Expenditure Forecast Assessment Guidelines Working Group meeting No. 15

Summary of meeting – 8 May 2013

Category assessment – Opex base step trend

Held via video link between AER's Melbourne and Sydney offices

On 8 May 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, Lawrence Irlam. A full attendee list can be found in Attachment A.

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

1 Summary of main discussion

The objectives of the workshop were to:

- identify the key drivers of cost changes between 'base opex' and later years
- discuss a method for accounting for all of these drivers without double-counting costs
- identify and discuss data collection implications

This workshop consisted of discussion of the factors accounted for when escalating NSP expenditure forecasts from the base year. These include:

- Network/scale/output growth
- Productivity improvements (such as economies of scale)
- Real price changes
- Other changes (step changes)

The discussion covered the conceptual framework behind each of the factors above, how they are approached at present, the relevant drivers and proposed assessment methodologies.

Issues around assessment and the acceptance or adjustment to actual, "base year" opex were not covered at this workshop.

2 Matters raised

General issues

Stakeholders noted the potential for inconsistencies to arise between the AER's use of a revealed cost approach and external benchmarking while assessing base year expenditures and the resulting composition of approved base year expenditure in a revenue reset proposal.

NSPs questioned the role of the guidelines in specifying the AER's assessment method versus how NSPs would develop their own opex proposal. It was noted that the NER specify two tests: firstly the determination of whether a NSP's total opex forecast was efficient, and secondly the method used by the AER to determine a replacement forecast in the event the NSP forecast was rejected. NSPs would be free to use their own method(s) for developing forecasts.

NSPs raised several issues around the Guideline's contents in the context of providing certainty on the AER's assessment approach. The AER should outline the key considerations that will be undertaken in utilising specific assessment techniques, rather than simply stating the AER will 'pick and choose' the techniques used. One NSP noted that, for example, there is a question on the quality of Total Factor Productivity (TFP) data, and on a TFP approach if this assessment technique were used by the AER. NSPs suggested that the inclusion of a decision or process tree within the guidelines would prove useful. This would incorporate key considerations including but not limited to statistical confidence intervals, thresholds, confidence in the technique based on experience, and information requirements by the AER. AER staff recognised that these were important matters that had been raised in written submissions and in prior workshops. They noted that decisions would not be made mechanistically and hence could not be defined in specific detail (e.g. quantitatively), and would also be dependent on the NSP's forecast methodology and the quality of data provided.

Output growth

NSPs raised concerns that the holistic economic benchmarking techniques being contemplated in consultation don't necessarily represent the cost drivers that affect output growth for opex forecasting. NSPs stated that the quantity of capital is a prime driver of operating expenditure. AER staff indicated that the intention of economic benchmarking with respect to outputs is to capture big-ticket items, not all outputs.

On discussion over the cost functions historically utilised by NSPs, the AER requested views on what NSPs would want from an ideal cost function. One NSP commented that they would like to see flexible cost functions used. It was noted that flexible and restrictive cost functions have been used empirically by consultants. NSPs considered that there is merit to the 'rate of change' approach proposed by AER staff, but they would need to check if the approach was representative of their cost drivers.

NSPs commented that they undertake particular maintenance regimes on their assets, which would influence and complicate the approach on accounting for network growth. One NSP noted that they compare costs of their maintenance tasks to those of similar companies and note defect histories. They considered that for their circumstances, undepreciated RAB was the closest proxy that reflects their cost drivers. Other proxy measures used in the past included customer numbers and line length.

Consumer representatives and NSPs discussed the capex/opex trade-off, and the implications on the validity of certain drivers for output growth. One NSP commented that opex drivers need to be related to the NSP's assets and are different to capex drivers; it considered that drivers that are different to how maintenance work is planned and carried out should not be used. A consumer representative

noted that there are three main types of capex works that would have different impacts on opex and on undepreciated RAB values (if the latter were used as a proxy for output growth):

- like for like replacement works – as newer assets require less maintenance work opex should decrease; however, undepreciated RAB values would not change
- replacements with increments in asset capacity or function – by replacing smaller assets with larger ones the undepreciated value of the RAB would increase at a greater rate than opex. The relationship between RAB growth and opex growth is not linear in this circumstance.
- network extensions – only in this instance would both opex and undepreciated RAB increase in direct proportion.

One NSP commented that this reflects its existing practice. One NSP commented that the purpose of using undepreciated RAB is to determine the replacement value of current stock, and replacements are not considered to be a driver for opex.

It was noted that although some network assets are replaced during a regulatory period, all unreplaced assets continue to age. This has an ambiguous effect on the average age of a NSP's network assets. If the average asset age stays constant, the maintenance requirement should also stay roughly constant. However, maintenance works are not based only on asset age but are also driven by other drivers, e.g. legislation.

Customer numbers was proposed as a driver and considered to be more relevant as a driver for gas networks.

Productivity growth

AER staff clarified that the separate identification of productivity growth should result in no productivity adjustment being applied in calculating labour cost escalation.

Stakeholders questioned how the AER would measure productivity change. AER staff noted this would be derived from economic benchmarking techniques. NSPs noted these estimates are abstract from cost drivers, and raised the prospect of needing to perform "sense checks" on these estimates. In particular, consideration should be made of particular NSP activities in order to ascertain where such gains might be realistically or feasibly made. NSPs noted that it can be argued there is no one productivity growth factor for a service provider. Instead, different cost categories can have different productivity changes. For example, corporate overhead can have greater economies of scale than other cost categories.

