Major Energy Users Inc.

Australian Energy Regulator

Better Regulation

Expenditure Forecast Guidelines

Comments on the Issues Paper

Submission by

The Major Energy Users Inc

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TABLE OF CONTENTS

1. Introductory comments

The Major Energy Users Inc (MEU) welcomes the opportunity to provide input into the AER review of the Expenditure Forecast guideline that it is required to develop as a result of the recent changes in network regulation in the National Electricity and Gas Rules.

1.1 About the MEU

The Major Energy Users Inc (MEU) represents some 20 large energy using companies across the NEM and in Western Australia and the Northern Territory. Member companies are drawn from the following industries:

- Iron and steel
- Cement
- Paper, pulp and cardboard
- Processed minerals
- Fertilizers and mining explosives
- Tourism and accommodation
- Mining

MEU members have a major presence in regional centres throughout Australia, e.g. Western Sydney, Newcastle, Gladstone, Port Kembla, Mount Gambier, Whyalla, Port Pirie, Westernport, Geelong, Kwinana and Darwin.

The articles of association of the MEU require it to focus on the cost, quality, reliability and sustainability of energy supplies essential for the continuing operations of the members who have invested $ billions to establish and maintain their facilities.

1.2 The source of the MEU commentary

The MEU has reviewed the Issues Paper released by the AER and has addressed the various aspects based on feedback from its members which are all substantial corporations operating in competitive markets.

The MEU members operate in markets which are highly capital intensive and therefore their operational experiences are similar to those of the energy network businesses. Using the feedback from its members, the MEU is therefore competent to provide input into the various aspects addressing the build up of costs that the AER is required to provide when developing the regulatory allowances for regulated energy network service providers.

As an over-riding observation, the MEU members comment that their expenditures (capex and opex) have maximum limits which are driven by

competition. In the case of capex, this is always constrained by the firm's ability to access added capital which is limited by what profit can be retained from dividends and what they can borrow. Operating expenses have to be reduced when exogenous factors reduce the revenue that can be generated from sales (eg reduced revenue from $A appreciation or increased competition). These top down pressures drive the firm to identify approaches to improve productivity to enable them weather the pressures imposed on them by the market. The MEU sees the AER has to identify methods to ensure that these same pressures are applied to regulated monopolies to make them more productive and achieve continuous improvement in efficiency.

MEU members all operate with the need to ensure that their costs are as close as possible to the efficient frontier in order to:

- Price their products such that their costs are fully recovered yet remain competitive with others making similar products,
- Maintain their assets so they provide the necessary uptime to enable them to stay in the market
- Invest to replace non-performing assets and/or increase their output
- Manage growth in their markets.

As these are the same issues faced by regulated networks, the MEU members are able to provide first hand observations to the AER about the various elements of the cost structures that regulated networks operate with.

The MEU members also all recognise that the network services provided by NSPs are essential to their long term viability, just as are the many other providers of inputs into each member's operations.

It should be noted, however, that network businesses are natural monopolies and do not face the sanctions of the market place (unlike MEU member companies) and under the system of regulation, have every incentive to manipulate expenditure forecasts to maximise returns, which are guaranteed by the regulator. This underlines the very important role placed on regulators to ensure the most robust expenditure forecasts are accepted for the built up of regulated revenues.

1.3 The basis of the MEU approach

In developing its observations and conclusions about the issues raised by the AER, the MEU has started its approach from first principles.

These are:

- All corporations are required to act in the interests of their shareholders. All corporations must operate under basic business fundamentals to ensure they meet both their commercial and statutory requirements regardless of the market(s) in which they operate. At its most basic, they operate to maximise the profit they make for their shareholders. The financial and operational "rules" they operate with to achieve this outcome are the same regardless of the market they operate within.

  This means that the approaches used to maximise shareholder benefit by every firm are essentially the same, and the AER can access this larger pool of information in order to assist it in its development expenditure forecasts guidelines

- Network businesses are only regulated because they are natural monopolies in the markets in which they operate. Despite being monopolies they must still operate to meet the business imperative[1] and within basic business fundamentals. This is an important aspect because it means that the regulatory review and reset process should recognise that regulated firms operate under conventional business practices.

- Economic regulation is about providing the firm with sufficient revenue so that it can deliver the services in the most efficient manner and that the rewards from doing so are sufficient that the firm continues to invest efficiently to continue doing so. The building block is one approach to providing the "bucket of money" determined by the regulator in response to applications by the regulated firm and is deemed to be adequate to provide the service. It is the sum of the total allowance that is critical rather than the development of any of the individual elements of the building block. Once the "bucket of money" has been set, the regulated firm has total freedom to use those funds in any way they consider will allow them to meet their business obligations.

- Markets do change over time and therefore there is a need to adjust cost inputs to ensure that:

    - The service provider can continue operating over the long term

    - Consumers are not paying more than is necessary

  This need to review prices and cost inputs is addressed by allowing regulatory reviews to occur at regular intervals. In particular, this regular

[1] This is that firms must make a profit

review process allows the regulator to ensure that the allowances made are still sufficient for the needs of the regulated firm, thereby limiting its risks.

- Incentive regulation (which the AER is required to apply) is about providing a regulated firm with the scope to implement better (more efficient) ways of providing the service. Over time the benefits of these better ways are expected to flow through to consumers. Historically, this has applied to opex but it can apply to other elements such as capex

- In a competitive market, competition ensures that each supplier into the market is operating efficiently. In a regulated market, the regulator only allows the regulated firm certainty in its recovery of its efficient costs. In this regard, the second reading speech by the Minister when introducing the new National Electricity Law in 2005 stated that[2]:

> "The market objective is an economic concept and should be interpreted as such. For example, investment in and use of electricity services will be efficient when services are supplied **in the long run at least cost**, resources including infrastructure are used to deliver the greatest possible benefit and there is innovation and investment in response to changes in consumer needs and productive opportunities.
>
> The long term interest of consumers of electricity requires the economic welfare of consumers, over the long term, to be maximised. If the National Electricity Market is efficient in an economic sense the long term economic interests of consumers in respect of price, quality, reliability, safety and security of electricity services will be maximised."[emphasis added]

The importance of this explanation as to what the Law (and the Rules) requires[3], is that it provides a definition as to what is intended by the term "efficient". The MEU considers that the AER needs to similarly define "efficiency" in its guidelines, how it will interpret the requirements of the Law in relation to "efficiency". In particular, the AER needs to clarify that if an outcome of its processes does not result in efficiency as is defined by the Minister in his second reading speech, then its processes must be changed to ensure that the outcome is "efficient". The benefit of defining "efficiency" in this way will provide the AER the ability to discern between competing aspects of the principles it proposes to develop its guideline.

