

Mr Warwick Anderson

General Manager

Network Regulation Branch

Australian Energy Regulator

GPO Box 3131

CANBERRA ACT 2601

Dear Mr Anderson

The National Generators Forum welcomes the effort and thinking that the AER has devoted to preparing the Better Regulation Guidelines that will apply to all electricity network service providers during the upcoming five-yearly revenue determination processes, starting with the three NSW Distribution Network Service Providers (DNSPs) for the period 2014-15 to 2018-19. The AER has previously outlined its proposed regulatory framework in the Stage 2 Framework and Approach for NSW DNSPs, January 2014.

The AER has since approved ‘placeholder determinations’ for 2014-15 for the NSW DNSPs and will shortly undertake a detailed assessment of the NSW DNSP proposals for regulated network allowances for the next five-year period. As this is the first application of the Better Regulation Guidelines and new National Electricity Rules for revenue determinations, the NGF has a keen interest in ensuring the AER is able to effectively apply the new Rules and incentive schemes.

The NGF has prepared the attached report outlining a number of issues relating to application of the new incentive schemes in light of past decisions to approve dramatic increases in capital and operating expenditure for these businesses. As noted in the report, it is important that incentive schemes are strong enough to reveal efficient costs, while at the same time not rewarding DNSPs for past, and potentially ongoing, inefficiencies.

The report provides high-level comment on three key components of the proposed new arrangements:

1. *Capital Expenditure Sharing Scheme (CESS)* – the regulated asset base of the 3 NSW DNSPs has blown out from just under $9 billion to some $28 billion over the past decade. The CESS scheme needs to ensure that DNSPs are only rewarded for genuine capital efficiencies, and not from artificially high forecasts of overall electricity consumption or peak demand. We are concerned that the NSW DNSPs stand to benefit from significant windfalls should current capex levels be used as the benchmark or base level for future allowances. We are also concerned that the sharing mechanism allows a mismatch in the timing of any savings for DNSPs and customers.
2. *Efficiency Benefit Sharing Scheme (EBSS)* – aggregate operating costs for the NSW DNSPs have increased by more than 90 per cent over the past two regulatory periods. While providing an incentive for DNSPs to reveal efficient operating costs over time, the EBSS may enable DNSPs to benefit from an inefficient starting point. DNSPs may be able to pass on these inefficient costs to consumers and retain perceived ‘efficiency’ savings for a further 6 years. Again, the onus is on the AER to separate genuine efficiency savings from any overstated regulatory allowance from past decisions.
3. *Expenditure Forecast Assessment Guidelines*: it is important that the AER gains an understanding of the underlying reasons for the past movements in RAB values. The NGF supports the use of top-down modelling techniques and benchmarking comparisons with inter-state DNSPs. Based on the NSW DNSPs transitional regulatory proposals, capex requirements are expected to moderate significantly over the next regulatory period. However, these reductions are from an extremely high base and would still result in substantial ongoing real increases in regulatory asset values. This is counter-intuitive given forecast decreases in demand and potential excess capacity in the opening RAB given the extraordinary level of capex spending over the past decade.

The generation sector looks forward to further opportunities to comment on the setting of regulatory allowances for all network service providers in the NEM.

Yours sincerely



TIM REARDON

**NGF SUBMISSION TO THE REVENUE DETERMINATIONS (2014-2019) OF THE NSW DISTRIBUTION NETWORK SERVICE PROVIDERS**

The National Generators Forum (NGF) welcomes the release of the Australian Energy Regulator’s (AER’s) transitional decision for NSW and ACT Distribution Network Service Providers (AER Transitional Decision)[[1]](#footnote-1). The NGF acknowledges that decision includes a placeholder determination for the transitional regulatory control period of one year and that the AER will carry out a full regulatory determination process by 30 April 2015 to apply to the subsequent regulatory period of four years.

The NGF understands that the AER has relied on the operating and capital expenditure inputs provided by the Distribution Network Service Providers (DNSPs) and that these will be subject to rigorous analysis as part of the full regulatory determination. Nevertheless, the NGF believes that the transitional decision has raised some concerns in terms of the practical implementation of the AER’s Stage 2 Framework and Approach for NSW DNSPs, particularly in relation to the proposed incentive based efficiency sharing schemes.

Historically, the regulatory framework has been ineffectual in curtailing NSW DNSP spending, contributing to spiralling regulatory asset base (RAB) values and substantial real increases in network prices:

Source: IPART 2004 and AER 2009 (Revised) Pricing Determinations

Source: IPART 2004 and AER 2009 (Revised) Pricing Determinations (cumulative X factors)

The NGF supports the proposed strengthening of incentive mechanisms in order to reveal efficient costs given the substantial information asymmetry between DNSPs, regulators and other stakeholders. However, a careful balance is required to ensure that incentive mechanisms are strong enough to reveal efficient costs, while at the same time not rewarding DNSPs for past (and ongoing) inefficiencies.

