



Australian Energy Market Commission

**RULE
CHANGE**

DRAFT RULE DETERMINATION

National Electricity Amendment (Total Factor Productivity for Distribution Network Regulation) Rule 2011

Rule Proponent(s)

Minister for Energy and Resources (Victoria)

Commissioners

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29 September 2011

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About the AEMC

The Council of Australian Governments, through its Ministerial Council on Energy (MCE), established the Australian Energy Market Commission (AEMC) in July 2005. The AEMC has two principal functions. We make and amend the national electricity and gas rules, and we conduct independent reviews of the energy markets for the MCE.

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Summary of draft Rule determination

On 18 June 2008, the Victorian Minister for Energy and Resources submitted a Rule change proposal to amend the National Electricity Rules (NER) to allow the use of a methodology based on Total Factor Productivity (TFP). This would operate as an alternative in pricing determinations to the current methodology based on "building blocks". A TFP methodology tracks industry-wide productivity and sets a revenue allowance for a business based on how it performs in comparison to a measured productivity trend. The proposal sought to permit the option of a TFP-based methodology for electricity distribution determinations and requested that this be made available in time for the next Victorian revenue reset process.

Following its review of submissions provided in response to first round consultation, the Commission decided to delay the Rule change while it conducted a wider review of TFP, entitled *Review into the use of total factor productivity for the determination of prices and revenues* (the Review). The Final Report for the Review was published in July 2011.

The Commission has decided not to make a draft Rule in response to the Rule change request. This is because the Commission has taken the view that the necessary conditions for applying a TFP methodology are not present at the current time. In particular, a sufficiently robust and consistent data-set to support TFP does not exist. This underlying data is critical to assessing the merits of adopting a TFP methodology, and is also needed to determine if other pre-conditions for a TFP methodology have been met.

The Commission considers that a more appropriate way to approach the introduction of a TFP methodology would be as proposed in the Final Report in the Review, that is, by starting with the gathering of data. Rules that would facilitate this data collection exercise have been proposed by the Commission as part of the Final Report in the Review and are being considered by the Ministerial Council for Energy.

Submissions on this draft Rule determination are to be provided by 10 November 2011.

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1 Rule Change Request

1.1 The Rule change request

On 23 June 2008, the Minister for Energy and Resources (Victoria) (Rule Proponent) made a request to the Australian Energy Market Commission (Commission) to make a rule to allow the use of a TFP methodology as an alternative economic regulation methodology (Rule Change Request)¹. This would be available to be applied by the Australian Energy Regulator (AER) in making determinations for electricity distribution network service providers.

1.2 Rationale for Rule Change Request

In the Rule Change Request the Rule Proponent seeks to implement an alternative to the building blocks methodology which is currently used for the economic regulation of network businesses. Under the current building blocks method, as prescribed by the NER², the AER estimates the efficient level of prices by assessing information and forecasts specific to each individual service provider. By contrast, a TFP methodology measures how businesses, industries or regions use all of the inputs in their production processes to produce outputs which are valued by customers. Instead of an assessment of business-specific costs, the regulator links the annual change in prices to estimates of the industry TFP growth.

The Rule Proponent has identified several benefits that would flow from adopting a methodology for economic regulation which does not rely on firm-specific forecasts of costs and demands. The principal benefit is an increase in the efficiency of the regulatory process. The Rule Proponent states that many of the difficult and adversarial issues which the AER faces in making revenue determinations under the building block approach are based on the need to estimate firm-specific costs and demands. The information asymmetry between the regulator and regulated body makes this a challenging task.

A secondary benefit noted by the Rule Proponent is the possibility of extending the regulatory control period. The use of known and measurable information in the TFP methodology should create more consistency in the process of estimating future costs and demands which could allow a longer regulatory control period. A longer regulatory control period should in turn strengthen the incentives on the regulated businesses to minimise costs.

¹ Minister for Energy and Resources (Victoria), *Proposed Rule Change to the Australian Energy Market Commission to Permit the Use of the 'TFP Approach'*, May 2008.

² See clause 6.4.3 of the NER.

