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A division of Parsons Brinckerhoff International (Australia) Pty. Ltd.

Australian Competition and Consumer Commission, Po Box 1199 Dickson ACT 2602

24 February 2005

Attention: Mr Warwick Anderson

Dear Mr Anderson,

Following the report prepared by PB Associates for the ACCC in which we reviewed aspects of the conversion application submitted by the Directlink Joint Venture (DJV) and the subsequent responses by the DJV to our report, it has become evident that there is a misunderstanding regarding this report and the one recently completed by PB Associates for the ACCC in which we assessed the forward capital expenditure requirements of TransGrid. The DJV has considered the TransGrid review and drawn inferences from that report for their own application, which are not appropriate.

The review of DJV's application was intended to provide the ACCC with an assessment of the electrical system needs accommodated by the Directlink interconnector, the range of projects that could deliver alternative and comparable services, and estimates for the costs of those alternative projects. The purpose of that assessment was to provide expenditure estimates which could be further developed and analysed by the ACCC to determine overall net market benefits offered by Directlink and the equivalent value and revenues applicable should the DJV proceed to convert to a regulated network status.

In contrast, the role of PB Associates in reviewing the forward capital expenditure program proposed by TransGrid was to advise the ACCC of the reasonable allowance of efficient capital investments required over the next 5 years. These allowable expenditures would form the basis of the asset roll-forward of TransGrid's asset base in framing its ex-ante revenues over the period.

The nature of assessing TransGrid's future capital expenditure requirements necessitates detailed analysis of system requirements over the regulatory period and the evaluation of proposed network solutions to accommodate these requirements. Forecasting system requirements into the future, particularly beyond 3 years, inevitably includes estimating the timing of augmentations and the optimal potential solutions likely to emerge. In some cases TransGrid were able to provide detailed project evaluations and system studies that could be accepted by PB Associates as demonstrating a comprehensive analysis of the underlying requirements, the range of alternatives and the efficient costs of the optimal solutions. In these cases PB Associates has recommended expenditure figures to be included in the exante capital expenditure allowance.

In some cases, however, TransGrid could not reasonably be expected to provide definitive studies that would reflect either the optimal timing or costs of the ultimate solutions. In these instances PB Associates either deferred the expenditures into a future regulatory period, excluded the projects to allow them to be reviewed at the time when detailed analysis would be available, or proportioned the expenditures over the current and future regulatory periods based on estimates of minimum costs and the probable timing of project requirements.



Where projects were deferred or excluded, PB Associates has clearly made no recommendation in support either of the appropriate timing or costs of those projects. However, where expenditures have been proportioned across years spanning the current and future regulatory periods, PB Associates has adopted the costs (with some adjustments) of the solution proposed by TransGrid as the basis for that allocation and assigned probabilities of expenditures to years on the basis of the possible deferral period.

Of particular significance in this regard is the augmentation expenditure proposed by TransGrid for the complex of projects known as the "Mid North Coast Reinforcements". The major components of this complex include a new transmission line between Kempsey and Pt Macquarie, uprating a transmission line between Coffs Harbour and Kempsey and associated substation works, a new transmission line between Armidale and Kempsey, and the establishment of a new 330/132 kV substation. The planned expenditure program for these augmentations included \$0.5m, \$6m, \$23m and \$32m in 2006, 2007, 2008 and 2009 respectively (2004 dollars). In reviewing the analysis provided by TransGrid, PB Associates made the following comment:

"PB Associates considers that TransGrid have adequately demonstrated the need for the Mid North Coast developments as part of the long term plan for supply to this region. However, we do not consider that the timing of this project is sufficiently certain due to the issues discussed above, and there appears a reasonable likelihood that the project or parts thereof could be deferred."