**CAPITAL EXPENDITURE SHARING SCHEME (CESS)**

While the NGF offers in principle support for the proposed CESS framework, the NGF remains concerned that the ‘horse may have bolted’ in terms of historical capital expenditure (capex) levels and that NSW DNSPs now stand to benefit from:

1. The inclusion of the full amount of past overspends in the RAB;
2. Commencing the CESS from a very high base in terms of capex allowances; and
3. Commencing the CESS with an opening RAB arguably containing considerable surplus capacity, given the substantial increases in RAB values over the past decade and recent downward trend in energy usage and peak demand.

Historically, capital incentive mechanisms have been weak, relying on the retention or forgoing of ‘within period’ capital returns as an incentive to contain capital spending within the regulatory allowances. However, such incentives are diluted in that 100 per cent of actual capital expenditure (including any over spend) was automatically rolled into the RAB at the subsequent regulatory reset, without regulatory scrutiny of the efficiency or otherwise of the over spend.

This was highlighted over the 2004/05 to 2008/09 regulatory period where NSW DNSPs over spent the regulatory capex allowance by more than $2.5 billion (53 per cent). In the subsequent regulatory period, capital expenditure allowances continued to spiral, contributing to a three-fold ($19 billion) increase in regulatory asset base values over the past two regulatory control periods[[2]](#footnote-2):

Source: IPART 2004 and AER 2009 Pricing Determinations

The total RAB value for NSW DNSP’s is projected at almost $28 billion in 2013/14, compared to a total of less than $11 billion for Victorian DNSPs. On a RAB/GWh basis, NSW distribution assets are estimated to be approximately 65 per cent higher than their Victorian counterparts. While the NGF acknowledges that energy volume may not be a major driver of asset values, the RAB/GWh ratio demonstrates the relative distribution of capital costs faced by NSW versus Victorian customers:

Source: AER 2009 (NSW) and AER 2010 (Vic) Pricing Determinations

The NGF is concerned that under the proposed CESS, DNSPs may potentially share in the benefits of future capex savings with little regard to the efficiency or otherwise of the existing capital base (i.e. opening RAB). As a result, past capital inefficient overspends are effectively locked in the RAB (and hence network prices) for decades to come.

Over the upcoming regulatory period (2014/15 to 2018/19), it is estimated that approximately 89 per cent of capital related revenue requirements (i.e. return on assets and regulatory depreciation) will be determined with reference to the opening 2014/15 RAB value and only 11 per cent with reference to projected capital expenditure allowances over the regulatory period[[3]](#footnote-3). The NGF acknowledges that the AER is unable to revisit past overspends. However it is important that past overspends and RAB value comparisons to interstate benchmarks are considered by the AER when assessing future capex requirements[[4]](#footnote-4).

The CESS provides financial rewards for distributors whose capex becomes more efficient and financial penalties for those that become less efficient. The problem is separating genuine capital efficiencies from artificially high forecasts and/or variations in the timing (i.e. deferral) of capital spending. Unlike operating costs, capex can be lumpy in nature (i.e. vary in value from year to year) and the timing of capex is often discretionary (i.e. projected capex can often be deferred to future regulatory periods with little short term impact on system reliability). Given that capex allowances have increased significantly over the past decade, NSW DNSPs stand to benefit from significant windfalls under the CESS should current capex levels be used as a benchmark or base level for future capex allowances:

Source: IPART 2004 and AER 2009 Pricing Determinations (excludes ACTEW AGL)

AusGrid’s total regulatory allowance for distribution capex has increased from nominal $2.1 billion over the prior (2004/05 to 2008/09) regulatory period to nominal $7.0 billion over the current (2009/10 to 2013/14) regulatory period. AER’s Transitional Decision shows that AusGrid now expects to spend $5.2 billion over current period, $1.8 billion below the regulatory allowance. Yet despite the ‘underspend’ of $1.8 billion relative to the current period allowance, projected capex remains $3.1 billion above the prior period regulatory allowance:

Source: IPART 2004 and AER 2009 Pricing Determinations, AER 2014 Transitional Decision

Had the proposed CESS been implemented over the 2009/10 to 2013/14 regulatory period, AusGrid would have benefited by $575 million (NSP Share) in NPV terms (see table below)[[5]](#footnote-5), despite capex increases of 150 per cent relative to the prior period capex allowances (i.e. $5,245 million versus $2,099 million). It is problematic whether the actual underspend could be classified as a genuine efficiency saving rather than an overstated projection. This highlights the need for a detailed reconciliation of actual versus allowed capex to be undertaken before any future CESS benefit is provided.



