CitiPower, Powercor Australia and

SA Power Networks

JOINT RESPONSE TO AER DRAFT EXPENDITURE FORECAST ASSESSMENT GUIDELINES FOR ELECTRICITY DISTRIBUTION AND TRANSMISSION

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CONTENTS

1 EXECUTIVE SUMMARY

CitiPower, Powercor Australia and SA Power Networks (**the Businesses**) welcome the opportunity to make this submission on the Australian Energy Regulator's (**AER**) *Draft Expenditure Forecast Assessment Guideline for Electricity Distribution* (**Draft Guideline**) and the accompanying explanatory statement[1].

The Businesses' submission makes the following key points:

- **AER's role** - the AER's role is to make an assessment of whether the Network Service Provider's (**NSP**) proposed expenditure meets the expenditure criteria set out in the National Electricity Rules (**NER**). It should not develop an alternative forecast. The language used by the AER in the Draft Guideline implies that it has the power to mandate the use of a particular opex forecasting technique and that it is the AER, rather than the DNSP, that is responsible for developing opex forecasts.
- **Decision making criteria -** the Draft Guideline provides no guidance on the circumstances in which the AER will apply different techniques for assessment of expenditure forecasts or the level of reliance to be placed on different techniques. The Businesses recommend that the Guideline include decision making criteria to address these concerns.
- **Limitations of assessment methods** - the Guideline should acknowledge that all of the proposed assessment methods are inherently imperfect and inaccurate and therefore the results of any particular method cannot be given undue reliance. Any form of benchmarking should only be used to identify areas for further investigation and consideration must be given to the unique operating conditions of individual NSPs. The Businesses support previous statements by the AER that benchmarking techniques would not be used deterministically.
- **Incentives versus bottom up build** – an examination of a bottom up build is a step away from incentive based regulation. The Guideline should acknowledge and take account of the incentives created by Efficiency Benefit Sharing Scheme (**EBSS**)**.**
- **Productivity adjustment** - the Businesses do not support productivity adjustments. Such an approach is inappropriate because the Consumer Price Index (CPI) is already affected by productivity growth, it would undermine the EBSS by passing on estimated future efficiency gains that have not yet been achieved and it would increase the risk of the AER failing to provide the opportunity for NSPs to recover their efficient costs.
- **Backcast data** - the request for 10 years of historical data is unreasonable, particularly in the timeframe provided. The draft category analysis Regulatory Information Notice (**RIN**) requires an extensive volume of data much of which is not collected by the Businesses. Consequently, numerous assumptions and estimations would be required to populate the templates. Such limitations on the quality of data would severely undermine the credibility of and stakeholder confidence in the results of any benchmarking model. The Businesses strongly recommend that the new data reporting requirements are only applied prospectively.

The Businesses support the submission made by the Energy Networks Association (ENA).

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[1] AER, *Explanatory statement, Draft Expenditure Forecast Assessment Guidelines for electricity transmission and distribution*, August 2013.

2 NETWORK SERVICE PROVIDER'S PROPOSAL

The NER require the *Expenditure Forecast Assessment Guidelines* (**Guideline**) to set out the AER's approach to assessing opex and capex forecasts and the associated information requirements. However, the AER's Draft Guideline steps dangerously close to going beyond this requirement in prescribing a forecasting method. The AER states:

> *"While the NER place no restrictions on NSP's forecasting methods, some of the techniques and data requirements specified in the Guidelines and F&A paper (which NSPs must comply with) may draw NSPs away from methods they employed in the past".*[2]

It is not the AER's role to prescribe the forecasting method that the NSP must adopt but rather to assess the NSP's expenditure forecasts. In assessing expenditure forecasts, the AER is required to accept forecasts that it is satisfied reasonably reflect the expenditure criteria as set out in the NER (clauses 6.5.6(c) and 6.5.7(c)). If it does not accept the forecasts, the AER is required to substitute an estimate that it is satisfied reasonably reflects the expenditure criteria, taking into account the expenditure factors (clauses 6.12.1(3) and (4)).