1.3 Solution proposed in the Rule Change Request

The Rule Change Request proposes the following:³

- electricity distribution businesses would be able to request the AER to change the pricing methodology for that business from building blocks to TFP;
- the AER would issue guidelines on such matters as its methodology for setting an initial starting price and how it intends to apply TFP;
- the AER would apply a threshold test to determine whether TFP should be used; it could only be applied where industry-wide productivity growth is a reasonable proxy for a firm's future productivity growth (without adjustments for the specific circumstances of the business);
- the AER would also be required to apply a calculation objective to ensure the TFP methodology can be applied in a consistent manner and that the allowed price path would be likely to track expected costs;
- the starting regulatory asset base of a business (as determined using the building blocks methodology) would be used to set initial prices;
- cost-based price-reviews would occur at regular intervals and the AER would determine the length of the regulatory control period;
- there would be no earlier reviews (sometimes called "off-ramps") triggered by earnings falling outside a prescribed band;
- one X-factor would be used industry-wide, which could be set on either a fixed or rolling basis; and
- a business for which a TFP methodology is being applied may only revert to the building blocks methodology with the consent of the AER.

1.4 Relevant Background

The Rule Change Request draws on previous work on energy access pricing undertaken by the Expert Panel on Energy Access Pricing. This Panel was established by the Ministerial Council on Energy in December 2005 and it issued a *Report to the Ministerial Council on Energy* in April 2006 (the Expert Panel Report). It considered in some detail the relative merits of the building block approach compared to TFP, and concluded that a TFP-based price control setting method does have the potential to bring about a reduction in the costs of regulation. This was subject to certain qualifications, however, which included that use of TFP depends on the availability of

³ Rule Change Request, p 13.

long term, reliable information on outturn costs of supply, and that TFP offers the greatest benefit for a business or industry which is in a relatively steady state⁴.

1.5 Commencement of Rule making process

On 24 July 2008, the Commission published a notice under section 95 of the National Electricity Law (NEL) advising of its intention to commence the Rule making process and the first round of consultation in respect of the Rule Change Request. Submissions closed on 22 August 2008.

The Commission received eleven submissions on the Rule Change Request as part of the first round of consultation. They are available on the AEMC website⁵.

1.6 Market Review

Submissions provided as part of the first round of consultation commented, among other things, that due to the breadth of the topic a rule change process is not the appropriate forum to address the issue of TFP and that it could not have been completed in time for the subsequent Victorian revenue determination. Instead, it was suggested that the Commission should conduct a review on the issue.

On 21 November 2008 the Commission initiated a review entitled *Review into the use of total factor productivity for the determination of prices and revenues* (the Review). This Review covered gas and electricity transmission and distribution sectors, with the objective of providing advice on:

- whether there would be circumstances in which the application of a TFP methodology could contribute to the National Electricity Objective (NEO) or the National Gas Objective; and
- possible rules to implement TFP.

The Final Report in the Review was published on 7 July 2011 (the Final Report). It concluded that the application of TFP as an alternative to the building block methodology could lead to increased productivity and lower prices for consumers in the long term, and therefore would contribute to national energy objectives. However, a number of conditions need to be met for TFP to work properly, and such conditions are not met at the present time. The Commission proposed a two stage rule process for changes to the NER. It proposed a series of changes in the first stage which would provide for the collection of data which would in turn allow the AER to test whether conditions for a TFP methodology had been met. Drafting of the detailed design of a TFP methodology in the second stage would only occur once such conditions had been met.

⁴ Expert Panel on Energy Access Pricing, *Report to the Ministerial Council on Energy*, April 2006, at pages 103-105.

⁵ www.aemc.gov.au

1.7 Extension of time

Following the initiation by the AEMC in November 2008 of the Review, the timing for publication of the draft Rule determination was extended under section 107 of the NEL on three occasions. On 27 November 2008, the AEMC published a notice under section 107 of the NEL extending the time period for making the draft Rule determination to 31 December 2009. On 23 July 2009, a further notice was published extending the time period to 1 October 2010. Finally, on 30 September 2010, another notice extended the time period to 1 October 2011.

As required by section 108A of the NEL, the Commission published a report in July 2009 setting out the reasons why the final Rule determination in respect of the Rule Change Request had not been made within 12 months of the publication of the notification of the commencement of the rule change process.