In drawing this conclusion PB Associates considered the potential for a range of factors and partial solutions that could alter the timing of the required expenditures by between 0 and 2 years with an equal probability of the expenditures commencing in any year within this timeframe. However, PB Associates accepted that the solutions proposed by TransGrid appeared to provide the most likely scenarios. Based on this assessment, PB Associates apportioned the expenditures in the following manner. Note that only figures for the current regulatory period are shown.

	2005	2006	2007	2008	2009
Mid North Coast Reinforcement	\$0	\$150,156	\$2,039,860	\$9,068,322	\$18,825,039

(Figures are in 2004 dollars)

In its supplementary submission the DJV has interpreted comments made by PB Associates to mean that the range of factors and partial solutions that could potentially defer the need for the Mid North Coast Reinforcements have been recommended by PB Associates. In particular, PB Associates commented that:

"Further studies performed by TransGrid at the request of PB Associates indicate that, if it is possible to implement the control scheme, the contingent overloads and low voltages could be managed via dispatch of generation at Lismore or import from Queensland through Directlink, and provision of some additional reactive support. At this stage, it is not certain that the control scheme will be able to be implemented although we do not see any significant technical difficulty with implementing a control scheme of this type."

This comment attributes a potential role for Directlink in possibly assisting in the deferral of the Mid North Coast Reinforcements, and in a limited way, Directlink could form part of a range of initiatives that together might provide up to a 2 year deferral of the expenditures for some, but not all, of the components of the complex.

In reading this statement, however, it is also important to note that despite the technical capabilities of the proposed control scheme to enable loads and voltages to be managed in a way that could allow some deferral of the Mid North Coast Reinforcements, there are still



some uncertainties regarding the practical implementation and management of such a scheme, and the potential role of Directlink. The scheme would require secure and duplicated communication systems at Lismore and Coffs Harbour. In addition, the scheme requires effective interfaces between the control system and TransGrid's equipment, in particular the static var compensator and tap changers. For these reasons PB Associates acknowledged in its report on TransGrid's capital expenditure program that the scheme may not be implemented.

If the control scheme could be implemented, the role Directlink might play to defer Mid North Coast Reinforcements would depend on a number of additional factors. In particular it can have no influence on the timing of the Kempsey to Pt Macquarie component. PB Associates stated in its report that further detailed system studies would be required to specifically identify the optimal least cost network configuration under this scenario, and since these studies were not available the final solution could not be determined. To allow an appropriately balanced outcome for the ACCC's revenue determination on TransGrid therefore, the costs of the Mid North Coast Reinforcement project were accepted (subject to some cost adjustments) and apportioned on a probability of timing basis.

In essence, the identification of a range of possible scenarios in the TransGrid review, which could impact the timing of its expenditures, cannot be read as an endorsement by PB Associates of those possible deferral options.

PB Associates understands the reasons behind the DJV's new found interest in the control scheme and the role it may enable Directlink to play in deferring the Mid North Coast Reinforcements. It is our view, however, that the DJV has incorrectly interpreted the TransGrid report as advocating the use of a control scheme and attributing benefits to Directlink in deferring the Mid North Coast Reinforcements, which clearly have not been demonstrated. However, rather than speculate on the impacts and deferral opportunities that are possible, PB Associates would welcome the provision of the necessary analysis to enable more rigorous consideration of the optimal least cost solutions and a balancing of allowable network expenditures between contributing parties.

PB Associates believes it is important that the ACCC does not permit multiple parties to receive the benefits for superfluous investments which would ultimately be reflected as higher prices to customers. For this reason the reports on TransGrid and Directlink need to be read in the contexts within which they were prepared, and that Directlink should only receive recognition for the benefits that it can legitimately demonstrate it provides. In these instances, and as noted by PB Associates in the TransGrid review, the allowable capital investments of TransGrid need to be adjusted to remove any duplication.

PB Associates would welcome the opportunity to further clarify the context of our reports. If you would like to discuss this matter further please do not hesitate to contact me using the details listed below.

Yours sincerely

## **Paul Topfer**

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