

1 February 2016

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Submitted via ERA Portal

Dear Ms Walters

# 2015 Wholesale Electricity Market Report to the Minister for Energy

Thank you for the opportunity to provide input to the WEM Report that the Authority is submitting to the Minster for Energy. As a long standing market participant, Perth Energy is keen to see the WEM continue to develop as an efficient and competitive market which will provide significant benefits to electricity customers and the broader public.

As an overall comment we consider that several recent market operational changes have provided benefits to consumers but these have been overwhelmed by negative developments on the structural policy side. We note that the focus of this review is to identify any existing or emerging issues which may not be dealt with as part of the current Electricity Market Review (EMR) reforms and have sought to restrict our comments to these. However, we see it as imperative that we also draw attention to issues that EMR may have placed on its agenda but may not be assigning a level of urgency and priority that Perth Energy believes it should.

# The Reserve Capacity Mechanism and Balancing Market

Perth Energy considers the establishment of the Balancing Market (BM), in conjunction with the Reserve Capacity Mechanism (RCM), to be core successes of market reform over the last 10 years. The creation of an all-encompassing wholesale market for energy, backed up by a high reliability standard capacity supply mechanism operated by the Market Operator, has successfully decoupled the need for new entrant retailers from having to build their own generation, leading to a more efficient and flexible trading environment for suppliers and consumers.

On the operational side, the further development of the BM since 2012 has provided considerable flexibility for both retail and generation operations through the relatively short gate closure and the creation of an effective gross pool. It allows generators to respond to imbalances in overall supply and demand and, as such, improves the efficiency of the supply side of the market. Perth Energy believes that the price outcomes are efficient and that generators are responding appropriately to

price signals. Further improvements regarding shorter gate closures for bids and reducing the half-hour interval are currently being contemplated by the EMR.

But on the structural side, EMR appears to have missed the critical relationship between the BM and RCM, particularly the caps placed on balancing prices.

The existing price caps are based on generator short run marginal cost (SRMC) and are designed to work hand in hand with the Market Rules applicable to the RCM and the formula governing determination of the Reserve Capacity Price (RCP). The RCM and BM make up the hybrid structure of the WEM and it is not feasible to change the RCM as proposed in the EMR Position Paper (released in December 2015) without changing the BM to complement the proposed RCM changes.

As the RCM is designed to make a return of and on capital for generators so that they can commit under the Market Rules to dispatching energy at SRMC, if the promise of return of and on capital is taken away or made highly volatile then the obligation for dispatch at SRMC must also be removed. If the Reserve Capacity Price can go to zero at the current excess capacity level of 23% then balancing energy prices should be able to go towards the NEM level of \$13,500/MWh, which is currently 40 times higher than the balancing price caps.

Yet allowing BM price caps (for liquids and gas fuelled energy) to increase well above generator SRMC for efficiency purposes would open up significant gaming risks due to Synergy's overwhelming market power. Synergy owns 55% of WEM generation capacity and controls another 20% by virtue of its long term PPAs with private generators. Control of 75% of generation capacity represents the single biggest impediment to a truly efficient BM in the long term. Preferably, BM prices should be able to reach levels that represent the value of lost load (VOLL) as seen in the NEM.

A liberated BM would allow the RCM to be modified while maintaining the economic relationship rationale that generators' promise to dispatch energy at a certain cost is predicated on the probability of their return rate of capital in the RCM. Steepening the RCP curve that could lead to price shocks many times as severe as currently possible, with the potential of the RCP falling to zero at just 20% excess capacity while ignoring the BM means proposing that generators could go insolvent on the RCM side while not allowed to recover any margin on the BM side.

Note that we have already seen 23% excess capacity simply because of IMO misapplication of Rules and misdirected government policy without any market driven input from generators or customers. The IMO mistake has led to 560MW of Demand Side Management loads being certified as "capacity" eligible for RCP payment and misdirected government policy that has allowed Verve, now Synergy, to hold on to 600-700MW of excess capacity that should have been closed down following Verve's unsuccessful bids to supply then separate Synergy under the Vesting Contract's Capacity Displacement Program. A 20% excess capacity level at which the RCP could go to zero, therefore, would be a high probability risk in the WEM.