Source: AER 2009 Pricing Determination, AER 2014 Transitional Decision, AER CESS Model

Under the CESS, there is an inequity associated with the timing of CESS benefits, as the DNSP share is received as an up-front adjustment to building block revenue (over the subsequent regulatory period) whereas customers receive smaller (albeit ongoing) reductions in regulated revenue reflecting lower capital returns (i.e. lower return on assets and depreciation) through a lower opening RAB. An alternative methodology would be to include the DNSP share of CESS savings (net of financing benefit) as an adjustment to the opening RAB rather than as an adjustment to building block revenue, thereby providing CESS benefits in the form of an adjustment to the RAB for both customers and DNSPs. This would provide a more equitable outcome in terms of matching the timing of CESS benefits between customers and DNSPs.

The NGF acknowledges that the CESS is not being implemented until the subsequent regulatory period (i.e. with reference to capital expenditure incurred over the 2015/16 to 2018/19 regulatory control period). However the above example demonstrates the potential for significant benefits to be gained and emphasises the importance for the CESS be complemented by rigorous ex-ante analysis of projections to prevent DNSP’s from setting artificially high targets from which to later benefit.

The NGF remains concerned that the need to strengthen incentive measures may imply that the regulator is not in a position to determine efficient costs, as evidenced over the past two regulatory periods with NSW DNSP capex being significantly under-estimated in IPART’s 2004 determination and significantly over-estimated in the AER’s 2009 determination. Such variations highlight the practical difficulties associated with the implementation of a CESS including the isolation of genuine efficiency savings given the discretionary nature of capex and significant information asymmetry between DNSPs and regulators.

**EFFICIENCY BENEFIT SHARING SCHEME (EBSS)**

The NGF acknowledges that the EBSS is designed to provide incentive signals to reveal efficient costs over time. However, it may take many years for this to occur during which period DNSPs are not only able to pass on inefficient costs to consumers, but also retain perceived ‘efficiency’ savings for a further six years. This means that a DNSP transitioning to an efficient cost level over a ten-year period can effectively pass through inefficient costs to consumers for a period of 16 years. This is in contrast to the market-based generation and retail sectors of the electricity supply industry where efficiency gains are served through competitive behaviour. It also highlights the potential need to set a base year operating cost benchmark based on an assessment of efficient rather than actual costs.

The EBSS example provided in the Stage 2 Guidelines demonstrates the benefits of a permanent efficiency improvement being shared approximately 30:70 between a DNSP and consumers. Though mathematically correct, the reality is that the DNSP benefits exclusively for the first six years and consumers will only benefit beyond this period if the efficiency saving is genuinely of a permanent basis and is not ‘lost in the wash’ at future regulatory resets. It is therefore important that the EBSS measures continuous improvement with increased emphasis on operating cost movements between regulatory periods. In this regard, the NGF supports the proposed annual 'rate of change' approach to account for efficient changes in operating costs over time outlined in the Expenditure Forecast Assessment Guidelines.

Aggregate operating cost allowances for NSW DNSPs have increased by more than 90 per cent in nominal terms over the past two regulatory periods. It is therefore critical for the AER to review the efficiency of the base level of operating costs to ensure that future cost reductions represent genuine efficiency savings rather than an overstated cost base:

Source: IPART 2004 and AER 2009 (Revised) Pricing Determinations

AusGrid’s total regulatory allowance for distribution operating expenditure (opex) increased from nominal $1,548 million over the 2004/05 to 2008/09 regulatory period to nominal $2,650 million over the current (2009/10 to 2013/14) regulatory period. Ausgrid now projects to underspend its regulatory opex allowance over the current regulatory period, translating to significant EBSS efficiency carryover allowances as outlined in the AER’s transitional decision[[6]](#footnote-6). In the 2014/15 transitional control period, AusGrid’s allowance for distribution opex (including efficiency carryover) is $646 million, representing a $74 million (13.0 per cent) increase over the previous year’s regulatory opex allowance. It is very difficult to comprehend how AusGrid’s network customers benefit under such an outcome.

**Table 1: Ausgrid – opex and efficiency carryover 2013/14 to 2017/18**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **13/14** | **14/15** | **15/16** | **16/17** | **17/18** |
| Operating Expenditure | 572 | 551 | 551 | 591 | 570 |
| Efficiency Carryover | - | 95 | 116 | 83 | 138 |
| Total  | 572 | 646 | 667 | 674 | 708 |

Source: AER 2009 (Revised) Pricing Determination, AER 2014 Transitional Decision

As with capex, the question remains as to whether AusGrid’s opex ‘underspend’ over the 2009/10 to 2013/14 regulatory period represent genuine efficiency savings or an overstated regulatory allowance, especially given that actual opex levels remain significantly above previous period regulatory allowances.

