8 March 2013

Mr Chris Pattas
General Manager - Network Operations and Development
Australian Energy Regulator
Level 35, The Tower
360 Elizabeth St
Melbourne Victoria 3000

via email: expenditure@aer.gov.au

Dear Mr Pattas

Better Regulation – Expenditure forecast assessment guidelines for electricity distribution and transmission – Issues paper

The Energy Networks Association (**ENA**) is pleased to have this opportunity to respond to the Australian Energy Regulator's (**AER**) Better Regulation – Expenditure forecast assessment guidelines for electricity distribution and transmission – Issues paper (**the issues paper**). The ENA appreciates the open and interactive approach adopted by the AER in this consultation. The ENA supports consultation that supplements written submission with face-to-face stakeholder workshops.

Introduction

The ENA is the peak national body for Australia's energy networks, which provide the vital link between gas and electricity producers and consumers. The ENA represents gas distribution and electricity network businesses on economic, technical and safety regulation and national energy policy issues.

Energy network businesses are valued at more than $60 billion, annually undertake investment of more than $6 billion in network maintenance and expansion, have annual revenue of over $20 billion and employ 40,000 staff.

The ENA appreciates the work put into the guidelines by the AER and appreciates the opportunity to continue to contribute to their development. If you have any questions please contact Jim Bain on 02 6272 1516.

Summary of Key Issues

The National Electricity Rules (**NER**) require the expenditure assessment guidelines (**the guidelines**) to specify the approach the AER proposes to use to assess the expenditure forecasts that form part of Network Service Providers (**NSPs**) regulatory proposals and the information the AER requires for the purposes of that assessment.

In the ENA's view, the issues paper raises a large number of matters for consideration. Many of these are material, urgent and relevant to establishing guidelines that address the matters required in the NER. However, many of the issues raised have only tangential relevance to establishing the guidelines, and most deal with matters that can only be applied to expenditure assessments beyond the upcoming round of reviews.

The ENA believes that a significant intent of the guidelines is to ensure an efficient process and cost level for regulatory reviews for all participants by:

1. Providing more certainty and understanding on the complete process and information the AER will use to assess expenditure over the various milestones of the regulatory review—from Framework and Approach to Final Determination.

2. Allowing NSPs to better target their proposals towards meeting the relevant regulatory tests in light of the AER's approach, reducing the amount of querying and re-work of information in the regulatory proposals.

To enable the above, good guidelines would provide a sound incremental understanding of:

1. How the AER interprets the relevant National Electricity Law (**NEL**) and NER provisions,

2. How the AER proposes to assess expenditures against those provisions, and

3. How the AER's assessment approach promotes the NEL objective and delivers long term benefits to consumers.

In light of this, the ENA suggests that the AER should:

- Refocus its work to ensure the guidelines clearly and primarily set out the approach the AER proposes to use to assess expenditure forecasts, including specific decision rules and associated assessment techniques. Use of expenditure assessment tools should be considered within the context of the overall approach, rather than just as an assortment of tools without an explanation as to how the AER would choose between them.

- Ensure that its proposed approach promotes not just productive, but also allocative and dynamic efficiency in the provision of regulated services, recognising that dynamic efficiency is of most long term value to consumers.

- Ensure close co-ordination, and at least partial integration, between the expenditure assessment and the capital expenditure incentive guidelines work streams. Developing these two work streams separately could lead to outcomes that undermine the incentive nature of the regulatory regime.

- Focus upfront on general issues, such as:

    - the contents and structure of the guideline,

    - how the cost/benefit analysis for introducing new obligations to support new assessment methods will be carried out

    - RIN/RIO implications

    - regulatory review process, including the role and scope of first pass assessments

    - links with other guidelines.

- Make a clear distinction between:

    - benchmarking techniques that can be applied in the upcoming reviews, which should be included in the guideline, and

    - aspirational economic benchmarking techniques that can only be applied during later reviews, which should instead be included in a separate work program that deals with annual benchmarking reports and regulatory reporting requirements, and has a timetable and resourcing effort that is aligned to the purpose of the annual benchmarking reports.

The ENA's suggested approach would create a narrower focus, which is important, given the large resource commitment required to deal with the full range of matters in this and other workstreams

created by the AER to implement the recent changes to the NER. Without such a re-focus, it will be difficult for stakeholders to fully participate in the multiple and extensive consultations envisaged by the AER. Important matters might not get a proper hearing or be missed entirely due to too much being attempted at once.

The ENA also observes that the differences between distribution and transmission businesses warrant separate guidelines. The ENA considers that the AER should consult separately on the development of the guidelines for transmission and distribution. The issues paper is heavily focused on distribution issues. There is a considerable risk that issues that are unique to transmission are not given due consideration when the guidelines are further developed. The task of the guidelines is to explain how the AER proposes, in practice, to apply the high level principles in the Rules and NEL to assess expenditure forecasts. It is at this level of operational detail where the differences in the technology and function/market between transmission and distribution should lead to different approaches for assessing forecasts.

Further General Observations

Below, the ENA sets out its other general comments on the issues paper in more detail. For completeness, the ENA has also provided appendices with responses to some of the 74 questions posed by the AER in the issues paper. The ENA was not in a position to meaningfully answer many of the questions and has chosen not to respond, or provide generic answers in some instances. This is because the ENA considers these questions are too detailed for this stage of the process, do not deal with many of the more important matters at hand, and in some cases are not relevant to establishing the guidelines for the upcoming round of regulatory reviews. The ENA looks forward to providing more robust and detailed responses, once it is in a position to do so—later in the consultation process, including through the workshops being run by the AER.

The specific questions in the issues paper that the ENA has answered are answered from the point of view of distribution network service providers (**DNSPs**), not transmission network service providers (**TNSPs**). The ENA understands that GridAustralia is responding to the detailed questions on behalf of TNSPs.

Objective of the guideline

The AER's objective, as set out in chapter 3 of the issues paper, is to expand the assessment techniques available to the AER. While it is appropriate for the AER to develop new techniques over time, the ENA does not believe that developing new techniques is the intended objective of the guidelines under the NER. The ENA believes the objective of the guideline is to explain how the AER will assess forecasts against the tests in the NEL and the NER, and the information required to undertake this assessment. While it is desirable to provide additional certainty on what techniques will be used in further rounds of reviews, this should not come at the expense of clarity of the AER's assessment approach for the upcoming round.

Scope of the guideline

The issues paper appears to aim to integrate consultation on two separate matters—the task of developing the guideline, and the task of developing and publishing annual benchmarking reports. These tasks are related and NSPs will need to provide information to support both tasks. However, the nature of the two tasks is quite different, and different techniques may be needed. The ENA considers that the consultation on the guidelines, and the process of assessing expenditure forecasts against the NEL and the NER requirements, should not be polluted with issues that are only relevant to annual benchmarking reports.

Experience with the first several workshops run by the AER confirms the ENA's concern that too much is being attempted at once. It seems that relatively little effort is focused on the AER's overall approach and expenditure assessments, including those to be used in the immediately upcoming round of reviews. Meanwhile, most of the effort is being directed at work related to annual benchmarking reports, as well as category assessment and benchmarking techniques that are more likely to be employed in subsequent regulatory review rounds. Given the extensive effort required of businesses and the AER in the workshop process, with multiple workshops being held on a near-

weekly basis, the ENA believes that the effort needs to be better balanced to reflect the task set out by the NER. This is not to say that the AER should not be consulting on matters relating to annual benchmarking reports, in fact the ENA welcomes this consultation. However, the main purpose of the guidelines should not be sidetracked by detail that may be better covered in separate forums.

Incentive regulation through building blocks remains the optimal and mandated approach

The ENA's impression from the issues paper is that the AER is aiming to, over time, move to using economic benchmarking as the main tool for setting efficient expenditure forecasts. The current incentive-based framework requires that the annual revenue requirement be determined by applying the building blocks approach (NER clause 6.4.3).

Any move away from that approach to one that relies wholly on economic benchmarking would be a fundamental change. Such a change, if proposed, would need to go through the proper process of being submitted to and considered by the AEMC in the form of further rule changes—similar to the 2008 rule change proposal by the Victorian Department of Primary Industries to permit the use of TFP regulation as an alternative to building blocks, which was rejected by the AEMC at the time. Nothing in the recent rule changes provides a mandate to move away from building blocks. This is reinforced by the fact that the efficiency benefit sharing scheme (**EBSS**) is still mandatory and is specified in detail in the NER.

Interdependence of expenditure assessments and incentives

There are important links between the incentive arrangements that are part of the regulatory regime and the way in which expenditure allowances are set. These two aspects of the regime should be developed and consulted on together.

The regime set out in the NER is grounded in incentive regulation, with actual revealed costs eventually being used to set future expenditure allowances. This has an important impact on the types of assessment methods that can be used without undermining the incentive nature of the regime. This is elaborated on further in the answer to question 12.

Program of work

The ENA would like to work closely with the AER and is committed to ongoing engagement throughout the AER's work program on the guidelines. The AER's proposed work program suggests a workflow that will first examine all the detailed techniques, tools and expenditure categories, and only then step back to discuss how the guidelines will be scoped and in what context these tools will be used (if at all). This bottom-up work program is likely to result in much wasted effort on developing techniques that may eventually prove to be not suitable, too costly to implement or only suitable for use within a very limited capacity when applying the NER.

The ENA is even more convinced that this is a material issue given the ENA's recent experience with the first several AER workshops held at the end of February and beginning of March. Our members have found it difficult to meaningfully engage with the AER on benchmarking and category assessment tools without the AER clearing stating how and for what purposes the tools will be used.