1.8 Consultation on draft Rule determination

In accordance with the notice published under section 99 of the NEL, the Commission invites submissions on this draft Rule determination by 10 November 2011.

In accordance with section 101(1a) of the NEL, any person or body may request that the Commission hold a hearing in relation to the draft Rule determination. Any request for a hearing must be made in writing and must be received by the Commission no later than 6 October 2011.

Submissions and requests for a hearing should quote project number “ERC0068” and may be lodged online at www.aemc.gov.au or by mail to:

Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

2 Draft Rule Determination

2.1 Commission's draft determination

In accordance with section 99 of the NEL the Commission has made this draft Rule determination in relation to the Rule proposed by the Rule Proponent.

The Commission has determined it should not make the rule proposed in the Rule Change Request (Proposed Rule).

The Commission's reasons for making this draft Rule determination are set out in section 2.4.

2.2 Commission's considerations

In assessing the Rule change request the Commission considered:

- the Commission's powers under the NEL to make the Rule;
- the Rule Change Request;
- the fact that there is no relevant Ministerial Council on Energy (MCE) Statement of Policy Principles;⁶
- submissions received during first round consultation;
- the revenue and pricing principles under section 7A of the NEL;
- the Commission's analysis and the outcomes of the Final Report of the Review; and
- the Commission's analysis as to the ways in which the Proposed Rule will or is likely to, contribute to the NEO.

2.3 Commission's power to make the Rule

The Commission is satisfied that the Proposed Rule falls within the subject matter about which the Commission may make Rules. The Proposed Rule falls within section 34 of the NEL as it relates to section 34(1)(a)(iii) which sets out that the Commission may make Rules with respect to the activities of persons (including registered participants) participating in the national electricity market or involved in the operation of the national electricity system. Further, the Proposed Rule falls within the matters set out in schedule 1 to the NEL as it relates to item 26J because that item specifically deals with the introduction of TFP as a regulatory economic methodology

⁶ Under section 33 of the NEL the AEMC must have regard to any relevant MCE statement of policy principles in making a Rule.

to be applied by the AER, or else as a tool to inform the AER's application of the building block methodology.

2.4 Rule making test

Under section 88(1) of the NEL the Commission may only make a Rule if it is satisfied that the Rule will, or is likely to, contribute to the achievement of the NEO. This is the decision making framework that the Commission must apply.

The NEO is set out in section 7 of the NEL as follows:

“The objective of this Law is to promote 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.”

For the Rule Change Request, the Commission considers that the relevant aspect of the NEO is promoting efficient investment in electricity services with respect to the price of electricity.⁷

The Commission is not satisfied that the Proposed Rule will, or is likely to, contribute to the achievement of the NEO because:

- in the absence of a robust, long-term data-set the necessary conditions for the implementation of a TFP methodology are not present; and
- as a result, it is not possible to tell whether permitting a TFP methodology, including the one described in the Proposed Rule, would lead to increased productivity and therefore more efficient investment in electricity services with respect to price.

⁷ Under section 88(2), for the purposes of section 88(1) the AEMC may give such weight to any aspect of the NEO as it considers appropriate in all the circumstances, having regard to any relevant MCE Statement of Policy Principles.

3 Commission's assessment approach

This chapter describes the assessment framework that the Commission has applied to assess the Rule Change Request in accordance with the requirements set out in the NEL (and explained in Chapter 2).

As described above, in assessing the Rule Change Request the Commission has had regard to the NEO. This encompasses not only the price at which services are provided, but also the quality, reliability, safety and security of the energy network systems. It also covers the principles of good regulatory design and practice in order to promote stability and predictability of the regulatory framework, minimise operational interventions in the market, and promote transparency.