The WEM is small, with system maximum demand of under 4000 MW compared to say the PJM market in the United States with over 130,000 MW. It is relatively easy for WEM to reach 20% excess considering the lumpy nature of power stations and mining loads, with the resources sector

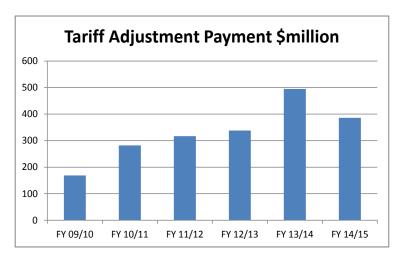
dominating the SWIS demand landscape whenever it is in upswing. A proper buffer for excess demand / supply with zero RCP outcome should be at least 40%, with any discrete load larger than 1-2% of total system demand being required to source its own supply through bilateral contract before being granted grid connection. This will avoid large demand forecast errors and minimise any potential market imbalance.

Perth Energy therefore sees the current high level of market concentration in the WEM, caused by the Verve-Synergy merger, as the show stopper towards the SWIS achieving a truly efficient and competitive market that will benefit consumers. This is highlighted by the following 2 charts:

# Average A1 Unit Charges (inc GST) 35.00 25.00 25.00 15.00 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Unit Charge (c/kWh) - with carbon Unit Charge (c/kWh) - no carbon

**SWIS Residential A1 Tariff Movement** 





Source: Synergy Annual Reports

Both the main Synergy residential A1 Tariff AND Tariff Adjustment Payment (TAP) subsidy that government pays to Synergy have grown substantially over the last 6 years. Since the TAP is supposed to be covering for the Franchise market's cost of supply, the near 100% A1 Tariff increase in combination with the near 300% TAP growth would have raised the effective revenue from this market segment, small business and residential inclusive, to Synergy in the order of 400%.

The TAP is based not on actual costs carried by Synergy but on a theoretical new entrant "optimal" portfolio generator's cost of supply assuming a full suite of new build power stations. Disconnected from actual costs, the TAP gives zero incentive to Synergy to improve its performance. It also assumes the PUO, which estimates this subsidy, knows what the future holds for a supplier wishing to source generation to supply the Franchise market. Considering the current excess capacity in the market, with no new build forecast for the next 10 years and with new technologies such as solar PV and energy storage entering the market, this is a brave assumption.

The EMR Position Paper thus focuses on a rather immaterial if not irrelevant feature of the WEM, around the RCP determination regime, while the major issues of 1) the prospect of remonopolisation of the market following the Verve-Synergy merger, 2) excess capacity being held by Synergy that has been depressing retail pricing in the contestable market, and 3) continued TAP subsidy, are not being urgently addressed.

## **Retail Market Competition**

The SWIS is a schizophrenic market with the Contestable segment (commercial and industrial users) enjoying the fruit of retail competition while the Franchise segment – the vast 1 million residential and very small business customers – enduring higher Tariffs as shown above.

This is a direct result of the artificial excess capacity caused by IMO's misapplication of DSM rules and government condoning Synergy breaching the 3000 MW capacity cap and Capacity Displacement Program. Due to its market power, Synergy is required to dispatch its plants at short run marginal cost (SRMC) and has had to spill coal fired energy at negative price at night when its own procured Collgar Wind Farm also generates. The result is very depressed BM energy prices. So Synergy has tried to hold on to excess capacity only to place the entire industry in a loss making environment. But Synergy is willing to do this only because the government has been willing to give it \$ billions in TAP subsidies over the years (\$495m in 2013-14 and \$386m in 2014-15). The effect in the Contestable market is akin to predatory pricing.

Due to basement RCP and BM prices, Contestable customer pricing has been well below true cost of supply, which has forced Synergy to allocate more and more of its fixed costs to the Franchise segment, where its customers are captive. Synergy then claims that it is not recovering costs in the Franchise segment to justify the TAP when in fact the residential Tariffs are so high they have been recovering true costs since 2012-13. Taxpayer money in the form of TAP is being used to deprive Synergy's private sector competitors of fair economic return as they can only operate in the Contestable segment.

This is setting the industry up for instability as it is not sustainable. Price shock to the Contestable market is only a matter of time.

