

15 March 2013

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Via website: www.aemc.gov.au

Dear John

Economic regulation and issues arising from differences between actual and forecast demand

Grid Australia appreciates the opportunity to set out its views in relation to the Standing Council on Energy and Resources (SCER) request for advice on differences between actual and forecast demand in network regulation. More specifically, the SCER seeks the Commission's advice on whether the National Electricity Rules at present provide the Australian Energy Regulator (AER) with appropriate tools to ensure that material changes to demand forecasts do not generate unsustainable windfall gains or losses. Related to this is also ensuring that network service providers (NSPs) have the incentive to alter their investment plans in response to such changes in demand.

In Grid Australia's view, the current regime and reforms already in train will either address, or empower the AER to address, the regulatory issues associated with differences between actual and forecast demand. In particular:

- The recent reforms for the economic regulatory regime for transmission – complemented by the reforms in train for a national framework for transmission reliability standards – provide the AER with the capacity to ensure that transmission businesses have financial incentives to invest efficiently at all times, including to respond to the latest demand forecasts.
 - Grid Australia expects that a key focus of the design of this incentive scheme will be to ensure that the scheme limits the prospect for TNSPs making windfall gains or losses where demand forecasts change materially during a regulatory period.
- The Australian Energy Market Operator's (AEMO's) initiatives with respect to demand forecasting should provide greater confidence that revenue caps are based upon robust demand forecasts. In addition, this task, combined with AEMO's role in reviewing Regulatory Investment Test for Transmission (RIT-T) applications, should provide greater confidence that the RIT-T will provide a further administrative check against investments being made in advance of need.

- revenue caps are an appropriate form of price control for transmission in view of the lumpiness of transmission investment (and consequent tenuous link between demand growth and investment needs); moreover, it is observed that:
 - the fact that most of the costs that are recovered through transmission prices are independent of demand (due to past investments) means that even large reductions in demand compared to forecasts may result in only a small reduction in revenues to a TNSP and hence in price to consumers, and
 - as noted above, the AER's new powers over the design of a capital expenditure incentive scheme allows it to tailor that scheme to minimise the scope for windfall gains or losses as demand forecasts change.

These points are elaborated upon, in turn below.

Regulatory issues with changes to demand forecasts

Differences between actual demand and the forecasts that were adopted during a revenue review are inevitable. The objective for a regulator (and consumers) is to ensure that:

- transmission businesses will have the incentive to invest only when it is efficient, which includes to alter investment plans in response to changes in demand (and employing non-network options where feasible to preserve such options), and
- the potential windfall gains or losses arising from changes in demand forecasts (and other exogenous factors) is kept to a sustainable level, both from the perspective of consumers (if demand is lower than expected) and regulated businesses (if demand is higher than expected).

The incentive for TNSPs to invest when it is efficient – but only when it is efficient – is created in two ways. The first is to provide TNSPs with effective incentives to minimise all costs. The second is for this incentive to be balanced against service-related financial incentives and service obligations (such as reliability standards) that encourage or direct only efficient investment. Both of these components either are, or have been, the subject of substantial review as follows:

- the clarity of the incentives on TNSPs to minimise capital expenditure (together with operating expenditure) was one of the key issues the Commission addressed during its consideration of the economic regulation rule changes proposed by the AER. The resulting Rule changes empower the AER to design and implement an effective incentive scheme for capital expenditure, with the design of this scheme one of the key priorities of the AER's Better Regulation project.
- the AEMC's previous review into a national framework for transmission reliability, combined with its current activities on this matter, is expected to address the need for reliability requirements to remain appropriate in light of changing demand.

Regarding the potential for windfall gains and losses, Grid Australia expects that a central issue for the AER when designing the incentive scheme for capital expenditure will be to simultaneously ensure that:

- TNSPs have an incentive to be efficient in matters within their control, while
- minimising the prospect of windfall gains or losses associated with matters largely beyond their control – like changes in demand forecasts..

The AER has wide powers to develop mechanisms as part of the new capital expenditure incentive arrangements to implement mechanisms to keep windfall gains and losses in check while also maximising the quality of the incentives provided.

Lastly, it was noted that one of the consumer representatives at the workshop advocated expanding the current review to consider whether the power should exist for the AER to “re-optimize” the regulatory asset base at regular intervals, and so remove any asset that, with the benefit of hindsight, proved to be unnecessary.