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[2] Hansard, SA House of Assembly Wednesday 9 February 2005, page 1452

[3] The MEU points out that the purpose of a second reading speech is to explain the intent of the Law being made so that interpretations of the Law are consistent with the intent.

The MEU points out that in the past the AER has considered that regulatory certainty (such as the continued use of its flawed debt cost element in the Statement of Regulatory Principles) was more important than ensuring that the outcome of its deliberations reflected efficient practices. An emphasis on the Objective and the definition of efficiency should prevent this occurring in the future.

1.4 A principles based approach

The AER has posited that its guidelines must be based on methodologies that are:

1. Driven by economic principles
2. Supported by robust analysis
3. Implemented in accordance with best practice
4. Recognise the potential need for regulatory judgement, and
5. Supportive of broader regulatory aims

All of these are laudable goals, but they must not be closed ended – ie be used to close off issues that will assist in ensuring the outcomes will be demonstrably efficient.

In this regard, the MEU considers that the listed principles omit two essential features which must be overarching – that the principles must deliver an outcome that is efficient and that the outcome must be one that is clearly in the long term interests of consumers.

The AER has stated that applying principles promotes consistency in decision making. The MEU agrees, but points out that consistency only has value if the outcomes resulting from the use of the principles provide a credible outcome – one that reflects efficiency which, as stated in section 1.3 above, must result in the least cost to consumers over the long term.

If the application of principles (the methodology) delivers an outcome that is not consistent with the market as a whole, then the methodology used needs careful consideration, especially when applying regulatory judgement. The MEU therefore considers that another over-riding principle must be that the methodology must result in an outcome that is consistent with what is seen in the market as a whole and which reflects the market conditions of the time.

The AER has also observed that “false precision” must be avoided. This term implies that when an outcome is calculated with care and, assuming the methodology is correct, therefore the outcome must be acceptable regardless as to whether the outcome is patently false. The MEU considers that this issue is extremely important, as in the past for example, the AER has used its “regulatory principles” to calculate allowances (eg a debt risk premium) which, when compared to what is available in the wider market, has been shown to be

patently wrong. If the market shows that a methodology delivers an incorrect outcome, then the methodology must be wrong and must be changed.

The AER has commented that preliminary discussions with stakeholders indicate there is an expressed preference for predictability. There is some merit in such a comment but, equally, all stakeholders would state that achieving the correct outcome must take precedence over predictability.

Basically, consumers do not want to pay more that the efficient amount to service providers than is appropriate under the circumstances and neither would providers want to have lower allowances that prevent them from earning a reasonable profit.

1.5 A view on incentives

Incentives provide a basis for setting future allowances closer to the efficient frontier. Therefore, if they are successful, the actual data recorded over time by a firm should reflect its best endeavours to reach the efficient frontier. However, there is no certainty that this is the case, so external benchmarking provides a view as to how well the incentives have achieved their purpose.

Competitive businesses face continual pressure to reduce costs merely to retain market share – if firms do not react to this competition, competitors will have lower input costs and then have lower prices; a loss of market share results from not maintaining costs ate the efficient frontier.

The knowledge held on what cost reductions can be achieved is more than likely held close to the work face. Equally, those close to the work face do not face the initial impact that competition brings, although they do face this later when downsizing and/or closures occur. Most senior managers have a concept of how cost reductions can be achieved and to what extent, but they are unlikely to have the most recent and detailed approaches that are available. To this end, executive management tend to impose limits on cost expansion and then force these onto those closer to the work face. Benchmarking provides executive management with the tool to define how much cost reduction is viable.

NSPs are no different to other firms but they have the incentive to “game” the regulator to increase cost allowances. Executive management of NSPs will still seek to drive cost efficiencies (as this improves profitability) but probably with less rigour than their counterparts faced with vigorous competition.

The benefits of competition drive a firm to produce more with the minimum of investment to increase capacities of plant, and to reduce the cost of operating existing plant by reducing opex and minimum investment in reducing operating and maintenance costs. The challenge for the AER is to impose the pressures of competition on a monopoly.

The AER has introduced its Efficiency Benefit Sharing Scheme (EBSS) as a method for driving NSPs to the efficient frontier and the theory behind it should encourage this outcome. However, the revealed costs have not fully delivered this expected outcome, as it has incentivised the NSP to reduce costs in the early years of the regulatory period but to maximise its costs in the so-called "benchmark year" (typically the second last year in the regulatory period) as the AER draft decision on ElectraNet indicates.

The MEU understands that incentive programs are the focus of another workstream and will provide its comments on incentives in relation to that workstream.

1.6 About benchmarking

It must be remembered that all firms closely monitor their costs and use internally, their historic costs for each activity to identify expected costs and times for carrying out elements of work. Additionally, all firms know that to remain competitive, they must drive their costs to be equal to, or better than, their competitors.

MEU members all undertake internal and external benchmarking – members with international affiliations or which trade internationally, also undertake international benchmarking. All MEU members have capital intensive operations and so these are comparable to the activities of NSPs.

So what is being sought by the AER in regard to benchmarking is not exceptional, and competent NSPs will already be capturing significant volumes of data for their own uses – what the AER is seeking is access to this and to seek to have commonality between firms in how the data is captured and recorded.

The MEU considers that the AER would be well advised to seek advice from other capital intensive industries (like those of the MEU) about how they undertake their benchmarking activities. The MEU would be pleased to provide the necessary introductions for such investigation to take place.

1.7 Applying the outcomes of benchmarking

At its most basic, it is unrealistic to significantly reduce actual historic costs in a short time. For example, IPART considered that when the Sydney gas distribution network was first regulated, its costs were too high and imposed a program of continuous improvement over a number of years. This allowed the NSP to sensibly reduce its costs under a controlled program and ultimately consumers benefited from the

The MEU considers that the cost reduction process needs to be continual but result in moderate downward movement in costs. There is the potential that benchmarking might identify significant reductions in allowances that should result. It would be inappropriate to declare a large reduction in allowed costs (regardless of the correctness of the decision) as this might result in other untoward outcomes such as a reduction in reliability.