Care when using benchmarking techniques

Both economic and category level benchmarking are useful tools and should be used by the regulator, to the extent that they can be demonstrated to provide useful information. The main use of these tools should be identifying stand out expenditure items for further assessments through economic benchmarking.

The ENA is concerned that the issues paper appears to imply that the main problem that prevents using economic benchmarking techniques to set regulatory allowances is collecting sufficient good quality data. The issues paper does not recognise the more important problem of benchmarking techniques not being able to fully control for all the individual idiosyncrasies of businesses, which drive differences in their efficient cost bases. This issue is exacerbated when there are relatively few firms that can be compared to one another, such as in the case of transmission businesses.

The AER's apparent view of benchmarking presented in the issues paper is at odds with the prior findings of both the Australian Energy Market Commission (**AEMC**) and Productivity Commission (**PC**) regarding the role of benchmarking within economic regulation of Australian network service providers. In the last decade, an attempt to move away from detailed assessments of costs to purely benchmarking approaches was also made in New Zealand. This attempt was unsuccessful and recent changes to the New Zealand framework re-established detailed cost assessments as the most appropriate way of ensuring regulated businesses are able to recover their efficient costs.

It is important to remember that a number of benchmarking techniques, such as DEA, only measure the total efficiency of a business, without providing a view on the efficiency of capex or opex forecasts. Such techniques will therefore be of limited suitability for assessing expenditure forecasts under the opex and capex factors set out in the NER.

Further, the challenges of establishing robust benchmarking techniques and supporting data cannot be overcome in time for use in reviews that must occur over the next three years. On this basis, benchmarking work should be separated from the current guidelines exercise.

Dimensions of efficiency

In promoting the NEL objective, the AER needs to focus on dynamic efficiency – the greatest value at stake for customers is from ensuring the appropriate timing and scope of investment.

The ENA believes that, while productive efficiency is an important aspect for the regulator to examine, it is fairly difficult for the regulator to determine with any degree of certainty whether a firm is productively efficient and, if not, how it should go about becoming more efficient. In order to make any meaningful contribution on this front, the regulator would need to be able to replicate the full knowledge and decision making processes of each regulated business. This cannot be achieved through benchmarking alone. The infeasibility of this approach is why incentive regulation approaches were developed in the first place, and why engineering review will continue to be a critically important feature in revenue determinations.

Further, it is important to note that the value from preserving dynamic efficiency and ensuring that the right investments are made at the right time, with the right price-quality trade-offs will likely far outweigh the value of moving firms towards the static productive efficiency frontier at a point in time.

Inconsistency with intent of the NER

The economic benchmarking techniques the AER appears to favour most may not be consistent with the NER intent on incentive regulation. The AER expresses a preference for economic benchmarking to assess efficiency, including the efficiency of expenditure allowances against a "frontier" efficient firm. However, the regulatory WACC required by the NER is one that is consistent with average performance—with higher performing firms expected to earn higher rates of return.

A shortcoming of benchmarking against a "frontier" efficient firm is the need to substantiate that the firm is operating sustainably and in the long-term interests of consumers, and is not operating in the short term in a way that will compromise long-term outcomes. For an essential service such as electricity, the consequence of an aggressive "frontier" benchmark that does not allow NSPs to recover their efficient costs may be significant.

As benchmarking is essentially a comparative tool, and is unlikely to be sufficiently accurate to deterministically set expenditure allowances, there is no reason that benchmarking against average performance would not be fit for purpose.

Economic benchmarking needs to use caution in regard to the RAB

The AER will need to be careful in applying any economic benchmarking techniques that use Regulatory Asset Base (**RAB**) as an input measure. The RAB is affected not just by the size of a NSP's network but also conversely by particular jurisdictions' historical approaches to customer contributions and the age of the assets, being a depreciated value. Its use in comparative benchmarking may therefore lead to misleading or non-credible results.

Net benefit of imposing new regulatory requirements

In considering introducing any new costly information requirements, the AER should test whether there is a net benefit to creating these new costs. The effort and cost expended on a new requirement/intervention should be commensurate with the benefit realised from that intervention. The recent introduction of regulatory information notices (**RINs**) has substantially increased reporting costs, as would any additional reporting requirements or moving regulatory years.

The ENA notes that the regulation of TNSPs, which has been carried out by the AER or previously ACCC for over ten years, has successfully relied on Submission Guidelines and templates rather than RINs.

Clarity is needed on relationship between the guidelines and the RINs

The ENA believes that, through the process of developing the guidelines, the AER should provide clarity in the relationship between the guidelines and Regulatory Information Notices (**RINs**). As the guidelines evolve and change over time, and so do the RINs, the AER should define a process for maintaining consistency between the two.

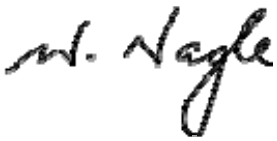
Cost allocation and capitalisation standardisation is not appropriate

Cost allocation is a fundamental part of the reporting processes of any business, whether it is regulated or not. The AER has raised the possibility of mandating a standard approach for allocating corporate costs to functions and the possibility of mandating a standard capitalisation policy for regulatory accounts. Businesses have varying approaches to cost allocation for statutory purposes and it is neither realistic, nor appropriate, for these to be standardised, given the different nature and level of complexity between businesses.

Currently, regulatory cost allocation requirements are largely in line with accounting standards. While it is possible to mandate standard cost allocation approaches for regulatory purposes at a more detailed level than is done currently, this would substantially increase costs for businesses, effectively creating a separate reporting standard and doubling much of the effort that goes into reporting. Before suggesting such an approach, it is important to understand the value of incremental benefits that such a standardisation would bring and the role that assessment techniques that require such standardisation will actually play in applying the NER.

Further it would be inappropriate for the AER to interfere with capitalisation approaches, as this would directly interfere with fundamental property rights of businesses by having follow-on impacts onto the valuation of the business. A business should have the ability to choose its approach to capitalisation and cost allocation within regulated boundaries. The ENA considers that interfering with cost allocation and capitalisation policies is not a proportionate regulatory response (and associated burden) to the role that benchmarking is permitted to play within a proper application of the NER, or the perceived problems that benchmarking can solve.

Yours sincerely



Bill Nagle

Acting Chief Executive

Expenditure forecast assessment guidelines - Q 1-19

Scope of current consultation

Question 1

Should we anticipate the application of some assessment techniques to gas service providers as part of this consultation?

Yes. The guidelines should not formally be applied to gas service providers. However the ENA understands that the AER envisages the outcomes of this process, particularly the principles and concepts, may be treated as a precedent for future development of gas service provider assessment techniques.

Question 2

Do stakeholders have any preliminary comments on the development of guidelines that will be different for transmission and distribution businesses? Should consultation be separate for these businesses?

As noted by the AER, differences exist between transmission and distribution businesses which will need to be addressed in the development of these guidelines. For instance, the paper only currently considers:

- the inputs, outputs and environmental variables pertaining to DNSPs
- expenditure categories for DNSPs
- assigning expenditure techniques to DNSP expenditure categories

Transmission businesses have been regulated by the AER, and previously the ACCC, for over ten years. As a result of regulation by a common regulator, transmission has consistent categories established in the AER's submission guidelines and templates, and has had comparative performance reports published over several years. This is further discussed in the Grid Australia submission.

A separate consultation process and separate guidelines are necessary to address transmission specific issues.

Question 3

How should linkages between expenditure assessment, information collection and storage, cost allocation and incentive arrangements be dealt with in the development of our overall assessment framework?

As noted in the issues paper, the application of techniques will involve an extensive information collection and storage exercise. The collection and value of this information will be influenced by the ability of NSPs to meaningfully allocate costs to the categories required. These factors represent constraints on the new expenditure assessment techniques and should be addressed.

It is our view that the annual and determination RINs involve a significant amount of work and effort to produce. Ideally, the annual benchmarking reports and new expenditure techniques can leverage off

this existing work. To ensure minimal disruption to the businesses, the information could be collected incrementally over several years.

In the development of the overall framework the AER should consult extensively with NSPs to develop appropriate cost categories. Arbitrary allocation of costs will reduce the value of the information and alignment of cost allocation methodologies is unlikely even in the long term. Cost categorisation is a key issue that should be addressed during this development process.

The AER's issue paper indicates that the assessment techniques may supplant or complement the existing incentive arrangements. It is unlikely that these high level expenditure assessment techniques will be sufficiently accurate to reveal or set efficient expenditure. It is our view that current incentive arrangements are effective, involve less risk and are at the core of the regulatory framework, and should therefore be retained.

Objectives for expenditure assessment

Question 4

Have we appropriately characterised the role of benchmarking in expenditure assessments, and set an appropriate objective in expanding and formalising our approach in consultation with stakeholders?

No. In the ENA's view, the AER has overstated the realistic and appropriate role that benchmarking assessment can play, especially in the immediately upcoming round of reviews.

The issues paper also indicates:

- the AER's desire to significantly improve their approach to expenditure assessment and analysing the proposals of regulated network businesses
- an expectation that benchmarking could deliver a more effective approach than detailed 'bottom-up' assessments.

The ENA agrees with the first point, however we consider that benchmarking will complement rather than replace "bottom-up" analysis.

We agree with the recent Productivity Commission review[1] that:

"At this stage aggregate benchmarking models are ill suited to setting regulatory revenue models. However benchmarking is; - a useful diagnostic tool that can help assess the reasonableness of bottoms up proposals."

