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Dr John Tamblyn
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Dear Dr Tamblyn

TOTAL FACTOR PRODUCTIVITY REVIEW – FRAMEWORK AND ISSUES PAPER EMO0006

1. Introduction

ETSA Utilities, CitiPower and Powercor Australia (**the Businesses**) welcome the opportunity to comment on the Australian Energy Market Commission's (**Commission**) *Review into the use of Total Factor Productivity (TFP) for the Determination of Prices and Revenues* (**Review**).

At the outset, the Businesses wish to emphasise that Chapter 6 of the *National Electricity Rules* (**Rules**) only commenced on 1 January 2008 and have therefore not long been in operation. Importantly, Chapter 6 was developed in accordance with a fully consultative process. As part of this process the TFP approach, as an alternative to the building block approach, was fully considered including by the Expert Panel appointed by the Ministerial Council on Energy (**MCE**). No specific Rule allowing the TFP approach was included in Chapter 6 of the Rules at the time and the Expert Panel recommended that the MCE direct the Commission to undertake a further, thorough review of TFP if it considered TFP would contribute to the *National Electricity Market (**NEM**) Objective*.

The Businesses are concerned that the Commission has not clarified why it is now, so soon after Chapter 6 of the Rules has commenced operation, revisiting the introduction of the TFP approach as an alternative to the building block approach. The building block approach retained in Chapter 6 has served the electricity industry and consumers well to date. It has ensured that the *NEM Objective* has been satisfied and in particular that there has been:

efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers of electricity with respect to

(a) price, quality, safety, reliability and security of supply of electricity; and

(b) the reliability, safety and security of the national electricity system.

The current TFP review appears to presuppose that firstly, the existing building blocks approach is deficient in some way from the TFP approach in satisfying the *NEM Objective* and secondly, that TFP is the only solution to those deficiencies. The Businesses do not believe either of these matters have been tested and established. The Businesses believe that the start point for the review should be these matters.

Further, should the Commission decide any future draft Rule in relation to TFP is necessary, it should be consistent with the Businesses' preferred design parameters set out in Part 2 and Appendix 1 of this submission. These design parameters include, amongst other things that the draft Rule:

- granting the distribution network service provider (**DNSP**) sole discretion as to whether to use the building block or TFP control mechanism;
- providing the DNSP with discretion to revert to using a building block approach in future regulatory control periods, if it has chosen, at any stage, to use TFP; and
- set out a clearly defined methodology for deriving the TFP growth estimate and a well specified basis, in the Rules, for adjusting the X-factor and deciding whether, when, and how to rebase prices.

The Businesses consider the above design parameters essential because TFP potentially imposes greater risks for DNSPs than the building block approach. This is because TFP fundamentally changes the basis on which a DNSP's prices and revenues are determined and will create a disconnect between its costs and revenues.

This submission is structured in two parts:

- **Part One** – this sets out why TFP potentially imposes greater risks for DNSPs than the building block approach; and
- **Part Two** – this summarises the Businesses' preferences in relation to design parameters of a TFP control mechanism in order to mitigate the potential risks associated with TFP. These have been discussed in detail by the Businesses in previous submissions on TFP including to the AEMC and the Victorian Department of Primary Industry (**DPI**).
- **Attachment 1** – This addresses the specific questions raised in the AEMC's Review and draws on Part Two of this submission.

In making this submission, the Businesses assume that TFP could only apply to Standard Control Services as defined in the Rules and not to Alternative Control Services or Negotiated Distribution Services.

