

AEMC Total Factor Productivity Review

ActewAGL Distribution response to AEMC Design Discussion Paper

October 2009



1. Introduction

ActewAGL Distribution welcomes the opportunity to respond to the Australian Energy Market Commission's (AEMC's) *Design Discussion Paper*, released in August 2009 as part of the AEMC's review into the use of total factor productivity (TFP) for the determination of prices and revenues.

ActewAGL Distribution is Australia's first multi-utility to offer electricity, natural gas, water and wastewater services. ActewAGL Distribution's electricity network connects to approximately 156,000 customers in the ACT. The gas network connects to around 107,000 customers in the ACT and the surrounding region.

The 2009-14 determination for ActewAGL Distribution's electricity network was one of the first for electricity distribution undertaken by the Australian Energy Regulator (AER) under the new national energy regulatory framework.¹ The AER is currently reviewing ActewAGL Distribution's proposed gas access arrangement for 2010-15. As a result of these recent and ongoing reviews, ActewAGL Distribution is keenly aware of the strengths and weaknesses of the building blocks approach to revenue and price determination.

ActewAGL Distribution fully supports the examination of alternatives to the existing building blocks approach. As the AEMC noted in the earlier stages of its TFP review, the current building block approach has several significant shortcomings.² However, it is also important to acknowledge that the approach has undergone substantial reform in recent years. The reform process has strengthened the building block approach in several ways. The National Electricity Rules (NER) and National Gas Rules (NGR) now clearly set out the criteria to be applied by the AER in assessing building block proposals, the factors to be considered and the limits of the AER's discretion. These features help to create a relatively predictable, well understood and stable regulatory framework. However, they also provide a capacity for overly intrusive and costly regulatory reviews.

ActewAGL Distribution believes that the TFP methodology must not only be designed to provide a clear, stable and predictable regulatory framework that does not create unreasonable regulatory risk and undermine incentives to invest in energy network businesses, it must also avoid or overcome the major shortcomings of the building block approach. These include the high information requirements and the potential for detailed, intrusive and costly regulatory reviews. Only then would the risks and costs of adopting the alternative of a TFP methodology be justified. To be successful, TFP regulation needs to result in a lighter handed regulatory approach and facilitate the move away from the current price control regime to price surveillance or price monitoring.

¹ The AER made the ACT and NSW determinations in accordance with the transitional *National Electricity Rules*. The AER's Final Decisions were released in April 2009.

² AEMC, Review in to the use of total factor productivity for the determination of prices and revenues: perspectives on the building block approach, 30 July 2009.



2. Overview of ActewAGL Distribution's response

The AEMC's design example provides a useful basis for consultation on the feasibility and possible operation of a TFP methodology. ActewAGL Distribution considers that the TFP design example presented by the AEMC contains several positive elements, including:

- the ability for businesses to opt in or out of a TFP methodology without AER approval;
- all the TFP principles and key mechanics, rights, obligations and procedural requirements to be clearly and comprehensively set out in the NER and NGR;
- inclusion of a firm-specific adjustment mechanism; and,
- the scope for businesses to propose certain elements of the method, such as off-ramps, cost pass through arrangements and capital modules, although the value of these features cannot be accurately assessed until the details of how they will operate have been established.

However, the design example also serves to highlight the range of complex issues that must be resolved before a TFP methodology could be effectively applied. For example, how should appropriate inputs and outputs be defined and measured? How should the initial price be set? How should changes in input prices be measured? The need to resolve these complex matters suggests that considerable lead time will be required for the introduction of a TFP methodology, to ensure that a transparent, stable and well understood alternative method is made available. The design example also identifies several areas where the AER will have discretion. Further guidance is needed on the scope of that discretion and the principles and procedures to be applied by the AER.

ActewAGL Distribution's comments on specific features of the design example are set out in the following section of this submission.

In addition to the conceptual issues raised by the design example, the AEMC's review should also address important practical issues. For example:

- Could a TFP methodology effectively deal with the fundamental changes that the energy sector is facing over the next few years, such as the introduction of the carbon pollution reduction scheme (CPRS) and new requirements to implement energy efficiency programs and adopt new technologies?
- How would a TFP methodology deal with different jurisdictional requirements on security and reliability of supply? and
- What practical problems have been identified or have arisen in applications of TFP in other countries?