The proposed approach seems to be based on the assumption that this would allow the AER to be less reliant on detailed engineering analysis and industry expertise. This assumption is incorrect. If the proposed expenditure assessment approach is to be effective, the AER will need to continue to rely on the assistance of industry & engineering expertise in:

- developing the expenditure assessment framework
- ensuring that the framework reflects the key characteristics and nature of the sector
- interpreting inputs, outputs and results of category analysis and benchmarking appropriately.

[1] Productivity Commission Draft Report, October 2012 p269

Put simply, no current benchmarking techniques exist that, even with perfect data quality, would be able to replace bottom up cost assessments for most activities involved in running an NSP.

The AER's issues paper indicates that the lack of a consistent reporting framework was the key impediment to it not being able to make full use of benchmarking techniques in assessing expenditure. The ENA agrees that this is an impediment, but a more important impediment is the inadequacy of benchmarking techniques in normalising for all the known (let alone unknown) external cost drivers that are beyond the reasonable control of NSPs.

A leading paper on benchmarking of Electricity Networks concludes that benchmarking;

"…*may help regulators to appraise large volumes of data on costs and outputs. However, benchmarking techniques are not robust and cannot replace detailed investigation of costs. Any attempt to rely entirely on benchmarking to set revenue allowances is bound to involve subjective and arbitrary choices. For the sake of transparency and stability in regulation, therefore, it will be necessary to regard benchmarking as an investigative technique, not an alternative method of setting revenues*."[2]

In other words, benchmarking will form part of the suite of tools that a regulator should use but is unlikely to fully replace a more detailed analysis. This view was supported by a recent paper commissioned by OFGEM;

"Given the volume and value of future investments there is likely to be a ***continued role for expert scrutiny of business plans and the use of historic benchmarks****. We are therefore recommending the continued application of historic benchmarking, but with a modified role. In past reviews historic benchmarking of operating costs has been used more prescriptively to determine future allowances. In future, we believe that evidence gained from historic benchmarking should be used to challenge the validity of future plans, acting as a further point of traction for the regulator, rather than for setting allowances in a more mechanistic manner. Effective and targeted use of analysis of historic data should assist OFGEM in identifying any unwarranted inflation of operator plans.*"[3]

No assessment framework can determine future efficient costs with a high level of accuracy. That is why incentive regulatory frameworks were developed and, indeed, why they have been prescribed in the form of periodic building block cost assessments in the NER. Incentive mechanisms are at the heart of the current regulatory framework. No regulator can accurately determine efficient expenditure levels and revenue allowances in the absence of detailed knowledge & information. High-level benchmarking and modelling may eventually play a useful part in the expenditure assessment process. However, until participants have a high level of confidence in these processes, it is not feasible to use them as the primary technique for determining expenditure allowances. The ENA accepts that modelling approaches have been used successfully in areas such as replacement planning—but, they need to be supported by other techniques, such as sound engineering and risk assessment studies, particularly where the proposed investments may vary or be "lumpy" over time.

Question 5

Do stakeholders have views on the use of revealed costs and the reliance on incentive mechanisms, and how this should change with the increased reliance on benchmarking to assess expenditure allowances?

The issues paper suggests that previous expenditure allowances may have been set too high, that some NSPs have not responded to the incentive mechanisms, and that benchmarking techniques could be relied upon instead of revealed costs. The issues paper appears to undervalue the role of

[2] Benchmarking of electricity Networks: Practical problems with its use in regulation, Graham Shuttleworth, NERA 2005

[3] RPI-X@20: The future role of benchmarking in regulatory reviews, A Final Report Prepared for OFGEM, Frontier Economics May 2010

existing carry-over and incentive mechanisms within the current regulatory framework, which ensure that regulatory decisions remain effective despite significant changes in the industry environment (e.g. technological change).

The ENA notes that there are incentives and requirements outside the NER regulatory regime that affect NSPs' behaviour, such as jurisdiction-specific reliability standards. Where the underlying issue is with such incentives and requirements, it needs to be addressed at the source and not through the AER's actions under the NER.

The extent to which benchmarks could be relied on at any point in time would depend on the confidence that participants, including the regulator, have in the accuracy of the benchmarking techniques and the quality and quantum of supporting data. This was noted by the Productivity Commission in it recent review of Electricity Network Regulation, where it stated that:

"It is quite conceivable that over-confident benchmarking modellers might make errors analogous to this (the Challenger disaster) — at least in terms of the consequences for a business (or consumers). This suggests the importance of engineering and financial analysis as a supplement in interpreting statistical benchmark results." [4]

It goes on to state that;

"..the degree of rigor required is dependant [sic] upon the extent to which benchmarking is used to determine the regulatory outcomes for the businesses"[5] and the importance of "…a linkage between the strength of the incentives and the level of confidence regulators have in their forecasts of efficient spending (the more accurate the forecast the stronger the incentive can be)"[6].

Whilst the Commission highlighted that benchmarking is a "demanding quantitative (and qualitative) task" it suggested that it could be useful, provided:

- criteria are used to identify good benchmarking, and
- it is possible to address inaccuracy and unreliability.

As the Commission (and others) have noted:

"The regulatory process can be seen as a repeated game between the regulator and regulated firms. Over time incentive regulation should use the information revealed by firms to develop better forecasts of efficient expenditure. This will reduce the scope for firms to earn excessive rents and allow the regulator to apply stronger incentives for further cost reduction." [7]

It is important that the guidelines reflect an integrated framework that covers both the expenditure forecast assessment method and incentive schemes relating to both operating and capital expenditure. The method of expenditure forecasting will affect the incentive properties of regulatory decisions and may lead to a power of incentives for operating expenditure that is inconsistent with the power of incentives for capital expenditure.

[4] Productivity Commission Draft Report, October 2012 p174.

[5] Ibid. p139

[6] Ibid. p181

[7] Ibid. p181

Principles for the selection of assessment techniques

Question 6

Are there any other principles that you think that should be added to this list? Should we include principles that guide the selection of the assessment techniques to be applied in the framework and approach stage, from the list of appropriate techniques (that will be) outlined in the Guideline? If so, do you think that the principles outlined here provide appropriate guidance on technique selection?

These principles seem reasonable in guiding the AER's selection of assessment techniques, with some clarifications. However, it is important to ensure that these principles are applied in preparing the guidelines, rather than just at the regulatory review stage. The guidelines should provide a clear decision framework for how expenditure assessments will be undertaken—explaining what technique will be used in what circumstances and how that decision will be made.

Principle 2 should explicitly state the need for transparency and due process when applying assessment techniques. It should also consider the relative precision of the different sources of information as a key criterion when selecting techniques.

Principle 3 should be extended to ensure that the selection of techniques does not place a significant cost on the service providers to gather the required data.

The more important issue is the development of a criterion to guide the application of the assessment techniques. This would provide NSPs with greater clarity and ensure appropriate controls are in place depending on the intended use of the technique.

In developing any techniques we would agree with the Productivity Commission[8] view that processes should be:

- Transparent
- Maximise learnings
- Involve international collaboration
- Involve peer review of processes and be subject to regular consultation with stakeholders.

Expenditure assessment techniques

Question 7

Are there any assessment techniques that should be considered as forming part of the guidelines? What are the relative benefits and shortcomings of each of the approaches and how could the latter be addressed?

The AER has comprehensively covered known assessment techniques adopted by regulators for the purposes of assessing a reasonable level of expenditure. There are benefits and shortcomings for each of the approaches. It is therefore important that the AER's guidelines set out how it will chose which approaches to use when and for what subset of expenditure. Without such clarification, the guidelines are of little use in providing certainty to stakeholders.

[8] Productivity Commission Draft Report, October 2012 p269

Engineering review

The ENA agrees that the use of engineering assessments can potentially provide a more detailed and accurate assessment compared to other techniques. In fact, the ENA believes that other techniques could not be meaningfully used independently of sound engineering advice. However, care must be taken to ensure that the engineering assessments are rigorous, fully justified and properly substantiated.

Engineering reviews can be used in conjunction with benchmarking by targeting detailed reviews where a particular benchmarking technique suggests greater scrutiny is required. Further, engineering reviews should be used to assess large material projects which may not be captured in benchmarking or modelling analysis.

Trend analysis

Trend analysis is a valuable tool for expenditure categories that exhibit relatively consistent levels of expenditure over time. However, if the business can demonstrate that circumstances have changed which results in a change to the expenditure profile, the AER should take this into account.

Governance and policy reviews

Governance and policy reviews, whilst conducted by the AER in the past, appear to have had little material influence in final decisions in relation to expenditure. The ENA considers that such reviews warrant greater use and have the potential to reduced regulatory review costs for all parties. However, to enable this outcome, it is important that such reviews are applied consistently and that, where comfort is taken from these reviews, that comfort is translated into a consequentially lower level of scrutiny on at least parts of proposed expenditure. If the governance and policy reviews are not determinative and also have no consequential bearing on the level of further scrutiny applied, there seems little extra benefit in having such reviews.

Expenditure benchmarks

Expenditure benchmarks are useful tools in providing a high-level "reasonableness view" of businesses' overall expenditure forecasts.

Expenditure benchmarks should be used as an informative rather than deterministic tool, to guide investigations. They should be used as a starting point for a conversation with regulated utilities about the level of operating and capital expenditure being incurred and proposed.

The greatest risk with benchmarking is to apply simplistic benchmarks that do not take into account the business' network characteristics, actual cost drivers and cost structure.

