ElectraNet SA

Review of Regulatory Test ACCC Discussion Paper February 2003

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1. Introduction

ElectraNet is pleased to contribute to the ACCC's review of the regulatory test and comment on its discussion paper of February 2003.

ElectraNet recognises the important role of regulated network investments in facilitating competition in the NEM and thereby maximising the benefits of the market arrangements to consumers.

ElectraNet submits that the current regulatory test for assessing whether proposed network investments should proceed does not require major change except to ensure that competition benefits are properly recognised and incorporated.

Our comments on the ACCC's Discussion Paper follow under the headings of the key issues raised in the paper.

2. Minor Amendments

The ACCC's Option 1 proposes a number of minor amendments to ensure consistency between the regulatory test and the Code, generally to align the regulatory test with the Network and Distributed Resources (NDR) Code changes. ElectraNet supports this objective and the changes proposed.

2.1 Thresholds for Small and Large Network Assets

A key objective of the NDR Code changes was to streamline the approval processes for network investments. A key initiative was the definition of new large network investments and new small network investments with the idea that a simpler streamlined approval process should apply to smaller more routine investments. The approval process was intended to be commensurate with the size and significance of the project.

The ACCC has asked interested parties to comment on whether the current classification between large and small network assets is appropriate.

ElectraNet proposed in its June 2002 submission that further streamlining of the network investment approval processes can be appropriately achieved by raising the \$1 million and \$10 million thresholds defining new small and new large network assets.

In our view, raising the thresholds will improve the efficiency of the current approval processes.

The administrative burden of having to undertake a detailed regulatory test and public consultation process for all projects over \$1 million and the additional costs associated with this are not justified. These costs, which are ultimately passed on to consumers, are not insignificant and should only be incurred on projects for which there are genuine cost effective alternatives.

For example, the installation of a replacement network transformer or capacitor bank is a very standard response to general load increases on the power system. Typical costs associated with these types of projects are \$4 million and



\$2 million respectively (for 275 kV equipment). No other real alternatives typically exist for such developments.

Regulatory test analysis and ranking of options for projects at this level of expenditure is of very limited value and of little interest to customers. This has been demonstrated by the very little feedback ElectraNet and other TNSPs have received from customers and other interested parties while undertaking public consultation processes. The little interest can be attributed to the fact that alternative generation and other non-network solutions are not viable when compared to transmission solutions in the \$5 - 10 million price range.

ElectraNet repeats, therefore, its previous proposal for raising the threshold defining new small network assets to at least \$5 million.

This change will provide an immediate benefit in improved efficiency by reducing the unnecessary administrative burden and costs associated with providing information that is of little value and interest to the market.

ElectraNet suggests that a summary of capital expenditure projects with a value of between \$1 million and \$5 million could still be published in the Annual Planning Report to address the need for transparency and disclosure of information in relation to a TNSP's proposed capital expenditure. However, the lack of public response to projects of this size would indicate that even this approach may be unnecessary.

ElectraNet believes that the threshold for new large network assets is too low and should be raised to at least \$20 million.

As noted earlier, the objective of the NDR Code changes was to introduce a simpler streamlined approval process for smaller more routine investments. ElectraNet believes that the approval process for new small network assets, which includes regulatory test analysis and ranking of options, is adequate for projects with value between \$5 million and \$20 million.

The additional steps in the approval process for new large network assets will only add value for the most significant projects that are of broad interest to the market. Such projects are not expected to fall below the \$20 million threshold.

2.2 Replacement Assets and Refurbishments

The ACCC proposes that:

- ? the regulatory test should be applied only to that part of an investment project that augments the network, as opposed to the replacement of existing assets; and
- ? replacement and refurbishment expenditure be subject to the existing prudency assessment that is part of the ACCC's regulation of transmission revenue requirements.

ElectraNet supports the ACCC's proposal.

A network development project is an *augmentation* if it increases the service capacity of the network (for example to facilitate a new connection, meet growth in customer electricity demand, or remove transfer constraints). The Code does



not require a TNSP to apply the regulatory test to refurbishment and replacement capital expenditure designed to maintain existing service capacity.