The EMR Position Paper's proposed RCM changes cannot be considered without the following critical conditions being achieved:

- Synergy closing down 600 MW of very old inefficient plant (1000 MW excess procurement under Vesting Contract CDP less the 380 MW Kwinana Stage C plant that the Energy Minister directed Synergy to close in 2014-15)
- Synergy being required to operate under individual facility bidding like every other generator
- TAP is withdrawn from Synergy or distributed to all incumbent retailers according to market share
- Balancing Market price caps being lifted from their SRMC levels to allow efficient energy products like DSM to adequately earn economic return
- DSM being shifted from the capacity market to be allowed to bid into the Balancing Market and be allowed to clear at much higher BM price caps than currently the case
- Introducing FRC as soon as possible so that all cross-subsidies are flushed out and true cost of supply to each segment is spotlighted on for efficient retail pricing.

It was noted at the recent workshop that market share held by the main retailers has not moved as much as might be expected. Perth Energy suggests that this is a function of retailers putting a strong emphasis on retention of existing customers rather than seeking out new customers as a result of competition being constrained to preventing further retail losses. The only way to rectify this situation is for the government to implement the conditions listed above.

# **Synergy Standard Products**

The Standard Product scheme was created so that all retailers could access energy at the same prices being offered to Synergy's Retail Business Unit (RBU) and so that the market has a price discovery channel which can be used as the basis of trades with Synergy and other parties. However, the buy/sell spread mandated in the scheme is wide because it reflects the excess capacity that Synergy holds – the utility is very long on energy and does not place value on buying back from the market.

Under a properly functioning and competitive market where the energy and capacity markets move into balance, and Synergy's market power being mitigated, the Standard Product prices should be much closer to actual traded prices thus becoming a genuine risk management mechanism. Currently, the relative gap between Standard Prices and BM prices also reflect Synergy's market power so the premium required of fixed (ie. hedged) energy prices is far higher than otherwise should be in a fully competitive market. In our view, the Standard Product scheme does not work in its current form due to the structural and policy defects blanketing the market.

# Synergy Retail Business Unit Structure

The Verve-Synergy merger has fundamentally undermined the competitive structure of the market in several ways:

- It lifted the moratorium placed on Verve as the dominant generator not to be able to retail directly, and on Synergy as the dominant retailer not to be able to generate power directly, this moratorium being a critical measure to mitigate the utilities' market power
- It allows the merged entity to use internal ring-fencing, in conjunction with the TAP subsidy, to absolve Synergy retail business (RBU) from being accountable for its own cost of supply, resulting in RBU being able to price customers in the Contestable retail market at or below short run marginal cost to damage competitors
- It allows Synergy to use the subsidy to repay debt, part of which has also been transferred to WA Treasury Corporation, effectively passing on generation risks to the taxpayers
- It prevents the Balancing Market from being able to made more efficient as a whole by having stringent SRMC rule being applied to all generators and especially (and correctly) Synergy.

As currently established, RBU can simply use the Balancing Market to buy electricity at unhedged short run marginal prices and offer this without being required to cover the legacy costs of its past decisions. In offering such low prices it does not appear to be undertaking any realistic risk management but is relying on its TAP covered GBU to address any market risk or potential losses in the future. Even a private new entrant, without any legacy cost in the WEM, would still not be able to match RBU's unhedged position because it would face risk of insolvency whenever spot prices turn against them while Synergy would not.

It has been contended that Synergy could not have been engaging in such predatory pricing because it has continued to lose market share. However, much of Synergy's market share loss had been incurred prior to the merger, with incumbent retailers' market share moving only marginally over the last 3 years. The only reason why RBU has not claimed back market share has been due to competing retailers (with their hedged position) having to follow RBU down to basement pricing in order to stay in the market given their significant investments already made in WEM.

This situation is opening up extreme volatility in the market, with the Contestable market facing potential price shock in the near future due to the unsustainability of the current situation.

# Synergy Profit and Loss Reporting

Perth Energy believes that separate profit and loss reporting for RBU's Contestable and Franchise markets as well as separate reporting for GBU, wholesale business unit (WBU) and RBU should be made available to the public. This will allow public scrutiny of the results and provide transparency to the government and industry with regard usage of taxpayer money by Synergy and whether market power has been abused.

## Synergy Data Imbalance

Because Synergy supplies all Franchise customers it has full access to all small business and residential customer meter data. This means that it can see when a small business customer's load is increasing to the point of being contestable which then allows Synergy to make contract offers to such loads without any knowledge of the loads or other retailers that customers have a choice. This unfair advantage held by Synergy needs to be addressed urgently.