**EXPENDITURE FORECAST ASSESSMENT GUIDELINES**

The NGF supports the Expenditure Forecast Assessment Guidelines as a critical element of the AER Better Regulation framework. Regulatory allowances, in particularly capex, have increased alarmingly in recent determinations, partly due to the lack of analytical tools and techniques available to assess regulatory proposals.

Historically, regulatory assessments of capital expenditure programs have predominantly incorporated bottom up assessments of a sample of projects and / or programs, with minimal top down assessment of the overall level of capex, underlying drivers and impacts on network prices. Given the substantial information asymmetry between DNSPs and regulators, past approaches have had limited success in determining an efficient overall level of capex for NSW DNSPs. It is far more difficult for a regulator to reject capital expenditure proposals on an individual project-by-project basis compared to setting a top down overall efficient level of capex within which DNSPs can prioritise individual projects.

As previously discussed, network prices have been impacted by a three-fold increase in NSW DNSP RAB values over the past ten years. In comparison, the aggregate RAB value of privately owned Victorian DNSPs has increased at a far more modest rate, with the gap between NSW and Victorian RAB values increasing from approximately $3 billion in 2004 to $17 billion in 2014:

Source: NSW and Victorian electricity distribution pricing determinations

It is important that the AER gains an understanding of the underlying reasons for the relative movements in RAB values. Historical capex levels should be considered when assessing the need for future spending, together with comparisons of opening RAB values against private sector interstate benchmarks. In this regard, the NGF supports the AER’s proposal to implement top down benchmarking techniques as an expansion to its regulatory toolkit.

The NGF also supports the introduction of modelling techniques for the purposes of assessing proposed replacement and augmentation capex. In order to achieve a steady state RAB (i.e. no real increases in capital costs), replacement capex should reasonably align with straight-line depreciation allowances and augmentation capex should reasonably align with demand growth. Yet over the current regulatory period alone, the total regulatory allowance for capex exceeded the total allowance for straight-line depreciation by almost $10 billion, despite flat to declining energy growth:

Source: AER 2009 (Revised) Pricing Determination

Assuming no changes in reliability standards, RAB values (on a $/GWh basis) should remain relative stable in real terms over the longer term. This would translate to constant capital costs (i.e. return on and of assets) in real terms. However, the total RAB value for NSW DNSPs (on a $/GWh basis) has more than doubled in real terms over the past decade:

Source: IPART 2004 and AER 2008 pricing determinations

While the NGF acknowledges that the above analysis may ‘over simplify’ the many complexities associated with determining capex requirements, it clearly demonstrates the significant impact of past capex levels on NSW DNSP RAB values and resultant network prices. In order to achieve a ‘steady state RAB’ over the next regulatory period, total NSW DNSP capex allowances would need to reduce from around $3 billion per annum (2013/14 capex allowance) to around $1 billion per annum (13/14 price levels).[[7]](#footnote-7)

Based on NSW DNSPs transitional regulatory proposals, capex requirements are expected to moderate significantly over the next regulatory period. However, it should be remembered that such reductions are from an extremely high base and that the transitional capex proposals are still expected to result in substantial ongoing real increases in regulatory asset values. This is counterintuitive given forecast decreases in demand and potential excess capacity in the opening RAB given the extraordinary level of capex spending over the past decade.

Over the 2014/15 to 2018/19 regulatory period, projected ongoing increases in RAB values and resultant increases in capital costs are expected to be largely offset by a material reduction in the WACC (due to changes in the risk free rate and equity beta). It is important that pricing impacts associated with changes in WACC are isolated from pricing impacts associated with capex levels and associated RAB value increases.

1. Note that analysis in this paper excludes Actew AGL. [↑](#footnote-ref-1)
2. Increase from opening 2004/05 RAB value of $8,749 million. Projected closing RAB values are based on AER forecasts from 2010 Determination and reflect asset values on which current network prices are derived. Opening RAB values in 2014/15 will vary to closing 2013/14 RAB values depending on actual capex and actual CPI over the 2009/10 to 2013/14 period. [↑](#footnote-ref-2)
3. Estimation based on AusGrid’s proposed distribution revenue outlined in AER Transitional Decision, Appendix B.1 [↑](#footnote-ref-3)
4. The NGF acknowledges the AER’s increased ex-ante and ex-post review powers under the proposed Expenditure Forecast Assessment Guidelines. [↑](#footnote-ref-4)
5. $171 million in financing benefit and $404 million as revenue building block adjustment at the next regulatory reset. [↑](#footnote-ref-5)
6. AER Transitional Decision, Table 4.4, pg. 23 [↑](#footnote-ref-6)
7. Assuming zero demand growth. [↑](#footnote-ref-7)