In this regard, the MEU considers that the AER should seek advice from executive management of other capital intensive firms on how they approach the issue of passing competitive pressures onto those at the workface while still being able to maintain volume, service performance and quality product.

2. Response to the specific questions raised

The MEU provides responses to these questions as requested but advises that in responding to these, the MEU highlights that the responses reflect the commentary provided above.

#	AER Question	MEU response
Scope		
1	**Should we anticipate the application of some assessment techniques to gas service providers as part of this consultation?**	Yes. Although the actual values and benchmarking measures might vary between gas and electricity, the principles underlying the development of measures are much the same for all firms. Segregation of data into defined cost centres and identification of appropriate control measures (ie cost/unit) is the same regardless of the firm's activities – only the control measures themselves will vary. Once the control measures are set, the benchmarking process remains the same regardless of the specific activity.
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?**	See comments above. The development process should be the same for transmission and distribution although the control measures might be different or the degree of variation between measures year on year be different. No, not entirely. As the determination of the measures and the expected y-o-y variances are identified, the process of application of the measures will be quite similar, especially for elements which are common (eg overheads, maintenance of assets, etc) so whilst the measures and the variance would need to reflect the type of business, the process will be the same.
3	**How should linkages between expenditure assessment, information collection and**	The key to good benchmarking is the selection/identification of the cost centres and ensuring that the data is accurately allocated to each cost centre. Random

	storage, cost allocation and incentive arrangements be dealt with in the development of our overall assessment framework?	auditing of cost allocations should be undertaken. Consistency in the definition of the cost centres is also essential, so that comparisons between firms are based on legitimate data. This is achieved by common cost coding of data inputs. Incentives are provided to drive costs to the efficient boundary. Therefore if they are successful, the actual data recorded over time by a firm should reflect its best endeavours to reach the efficient boundary. However, there is no certainty that this is the case, so external benchmarking provides a view as to how well the incentives have achieved their purpose.
Objectives for expenditure assessment		
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?**	Yes. The MEU agrees that the current actual costs might not be at the efficient boundary and a check is required to identify if this is the case and by how much. The MEU considers that specific elements of the cost structure should also be benchmarked as well as overall costs. For example, maintenance costs at each substation or maintenance costs per compressor station should be recorded to provide a sub-benchmark that when applied across the entire asset base provides greater confidence that the sub-element costs are at the efficient boundary. The importance of sub-element benchmarking cannot be over stated. It is recognised that all regulated energy services do reflect variations from others, and this variability between NSPs has been used to explain why each should

		have a greater allowance than their comparator firms. There is a basis of truth in this and therefore to overcome the differences benchmarking of key sub-elements provides a tool to address the differences. This approach is already embedded in the STPIS where CBD, urban, rural short and rural long are used to explain the differences within an NSP purview of the variability of performance outputs. However, these outputs can be readily applied across different NSPs
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?**	When seen in global terms, the revealed costs address the unique features of the NSP. The MEU members refer to these as internal benchmarks and are used as a starting point for assessing future costs. The MEU considers that the revealed costs (when driven by an appropriate incentive) should provide the starting point for assessing future costs. Equally, if an NSP knows that its revealed costs will be used exclusively as the basis of its future allowances, the strength of an incentive is weakened. For a non-monopoly, competition is intended to impose the effect of the incentive yet it is not likely to engender change to drive to the efficient boundary. External benchmarking assesses the internal performance and applies the concept of competition to the internal costs.
Principles for the selection of assessment techniques		
6	**Are there any other principles that you think that should be added to this list? Should we include principles that guide**	The MEU considers that the list of principles developed provides a good starting basis for the assessment process.

	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?	High level benchmarking comparisons are likely to define whether the claimed allowance is efficient. This initial high level comparison is likely to indicate which of the various techniques is most appropriate in the particular circumstances. The MEU considers that all of the techniques should be retained as part of the AER "armoury" and that the most appropriate for the circumstance is used. The AER would explain why it selects one tool over another as part of its decision process.
Expenditure assessment techniques		
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?**	A critical element of any analysis is appropriate recording of actual costs by the NSP and its comparators. Unless cost recording is standardised across all NSPs, then the techniques being considered will be greatly limited in application. In relation to capital investment, many firms use the available capital as the upper limit of capital investment. Essentially, this upper limit is defined by how much new capital can be borrowed (debt) and is available for retention from declared profits – such an approach is predicated on not acquiring new capital from equity raisings which are rarely used as a source of capital required for continuing operations[4]. The MEU considers that this is a technique that should be applied to total capex.

[4] Equity raisings are rare and usually used for major acquisitions.

		The MEU is not aware of any other techniques used to justify an allowance (opex or capex) other than the arbitrary total cost reduction process – usually this is defined by and arbitrary headcount reduction which is often used when a firm sees that its overall cost structure is making it uncompetitive. The equivalent to this technique for regulation would be the imposed cost reduction percentage that would be seen as needed if comparative benchmarking indicated that an NSPs costs were seen to be excessively outside reasonable limits. This approach has been used by regulators in the past (eg IPART when reducing AGL gas network costs in the late 1990s).
Proposals for further work		
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 MEU considers that the approach proposed by the AER to examine direct costs for various activities and to relate these back to drivers of the cost is a sound approach which is the basis for cost estimation used widely. For example, this is used extensively in the construction industry for costing "hard money" contracts and by manufacturing firms in assessing the relative performance of one operation against another. Typically, such direct cost assessments for an activity are related to a non-inflationary base such as hours for a task, or numbers required in a team to carry out specific tasks. For example, in estimating capital works, there are many tools available to assess the total cost of the new works – hours/tonne to fabricate and erect steel, hours/km to install conductor, cost/diameter inch/km, pipe welding and erection labour constants, hours/tonne of equipment to erect. All of these are used to

		develop a total cost. This approach of identifying sub-elements which can be compared across the NEM and even overseas because the constants tend to be measured in non-cost related measures Excluding indirect costs from the analysis for direct costs again reflects actual practice in the wider market. Indirect costs can be assessed on a case by case basis and then these compared with comparators on a number of different unit bases.
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?**	As noted above, separation of costs into defined cost centres is the very basis of proper cost control, and all competent firms will carry out such segregation of costs. Whilst different firms will have differing cost centres, the MEU is of the view that most firms in a similar business will have a large degree of commonality in their cost centre structure. To accept that imposing this need for commonalty is too difficult does not recognise that such a need is basic to sound regulation (remember that these firms knew that regulation would require close controls on recording and justifying costs) and to ensuring that comparative benchmarking can be carried out. Cost segregation and recording can be relatively easily changed with the tools now available – cost segregation and recording for control purposes is not new and was carried out in considerable detail before the computer age, although it is noted that changes were more difficult to implement than now. With the computer age, payments are not made unless the authorisations are properly coded to each activity. Changing coding is not a rare activity, so the MEU does not consider that imposing the AER requirements for its control purposes will result in considerable difficulty.