Against this background the Commission identified five criteria which could be used to assess the TFP methodology proposed by the Rule Proponent. This will identify whether implementing the TFP methodology would contribute to the NEO, against the counterfactual of the current building block methodology. These criteria, which were also applied as the assessment framework in the Review⁸, are as follows:

1. Cost incentives - the strength of the incentives on the network service provider to pursue cost efficiencies and the extent to which such cost efficiencies are shared with end-users;
2. Investment incentives - the ability of the framework to ensure efficient investment to promote long term innovation and technical progress for the benefit of the network service provider and end-users;
3. Good regulatory practice - clarity, certainty and transparency of the regulatory framework and processes to reduce avoidable risks for network service providers and users;
4. Cost of regulation - minimisation of the costs and risks of regulation to network service providers and end users; and
5. Transition and implementation issues - appropriate resolution of transition and implementation issues and costs.

The Commission's approach to applying the assessment framework has been to consider, first, whether the TFP methodology proposed by the Rule Proponent could, at a conceptual level, meet the assessment criteria, and if so, whether the relevant conditions are present for TFP to be able to be applied. This analysis of these issues is set out in the following chapters.

⁸ Review Final Report, page 5.

4 Assessment of TFP in General

This chapter sets out the Commission's higher-level consideration of whether the TFP methodology, at a conceptual level, could meet the assessment criteria described above.

4.1 Rule Proponent's view

In the Rule Change Request, the Rule Proponent has identified the reasons why it is of the view that the TFP methodology may offer advantages in comparison with a building block approach. One such reason is that because the TFP methodology is based on measured TFP, as opposed to forecasts of firm-specific expenditure and demand, it is likely to be less affected by problems of asymmetry of information between the regulator and the regulated business. This should mean less potential for the regulated business to use its superior knowledge of the business to convince the regulator to accept upwardly biased expenditure forecasts.⁹ A flow on effect of this is that as the regulator should be more confident that inappropriate windfall gains to the regulated business are not accruing, a longer regulatory control period should be possible. A longer regulatory control period would in turn increase the incentives on the regulated business to be cost efficient, because it would improve the power of the incentives that are utilised to encourage businesses to act efficiently.¹⁰

The Rule Proponent also contends that use of the TFP methodology in preference to building blocks would reduce the cost of regulation. This is because the regulator would avoid having to assess a regulated business's forecast of expenditure, a task that is often challenging for a regulator on the basis of the asymmetry of information and possibly also expertise. It should be significantly simpler for the regulator to apply the "known and measurable" information that is required for the TFP methodology.¹¹

4.2 Stakeholder views

Most stakeholders addressed the question of whether the TFP methodology, at a conceptual level, would merit further consideration. There were mixed responses on this issue, however. The submissions from the AER¹², Citipower/Powercor/ETSA Utilities¹³, Integral Energy (now Endeavour Energy)¹⁴, Jemena¹⁵, SP AusNet¹⁶ and

⁹ Rule Change Request, page 39-40

¹⁰ Rule Change Request, page 40-41.

¹¹ Rule Change Request, page 44.

¹² AER, Submission to the first round of consultation, page 1.

¹³ ETSA Utilities/Citipower/Powercor, Submission to the first round of consultation, page 1.

¹⁴ Integral Energy, Submission to the first round of consultation, page 1.

¹⁵ Jemena, Submission to the first round of consultation, page 1.

¹⁶ SP AusNet, Submission to the first round of consultation, page 2.

United Energy¹⁷ were generally positive, at least in that there would be enough potential benefits that could be offered by a TFP methodology to justify a more detailed consideration of it. Most of these submissions, however, were not in favour of the TFP methodology and Rule proposed by the Rule Proponent.

Submissions from Country Energy (now Essential Energy)¹⁸, the Energy Networks Association¹⁹, Energex²⁰, EnergyAustralia (now Ausgrid)²¹ and Ergon Energy²² were not in favour of TFP as a concept, for various reasons. Part of the rationale was that the building blocks methodology is well established and understood. Other issues were that TFP could undermine the current regulatory framework in general and that, if a TFP methodology was not properly designed, it might have implications for the financial sustainability of regulated businesses.

4.3 Other relevant considerations

Other relevant considerations included the Commission's analysis in the Final Report in the Review.

4.4 Commission's Analysis

4.4.1 Cost incentives

Increasing the incentives on regulated businesses to pursue cost efficiencies will contribute to the achievement of the NEO. The Commission is of the view that, at a conceptual level, if a sufficiently robust and consistent data-set to support TFP exists a TFP methodology could increase such incentives in two ways.

