24 December 2010

Mr John Pierce
Chair
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

energex
positive energy

Dear Mr Pierce

Response to AEMC Draft Report - Review into the Use of the Total Factor Productivity for the Determination of Prices and Revenues

ENERGEX welcomes the opportunity to provide comments on the Australian Energy Market Commission's (AEMC) Draft Report – Review into the use of total factor productivity (TFP) for the determination of prices and revenues (draft report). ENERGEX acknowledges the substantial work undertaken by the AEMC and Economic Insights (EI) to publish the draft report.

ENERGEX continues to oppose the introduction of TFP and welcomes the deferral of the introduction of a full set of rules to enable a TFP methodology including a detailed design. While ENERGEX recognises that the AEMC has sort to address key issues raised by stakeholders in the draft report, ENERGEX has reservations regarding aspects of the initial rule and that the analysis does not substantiate the articulated benefits of introducing TFP.

ENERGEX considers the proposed staged approach is prudent. The focus of the initial rule for the most part appears appropriate in terms of undertaking further analysis to establish if the pre-conditions exist. However, ENERGEX's main concerns with the initial rule arise around the collection of data availability, ensuring adequate consultation occurs and that any future introduction of a TFP-based methodology is optional.

A key concern with the development of a TFP dataset is that the regulatory information sought does not extend beyond the scope required to establish the pre-conditions to support TFP. ENERGEX believes that the costs of additional requirements may be substantial based on previous refinements and additions to data reporting requirements. Balanced outcomes in terms of the information requirements and associated costs are required, particularly as customers will eventually fund these costs.

Consultation is critical not only in developing an appropriate dataset but in developing a TFP specification and establishing the existence of the pre-conditions. ENERGEX would emphasise the importance of consultation under the initial rule change as ultimately, businesses will only consider opting for TFP regulation in the future providing they have confidence in TFP model design. While the draft report refers to a TFP-based methodology as an alternative, ENERGEX considers that it is imperative to reflect the optionality of any future TFP methodology in the principles for the design.

As previously articulated, ENERGEX does not accept that any significant efficiency point of difference between the building block approach and TFP-based methodology exists. While the development of the EI model to

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compare the relative incentive properties is a useful tool, caution should be exercised in interpreting results given the assumptions pertaining to the TFP specification, the X factors and the application of the Efficiency Benefit Sharing Scheme (EBSS).

ENERGEX believes that a more comprehensive assessment would have considered more than one TFP specification to provide confidence in the draft report conclusions. Moreover, the draft report acknowledges that there are limitations to TFP and that under a number of circumstances the TFP methodology is comparable to the building block approach. Consequently, ENERGEX considers that significant further work needs to be undertaken to have any confidence that the purported benefits can be derived.

Further details are provided in the attachment.

If you wish to discuss this submission further, please contact Leigh Henderson, Network Economist on (07) 3664 4118 or leighhenderson@energex.com.au.

Yours sincerely

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Assessment of TFP Methodology

The development of the Economic Insights model is a useful tool to quantify the relative incentive properties of the TFP methodology and provides for a more comprehensive analysis which to date has been largely theoretical.

As with any economic model there are limitations in its ability to predict economic incentives which are highly dependent on the model's assumptions and the data employed. Grid Australia's submission on the model raises a number of issues regarding the assumptions pertaining to the TFP specification, the X factors and the application of the Efficiency Benefit Sharing Scheme (EBSS) and ENERGEX concurs with the issues raised.

While the EI models are valuable tools for stakeholders which have provided more rigour around the assessment of TFP, it is premature to conclude that TFP will contribute to achieving the National Electricity Objective (NEO)/National Gas Objective (NGO). This is because the economic incentives and outcomes are largely driven by the TFP specification and model design. EI adopt a TFP specification without testing the efficacy of alternative TFP output and input specifications. An earlier commissioned study on Energy Network TFP sensitivity analysis by EI concluded that the TFP methodology is sensitive to the specifications chosen and the method used to calculate growth rates.

In ENERGEX's view the question of relative economic incentives can not be based on a single, notional TFP specification given that the specification is paramount in whether the NEO/NGO is ultimately promoted. While appreciating the practicalities of testing alternative specifications, ENERGEX believes that a more comprehensive assessment would have considered more than one specification to provide confidence in the draft report conclusions. It was not apparent which safeguards, beyond price resets, if any were applied under TFP, noting that they have the potential to diminish incentives under TFP. As such, ENERGEX believes that considerable caution should be exercised in placing too much emphasis on the results of a model with a single TFP specification which employs forecast data with fairly stable output and input growth rates.