10	**Do stakeholders agree that economic benchmarking will be an important adjunct to more detailed expenditure assessments?**	Emphatically yes. The absence of the implementation of this tool has been a major failing of the AER processes to date. The MEU welcomes the extension of the expenditure forecasting process that this will introduce.
Expenditure assessment process		
11	**Do stakeholders agree that the first-pass process described above is a useful and appropriate application of expenditure assessment techniques?**	Yes This process has been used intermittently by the ACCC and state regulators in the past. An Issues Paper released with initial AER assessments of the application would provide a degree of focussing by stakeholders (especially consumer advocates) on key issues that the AER has identified. This can only assist improving the regulatory process.
Expenditure incentive schemes and their application		
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**	The MEU is concerned that the EBSS and revealed cost approach does not necessarily lead to the identification of the "efficient base year". This is confirmed recently by the AER draft decision on the ElectraNet review to use the third year of the current period rather than the more common fourth year which was proposed by ElectraNet. The main reason for this was that the AER had identified that the fourth year appeared to have more costs included than might be considered consistent with costs in other years. This occurred even though ElectraNet was subject to an EBSS.

	incentives on NSPs to make efficiency gains, while at the same time implementing appropriate expenditure assessment techniques?	Despite this, the MEU does consider that the revealed costs when coupled to an EBSS can provide guidance as to the efficient costs that an NSP might incur and reflect the unique features of the specific NSP. The MEU considers that the revealed costs (when coupled with an EBSS) can assist in identifying the efficient costs an NSP might incur. The shortcoming of the revealed cost approach is that the current costs might not be efficient and this would become obvious when compared to the costs other NSPs incur. Comparisons will reveal different and lower cost approaches that the NSP might be able to introduce when faced with reduced but efficient allowances provided by the AER. The MEU considers that the re3vealed cost approach should still be included in the armoury of the AER to identify the efficient cost allowances.
The guideline, benchmarking reports and determinations		
13	**Do stakeholders have any comments on how best to manage the interrelationships between the guidelines, F&A processes, determinations and annual benchmarking reports?**	The MEU understands the difficulties faced by the AER in getting accurate data for implementing the process to get the necessary data in a form that is most useful for the future reviews undertaken using the new guidelines. However the MEU does note that there is already significant data available to carry out higher level benchmarking even though the data necessary for more detailed assessments might not be immediately available. The MEU also recognises that the preferred format for data submission might require further adjustment and recasting as the better information is used in
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?	future reviews so there is an expectation that the AER processes will be "work in progress" until data provided is able to be used as envisaged. With this in mind, the MEU considers that the AER require future data be provided in the required format that is being currently developed under this guideline and that each NSP be required to publish the data within a reasonable time of the completion of each year. This incremental acquisition of data in a useful format will enable the AER to implement progressively more accurate benchmarks of performance, even though some of the data used is still based on the old formats. Essentially a start must be made and this as soon as possible. The AER should also seek each NSP to provide the historic data that has been collected in the new format. It is recognised that this might result in aggregation of data against a number of the new element allocations, but even so this will be useful in benchmarking in reviews in the next few years. In this transition period, the AER should use its current revealed cost approach with the outcomes of this being modified by the benchmark data that is available, regardless of the format in which it has been collated.
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?**	
Detailed timing and transitional issues		
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?**	The current data sets are not necessarily collected to suit the new needs, and the amount of data already collected from each NSP varies considerably. Without accurate and appropriate data, the ability to benchmark is severely constrained.

	Would these need to be for all NSPs? How frequently should we do this?	The MEU considers that all NSPs should commence collecting the data in the format required as soon as possible, even though application to their specific revenue rest might be some time away. On this basis, all NSPs should immediately start collecting data from the beginning of the year following the form of the data collection is finalised. The AER should also commence its comparative assessments on receipt of the first full year of data collection provided. The continuous collection of data is fundamental to benchmarking and even though the data might lose some relevance over time (eg due to inflation) this can still be normalised to a constant year through a recognised adjustment process.
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?**	No, data should be collected from all NSPs on an annual basis. Even though the data collected for an NSP which is not about to undergo a revenue review, the data provided by it is useful for assessing performance of another NSP that is undergoing a review. Annual comparison work of all NSPs will provide useful input to stakeholders examining revenue review documentation. Therefore the AER should carry out its benchmarking performance analysis of all NSPs every year and make this information public. Having this information made available prior to an NSP submitting its revenue reset proposal, will provide the NSP with a clear indication as to what will be used by the AER and stakeholders when analysing the proposal. It also assists in stakeholders being able to focus on the issues of

		greatest importance.
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?**	Collection of data under the requirements of the NEL imposes considerable constraint on NSPs to ensure the data is as required and is accurate. Whilst some data collection outside the requirements of the NEL could be useful, there will always be a residual concern about its accuracy. The MEU has doubts that NSPs will comply with requirements that are not enforced under the NEL. There is also a concern that NSPs will seek to be reimbursed for providing such data raising the concern as to the "value for money" that such data will provide. However, the MEU considers that over time the acquisition of additional data will be useful and therefore this aspect should be kept "open"
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 MEU assumes this is reference to whether data is collected on a calendar year or financial year basis. For the sake of clarity the MEU does not consider that all revenue rests should be carried out concurrently. Providing that all data covers an entire 12 month period, it is still useful whether collected over a financial or calendar year. Equally, having data collected over the same timeframe is preferable statistically. The main reason for collecting data over the same 12 month periods related to the regulatory period is that it would provide the latest full year data mirroring the recorded actual cost data that each NSP provides of its historical performance. On balance, the MEU considers that data should be collated over the same periods (ie calendar of financial years) as this provides more consistency and

		comparability of the data collected.
Holistic approach		
20	**We are interested in your views on the holistic approach to the selection and establishing reporting requirements for economic benchmarking techniques.**	The MEU supports the holistic approach. It considers that there is no single approach that will provide a perfect answer. This means that a number of techniques should be used and from this, the most appropriate outcome identified. The MEU also accepts that in the early years of the data collection, there will be a reduced ability to apply some techniques due to the paucity of data. Therefore the approach used in the early years will reflect greater reliance on one approach with this having less applicability in later years as the data collected is more expansive. A holistic approach allows for this change in emphasis over time as different techniques become more applicable.
Efficiency and productivity measurement		
21	**Have we identified all the relevant economic benchmarking techniques and, if not, are there other economic benchmarking techniques that should be considered?**	The MEU has no comment on this
Relating productivity to the AER's task		

