SP AusNet™
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18 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

SCER Request for Advice on Differences between Actual and Forecast Demand in Network Regulation

SP AusNet welcomes the opportunity to make this submission 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 SCER is seeking 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.

SP AusNet has contributed to two other submissions into the Commission's review, these being a joint submission by the five Victorian electricity distribution network businesses, and a Grid Australia submission. This submission focuses specifically on issues relating to the choice between Revenue Capping and Weighted Average Price Capping (WAPC) for distribution network regulation.

The Commission's workshop discussion paper discusses the AER's assessment and conclusions in reaching its preliminary position that revenue capping should apply to the NSW and ACT distribution businesses 2014 – 2019 regulatory determinations. In part the AER's position is attributed to the issue at hand, that is, efficient recovery of costs having regard to volume risk. SP AusNet does not agree with the AER's reasoning, and considers that enhanced incentives for DNSPs to introduce efficient cost reflective pricing throughout the entire regulatory control period will best ensure efficient cost recovery. Conversely, Revenue Cap regulation has the effect of weakening those incentives. SP AusNet's submission into the AER's consultation on the framework and approach paper is attached.

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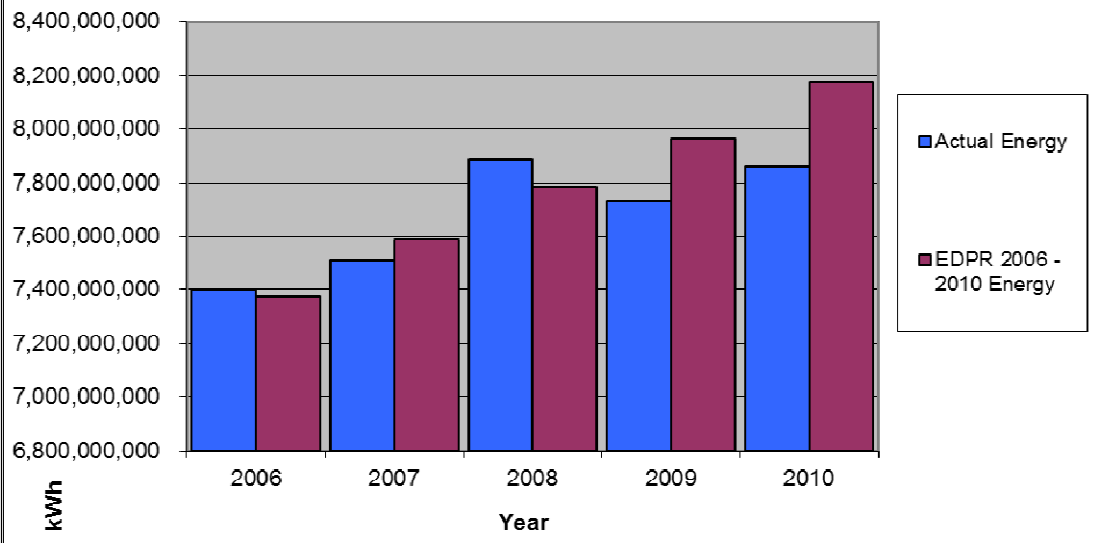
Volume forecast decisions

The AER builds its case around the DNSPs incentive to under forecast energy consumption. However it must be recognised that the volume forecasts approved are rarely what networks have proposed but rather are the AER's. As would be expected there are as many examples of regulators over forecasting as under forecasting.

For example, SP AusNet's 2005 regulatory determination (for the 2006 – 2010 regulatory control period) over-estimated the energy that would be transported over the period, as did the subsequent 2010 regulatory determination discussed further in this section. SP AusNet has also experienced energy consumption over 2011 and 2012 that is well below that forecast by the AER in the 2010 Determination (noting that the AER increased the energy forecast from SP AusNet's proposed levels).

Figure 1 compares forecast and actual energy transported in each year of the 2006 – 2010 regulatory control period.