In previous years and under previous Contestability threshold levels being reached, the then Office of Energy would provide a list of potential Contestable customers to the public and this would prepare the market to provide competitive bidding to customers. Government policy was also that the vertically integrated Western Power at the time would not be allowed to write long term contracts prior to a lower Contestability threshold being reached and would be directed to terminate all contracts written with those newly Contestable customers so that the latter could choose to renew or not following free choice. This public benefit is no longer available since the closure of the Office of Energy in 2010.

The lack of public information regarding the rights of customers under Contestability is concerning. Perth Energy has noted that many Contestable customers do not yet appreciate that the market is open to 5.7kW average demand and that they can seek alternative supply offers. We recommend that ERA resume what the Office of Energy left off, to publish a list of Contestable customers drawing from Western Power's meter data and provide this list to all registered retailers in WEM. This list should be updated annually to include customers whose demand has increased to Contestability level.

Synergy should also be required to advise customers when they become contestable and provide a transition period during which time the customer may opt to leave Synergy and take supply from an alternative provider.

Unless customers know their rights and are free from constraints designed to limit their rights upon Contestability, competition in the market is effectively limited and the public benefit eroded even before competition starts.

# Integration of Constrained Network Access and the Reserve Capacity Mechanism

At present whenever a new generator is connected to the grid sufficient network transmission lines and equipment are supposed to be provided to ensure that the generator can operate at full output at all times. There are, however, a number of "run-back" schemes in place where Western Power has allowed generators to connect to the grid even though there is insufficient capacity to export their power under all reasonable grid operating conditions. In the longer term, all access offers will be based on constrained access.

No consideration appears to have been given as to how these constraints are to be integrated with the requirement under the Reserve Capacity Mechanism that a generator must offer its full capacity at all times. Perth Energy is keen to understand how this is to be addressed. For example:

- How will capacity credits be assigned?
- Will capacity credits be reduced if a new generator constrains access for an existing generator?
- Will existing rights be grandfathered, compensated or extinguished?
- Will Western Power be obliged to give an access applicant an estimate of the level of constraint that a new generator might expect, or cause to an existing generator? (It has refused to do this when offering run-back schemes but it is critical to the investment decision).

Perth Energy sees these as emerging issues that appear to have been overlooked to date.

# The impact of "causer pays" for Load Following Ancillary Service (LFAS)

At present the cost of load following is spread across all users of the transmission system. The Authority has indicated that it would like to see a "causer pays" system in which, presumably, those participants that cause demand and supply to move out of balance will be required to carry the costs. Perth Energy appreciates this in concept but is reserved about as always about the practical impact on generators when such concepts are implemented. We are concerned about the quantum of any impact of such a change and any change in resultant costs for generators would need to be recognised in the Reserve Capacity Price determination.

# Cost reflective network prices

There has been some public discussion on the fact that network prices are not cost reflective. The bulk of Western Power's costs are fixed in the short to medium term but prices for smaller customers are passed through on a per unit basis. This mismatch is highlighted in supply to domestic customers who have solar PV panels and are seen to be making use of the fixed capability at less cost than their neighbours. By providing a pricing subsidy to solar PV system users Western Power's approach could also be seen to be directly in conflict with the market objective to avoid discrimination against particular energy options or technologies.

Perth Energy notes that, in the medium to longer term, the whole issue of regulated network prices needs to be reviewed. Technology changes mean that networks are no longer a monopoly but are part of the supply chain in which central generation plus delivery networks compete directly against local and behind-the-meter generation. Perth Energy would encourage the Authority to take the lead in discussing this issue so that some efficient ground rules can be put in place.

### Conclusion

Perth Energy has grave concerns over the general structure of the WEM because of the Verve-Synergy merger and its fundamental impact on the market. Synergy's market power and the TAP subsidy accorded the utility are causing major distortions in the retail market. The release of the EMR Position Paper compounds the state of affairs by unwittingly focusing on an immaterial issue in the RCM regime, being the RCP determination regime. As neither the RCM nor RCP regime is the cause of excess capacity in the market or of severe increases in Franchise customer Tariffs, particularly residential Tariffs, the EMR program is not targeting the right sources of market dysfunction and distortion.

As the sources of dysfunction and distortion can be rooted to government policy, we recommend that the Authority provide the Minister with full and thorough insight into the issues discussed in this submission.

Should you wish to discuss any of these matters further I would be happy to make the time available.

Yours sincerely

**Ky Cao** 

**Managing Director**