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.**	Regulatory periods are usually 5 years or longer, but longer periods are less common. Therefore these questions should be assessed on the basis that the forecast is for 5 years. Historically, the revealed cost approach has been based on 4 years of data being considered to be adequate for forecasting. Therefore, after 4-5 years of data collection, there should be sufficient data collected for benchmarking to be considered as the primary tool for assessing whether the proposed expenditure is in relation to the efficient frontier. The less the amount of data available, the more the revealed cost approach must be used as the primary tool for assessing expenditure forecasts. Improvements in productivity are difficult to measure with accuracy year on year as the measures will be influenced by specific exogenous issues. Over an entire regulatory period of 5 years, there should be sufficient normalisation of exogenous issues and other anomalies to provide a clear indication of the improvements in productivity. It should also be sufficient time for the identification of the capex/opex trade off that has occurred. Despite the greater use of benchmarking tools as the data sets expand, the MEU considers that the revealed costs approach still has value and should be measure to provide a guide as to how far from the efficient frontier the NSP is at any point in time.
Inputs, outputs and environmental variables		

23	**Should the AER separate DNSPs into groups for the purposes of economic benchmarking? If so, how should the groupings be determined?**	NSPs have consistently explained why they are less efficient than their comparator NSPs. One way of addressing this is to group the NSPs into types, but this still will not address all of the differences and reduces the number of comparators that are available. The MEU considers that rather than group NSPs by type, it would be preferable to measure the inputs in terms of similar activity. For example rather than grouping (say) SA Power networks, PowerCor, SP Ausnet, Ergon and Essential Energy, it would be preferable that the benchmarking data from all NSPs be collected for all NSPs under the four commonly used headings of CBD, urban, short rural and long rural. Performance and reliability data is collected under these, so it makes sense for cost data to be similarly collected under these headings. This will allow comparisons of all NSPs to be made on a consistent and useful basis. For example, all DNSPs have urban elements in their networks so there would be available data from all DNSPs on the costs of their urban activities – this would result in a large population of data and overcome many of the arguments as to why the benchmarking data is not applicable to specific NSPs.
24	**Are our criteria for selecting inputs appropriate? Are there any additional criteria that should be added?**	The MEU has no additional observations to make
25	**Are the assets and operate and maintain variables appropriate for economic benchmarking?**	Yes

26	**What indices can we use to derive price and quantity information for the operate and maintain variable for economic benchmarking?**	Consistency and stability of indices is an essential feature of benchmarking, as is the independence of its measurement. Additionally, there is a need to verify ex post how accurate the index was in forecasting. This assessment of the ability to forecast accurately must be introduced by the AER to support its selection of indices. Currently there is debate as to whether independently developed and published indices should be modified to reflect the supposed make up of the index, thereby introducing some subjectivity into the index. The MEU considers that independence of the index development must be maintained and there should be no adjustments made by the AER or NSPs. This maintains the integrity of the index. The AER has provided, in a number of recent decisions, reasons why it prefers one index in relation to labour price movements over another. The AER arguments in support of its decision reflect these elements of consistency and stability over time, and independence of the development of the measure. The MEU notes that the AER has not carried out ex post assessments of its preferred index to support its contentions.
27	**Is the one-hoss shay assumption appropriate for the measurement of capital services provided by individual distribution system assets?**	Yes. The MEU has sought advice from its members (which are all capital intensive industries) and the “one hoss shay” approach is how they approach the measurement of capital services. Interestingly, a number have also indicated that rather than their assets declining in ability to provide the service over time, they have through judicious investment increased the output and productivity of the asset even beyond its original planned life. This seems to run counter to the PEG proposed approach which

		has the output of the asset declining over time. Members have also noted that opex does increase as an asset ages.
28	**Does the 'portfolio effect' apply to populations of distribution assets? Assuming the one-hoss shay assumption is appropriate for individual assets, does the portfolio effect negate the one-hoss shay assumption when using populations of assets in economic benchmarking?**	No. In fact the portfolio effect tends to enhance the "one hoss shay" effect as small amounts of capex can increase the overall output beyond the apparent value of the investment. For example, a substation rated at (say) 100 MVA based on 4 transformers can be increased in size to 125 MVA by the addition of another transformer bay. The marginal increase in cost is modest compared to the step increase in capacity. This shows that the portfolio effect is positive on the "one hoss shay" effect.
29	**If the one-hoss shay assumption does not appropriately describe the deterioration profile of DNSP assets, which deterioration profile is most appropriate?**	The assumption of the "one hoss shay" is correct, so the question cannot be answered.
30	**Should we measure asset quantities using physical or value based methods?**	Physical measures are less transient than value based measures, as value based measures are eroded by inflation and new technology. Physical measures are eroded by productivity but this less influential than value depreciation. Most firms prefer to use physical based measure for this reason and quantities (eg hours, MWh of electricity, GJ of gas, etc) per tonne of production allows comparisons to be made on a wider basis, even across countries. Whilst labour intensive firms must relate their activities back to hours, so too do

		capital intensive firms for the same reason
31	**Assuming the one-hoss shay assumption is appropriate for individual distribution assets, would the existence of the portfolio effect render the use of physical measures of capital quantities inappropriate for economic benchmarking?**	No. As noted above, the portfolio effect enhances the "one hoss shay" effect
32	**How should we derive the value of a DNSP's capital stock for the purpose of determining quantity of assets?**	There are two basic asset values that are used – actual cost and replacement cost. Until an asset is taken out of service, under the "one hoss shay" assumption, the capital involved in its ability to produce its output is reflected in its actual cost. Equally, the ability of the asset to produce is not impacted by its replacement cost. Depreciation of an asset value is a financial approach to recovering the actual investment. Depreciation of an asset does not impact its ability to produce the output. Therefore the value of the asset's ability to produce (ie its capital stock) should not be a depreciated value. Therefore RAB (a depreciated replacement cost) is not a surrogate for the capital stock, but neither is the depreciated actual cost. The actual cost for an output varies with time (eg the output/$ of an asset purchased two years ago will be more than the output/$ of an asset just purchased (after allowing for inflation).