ActewAGL Distribution is concerned that practical matters such as these have not been adequately addressed at this stage of the review.



ActewAGL Distribution is also concerned about the approach the AEMC has taken in the discussion paper to information requirements. The AEMC says that the design example has been developed under the assumption that the necessary data would be available:

The TFP methodology should determine the required data rather than the existing data-set dictating the design of the TFP methodology.³

The AEMC's assumption that the necessary data would be available is clearly an unreasonable assumption. The AEMC's own consultants, Economic Insights, concluded that the regulatory data currently available are not fit for the purpose of robust TFP analysis.⁴ Network Advisory Services found that a range of factors limit the quality and comparability of expenditure data for electricity and gas businesses.⁵ While ActewAGL Distribution accepts that data availability should not dictate the design of the methodology, the costs of developing and maintaining the required data sets must be an integral part of the assessment of any design example. The AEMC says that:

the objective of the review is to determine under what circumstances the adoption of a TFP methodology, as an alternative to the existing building blocks approach, can be expected to deliver economic benefits.⁶

ActewAGL Distribution believes that any assessment of a TFP methodology, and the potential net economic benefits of adopting it, must take account of the information requirements and the costs of meeting those requirements. Information requirements should be a key consideration when determining matters such as the timing of the introduction of a TFP methodology. Businesses will need time to transition to new arrangements, particularly where detailed new information requirements are involved.

The need to carefully consider the information requirements is particularly important given that the AEMC proposes that all businesses will be required to provide annual data to the AER, regardless of whether they choose to adopt the TFP methodology. ActewAGL Distribution appreciates that this requirement is designed to ensure that an appropriate database is developed, and that all businesses will have access to the database. However, it also means that some businesses will be required to provide new or reclassified information for TFP analysis, which may involve setting up new reporting frameworks, even if they are not going to adopt the new methodology.

³ AEMC Review into the use of total factor productivity for the determination of revenues and prices – Design Discussion Paper, August 2009, p.iii

⁴ Economic Insights, Assessment of data currently available to support TFP-based network regulation, June 2009, p. v

⁵ Network Advisory Services, Issues in relation to the availability and use of asset, expenditure and related information for Australian electricity and gas distribution businesses, August 2009, p. 6 ⁶ AEMC Design Discussion Paper, p. 10



3. Comments on elements of the design example

The choice to apply the TFP methodology

The design example involves the following arrangement for applying the TFP methodology:

The initial selection of a TFP methodology and its continued application beyond the first regulatory control period would be a decision for the service provider. No approval of the regulator would be required.⁷

The AEMC says that the decision to revert to using the building block approach after a period using the TFP approach would also lie with the service provider, with no approval of the regulator required. ActewAGL Distribution strongly supports these elements of the model.

As the AEMC notes in the discussion paper, the existing regulatory frameworks in the NER and NGR are based on an approach where the service provider develops and submits a proposal and the AER assesses the proposal against relevant criteria and principles. This should also be the approach for the TFP methodology. The regulated businesses are best placed to determine which methodology is appropriate for their circumstances in each regulatory period. Requiring regulator approval to use TFP would create additional uncertainty for the regulated businesses and undermine the appeal of TFP as an alternative methodology.

The balance between certainty and flexibility

Striking the appropriate balance between certainty and flexibility in regulatory frameworks is a difficult challenge. A stable framework is sought by investors in network infrastructure, and this requires a high degree of prescription of key principles, criteria and procedures in the Rules. However, flexibility to depart from the prescribed requirements is also necessary to take account of individual circumstances.

ActewAGL Distribution supports the broad approach in the AEMC's design example:

A high level of prescription on the TFP methodology would be included in the NER and NGR. All the TFP principles, key mechanics (such as formulas, calculations and definitions), key rights and obligations and procedural requirements would be clearly and comprehensively established in the NER and NGR.⁸

Under the design example, the AER would also produce a set of non-binding guidelines on (i) technical matters on which the AER has discretion, and (ii) those aspects of the methodology that could be adapted by the service provider to its circumstances, subject to the regulator's approval.

