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Mr Lyndon Rowe  
Economic Regulation Authority  
Level 6 Governor Stirling Tower  
197 St Georges Terrace  
PERTH WA 6000

Dear Lyndon

## **ANNUAL WHOLESALE ELECTRICITY MARKET REPORT**

Thank you for the opportunity to comment on the Authority's discussion paper: "Annual Wholesale Electricity Market Report to the Minister".

Synergy has developed a substantial body of knowledge by virtue of our activities in the WEM's Short Term Energy Market (STEM), balancing and capacity markets. Further, Synergy has been active in the wholesale market attempting to put in place new supply agreements via the vesting displacement mechanism and other bilateral arrangements.

Synergy notes that, as a market, the WEM is in its infant stages and hence its effectiveness is still to be evidenced. However, despite its infancy, Synergy believes that the Wholesale Electricity Market Rules (**the WEM Rules**) and their application by the Independent Market Operator (**IMO**) have ensured that there exist appropriate systems, processes and procedures to ensure the effectiveness of the WEM in the short to medium term. This is reflected in the fact that many of the issues raised by the Authority for comment are already under consideration by the IMO, or where the issue relates to broader industry structure and policies, by the Office of Energy (**the OOE**).

Synergy provides the attached submission to the Authority and would be happy to discuss any matter raised herein directly with the Authority.

Yours faithfully

**TREVOR JAMES**  
**HEAD OF WHOLESALE (ACTING)**

#### **Discussion Point 4**

**The Authority invites comment on whether the risk that a network connection will not be delivered on time impacts on investment incentives, including incentives to invest in new facilities on particular parts of the network.**

Synergy notes the critical interaction between the available capacity of electricity transmission infrastructure and the siting of generation plant. In particular, Synergy notes that the South West Interconnected Network (SWIN) remains primarily a radial network with generation centred at Collie, and, to a lesser extent, Kwinana, and supply radiating to extremities at Kalbarri/Kalgoorlie/Albany. The past practices of Western Power are continued under the current Access Arrangement, with the costs of connection being directly applied to the proponent requiring it. As such, network capacity favours generators sited in the Kwinana and Collie regions, where there is already access to connect to the HV transmission grid. Generators sited at the extremities have had considerable difficulties in being connected at full capacity. This is especially an issue for renewable generators such as windfarms, which by nature are unlikely to be sited in either the Collie or Kwinana regions. They are likely to be sited at the extremities and the reliability and capacity of the HV grid may therefore be a significant barrier for such development.

Synergy has previously drawn to the Authority's attention, the concern that the main transmission lines between Collie and Perth are also approaching full capacity. In particular, Synergy notes that Griffin's Bluewaters 1 Power Station's ability to supply Boddington Gold Mine is dependant on the upgrade of the existing 132kV line. In addition, the connection of the Pinjarra gas turbines has compromised access to transmission for further capacity expansions in that region.

Synergy is aware that upon the scheduled retirement of some existing generators, network capacity will become available (physically). Synergy holds that this capacity must be released by Western Power to other generators. If not, this quarantining of network capacity will act as a further barrier to competitive entry by new generators.

While the transmission system's capacity constraints have been recognised and Western Power's construction programme brought forward, it is likely to remain a constraint on the ability of new generators to be connected.

Synergy is concerned that these network constraints will continue to have significant implications to the efficient siting of generation plant, and in doing so, impinge on the efficient pricing as required by objectives 1, 2 and 4 of the WEM objectives. We therefore request that the Authority undertake a review which assesses:

- The implications of a carbon cost on network investment.
- The state of the SWIN with regard to accommodating potential new generation siting.
- Availability of transmission capacity to the market when generation plant is retired.

We request that such a review be undertaken in time to input into the Authority's next review of the Western Power Access Arrangement.

## Discussion Point 7

**The Authority invites comment on the extent to which the reserve capacity mechanism, along with other elements of the WEM, provides appropriate incentives for investment in a mix of new generation plant. The Authority is interested in specific factors that might have deterred potential new investment in the market.**

Synergy notes that an efficient electricity system requires a combination of services provided to meet base load, mid-merit and peaking load tranches. Generators providing these services earn the following revenue streams to finance their operations:

- Energy sales (achieved either through bilateral contracts or trading in the STEM);
- Capacity Credits (issued by the IMO)
- Ancillary services, such as balancing.

At present ancillary services are provided in the main by Verve. Synergy addresses this issue when responding to Discussion Point 110 below.

Synergy notes that peaking plant, as a reflection of its reduced capacity factor (less than 10%) is usually provided from Open Cycle Gas Turbines. This plant relies on capacity payments with limited energy sales, either from the STEM or as bilaterally contracted, to underwrite its operations. This can be compared with a mid-merit plant (with capacity factors of up to 30%), which relies on an increased quantum of energy to supplement ongoing capacity payments. Base-load plant, however, relies predominantly on energy sales, contracted over the long term to underwrite their plants. Synergy plays a substantial role in encouraging such plants into the market.