		By elimination, actual cost adjusted to a common point in time is the best indicator of the output value of the capital stock.
33	**What index should be used to inflate historical asset prices into real terms?**	The MEU has been a proponent of there being a unique inflation index for energy related assets as the CPI has not been accepted as reflecting the movement in prices of assets[5] – the AER carries out detailed analysis to calculate "real" increases in prices for forecasting and in doing so makes many assumptions. The MEU considers that the AER should develop a specific index which reflects the actual movements in labour and materials used by NSPs and use this to adjust annual price movements. This would be more exact, remove the risk to consumers and NSPs and avoid the inevitable conservative allowances that currently are built into allowed revenues. This is what occurs in many other industries for adjusting costs and prices. The MEU would be pleased to expand on this concept. Such a specific index would provide a much more accurate approach to inflating historical costs to current day prices than the currently used CPI which is considered by the AER to be insufficient when addressing revenue resets.
34	**Is RAB depreciation an appropriate measure of the annual contribution of capital to the provision of outputs?**	No. This approach attempts to relate two different value elements developed for different purposes. Depreciation is the recovery over time of an investment made – it has no relationship to the outputs that are achieved.

[5] For example, see page of the MEU response to the

		A fully depreciated asset can still deliver much the same output as when it was first put into service and when it is still "used and useful". Many network assets (and those of other capital intensive industries) are still used and useful even though they are fully depreciated because their notional engineering or financial life has completed. Equally and asset might be replaced before it is fully depreciated because of failure or technology advancement. RAB is a depreciated replacement cost and this is not appropriate for valuing outputs See comments to question 32 The MEU does not consider the depreciation (although readily available) is an appropriate tool for this purpose .
35	**What prices should be used to weigh assets and the activities involved in operating and maintaining those assets?**	NSPs currently use replacement cost as the basis to assess tariff development, and therefore the data is readily available. However the cost of replacement has significantly exceeded the amount of depreciation recovered, so there is a disjoint between the two amounts. Replacement cost assumes new equipment and opex is biased towards older plant (the older the plant, the more O&M required). Asset age is a better indicator of O&M costs. As asset age increases, so does the depreciated actual cost reduce. Therefore the inverse of depreciated cost is

		a better weighting for O&M.
36	**Do the prices of inputs materially differ across jurisdictions within Australia, or could the AER use the same prices as weights for inputs across jurisdictions?**	Why would they? The only cost element that might be affected would the cost of installation which depends on location. This can be overcome by subdividing costs into the four basic subgroups of CBD, urban etc. See response to question 23
37	**Are our criteria for selecting outputs appropriate? Are there any additional criteria that should be considered?**	Generally, yes Connection should be readily definable in terms of numbers and the four basic sub elements (CBD, urban, etc); replacement could be assessed in terms of reliability.
38	**If customer numbers are used as an output for economic benchmarking, should these customer numbers be separated into different classes? If so what are the relevant customer classes for the purpose of economic benchmarking?**	Yes. The impacts of different customer classes on networks are significant. The allocation should reflect the impact each has on the network – eg kW in terms of electricity networks and MHQ or MDQ in terms of gas networks. These measures also address the impact upstream of the connection point and the degree of augmentation needed, subject to a diversity factor being introduced.
39	**Have we identified all the relevant outputs? Which combination of outputs should we use in economic benchmarking?**	Generally yes. Peak demand by each connection is the prime driver of what the network requires to provide, subject to appropriate recognition of diversity. Peak demand on a feeder is a paramount driver of cost

40	**Despite multiple studies using volume of energy delivered as an output, we are not convinced that this is appropriate. What are stakeholder's views on the use of energy delivered as an output?**	Whilst energy used (because it is easily measured) is the measure that consumers assess their costs by, it is not the main driver of investment needed in a network. The main driver is peak demand moderated by diversity.
41	**It would appear that much network expenditure is ultimately intended to maintain the reliable supply of electricity. This might include the management of peak demand, network capacity and investment to ensure that networks are secure. Given this, is it appropriate to use measures of reliability as an output variable?**	Yes. Ultimately consumers measure the value of the network in terms of amount of energy used and the reliability of supply as measured by SAIDI, SAIFI and other similar measures. Less investment is needed if these measures are low and more is needed when they are high. So using these measures provides a good indication of what investment is needed and where. This makes reference to these an appropriate standard. In contrast, some jurisdictions use deterministic reliability standards (eg N-1, N-2) to deliver reliability but these do not reflect what consumers actually see.
42	**Are our criteria for selecting environmental variables appropriate?**	Yes
43	**Have we identified all the relevant environmental variables?**	Yes, although they would be more appropriate when measured against the sub elements (CBD, urban, etc) and so allow better benchmarking
44	**Which combination of environmental variables should we use in economic benchmarking?**	Peak demand, network density. However these should be reduced to the sub elements of CBD, urban, etc to provide a more reliable measure

Expenditure categorisation		
45	**Do you agree with this list of expenditure drivers? Are there any others that should be added?**	These should be reduced into exogenous and endogenous categories and further reduced into sub elements of CBD, urban, etc
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 MEU considers that there is considerable risk in commencing this process too small – ie starting with too small a set of drivers and later attempting to increase it. The MEU therefore considers that the list of drivers should be kept as wide as possible and later consolidated if there is a high level of correlation
Details of driver based assessments		
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?**	Yes. There is a clear difference in cost between overhead and underground connections.
48	**Do you agree with separating customer-**	Yes