The Australian Energy Market Commission (**AEMC**) stated in the Rule Determination, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012, that:

> *"The NSP's proposal is necessarily the starting point for the AER to determine a capital expenditure or operating expenditure allowance, as the NSP has the most experience in how its network should be run. Under the NER the AER is not "at large' in being able to reject the NSP's proposal and replace it with its own since it must accept a reasonable proposal".*[3]

In this light, the AER should consider re-framing the Guideline whereby the AER's approach is set out in the context of how it will go about assessing the NSP's expenditure forecasts, not on how it intends to develop the NSP's expenditure forecasts.

2.1 Application of techniques

The Businesses recognise that the AER seeks to adopt a holistic approach. However, the Businesses need to have clarity and certainty on the techniques and the circumstances of their application. We also note that, there are a number of risks associated with the holistic approach, in particularly a lack of transparency and the ability for the AER to 'cherry pick' the results to arrive at the lowest cost outcome.

In order for the NSP to understand the AER's holistic approach, it must provide decision making criteria that the AER will apply, including detailing the circumstances when each method will be used, the data and analysis required, how the methods would be applied and the weighting that would be used. Such an approach affords NSPs procedural fairness.

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2 Ibid, page 3.

3 AEMC, *Rule Determination, National Electricity Amendment (Economic Regulation of Network Service Providers) Rule 2012*, 29 November 2012, page. vii.

The question as to which assessment techniques should be employed and their application must be resolved firstly by reference to the NER requirements and any pre-determined principles or the annual benchmarking reports should only be considered after that. The Businesses are very concerned with the AER's statement in the explanatory statement that benchmarking is inherently more accurate than engineering reviews.[4] This type of statement is unfounded since both methods are subject to error and unlike benchmarking, engineering assessments directly consider the specific circumstances of an NSP.

As noted, there is likely to be a strong temptation for the AER to 'cherry pick' the results of the assessment techniques and choose the methods which determine revenue based on 'minimum costs'. The AER's application of the repex model and decision with respect to vegetation management for the Victorian Distribution Network Service Provider's (**DNSP**) 2011-15 regulatory review are two well documented examples where 'cherry picking' occurred.

In order to mitigate both the risk and appearance of 'cherry picking' the AER should:

- Seek to look for "consensus" outcomes across multiple techniques rather than relying too heavily on the results of any single technique. If there is a technique that results in an outlier then the AER should seek to further understand the drivers behind the results before rejecting the NSP's forecast;
- Apply the same assessment techniques in similar circumstances, e.g. for a particular cost category across all NSPs; and
- Apply assessment techniques in such a way that it will produce stable results over time.

2.2 First pass assessment

In the *Expenditure Forecast Assessment Guidelines for electricity distribution and transmission, Issues Paper* (**Issues Paper**) the AER foreshadowed a "first pass" assessment approach. The "first pass" approach proposed in the Issues Paper provided a framework in which the AER began to set out the circumstances the AER would apply each technique. A first pass process could potentially provide a cost effective mechanism for identifying categories of an NSP's costs that would require less scrutiny by the AER. This would reduce the scope of the full regulatory process and lower the costs incurred on all participants.

The Draft Guideline however only briefly mentions the "first pass" approach providing little guidance for how this would work in practice or the circumstances in which the AER will apply the different assessment techniques and reconcile the results. The Businesses encourage the AER to re-consider giving a stronger role to the "first pass" assessment in the Guideline, and provide clear guidance on how this process would work within the decision making criteria described above.

[4] AER, *Explanatory statement Draft expenditure forecast assessment guidelines for transmission and distribution*, August 2013, page. 56.

2.3 Onus on NSPs to identify uncontrollable costs

In order to discharge its statutory obligations in the context of applying benchmarking analysis, the AER must ensure that it has access to the information required to assess whether the benchmarks it applies are reasonable comparators and capable of producing robust results. While the Draft Guideline states that the onus will be on NSPs to demonstrate the nature and quantum of uncontrollable factors that influence differences in expenditure across NSPs, in light of its statutory obligations, it is not permissible or appropriate for the AER to shift the onus to NSPs in this way.

The Businesses consider it to be a mutual responsibility to identify uncontrollable factors. However, the AER is best placed to obtain the required information, principally through the use of its compulsory information gathering powers to identify uncontrollable factors and reasons for differences between NSPs. NSPs cannot be expected to fully understand all the different cost drivers of all other NSPs in Australia, nor do they have the information gathering powers of the AER to obtain such information.