More sophisticated benchmarking can enhance credibility for regulatory determinations. However, more sophisticated and extensive use of benchmarking is not a "silver bullet" for improving the credibility of the regulatory process. There will always be legitimate reasons as to why expenditure benchmarking does not accurately reflect some businesses' network characteristics, actual cost drivers and cost structure. Effective benchmarking requires a clear understanding of those reasons. It is also useful to understand the nature of any economies of scale or scope in the industry.

It is critical to the effectiveness and stakeholder confidence of comparative benchmarking that the AER uses only robust data sets and transparent and replicable methodologies. In this regard, further work is required in developing benchmarking techniques such as:

- collecting robust consistent data over a number of years across all jurisdictions
- undertaking extensive modelling analysis and sensitivity/robustness testing that is transparent replicable and subject to consultation

- ensuring businesses have had the opportunity to review, replicate and test the AER's preferred models, and

- consideration is given to the performance of incentive schemes.

The ENA cautions the AER in applying benchmarking techniques that are applied overseas and are not necessarily translatable to Australia. In many cases, benchmarking techniques are applied overseas in an environment where there are many homogenous businesses and there is a long data history.

Modelling

The ENA considers that technical models should not be relied upon solely when determining expenditure. Technical models such as the augex and repex models can be useful tools in providing a "reasonableness view" of expenditure for some specific processes or activities, but should not be determinative.

As with expenditure benchmarks, technical models should be used as an informative rather than a deterministic tool, to guide investigations, and it is critical that the AER uses only robust data sets and transparent and replicable methodologies.

Technical models proposed by the issues paper such as the augex and repex models have limitations, including an incomplete list of expenditure drivers and a lack of account for different planning standards and different planning methodologies (such as probabilistic and deterministic). Further, the models require the establishment of standardised definitions and categories. It is challenging for businesses to map costs which are typically recorded internally on an activity basis to the standardised definitions and categories. As a consequence, the costs recorded under the standardised definitions and categories may not reflect the actual costs of replacing and/or augmenting the network in like-for-like way.

Technical models are less likely to be suitable for transmission than distribution, given the 'lumpy' nature of expenditure and smaller populations of larger equipment.

As with expenditure benchmarks, there will always be legitimate reasons as to why technical models do not accurately reflect some businesses' network characteristics, actual cost drivers and cost structure.

Proposals for further work

Question 8

Do stakeholders agree with our general approach of attempting to derive quantitative relationships between expenditures and drivers? Are there better, more cost effective alternatives to assessing disaggregated expenditures?

The ENA supports the general approach of attempting to derive quantitative relationships between expenditures and drivers. The AER must however ensure that it has identified all of the expenditure drivers to ensure a business is funded to meet all its obligations.

Question 9

Do stakeholders have any in-principle comments about the level of expenditure disaggregation given our expectation that lower levels of aggregation e.g. by asset type, are likely to be conducive to more robust benchmarking and other quantitative analysis?

The ENA is comfortable with aggregation at an asset type level. However, the AER must be cognisant that obtaining unit costs and volumes for each asset type will not necessarily provide robust data for the purposes of benchmarking in the short to medium term. The AER will further need to ensure that comparability. For example, given the differences in operating environments, the cost of maintaining a feeder in a mountainous area will be significantly different to the cost of maintaining a feeder in a costal area or a central business district.

Also, the level of disaggregation should not be greater than businesses use to manage their own costs. This will need to recognise that businesses will use "unit costs" to monitor and manage its costs, which are defined differently and comprise different levels of aggregation. For example, businesses may track the cost of maintaining a SWER feeder whilst another business may monitor the cost of managing the maintenance of poles on that feeder and other feeders.

The AER should be extremely cautious when considering forcing businesses to change the granularity level at which they record costs. The likelihood is—if a level of detail is not useful for asset management, it is unlikely to be useful for regulatory purposes.

In recent decisions, the AER has disallowed provisions from both capital and operating expenditure. This treatment has a similar effect to the imposition of cost allocation requirements, by creating a separation between regulatory costs and accounts used for statutory purposes.

Inclusion of provisions as expenditure is consistent with accounting practice, legal precedence and established business practices. The question of the costs being incurred is one which is reasonably supported as is highlighted through the legal definition which has been stated as having a broader interpretation than just when the costs are paid. Under the NER the AER are obliged to allow recovery of efficient costs incurred by an entity. As provisions are unavoidable it is reasonable for them to be recovered as efficient costs.

Question 10

Do stakeholders agree that economic benchmarking will be an important adjunct to more detailed expenditure assessments?

The ENA agrees that economic benchmarking has potential to be an adjunct to more detailed expenditure assessments. However, as noted in the response to question 7, economic benchmarking should only be used to inform the AER of a reasonable level of revenue, and only to the extent to which it relates closely to the cost drivers of NSPs. It should not be used for deterministic purposes.

Expenditure assessment process

Question 11

Do stakeholders agree that the first-pass process described above is a useful and appropriate application of expenditure assessment techniques?

The ENA supports the first-pass process in principle as it provides stakeholders early notification of areas of concern with the businesses' expenditure forecast and, therefore, allows all stakeholders to focus on providing evidence in relation to the targeted areas. The potentially reduced scope will make the regulatory process more accessible to all stakeholders and lower the costs incurred on all participants.

While supporting the proposed first-pass approach, the ENA is also concerned that the first-pass process is undertaken with sufficient rigour and published with sufficient supporting information to not mislead consumers. First-pass analysis that is too brief or not sufficiently considered may be misleading. NSP experience with the AER's annual performance reports to date has found a number

of cases where information in the reports is incorrect or presented without sufficient explanation, even after NSP comments have been provided.

The ENA also considers that the category level analysis should be limited to categories at a reasonably high level of aggregation. The more disaggregated the cost, the more potential for differing interpretations and cost allocations to result in non-comparable data across different businesses.

Expenditure incentive schemes and their application

Question 12

Do stakeholders have any views on the relationship between the assessment tools that we have identified, and our existing incentive schemes? Given the interrelationship between the two, and that our incentive schemes are to be revised over 2013, what processes should we follow to ensure there are appropriate incentives on NSPs to make efficiency gains, while at the same time implementing appropriate expenditure assessment techniques?

Some of ENA members have been subject to incentive regulation for more than 15 years, making large efficiency gains in the process and moving towards the efficiency frontier. For many of these businesses, large step changes in efficiency will not be possible, with only gradual year-on-year improvements being realistic.

Benchmarking (as a tool for setting allowances) and the use of an incentive-based revealed costs methodology for opex do not sit comfortably together. The revealed cost approach is based on the presumption businesses are sufficiently incentivised to reveal their efficient level of costs throughout a regulatory period. The relative power of that incentive will be driven by certainty around the rewards and penalties.

Any benchmarking that leads to an efficiency adjustment to the base costs will dilute the sharing of efficiency gains or losses, undermining stakeholder confidence in the potential rewards or penalties that exist under the scheme. This uncertainty may ultimately render the incentives under the scheme ineffectual. Further, a business cannot respond instantaneously to benchmarks and should be provided a reasonable length of time to do so.

The AER has stated its confidence in the revealed costs arrangements in previous regulatory reviews, and that in such a case benchmarking of opex may be unnecessary. The ENA supports this view. The ENA also notes that nothing in the recent rule changes determined by the AEMC suggested that the incentive building blocks framework should be fundamentally changed. Incentive regulation is still the mandated regulatory regime in Australia.

The guideline, benchmarking reports and determinations

Question 13

Do stakeholders have any comments on how best to manage the interrelationships between the guidelines, F&A processes, determinations and annual benchmarking reports?

Annual benchmarking reports and determinations need to be based on consistent data across all NSPs in order to make valid benchmarking comparisons. To achieve this, the AER will need to choose a specific area or areas to assess and decide on the appropriate benchmarking technique to apply, based on a clear understanding of the input, output and environmental variables that has been consulted and agreed with NSPs and consumers through a process defined in the guidelines.

Annual benchmarking reports provide an opportunity for the AER to understand the ability of NSPs to provide required data and the ability of that data to explain expenditure forecasts, which can be reflected in the weight that the AER should place on the use of a particular technique for particular revenue determination and detailed in the F&A paper for that determination.

Annual benchmarking reports may also provide the opportunity to develop new forecast assessment techniques relevant to a limited number of expenditure areas at a time. As experience is gained with the use of a technique and NSPs have developed the capability to produce consistent data that supports the use of the technique in that area, further expenditure areas or assessment techniques can be introduced and may applied in revenue and regulatory determinations if they are of value.

Question 14

How would it be best to maintain a degree of consistency in assessment techniques and associated data reporting, while at the same time allowing improvements in techniques?

The AER currently requires DNSPs to respond to annual RINs. The AER also has extensive data obtained through RINs issued in connection with the first round of reviews. That information needs to be evaluated and compared with the data requirements of any selected benchmarking methods.

Introducing benchmarking as expenditure forecast assessment technique needs to be carried out in a managed way, with a commitment by the AER to a cycle of review and process improvement. The fact that revenue determinations are made each year provides an opportunity for the AER to assess its newer expenditure assessment techniques against those which it has used in the past and has a degree of confidence in. This will enable improvements in techniques to be considered and implemented in an evolutionary manner.

Question 15

Are there any ways the expenditure assessment process, including in preparing NSP forecasts, could be improved by linking the Guidelines, the F&A process and the NSP's obligation to notify us of its forecasting methods?