	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?	Probably not Yes. If this further subdivision is later demonstrably not required, then re-aggregation should be carried out. See answer to question 46 The issue of capital contributions by customers also needs to be clearly defined
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?**	Yes Yes Yes See answers to question 48. The issue of capital contributions also needs to be addressed.
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**	Yes Probably Yes. The MEU considers that the approach should start by being comprehensive but which can be reduced at a later time is seen as evidence shows that the effort is not worth the benefit

	variance, ferroresonance and system fault levels? Would the benefits of distinguishing Expenditure into these subcategories for forecasting the timing and scope of changes in Expenditure trends over time outweigh the added complexities from doing so?	
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?**	Yes
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?**	Probably However the MEU has concerns that some of the costs that are incurred result from poor management and lack of preventative O&M. The measures must ensure that these causes of O&M are properly captured
53	**Do you think cost differences between emergency rectification activities and other activities to address deteriorating asset condition are sufficient to require separate categorisation?**	Yes Emergency rectification is an indicator of poor management and lack of preventative O&M. Measuring this work provides an indication of what is needed and what the trends are.
54	**Do you think cost differences between non-emergency prevention activities and**	Yes Measuring non-emergency prevention is to a degree the inverse of issues

	non-emergency rectification activities to address deteriorating asset condition are sufficient to require separate categorisation?	identified in question 53 and provides evidence that the NSP is addressing issues appropriately Measuring non-emergency rectification is a useful tool because it is an indication of how well O&M is being performed. The higher the amount of rectification, the less well the O&M activity is being performed.
55	**Do you think cost differences between non-emergency replacement activities and non-emergency maintenance activities are sufficient to require separate categorisation?**	Yes Combined, this would be a large category and deserving of separation. Replacement of assets is closely tied to the capex program whereas maintenance is an indication as to whether assets should be replaced. Measuring them separately provides different signals as to how the network is being managed.
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?**	Yes These must be defined so that the efficient boundaries can be defined and the differences then be measured
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?**	Yes, although experience with using the tool and using the outputs will increase the usefulness
58	**Do you think that expenditure directed at altering network infrastructure or**	Changed regulatory obligations are currently assessed as “step changes” in the revealed cost approach. Benchmarks need to be assessed on a common basis,

	management systems to ensure compliance with a changed regulatory obligation can be disaggregated in a way that improves accuracy in forecasting and efficiency assessments?	so that the cost impact of these step changes must be identified and adjustments made to the historical benchmark so it is still useful when looking at the new forecast regime. This adjusted benchmark then needs to be refined as the actual costs in the future are revealed over time (ie that the benchmark includes the step change and the new efficient frontier identified with this additional work included.
59	**Do you think cost differences between emergency rectification activities and other activities to address third-party actions are sufficient to require separate categorisation?**	Third party caused emergency rectification has to be measured so that it can be excluded from the benchmark. Therefore it is a separate category which has to be measured. As it is measured, it would make sense to compare this element to identify if there are specific reasons why one NSP has higher third party caused emergency rectification than another. Once measured for an NSP, an amount has to be added into the forecast to make allowance for this rectification work
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?**	Vegetation management is a significant element of the O&M budget of most NSPs. The cost of this work is dependent on the environment through which the network operates. Because of the size of the cost, there is value in identifying lengths of line exposed to some sub groups (eg urban leafy, forest, open pasture, etc) and the costs for each benchmarked across all NSPs.
61	**Do you think general measures of network**	No

	size and type are sufficient measures for investigating differences in third party expenditure across service providers? What other measures may be useful?	The measure should be reduced into the four basic subgroups (CBD, urban, etc)
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?**	As a matter of principle, overheads must be separately identified and costed, and a common basis developed for their identification. The greater the aggregation of overhead costs, the greater the ability to argue the need for higher allowances than the benchmark. Firms measure their overheads separately to ensure that unnecessary costs are not "creeping in" Firms identify this creep from two points of measurement – on a percentage of total cost basis and from an individual build up, especially when the percentage of total cost indicates that overheads are too high. The MEU does not agree with overheads being fully distributed across all categories and should be separately identified. Overheads should be measured both as separate costs and in relation to the total cost of operating the NSP. At some point in the future, there may be an argument to include these as fully distributed
63	**How do you think overhead expenditure should be distinguished and assessed? How would you define any overhead expenditure sub-categories?**	The separation of overhead elements varies with the type of business a firm carries out. The Issues Paper (page 111) provides what appears to be an acceptable separation of activities. However what is critical is that the same basis is used for all NSPs so that the overhead costs can be compared, and that there is no variation in the other costs

		being benchmarked – if costs are transferred out of the overhead category they will inflate the category to which they are transferred.
Other issues in category based assessment		
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 MEU has seen that these costs are material and has made this point in revenue reset reviews. The actual outcome has been biased in favour of NSPs as the AER has been conservative in its application of "real" input cost increases. When an NSP considers that the "real" input prices are likely to fall, they seek CPI price adjustments. This means that the current process is biased against consumers. The MEU and its affiliates have provided evidence of this bias. The MEU has provided evidence that the current AER approach results in unnecessary complexity such as forecasting future movements of materials prices and then adjusting this to exclude CPI adjustments and exchange rate changes. At each stage of the calculation, the introduction of an additional forecast increases complexity and reduces the accuracy of the outworking. As noted in the response to question 33, the MEU has proposed that the AER develop a unique NSP index for price adjustments and discontinue the use of CPI-X adjustment process currently in use for annual price adjustments. This practice of a unique price adjustment is widely used across many industries. The MEU is unsure why the AER persists with the CPI-X approach. The only conclusion is that this relates future costs to general inflation, yet with the many other changes that occur in the setting of allowed revenues, this apparent

		security of price movements loses credibility[6]. Prices calculated under a revenue cap vary considerably year on year from the notional CPI-X determined at the revenue reset – this is because the over/under recovery in one year is transferred to the next year, creating considerable volatility in annual price adjustments The setting of a unique AER determined annual inflation adjustment figure (comprised of movements of the costs of a number of inputs) reduces risks for both NSP and consumers and eliminates the many arguments in the revenue reset as to what index should be used, its weight, etc, and eliminates the inevitable errors that forecasting includes. The MEU would like to discuss this issue in more detail with the AER.
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 inputs do vary in time but there is considerable commonality in the weightings used across all NSPs. There is no doubt that there are geographical locational differences but these tend to be modest and are already integrated into the benchmark costs seen by each NSP. But under the MEU approach, these could be incorporated into an AER index by using specific input data for each region where the index shows a marked difference by location.