3 INFORMATION REQUESTS

In the Explanatory Statement the AER makes a number of statements that the benefits of requiring NSPs to provide an extensive set of data exceed the costs. The Businesses have no confidence that these statements are correct, and consider it to be inappropriate for the AER to make such statements when it has not provided evidence of a proper cost benefit analysis. In particular the AER has not discussed or identified the costs associated with providing 10 years of back-cast data which will require very significant NSP resources and substantial audit costs. Furthermore, the Businesses question the real benefit of requiring 10 years of historical back-cast data when much of this will be derived from extensive use of estimation and assumptions. The limitations on the quality of such data, which can lead to measurement error in the analysis, is likely to undermine the value of the AER's proposed benchmarking assessments.

The AER intends to make multiple regulatory information requests over the next year to collect an extensive volume of information for various purposes. This relatively uncoordinated approach to data collection will result in each of the Businesses being required to prepare three different data requests with three separate audit processes and three separate internal sign-off processes within seven months. These new requirements will be concurrent with an extremely busy period as the Businesses prepare their regulatory proposals for the next regulatory control period (SA Power Networks will submit in October 2014, and CitiPower and Powercor Australia in April 2015). The Businesses recommend that the AER strongly consider an immediate streamlining of its data requests.

The Businesses support the AER's position that all data used for benchmarking should be audited as this is essential to promote a high quality dataset. The audit costs for providing a level of assurance for the additional data requests will be considerable however, with SA Power Networks alone estimating that additional audit costs could exceed $500,000. Further, it is also important that the AER carefully consider the standard of audit that can practically be achieved with regards to historical back-cast data, particularly where assumptions and estimations must be applied. In the case of the annual RIN, financial data are audited against the Cost Allocation Method. No such methodology exists for deriving cost elements which have not previously been recorded by the Businesses.

The AER's proposed timeframe for collecting the economic benchmarking data is particularly onerous for the Businesses as the audit timing will coincide with the Businesses' statutory accounts audits. The Businesses are therefore not confident that our auditors will be available during the required period, particularly at such short notice. Neither is it practical to bring in new auditors who would be unfamiliar with the Businesses.

The AER's proposed timeframe for the category analysis RIN is very tight, particularly given the extensive scope of new data required and the requirement to back-cast 10 years of data. It is unlikely that the AER would be provided with data of a sufficient quality under such short time-frames. Additionally, the draft category analysis RIN is very unclear on what is required and the Businesses are particularly confused about what is required to be reconciled.

The Businesses are also concerned with the amount of category analysis information the AER requires. The Businesses cannot provide much of the information the AER is requesting and will provide more detailed comments at the category analysis RIN consultation stage. There is a risk that the AER will push the NSPs to adopt largely arbitrary allocations in order to populate the category analysis RIN. In such a case, NSPs would be at a high risk of providing materially misleading and unreliable information. Further, it would be inappropriate for the AER to unfairly disadvantage a NSP if they cannot genuinely provide the information by, for example, substituting unit costs provided by another NSP in its determination.

Overall, the Businesses are concerned that the AER is unduly rushing the data collection process, particularly with regard to collection of back-cast data when only one year of data is required to meet its obligations under the NER to produce an annual benchmarking report that assesses the relative efficiency of NSPs over a 12 month period.

The Businesses strongly recommend that the AER apply the new data requirements prospectively, rather than retrospectively, in order to ensure a high quality dataset and promote high quality benchmarking. A prospective application of new data reporting requirements would enable NSPs to take steps to put the necessary systems in place to more accurately capture the data the AER requires. This includes changes to both IT systems and field staff reporting practices to introduce record keeping for information that is not required for network management purposes but will now be required for regulatory reporting. Given the high cost of implementing new data collection and storage processes, NSPs also require a high level of certainty that the AER will not change reporting requirements in the future. Prospective application of the new data requirements would also reduce the risk of stakeholder confidence in the AER's benchmarking program being undermined by spurious outcomes, the result of poor data quality.

