Market Advisory Committee

Agenda

Meeting No.	30
Location:	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Wednesday 11 August 2010
Time:	2.00 – 5.00pm

Item	Subject	Responsible	Time
1.	**WELCOME**	**Chair**	5 min
2.	**MEETING APOLOGIES / ATTENDANCE**	**Chair**	
3.	**PREVIOUS MEETINGS**		
	a) Meeting No. 29: 16 June 2010- Minutes	**Chair**	10 min
	b) Special Meeting No. 3: 20 July 2010 - Minutes	**Chair**	10 min
	c) Special Meeting No. 3: 20 July 2010 – Decision (to be circulated late)	**Chair**	10 min
	d) Special Meeting No. 3: 20 July 2010 – Letter to IMO Board Chairman (to be circulated late)	**Chair**	10 min
4.	**ACTIONS ARISING**	**IMO**	5 min
5.	**MARKET RULES**		
	a) Market Rule Change Overview	**IMO**	2 min
	b) PRC_2010_11: Removal of NCS procurement from the Market Rules	**IMO**	15 min
	c) PRC_2010_12: Reserve Capacity Security	**IMO**	15 min
	d) PRC_2010_17: IRCR Timing	**Synergy**	15 min

Item	Subject	Responsible	Time
6.	**MARKET PROCEDURES**		
	a) Overview	**IMO**	5 min
7.	**WORKING GROUPS**		
	a) Overview and membership updates	**IMO**	2 min
	b) REGWG Update	**IMO**	10 min
	c) MRCP Update	**IMO**	10 min
8.	**CONCEPT/DISCUSSION/INFORMATION PAPERS**		
	a) Relevant Demand Analysis	**IMO**	15 min
	b) Information Confidentiality Project	**IMO**	15 min
9.	**MARKET RULES DESIGN REVIEW**		
	a) Market Rules Design Problem Statement	**IMO**	20 min
	b) Working Group Terms of Reference	**IMO**	10 min
	c) Working Group Proposed Membership Structure	**IMO**	5 min
10.	**IMO OPERATIONAL PLAN 2010/11**	**IMO**	10 min
11.	**GENERAL BUSINESS**		
12.	**NEXT MEETING: Wednesday 8 September (2.00 – 5.00pm)**		

Independent Market Operator

Market Advisory Committee

Minutes

Meeting No.	29
Location:	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Wednesday 16 June 2010
Time:	Commencing at 2.00 - 5.20 pm

Attendees	**Class**	**Comment**
Allan Dawson	Chair	
Troy Forward	Compulsory – IMO	
Stephen MacLean	Compulsory – Customer	
Ken Brown	Compulsory – System Management	
Wendy Ng	Compulsory – Generator	
Neil Gibbney	Compulsory – Network Operator	Proxy
Corey Dykstra	Discretionary – Customer	
Steve Gould	Discretionary – Customer	
Peter Huxtable	Discretionary – Contestable Customer Representative	
Andrew Sutherland	Discretionary – Generator	
Shane Cremin	Discretionary – Generator	
Rob Pullella	Observer – ERA	Proxy
Tony Perrin	Minister's appointee/ Small Use Customers	
Also in attendance	**From**	**Comment**
Kynan Smith	Synergy	Presenter
Alistair Butcher	System Management	Presenter
Jenny Laidlaw	IMO	Minutes
Jacinda Papps	IMO	Observer
Ben Williams	IMO	Observer
Fiona Edmonds	IMO	Observer
John Rhodes	Synergy	Observer

Item	**Subject**	**Action**
1.	**WELCOME** The Chair opened the meeting at 2.00 pm and welcomed members to the 29th meeting of the Market Advisory Committee (MAC).	

