

Agenda item 10, Appendix 1:

Future procurement of Spinning Reserve and Load Following

The 2009 Review of Ancillary Services Requirements, Processes & Standards¹ by the IMO concluded that:

- changes should be made in order to reduce the reinforcement of the dominance of Verve Energy in the provision of Ancillary Services; and
- a real time market for the procurement of Ancillary Services is not implemented at this time.

In addition, the Economic Regulation Authority's 2008 Annual Wholesale Electricity Market Report to the Minister noted that:

The Authority strongly supports further moves towards competitive procurement of ancillary services.

Based on the above, System Management's intention is to transition to full provision of the Ancillary Services requirement by contract, either on a forward fixed-price or daily bid arrangement. However, provision of these Ancillary Services solely by contract is not without risk, and System Management will consider transitioning steadily towards this end point.

The options System Management are considering should work with any balancing regime. In addition, Participant's have indicated that there is impetus to resolve these issues now, prior to the implementation of a new balancing regime, which may take up to three years.

The first option to transition to this end has already been attempted:

1. Contract with non-Verve Energy Participants using the current Market Rules ie that a tender would have to be based on availability only and in line with current payments to Verve energy (ie a proportion of MCAP), and at a discount to Verve Energy (ie less than 100% of Margin_Peak and Margin_Off-Peak).

There are two other options to reach this end point:

2. Remove the existing Market Rules and replace them with a payment mechanism based on lowest tendered fixed price for a fixed period, and dispatch where Participants are committed. In this option only the lowest number of facilities (those that have tendered the lowest price) will provide the service.
3. Remove the existing Market Rules and replace them with a payment mechanism based on lowest bid price (per interval or per day) on the

¹ Available at: http://www.imowa.com.au/f685,166353/AS_Study_Final_Report.pdf

Scheduling Day where the facilities are committed. In this option many facilities can provide the service.

It should be noted that the discussion below relates only to the availability payment for the service. All energy deviations from Resource Plan would be authorised and settled at MCAP, as per current Market Rules ie UDAP and DDAP would not apply.

1 Option 1

System Management completed an EOI for Load Following in December 2009. The structure of the EOI was based on the current Market Rules ie that a tender would have to be based on availability only and in line with current payments to Verve energy (ie a proportion of MCAP), and at a discount to Verve Energy (ie less than 100% of Margin_Peak and Margin_Off-Peak).

Complete documentation², including a probity plan, template Deeds and Assessment Guidelines, were prepared and published to provide certainty to prospective parties. This included terms and conditions attaching to the provision of the service.

There was no response to the EOI.

Participants indicated that the lack of response was primarily due to the following reasons:

1. lack of certainty surrounding the pricing mechanism (MCAP unknown);
2. provision of the service at a discount to Verve Energy was not attractive;
3. costs associated with installing generation control devices; and
4. physical ability of plant to deliver sufficient service.

In an attempt to address these issues System Management considers that:

- Item 3 would be addressed if the remuneration was sufficiently attractive (ie points 1 and 2 were met).
- Item 4 is a requirement to provide the service.

Therefore the issues reduce to the level of remuneration and the degree of pricing risk associated with the service.

Pricing on the basis of MCAP creates inherent risk for Participants. For example, MCAP, in addition to being volatile, can be zero or negative. This creates disincentive for Participants.

² Available at:

http://www.westernpower.com.au/mainContent/workingWithPower/systemManagement/Load_following_ancillary_services_.html

This would suggest Option 2 or Option 3 would be the most attractive to Participants.

2 Option 2

The second alternative is to replace the existing Market Rules with a payment mechanism based on lowest tendered fixed price for a fixed period, and dispatch where Participants are committed. In this option only the lowest number of facilities (those that have tendered the lowest price) will provide the service.

Participants would be required to provide the service only when committed, and thus to ensure availability the quantity contracted would be greater than the requirement. Thus, while the usage of the service would remain the same as current, the availability (and thus payment) of the service would be much larger than is currently the case.

Any Participant, including Verve Energy, would be able to tender, and therefore the price would not be artificially constrained, as in option one. System Management would contract with the lowest number of facilities at the lowest price that meet technical and performance requirements.

In order to achieve this, many sections of the Market Rules (in particular settlement rules) would need to be varied, as one structure would be exchanged for another. This is because the level of remuneration and the degree of pricing risk associated with the service are embedded in the existing Market Rules [MR 3.8.11 (b) and 3.11.8E], and many settlement payment Rules make this explicit.

System Management considers that an in depth review of these rules would be essential before changes could be considered.

Note that market power issues may exist in this approach.

3 Option 3

The third alternative is to replace the existing Market Rules with a payment mechanism based on lowest bid price (per interval or per day) on the Scheduling Day where the facilities are committed. In this option many facilities can provide the service.

Here, some (or all) Participants would enter into arrangements with System Management. However, on the Scheduling Day, System Management would select which facilities provide the service based on the lowest offer price for the Trading Day (or perhaps Trading Interval).

Any Participant, including Verve Energy, would be able to provide an offer price, and therefore the price would not be artificially constrained, as in option one. All facilities participating would be required to meet technical and performance requirements.

This is similar to the approach used in the NEM. It has the advantages of ensuring maximum availability of the service (greater than the daily

requirement), while ensuring the Market only pays for the services actually used.

In order to achieve this, many sections of the Market Rules (in particular settlement rules) would need to be varied, as one structure would be exchanged for another. This is because the level of remuneration and the degree of pricing risk associated with the service are embedded in the existing Market Rules [MR 3.8.11 (b) and 3.11.8E], and many settlement payment Rules make this explicit. System Management considers that an in depth review of these rules would be essential before changes could be considered.

Note that to avoid a perverse outcome, System Management will be required to follow transparent guidelines which may not result in the lowest cost providers being selected. For example, in the NEM the situation exists where a provider is selected for intervals 1 and 3, but not for interval 2. This situation, in the SWIS, may result in operational difficulties and must be avoided. The need for such discretion means that a purely automated system approach is not applicable.

Further, price caps may be applicable to limit market power.

4 Summary of advantages and disadvantages

Item	Option 2	Option 3
Amount procured	Greater than requirement	Equal to requirement
Service provided by	Facilities winning tender who are committed during the interval.	Facilities providing lowest offer who are committed during interval.
Price of energy provided	MCAP	MCAP
Price of availability	Set in tender for term of contract whether service is provided or not, to the level procured (which is greater than requirement).	Lowest offers for day to level of requirement (no excess procurement)
Length of contract	Fixed period (eg 1 year or more)	N/A
Flexibility of service provision	Limited	High
Process requirements	None (fixed for term of contract)	Activities on Scheduling Day for parties providing service and for System

Item	Option 2	Option 3
		Management.
Security of provision	Medium- limited to level of procurement requirement. above	High
Risk of market power	Medium	Low

5 Conclusion

System Management has attempted option 1, and is now considering options 2 and 3, each of which have differing advantages and disadvantages.

At this stage System Management's preference is for option 3.

Once the broad option has been selected System Management will identify the full process and details, as well as determine an implementation methodology (ie a direct change from one regime to another, or a phased approach).