Synergy therefore views the WEM Capacity Mechanism as providing some revenue certainty for providers of peaking plant and to a lesser extent mid-merit plant. We note, however, that these payments do not provide significant incentives for the construction of base-load plants – nor did the market design intend them to do so.

From our learnings in undertaking power procurement for new generation plant, Synergy has identified the following requirements to bring a base-load plant into the market:

1. Competitively priced, long term fuel supplies (e.g. coal or gas)
2. Firm access to transportation infrastructure (eg T1 gas access, electricity transmission access)
3. Long term bilateral contracts with retailers for energy sales
4. Allocation of risks associated with climate change policies and overall certainty as to the eventual legislative obligations.

Synergy notes that without these arrangements in place, it is very difficult for base-load generators to obtain finance, especially without point 3.

While there have previously existed barriers to entry in the market, most notably as a result of gas shortages, limited network access and uncertainty about future carbon prices, Synergy acknowledges that many of these issues are now being addressed by the OOE. We welcome the opportunity to engage with the OOE and other industry participants on these matters.

## Discussion Point 8

The Authority invites comment on the appropriateness of the mechanism for determining the reserve capacity price. In particular:

- Does the reserve capacity price provide appropriate investment signals;
- Would investment signals be improved by a shift to a reserve capacity price that is determined using a mechanism more closely reflecting market outcomes;
- What, if any, barriers currently exist that would impede a shift to a reserve capacity price that is determined by the market;

Synergy has assessed the outcomes achieved through the Reserve Capacity Mechanism to date against the overarching objectives for the WEM.

Synergy notes that the Market Rules inevitably lead to an outcome of excess capacity over the Reserve Capacity Requirement. Synergy views excess capacity as inevitable in the wholesale market, given the lumpy and indivisible nature of generation capacity. Excess capacity can be an efficient outcome if it permits new plant to enter the market to achieve economies of scale (eg to accommodate a 400 MW plant) rather than installing smaller units (eg. 100 MW each), which will have higher levelised costs. Synergy holds that permitting excess capacity in the market can reduce barriers to entry for new plant since it allows new entrants to be paid in full for all capacity installed, rather than capacity required in a given year.

However, excess capacity imposes costs on existing generators, retailers and ultimately customers. Excess Capacity results in a decline in the value of existing Capacity Credits via the sliding scaled administered price mechanism. This has the potential to impact both the risk profile and ongoing revenue streams of generators, who rely on the value of these Capacity Credits to finance their projects. Retailers will attract excess capacity charges in proportion to their market share. It would be strategic for these retailers to seek to pass through these costs to customers, who will therefore be subject to increased electricity prices. However pass through of the additional excess capacity charges and other statutory charges is not always possible since price caps are in place for customers using less than or equal to 160 MWh per year. These price caps, or Gazetted Tariffs, are set by Government, with the Tariff By-Laws subject to tabling in Parliament.

In this regard Synergy notes the comprehensive review of electricity tariffs recently undertaken by the OOE. We appreciate the opportunity to identify key strategic issues associated with the market structure and the encouragement of generators to enter that market. Further, as the advocate for our customers we have greatly appreciated opportunities to discuss tariff outcomes which will mitigate the potential for price shocks in the retail market.

Synergy notes the Authority's comments with regard to a potential shift to a reserve capacity price that is determined by the market. However, we see such a move as potentially discouraging entry of new generators, given that a market price may be highly volatile from one year to the next, and as such would provide no price certainty to proponents.

## Discussion Point 10

**The Authority invites comment on the effect of moving the STEM closer to real time or of introducing multiple gate closures. In particular:**

- **Would this encourage greater participation in the STEM or improve outcomes in the STEM, including through improved price signals;**
- **Would the benefits to participants outweigh the costs to participants; and**
- **What, if any, barriers are there to such a change and what do these barriers suggest for the timing of such a change.**

As identified in Synergy's response to Discussion Point 7 (above), the STEM has specifically been designed to accommodate the fact that the Western Australian electricity market is essentially a long term bilateral contract market. For example, the STEM allows retailers and generators to adjust their bilateral contract positions a day ahead of the Trading Day and also optimise their contractual arrangements. However at the same time, the STEM has not been designed to function as a long-term source of supply for a significant portion of a retailer's customer portfolio, given its day-ahead nature and relatively lower price risk associated with the alternative of bilateral contracts.

Synergy perceives a weakness in the current market design in that it limits the interactions between Market Participants by insisting that trading positions, being a demand forecast for a retailer and a resource plan for a generator, be determined in the morning of the day before the trading day. No flexibility to adjust these positions closer to real time is allowed. This is particularly significant for Western Australia given that the majority of loads are weather dependent. Greater flexibility would allow retailers to adjust their requirements closer to the actual trading interval, based upon current weather forecasts. It is Synergy's position that generators should be authorised to change their resource plan to account for changes to retailers' demand forecasts, the replacement of one generator with an equivalent unit (thereby not impacting total supply) and the inclusion of generators returning early from planned outages<sup>1</sup>.