Item	Subject	Action
2.	**MEETING APOLOGIES / ATTENDANCE** Apologies were received from: • Peter Mattner (Western Power); and • Chris Brown (ERA). The following other attendees were noted: • Rob Pullella (proxy for Chris Brown) • Neil Gibbney (proxy for Peter Mattner) • Kynan Smith (Presenter) • Alistair Butcher (Presenter) • John Rhodes (Observer) • Jacinda Papps (Observer) • Fiona Edmonds (Observer) • Ben Williams (Observer)	
3	**MINUTES OF PREVIOUS MEETING** The minutes of MAC Meeting No. 28, held on 12 May 2010, were circulated prior to the meeting. The following amendments were agreed: *Page 3: Section 3: Minutes of Previous Meeting* • "The OoE noted a preference to develop a solution through the MAC given the committee's technical knowledge. ~~My~~ Mr Dykstra noted that this provides an opportunity …" *Page 3: Section 4: Actions Arising* • "Mr Dykstra requested clarification on what was being contemplated. It was noted that the costs of dual fuel firing and fuel storage (gas) were to be ~~covered~~ recovered from the market." The importance of a timely resolution to this project was noted by the MAC. *Page 5: Section 7b: REGWG Work Package 1: Interim Report – Scenarios for Modelling Renewable Generation in the SWIS* • "Ms Ng noted ~~the~~ that under most of the scenarios presented in the report OCGTs and CCGTs are assumed to be gas-fired…" *Page 10: Section 8a: Market Rules Design Review: Workshop Overview* • "Dr Gould ~~considered that~~ asked if there is a hidden threat about the timescale, in that a decision may be imposed if the MAC does not reach one soon." *Page 12: Section 9a: Reserve Capacity Security* • "***Discussion Point 4:*** The MAC discussed whether ~~RSC~~ RCS	

Item	Subject	Action
	should be released before RCOQs apply when a Facility has entered the market early… Mr McKay stated that there was no benefit in holding ~~RSC~~ RCS that is no ….” *Page 13: Section 9b: Curtailable Loads* • “Mr MacLean noted a concern that aggregators are unregulated and that an aggregator could deceive a customer by failing to inform it of the obligations it would incur in return for the payments being offered. ~~Mr Dykstra expressed a similar concern.~~ The Chair suggested that the Trade Practices Act may prohibit this type of behaviour. Mr Dykstra noted that he shared Mr MacLean’s concern that DSM aggregators are currently unregulated.” *Page 14: Section 9b: Curtailable Loads* • “~~Mr Dykstra considered that the process was not very efficient. Mr Zammit responded that the process is efficient from Energy Response’s viewpoint, as it allowed it to provide System Management with a reliable load reduction when needed.~~” Subject to the agreed amendments, the MAC endorsed the minutes as a true and accurate record of the meeting. *Action Point: The IMO to amend the minutes of Meeting No. 28 to reflect the points raised by the MAC and publish on the website as final.*	**IMO**
4	**ACTIONS ARISING** The actions arising were either complete or on the meeting agenda. The following exceptions were noted: **Item 35:** Ongoing. **Item 37:** Underway. **Item 41:** The Chair noted the draft letter to the Minister included in the MAC papers for this meeting. The MAC agreed for the Chair to send the letter to the Minister. **Item 44:** Mr Forward advised that work was underway. The Fuel Study (presented at the April MAC meeting) is with the Office of Energy (OoE) for inclusion in the “Review of Gas Contingency Service Options” project. In response to a request, Mr Tony Perrin noted that this project is likely to span the remainder of 2010, noting that a consultant had been engaged to assist. Mr Dykstra requested circulation of the Consultant’s Terms of Reference. Instead Mr Perrin offered to provide regular updates to the MAC on the progress of this work. *Action Point: The OoE to update the MAC on the progress of the review of gas contingency service options every second MAC meeting.* **Item 54:** The Chair noted the summary of MAC member comments on the Vesting Contract Review. The MAC noted that the Chair would table these comments at the Steering Group meeting of 17 June 2010.	**OoE**