The ACCC is of the view that if a TNSP replaces an existing asset with one that simultaneously increases the capability of its network, then only that part of the investment project that augments the network is subject to the regulatory test. ElectraNet supports this view.

However, we note that in some cases a refurbishment or replacement project designed to maintain or restore existing service capacity may result in an incidental increase in service capacity. For example where:

- standardised replacement plant is used (to ensure compatibility with spare holdings and plant used elsewhere in the network – consistent with good electricity industry practice);
- ? plant of a higher capacity is more cost effective (for example due to changes in technology); and
- ? network service capacity is restored by an alternative development that is more cost effective than a simple one on one replacement.

In such cases, the replacement should not be treated as an augmentation if any increase in service capacity is a benefit that is only incidental to implementing the most cost effective approach to maintaining existing service capacity. A TNSP is not required to apply the regulatory test in such cases.

3. Definitional Amendments

The ACCC's Option 2 proposes to define and clarify elements of the regulatory test that may be ambiguous and open to interpretation.

ElectraNet supports attempts to clarify elements of the regulatory test and to provide additional guidance to market participants on its application, but this should not result in the regulatory test becoming overly prescriptive. Flexibility must be maintained to ensure that the test can be appropriately applied in specific circumstances that may arise in the future.

3.1 Alternative Projects

ElectraNet sees potential problems with the proposed definition of alternative projects because the definition encompasses both reliability augmentations and other augmentations.

For example, the criterion proposed by the ACCC for deciding which alternative projects should be taken into account in applying the regulatory test requires a project to:

- ? have a clearly identifiable proponent; or
- ? (a) the project should be a genuine alternative to the project being assessed, i.e. a substitute; and
- ? (b) the project should be practicable.



For a reliability augmentation, it is not practicable to consider an alternative project <u>unless</u> it has a clearly identifiable proponent who is prepared to enter into a network support agreement for the provision of the relevant services.

Reliability augmentations generally have a specific timeframe in which they must be completed in order to meet the relevant mandated service standard. ElectraNet would be in breach of the Code and/or its South Australian transmission licence obligations if this timeframe were not met.

Similarly, the requirement that a proposal should become "operational in a similar time frame" to be a substitute is not practicable in the case of reliability augmentations.

In addition, the proposed definition of alternative project needs to be amended to ensure that a project that has a clearly identifiable proponent also satisfies the other requirements, in particular that it is a genuine alternative.

This could be done by requiring that a project satisfy (a) and (b) above while amending the definition of practicable to require a proposal that has a clearly identifiable proponent to be considered as practicable.

ElectraNet supports the ACCC's view that the number of alternatives considered should not be defined, but should be commensurate with the size and/or significance of the proposed augmentation.

3.2 Benefits and Costs

ElectraNet supports the inclusion of the benefits and costs proposed by the ACCC <u>as examples</u> after the definitions of "market benefits" and "costs" in the regulatory test.

However, the examples should not preclude other valid benefits and costs from being included in the analysis where these are applicable.

Neither should the examples mandate the calculation of the listed categories of benefits and costs for all applications of the regulatory test, rather flexibility should be maintained.

3.3 Committed Project/ Anticipated Project

ElectraNet understands that the purpose of committed and anticipated projects in the regulatory test is to ensure that the proposed augmentation is compared with alternatives that have a reasonable probability of proceeding.

ElectraNet supports the NEMMCO Statement of Opportunities criteria as a useful guide for identifying committed projects and similarly the modified criteria proposed by the ACCC for identifying anticipated projects.

However, we believe that these criteria should not be prescriptive and should only apply to non-network options.

For network options, there can be no certainty about whether a project is likely to proceed until it has passed the regulatory test itself.



3.4 Commercial Discount Rate

The ACCC's discussion paper concludes that a pre-tax real discount rate would appear appropriate for the purpose of the regulatory test.

