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Victorian Energy Networks Corporation

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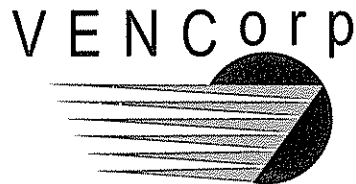
Dear Sebastian

**ACCC DRAFT DECISION: REVIEW OF THE REGULATORY TEST FOR NETWORK AUGMENTATIONS**

VENCorp welcomes the publication of the ACCC's Draft Decision on its review of the Regulatory Test. In particular, VENCorp notes the Draft Decision's confirmation that:

- In keeping with the code's objectives the ACCC considers that the calculation of "competition" benefits must be limited to considering those benefits arising from increases in economic efficiency due to the augmentation of transmission networks (page 47 of the Draft Decision);
- The ACCC does not propose to require the evaluation of the market benefit of a proposed project to include an evaluation of competition benefits, although under clause 6 of the proposed Regulatory Test, the analysis of market benefit *may* include competition benefits. On this basis, VENCorp would support the inclusion of the proposed clause 6 in the Regulatory Test;
- The ACCC believes that the principle of market efficiency would suggest that the Value of Customer Reliability (VCR) should be used to represent the true value of supply reliability, and therefore, VCR (where it has been estimated), or the VoLL market price cap, can be used in a regulatory test assessment (page 37 of the Draft Decision);
- The ACCC recognises that the reliability limb of the regulatory test has the effect of bringing forward proposed augmentations to meet reliability obligations compared to the economic assessment under the market benefits limb (page 39 of the Draft Decision); and
- Ideally there should be no separate criteria for the assessment of reliability augmentations given that the market benefits limb is capable of capturing and valuing reliability benefits. However, the ACCC notes that there are service standards in the code and jurisdictional legislation which impose standards on NSPs, and these factors must be considered in developing and amending the regulatory test (page 39 of the Draft Decision).

It is also noted that the effectiveness in practice of limb (a) of the Regulatory Test (reliability augmentation) is reliant on the definition of "reliability augmentation". In this regard, it is noteworthy that the ACCC's Supplementary Discussion Paper on the capital expenditure framework states that:



- In practice the distinction between "reliability" investment and other augmentation investment involves a high degree of judgement, and has proven to be problematic.
- In 2002 the IRPC was tasked with developing a consistent definition of reliability investment in the NEM, and has not yet been able to bring this matter to a resolution.

Given these considerations, it will be important for all stakeholders – including the ACCC – to seek to ensure that any guidance produced by the IRPC for assessing whether or not a proposed augmentation is a reliability augmentation (pursuant to clause 5.6.3(1) of the code) provides a high level of consistency in practice between limbs (a) and (b) of the Regulatory Test. In this regard, it is noted that provisions within clause 4 of the Regulatory Test itself appear to mandate the application of a lower hurdle in the assessment of reliability augmentations, and may provide a potential means to proponents of network-based reliability augmentations to limit the consideration of otherwise practicable alternatives under limb (a) of the Regulatory Test. VENCORP suggests that any such potential bias should be removed from the Regulatory Test.

Finally, it is noted that the nature of the *market benefits* test has the effect of making a reliability augmentation far less vulnerable to disputation than an augmentation proposed pursuant to limb (b) of the test. Again, this effectively results in the application of a lower hurdle in the assessment of reliability augmentations, and would appear to have the potential (and inadvertent) effect of encouraging the application of limb (a) of the test (reliability augmentation) as a means of streamlining the investment approval process. VENCORP suggests that both limbs of the Regulatory Test should provide for an appropriate and consistent level of rigour in the investment decision analysis and consultation process.

VENCORP's more detailed comments on the Draft Decision are attached.

Should you have any queries in relation to any of the matters raised in this submission, please contact Joe Spurio (03) 8664 6613.

Yours sincerely

A handwritten signature in black ink, appearing to read "M. Zema", written in a cursive style.