Item	Subject	Action
	Item 59: Not started. **Item 60:** Underway. The IMO and System Management will discuss the appropriate level of testing required. **Item 61:** Underway. **Item 62:** Underway. The Chair asked if the letter should be sent to the ERA or the OoE. It was agreed that this action point be amended to refer to a letter to be provided to both the OoE and ERA. **Item 63:** Underway. **Item 65:** Mr Forward advised that work had not started and noted Perth Energy's Rule Change Proposal was on the meeting agenda. The Chair noted that the IMO Board requested resolution of this issue before the next selection of MAC members.	
5a	**MARKET RULE CHANGE OVERVIEW** The MAC noted the overview of the Market Rule changes. Mr Forward noted that there is ambiguity in the Market Rules around awarding Capacity Credits to a Non-Scheduled Generator (generators with a rated capacity less than 10 MW). It was noted that, as Non-Scheduled Generators cannot be dispatched up, the IMO does not consider it reasonable for them to receive Capacity Credits, especially when System Management cannot call on them in a contingency event. Mr Forward noted that the current rules represent an inefficient outcome and the IMO will seek to remedy this in the Certified Reserve Capacity (CRC) Rule Change Proposal (PRC_2010_14). Mr Dykstra noted that Alinta has identified another issue affecting Intermittent Generators and the use of three year averages in awarding CRC. In this case the effect of an Intermittent Generator being dispatched downwards (which is reflected in its Metered Schedules) is a reduction in the amount of Capacity Credits awarded. Mr Dykstra noted that this seems to be an anomaly and will seek to remedy this in a Rule Change Proposal. It was agreed that the IMO and Alinta discuss whether to include both these issues in PRC_2010_14. *Action Point: The IMO and Alinta to discuss whether Alinta's issues around Certified Reserve Capacity and Intermittent Generators should be included in PRC_2010_14.* Mr Brown queried whether a small generator willing to be dispatched by System Management would still receive Capacity Credits under the IMO's proposal. Mr Forward indicated they would likely receive Capacity Credits, noting that they would require communication systems that allowed them to talk to System Management and be dispatched.	**IMO**
5b	**MAC MEMBERSHIP REVIEW [RC_2010_15]** The Chair noted Perth Energy's Rule Change Proposal: MAC Membership Review (RC_2010_15), which seeks to expand the MAC by two additional	

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	Discretionary Class members, one representing Market Customers and the other Market Generators. The Chair noted that originally he had been concerned about the size of the MAC as it was a large group for constructive decision-making, and although 8 members is an optimal group size he considered that the MAC is currently working well and would not necessarily be affected by two additional members. The following points were discussed/noted: • What would happen next time someone did not get appointed to the MAC and requested that additional places be created. It was noted that the MAC should not just keep expanding at the request of participants; • A larger group would not necessarily improve the quality of debate, as this depends more on the individual members; • All members needed to contribute to MAC discussion and not all members had done this in the past. It was noted that there has been a significant improvement since the appointment of the 2010 MAC; • If participants use the MAC purely to gain information then this would result in a one-way information flow that could lead to problems; • A requirement for MAC members to attend meetings could be introduced (it was confirmed that this was already included in the MAC Constitution); • There is benefit from MAC membership, but there are other ways for participants without MAC membership to become involved in the process, for example through their Discretionary Class representatives; • The Market Generators forum has meant that Market Generator representatives had made progress in representing the views of the wider group; and • A significant amount of work had been put into developing the MAC process, and Market Participants now have a better idea of the role of their representatives, although there is still some development required. The importance of open access to what occurs at MAC meetings was noted. The Chair noted that to help ensure this the IMO: • has implemented an open access approach to most Working Groups; and • publishes MAC papers on the IMO website at the same time as they are received by MAC members, to allow a participant to raise issues with its representatives or request to attend a MAC meeting as an observer if relevant issues are to be discussed. The IMO will consider the comments made by MAC members when assessing this Rule Change Proposal. *Action Point: The IMO to take the MAC's comments into consideration when preparing the Draft Rule Change Report for RC_2010_15.*	**IMO**

Item	Subject	Action
6a	**MARKET PROCEDURE CHANGE OVERVIEW** Mr Forward noted that, as agreed at the Maximum Reserve Capacity Price (MRCP) Working Group (MRCPWG), the Procedure Change Proposal: Determination of the Maximum Reserve Capacity Price (PC_2010_04) will be presented to the IMO Procedure Change and Development Working Group at its next meeting. Mr Forward noted that the proposed amendments will seek to reinstate the 2009 MRCP Major Component values. The MAC noted the overview of recent and upcoming procedure changes.	
7a	**WORKING GROUP OVERVIEW** The MAC agreed to the proposed amendment to the membership of the IMO Procedure Change and Development Working Group. *Action Point: IMO to publish the updated Terms of Reference for the IMO Procedure Change and Development Working Group.*	**IMO**
7b	**MRCP WORKING GROUP – MEMBERSHIP AND PROPOSED WORK PROGRAMME** Mr Forward noted that the first meeting of the MRCPWG was held on 31 May 2010. At this meeting it was agreed to expand the membership to include a Demand Side Management (DSM) aggregator representative. As a result Mr Pablo Campillos has been appointed to the MRCPWG. The MAC discussed the calendar of milestones, noting that the dates were still to be finalised due to uncertainty around the key questions such as transmission pricing. The Chair noted that transmission pricing was a significant driver in determining MRCP. Mr Dykstra noted the following two significant outputs expected from the MRCPWG: • a review of the methodology and simple mechanics for the process, for example where data was sourced and what calculations were used; and • consideration of how the MRCP is used within the Market Rules. Mr Dykstra noted that the second point was outside the MRCPWG's Terms of Reference and so any identified issues would be presented back to the MAC. The MAC approved the work programme for the MRCPWG.	
7c	**REGWG UPDATE** Mr Forward discussed the progress of the Renewable Energy Generation Working Group (REGWG), noting that its next meeting will be held on 24 June 2010. Mr Forward noted that the REGWG work was progressing well and highlighted the following points. • Work Package 2 - The IMO will develop an assessment framework to assess the different mechanisms proposed for the assignment of Capacity Credits to Intermittent Generators. Different options have been proposed by McLennan Magasanik Associates (MMA), the OoE and System Management.	