One of these ways is related to the information asymmetries that exist between the regulator and a regulated business. Since the regulator will not have complete information about the costs and expenditure of the regulated business, it may have difficulty estimating what the efficient costs of the regulated business should be. This is a critical part of the building block methodology, and as a result the regulated business could use its information advantage to increase the revenue it is allowed by the regulator. Under a TFP methodology, however, prices are not set on the basis of the regulated business's forecast of its costs but on industry-wide TFP growth. This would mean the regulator is less reliant on information from the regulated business and there should be a reduced ability for the business to increase its forecast of costs by exploiting the information asymmetry. This should in turn create an incentive for the business to seek additional profits through productivity improvements.

17 United Energy, Submission to the first round of consultation, page 1.

18 Country Energy, Submission to the first round of consultation, page 1.

19 Energy Networks Association, Submission to the first round of consultation, page 2.

20 Energex, Submission to the first round of consultation, page 2.

21 EnergyAustralia, Submission to the first round of consultation, page 1.

22 Ergon Energy, Submission to the first round of consultation, page 3.

A TFP methodology should also provide higher returns when a regulated business makes improvements which enhance productivity on a continuing basis. Under the building block approach, a regulated business retains the benefit of any increase in efficiency and/or reduction in cost for the regulatory period in which the benefit is achieved. However, at the next cost review the regulator builds this into the forecast and revenue allowance for the following regulatory period and the regulated business therefore retains none of those benefits in that following period (as well as any subsequent periods). On the other hand, under a TFP methodology, the productivity growth of the regulated business is measured against that of the industry, so it should continue to benefit from any productivity enhancement it achieves. This creates an additional incentive to seek such efficiencies. Using known and measurable information could also create more consistency in the regulatory process, possibly allowing for longer regulatory control periods. This would strengthen the incentives on businesses to reduce costs.

4.4.2 Investment incentives

The Commission is of the view that a TFP methodology could, at least to an equivalent extent to a building blocks methodology, provide regulated businesses with a reasonable opportunity to recover their prudent costs.

In terms of ensuring a regulated business can recover its costs, a building block methodology offers one advantage and one disadvantage compared to a TFP methodology. As it is based on a business-specific forecast of costs it may better provide for significant costs which only affect one regulated business. That is, the forecast can be better tailored to the circumstances of the specific business. On the other hand, because the forecast would be based on information from one business only, it could be expected to be more prone to errors which could cause divergences of allowed revenue from actual revenue.

Modelling undertaken as part of the Review²³ indicates that since forecasting errors are common in applying a building blocks methodology, a TFP methodology may be less risky than the building blocks methodology in ensuring a regulated business can recover its prudent costs. This model also indicates that a TFP methodology could deal with significant industry-wide changes provided regular price resets are included as part of it. On the whole, a TFP methodology should be no more risky for a regulated business than a building blocks methodology, and as a result there should be no more financing costs.

4.4.3 Good Regulatory Practice

The introduction of a TFP methodology may, through the information-gathering processes it introduces, lead to an increase in the level of regulatory consistency across the NEM. This is because for a TFP methodology to work in an optimal way standardised information will be needed from regulated businesses. This would

²³ Final Report, page 61.

require jurisdictional differences in data reporting to be overcome. Having standardised data will increase the clarity of regulation.

As described above, since the regulator should be more confident under a TFP methodology that windfall gains are not accruing to a regulated business, longer regulatory control periods should be possible. This would increase certainty with respect to charges for all market participants.

4.4.4 Costs of Regulation

As mentioned in the previous section, there is the possibility that a TFP methodology could lead to longer regulatory control periods. If this is the case, and there are less frequent cost reviews, the overall costs of regulation should be reduced. However, even if the extended regulatory periods do not lead to reduced costs, a TFP methodology may otherwise achieve this. While implementing an information reporting regime will be required for a TFP methodology to work, a TFP methodology will avoid many of the costs involved in regulated businesses preparing, and the regulator assessing, business-specific forecasts which include detail such as the specific projects proposed by a business. Additional costs result from exploring these kinds of details.