Matt Zema  
Chief Executive Officer

## VENCORP'S COMMENTS ON ACCC Draft Decision: Review of the Regulatory Test for network augmentations

### 1. The regulatory test

VENCorp considers that clause 1(b) of the Proposed Regulatory Test may be open to interpretation as proposed. We suggest that the test should be written in a manner that provides more clarity on how an alternative project should be selected as the proposed augmentation. The following is suggested for the Commission's consideration:

*"(b) In all other cases, it is the alternative that maximises the expected present value of the market benefit using a number of reasonable scenarios".*

We would envisage that the expected present value of the market benefit for a particular alternative project would be calculated by using a probability weighting for each scenario times the present value of the market benefit for that scenario.

### 2. Definition of *reasonable scenario*

Clause 3 of the Proposed Regulatory Test lists the factors that are to be taken into account in determining a *reasonable scenario*. The fourth paragraph of this clause states that a *reasonable scenario* should consider "the capital costs of *committed, anticipated and modelled* projects including demand side and generation projects and whether the capital costs are completely or partially avoided or deferred". VENCorp suggests that this provision should be re-worded to clarify that the definition of costs within any *reasonable scenario* should include **all avoidable costs** associated with alternative projects, regardless of the status of those alternatives. Clarification of this provision in this way would ensure that a proper consideration of the incremental costs of all alternatives is included in the economic assessment.

We also suggest that second paragraph of this clause, which references the value of energy to electricity consumers, should be moved to clause 5(c) of the test, as we cannot see its relevance in determining *reasonable scenarios*.

### 3. Definition of the Value of Customer Reliability (VCR)

Clause 3 and clause 14 contain references to "VCR" (the value of customer reliability). The Regulatory Test does not define the term "VCR". VENCorp considers that it would be prudent for a definition of this term to be included. The Regulatory Test and any explanatory notes should clarify that:

"VCR", or value of customer reliability is a measure of the marginal value to electricity consumers of supply reliability. Sometimes also referred to as the "value of unserved energy", VCR is expressed in terms of dollars per unit of energy, and is usually estimated from customer surveys that gather data relating to the marginal costs incurred by electricity consumers during unscheduled supply interruptions. Research completed in Victoria in 2002 suggested that the VCR in that state (applicable across all electricity consumers) is of the order of \$30,000 per MWh.

#### 4. Definition of *alternative projects*

Clause 4 sets out the factors to be taken into account in identifying an *alternative project*. The clause proposes the application of two different sets of criteria to identify an *alternative project*, depending on whether limb (a) or limb (b) of the Regulatory Test is being applied.

In the case of limb (a) – which involves assessment and justification of a *reliability augmentation* in terms of its cost-effectiveness – clause 4(a)(i) requires an *alternative project* to “have a clearly identifiable proponent”.

By contrast, in the case of limb (b) – which involves the assessment of all augmentations that are not *reliability augmentations* in terms of their *market benefit* – clause 4 states:

“...[The] existence of a genuine proponent for the *alternative project* will be taken into account when determining practicability; however absence of such a proponent will not exclude a project from being an *alternative project* for the purposes of the Regulatory Test.”

These provisions appear to restrict the potential range of *alternative projects* that must be considered under limb (a) of the test, compared to limb (b). In effect, this appears to mandate the application of a lower hurdle in the assessment of *reliability augmentations*. Moreover, it may provide a potential means to proponents of network-based *reliability augmentations* to limit the consideration of otherwise practicable alternatives under limb (a) of the Regulatory Test.

VENCorp suggests that the approach to identifying and defining *alternative projects* should be consistent, regardless of whether the assessment is being conducted in accordance with limb (a) or limb (b) of the Regulatory Test. The criteria to be applied in identifying *alternative projects* should minimise the risk that practicable alternatives may not be given reasonable consideration under either limb of the Regulatory Test.

In addition, whilst VENCorp generally concurs with the spirit of clause 4(d), it will be important to ensure that any processes set down in, or implied by the Regulatory Test are workable in practice, and will deliver least-cost (value maximising) outcomes. In this regard it is noted that at the time a Regulatory Test is completed, an *alternative project* may not have an obvious proponent. Under these circumstances, the planner would make assumptions about the cost of that *alternative project*, and the market benefit of the *alternative project* (along with the network augmentation and any other alternatives) would be assessed using the Regulatory Test. If the *alternative project* is assessed as being the one that maximises the *market benefit*, this does not necessarily mean that that particular *alternative project* should proceed. This is because following further investigation and inquiry with prospective proponents:

- it may be apparent that there is no proponent willing to undertake the project; or
- the charges that a proponent would require indicate a materially higher cost for the *alternative project* than that assumed by the planner when the Regulatory Test was undertaken.