Part One – Potential Risks for DNSPs Arising from the TFP Approach

As noted, the Businesses believe that TFP has the potential to impose greater risks and uncertainties on DNSPs than the building block approach. This is because:

- TFP fundamentally changes the basis on which a DNSP's prices and revenues are determined. Unlike the building block approach which determines a DNSP's annual revenue requirement on the basis of a build up of its costs, TFP relies on the industry's past performance as an indicator of a DNSP's future performance. This means that an annual revenue requirement calculated under the TFP approach no longer has regard for a DNSP's specific costs or future changes in industry technologies and/or structures;
- TFP is a backward looking measure of performance. That is, it assumes past industry performance is representative of future industry performance. The introduction of advanced metering infrastructure in Victoria, introduction of smart networks and government policy change with respect to climate change over the next regulatory period demonstrate the risks in making this assumption;
- TFP is in its infancy and is yet to be applied anywhere in the National Electricity Market[1] (**NEM**). Its application in overseas energy markets to the Businesses' knowledge is also very limited;
- TFP requires consistent information from a number of comparable DNSPs over an extended historical time period in order to calculate a robust X factor. This in turn requires:
    - well established data collection arrangements;
    - well defined inputs and outputs which form the basis of the efficiency calculation (X factor) and established measurement techniques. The costs included in the inputs and outputs must be comparable between DNSPs in order for the X-factor to be applicable to any DNSP; and
    - a methodology for determining the weightings for each output and each input used to calculate the X factor.

  The Businesses note that it is not currently clear that all Australian DNSPs, who might be included in the industry on which the X-factor is calculated:

    - currently have comparable data that is robust, consistent and reliable. Before TFP can be feasibly introduced a consistent, robust and credible database will need to be established; and
    - have the required data collection systems in place to support the calculation of the X factor. This means that DNSPs will need to establish appropriate systems and processes, regardless of whether they choose to apply TFP, in order to collect required information for those DNSPs subject to the TFP approach. This will be a potentially costly and onerous obligation.
- TFP only deals with relative improvements in efficiency or productivity, not absolute improvements. This means a DNSP historically operating on the frontier of industry performance at the time the TFP period commences could be

[1] The Businesses note that a modified version of TFP is currently applied in the Northern Territory.

penalised whilst a relatively poor performing DNSP could expect significant windfalls.

The AEMC should have regard for these risks and uncertainties in developing any future TFP arrangements.

2. Part Two – TFP Design Parameter Requirements

In order to manage the risks and uncertainty associated with TFP, the Businesses consider that the design parameters of any future draft Rule should:

- grant DNSPs sole discretion as to whether to use the building block or TFP approach. The Businesses' investors have committed their capital based on a well understood and mature approach to regulation, namely building blocks. This investment could be placed at risk if the proposed amendment to the NER provides for the mandated introduction of TFP through the application of less well specified and less predictable regulatory model. The myriad of design issues highlighted in subsequent sections of this submission demonstrate that.
- set out a clearly defined methodology in the Rules for deriving the TFP growth estimate, for adjusting the X factor and deciding whether, when, and how to rebase prices;
- require the Australian Energy Regulator (**AER**) to use audited historic data only for the purposes of calculating the X factor under a TFP approach. This will give parties confidence in the integrity of the TFP estimation process. The Businesses consider that the AER should not have greater regulatory discretion in relation to its use of data and applying the TFP approach than it currently does in relation to the building block approach. This is consistent with promoting certainty and transparency of the regulatory framework;
- provide DNSPs with discretion to revert from using a TFP approach to a building block approach between regulatory control periods, by giving notice to the AER 2 years before the start of a new regulatory control period;
- provide for the X factor to be determined at the start of a regulatory control period and to be fixed throughout the period. A rolling X factor that is calculated annually by the AER, based on the previous year's productivity data, should not be contemplated as it could create unacceptable revenue uncertainty;
- require data used to calculate the X factor to be normalised in order to account for the differences between DNSPs. These differences may relate to, amongst other things, their service classification, operating environments, jurisdictional regulatory obligations, corporate objectives and ownership arrangements as well as technological and scale and scope differences. Normalisation would ensure that these differences are adequately taken into account in order to allow a "like-for-like" comparison. The Businesses believe that it would not be possible to normalise the differences of overseas DNSPs due to differences in accounting policies, tax laws and corporate structures. Only Australian DNSPs should be included in the industry;
- ensure that the TFP approach is consistent with the *National Electricity Objective* and the *Revenue and Pricing Principles* in the *National Electricity*