The NER sets our a clear sequencing of the Guidelines, the F&A process, NSPs' notification of forecasting methods and NSPs' submission of regulatory proposals. Quite purposefully, there are no restrictions in the NER on the forecasting methods that an NSP may adopt. The ENA sees no problems with the sequencing of events as specified in the NER.

The ENA expects that all the processes used by the AER to obtain and assess information from NSPs will have as their ultimate aim the eventual development of efficient revenue allowances for the NSPs. The individual processes should therefore all exist within a coherent, integrated framework that minimises duplication of effort and contributes to enhanced understanding by both the AER and the NSPs of cost drivers and efficient costs.

The guidelines need to set out the assessment techniques that the AER intends to use, informed by an understanding of the input, output and environmental variables associated with a particular assessment focus area and the ability of NSPs to provide meaningful data. This, in turn, will inform the AER of an NSP's ability to provide the data that the assessment technique requires. Where it becomes apparent to the AER through this process that sufficiently consistent and accurate data is not available, or that benchmarking reports fail to show adequate relationships between theoretical cost drivers and actual expenditure, the F&A process needs to recognise that less weight should be given to the use of that particular technique during the determination process.

Customer groups should be involved in determining the output variables to be assessed, as customers will provide insights into the outputs that they consider to be important and on which they place value.

Alternatively, where the annual benchmarking process shows that a particular technique has a strong determinative value in assessing an expenditure forecast, the F&A process can recognise this and allow the AER to place substantial weight on the outcome of that particular technique during revenue determinations.

The AER's comments that it would be concerned if "NSPs were to present arguments or data in their favour only after viewing benchmarking that indicates they are inefficient". The ENA does not share the AER's concern. It is important to remember that, given the current state of benchmarking tools, an unfavourable outcome on a particular benchmark does not necessarily indicate that a business is inefficient. It could indicate a problem with the data or the benchmarking technique itself, or it could also indicate a different asset management strategy. It is entirely natural for a business to only expend effort and funds in addressing issues that are relevant and material to them.

The AER's suggestion of only releasing results after stakeholders have presented arguments from an "in-principle" perspective seems unusual. It is akin to a Board of a business asking the Management to discuss financial results and variances without seeing the accounts. This would likely result in much wasted effort and would be highly inefficient.

An NSP is unlikely to be aware of particular inefficiencies (or may not in fact be inefficient in a specific area if the benchmarking has not properly considered environmental variables in the analysis or the comparative data is not sufficiently robust to support benchmarking). The AER's process should allow the presentation of data and arguments that support improvement in the application of benchmarking techniques at any time during the assessment process.

Detailed timing and transitional issues

Question 16

Keeping in mind the preference to use up to date and nationally consistent data in all benchmarking analysis, what would be the best time to issue RIN templates? Would these need to be for all NSPs? How frequently should we do this?

RIN timing for each business should continue to align with each business's regulatory year and regulatory period cycle.

The issues paper appears to anticipate a need for all data to be collected at the same time across the country in order for results to be comparable. In reality, it is unlikely that data collected will have such a degree of accuracy that timing differences in the collection of data between NSPs will have a significant impact on the comparability of data. Consistency in data definitions across NSPs is more important and that this consistency be reflected in the requirements of the annual RIN process.

In practice, the required degree of consistency will take several iterations to achieve and the annual RIN process will need to support an evolutionary development of the data requirements; ie requirements should not change from a planned development path from year to year.

Simply setting out consistent definition is not sufficient, as it takes time for businesses to align their operational and financial processes to new definitions. Also, it will take time to understand whether all businesses are interpreting the definitions in the same way. Until consistency of application (as opposed to definition) is achieved, benchmarking is likely to experience large discrepancies that would simply reflect different interpretations, rather than different performance.

Question 17

Should we try and limit the collection and analysis of benchmarking data to annual benchmarking reports? Alternatively, should we focus our effort on benchmarking analysis at each draft and final decision stage, with less attention to annual benchmarking reports?

The ENA believes that the NER are clear that the AER must take account of its most recent annual benchmarking report (NER s 6.5.6(e)(4), 6.5.7(e)(4), 6A.6.6(e)(4) and 6A.6.7(e)(4)) when assessing a regulatory proposal. Regulatory proposals will always be built around regulatory years. It is not clear to the ENA what basis there is for the flexibility implied by this question.

Question 18

Are there alternative, more flexible means to gather data for benchmarking purposes in annual reports and in determinations, such as requests outside the NEL provisions?

The ENA does not believe it would be necessary to use any data gathering mechanism outside of NEL provisions.

The annual RIN process provides ample opportunity to gather all required data. Any data for regulatory purposes, including benchmarking, should ideally be collected through the evolution of current formal RIN processes. It is not clear on what authority the AER could collect data "outside the NEL provisions" for use in regulatory processes or why that would be a preferable approach.

It is important to remember that RINs are a fairly recent development and that business systems for most NSPs are not currently aligned even with the existing RIN provisions, with material costs being incurred to provide RIN responses, often using manual work-arounds and allocations. The AER should exercise caution in expanding information requirements, not only because of the expense involved, but also because of the poor quality of the data created when it cannot be directly extracted from business systems. Continuous change to the RINs also makes it hard for businesses to align their systems with regulatory requirements.

Currently, the RINs require a very high standard of certification for the information provided, with statutory declarations, board resolutions and audit reports required. This places significant constraints on the information that a business is able to provide. The AER should consider relaxing some of these requirements when experimenting with new types of information requirement. This may allow businesses to provide information that, while not 100 percent accurate, may still be useful.

Question 19

Should we be considering the alignment of regulatory years and of regulatory control periods for transmission and distribution NSPs to overcome some of these challenges? If so, should regulatory years reflect the Australian financial year? How would the alignment of regulatory control periods be best achieved?

The ENA does not believe that it is necessary to align regulatory control years and periods for transmission and distribution NSPs, or to align regulatory years with financial years. In terms of benchmarking, there is no practical reason why the AER's analysis should not be based on the most recently reported data for each business.

It is important to remember that there is no consistency even between financial years across businesses, for example as some are overseas owned with financial years in the shareholder's jurisdiction being different to the Australian financial year.

The staggered nature of regulatory periods provides an opportunity for regular review of the effectiveness of the benchmarking and assessment process and to include learnings from one revenue determination into the process applied to the following determination.

The introduction of a range of new expenditure assessment techniques in a wholesale manner would represent a significant change for both the AER and the NSPs, and would need to be managed effectively if it is to be successful and result in the outcomes desired by the AER. A process whereby smaller incremental steps are taken and the results assessed and processes modified accordingly is more likely to result in a successful implementation.

Expenditure forecast assessment guideline – Issues Paper

Attachment A: Economic benchmarking techniques Q20-44 (comments on distribution only)

The ENA welcomes the further development of economic benchmarking techniques and believes that they have the potential to play a more important role in future expenditure reviews.

ENA's response in relation to Economic Benchmarking Techniques mirrors its response to the Expenditure Assessment guidelines generally.

The discussion of benchmarking techniques raises a range of issues, many of which relate to future development and implementation. These longer term issues are unlikely to be directly relevant to the AER's requirement to 'determine how it will be applied at the framework and approach paper stage', particularly for the next round for reviews.

ENA are concerned with providing definitive responses in relation to economic benchmarking techniques at this stage. Given the interdependencies between selected inputs, outputs, environmental variables and other specifications, it is not appropriate for ENA to nominate preferred methodologies, inputs, outputs and environmental variables before engagement through the working group forums.

The responses provided at this stage are merely indicative and are not intended to validate the proposed techniques or the choice of a particular model. Rather, they should be seen as a starting point for further discussion and consultation with the AER.

Generally, the ENA is concerned with the focus of Appendix A as compared to that of the main issues paper. The Issues Paper focused primarily on issues of scope and application rather than issues of detail and implementation. More fundamental issues include;

- Should economic benchmarking be focused on analysis of historic costs (ex-post) or future plans?

- What role benchmarking should have in the context of the current incentive based regulatory framework? Should it be used indirectly to identify areas for more detailed investigation or to directly determine future expenditure allowances?

The AEMC and Productivity Commission have both found that a number of pre-conditions that would need to be satisfied before economic benchmarking techniques (particularly TFP) could be used more extensively in regulatory decisions, either as qualitative input in addition to other expenditure assessment processes or more deterministically in setting expenditure allowances. It is noted that, in terms of current NER[1], there is a requirement that operating expenditure and capital expenditure to be assessed separately, albeit having regard to the substitution possibilities between them. This is likely to have implications for the potential choices of technique applied. It would seem there is greater potential (in the near term) for economic benchmarking techniques to be applied as one of a number of "diagnostic" tools rather than to deterministically set expenditure allowances. As a result, it is argued that initially, economic benchmarking should be developed in the context of the annual benchmarking report where the first is due in September 2014.

[1] 6.5.6(e)(4) and 6.5.7(e)(4)

- Is it feasible to define the outputs of network businesses in a meaningful way to ensure that they can be accurately and consistently measured to justify inclusion in a benchmarking model?

  ENA also notes developing views as to what constitutes the output of a network business. OFGEM has recently been involved in an extensive consultation with DNSP's as part of its RIIO-ED1 review and has proposed that the outputs of DNSP's include;

  - Safety
  - Environmental Impact
  - Customer satisfaction
  - Social obligations
  - Connections
  - Reliability & Availability

  The ENA would confirm that these are the type of 'outputs' that the businesses are focused on, however, the challenge for management, let alone regulators, is to identify ways of defining and measuring these in timely and objective way. It is suggested that the only feasible way of exploring and addressing these conceptual issues is through the proposed working group process.