ElectraNet supports the use of a pre-tax real discount rate based on the weighted average cost of capital (WACC) determined by the ACCC in its regulated transmission revenue cap decisions.

We note that the choice of discount rate may not be a critical issue in practice because application of the regulatory test requires sensitivity analysis with respect to the discount rate.

3.5 VoLL

The ACCC proposes that the value of VoLL for the purpose of the regulatory test should be as specified in clause 3.9.4 of the Code; i.e. \$10,000/MWh.

It is important to recognise that VoLL as defined in the Code is a wholesale market price cap and does not necessarily reflect the real or true value of lost load to end use customers, which will vary by customer type and location.

For this reason, ElectraNet does not agree with the ACCC's proposal.

VENCorp has recently determined an average value of lost load for its transmission planning decision-making of \$29,600/MWh, based on market consultation. The consultation found that some areas, such as the Melbourne CBD, have real VoLL costs closer to \$60,000/MWh. There have also been studies conducted on the value of unserved energy to customers in South Australia and New South Wales.

ElectraNet supports the adoption of a realistic value of lost load based on customer research, including the adoption of different values at different locations, where this information is available. In the absence of specific locational information, a composite value of at least \$20,000/MWh would appear to be more appropriate than the wholesale market price cap specified in the Code.

The jurisdictional planner should be required to undertake a regular determination of the value of unserved energy or VoLL across various customer groups and locations on a regular basis for use in planning decisions.

If the value of unserved energy is under-estimated then application of the regulatory test could lead to an inefficiently low level of network investment; and the market as a whole will not benefit from transmission investments that deliver market benefits in excess of their costs.

3.6 Reliability Augmentation

The ACCC notes that there have been a number of concerns raised by interested parties with respect to the reliability limb of the regulatory test, in particular that the test dealing with reliability driven augmentations does not place sufficient accountability on the proponent.



ElectraNet does not understand these concerns. Our view is that the reliability limb of the regulatory test has been working well and does not need to be changed.

Reliability augmentations are subject to the same consultation processes as other augmentations giving market participants and interested parties the opportunity to propose alternative solutions and participate in other ways in the approval process.

The only difference is that reliability augmentations maximise market benefits by minimising the costs of meeting an objectively measurable service standard imposed on the TNSP by the Code or a statutory instrument of the jurisdiction; and it is accepted, therefore, that there may be, a nett cost to the market of meeting this service standard.

The ACCC proposes to incorporate into the regulatory test notes that would require a TNSP to disclose the following information in respect of a reliability driven augmentation:

- ? cost of the augmentation;
- ? whether the augmentation meets a code or jurisdictional objective;
- ? what the current restriction is on the network and why the proposed augmentation is required;
- ? implications to the system or network if the proposed augmentation does not proceed; and
- ? the benefits that the augmentation can provide.

ElectraNet notes that the NDR Code changes have already introduced information disclosure requirements at this level of detail for all new small and new large network assets, including reliability augmentations.

ElectraNet does not believe, therefore, that the proposed information disclosure requirements are required in the regulatory test. Including them would amount to unnecessary duplication of requirements already in the Code.

4. Competition Benefits Test

The ACCC's discussion paper seeks comments from interested parties on whether to include a competition test as a benefit to be measured within the existing regulatory test framework, or to be applied as a separate test. The paper also considers and seeks comment on a number of approaches to measuring competition benefits.

ElectraNet believes it is essential for the regulatory test to allow the inclusion of competition benefits resulting from network augmentation.

ElectraNet engaged Drayton Analytics to provide economic advice on the competition benefits aspects of the ACCC's Discussion Paper.

Drayton Analytics' report is included as an Attachment to this submission.



4.1 Competition Benefits and Their Role in the Regulatory Test

The benefits arising from reduction in market power are legitimate economic impacts that should be included in the regulatory test benefit-cost assessment (where applicable). However, other benefits of increased competition should also be included.

