Summary of workshop

Expenditure Forecast Assessment Guidelines Working Group meeting No. 6

Summary of meeting – 14 March 2013

Economic benchmarking – transmission outputs and environmental factors

On 14 March 2013, the AER, as part of its *Better Regulation* package, hosted a working group meeting on the development of the Expenditure forecast assessment guidelines (the Guidelines). The meeting was chaired by AER Director Mark McLeish.

A full attendee list can be found at Attachment A.

This summary outlines the key topics and themes of the meeting, including views expressed at the meeting, without ascribing particular comments to any one individual or organisation. The outline follows that of the agenda.

1   Introductions

In this workshop, AER staff sought feedback from stakeholders on the appropriate outputs and environmental factors to be used in economic benchmarking of transmission network service providers (TNSPs).

In response to submissions requesting further information on how the AER intends to apply economic benchmarking, the AER provided a brief summary of the underlying theory of economic benchmarking and why it is relevant to the review of expenditure forecasts.

The AER's consultant, Economic Insights, summarised its briefing notes on outputs and operating environment factors to be used in economic benchmarking of TNSPs and provided a short list of potential outputs and environmental factors.

The briefing notes and slides used in the presentation are available at: http://www.aer.gov.au/node/19508

2   *Major issues for discussion and feedback from the workshop*

Meeting participants discussed issues regarding the application of economic benchmarking and the appropriate TNSP outputs and environmental factors to be used in economic benchmarking.

Application of economic benchmarking

Stakeholders noted the top down nature of economic benchmarking, and that clarity would be required on how this would be used to inform assessment of operating expenditure (opex) and capital expenditure (capex) that comprise the building blocks of revenue. Stakeholders asked how economic benchmarking could validate across the different characteristics of TNSPs such as demand growth and asset age.

AER staff noted economic benchmarking will be used initially in conjunction with the AER's current tools to assess opex and capex and that it may take longer to reach long term efficiency for the capital input. TNSP representatives put the view that the inclusion of existing capital stock in benchmarking is problematic as it reflects historic decisions, such as the selection of network voltages, that could not be efficiently altered by investment decisions today. This effectively implies that there is no reasonable long term efficiency of capital stock towards which TNSPs could be expected to move.

Stakeholders asked what techniques the AER would apply in setting benchmarks. The AER noted there were several techniques available to the AER such as data envelopment analysis (DEA), stochastic frontier analysis (SFA) and other econometric techniques with different information requirements.

Stakeholders noted US benchmarking studies were not accurate and TNSPs were heterogeneous and only a few data points would be available. Stakeholders also commented that it may not be possible to account for all environmental factors that may affect benchmarking comparisons.

Stakeholders noted that there were more assets being used by TNSPs than were accounted for in the regulatory asset bases of the TNSPs (a result of decisions made at the valuation phase when RABs were established). They questioned the extent to which the findings from economic benchmarking studies would be able to be applied in the context of expenditure assessments given that the efficiency scores would relate to assets which had not been included in the RAB.

AER staff questioned the extent to which this issue was material given the time elapsed since the TNSP RABs had been established, but notwithstanding this noted that this proposition could be tested and was open to receiving further views quantifying this issue.

Stakeholders expressed their concerns that inaccurate data may lead to setting an inaccurate efficient frontier.

The AER noted the accuracy of the data will be taken into consideration when setting the appropriate efficient frontier and that other jurisdictions account for data uncertainty in their benchmarking by setting the efficient frontier as the top quartile of firms in the sample. AER staff also noted that the limitations stated may not preclude the measurement of efficiency change of individual NSPs over time. Also, benchmark data from international businesses could be used to increase the data sample size.

Stakeholders pointed out there was an inherent assumption in economic benchmarking that efficiency of TNSPs will improve into the future. Stakeholders expressed the concern that transmission technology has not changed and environmental factors may shift the frontier in both directions. It was also noted that the AER would need to consider the extent to which historical trends in benchmark measures would provide a guide to reasonable future expectations.

Outputs

There was general consensus that billed outputs aren't suitable as outputs for use in economic benchmarking.

Stakeholders noted demand was not a measure of efficiency for TNSPs and that capacity was provided in line with the National Electricity Rules (NER) which requires best industry practice and state requirements which may have different environmental and planning requirements across states. However, the counter point was put that consumers want their peak demand to be met and so peak demand might be a preferential measure.

Stakeholders stated that their outputs are the provision of capacity, to a level of reliability, in compliance with statutory requirements.

Stakeholders noted system losses through increased utilisation may be a possible output. Other stakeholders noted that this might not be a good measure as this could be driven by exogenous factors such as dispatch patterns in the National Electricity Market.

Stakeholders generally favoured a measure of peak demand over total energy delivered as an output. However, it was noted that consumers measure what they get in terms of what they pay for, supporting the use of energy delivered as an output.

The comment was made that consumers are concerned with overall reliability of the network. However reliability in transmission is not an issue relative to other parts of the electricity network and an incremental increase in the reliability of the transmission network might not be observed by consumers.

Stakeholders considered overall reliability of a network may not be appropriate since reliability may differ across locations in the network. There may be a need to disaggregate reliability data and investments are based on specific locations.

Some stakeholders considered that STPIS may not be appropriate to represent reliability, however they considered that some measure of reliability should be taken into account. Stakeholders noted that the STPIS parameters are not consistent across businesses, as they are designed to provide incentives to each business for continuous improvement relative to historical performance rather than to an absolute level of performance. Stakeholders stated that as reliability for transmission network was close to 100 per cent, perhaps only a relatively small weight should be assigned to it. Stakeholders also noted that other quality measures should potentially be considered, including measures of stability of current frequency and voltage.

Environmental factors

The materiality of terrain variables to the costs of businesses was questioned.

Stakeholders noted that terrain might make a material difference to costs. Different lines would have varying degrees of vegetation management costs and bush fire risk. Other factors to consider would be urban versus rural lines, the topology of the network and how the network has been established. They also noted that some networks were more "meshed" than others leading to differences in costs.

Stakeholders asked how economic benchmarking would take into account environmental factors. Economic Insights responded that there were alternative approaches to incorporating environmental variables into the analysis that depended on the techniques used.

Stakeholders noted the difficulties in quantifying some of the environmental factors, and considered that such limitations should not be ignored.

3   Other matters

Stakeholders offered to provide the AER with more information in writing on the materiality of outputs and environmental factors.

Attachment A: Attendee list

Melbourne office

Name	Organisation
Michael Seddon	Transend Networks
Bill Jackson	ElectraNet
Kelvin Gebert	SP AusNet
David Dawson	Strategic Economics Consulting Group
David Headberry	Major Energy Users
Jeff Balchin	PWC Austalia
Denis Lawrence	Economic Insights
John Kain	Economic Insights
Su Wu	AER
Mark McLeish	AER
Andrew Ley	AER
Anthony Seipolt	AER
Jason King	AER
Kevin Cheung	AER

Sydney office

Name	Organisation
Andrew Kingsmill	TransGrid
Matthew Le Cornu	AER