VENCorp suggests that a reasonable approach in these circumstances is to make an upfront assessment as to whether there is likely to be a proponent for an alternative project. This could be achieved for instance by seeking expressions of interest prior to the application of the regulatory test. In the event that this assessment reveals that there is no likely proponent, then that alternative project should not have to be assessed.

However, in the event that it is assessed, and one of the two scenarios outlined above occur, then we suggest the following:

- In the first instance, if the planner has made reasonable efforts to procure an offer from the market, and an offer has not been forthcoming, then the project's status as an *alternative project* should be revoked.
- In the second instance, if the price offered by a proponent of an *alternative project* leads to a change in the Regulatory Test's original *market benefits* ranking of the alternatives, then the rankings should be changed accordingly, and the preferred option should be identified as the one that maximises *market benefit* as recalculated to take into account the new and more accurate information on the costs of the alternative(s).

## 5. Definition of *market benefit*

Clause 5 provides a list of benefits that may be included in the evaluation of *market benefit*. Paragraph (a) refers to "benefits of savings in fuel consumption caused through differences in dispatch patterns and differences in fuel costs". VENCORP notes that these provisions clearly suggest that within a *market benefit* assessment, any estimate of costs associated with a particular pattern of dispatch would be made with reference to the underlying short run marginal cost of the resources dispatched.<sup>1</sup> Under this definition, the total resource (fuel) cost for the purpose of assessing *market benefit* is not affected by a change in the offer prices of generators, except to the extent that:

- such a change leads to a change in the pattern of dispatch; and
- there is a consequential change in the dispatch cost (measured as the sum of the product of SRMC and dispatched energy for all of the generation resources dispatched).

In calculating *market benefit* pursuant to the Regulatory Test, VENCORP applies the approach outlined above to evaluate total resource costs associated with different dispatch patterns. However, there is scope for material differences to arise between assessments of market benefits for the same scenarios, depending on the approach taken to valuing fuel (total dispatch resource) costs. For example, if the resource cost is calculated as the sum of the product of offer prices and dispatched energy for all of the generation resources dispatched. VENCORP understands that the approach it adopts is consistent with:

- the broad definition of *market benefit* as "the net increase in consumers' and producers' surplus, as set out in clause 5 of the Regulatory Test; and
- the requirement, noted on page 33 of the Discussion Paper, that "the wealth transfer aspect of cost should not be incorporated into the regulatory test assessment".

It would be very helpful if the Regulatory Test were to provide absolutely unequivocal guidance on this important matter, to ensure that the approach taken by all users to the evaluation of fuel costs and total resource costs associated with dispatch is consistent with the definition of *market benefit* as set out in clause 5 of the Regulatory Test.

Paragraph (d) of clause 5 refers to "benefits in capital deferrals" attributable to a range of factors, some of which do not directly relate to capital deferral benefits. VENCORP suggests that the information presented in clause 5(d) would be clarified if the amendments marked below were made:

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<sup>1</sup> It is also noted that the short run marginal cost of generation is often referred to throughout the industry as "fuel cost".

- "(d) benefits in terms of reduced or avoided costs ~~capital deferrals~~ caused through
- (i) deferral of market entry plant or deferral of reliability entry plant
  - (ii) differences in capital costs
  - (iii) differences in the operational and maintenance costs
  - (iv) deferral of transmission investments"

## 6. Definition of competition benefits

Page 46 of the Discussion Paper states:

"Powerlink and VENCORP believe that "competition" benefits is not currently included in the regulatory test."

For the record, VENCORP's view is that the present provisions of the *market benefits* limb of the Regulatory Test enable a large proportion of any economic efficiency gains due to increased competition following an augmentation to be captured in the analysis. To this extent, "competition benefits" are already included in the Regulatory Test.

As noted in the covering letter, VENCORP concurs with the ACCC's view that the code's objectives require the calculation of "competition" benefits to be limited to considering those benefits arising from increases in economic efficiency due to the augmentation of transmission networks. VENCORP's application of the Regulatory Test effectively includes competition benefits but assigns a load elasticity value of zero. Implicit in the determination of competition benefits is the need to assume a value for the medium to long term price elasticity of demand. This figure is not readily available from the load forecast models and could vary within a wide range without being obviously wrong. In the interests of transparency and consistency, and to minimise the risk of disputes, VENCORP believes that the ACCC could consider providing this data for all users of the Regulatory Test.