4 CAPITAL EXPENDITURE ASSESSMENT APPROACH

The Businesses are broadly comfortable with the AER's general approach to examining work volumes and costs in the context of the high level subcategories as set out below:

- Replacement expenditure;
- Augmentation expenditure;
- Connection and customer driven works capital expenditure; and
- Non-network capital expenditure.

The Businesses welcome the AER's view that this category based level analysis will allow the AER to better control for differences across NSPs which cannot be accommodated through economic benchmarking approaches. However, specific concerns with the general approach are discussed below.

4.1 Replacement expenditure model (Repex)

The Businesses consider that the repex model should not be relied upon solely when determining replacement expenditure. The repex model should only be used to identify further areas of investigation and potentially explain the different cost drivers between each NSP.

Of particular concern to the Businesses is the AER's approach to recalibration. The AER noted that where a NSP has sufficiently detailed records and can directly calculate actual observed mean life and standard deviation, the need for recalibration will be substantially reduced or eliminated. According to the AER, the Victorian DNSP's did not have this data available.

Following the release of the AER's *Victorian electricity distribution network service providers: Distribution determination 2011 to 2015 Draft decision* (**Draft Determination**), CitiPower and Powercor Australia engaged Parsons Brinckerhoff (**PB**) to consider the AER's approach to assessing its reliability and quality maintained capex forecasts for the next regulatory control period.[5]

PB considered that the use of historical data to calibrate the repex model needs to be done with extreme caution due to the changes in the condition and/or the assessed condition of the assets and the associated risks. PB concluded in respect of its review of the repex model:[6]

> *"….the AER's approach assumes that the asset condition and associated business risks over the period from 2006 to 2008 are not materially different to those expected over the next regulatory control period. In the absence of an ex-post review of the drivers of actual expenditure, PB considers that limited conclusions can be drawn based on historical levels of expenditure, particularly over relatively short periods."*

The Businesses urge the AER to seriously consider their view on re-calibration and the scope of information required to provide a robust data set.

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5 P*Model Review*, July 2010.

6 Ibid.

4.2 Augmentation Expenditure Model (Augex)

The Businesses consider that the augex model should not be relied upon when determining augmentation capex. Like the repex model, the augex model should only be used to provide the AER information on further areas of investigation and potentially explain the different cost drivers between each DNSP.

The Businesses are disappointed that the AER statement in the *Guidance document, AER Augmentation model- data requirements* (**Guidance document**) still indicates that it anticipates the large majority of augmentation expenditure would be considered as modelled.[7]

The Businesses consider that a significant component of the augmentation capex forecasts would not be captured by the augex model. Please refer to the Businesses submission to the Issues Paper for examples of 'un modelled' capex.[8]

The Businesses in preparation for the next price reset will attempt to explain the differences between the AER augex model outputs and their own internal forecasts. In doing so, it will be clear that a significant amount of augmentation related expenditure is not captured by the AER augex model.

5 OPERATING EXPENDITURE ASSESSMENT APPROACH

5.1 Bottom up build

The Businesses agree that a bottom up build for step changes is appropriate. However, the Businesses question to what end the AER is seeking a bottom up build for the revealed base year through its disaggregation of expenditures and activity volumes for maintenance expenditure categories. The objective of the EBSS is to incentivise an NSP to reveal its efficient costs. An examination of a bottom up build is a step away from reliance on incentive based regulation on which economic energy regulation in Australia is based. This also appears contradictory to the AER's stated preference of a 'base-step-trend' approach to forecasting most opex cost categories.

It will be a challenging task for the Businesses to provide a unit cost and activity volume build for maintenance and vegetation management. In regard to maintenance for example, it is not possible to derive a unit rate for each individual maintenance activity and physical asset. Therefore, a derived unit rate will not provide an accurate picture of the Businesses activities and underlying costs.

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[7] AER, *Guidance document, AER Augmentation model - data requirements*, June 2011, page 10.

[8] CitiPower, Powercor Australia and SA Power Networks, *Joint response to AER issues paper on Expenditure forecast assessment guidelines for electricity distribution and transmission*, 15 March 2013, page 16.