This proposal was part of a rule change submitted by the Major Energy Users in November 2011, which was not adopted by the Commission. The Commission’s reasons for rejecting this proposal – namely, that better mechanisms exist for encouraging efficient investment that involve much less risk and complexity – remain valid today.¹ The Commission’s view at that time of the unusual risk that regulated businesses bear in relation to demand risk, and the need for this to be properly accommodated in the regulatory framework, remain relevant to its current review:²

In considering the capex incentives, it is also important to bear in mind the obligations that electricity NSPs have to provide a service. Regulated businesses, such as the NSPs and some service providers, do not have the same choices and options as competitive businesses. In particular they have an obligation to provide a service to a particular standard, including a reliability standard, that does not exist for most competitive businesses, and regulated businesses are limited in the rate of return that they can earn on their investment. For example, before making a long term commitment a competitive business would usually assess the market and invest only if it formed the view that its likely return would compensate it for the level of risk and allowed a profit. This is not the case for regulated businesses which may be obliged to invest to meet expected demand growth against the risk that demand growth may not eventuate – a risk that is not compensated for in the rate of return applied to regulated businesses such as NSPs and gas service providers.

Grid Australia also notes that under the new Rules the AER has the power to disallow from inclusion into the regulatory asset base any capital expenditure above forecast that it deems was not prudent. This is supported by a requirement for the AER to undertake a review of the efficiency of past expenditure. A factor the AER would likely have regard to in the context of these new tools is the extent that NSPs take into account changes to forecast demand prior to proceeding with investments. This should further increase stakeholder confidence that NSPs give proper regard to changing circumstances before they undertake new investment.

AEMO’s new roles

AEMO’s new roles should also increase the confidence that any prospect for windfall gains or losses is kept in check, and that inefficient investment is dissuaded.

First and foremost, AEMO’s role has expanded to include the coordination of a consistent approach to forecasting at the localised (connection point) level. This activity is expected to improve forecasts of demand, and should provide greater confidence about the demand forecasts that underpin revenue caps.

¹ AEMC, Final Determination: National Electricity Amendment (Optimisation of the Regulatory Asset Base and the Continued Use of Fully Depreciated Assets) Rule 2012, 13 September 2012, page ii.

² AEMC, Final Determination: National Electricity Amendment (Optimisation of the Regulatory Asset Base and the Continued Use of Fully Depreciated Assets) Rule 2012, 13 September 2012, page 6.

In addition, the AEMC has proposed to expand AEMO's role with respect to reviewing the application of the Regulatory Investment Test for Transmission (RIT-T). This role, which is complemented by AEMO's demand forecasting role, should enhance the ability of the RIT-T to provide a further administrative check against transmission investments being made in advance of the need. This is in addition to the fact that stakeholders have the opportunity to participate in such public consultation processes about the nature and timing of corrective action to address an identified network need.

Revenue caps remain appropriate

The rationale for applying revenue caps to transmission, which remains appropriate, is that the relationship between transmission cost and demand is quite weak and uncertain. This follows because:

- most of the cost that is recovered through transmission prices in any regulatory period relate to costs that do not vary with demand, either relating to past investments (which cannot be reversed if demand changes) or are otherwise fixed, and
- the link between augmentation requirements and demand is far from uniform and constant – this is because transmission investment typically occurs in large “lumps”. This means that the cost of serving additional demand is very low until a constraint is reached, and even then the cost of relieving the constraint will vary materially depending upon the options that are available for that location.

These observations also mean that the scope for windfall gains as demand falls is limited by the extent of variable costs (such as augmentation expenditure) that were factored into the revenue cap for the TNSP in question.

The case of ElectraNet during its current regulatory reset review provides a good illustration of the possible extent of this windfall. Prior to submitting its revised Revenue Proposal, the demand forecasts for South Australia were revised down by approximately 10 per cent. This led to a reduction in forecast capital expenditure requirements by approximately 20 per cent. However, the final impact on transmission prices from this reduction in capital expenditure was a reduction of approximately 1 to 2 percentage points.

Notwithstanding the results in this case, Grid Australia expects the new capital expenditure incentive arrangements to include mechanisms that will limit the scope for changes in demand to deliver windfall gains and losses to levels that are considered sustainable.

Please do not hesitate to contact me on (08) 8404 7983 if you wish to discuss any aspect of this submission.

Yours sincerely



Rainer Korte
Chairman
Grid Australia Regulatory Managers Group