[6] For example, The CPI-X approach used for the NSW revenue reset in 2009 indicated that prices would rise at CPI plus a defined amount. In fact, MEU members reported tariff increases of some 10 times what was implied by the CPI-X approach

		Whilst there may be differences between regions for labour, there is unlikely to be much variation in materials prices, thereby reducing the overall impact on labour cost differences.
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?**	Yes – this is an essential feature where cost structures are uncertain. It is a well recognised feature seen in the construction industry where capital works costs are being regularly estimated. No. The MEU considers there is a bias to downwardly estimate network solutions to provide an impetus to obviate non-network solutions (ie the RIT-T and RIT-D assessments are likely to understate network solution costs, as this provides a greater benefit to the NSP). In contrast, once a project is determined and fully developed, the NSP is incentivised to overstate the capital cost because this provides the benefits of not over-running the cost (a project staff consideration) and giving a financial benefit to the NSP through the incentive program.
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 RIT-T and RIT-D costs used to show the viability of the lowest cost option should be locked into the capex program. If this process identifies the best solution to a need, then this should be the cost that is allowed. External benchmark costs based on historical performance of similar works should be used to develop the capex needed for the project and this should be the maximum capex allowance permitted. Whilst using prices identified on a competitive basis gives some indication that the capex is reasonable, changes in the definition and scope of the works

		covered can be made after the event to reduce or increase costs. The MEU considers that these would not impact the incentive schemes.
68	**Do you think our established approach to assessing debt and equity raising costs remains appropriate? What modifications or alternative techniques would you suggest?**	No Whilst it is recognised that debt is acquired on a portfolio basis and therefore the debt acquisition is a continuing activity and reflects the amount of debt acquired, the acquisition of equity is a seldom occurrence and therefore the costs are minimal. It has been argued that equity is provided through retained profits and therefore equity holders are foregoing a dividend which is a cost, the MEU points out that this cost is already addressed as it is a component of the market risk premium. Unless new equity is actually acquired through the issue of new shares, then there should be no allowance provided for this activity. In the case of government owned NSPs, the acquisition of debt is nearly a costless exercise as they all are provided with the debt from their related Treasury Corporation. The MEU considers that the allowance for debt and equity acquisition should be built up from the revealed costs of the NSP and these costs applied to the amount of new funds required.
69	**Do stakeholders have any in-principle views on how demand forecasts should be derived and assessed?**	The proposed approach to forecasting demand is supported. Whilst the proposal for assessing increased demands in elements of the networks is a sound approach, the MEU also considers that the build up from this approach should be reconciled with the overall expected regional change in demand. Such a reconciliation would have to incorporate negative growth on

		some feeders along with the positive growth on others.
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?**	Yes – see responses to earlier questions Yes- there will be significant differences in costs between the different sub elements
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 MEU considers that a firm will only outsource work if it is commercially sensible to do so. Regardless of approach, costs should be based on the most efficient approach rather than the costs incurred in doing the work the way the NSP favours. For example, if carrying out the work using its own staff is benchmarked as a lower cost than outsourcing, then the benchmark costs of doing the work internally should be the driver, even if the outsourcing is competitively tendered. There has to be a single approach to capitalisation used when benchmarking performance. If different capitalisation approaches are allowed, the benchmarks will be different and therefore less useful. Therefore the notional efficient NSP should be measured on a standardised capitalisation approach. There must be consistency in the development and use of cost allocations.

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?**	The reason for concern about related party contracts is that these provide a method for the owner of an NSP to acquire greater reward by by-passing the regulatory process. The revealed cost approach and the cost of service model are both particularly susceptible to providing unnecessarily high allowances for expenditures. At the most basic level, the approach to avoid providing unnecessary allowances via related party contracts, is that the allowance provided is based on benchmarks which identify the efficient frontier. Using any other method provides an avenue for an entity to acquire increased profits through related party arrangements. Even competitive contracts for works can include unnecessary costs through the careful crafting of the scope of works. The MEU therefore considers that although the principle behind it appears sound, passing the first stage process still does not guarantee that costs are efficient – all it does is identify whether the allowance for the scope of works defined is the lowest cost. Whilst the second stage of approach regarding related party contracts might identify whether there is embedded an unnecessary cost or margin, it is still not foolproof. The MEU considers that the appropriate approach for any contracted work (and particularly the second stage of approach) is for the AER to have access to all the costs of the contracted work (especially the related party) revealed for interrogation and that these are benchmarked in the same manner as if the work was being carried out directly by the NSP.

73	**Do you think our conceptual framework for assessing self-insurance is appropriate? What other techniques may be appropriate?**	The MEU considers that as a basic premise, what can be insured should be insured. Equally, the MEU notes that insurance costs vary on the claims history of the insured. This means that the entity which does not take appropriate precautions to prevent the likelihood of an incident which requires an insurance pay out, is likely to have a lower actual opex (eg through less maintenance which results in more breakdowns) and higher insurance costs. The MEU considers that although the AER approach addresses many concerns, it does not identify the need to assess the claims history of the NSP and benchmark this against what is more generally seen in the industry. The MEU also considers that the AER needs to analyse the opex and capex actually used (compared to external benchmarks) to identify any trends as to whether there is correlation between actual opex and capex, claims history and the insurance costs. The MEU notes that self insurance is used when the costs of external insurance is either too high or is unavailable. Assessing the amount for this self insurance is difficult and there is no certainty that the self insurance premiums are indeed allocated to this purpose. As self insurance is seen as appropriate for high impact low probability events, the MEU considers there is merit in considering whether all NSPs should contribute to a NEM wide self insurance scheme which collects all self insurance amounts and then provides pay outs when the low probability event occurs.
74	**Do stakeholders have any in principle views on how benchmarks should be**	There is a tendency to apply high level benchmarks across a few but wide drivers (eg opex/MWh, opex/RAB, capex/connection, etc) and therefore there is

	derived and applied?	greater ability for individual NSPs to argue their special case for increased allowances. The MEU considers that the benchmarking exercise needs to address more focused benchmarks, especially where these increase the amount of comparative data. Such a benchmark might then be hours of maintenance/urban substation/MW capacity, or capex/residential customer/short rural. Disaggregation of benchmarks is an essential step in the process of ensuring the efficient frontier has been reached. The MEU members advise that they look at focusing their benchmarks deep into their cost structures. For example, one member advises that it looks at the amount of electricity used per tonne of certain grades of product so that these can be benchmarked against inputs used in overseas operations. The principle of identifying such levels of benchmarking is an essential step to ensuring the best practice (efficient frontier) has been reached.