- Are the activities of networks expected to be stable enough for past performance to be used to determine future expenditure allowances?

  ENA is concerned that the AER may be seeking to resolve implementation issues and determine model specifications before major policy issues had been considered or consulted on.

  The businesses consider instead of using a theoretical approach, the AER's initial focus should be on analysis and consultation in the development of a framework for the application and development of economic benchmarking techniques. Such a process could involve the following steps:

  - Identifying the scope for applying economic benchmarking techniques in an incentive based regulatory framework;
  - Development of a performance measurement strategy for network businesses;
  - Determining selection criteria for the various techniques for comparing absolute and relative performance of DNSP's; and
  - Determining what role businesses and other stakeholders have in the development, review and testing of alternative models.

Furthermore, the businesses consider that since the primary purpose of the guideline is to outline how the AER intends to assess expenditure for the next round of determinations an important primary focus should be on developing the scope and techniques in this context. Both the AEMC and the Productivity Commission have cautioned that it may take some time before the conditions required to ensure that these techniques can be effectively applied in determining efficient expenditure allowances.

Given our response raises fundamental issues of the scope and application of economic benchmarking techniques, the ENA consider that we are only able to respond directly to questions 20-22. Once these issues of scope and application are clarified it is believed it will be possible to provide responses to the more detailed questions through the working groups established by the AER.

Holistic approach

Question 20

We are interested in your views on the holistic approach to the selection and establishing reporting requirements for economic benchmarking techniques.

The ENA understands the AER's desire for flexibility in selecting an appropriate benchmarking technique however, this may come at the cost of additional costs or inefficiencies related to data definition and collection costs. The AER may benefit by focusing its initial efforts on;

- What aspect of productivity/performance should be measured in the context of an incentive based regulatory framework;
- A strategy to support the definition, measurement and collection of data to support the economic benchmarking of these businesses.

Whilst a holistic approach may be more appropriate than choosing a single technique, given the lack of certainty associated with whether the application of these techniques to network distribution businesses in an Australian context, this raises the issue as to whether it is reasonable or valid to average or combine the results of different techniques.

Efficiency and productivity measurement

Question 21

Have we identified all the relevant economic benchmarking techniques and, if not, are there other economic benchmarking techniques that should be considered?

Although the AER has identified all of the common techniques used for benchmark analysis, this does not mean that they are relevant in the Australian context. Australia has only 15 DNSP's some of which are predominantly rural and others predominantly urban, with varying levels of load density.

Question 22

We are interested in your views on how economic benchmarking techniques should be applied in our decision making process regarding expenditure. Specifically, we are interested in your views on:

- using these techniques to assist us to form a view on the efficiency of base expenditure and expenditure forecasts
- measurement of the likely pace at which productivity improvements may be made over a regulatory control period.

Whilst economic benchmarking techniques may be a useful tool in comparing DNSPs, using it to assess the efficiency of base expenditure or the likely pace of productivity improvements relies on being able to fully account for the cost drivers and circumstances of each of the businesses. Whether this was possible would need to be verified. As a result, economic benchmarking cannot currently be relied upon to provide reliable and consistent results and should be used to supplement engineering reviews and bottom-up analysis that can account for the inherent cost differences between DNSPs.

Setting an expenditure target for a NSP for one control period on the basis of economic benchmarking techniques is unlikely to result in an increase in productivity. If the targets were set without a clear understanding of the underlying cost drivers on the business, these targets will be achieved through the deferral of projects and reductions in activity, which may be detrimental to productivity in the longer term.

Expenditure forecast assessment guideline

Attachment B: Category analysis Q45-74 (comments on distribution only)

Expenditure categorisation

Question 45

Do you agree with this list of expenditure drivers? Are there any others that should be added?

The ENA agrees with the list of expenditure drivers identified in the issues paper, however notes that the following issues should be considered:

- The relative contribution of each driver to each output and the interrelationships between the drivers.
- Expenditure on quality of supply including harmonics, fault levels and voltage compliance is generally considered as augmentation by most DNSPs and included in the system growth category. However, the expenditure on quality of supply is not correlated with the expenditure required to increase network capacity. The augex model is currently unable to capture this expenditure.
- While many network assets continue to provide a service for their entire physical life, there is an increase in the tendency for some assets to become obsolete before their condition deteriorates, for example protection relays. This would generally be included in the asset replacement category by most DNSPs.
- Safety and environment cost drivers associated with legislative changes and state based obligations would generally be captured in the changes in obligations category by most DNSPs.
- Relocation of assets is referred to under both customer requests and actions by 3rd parties. The relocation of assets is generally captured under customer requests by most DNSPs.
- Joint planning can be an expenditure driver, for example where a regulatory test for a constraint in one network can produce an efficient and prudent investment in the neighbouring distribution or transmission network.
- There are expenditure drivers relating to service standards resulting from state based regulation which differs from state to state.

Question 46

To what extent do you think the expenditure drivers are correlated with each other? Given this level of correlation, should we examine the impact on expenditure of each one, or can this list be consolidated?

The ENA is of the view that the expenditure drivers identified are not necessarily correlated, and that if they were the extent of correlation would be open to subjectivity resulting in errors due to inconsistency.

Additionally, where there is some correlation between expenditure drivers, the extent that those correlations appear would already be captured in the examination of the historical expenditure. For example to manage a system growth driver a DNSP may need to replace an old transformer with a new higher rating transformer. This defers the future need to replace the transformer due to an asset condition driver.

Further aggregation of the list will reduce understanding of expenditure and therefore limit its value.

Details of driver based assessments

Customer driven capex

Question 47

Do you think that the network segments outlined above provide a useful demarcation of the costs of customer-initiated network extension and/or augmentation? Do you think that there are significant cost differences in installing connection point assets and in network extensions between overhead and underground assets? What alternative asset type demarcations would be more appropriate?

The approach to customer driven capital expenditure proposed in the guidelines assumes a level of detail and network homogeneity that from a practical level is inconsistent with existing business processes and operationally difficult to achieve. The AER needs to acknowledge the level of detail collated for customer driven expenditure varies significantly between DNSPs. Specifically:

- Connection work is typically categorised by connection type not by basic connection, extension and capacity upgrades.
- In many cases a connection may involve all three components included in a single job making separation of individual components impossible without arbitrary assumptions being made
- Given the variability in costs, network segments are not typically used by DNSPs to categorise connections but rather the purpose, size or location of a connection.
- Existing categorisations have typically been in place for extended periods of time and reflect how individual DNSPs view costs are incurred.
- DNSPs with a contestable framework for customer connections do not see the actual costs and would therefore be unable to produce meaningful, quantifiable data.

It would therefore be burdensome for all DNSPs to collate data to the level of detail specified in the guidelines that is sufficiently robust for benchmarking purposes. The AER should also consider the consequences of imposing a categorisation inconsistent with that operating within a DNSP. Any resulting information provided by the DNSP will inevitably be subject to a number of largely arbitrary assumptions in order to meet the guideline requirements compromising the value of any inter DNSP benchmarking analysis.

Given the above, it is important the guideline provides flexibility in how connections are classified within DNSPs and acknowledge the inherent network differences that have a significant impact on costs.

Question 48

Do you agree with separating customer-requested expenditure by connection point assets, extensions, and augmentations? Do you think total expenditure for each service (excluding new connections services) is a sufficient degree of disaggregation? Should further sub-categories be identified?

As noted in response to Question 47, connection work is typically categorised by connection type not by basic connection, extension and capacity upgrades. In many cases a connection may involve all three components included in a single job making separation of individual components impossible.

Therefore, careful consideration is required of how individual DNSPs currently categorise connections before the guideline moves to mandating solutions.

Question 49

Do you agree with separating new customer connections expenditure by the connection point, extension, and augmentation components? Do you think that the number of new connections, length of network extensions added, and size of capacity added are useful measures of the volume of work and expenditure required for new connection services? Should these categories be disaggregated into more detailed categories reflecting the type of work undertaken by the NSP to account for factors that drive changes in new connections expenditure over time?

See response to question 47 and 48.

The increase in generation connections may lead to the need for a separate category to capture expenditure driven by the connection of distributed generation.

Further consideration is necessary over how the length and capacity of mains are best characterised. For example MVA-km may provide a better measure than just MVA (as used in augex) or just length. If MVA is to be considered as a measure for comparison of mains between DNSPs some account need to be made of the voltage of the construction.

Accounting for such fundamental system characteristics which have a large impact on costs is more important than further disaggregation of activities.

System Growth capex

Question 50

Do you think the system growth expenditure driver category should be distinguished by expenditure directed at addressing different service standard issues, such as harmonics, voltage variance, ferro-resonance, and system fault levels? Would the benefits of distinguishing expenditure into these sub-categories for forecasting the timing and scope of changes in expenditure trends over time outweigh the added complexities from doing so?

The ENA considers that a separate categorisation of expenditure to address harmonics, fault levels and voltage compliance can be potentially meaningful, given its significance. However, further examination is required to determine if the effort of collecting the required data is matched by the benefit. This is because doing so would require substantial changes to recording processes, practices and systems for

many DNSPs. The costs of making these changes may be material, especially if the AER required these costs to be audited.

The ENA notes, that the augex model currently does not capture expenditure required to comply with service standards or changes in Codes. If these drivers are not separately recognised it would be ignoring a large portion of the businesses' augmentation expenditure.