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	• Work Package 3 - The REGWG is working through the draft report from ROAM Consulting. Mr Forward noted that the report predicts a requirement for approximately 300 MW of Frequency Control Services by 2020 with the view that this could be covered by existing plant. There are still outstanding issues relating to costs and procurement as well as the settlement formula in the Market Rules • Work Package 4 - Underway The Chair noted that the Oates Steering Committee, the ERA and several other parties were very keen to see the Load Following proposals that arise from this work. Mr Cremin raised concerns about the runway methodology used to allocate Spinning Reserve costs. Mr Cremin considered that this was becoming a strong price signal to generators, who were concerned about which band they fell into for the cost allocation process. The Chair emphasised the need to conclude the work as soon as possible.	
8a	**MARKET RULES DESIGN REVIEW – VERBAL UPDATE** Mr Forward thanked representatives for their attendance at the Market Rules Design Workshop held the previous day. The MAC was requested to provide any comments and additional information requirements by Wednesday 23 June 2010. The IMO will collate these comments and circulate. *Action Point: MAC members to email the IMO their information requirements and questions on the market design options by Wednesday 23 June 2010.* *Action Point: The IMO to consolidate the MAC's information requirements and questions on the market design options and circulate to the MAC.* *Action Point: The IMO to provide responses to the information requirements and questions on the market design options raised by the MAC as soon as possible but not later than 12 July 2010.* The Chair advised that the IMO Board had asked the Chair to convey its positive feedback to the MAC on the way that work has progressed to date and to thank participants for their efforts. The Board had also stated that should option B or C be recommended then the Board would need to see the drivers for progressing to the more mature model clearly defined. The Chair noted that this was consistent with the feedback provided by most parties. The Chair offered to make members of the Market Rules Design Team available if necessary to help explain concepts to board members and key staff within the organisations represented by MAC members. The Chair noted the CEO briefing scheduled for 30 June 2010 to update on progress and the decision to be made at the July 2010 MAC meeting. Mr Dykstra asked whether the IMO was planning a briefing for industry before the next MAC meeting, including advice of the IMO's preferred option. Mr Forward replied that the IMO had no preferred option, and	**MAC** **IMO** **IMO**