Law (**NEL**). In particular, the TFP approach should be consistent with sections 7A(2)(a) and (b) of the NEL which requires that:

> *A regulated network service provider should be provided with a reasonable opportunity to recover at least the efficient costs the operator incurs in:*
>
> *a) providing direct control network services; and*
>
> *b) complying with a regulatory obligation or requirement or making a regulatory payment.*

- provide DNSPs with discretion to determine the length of the regulatory control period, under the TFP approach, greater than 5 years. This is consistent with the current provisions under Chapter 6 of the Rules for the building block approach; and

- clarify which parts (and provisions) of the current Chapter 6 of the Rules would apply in conjunction with the TFP approach and which parts would not. The Businesses consider that:

    - some provisions, including in relation to cost pass-throughs, are equally applicable under a TFP approach as they are under a building block approach; but

    - other provisions, including those relating to incentive schemes such as the Demand Management Incentive Scheme and the Service Target Performance Incentive Scheme Standard, may not be able to be applied under a TFP approach as they are under a building block approach.

If you have any further queries with respect to this submission please do not hesitate to contact me on (03) 9683 4465 or at bcleeve@powercor.com.au.

Yours sincerely

Brent Cleeve
MANAGER PRICE REVIEW

Attachment 1 – The Businesses' Specific Responses to Questions Raised in the Review

This section sets out the Businesses' responses to the questions raised in the AEMC Review. The Businesses reserve their position in relation to the Review's other questions, which are not specifically answered.

1. Are the Commission's proposed assessment criteria appropriate? Are there other desirable criteria?

The Businesses emphasise that the TFP approach must be consistent with, and give effect to, the *NEM Objective* and the *Revenue and Pricing Principles* set out in the NEL.

The guidance in the NEL has been deemed satisfactory by law makers and as such there is no further compelling reason why additional criterion is required.

2. If TFP were available for revenue and pricing decisions, what would be the correct industry definitions for the respective each sectors? Also, in determining an industry definition for a TFP based approach , would adjustments for operating environment conditions be necessary and, if so under what conditions?

The Businesses note that there are currently only 13 DNSPs operating in the NEM and each of these DNSPs are different. Differences may relate to, amongst other things, their service classification, operating environments, jurisdictional regulatory obligations, corporate objectives and ownership arrangements as well as technological, scale and scope differences.

Accordingly, in relation to defining the industry, the Businesses consider that:

- limiting the industry to a sub-set of sufficiently similar DNSPs firstly requires clarification of what sufficiently similar means, and on what basis DNSPs would be deemed to be sufficiently similar. This aside, limiting the number of DNSPs may result in:
    - a sample size that is too small to be reliable; or
    - a split between publicly and privately owned DNSPs. This could result in competitive neutrality issues if publicly owned DNSPs enjoy a net benefit over their privately owned counterparts.
- data used to calculate the X factor should be normalised in order to account for the differences between DNSPs and allow a like-for-like comparison.

3. What is the current availability of TFP relevant data and its quality and consistency?

The availability of relevant data can not be determined until the inputs and outputs required to calculate the X factor have been defined. Notwithstanding this, the Businesses highlight that it is not clear that all Australian DNSPs, who might be included in the industry for the purposes of calculating the X factor:

- currently have comparable data that is robust, consistent and reliable. Before TFP can be feasibly introduced a consistent, robust and credible database will need to be established; and
- have the required data collection systems in place to support the calculation of the X factor. This means that DNSPs will need to establish appropriate systems and processes, regardless of whether they choose to apply TFP, in order to collect required information for those DNSPs that do choose the TFP approach. This will be a potentially costly and onerous obligation.