The assumption that the X factors under the building block approach are set to zero does not reflect what occurs in practice, as demonstrated by recent distribution regulatory determinations. Under the National Electricity Rules (NER) the X factors are set to minimise as far as possible variance between the expected revenue and the annual revenue requirement for that last regulatory year. The X factors are considered to be smoothing factors such that prices year-on-year follow a more constant trend thereby avoiding price shocks for customers. This assumption that the X factors are set to zero may contribute to the EI conclusion that the building block approach produces a more volatile price path for customers. Finally, the model assumes that the EBSS is not applicable under the building blocks approach in its assessment of the relative incentives of the schemes and this is not the case.

The EI report on the model approaches and outcomes concludes that for one-off and recurrent opex reductions and one-off capex reductions, the incentive properties under the two schemes are comparable. Only for ongoing capex reductions is the TFP methodology considered to have stronger incentives relative to the building block approach. Theoretically if the building block approach did not provide sufficiently strong incentives for service providers to pursue ongoing capex reductions, there are alternative options under the building block approach which could be explored, for example extending the EBSS to capex as permitted under the NER. Moreover, it is

important to note that the building block incentives are continually evolving with the impact of recently introduced schemes such as EBSS yet to be known. Understandably EI assessed the relative incentives based on the current building block approach (with the exception of the EBSS), however given the potential introduction of TFP at some future time, the AEMC's assessment of the relative merits of TFP in terms of stronger incentives may no longer hold.

The EI modelling results suggest that the TFP methodology delivers more differentiated outcomes for service providers. This suggests that there is inherently more risk for service providers subject to TFP regulation and raises the question as to whether any service provider would opt for this method of regulation. The modelling outcomes, highlighting the relative poor performance of the rural distributor and the more favourable outcomes for the urban distributor raises a question around whether the TFP specification tends to favour businesses with urban characteristics. ENERGEX acknowledges that the modelling exercise was, in part, to demonstrate the workings of a TFP approach. However, ENERGEX was unable to gain an insight as to whether the relative poor performance of the rural distributor was reflective of actual performance or whether the inability of TFP to adequately account for network specific circumstances contributed. In addition, ENERGEX noted that under some modelling scenarios, particularly the anticipated increase in standards, service providers operating at close to the observed industry TFP would be marginally penalised under TFP.

The AEMC's draft report concluded that the TFP methodology has the potential to create stronger incentives as it reduces the scope for the service provider to boost returns by exploiting its information advantage over the regulator. As noted in previous submissions ENERGEX believes that the issue of information asymmetry is overstated given the regulator has significant information gathering powers under the National Electricity Law. Furthermore, with the establishment of a national regulator, the opportunity is available for the benchmarking of expenditure data to determine the efficiency of costs.

In summary, ENERGEX does not accept that a significant efficiency point of difference exists between the incentive properties under the building block approach and TFP methodology. ENERGEX considers that significant further work needs to be undertaken to have any confidence that the purported benefits can be derived.

Conditions Required to Support TFP Methodology

The draft report's findings recognise a number of pre-conditions required to support a TFP based methodology. In terms of the pre-conditions required to support the application of TFP, ENERGEX considers that all conditions must be met and the TFP methodology can not be applied if any one of the conditions is not met. ENERGEX believes establishing that the pre-conditions exist to the satisfaction of most stakeholders will be challenging, given that this may be highly subjective. In particular, where empirical work needs to be undertaken to demonstrate the existence of a pre-condition, the findings may be open to challenge depending on the data used, the methodology employed and tolerance levels applied. Given that some subjective judgement will undoubtedly need to be applied in establishing that the conditions exist, it may be useful to determine tolerance levels prior to undertaking the work. ENERGEX notes that differences of opinion already exist around a range of issues including the suitability of data and the accuracy of productivity growth measures.

The availability of consistent, comparable and reliable data is critical to the performance and credibility of a TFP based methodology. In the absence of reliable data there would be considerable risk to service providers to recover efficient costs. ENERGEX acknowledges the need to develop a dataset to progress the implementation of TFP however ENERGEX has concerns regarding the proposed initial rule which are discussed below.

Apart from developing a dataset, ENERGEX considers the resolution of issues regarding how reliability in a TFP index will be accounted for and convergence of TFP growth rates to be critical. Service providers incur significant costs to improve or maintain reliability standards and this value-adding for customers should be captured. The outcomes under TFP methodology could be somewhat perverse where firms are not rewarded for improvements in reliability or TFP growth is achieved at the cost of declining reliability. In ENERGEX's view, determining the different productivity growth prospects may be problematic as this will require regulatory discretion. The draft report acknowledges that a service providers' capacity to deliver TFP growth depends on their current level of efficiency. Efficient businesses will have limited scope to drive further efficiencies whereas less efficient businesses will have the greatest scope to deliver TFP growth. While these different prospects may be able to be managed through establishing industry groupings, there is uncertainty on what basis this may occur.