NSPs also suggested the guidelines should identify the timeframe over which such gains might be realised. NSPs questioned whether an opex productivity adjustment would reduce the incentives arising under the EBSS (under which some efficiency gains can be retained by the NSP). NSPs noted that this is particularly worse for firms at (or almost at) the efficiency frontier, and applying both the productivity adjustment and the EBSS incentive scheme may affect the incentive properties of the scheme.

AER staff noted that the validity of applying productivity gains in an opex trend adjustment depends on how it is calculated. It is anticipated that the opex productivity adjustment would refer to industry-wide productivity while the EBSS refers to the specific firm's productivity. If the NSP's productivity is greater than the industry's, the NSP is allowed to keep the gains under the EBSS and the incentive is not reduced. NSPs questioned the appropriateness of this and agreed to take it on notice to think on further.

The user group noted that 'industry-wide productivity' must include both private and public NSPs. Private providers are likely to be more productive and public providers less so. Revenue reset proponents would benefit if private providers are excluded from 'industry-wide productivity' (because this results in a smaller productivity adjustment to forecast opex proposals). However, due to the small number of NSPs in Australia, it would not be reasonable to exclude private providers, as this would lead to an even smaller number of NSPs as a basis for the productivity measure.

It was noted that some NSPs were able to achieve material productivity gains post privatisation and may not be able to continue these into the future. Applying industry-wide measures (including businesses still achieving high rates of improvement) to these businesses may overstate the gains they could achieve. NSPs noted that the risk of getting an expenditure forecast wrong for frontier performers was potentially higher.

It was noted that some of these issues for notional "frontier" performers could also be addressed through the calibration of incentive mechanisms. It was further noted that getting an incentive rate wrong would most likely have a less material impact than getting an expenditure forecast wrong.

Labour and materials escalators

NSPs questioned whether AWOTE or the Labour Price Index was the AER's measure of choice. It was noted that AWOTE accounts for labour force compositional change, while the LPI does not. AER staff commented that, as long as the same index is used for both labour cost escalation and for measuring labour productivity, the outcome is the essentially the same regardless of which index is used. It was suggested the guidelines might reflect a consensus of views on which was currently shown to be more accurate or outline principles for selection. Stakeholders briefly noted the issues faced by the sector in examining two competing data sources in estimating the debt risk premium.

Labour cost escalator forecasts produced by BIS Shrapnel and Deloitte Access Economics were recently compared, showing one consistently under-forecast outcomes while the other was shown to over-forecast them. Consumer representatives urged the AER to review the accuracy of forecasts for cost escalators, and that this could inform the choice of forecast in future determinations.

AER staff noted that materials escalation had been largely based on an approach developed by Sinclair Knight Merz; however, there was little transparency of how the weightings of different price measures were derived. Some stakeholders suggested that the same mix of materials inputs could be used for all NSPs, while noting differences between transmission and distribution. They considered that the guidelines could specify the specific weights for each input or approach(es) to deriving them.

Step changes

AER staff explained they expect future step changes are based on changes in NSP outputs arising from exogenous changes (e.g. legislative requirements). One NSP queried if proposals by NSPs that incur short term costs but exhibit dynamic efficiency gains could be claimed as step changes. AER staff commented that, given incentive mechanisms, allowing this may fund the cost of achieving the efficiency gains in future regulatory periods twice: once through providing the upfront cost and a second time through the EBSS allowing the NSP to retain the efficiency gain for five years.

AER staff discussed their intention to account for 'regulatory creep' in future productivity adjustments. 'Regulatory creep' refers to the ongoing regulatory changes that impact on NSPs' regulatory burden. NSPs queried how the AER would measure the impact of ongoing regulatory changes in historic data, noting that they are hard to identify. NSPs asked the AER to clarify this further, including:

- how to determine the "base" level of regulation for each business

- how to determine a material increase in the firm's costs due to regulation (at present, this is material when regulatory costs are greater than one per cent of the firm's revenue)
- whether the CPI can be used as a proxy for cost increases due to regulatory creep.

TNSPs noted that in RIT-T investment tests, the price escalation factor is different from CPI.

NSPs asked if the concept of regulatory creep implied that future step changes would be 'discounted'. On this basis, NSPs would not be able to recover the full costs of the step change, as some costs are in effect already compensated for. AER staff replied that this is correct to an extent; NSPs would not be receiving compensation for every regulatory change.

NSPs suggested there may be a need for a specific workshop to discuss step change adjustments to opex and how this might be affected in light of regulatory creep. One NSP commented that regulatory changes commonly occur when there is a change in government.

AER staff noted that the calculation of regulatory creep would be difficult, yet was raised with the view of seeking stakeholder input. In particular, it appears that this issue gives rise to potential windfall gains to NSPs; however, its materiality would be difficult to establish.

Attachment A: Attendee list

Melbourne office

Name	Organisation
Renate Tirpcou	CitiPower & Powercor
David Headberry	Major Energy Users
Charlotte Coster	SP AusNet
Heath Dillon	Transend
Jeff Balchin	Incenta
Peter Bucki	Envestra
Jeremy Rothfield	United Energy/ Multinet
Lawrence Irlam	AER
Toby Holder	AER
Anthony Seipolt	AER
Andrew Ley	AER
Ben Shafran	AER
Jess Manahan	AER
Cameron Smith	AER

Sydney office

Name	Organisation
Son Truong Vu	Ausgrid
Cathy Waddell	Essential Energy
Jennifer Harris	Powerlink
Rick Wallace	Endeavour Energy
Andrew Kingsmill	TransGrid
Nicola Roscoe	Energex
Alex Curran	APA Group
Rob McMillan	Jemena Gas Networks
Matthew Le Cornu	AER