Further, Synergy anticipates a substantial increase of intermittent generators within the WEM, such as wind farms, arising from the extension of the MRET scheme. Amendments to the market structure to accommodate a gate closure closer to real time would allow such generators to adjust their positions to reflect the implications of changed weather forecasts on generation capabilities.

Synergy views the inability of market participants to adjust their contracted position or resource plans within the trading day, without incurring penalties for deviations, as resulting in a less than efficient outcome with any costs or penalties ultimately being borne by customers. This is however, not an insignificant change to the market rules, procedures, processes and systems and will therefore require considerable review, modelling and debate between regulators, market participants and the OOE. We note that this issue has been the subject of much discussion at the Market Advisory Committee with the establishment of a working group chaired by the OOE. Synergy holds the view that the processes to address this important concern are well in train and will result in appropriate outcomes.

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<sup>1</sup> If a generator scheduled out for maintenance returned early and produced electricity it would suffer a penalty because its production was not included in a resource plan. Similarly the generator in the resource plan producing less to accommodate the returning generator would suffer a penalty by not meeting its resource plan.

## **Discussion Point 11**

**The Authority invites comment on the extent to which Verve Energy's exposure to forecasting errors in the balancing market impacts on the effectiveness of the market. The Authority invites comment on barriers to the introduction of competitive balancing arrangements.**

Synergy notes that Verve Energy currently fulfils the key role of balancing out the difference between demand forecasts, actual generation dispatch and actual SWIS load. Verve effectively controls the balancing mechanism by acting as the swing generator. It is Synergy's view that a more efficient approach would be to allow all generators to offer balancing via incremental offers and decremental bids from each generator. This was a feature of the original market design, but was deleted in the final version of the market rules because Western Power was not disaggregated at the time the market design was finalised. This being said, it is important to note that this is a substantial change to the market design and the need for system, rule, and procedural changes will come at a substantial cost to Market Participants, and in turn, their customers. The merits of such a change must therefore be closely scrutinised against these costs. Synergy notes that Verve Energy has recently advanced a rule change aimed at increasing the balancing payments they attract by virtue of the balancing price being reset for every trading interval. Synergy would consider any further rule changes put forward by Verve Energy to address cost exposures arising out of their balancing role on their individual merit.

### **Discussion Point 15**

**The Authority invites comment on the rule change process and procedures, the consultation process for rule change proposals and the time taken to have a rule change proposal considered and finalised.**

Synergy notes that there has been a significant number of the Market Rules subject to review and amendment and this has created a significant regulatory impost for Synergy. The Rule Change processes in place are onerous, with a twenty week process required to amend most Market Rules, although in limited circumstances a fast track approach may be adopted. This being said, from Synergy's perspective it is more appropriate to have a substantial, but sound, review of all prospective Market Rules, rather than expediting them in a manner that results in unforeseen consequences, and the need therefore for subsequent review and amendment. This would result in unacceptable regulatory risk for Market Participants. Synergy therefore views the IMO's current processes as being appropriate given the relative infancy of the market.

Synergy acknowledges the benefits of the Market Advisory Committee (MAC) in providing a forum for Market Participants to discuss issues associated with the interpretation and operation of the Wholesale Market Rules.

Synergy would like to take this opportunity to commend the IMO for the manner in which they support the Rule Change Process, most particularly the assistance provided to Market Participants in structuring amendments and in the professional manner in which stakeholder consultation is undertaken.

## Discussion Point 16

**The Authority invites comment on whether System Management remaining with Western Power impacts on the effectiveness of the market and, if so, in what way.**

Synergy is generally satisfied with the manner in which System Management has undertaken its role to date. We have no immediate concerns with System Management remaining with Western Power, however, we believe that this is an appropriate time to consider the need for an electricity retail market operator in this State.

Synergy notes that at present there is no formal retail electricity market operator in Western Australia, with most of these functions being carried out informally by Western Power. The introduction of Full Retail Contestability (FRC) for electricity will result in a substantial increase in customer churn and we remain concerned that current arrangements will not be adequate to efficiently manage such an increase in transactions. Synergy therefore sees the establishment of an electricity retail market operator as a prerequisite for the introduction of Full Retail Contestability (FRC).

Synergy has a strong preference for the creation of an industry funded retail market operator. Under this model the Government and its regulators would be responsible for market regulation and policy, while the market operator would be responsible for the implementation and operation of the retail electricity market. This preference stems from Synergy's experience with REMCo, where the general perception has been that the market operator is very responsive to industry needs<sup>2</sup>.

Synergy notes that prior to any such arrangements being progressed, it would be necessary for a lengthy consideration of a range of issues, including, costs vs benefits, technical feasibility, industry vs government funded/owned, policy vs market functions, the role of market participants, the creation of new market opportunities and the changes necessary to existing governance arrangements.

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<sup>2</sup> As concluded by REMCo's Report on Rule 17 Review of Retail Market Rules, published on 10 September 2007.