Clause 6 sets out a definition of competition benefits for the purpose of the Regulatory Test. VENCORP considers that in its present form, clause 6 does not provide a sufficiently clear definition of competition benefits.

To ensure that a sufficiently clear and comprehensive definition of competition benefits is provided within the Regulatory Test itself, the ACCC should consider including additional explanatory notes. To this end, it is noted that Appendix D of the Draft Decision ("A Definition of Competition Benefits") provides a useful source of additional explanatory material. Based on the information presented in Appendix D, VENCORP suggests that the definition of competition benefits set out in the Regulatory Test should be supplemented, to include the following material:

- The "total benefits" resulting from any transmission augmentation can be broken down into two parts, being:
  - the "efficiency benefits" arising from the more efficient (ie lower cost) dispatch of generation and load made possible by the augmentation; and
  - the "competition benefits" arising from the net welfare gain due to the change in the bid and offer curves brought about by the augmentation.
- For a given potential project, the "total benefits" of the project can be defined to be the difference in total surplus between the following two network scenarios:

- a base case defined by the existing network (the "status quo network"), and assumed generator bidding which is consistent with a reasonable estimate of the effects of any market power possessed by generators in the status quo network; and
- the "augmented network" case in which the existing network is augmented with the proposed project, and in which assumed generator bidding is consistent with a reasonable estimate of the effects of any generator market power that would be present in the augmented network,

where "total surplus" is the sum of the consumers' and producers' surplus.

- The "efficiency benefits" of the project can be defined to be the difference in total surplus between the following two network scenarios:
  - the "status quo network" in which assumed generator bidding is consistent with a reasonable estimate of the effects of any market power in the status quo network; and
  - the "augmented network" with generator bidding assumed to be the same as in the status quo network.
- The "competition benefits" of the project can be defined to be the difference in total surplus between the following two network scenarios:
  - the "augmented network" with bidding assumed to be the same as in the status quo network; and
  - the "augmented network" in which assumed generator bidding is consistent with a reasonable estimate of the effects of any market power in the augmented network.
- Competition benefits (where positive) represent an increase in economic efficiency, because they contribute to a net increase in the sum of the consumers' and producers' surplus.

VENCorp notes that the concepts and definitions listed above are consistent with those set out in Appendix D, however VENCORP proposes the use of language which avoids the suggestion that market power can be accurately and fully reflected in an evaluation of competition benefits.

## 7. Definition of the discount rate

The Draft Decision appears to propose that clause 10 will mandate the use of one specific definition of the weighted average cost of capital (WACC). VENCORP notes that the definition proposed in the Draft Decision is a form of after-tax WACC. Furthermore, it is noted that the WACC definition included in clause 10 is one of at least four forms of after-tax WACC described by Professor Robert Officer.<sup>2</sup>

On the issue of discount rates, VENCORP's April 2003 submission on the ACCC's Discussion Paper stated:

"VENCorp concurs with the ACCC's suggestions (on page 36 of the Discussion Paper) that:

- The definition of the discount rate used should be consistent with the definition of the cash flows being discounted.

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<sup>2</sup> These four definitions of post-tax WACC, and the correct corresponding definitions of cash flow applicable in each of the four cases are described in Appendix 1 of a paper titled *A Cost of Capital for Murraylink*, prepared by Officer in October 2002. A copy of the paper was provided to the ACCC by the Murraylink Transmission Corporation

- The estimated market benefit cash flows that are discounted in the Regulatory Test are expressed on a before-debt and before-tax basis.
- Typically, the processes of forecasting cash flows and calculating net present values are simplified if cash flows are expressed in real terms.
- It would therefore be appropriate to use a real pre-tax discount rate (WACC) and real pre-tax cash flow forecasts for the purpose of the Regulatory Test."

VENCorp remains committed to these views.<sup>3</sup> For the reasons set out above and in its April 2003 submission on the ACCC's Discussion Paper, VENCORP considers it is both undesirable and unnecessary for the Regulatory Test to appear to "hard-wire" a particular definition of the WACC.