4.4.5 Transitional and Implementation Issues

In general terms, there are likely to be a number of transitional and other issues involved in implementing a TFP methodology, which would include gathering the relevant historical data, maintaining the data-set going forward and establishing the TFP methodology itself. These would have to be resolved appropriately for a TFP methodology to be successful.

4.5 Conclusion

The analysis above supports the conclusion that if a sufficiently robust and consistent data-set to support TFP exists a TFP methodology could, at a conceptual level, provide benefits in terms of the assessment framework described in chapter 3 above. In particular, it should provide increased incentives on a regulated business to pursue cost efficiencies while allowing the business to recover its costs. The effect of information asymmetries would be reduced, potentially allowing for longer regulatory control periods. The Commission acknowledges that the building blocks methodology is well established and understood, and that there would be some challenges in a transition to another methodology, however that of itself should not be sufficient reason for resisting the change²⁴. Finally, transitional and implementation issues may need to be overcome before a TFP methodology could be applied. These may be based on whether the underlying conditions for TFP are present, which the following chapter considers.

²⁴ The Commission notes that the AER is currently developing a Rule change package addressing a number of the economic regulatory framework issues in chapters 6 and 6A of the NER.

5 Underlying Conditions for TFP

An important pre-condition for the implementation of a TFP methodology is the existence of a robust and consistent data-set, since this is the basis of the TFP growth estimate and if it is set incorrectly returns and incentives will not be efficient. This Chapter describes this pre-condition and considers whether it has been met.

5.1 Rule Proponent's view

The Rule Change Request recognises, at several points, the importance of long term, reliable information that allows the historical growth in TFP for a sample of firms to be reliably estimated.²⁵ The Rule Change Request itself does not expressly state the extent of such information in Victoria, though it does indicate that the level of information differs amongst jurisdictions in Australia, and that it may be supplemented by information from the United States. The Rule Change Request also contains a requirement that the AER, in deciding whether to apply a TFP methodology, must have regard to the adequacy and quality of the data that would support the methodology.

The Victorian Department of Primary Industries made a submission in the course of the Review in respect of the level of data available in Victoria, as described in the following section.

5.2 Stakeholder views

Several of the submissions received considered whether the quality of the existing data would be sufficient to support a TFP methodology. The AER noted that a full national cost database was currently being developed by the AER but that it would take some time to be completed²⁶. A subsequent submission made by the AER in March 2010 in respect of the Review Preliminary Findings Paper indicates that in 2010 the AER continued to be of the view that the existing data-set was insufficient²⁷. Energex made a similar comment that a TFP approach requires "consistent time series information" that was not available²⁸. The combined Citipower/Powercor/ETSA Utilities submission noted the adjustments that have been made to outturn information in Victoria and that this has made it impossible to replicate the calculations²⁹.

The issue of availability of data to support TFP was raised in the course of the Review. In submissions on the Review, comments were made by regulators and service providers that the existing data is not sufficiently robust to support a TFP methodology. On the other hand, the submission of the Victorian Department of

²⁵ Rule Change Request, pages 4 and 19.

²⁶ AER, Submission to the first round of consultation, page 2.

²⁷ AER, Submission in respect of the Preliminary Findings Paper in the Review, page 1.

²⁸ Energex, Submission to the first round of consultation, page 3.

²⁹ ETSA Utilities/Citipower/Powercor, Submission to the first round of consultation, page 2.

Primary Industries (February 2010) on the Preliminary Findings Paper stated that, at least in Victoria, there is currently sufficient data for a TFP methodology to work.³⁰ The Essential Services Commission of Victoria stated in its March 2010 submission on the Preliminary Findings Paper that analysis it procured in Victoria suggests that the necessary trends for TFP can be established with confidence and similar analysis nationwide should commence.³¹

5.3 Other relevant considerations

Other relevant considerations included the Commission's analysis in the Final Report in the Review.

5.4 Commission's Analysis

5.4.1 Robust and Consistent Data-Set

A robust and consistent data-set is critical for the successful implementation of a TFP methodology. A TFP growth estimate must accurately provide a measure of productivity performance for service providers. If input and output quantities are reported incorrectly (or not at all) or are inconsistent for different service providers, the TFP growth estimate may simply reflect the errors, inconsistencies or gaps in the data.

