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11 July 2007

Dr John Tamblyn
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Dear Dr Tamblyn

John

CONGESTION MANAGEMENT REVIEW

Stanwell Corporation Limited (Stanwell) welcomes the opportunity to provide further comments on the Congestion Management Review (CMR), being undertaken by the Australian Energy Market Commission (the Commission). This letter follows the Forum hosted by the Commission seeking further views from Queensland participants on its various work streams including Congestion Management.

As background, Stanwell is a Queensland Government-owned Corporation (GOC) with an energy portfolio comprising coal and hydro located in Central and North Queensland. Our major asset is the 1400MW Stanwell Power Station, which is a coal-fired facility located near Rockhampton in Central Queensland and our hydro assets include Kareeya (88MW) and Barron Gorge (60MW) Power Stations in North Queensland. Following a number of recent Government decisions, from October Stanwell will manage the energy trading operations of Gladstone Power Station (1680MW) also in Central Queensland. The Corporation's interests in wind assets will be divested in line with the outcomes from the Queensland Government's *ClimateSmart 2050* policy.

The focus of Stanwell comments relate to:

- The Report, *Modelling of transmission pricing and congestion management regimes* (the IES Report), which was undertaken by IES for a group of generators, which was published in December 2006. Given the IES modelling was focused on the Queensland region, Stanwell is well positioned to provide detailed comment on the methodology and assumptions related to this work.;
- Overview of Stanwell's latest discussions with the Commission (20 June presentation); and
- Key transmission issues for Stanwell which relate to the risks associated with network reconfigurations.

Comments on the IES Report

Stanwell notes that the IES Report is being considered in the current review of congestion management as an indicator of the economic costs to the market of congestion. Stanwell has undertaken a high level review of the modelling methodology and assumptions utilised in the study and has identified a number of issues for further consideration and clarification. Overall, these points raise questions about the suitability of using the results as an indicator of the economic cost of congestion in Queensland.

In terms of the methodology adopted by IES, using pool price modelling it determines the optimal generation and network investment patterns under two congestion management regimes (which effectively reflect full nodal pricing for generators) and these NPV results are compared to the Base Case, which reflects the current market settings. Based on this analysis, assessments are then made regarding the dynamic efficiency benefits of introducing greater locational pricing in Queensland.

Stanwell considers that generation investment decisions extend beyond these pool price considerations and issues such as access to competitively priced fuel (and water) and incentives associated with greenhouse policies play a critical role in this process. We note that the IES Report does not explicitly account for these factors. Further, while the modelling considers the efficiency benefits of more refined locational pricing, the costs of implementation and flow-on impacts to the contract market and liquidity are not quantified. On this basis, this approach is only a component of the full suite of analysis that is necessary to assess the costs and benefits of a congestion management regime. In this context, the following discussion highlights specific areas where the IES modelling is limited in its usefulness in addressing the broader question of net benefit.

Specifically, the IES Report notes that significant differences between Case 1 (full regime of constraint support pricing) and the Base Case come in the transmission upgrades required and the timing and placement of generic new entry. In particular, the Report identifies significant differences between the cases in terms of the volume and type of generic new entry when plant receives locational rather than regional prices which is responsible for a significant proportion of the differences in economic costs identified in the IES Report.

Stanwell has a number of concerns about the new entry plant selected in the Base Case and whether locational pricing would in fact drive such significant differences in the timing, placement and type of new investment as suggested in the modelling. The use of a Base Case more reflective of current market and regulatory sentiment i.e. more heavily weighted towards gas as the new entrant plant predominantly located where there is access to low cost gas, may result in a significant reduction in the economic cost that has been identified in the Report.

IES has developed an automated new entry that brings on new generation based on a spot market price duration curve using an input list of potential new generators with a predetermined priority ranking. Of concern is the fact that the priority list of new generation projects utilised by IES to select new investment does not appropriately take into account the range of factors that are likely to have a significant impact on the timing and type of new entry plant. These factors include the impact of current state and proposed national environmental regulation including emissions trading and the recently announced increase and extension of the Queensland Gas Incentive Scheme to 18

per cent by 2020. For example, it would appear unlikely, given the current regulatory environment, that 2,500MW of coal plants will be commissioned in Queensland over the modelling period. Of particular concern is the selection in the Base Case of coal plants in Tarong (2014-15) and Gladstone (2018-19) given the degree of uncertainty regarding the availability of low cost coal in these regions.

In reality gas plant located where there is an abundant supply of low cost gas, is likely to be the dominant new entry plant in the Queensland market regardless of regional or locational pricing signals particularly given the Queensland Government's commitment to the introduction of emissions trading and the subsidies afforded to gas plant through the Gas Electricity Certificate (GEC) scheme. This is further reinforced by the fact that the two dominant retailers in Queensland have access to low cost gas that they are looking to monetarise through the development of gas generation in Queensland to cost effectively manage their retail load. Origin Energy's recent announcement to build 630MW of gas fired plant in South West Queensland in 2010 is further evidence of this.

The additional coal plant selected in the Base Case (500MW) will have a number of implications for the results. By their nature coal plants are large and capital intensive projects in comparison to gas plant. As a result investment in the Base Case is likely to be comparatively lumpy and may be less efficient in terms of meeting Queensland's load growth which is very peaky by nature. These factors will contribute to the difference in costs identified between the Base Case and the locational pricing scenario (Case 1).

In summary, gas is likely to be the primary new entrant fuel source moving forward. In the case of Queensland, Stanwell considers that the overall cost of delivered gas (due to limited pipeline infrastructure) to areas of relatively higher electricity prices such as the South-east and North Queensland load centres will outweigh any locational price impacts in an investment decision. Further, particularly in the case of South-east Queensland, the lack of suitable generation sites will highlight this issue. In other words, new large scale generation projects will continue to locate close to the fuel supply.

