

November 30, 2007

Mr Chris Pattas  
Australian Energy Regulator  
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Dear Chris

Review of the AER's adjustments to VENCORP's planned augmentation general allowances

The Australian Energy Regulator (AER) has engaged Nuttall Consulting to review the analysis that the AER has undertaken to inform its draft decision on VENCORP's maximum allowed revenue during the 2008/09 to 2013/14 period. The AER's analysis concerns VENCORP's planned augmentation expenditure allowance, and specifically, the extrapolation of the findings of PB Strategic Consulting's (PB) review of two general allowance projects<sup>1</sup>, to other general allowance projects in VENCORP's proposal. The AER's analysis has resulted in a number of adjustments to VENCORP's planned augmentation expenditure allowance.

The AER has requested Nuttall Consulting to review this analysis, and the AER's position resulting from it, to confirm whether it is appropriate with regards to PB's findings and any relevant technical/engineering matters that VENCORP has raised in its proposal. The Nuttall Consulting review has not involved detailed project evaluations, or any further discussions with, or information requests to, VENCORP.

It is also important to note that the key consideration in the Nuttall Consulting review is not the appropriateness of PB's findings. Rather, it is the appropriateness of the AER's extrapolation of these findings across the other general allowance projects, assuming PB's findings are appropriate.

The main documents referenced during the Nuttall Consulting review include:

- a working version of Section 4 and Appendix A of the AER's draft decision<sup>2</sup>;
- the PB report, "VENCORP revenue reset, An Independent review"; and
- VENCORP's revenue proposal and supporting information.

The overall finding of the Nuttall Consulting review is that the AER's adjustments to VENCORP's general allowance projects, which are based upon an extrapolation of the PB findings, are appropriate.

The remainder of this letter provides a more detailed discussion of the Nuttall Consulting review.

The basis of the AER's adjustments is PB's findings from the detailed review of two projects. These projects are:

- Minimum reactive support in the state grid region; and

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<sup>1</sup> General allowance projects are those projects in VENCORP's proposal that represent a number of smaller projects of similar form, for which no specific need or timing has been defined at this time for any individual projects.

<sup>2</sup> Provided to Nuttall Consulting in an email from the AER, dated 26 October 2007.

- Line terminations and monitoring equipment in the metropolitan area.

The AER's extrapolations concern three of VENCORP's project categories, namely:

- The remaining general allowance reactive support projects, covering:
  - Minimum reactive support in the metropolitan area; and
  - Additional reactive support in the metropolitan and state grid areas;
- Line terminations and monitoring equipment in the state grid areas; and
- Minimum fault limiting devices in the metropolitan region.

The appropriateness of the AER's adjustments to expenditure allowance for these three project categories will be discussed in turn below.

### ***Remaining general allowance reactive support categories***

The basis of the AER's adjustments on the general allowance reactive support projects are PB's findings on the 'minimum reactive support in the state grid region' project. In this regard, PB recommended a significant reduction on VENCORP's proposed project costs, based upon PB's view that the majority of the reactive support would not be required. PB's view was that much of this reactive support would be accounted for by other projects that will occur during the next regulatory period, and noted that this has occurred in this period to the equivalent reactive support allowance. In support of this view, PB has raised the lack of detailed planning studies, and in particular, the lack of a coordinated and systematic study accounting for other planned projects.

In considering whether it is appropriate to apply PB's findings on this project across the other general allowance reactive support projects, it is important to note that there is nothing in VENCORP's proposal to suggest that the basis of these other general allowance reactive support projects is different to that of the project reviewed by PB. That is, the form of the analysis undertaken by VENCORP to determine the reactive requirements in these projects appears to be similar to the project reviewed by PB. Importantly, there is no indication that a coordinated study accounting for other planned projects has occurred with any of these other projects. Therefore, Nuttall Consulting considers it reasonable to assume that some reduction based upon PB's findings is appropriate.

It is a little more uncertain whether it is appropriate to apply an equivalent scale of reduction on the other reactive support projects. An important matter in this regard is the significance on PB's findings of the other more specific reactive projects that VENCORP is proposing in the state grid, such as the state grid SVC project. It is noted that VENCORP has not proposed similar reactive projects in the metropolitan region, and therefore, there may be less scope for projects to remove the need for the general allowance requirement.

However, in the absence of specific information on this factor, and noting the similarities in the basis of all these projects, Nuttall Consulting considers the AER's adjustment of the other general allowance reactive support projects is appropriate.