This relates to the assessment criteria because if the TFP growth estimate is incorrect the cost incentives or investment incentives may be set incorrectly, which may impact on efficiency. For example, if the investment incentives are wrongly applied a TFP growth estimate may not allow a service provider to recover its efficient costs. This would in turn suggest the Rule proposal does not contribute to the NEO.

A robust and consistent data-set must be predicated on consistent definitions of the way input and output quantities have to be reported. This is particularly significant since input and output quantities will not necessarily have formed part of building blocks analyses. The data-set must also cover a sufficiently long period of time. At least one business-cycle of data should be included to remove any business cycle impacts. Finally, it would be preferable that the data-set be in the public domain. This will increase transparency about the way the TFP methodology is applied, and may reduce the likelihood of disputes.

The Commission has considered the analysis it undertook in the Review, and in particular the reasoning in the Draft Report, dated 12 November 2010 (the Draft Report). While the Review was not specific to Victoria, it considered Victorian issues in

³⁰ Department of Primary Industries (Victoria), Submission in respect of the Preliminary Findings Paper in the Review, page 9.

³¹ Essential Services Commission, Submission in respect of the Preliminary Findings Paper in the Review, page 12.

depth. The Draft Report considers a report produced by Economic Insights³² which concluded that the current data across all jurisdictions is not sufficiently robust to be used for a TFP methodology. The quality and consistency of data has varied across jurisdictions and over time, and has tended to focus on financial information, in preference to physical data. The financial information itself has been adjusted and refined over time, making it less useful for TFP purposes. Finally, Economic Insights noted that most of the data is not in the public domain or else is presented in an aggregated form.³³

In respect of Victorian matters, the Draft Report in the Review raises queries over how robust the Victorian data is³⁴. Further, without information being produced by other regions on a consistent basis, there may not be enough information to determine TFP trends with sufficient confidence. The Draft Report notes that systematic differences in coverage and definitions exist across regions in Australia. It also refers to earlier discussions with the ESC which identified problems with data availability and integrity.³⁵ Finally, the Draft Report responds to a proposition by SP AusNet that existing data can be "cleaned" to ensure consistency in definitions, but notes that previous experience suggests such a process would be difficult and could lead to disputation and gaming.³⁶

Even if there was sufficient data available in Victoria to implement a TFP methodology, the Commission considers that it would not be ideal to allow a TFP methodology to apply in Victoria while conducting a data collection exercise to enable TFP in other regions. This is because jurisdictional frameworks should not be allowed to evolve separately from the national approach. A range of benefits flow from having a uniform national energy market and national approaches to regulation. These should be preserved to the extent possible. It would be preferable if TFP specifications and methodologies were developed in harmony and a common framework for the implementation of the TFP methodology applied across the NEM as far as possible according to similar timing.

5.5 Conclusion

The Commission is of the view that, in the NEM, sufficient robust data to support a TFP methodology does not exist.

This conclusion means a key pre-condition to support the Rule Change Request is absent. In these circumstances the Commission has decided that it is not necessary for it consider the mechanics of how the Rule Change Request proposes that a TFP methodology should be applied, and that no Rule should be made. Instead, one option

³² Economic Insights, *Assessment of data currently available to support TFP-based network regulation*, 9 June 2009.

³³ Draft Report, page 118.

³⁴ Draft Report, page 65.

³⁵ Draft Report, page 66.

³⁶ Draft Report, page 66.

for exploring further the potential for a TFP methodology would be to start to collect the relevant data that would be needed to determine whether it could apply. Rules that would facilitate this data collection exercise have been proposed by the Commission as part of the Final Report in the Review and are being considered by the Ministerial Council for Energy.

Abbreviations

| | |
|------------|-------------------------------------|
| AEMC | Australian Energy Market Commission |
| AEMO | Australian Energy Market Operator |
| AER | Australian Energy Regulator |
| Commission | See AEMC |
| MCE | Ministerial Council on Energy |
| NEL | National Electricity Law |
| NEO | National Electricity Objective |
| NER | National Electricity Rules |
| TFP | Total Factor Productivity |