

# An integrated cost-benefits analysis of the Market Development Programme

Review and discussion

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The results and the charts contained in the attached paper should not be quoted and should be viewed as first cut, indicative figures. They are included in this draft in order to give the technical group members an opportunity to see how an integrated cost-benefit approach will work.

11 August 2010

## An integrated cost-benefit analysis of the Market Development Programme (MDP)

### Purpose

1. The purpose of this paper is to seek SPDBTG advice on the development of the integrated cost-benefit analysis of the MDP. A working draft of the analysis is attached.

### Introduction and background

2. The Electricity Commission (**Commission**) is undertaking an integrated cost-benefit analysis (**CBA**) of the MDP. This has been commissioned in part at the suggestion of attendees at the MDP conference on May 2010.
3. The integrated CBA covers the following closely-related projects:
  - (a) scarcity pricing;
  - (b) default buyback;
  - (c) locational price risk management;
  - (d) dispatchable demand; and
  - (e) transmission pricing.
4. Each individual project is developing its own CBA in detail, but in order to clearly communicate the costs and benefits and to support decision making, it is important for the integrated CBA to:
  - (a) consider the costs and benefits of the five projects as a whole; and
  - (b) ensure a consistent approach is taken for analysis of the individual projects.
5. The emphasis of the integrated CBA is on understanding the likely costs and benefits without resorting to overly complex modelling and analysis.

### Development of the integrated CBA

6. The Commission has engaged a consultant (NZIER) to work with the project teams to develop the integrated CBA. Work to date on the analysis has focused on:
  - defining the approach including the problem definition, baseline scenario and MDP project scenarios;
  - defining the costs and benefits for each of the projects; and

- building the cost-benefit model.
7. The Commission has begun to input cost and benefit estimates, but those included in the attached paper should be viewed as first-cut, indicative figures only. In some cases figures are given as 'place-holder' values. They are included to give the advisory group members an opportunity to see how the CBA approach will work.
  8. The CBA will be refined following advisory group feedback, project team review, and development of the individual project cost-benefit analyses. A later draft will be prepared for discussion with the Commission Board and eventual release as an information paper.
  9. Even when released, the integrated CBA may not provide a definitive estimate of total costs and benefits, given that the preferred option for each project and the detailed design of each option may not have been determined. The integrated CBA may need to be updated subsequently.

## Advice sought from SPDBTG

10. The Commission is primarily seeking advice from the technical group on:
  - (a) whether the attached paper describes an appropriate approach to an integrated CBA and how it could be improved;
  - (b) whether the problem definition is correct;
  - (c) whether the descriptions of the baseline scenario and MDP project scenarios are appropriate and how they might be amended; and
  - (d) whether the costs and benefits have been correctly identified and if there are additional costs and benefits that should be considered.
11. As noted above, the figures given in the cost-benefit analysis are first cut and indicative only, and should not be quoted. However, the Commission welcomes comments on the values used, especially where members have relevant evidence or examples that might assist the Commission in estimating costs and benefits.

## Attachments

12. The draft integrated CBA of the MDP is attached.

Tim Street  
**Director Wholesale**