Drayton Analytics observes that:

- ? the basic measures of benefits and costs under the test, by definition, account for all relevant economic impacts from changes in production and consumption due to a project, given they are applied correctly;
- ? benefits due to market power reductions, therefore, are implicitly included in the regulatory test's definition of *market benefit*, and as a result, are allowable under the current test (but this fact is not explicit); and
- ? attaching a connotation to 'competition benefits' that relates specifically to market power implies (incorrectly) that such benefits must not be allowable under the current test and may inadvertently lead to participants overlooking or disregarding other legitimate net benefits from consumption changes that have no relationship to market power reductions.

These observations warrant clarification of the current test. Specifically, the test should make explicit that demand-side impacts, such as changes in the net value of consumption from augmentation are allowed.

Drayton Analytics notes that although (short-run) demand for electricity is highly price inelastic, it is not zero, especially for commercial and industrial customers. As a result, such impacts, which are relatively 'small' on a trading period by trading period basis, may be significant, in aggregate, over the project benefit-cost horizon.

ElectraNet agrees that the regulatory test should clarify that net market competition or consumption benefits are allowed and that these benefits can be captured by modelling price elasticity and anti-competitive or strategic bidding behaviour by generators.

4.2 Evaluation of Proposed Measures of Competition Benefits

The Drayton Analytics report discusses the strengths and weaknesses of the ACCC's six proposals for measuring reductions in market power (refer to Section 3 of the report). The primary conclusions from this evaluation are that:

- ? unless it is intended that the test becomes the new market power detector/ regulator, it is entirely unnecessary to develop a test to specifically address benefits from market power reductions (from a net market benefits perspective);
- ? the review should instead focus on improving the clarity of the current test with regard to allowable benefits and costs and how to correctly assess them, especially with respect to evaluating changes in the net value of consumption resulting from price changes, regardless of whether they arise from market power reduction or some other source; and

? all of the proposals ultimately require some assumption about the relative movement of regional prices post-interconnection relative to the *status quo*, and mathematically consistent and auditable optimisation-based simulation provides the most effective and robust tool for undertaking this analysis.

ElectraNet agrees that the only practical and robust way to include competition or consumption benefits in the regulatory test is through market modelling and simulations.

4.3 Gross Competition Benefits

Competition benefits arising from transmission augmentation can be classified as "net benefits" (measured at the market level) or "gross benefits" (measured at the customer level).

While the current regulatory test may capture the net market benefits of increased competition (resulting from price elasticity - the relationship between consumption and price), it will not capture the transfer of monopoly rent from producers to consumers (resulting from reduction in market power).

ElectraNet recognises that the recent concerns raised by Parer and others concerning competition and the regulatory test are in relation to gross customer benefits (including the transfer of monopoly rent from producers to consumers).

ElectraNet believes that these gross customer benefits should be allowed in the regulatory test assessment where there are clear indications that significant market power exists.

ElectraNet proposes that the regulatory test be amended to include a "third limb" that allows gross customer benefits to be included in the assessment if one or more of the following indicators signals the existence of significant market power:

- ? actual observed price outcomes at times when the network is constrained;
- ? a simple index such as the Hirschmann-Herfindahl Index (HHI), which measures market concentration; or
- ? the magnitude of monopoly rent transfers from producers to consumers identified as part of market modelling and simulations.

Allowing the inclusion of these benefits would maximise the benefit of the NEM to consumers, which was one of the primary objectives of the market reform process.

5. Conclusion

The current regulatory test for assessing whether proposed network investments should proceed on a regulated basis does not require major change except to ensure that competition benefits are properly recognised and incorporated.

Competition benefits arising from transmission augmentation can be classified as "net benefits" (measured at the market level) or "gross benefits" (measured at the customer level).



ElectraNet submits that:

- ? the regulatory test should clarify that net market competition or consumption benefits are allowed and that these benefits can be captured by modelling price elasticity and anti-competitive or strategic bidding behaviour by generators;
- ? the regulatory should be amended to include a "third limb" that allows gross customer benefits to be included in the assessment if there are clear indications that significant market power exists; and
- ? market modelling and simulations are the most practical and robust way to include competition benefits in the regulatory test assessment.