Question 51

Do you think that the network segments outlined above provide a useful demarcation of the costs of general load driven network extension and/or augmentation? What alternative asset type demarcations would be more appropriate?

The segments proposed in section 2.2.2 of the issues paper can be considered reasonable however it should be at the business' discretion to further disaggregate beyond the network segments outlined. If the network segments were mandated then some utilities may encounter problems. Reporting on the proposed categories and subcategories would involve substantial changes to current practices and systems, especially if reporting was required to an auditable standard. For example, distribution substation and LV feeder data would be difficult to obtain for most DNSPs and a sample based approach may be more pragmatic.

Alternative demarcations to provide an increased understanding of the costs could be based on overhead and underground construction or voltage level as the cost per MVA of capacity added is likely to vary considerably.

Replacement capex and maintenance opex

Question 52

Do you think the above asset types are sufficient in capturing the cost differences associated with activities to address deterioration in asset condition? What other asset types may be suitable?

The ENA agrees with the list of asset types identified in the issues paper, however notes that the following issues should be considered:

- The repex model allows for further disaggregation of the proposed asset types. This should be at the DNSPs discretion.
- An additional asset type for sub-transmission substations may be required by some DNSPs.
- An additional asset type for secondary systems (such as protective relays, SCADA and Communications) and metering should be considered.
- Some DNSPs would prefer that "poles, pole top structures, overhead conductor and services asset" be combined into a category called distribution assets, as the costs of these assets are allocated at an aggregated maintenance level and allocated between opex and capex. These costs are not disaggregated to each of the specific maintenance activities. As a consequence it is not practical to derive a unit rate for each individual activity and physical asset.
- Some DNSPs would prefer that distribution transformers and distribution switchgear be combined as often these units are installed as combined units in the network.
- The "Other Assets" category may not be useful from a benchmarking perspective due to the mixed nature of what each DNSP would categorise in there. A clear definition would be required.

Question 53

Do you think cost differences between emergency rectification activities and other activities to address deteriorating asset condition are sufficient to require separate categorisation?

There are no synergies between emergency rectification activities and planned activities to address deteriorating asset condition. Therefore, the ENA considers that there should be separate categories for these activities for distribution networks.

Question 54

Do you think cost differences between non-emergency prevention activities and non-emergency rectification activities to address deteriorating asset condition are sufficient to require separate categorisation?

The ENA seek clarification of the categorisation of these activities. It is suggested this question is therefore addressed in further detail during relevant workshop(s).

Question 55

Do you think cost differences between non-emergency replacement activities and non-emergency maintenance activities are sufficient to require separate categorisation?

The ENA questions the benefit of disaggregating operating expenditure to this level of granularity. The ENA also notes that the AER should give further consideration of the EBSS which provides an incentive for a business to develop the least cost solution.

Question 56

Do you think the approach to using benchmarking and trend assessment for routine and non-routine maintenance is reasonable? Are there any alternatives which might be more effective?

The ENA questions how adopting a routine maintenance model will provide a more robust forecast for the DNSP. There are a range of uncontrollable factors that will reduce the comparability of routine maintenance expenditure including the age of the asset and the operating environment. It is therefore not feasible to construct a deterministic routine maintenance model given the large number and variety of distribution assets.

The ENA notes that maintenance costs include a myriad of small opex and capex activities. The costs are allocated at an aggregated maintenance level and allocated between opex and capex. The costs are not disaggregated to each of the specific maintenance activities. As a consequence it is not practical to derive a unit rate for each individual activity and physical asset as would be required.

Furthermore, a routine maintenance model is inconsistent with the EBSS. The EBSS incentivises a business to develop the least cost solution. Any benchmarking that leads to an efficiency adjustment to the base costs will dilute the sharing ratio of 30:70 and hence disincentives businesses from pursuing further efficiencies.

Question 57

Given the relative predictability of maintenance cycles and activities, do you consider it feasible to construct a deterministic maintenance model, such as that described above?

See response to question 56.

The ENA disagrees that maintenance cycles and activities are relatively predictable. For instance, non routine maintenance is heavily dependent on storms and therefore not predictable. It should also be noted that some assets have maintenance cycles longer than one year and in many cases longer than a regulatory period, which would make calculation of 'average cost per control period' problematic. This cost is also relatively meaningless from a DNSP BAU point of view.

In general, the ENA opposes the use of deterministic models for setting regulatory expenditure allowances. Deterministic models fail to pay regard to the data intensive processes used by individual DNSPs in order to determine cost efficient maintenance programs which may not be limited by asset type. For example, in regional areas, cost effective maintenance cycles may be achieved through bundling the maintenance of different asset types, this would be ignored by examining each asset type separately. Although all DNSPs undertake routine maintenance, the tasks undertaken and the frequencies differ.

Question 58

Do you think that expenditure directed at altering network infrastructure or management systems to ensure compliance with a changed regulatory obligation can be disaggregated in a way that improves accuracy in forecasting and efficiency assessments?

The degree of expenditure resulting from change in regulatory obligation will differ between DNSPs. There are challenges in capturing the incremental expenditure due to a change in a regulatory obligation for an existing activity.

Question 59

Do you think cost differences between emergency rectification activities and other activities to address third-party actions are sufficient to require separate categorisation?

The ENA proposes that vegetation management is not grouped under the heading of 'third party actions'. The ENA also supports the separation of third party costs as asset relocation requests are quite separate to vandalism and theft for example. However, these expenditures are difficult to forecast as they are outside of a DNSPs control generally.

Question 60

Do you think expenditure on managing vegetation growth should be distinguished from expenditure on third-party stochastic events? Should expenditure on third-party stochastic events be distinguished into sub-categories?

The ENA notes that DNSPs have already been separately reporting vegetation management as the RIN has a separate operating expenditure category for vegetation management. Generally, the ENA

questions the benefit of disaggregating operating expenditure into sub-categories. The EBSS provides an incentive for businesses to develop the least cost solutions.

Specifically, the ENA disagrees with the assertion that "vegetation growth tends to occur at reasonably predictable rates." There are multiple factors that impact on growth which are highly variable across DNSPs i.e. tree species, climatic conditions, weather and soil type.

Moreover, benchmarking of vegetation management expenditure across the measures will be severely limited, given the variability of factors such as different regulatory obligations (e.g. a buffer zone applies in SA Power Networks, which limits the amount that can be cut); tree growth rates; tree density/terrain and contract arrangements. In light of this, trend analysis on a total expenditure basis could be considered. Although even then there can be significant variability in expenditure from year to year due to the change in weather which would need to be accounted for.

Question 61

Do you think general measures of network size and type are sufficient measures for investigating differences in third party expenditure across service providers? What other measures may be useful?

As explained in question 60, the ENA is not in agreement with the use of these measures, particularly as they relate to vegetation management. It is not possible to answer this question in a definitive way without undertaking empirical analysis using an actual model proposed by the AER.

It is suggested that further consultation is conducted. The ENA suggests that more relevant measures for 3rd party expenditure (for discussion) may include geographic location, level of construction activity, level of traffic, seasonal climate of the network area and socio-economic profiles of the network area and the customers

Question 62

Do you think overheads should be separately reported, or included on a fully-distributed basis in the expenditure driver-activity-asset categories, or both?

The ENA considers that overheads should be separately reported and due to the differences between DNSPs they should be assessed and reported at an aggregated level. In general, expenditure categories need to be clearly defined and only contain those costs necessarily incurred in undertaking that work for comparable benchmarking purposes.

The inclusion of overheads in expenditure categories will unreasonably impact the ability to benchmark and the method of allocation adds another variable that will need to be considered in assessing between entities. Company specific costs, or corporate overheads, may have disparate expenditure drivers, for example office and depot accommodation are largely fixed and driven by location specific factors. Similarly legal costs may be driven by exogenous events that are not directly comparable between entities.

The ENA argues that the cost of operating an electricity distribution network (e.g. system planning, standards, network control etc) should be reported as a separate business activity rather than as an overhead. Costs will vary due to environmental factors, such as customer density, overhead/underground configuration, peak demand etc and should be assessed separately. An agreed definition and common understanding of what activities constitute 'operating an electricity network' will be required.

Question 63

How do you think overhead expenditure should be distinguished and assessed? How would you define any overhead expenditure sub-categories?

See response to question 62. The ENA considers that overheads should be separately reported and assessed. Overhead expenditure can be further disaggregated; however, this will require the businesses' to make allocations. The need to make allocations diminishes the usefulness of information and may not provide reliable results if analysed at a disaggregated level.

Overhead expenditure for preliminary purposes can be defined as that which is not related to the management and operation of network infrastructure. However, this definition will require further discussion and agreement to reach a common understanding across DNSPs as to what activities constitute this expenditure versus activities that constitute corporate support/overheads. Further, the way businesses split their overhead costs and to what extent costs are recognised as direct will depend on the corporate structure of the relevant DNSP. DNSPs that are part of a large integrated corporation may have a larger number of functions that are provided at a group level and, therefore treated as overheads, as opposed to direct costs.

The ENA also considers that the cost of operating an electricity distribution network (e.g. system planning, standards, network control etc) should be reported as a separate business activity rather than as an overhead. As above, an agreed understanding of activities constituting 'operating an electricity distribution network' will need to be reached. Similarly customer service costs are integral to operating a network and should be reported as a separate business activity.

Question 64

How material do you think are changes in input prices on overall expenditure levels? What forecasting and modelling approaches do you think can reliably account for the impact of input price changes on expenditure without introducing overly burdensome reporting requirements?