Way Forward

As ENERGEX opposes the introduction of TFP regulation, ENERGEX supports the AEMC's proposed approach to defer the drafting of all the rules needed to implement a TFP methodology, opting to proceed on a staged approach indicated in the draft report as follows:

- An initial rule is made to facilitate the collection of data and testing; and
- Subsequent drafting of the detailed design of the TFP methodology once the necessary conditions can be, or are likely to be met and it is considered that there is merit in allowing a TFP methodology to be used as an alternative to building blocks given the market conditions and regulatory framework applying at that time.

ENERGEX provides the following comments on the drafting of the initial rule.

1. Collection of necessary data for a TFP methodology

   Given the criticality of a consistent and reliable dataset, ENERGEX appreciates the proposal for a new reporting obligation. ENERGEX's understanding of this initial rule change is to develop a dataset and allow for the testing of the other pre-conditions required for TFP. While this may provide some secondary benefit in allowing benchmarking of potential TFP inputs and outputs within the existing regulatory framework, ENERGEX has concerns that the wide-ranging regulatory information sought may be beyond the scope required to establish the pre-conditions to support TFP. The Australian Energy Regulator (AER) has existing powers under the NEL which support the use of benchmarking in building blocks while providing service providers with some safeguards in terms of consultation or being heard prior to an information notice being served.

   While welcoming the proposed requirement for the AER to establish a working group on the coverage and specification of the required data, it is important that consultation occurs prior to the requirements being specified. ENERGEX considers that it would be more appropriate to include the requirements and definitions into the guidelines on the information disclosure process to be developed by the AER in consultation with industry. This will also provide greater flexibility as data requirements/specifications to support TFP may be refined over time.

   ENERGEX believes that the costs of the additional data requirements will be more than marginal to businesses. In ENERGEX's experience, refinements and additions to data reporting requirements have involved significant system and

process changes at considerable cost. The requirement to have the data audited will involve further costs. Given that customers will eventually fund the costs associated with the information requirements (with service providers funding these costs in the short term) balance is required in determining the adequate levels of information and the associated costs. ENERGEX notes the extensive list of potential inputs and outputs presented in Appendix E of the preliminary findings, which provides no clarity around likely data requirements. Robust consultation around representative inputs and outputs would allow significant refinement of such a wide-ranging data list.

ENERGEX notes that the draft report did not preclude the backcasting of data. ENERGEX strongly opposes any recommendation to backcast data given that data would need to be cleansed to achieve consistency. A lack of transparency on data cleansing which would involve discretion on the part of the regulator can lead to reduced confidence in the data and TFP outcomes. ENERGEX supports the proposed requirement of eight years of data (as per the AEMC's preliminary report) with data collection commencing once definitions and specifications have determined through consultation.

2. Requirement on the regulator to produce annual TFP index and calculation report

ENERGEX supports the production of an annual TFP index and report as it will assist the industry's understanding of TFP methodology and determining whether pre-conditions exist. However it is important that the any adjustments to data in developing a TFP index are undertaken in consultation with the relevant service provider and fully outlined in the report. Given that data specification and definitions will be agreed upfront, ENERGEX considers that there should be limited scope for making adjustments.

3. Use of the data to test TFP specification options

ENERGEX agrees that testing TFP specification options is required given the sensitivity of the TFP methodology to the specification. Ideally the specification would capture all the inputs required and outputs produced. However there are practical considerations. To promote transparency and reduce costs, ENERGEX would be in favour of a relatively straightforward specification providing it was suitable. Consideration needs to be given to service quality issues, in particular how to account for changes in reliability as discussed above.

ENERGEX strongly recommends that the proposed rule on the TFP specification and the industry group definitions requires consultation with industry, particularly given the difficulties in allowing for service quality and sensitivities of the TFP methodology to the specification. There is potential for the selection of a sub-optimal TFP specification because it tends to allow the pre-conditions to be met.

The industry group definitions could have a significant implication for businesses' performance under TFP methodology. The development of industry group definitions may be relatively subjective, with the regulator determining the initial relative efficiency of a business and its potential to achieve further efficiencies. As these design features have ramifications for the relative incentives and potential outcomes under TFP, industry should be consulted.

4. Conditions needed to be met before a TFP methodology could be applied

ENERGEX agrees with the pre-conditions outlined in the draft report. As discussed above, ENERGEX believes that it will be difficult to establish that the conditions exist to the satisfaction of all stakeholders. Given the room for interpretation it is suggested that the initial rule provide some guidance on

reasonableness or there is some pre-determined tolerance levels agreed with stakeholders. Any empirical analysis undertaken should be made available to stakeholders.

5. Principles for the design of a TFP methodology

ENERGEX generally supports the principles for the TFP methodology design. While the draft report refers to the TFP methodology as an alternative to building blocks, it is essential that the principles explicitly reflect the optionality of the TFP methodology; that is, the application of the TFP methodology in determining revenues and prices is solely at the discretion of the service provider.