⁷ AEMC Design Discussion Paper, p. 11

⁸ AEMC Design Discussion Paper, p. 11



ActewAGL Distribution acknowledges the important role of guidelines in potentially mitigating the uncertainty that naturally comes with discretion and flexibility. However, to work effectively, the nature and scope of guidelines, and where and how discretion and flexibility can be applied, must be clearly set out in the Rules.

In the discussion paper, the AEMC provides some indication of where flexibility and discretion will apply. ActewAGL Distribution notes that these areas of AER discretion and flexibility are potentially critical elements of the model. For example, the AER would:

- Choose the index number approach it considers appropriate;
- Decide which TFP growth rate approach to use;
- Set the initial price or revenue cap, based on a partial building block approach; and
- Decide whether to accept the service provider's proposed off-ramps, capital module, cost pass through mechanism, form of X and length of regulatory period.⁹

ActewAGL Distribution is concerned that the design example provides only limited guidance on how the discretion and flexibility would be applied. For example, the assessment of the service provider's proposed package "would have regard to the NEO or NGO and the revenue and pricing principles". The off-ramp event, potentially a key element of the proposal, would need to be "significant". In relation to the setting of initial price cap, the AER:

determines the level of operational and capital expenditure for that year based on a *reasonable assessment* of actual costs incurred in the current period (emphasis added). (p. 13)

ActewAGL Distribution considers that further direction is required on the principles and criteria to be adopted by the AER in making critical decisions such as these.

Calculating the TFP growth rate

In the AEMC's design example, the specification for calculating the TFP growth rate (that is, inputs, outputs and weightings) would be prescribed in the NER and NGR.¹⁰ ActewAGL Distribution considers it appropriate to clearly set out these critical elements of the methodology in the Rules. Leaving these matters to the discretion of the AER would create unreasonable regulatory uncertainty.

The AEMC says that at this stage further analysis and consideration is needed to determine the correct specification. ActewAGL Distribution considers that the AEMC's proposed list of criteria for determining the appropriate specification is appropriate. However, as the discussion of specification issues in the paper illustrates, choosing the specification will be difficult.

⁹ AEMC Design Discussion Paper, pp. 13-14

¹⁰ AEMC Design Discussion Paper, p. 25



A key element of the specification is the definition of the relevant industry group. In principle, ActewAGL Distribution prefers the option of splitting businesses into sub-groups, reflecting different operating circumstances. However, given the likely problem of small sample sizes, ActewAGL Distribution accepts that a single TFP growth rate may need to be calculated. The single TFP growth rate (one for all electricity distribution businesses, one for all gas) may be appropriate provided there is scope for the AER to make business specific adjustments to the growth rate. ActewAGL Distribution supports the inclusion of a business specific adjustment in the design example¹¹, and notes that further analysis is required on how it would be implemented.

Elements to be proposed by the service provider

The AEMC's design example allows service providers to propose: the length of the regulatory period; a cost pass through mechanism; a capital module (to recover "extraordinary significant costs in the regulatory period"; off-ramps (to allow a price reset if certain events, not covered by cost pass through or the capital module, occur); and the form of X (fixed or rolling).¹²

ActewAGL Distribution considers that the scope for service providers to propose any or all of these elements is an essential feature of the TFP methodology. In the absence of these elements, particularly the scope to propose off-ramps, a capital module and cost pass-through mechanisms, the regulatory risks associated with adopting a TFP methodology would be unreasonably high.

As noted above, in the discussion of flexibility and AER discretion, more guidance is needed on how the AER is to assess the proposed elements such as off-ramps and capital modules. The resolution of key matters such as the grounds on which the AER could reject a proposed off-ramp, will be critical to determining whether the TFP methodology is an attractive option for service providers.

¹¹ AEMC Design Discussion Paper, p. 54

¹² AEMC Design Discussion Paper, p. 14