Figure 1: Forecast versus Actual Energy Transported



As a result SPI Electricity's (SP AusNet) revenue recovery over the 2006 – 2010 regulatory control period was below forecast due to the effects of volume and continue to be well below in the new regulatory period.

How have price caps actually performed

A mismatch between forecast and outturn energy consumption is unavoidable but insomuch as energy and demand trend in the same direction (which they may not) revenues should move with costs

For example, recent demand growth in SP AusNet's area has been subdued when compared with forecasts underpinning its approved sizable augmentation and customer

connection capex allowance. As energy has also been subdued revenue has also declined below that forecast in the Decision. This means that customers have not had to pay for capex that has not been required even though it was contained in the original price cap revenues. Interestingly if the business had been revenue capped customers would be paying. This loss of revenue also incentivises SP AusNet to invest in improving its forecasts for the next price review generating the continuous improvement expected from the current regime.

This highlights the importance of cost reflective tariffs. In the above example, energy and maximum demand have trended together, however, if energy had continued to increase while maximum demand flattened revenues would have moved in the wrong direction (noting the reverse is the more common recent Australian experience).

Nonetheless, this points to the continual need to improve forecasting and the cost reflectivity of tariffs, especially in light of changing consumer behaviour, not to taking the retrograde step of moving to a Revenue Cap.

Under a revenue cap bad forecasting of cost drivers will result in an identical gap opening up between revenues and costs within the next regulatory control period, which will have to be "corrected" at the commencement of the next regulatory control period by rolling in the higher actual capital expenditure. The only way a DNSP can mitigate this under a Revenue Cap is for the business to use extreme (non cost reflective) prices to ration demand, hence the Revenue Cap has the additional cost of incredibly poor incentives to price efficiently.

Figure 2 compares forecast and actual revenue across the regulatory control period. The comparison excludes the service factor reward / penalty (S Factor) from the actual revenue, as the forecast revenue assumes a neutral S Factor outturn impact on revenue. For the record, S Factor contributed an average of $9M per annum to SP AusNet's revenue over the period, or 2.5% of the EDPR revenue determination.

Figure 2: Forecast versus Actual Revenues
(excluding service incentive reward / penalty)

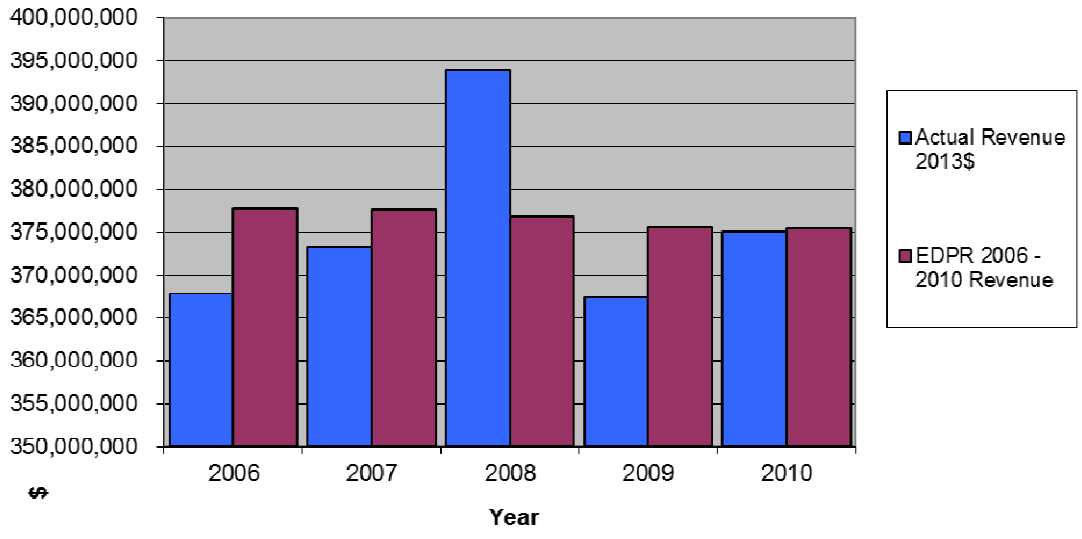
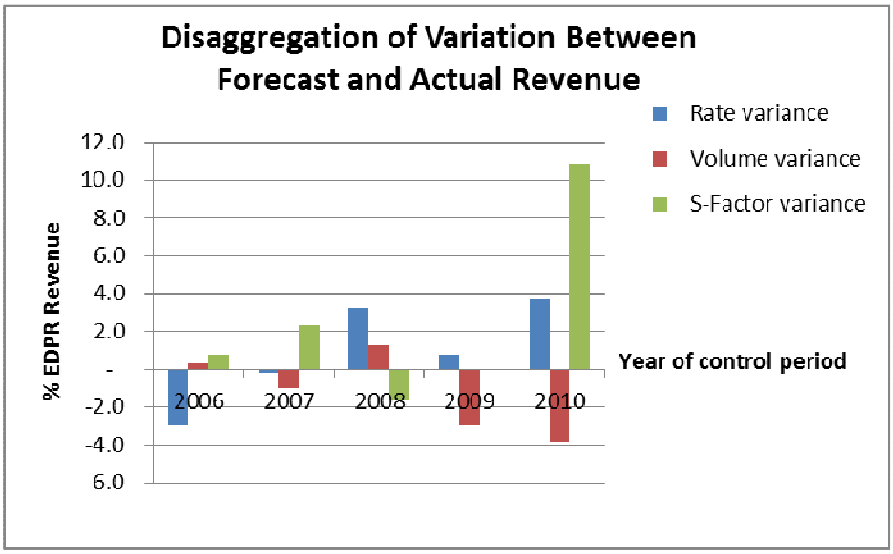