Notwithstanding these comments, it is noted that the closing paragraph of clause 10 states:

"In determining whether to use a real, nominal or pre or post tax discount rate, the guiding principle is that the discount rate used should be consistent with the cash flows being discounted."

Thus, contrary to the inference conveyed by the inclusion of an after-tax WACC formula in clause 10, the clause appears to provide discretion as to whether the discount rate and cash flows are expressed in pre-tax or after-tax terms. VENCORP considers that the Regulatory Test should enable the use of real, nominal, pre-tax or post-tax cash flows and discount rates, subject to the guiding principles that:

- the discount rate used should be consistent with the opportunity cost of capital of an investment in electricity infrastructure (and the opportunity cost should reflect the market risk, or undiversifiable risk associated with the investment); and
- the definition of the discount rate used should be consistent with the definition of the cash flows being discounted.

The Regulatory Test should therefore not prescribe a particular formulation of the WACC.

## 8. Definition of market development scenarios

Clause 11 sets out requirements relating to the identification and definition of market development scenarios. These provisions appear to overlap with those set out in clause 3. VENCORP therefore suggests that clauses 3 and 11 could be combined into one clause that sets out all of the requirements for defining *reasonable scenarios*.

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<sup>3</sup> For the record, page 26 of the Draft Decision states incorrectly that: "VENCORP generally concur that the post-tax real cash-flow and the WACC is an appropriate approach in the application of the regulatory test"

However, page 27 of the Draft Decision states correctly that: "VENCORP is of the view that it would be appropriate to use a real pre-tax discount rate (WACC) and real pre-tax cash flow forecasts for the purpose of the regulatory test VENCORP also notes that given the level of inflation and WACC that currently prevail, the choice of transformation method does not appear to have a material impact on the estimate of the discount rate".



## 9. Construction timetable

Clause 15 sets out definitions governing the description of a nominated construction timetable. There appears to be some potential inconsistency between the definitions set out in paragraphs (i) and (ii) of this clause:

- paragraph (i) defines the start of construction with reference to the date on which construction commences; while
- paragraph (ii) defines construction time as including the time required to order equipment and build the project.

VENCorp suggests that the definitions set out in paragraphs (i) and (ii) should be aligned, and should take into account the timing of commencement of the design and equipment procurement processes, because:

- these activities involve costs which comprise a significant proportion of the total project cost; and
- these costs are incurred as part of the execution of a project well prior to the commencement of physical construction on site.

In this regard, it may be more appropriate for paragraph (i) to define the commencement of the project, rather than commencement of construction.

## 10. Definition of terms used in the Regulatory Test

The Regulatory Test uses a number of terms which have a specific meaning in the context of the test. These terms are defined (in no particular order) in the various clauses of the instrument itself, however the test itself does not contain a glossary. The absence of a glossary is likely to hinder the ability of many readers to gain a clear understanding of the key provisions of the test. VENCORP therefore suggests that a glossary should be included in the Regulatory Test to define all of the terms that have a specific meaning in the context of the test.

## 11. Minor typographical errors

### 11.1 Clause 3

The paragraph numbering of clause 3 should be corrected so that numbering commences at (i). After making this correction, the paragraphs currently numbered as (vii) to (xii) would be denoted as paragraphs (i) to (vi).

### 11.2 Clause 12

Clause 12 should be amended in accordance with the suggested revisions marked below:

"A project is a *committed project* if it satisfies all the following criteria:

- a. the proponent has obtained all required planning consents, construction approvals and licenses, including completion and acceptance of any necessary environmental impact statement; and

- b. construction of the proposal must either have commenced or a firm commencement date must be set; and
- c. the proponent has purchased/settled/acquired land (or commenced legal proceedings to acquire land) for construction of the proposed development; and
- d. contracts..."

### 11.3 Clause 13

The fifth line of clause 13(b) should be amended in accordance with the suggested revisions marked below:

"... net present value of generation costs). The forecasts of spot price ~~tends~~ trends should..."

### 11.4 Clause 14

The paragraph numbering of clause 14 should be corrected so that numbering commences at (a). After making this correction, the paragraphs currently numbered as (g) to (l) would be denoted as paragraphs (a) to (f).