-1) for investments. Such investments still require a CBA, but the focus is on finding the least cost option, rather than an option that is NPV positive.

In principle, all transmission investment is the same but practically they fall into two different classifications

that the analysis happens to treat differently.

## 8 **GEM analysis**

Phil Bishop gave a presentation on the work the secretariat is undertaking in response to submitter and Independent Review concerns. A copy of the presentation is available at:

<http://www.ea.govt.nz/document/14685/download/our-work/advisory-working-groups/tpag/10Aug11/>

As the GEM analysis was carried out in 2010, GEM has been updated and the Authority is updating the transmission pricing analysis as a result, as well as undertaking new analysis in response to concerns on the original analysis. GEM will also be used to undertake some HVDC analysis.

TPAG members noted that the discussions should be reflected in the paper to the Board, including a discussion of how GEM handles uncertainty. TPAG discussed the limitations of GEM: GEM does not undertake stochastic modelling of hydro, nor does it model pricing, rather it behaves like a central planner. However, specialised models are used to populate GEM.

TPAG members discussed possible uncertainties that are different for the NI and SI, noting that two possible uncertainties are gas prices and the impact of the smelter shutting down.

## 9 **Deeper or shallower connection**

TPAG members reconfirmed that they had agreed that further analysis of deeper or shallower connection would require coordination with the Commerce Commission. In drafting the section of the TPAG report to the Board TPAG agreed that:

- the connection part of the document should align with the regulatory context narrative; and
- issues with the incentives to embed in a distribution network should be considered (See Independent Review, p63), noting that there is the prudent discount policy.

## 10 **Draft note on regulatory context**

TPAG members discussed the point made by Bruce Girdwood in his tabled note, that although rentals would not be allocated, auction proceeds would be under plans for FTRs.

## 11 **Draft note on 'Incentive –free' option**

TPAG agreed that the incentive-free option as described in the presentation should be considered in the HVDC analysis, as should the other options provided in Bruce Girdwood's note or in the Independent Review. Legal advisers noted that under the Act, the Authority could probably implement such a charge providing it is analysed and consistent with CRE.

TPAG members made the following points about the incentive-free option:

- It is not consistent with a contractual model would no one would voluntarily agree to it.
- It is not incentive-free, rather it introduces different incentives.
- It is equivalent to imposing a tax on people who are not beneficiaries.
- It is inconsistent to on the one hand justify an incentive-free charge on existing SI generators as a means to charge beneficiaries, but not to impose the charge on new generators.

- It is very different from the transition option as there would be a huge incentive to fight it and it introduces huge political incentives.
- It sends the wrong signals about regulatory practice: that participants may have costs imposed on them that they cannot escape; that the regulator may target producer surpluses again; and that there is a long term inconsistency in how the costs of the grid are charged.

12 **Draft note on Efficiency considerations**

TPAG agreed that the report to the Board should note that TPAG has considered how the efficiency considerations relate to other economic criteria.

13 **Summary of Submissions**

The Chair requested that the secretariat work through the summary of submissions noting how views are being considered by TPAG. The Chair also requested that the secretariat provide a note on how TPAG is responding to the Independent Review.

14 **Next meeting**

22 August 2011

<b>Actions</b>	<b>By</b>	<b>Date for action</b>
Provide a draft of the TPAG report to the Board for TPAG review taking account of the discussions and points agreed by TPAG.	Secretariat	Next meeting
Provide a draft of the Summary of Submissions that notes how submitter views are being considered by TPAG.	Secretariat	Next meeting
Provide a note on how TPAG is responding to the Independent Review issues.	Secretariat	Next meeting

Meeting closed 17.00