Figure 2 reveals that across the regulatory control period, forecast revenue exceeds actual revenue recovered, by approximately $6M.

Disaggregation of the revenue difference reveals that SP AusNet was able to apply tariff basket pricing strategy in accordance with the provisions and intent of the Rules to minimise the negative revenue impact of the AER's under-forecasting of energy consumption. This can be seen in Table 1.



SP AusNet notes that the AER's analysis does not disaggregate the different drivers of revenue variance and, therefore, draws conclusions on correlations that may be shown to be spurious with more detailed analysis. For example, S Factor performance introduces large variances into revenue that are independent of volume. Revenue out/under outperformance due to volume variance also needs to be disaggregated from the effects of tariff rebalancing. This is important because if volume outperformance is driving the revenue outperformance rather than tariff rebalancing then the issue becomes one of volume forecasting, not problems with the price cap mechanism itself.

The variation of components across the years also reveals the need for strategies to be employed by DNSPs to understand and respond to their customer base, through close monitoring of year on year volume forecasting, customer response to the introduction of more cost reflective pricing via annual tariff rebalancing. The WAPC facilitates this customer oriented approach to the service / price offering.

Incentives toward cost reflective pricing

In addition to facilitating volume risk management SP AusNet's experience is that the WAPC does encourage DNSPs toward cost reflective pricing although with a weak and declining capex incentive this incentive also weakens across the period (the future introduction of a time neutral capex incentive regime will help address current deficiencies).

The AER's conclusion that 'the theoretical incentives for efficient pricing provided by the WAPC have resulted in little practical benefit in DNSPs' pricing'[1] is contradicted by the evidence. In particular, in SP AusNet's distribution area, the cross subsidy of small residential and commercial customers by medium and large customers that was embedded in the early Victorian regime has been gradually unwound through the tariff rebalancing mechanism available under the WAPC.

Furthermore, SP AusNet has introduced cost reflective tariffs that can be enabled by interval metering. Under a revenue cap the incentive for this behaviour would not exist, but would likely create the incentive to set tariffs that are significantly above cost reflective levels. SP AusNet has:

- Successfully introduced a new large commercial cost reflective critical peak demand tariff, which has been referenced in the Commission's Power of Choice Review Final Report;
- Obtained AER approval from the AER to introduce cost reflective time of use residential and small customer tariffs in conjunction with the 2011 – 2015 Victorian Electricity Distribution Price Review. These new tariffs were placed under moratorium by the Victorian Government, however the government has now approved the introduction of voluntary flexible tariffs for residential consumers from July 2013.