5.2 Assessing efficiency of base year opex

The Businesses consider that the EBSS provides a strong incentive for the Businesses to seek continuous cost efficiencies in each year of the regulatory control period. The AER should therefore be confident that re-current base year opex is an efficient starting point for forecasting opex into the regulatory period.

The Businesses are concerned that the Draft Guideline does not acknowledge the role of the incentive framework for driving efficient base year costs. Instead the Draft Guideline and explanatory statement places significant emphasis on the use of mechanistic assessment tools, such as the use of economic benchmarking, to assess and potentially substitute base year costs. The Businesses have made numerous submissions to the AER concerning the inherent weaknesses of economic benchmarking, particularly its inability to adequately account for uncontrollable differences between NSPs, which make it an inappropriate tool for deterministic application.[9]

The AER also intends to use economic benchmarking to make an assessment of whether NSPs are responding to the EBSS incentives. The Businesses do not consider economic benchmarking to be an appropriate tool for making judgements regarding why NSPs are making particular decisions. Economic benchmarking provides no information on the decision making process or the constraints a NSPs faces.

Notwithstanding the above points, if the AER does use economic benchmarking to assess and potentially substitute base year opex, then it needs to be clear about what principles it will apply to set the benchmark and how the model and the benchmark will fully account for differences in NSPs' uncontrollable operating conditions.

The AER's statement in the explanatory statement that Australian DNSPs are less efficient than international counterparts and therefore the benchmark could reasonably set at the frontier firm is unfounded. International comparisons of regulated energy utilities are extremely difficult due to very different operational circumstances and regulatory environments. Further, the AER has provided no quantitative evidence at all to substantiate such a claim.

5.3 Rate of change productivity adjustments

The Businesses do not support the AER's intended application of productivity adjustments to the opex rate of change formula, for either "frontier shift" or "catch up".

The CPI is already affected by economy-wide productivity change. Productivity change across the general economy has a dampening effect on growth in CPI, all other things being equal, particularly in relation to wages and monetary policy. To apply an additional "frontier shift" productivity assumption, the AER would need to have evidence to that the electricity network industry was able to make productivity improvements at a faster rate than the general economy. Such quantitative evidence has not been provided.

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[9] For example, CitiPower, Powercor Australia and SA Power Networks, *Joint submission to the AER expenditure forecast assessment guideline issues paper,* March 2013 and CitiPower, Powercor Australia and SA Power Networks*, Joint submission to AER on economic benchmarking of electricity distribution service providers,* May 2013.

The EBSS provides strong incentives for the Businesses to seek opex efficiency improvements. If the AER reduces an NSP's opex allowances by imposing productivity adjustments (via either "frontier shift" or "catch up") then this results in estimated productivity gains being passed through to consumers before these have actually been achieved. This will significantly undermine the effectiveness of the EBSS as the NSP would potentially receive no share in the benefit of the efficiency improvement encompassed by the adjustments. Furthermore, as a result of error in the estimation of achievable future productivity gains, the AER may fail to allow NSPs the opportunity to recover their efficient costs. The Businesses therefore interpret what the AER is proposing as an intention to move away from incentive based regulation. Such an approach risks failing to provide NSPs with effective incentives as required under section 7A(3) of the NEL.

The Businesses do not support the use of economic benchmarking to develop opex productivity adjustments. Productivity adjustments developed from economic benchmarking incorrectly assume that:

- Historical average productivity change is achievable in the future;
- Cost reductions resulting from one-off events will be repeated in the future; and
- All NSPs have the same capability to achieve the same level of productivity and productivity change. However this will not be the case, particularly in Australia where NSPs have substantially different network configurations, customer characteristics and environmental conditions. Neither the Draft Guideline nor the explanatory statement provide sufficient guidance on how the AER will adapt the economic benchmarking models to fully account for the uncontrollable differences between NSPs in the potential calculation of any proposed productivity adjustment.

Further, if the AER was to apply its rate of change formula, inclusive of productivity adjustments, as an alternative to an NSP's opex forecast, then this would amount to a deterministic application of economic benchmarking. The Businesses caution the AER that a deterministic application of benchmarking is inappropriate as benchmarking is inherently inaccurate and unable to properly account for the differences in cost drivers between NSPs.