### ***Line terminations and monitoring equipment in the stage grid region***

The basis of the AER's adjustments on the 'line terminations and monitoring equipment in the state grid region' project are PB's findings on VENCORP's equivalent project for the metropolitan region. In this regard, PB recommended a significant reduction on VENCORP's proposed project costs, which were significantly greater than historical levels. PB's view was that the historical expenditure represented a more appropriate level. In support of this view, PB has raised the lack of detailed planning studies, and in particular, the fact that VENCORP has not accounted for SP AusNet's metropolitan substation redevelopments. The SP AusNet redevelopments will replace line termination equipment in the metropolitan regions, and these works would most likely upgrade equipment that may be at or near to limiting transfers.

In considering whether it is appropriate to apply PB's findings on this project to the state grid line terminations projects, it is important to note that there is nothing in VENCORP's proposal to suggest that the basis of the state grid project is different to that of the project reviewed by PB. That is, there does not appear to be any supporting planning studies, and importantly, there is no indication that VENCORP has adequately accounted for SP AusNet's redevelopment program of the substations in the state grid. SP AusNet's redevelopment program undertaken in this period, and continuing into the next, has resulted in a very significant upgrade of the state grid substations, including line terminal equipment. Therefore, Nuttall Consulting considers it reasonable to assume that some reduction based upon PB's findings is appropriate.

With regards to whether it is appropriate to apply an equivalent proportional adjustment, it is important to note that PB's recommendation is based upon an adjustment to historical level. As such, an adjustment to the historical level of the equivalent state grid works would be more in accordance with PB's recommendation. However, Nuttall Consulting is not aware of this information being requested of, or supplied by, VENCORP during the course of this review. Nevertheless, it is considered reasonable to assume that VENCORP applied a similar process to determine the expenditure allowance for the metropolitan and state grid projects. Therefore, in the absence of the historical costs, it is reasonable to assume that the proportional adjustment from the metropolitan project is an appropriate proxy for the equivalent adjustment to the state grid project.

Based upon the above, Nuttall Consulting considers the AER's adjustment of the 'line terminations and monitoring equipment in the state grid region' projects is appropriate.

***Minimum fault limiting devices in the metropolitan region.***

The AER's adjustments to the 'minimum fault limiting devices in the metropolitan region' project are based upon the percentage reduction applied to the 'line termination and monitoring equipment in the state grid region' project i.e. the project discussed above. It is noted that the AER's use of the 'line termination' project adjustment appears to be based upon a desire to apply a 'conservative adjustment', rather than the AER making a direct linkage between these two projects.

In considering whether it is appropriate to base the adjustment on the 'line termination' project, there does appear to be some similarities. Fault limiting devices are most likely to be required if short circuit currents may exceed the rating of line termination equipment, particularly circuit breakers. As with the 'line terminal' project, it would be expected that SP AusNet's extensive redevelopment of the metropolitan substations would reduce the need for such fault limiting devices. In this regard, SP AusNet has indicated in material provided with its revenue proposal that a benefit of its replacement program is the upgrading of some equipment that is near its short circuit rating.

As such, noting that no detailed technical studies appear to have been performed by VENCORP to determine the allowance for the 'minimum fault limiting devices in the metropolitan region' project, it is considered reasonable to assume that PB's findings on the 'line terminations' project may be the most relevant to this project.

It is more difficult to say that the equivalent proportional adjustment is reasonable. As noted in the discussion on the 'line terminations' project, PB's recommendation was based upon the historical expenditure level. As such, an adjustment to the historical level of the 'minimum fault limiting devices in the metropolitan region' project would be more in accordance with PB's recommendation. However, Nuttall Consulting is not aware of this information being requested of, or supplied by, VENCORP during the course of this review.

Nevertheless, noting that both the 'line termination' projects and this 'minimum fault limiting devices' project appear to be general allowance projects (without any basis of specific needs), it is considered reasonable to assume that VENCORP applied a similar rationale to determine the expenditure allowance for all these projects. Therefore, in the absence of the historical costs, it is reasonable to assume that the proportional adjustment from the 'line terminations' project is an appropriate proxy for the equivalent adjustment to the state grid project.

Based upon the above, Nuttall Consulting considers the AER's adjustment of the 'minimum fault limiting devices in the metropolitan region' projects is appropriate.

**Summary**

In summary, Nuttall Consulting has reviewed the AER's adjustments to VENCORP's general allowance projects, which are based upon an extrapolation of PB's project findings. The aim of this review has been to confirm whether the adjustments are appropriate with regards to PB's findings and any relevant technical/engineering matters raised in VENCORP's proposal.

The overall finding of the Nuttall Consulting review is that the AER's adjustments, which are based upon an extrapolation of the PB findings, are appropriate.

I trust you will find the above satisfactory. However, do not hesitate to contact me should you require any clarifications.

Sincerely,

Brian Nuttall  
Director