Like most stakeholders who attended the Commission's workshop on 28 February 2013, SP AusNet considers that the current regulatory regime for economic regulation, as recently reformed, enables energy forecast risk to be mitigated and managed by the AER, to address concerns regarding the potential for windfall gain or loss. Additionally, the implementation of Power of Choice Review recommendations will enhance the incentives and guidance toward cost reflective pricing, further enhancing the superiority of the WAPC form of regulatory control for the distribution sector.

I would be pleased to respond to any enquiries the AEMC may have regarding this submission.

Yours sincerely,

Kelvin Gebert

Manager Regulatory Frameworks

Attachment: SP AusNet - Submission on Preliminary Framework and Approach - 22 August 2012.

[1] AER, Preliminary Positions, Framework and Approach Paper – AusGrid, Endeavour Energy and Essential Energy, June 2012, p.46.

22 August 2012

Mr Warwick Anderson
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Dear Warwick,

RE: NSW Framework and approach paper – control mechanisms

SP AusNet welcomes the opportunity to comment on the AER thinking with regards to control mechanisms. In particular, several misconceptions about the weighted average price cap (WAPC) need to be dispelled.

Weighted Average Price Cap

The Framework and Approach Paper states that under a WAPC revenue varies with the volume of sales while costs are more closely related to customer numbers and peak demand. This statement omits key aspects of the complex pricing that can occur under the WAPC. In particular, prices can vary according to volume, customer numbers, peak demand or any combination of these metrics. Further, given the continued increase in the penetration of smart meters across Australia (particularly in Victoria), volume can be further disaggregated between:

- Peak Energy – energy that drives the augmentation of the network (energy at risk);
- Shoulder Energy – energy that could, under certain circumstances, underpin the future augmentation of the network; and
- Off-peak energy – energy that in no way drives a business' future capital costs.

This highlights that the relationship between a WAPC and actual costs can be kept very close if the National Electricity Rules are enforced.

Volume outperformance versus tariff rebalancing

The Framework and Approach Paper appears to confuse two different effects with respect to revenue outperformance or under performance that may arise from a WAPC. Large revenue out performance or under performance may result from differences in outturn energy consumption volumes relative to the energy consumption forecasts embedded in a Determination. These variances will, in almost all most cases, dwarf revenue variations that derive from annual tariff rebalancing.

This is important as problems that arise from the first effect appear to be being used to justify removing one of the key incentive properties of a WAPC which is to encourage a DNSP to make their tariffs more cost reflective over time (through the rebalancing).

However, the revenue problem associated with the first effect arises from inaccurate forecasting (regardless whether the inaccuracy arises from the regulator, the DNSP or largely external factors), that is, it is not inherent in the WAPC. Obviously the solution to this problem is to increase the accuracy of the AER's forecasting in future decisions, not take the retrograde step of moving to a revenue cap.

Furthermore, under a revenue cap, bad forecasting of cost drivers will result in an identical gap opening up between revenues and costs within a regulatory period, which will have to be "corrected" at the commencement of the next regulatory control period by rolling in the higher actual capital expenditure. The only way a business can mitigate this under a Revenue Cap is for a business to use extreme (non cost reflective) prices to ration demand, hence, the Revenue Cap has the additional cost of incredibly poor incentives to price efficiently.

It should be noted, that while the AER has highlighted some instances where their Final Determination has under estimated a DNSP's energy consumption forecast (resulting in alleged windfall gains) it has remained silent on the numerous examples where it has overestimated a DNSP's energy consumption. For example, the AER has consistently overestimated SP AusNet's energy consumption over the two most recent regulatory periods.

Revenue cap versus price cap

The Framework and Approach Paper overstates the benefit of revenue caps. As highlighted above, unless forecasting is improved, any move to a revenue cap can still result in exactly the same gap between revenues and costs that can occur under a price cap. As highlighted previously, the difference is that under the revenue cap, because the business only gets rewarded for cost reductions, and faces no financial penalty (in NPV terms) for reductions in volumes, there is an incentive to deliberately price inefficiently.