The changes in input prices are material and due to the majority of the inputs being specific to the network businesses, they can diverge significantly from the input prices of other industries. The ENA sees merit in the guideline providing guidance on the preferred approach but recognising that other approaches may be needed to be able to cater for the particular circumstances of the DNSP and the timing of the determination.

The ENA also notes that errors occurred in the initial development of cost escalation procedures. The case referred to was a genuine error that was identified and addressed in collaboration with AER staff as part of the draft determination process. These issues have largely been overcome with the standardisation and development of the methodology.

The ENA agrees that the use of forecasts published independently of the regulatory process is attractive; it considers that the value of their independence should not overshadow their relevance to the input prices of a DNSP over the 5 year regulatory period. Due to the inexactness of forecasting even by the best forecasters, the ENA supports approaches with appropriate consensus.

The ENA agrees with the suggestion of incorporating appropriate risk sharing mechanisms such as pass through adjustments to allow for circumstances "where factors are particularly uncertain and unmanageable". However, where risks are able to be quantified with a reasonable level of accuracy on the basis of futures prices and forecasts, this would seem to be a more efficient way of allowing for these risks rather than pass-through arrangements that may result in one-off potentially volatile changes to

allowed costs. It should be noted that hedge contracts do not avoid future price increases - they lock them in. Optimal timing of material purchases is already assumed in the forecasts. Labour cost forecasts will include productivity dividends but it is important the value of the productivity efficiencies is recognised.

Question 65

What categorisation of different inputs do you think provides a sufficient understanding of both how input prices may change over time, as well as how input prices may vary across geographical locations?

The ENA agrees that the categories of inputs outlined in Attachment B section 3.1 of the issues paper, can materially influence the cost of inputs. However, the ENA notes that the changes in the prices of manufactured materials are not solely influenced by the changes in the raw materials that are used. Consequently, the price of manufactured network materials may not be well correlated with raw material costs.

The ENA also notes that it is extremely difficult to change the input mix, particularly in the short term. It would not be prudent for a DNSP to seek to change the mix unless there was a high degree of confidence that the change in relative prices would be sustained. There is still potential for forecasting error either way.

Question 66

Do you consider optimism bias and/or strategic misrepresentation to be a material issue in the cost estimation for non-routine projects? Do you consider downward biases in cost estimation to materially outweigh regulatory incentives to over-estimate expenditure? To what extent do you consider there to be a consistent downwards bias in initial project cost estimates?

Each DNSP applies varying techniques to build up specific project budgets. It needs to be recognised that when the estimates are being prepared for regulatory proposals there will be unidentifiable costs due to the high level nature of the scopes. Therefore when considering the cost build up of projects, estimates will be commensurate with the degree of detail available at that time.

However, the ENA does not consider strategic misrepresentation to be an issue under the current NER regime. Strategic misrepresentation would require a company officer to make a false statutory declaration to the AER, which is highly unlikely, given the personal and professional implications of such conduct.

Question 67

What should be our approach to cost estimation risk factors and addressing potential asymmetric estimation risk? Would techniques such as reference class forecasting be beneficial? How would any techniques to address asymmetric cost estimation risk interact with potential incentive schemes (for either opex or capex)?

The ENA considers that it is important to recognise that the forecast of capital expenditures are based on estimates of projects for which many have only been developed to a conceptual level. At this level, there are risks to achieving accurate forecasts arising from a range of factors which would include unidentified elements of the scope and location specific cost influences. The ENA does not advocate the prescription of a particular methodology to take into account these risks as this will depend on the cost estimating methodology used by a DNSP.

In general, the ENA supports strong incentive schemes to drive efficient levels of expenditure, which would then be taken into account in determining expenditure forecasts. This removes the AER's concern that forecasts would be inflated by the use of risk factors developed from past actual expenditures which were not efficient.

Question 68

Do you think our established approach to assessing debt and equity raising costs remains appropriate? What modifications or alternative techniques would you suggest?

The ENA supports estimating debt and equity raising costs by applying a consistent approach across all determinations using benchmark assumptions which are consistent with the assumptions for determining revenue requirement.

The approach to estimating equity raising costs by modelling benchmark cash flows is appropriate. However, the AER has used subtly different models in various determinations to determine equity raising costs and some parties have had specific concerns with the AER's calculations. The model and its inputs should be subject to a proper consultation process. The consultation should also consider whether equity raising costs ought to be expensed or capitalised.

The current approach to estimate the all-in cost of debt as a corporate bond yield (included in the WACC) and debt raising costs (included in operating expenditure) does not recognise other debt financing costs such as those for liquidity risk management and refinancing risk management which are required to maintain an investment grade credit rating.

For example, in more recent years, Standard & Poor's has adopted a liquidity risk score that requires a certain level of available financing to be held by a DNSP. DNSPs also manage prudent risk policies that enable them to maintain an investment grade credit rating by ensuring committed financing is available well in advance of any maturing debt.

Additionally, the implications of any changes to the benchmark debt financing approach arising from recent changes to the Rules will also need to be considered. For instance the tenor of the debt and the type of debt issued has implications for debt financing costs. It is important that the all-in cost of debt be considered holistically, recognising that there are trade-offs between interest costs and other debt financing costs.

Question 69

Do stakeholders have any in-principle views on how demand forecasts should be derived and assessed?

The ENA is comfortable with the approach recommended by the AER provided clear definitions such as a suitable long time series can be agreed with the AER. Consideration should be given to the treatment of additional factors such as the treatment of embedded generation including solar PV.

The ENA also notes that DNSPs are best placed to determine the bottom up demand forecasts at a zone substation level as AEMO can only provide demand forecasts at a terminal station level.

Question 70

Do you think that the network segments outlined above provide a useful demarcation of the expenditure incurred to address various expenditure drivers? Do you think that there are significant cost differences in

building, repairing, or replacing network assets based on region in which the work is being done? What alternative asset type demarcations would be more appropriate?

Whilst the ENA notes that there can be significant cost differences in building, repairing or replacing network assets depending on the region, the ENA does not believe that this question can be answered without substantial empirical analysis.

The network segments outlined in section 3.5 have not been universally applied by DNSPs for the demarcation of costs.

Question 71

For the purposes of comparative analysis of various expenditure categories, do have any views on how to best control for difference in approaches to cost allocation, capitalisation and outsourcing?

The method by which costs are captured and attributed or allocated is described in an entity's Cost Allocation Method (CAM), which is approved by the AER and can not be changed without the written authority of the AER.

In determining an appropriate CAM, consideration needs to be given to the reality that most businesses allocate their costs according to their CAM, through the same business finance systems that are used to produce Statutory accounts. It is crucial that a regulated CAM is not developed in total isolation from this fact and the costs/administrative burden that would result from requiring businesses to generate regulatory accounts under a CAM that is completely inappropriate for statutory purposes.

Question 72

Do you think our conceptual framework for the assessment of related party contracts is reasonable? What other techniques may be appropriate? Should we apply the same conceptual framework when assessing the efficiency of related party margins on an ex post basis?

It is important that the framework is transparent and well understood. The DNSPs must have a clear understanding of how each transaction will be assessed under the framework.

The AER's conceptual framework has yet to be tested through review by the Australian Competition Tribunal. The framework treats the related party contractor as a regulated entity, rather than recognising that the contractor participates in a competitive market. The key concept should be whether the costs incurred by the regulated utility (and ultimately by customers) are higher or lower than those that would be incurred if an unrelated party contractor was used.

Question 73

Do you think our conceptual framework for assessing self-insurance is appropriate? What other techniques may be appropriate?

Self insurance is an appropriate mechanism for the management of risks particularly with respect to:

- uninsurable risks (either as no insurance is available or insurance is not available on economic terms);

- the amount of the deductibles under insurance policies;
- historical claims or self insured losses including frequency, severity and likelihood versus the cost of the policy
- any amount above insurance policy limits; and
- other uninsured risks businesses consider it appropriate to retain.

These costs are all 'business retained costs' therefore it is important not to too narrowly define self insurance costs as catastrophic events that occur only rarely.

These costs are real costs to the business and involve actual outgoings of cash. The regulatory determination process should be clear as to whether it is appropriate for recovery of these costs to be by way of operating expenditure allowance or whether it is more appropriate for such costs to be recovered through an appropriately drafted pass-through mechanism. For costs recovered by way of operating expenditure allowances further consideration is necessary as to whether such costs should be classified as controllable or non-controllable costs.

For self insurance costs involving more regular events such as deductibles under insurance policies the appropriate mechanism for recovery is by means of operating expenditure allowances. For lower dollar more regular events these will often be business as usual costs and considered to be controllable in nature and historical costs in the baseline year should provide the basis for determining the necessary allowance. For higher dollar less regular events these are more likely to be classified as non controllable and historical costs over the current regulatory period will provide useful information in assessing a self insurance proposal. It is necessary to consider several years of data due to the more lumpy and uncontrollable nature of such expenditure. However, this information should be overlayed with further information which may provide necessary evidence to ensure the non controllable allowance is appropriate and sufficient in all the circumstances.

For self insurance events typically involving catastrophic events, such as bushfire, any amounts above the insurance policy limit should be recovered through an appropriately drafted pass-through mechanism. These types of events occur rarely, historical cost data is limited and it is difficult to estimate the cost of the event making inclusion in regulatory allowances inappropriate.

Regulatory reporting should be sufficient to ensure that there is not 'double counting' of costs when considering historical cost data.

Question 74

Do stakeholders have any in principle views on how benchmarks should be derived and applied?

Please refer to the key messages and Attachment A.