4. **If a TFP based approach is used, should any Australian data be supplemented with overseas data. On what conditions would this be appropriate?**

The Businesses believe that it would not be possible to normalise the differences of overseas DNSPs due to variations in accounting policies, tax laws and corporate structures. Accordingly, only Australian DNSPs should be included in the industry.

5. **What characteristics of the dataset would need to be met for a TFP calculation to be robust and credible? Should the regulator be allowed to clean up data?**

The Businesses consider that the AER should be required to use audited historic data only for the purposes of calculating the X factor under a TFP approach. This will give parties confidence in the integrity of the TFP estimation process.

The Businesses consider that the AER should not have greater regulatory discretion in relation to its use of data than it currently does in relation to the building block approach. This is consistent with promoting certainty and transparency of the regulatory framework.

6. **If a TFP based methodology was to be introduced, should a fixed or rolling X factor be used? Alternatively should the regulator have the option to choose between these in applying the TFP based methodology?**

The Businesses consider that the X factor should be determined at the start of a regulatory control period and should be fixed throughout the period. A rolling X factor that is calculated annually by the AER, based on the previous year's productivity data, should not be contemplated as it could create unacceptable revenue uncertainty.

7. **If full application of a TFP based approach were to be introduced:**

   a) **Should periodic assessments of efficient costs and the resetting of the X factor be undertaken?**

   b) **Would it be appropriate for the building block approach to be applied to an assessment of a single year of costs?**

   c) **Does the building block approach need amending to allow it to work within a TFP framework?**

A key advantage of the TFP approach, over the building block approach, is the potential for longer regulatory control periods as this would lower the costs of the regulatory review process. Accordingly, the Businesses consider that under the TFP approach a DNSP's revenues should have the option of not being reset periodically every five years.

The Businesses note, however that in the event that a DNSP is not recovering at least its efficient costs under the TFP approach, then it may be appropriate to reset the X factor on some basis such as a full building block review. This would ensure consistency with section 7A(2) of the NEL which provides that a DNSP should be provided with a "reasonable opportunity to recover at least the efficient costs the operator incurs in providing direct control network services…".

The Businesses consider that it would not be appropriate to establish a DNSP's opening tariffs based on a building block approach using one year of historic costs. This is because these costs may not be representative of future requirements for the next regulatory control period.

8. Under a full application what should be the length of the regulatory period?

As previously noted and consistent with the Rules, DNSPs should be able to nominate the length of the regulatory control period.

9. If a TFP based methodology was introduced, could earnings based re-openers or cost pass through mechanisms be used? What feature of these mechanisms would be desirable (or not desirable?)

The Businesses consider that re-openers and cost pass-thorough mechanisms are equally relevant under a TFP approach as they are under a building block approach.

The Businesses highlight that any future draft Rule should clearly set out which parts of the current Chapter 6 of the Rules would apply in conjunction with the TFP approach and which parts would not.

10. If a TFP based methodology was to be introduced, should it be a requirement for service providers to consent to an application of TFP to determine allowed revenue / prices?

The Businesses consider that any future Draft Rule should provide a DNSP with:

- discretion as to whether to use the building block or TFP control mechanism; and
- discretion to revert to using a building block approach in future regulatory control periods, if it has chosen, at any stage, to use TFP.

11. If a TFP based methodology was to be introduced, should it be applied in electricity distribution determinations?

The Businesses do not oppose the consideration of TFP as an alternative to the building block approach, under Part C of Chapter 6 of the Rules provided its use is at the discretion of the DNSP.

12. If a TFP based methodology was to be introduced, would the existing incentives schemes be needed? And if so, do they require any amendment?

The Businesses highlight that any future draft Rule should clearly set out which parts of the current Chapter 6 of the Rules would apply in conjunction with the TFP approach and which parts would not and the reasons for these decisions.

Some provisions including those relating to incentive schemes such as the Demand Management Incentive Scheme and the Service Target Performance Incentive Scheme Standard can not operate as they currently do under a TFP approach. This is because the incentives under these schemes may potentially result in a DNSP being penalised under the TFP approach.