If the AER applies its rate of change formula as a substitute for the NSP's opex forecast then it will potentially be at risk of failing to provide NSPs "*…with a reasonable opportunity to recover at least the efficient costs…"* as required under the revenue and pricing principles set out in clause 7A(2) of the NEL.

5.4 Step changes

The Businesses are very concerned that the AER's approach to step changes appears to be limited to regulatory obligations and capex-opex trade-offs. If this is correct, then the AER potentially might not take adequate account of section 7A(2) of the revenue and pricing principles when performing its functions and powers.

Instead the AER should consider all cases where historic costs are not a reasonable basis for forecast costs. Obviously, the onus of responsibility is on the NSP to justify that the benefit of the step change outweighs the costs. Some examples of step changes might include:

- Business practices and investment changes due to a change in external obligations, for example an increase in inspection cycles might result in a bring forward of expenditure;
- Changes in, 'good industry practice', this being an evolving concept that NSPs should move to align with society's expectations, for example by meeting community demands that NSPs use best endeavours to mitigate bushfire risk;
- Situations where customer engagement has indicated support for a range of new activities or an increased level of activity to meet changing customer demands and future needs, for example significant change to the level and timeliness of information to customers and the channels for provision of such information; and
- Dynamic efficiency impacts, for example where a business transformation program might result in an early increase in costs with expected future service or efficiency benefits.

Also the Businesses are unclear how the AER intends to make productivity adjustments for a step change that is not captured by the 'historic average changes'. Particularly, as the benchmark or 'frontier' NSP will not have experienced the same magnitude of step changes as all other NSPs. While the AER notes the difficulty of determining the productivity impact of changes in past regulatory obligations, it has not specified a particular assessment approach. The Businesses consider that this is unsatisfactory and if the AER intends to adopt such an approach it must set out in the Guideline how it intends to implement it.

6 ECONOMIC BENCHMARKING MODELS

The Businesses support the AER's decision not to pre-determine an economic benchmarking model in the Draft Guideline. It is essential that the AER develop a model that reflects the underlying cost drivers of each NSP. The AER will need to test the robustness and sensitivity of any proposed economic benchmarking models using real data.

The Businesses also consider that it is critical that the AER estimate the output weights to be applied in any Total Factor Productivity (**TFP**) model based on the data from the NSPs. Importantly the AER should consider and test the appropriateness of using different output weights for different NSPs to better reflect the differences in the contribution of each output to NSPs' costs. It is unlikely that the costs of a CBD or urban NSP change at the same rate as a rural NSP when, for example, one more customer is added to the network.

The Businesses encourage the AER to undertake extensive sensitivity testing of its preferred economic benchmarking model, including for example:

- Using smoothed measures of reliability, e.g., a moving average. Annual reliability is particularly volatile primarily due to weather events. An annual measure may therefore lead to significant changes in perceived efficiency depending on the year of assessment. Furthermore, costs incurred to improve reliability will have a delayed effect on reliability outcomes.
- Removing outages that are not controllable by DNSPs, for example those caused by major weather events or upstream generation or transmission events.
- Applying a measure of utilisation to system capacity. This is important for distinguishing between the capacity of the network that is provided and the capacity that is actually required to meet demand.
- Assessing the validity of the assumption that the growth rate in the quantity of transformers is an appropriate proxy for the growth in the quantity of other capital.

The explanatory statement to the Draft Guideline states that the AER will advise of its proposed timeline for model testing and development in March 2014. The Businesses consider that the AER should set out its proposed process for consulting with stakeholder on the proposed economic benchmarking models for the annual benchmarking report as soon as possible. The Businesses are concerned that the AER has a very short timeframe within which to test the data quality, test the sensitivity of the model and consult with stakeholders, before publishing the annual report by 30 September 2014. The Businesses consider that it is essential that all data is published and available to stakeholders a soon as possible to enable an effective consultation process.

7 DEMAND FORECASTS

The Businesses support the AER's approach for demand forecasts. However, the Businesses note that the Australian Energy Market Operator (**AEMO**) does not have information to reflect demand at a regional level. As a consequence, the Businesses' forecasts continue to be the most accurate and the AEMO forecasts should only be used as a cross check.