The following discussion provides further comments on the specific modelling assumptions and results, which is important if this form of modelling is to be used as part of a broad assessment of congestion management.

Some specific additional points regarding the IES Report should also be noted:

- As mentioned, the modelling assumes that generators are subject to a locational pricing regime, or nodal pricing for generators and a full regime of constraint support pricing (CSP). The March Directions Paper states that, the Commission will only consider localised applications of CSPs and as such the full rollout of CSP is outside the scope of the terms of reference.
- In the event a CSP or alternative arrangement was introduced, contracting levels will be impacted by a generator's allocation of constraint support contracts (CSC). However, the modelling holds contracting assumptions static across the base case and congestion management scenarios. Further, the modelling does not indicate how CSCs would be allocated to particular portfolios.
- According to the results, with and without a congestion management regime, there are no substantive changes in generation investment patterns until mid next decade. By the stage that investment decisions could be influenced by locational

pricing, carbon pricing is likely to change the expected pattern of generation investment.

- North Queensland is generally accepted as an area which would possibly benefit from further generation investment. As acknowledged in the IES Report, the application of locational pricing in the model does not deliver new generation to this area.

Overview of the recent presentation to the Commission

On 20 June, Stanwell met with Commission officials to discuss elements of the CRM. The following provides an overview of the issues identified by Stanwell:

- To date, Stanwell has been reasonably comfortable with the Commission's approach to the CMR (i.e. assessment of materiality and cost/benefit approach), which was reinforced in the March Directions Paper.
- The two major trading issues facing Stanwell are managing the risks (price and volume) following the entry of vertically integrated entities associated with the introduction of Full Retail Contestability (FRC) in Queensland and the sale of the Government Owned Retailers. The impacts of an emissions trading scheme (and other greenhouse policies) is another key risk facing the organisation. The choice of permit allocation methodology is critical in minimising the financial impacts to incumbent generators.
- Based on a materiality assessment (current and future), dispatch risk due to network congestion is a second order issue for generators in Queensland. Instead, the regulatory risk associated with the outcome of the CMR review (i.e. whether a specific scheme will be introduced in Queensland) is of greater concern to Stanwell rather than the risks presented by the level of future congestion. This particularly relates to managing basis risk under a congestion management regime and the impacts for contract market liquidity.
- Of recent times, constraints in Queensland have typically bound due to network outages (for example 23rd and 24th January – Tarong Switchyard outage). Stanwell considers that improved market-based incentives on network operators would assist in reducing the financial impacts of constraints.
- Queensland is characterised by high demand growth, which will be met by further large-scale generation investments. While this continues, network reliability investments will continue, which will indirectly address the problem of congestion. Based on current investment plans, Powerlink analysis suggests that the 'Tarong constraint' is manageable until 2011.
- As detailed above, the key drivers in investment decisions are access to competitively priced fuel (and water), necessary transmission infrastructure, and greenhouse policies and incentives. It is unlikely that locational pricing will drive further generation investment in North Queensland or alter the timing or size of investments in Surat Basin. With respect to North Queensland, network support agreements will continue to be effective in providing the necessary level of supply to maintain reliability to the region. However, this arrangement could be improved by measures such as increasing the term of the agreements.

- From the perspective of a Central Queensland generator, the benefits of a broad application of locational pricing in Queensland are unclear.
 - The key issue is the Tarong constraint and (and its impact on the interconnector);
 - When it binds, Central Queensland generation will have a second order impact on the Tarong constraint;
 - To meet reliability requirements for summer 2008/09, Powerlink is planning an augmentation of the link to South Queensland; and
 - Based on access to fuel and rail (and marginal loss factor considerations), it is unlikely that there will be further generation investment in Central Queensland.

- Stanwell is aware that the Australian Energy Regulator (AER) is developing a Transmission Network Service Provider (TNSP) performance standards framework which incorporates market-based impacts. Further, the Australian National Transmission Planner is to be established as part of the new National Energy Market Operator (NEMO), which will improve the framework for investments impacting the major national flow paths. The benefits of these policy initiatives need to be observed before significant market reform is initiated.

- Incremental market design changes could assist in facilitating a greater level of inter-regional trade and allow participants to better manage trading risks including:
 - 'Firmer' inter-regional settlement residuals (IRSR); and
 - Improved information provision relating to constraints (including NEMMCO management).

A copy of this presentation is attached.

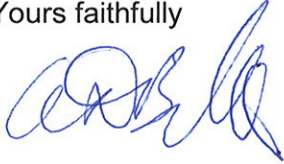
Stanwell Rule change and network reconfigurations

Of recent times, Stanwell's primary focus in relation to transmission matters has been on addressing the unmanageable risks facing generators with regards to the financial implications of network reconfigurations. In the case of Stanwell, Powerlink Queensland is proposing to undertake a reconfiguration of the network in the Kareeya Power Station area, which under the current regulatory framework is likely to result in increasing connection charges and the inability to provide System Restart Ancillary Services.

As the Commission is aware, Stanwell recently proposed a package of regulatory changes to address this gap in the Rules. In part, this involved proposing the establishment of a framework in the Rules (the Stanwell Rule change) which would take into account the impact of network reconfigurations on network users when making investment decisions.

While Stanwell appreciates that the Commission has completed the Transmission Revenue and Pricing Review and issued a Final Rule Determination on the Stanwell Rule change there remains an ongoing risk for network users with possible broader market implications. Stanwell is still very keen to discuss these matters further with the Commission.

Yours faithfully



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