For example, DNSPs would be incentivised to levy prices above cost reflective levels to those customers that are contributing to future costs being incurred, and who are deemed to have the most highly elastic demand (these tend to be business customers). This is done so that demand can be rapidly decreased to reduce costs, whilst any revenue reduction stemming from reduced sales to those customers is compensated for in future years under the revenue cap.

Efficient Pricing

The Framework and Approach Paper also states that the theoretical incentives for efficient pricing under a WAPC have not eventuated. Firstly, if this is true, the AER should assess the extent to which it is due to

- a design flaw in the WAPC itself that can in turn be easily overcome;
- a design flaw in the broader regulatory framework that can be easily overcome; or
- a flaw in the AER's administration of the Annual Tariff Proposals submitted by the businesses under the Rules.

Identifying an issue but not what is causing that issue to occur is not a sound basis for making significant changes to the broader regulatory framework.

An example of a regulatory design flaw that may weaken incentives faced by businesses to set cost reflective tariffs across the entire regulatory period, relates to the extent to which businesses can share in the economic benefits from reducing peak demand in any particular year when those benefits accrue across multiple regulatory periods. If, as the AER has stated, costs are more closely related to peak demand and therefore are generally capital in nature, then the existing flaws in the capital expenditure carryover mechanism (i.e., there are reducing incentives the further into the regulatory period a business is) means that virtually none of the economic benefits from setting cost reflective tariffs *now* to reduce future capital costs are able to be captured by the business. In fact, the business will actually suffer from reduced revenues in the near term, as well as facing lower capital expenditure forecasts during the next regulatory period, if it seeks to set cost reflective tariffs that would reduce demand.

The weak capex incentive regime has been raised as a significant flaw in the current 'Economic Regulation of Networks' Rule change proposal process by both the AER and industry. The above example, demonstrates that leaving one area of the regulatory regime with significant flaws can cause problems in other areas. These problems then attract second best solutions (such as revenue caps) rather than the actual cause of the problem being tackled.

Secondly, despite these aforementioned issues, the Framework and Approach Paper's broader statement is contradicted by the evidence. In particular, in SP AusNet's distribution area, the cross subsidy of small residential and commercial customers by medium and large customers that was embedded in the early Victorian regime has been gradually unwound through the tariff rebalancing mechanism available under the WAPC mechanism.

Furthermore, SP AusNet has:

- successfully introduced new large commercial cost reflective critical peak demand tariff;
- sought to introduce cost reflective time of use residential and small commercial tariffs. These new tariffs were placed under moratorium by the Victorian Government.

SP AusNet has done this because it believes in the broader benefits that accrue from setting cost reflective tariffs. It would not have any incentive for this behaviour under a revenue cap, in fact, as stated previously, it is likely to have an incentive to set tariffs that are significantly above cost reflective levels.

In addition, Clause 6.18.5 (a) and (b) of the Rules require that DNSPs to demonstrate that their prices are cost reflective before tariffs are approved by the AER. To now claim that DNSPs have not been doing so calls in to question regulatory oversight of annual tariff setting.

Conclusion

The majority of the concerns of policy makers and customers would be best addressed through enhanced incentives for DNSPs to introduce efficient cost reflective pricing

throughout the entire regulatory control period, rather than see the weakening of those incentives through revenue cap regulation. Adopting a carryover mechanism that is directly related to the DNSP's key cost driver, namely peak demand capital expenditure would be the key starting point.

Therefore, SP AusNet considers that a compulsory move to a revenue cap would be retrograde step for energy regulation in Australia. In particular, it is difficult to envisage how such a move would enhance the long run interests of consumers as required by the National Electricity Objective.

Should you have any questions in relation to this matter, please contact Tom Hallam on 9695-6617, also we would be happy to provide further information if required.

Yours sincerely,

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Director Regulation and Network Strategy