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	suggested that an industry briefing be held after the July MAC meeting. It was noted that the following was expected to be presented at the July MAC meeting: • Implementation system costs for the IMO and System Management of each option, as well as the expected impact on Market Fees. • Ongoing costs for the IMO and System Management of each option, as well as the expected impact on Market Fees. There was some discussion over an appropriate lifetime of the Market Systems; • Comparison with the NEM market fee rate; • Quantification of the benefits of each option (where possible), in effect providing a balanced scorecard for each option; • Timeframes for each option, covering Market Rule development, system procurement, etc. The IMO will need to work with System Management on the people impacts of the options; • The impact on the IMO's IT Roadmap if options B or C were chosen i.e. what changes may not be necessary. Mr Cremin suggested that the Market Rules Design Team should consider what the market might be like in 10 years time, for example considering the use of gas turbines for Spinning Reserves to compensate for increased wind generation. Mr Brown considered that the use of gas turbines was a significant issue, with everyone assuming that these will provide the solution. The Chair considered that the problem with this assumption was not one of gas volumes but of flexibility in gas contract arrangements. *Action Point: the IMO to work with System Management to develop estimates of the personnel impacts for each of the market design options.* *Action Point: The IMO to assess the impact of selecting options B or C on the IMO's IT Roadmap.*	**IMO/ SM** **IMO**
9a	**RELEVANT DEMAND** Mr Forward noted that the IMO had presented an issues paper on Curtailable Loads at the 12 May 2010 MAC meeting, which outlined three options for measurement of the Relevant Demand (RD) level of a Curtailable Load. The MAC agreed that the IMO should undertake additional analysis to compare the three options presented. The IMO engaged Data Analysis Australia (DAA) to assist with this work. DAA has undertaken an initial investigation and its conclusions to date are summarised in the update provided in the MAC papers for this meeting. Mr Forward noted that DAA has been requested to undertake further analysis to determine which methodology best represents the curtailability of a DSM provider at peak demand times during the Hot Season. The MAC noted that DAA will be undertaking further analysis of the identified methodologies for determining the RD level for Curtailable Loads. *Action Point: The IMO to continue to work with DAA on the methodology for measurement of Relevant Demand and report back to the MAC with the results of the study.*	**IMO**

Item	Subject	Action
9b	**EXTENSION OF BILATERAL SUBMISSIONS TO MARKET CUSTOMERS [CP_2010_08]** Mr Kynan Smith presented Synergy's Concept Paper: Extension of Bilateral Submissions to Market Customers (CP_2010_08), which seeks to introduce the ability for Market Customers to make Bilateral Submissions. A copy of the presentation is attached as Appendix 1. The following points were noted/discussed: • Whether the Short Term Energy Market (STEM) already provides sufficient options for Market Customers who are overcommitted – Mr MacLean responded that technically this was correct, but that practically it was not, as the STEM cannot provide the same level of price and volume certainty as the Bilateral market. • It was suggested that if Synergy has its Bilateral position wrong then it should be attempting to procure more customers. In response, Mr Smith stated that a retailer with a fixed block of supply that loses market share will need to increase prices for its remaining customers if it is unable to reallocate the excess supply. • Currently Synergy can on-sell electricity, but to do so requires the involvement of a generator and some generators are unable or unwilling to provide this service. Further, the current arrangements prevent Synergy from adopting a portfolio approach to the process. There was general discussion around whether the proposal represented a workaround for Synergy to replace inefficient contracts, and whether the desired outcomes could be achieved contractually. Mr MacLean considered that Synergy's issue related to the efficiency of these deals rather than their possibility. • The issue of potential abuse of Market Power was raised, with suggestions made that Synergy has the benefit of the Vesting Contract and could take advantage of an inefficient Vesting Contract outcome. It was questioned how the proposal represented a move towards competitive neutrality. The responsibility of the IMO and the ERA to monitor any abuse of Market Power was noted. The Chair suggested that Synergy work with the ERA to determine how Market Power would be managed if the proposal was implemented. • Some members questioned the benefits of the proposal to Market Participants other than Synergy. In response, it was suggested that the proposal could help new Market Customers who wanted to enter the market without also being a generator. There was some agreement that the proposal might benefit some Market Customers, but it was noted that there could be a problem with a major competitor knowing the price paid for generation. It was also suggested that the proposal could benefit a generator that is temporarily unable to supply, who can currently go to the STEM but does not have the option to go to a retailer like Synergy. • Concerns were raised about the low marginal cost of the additional generation that Synergy is seeking to sell and its impact on competition in the market. • It was suggested that the proposal would give Synergy the benefit of being a "synthetic generator". The current restrictions on Synergy	

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	becoming a Market Generator were noted, as was the review of these restrictions by the OoE scheduled for October 2010. Some members questioned whether synthetic generators should be allowed in the market and if so whether Synergy should be permitted to be one. It was suggested that Synergy might want to seek the current views of the OoE on these questions. • Synergy was asked to provide more detail on the mechanics of how the proposal would work in practice, including the impacts on Resource Plans and penalties. In response, Mr Smith stated that as the Market Customer would not be acting as a generator there would be no need for it to submit Resource Plans. • Concerns were raised about the timing of the proposal, given the current status of the Market Rules Design Review. Mr Dykstra considered that there was not a lot of enthusiasm for the proposal in the MAC, but that if people could see the benefits for them then the proposal may get more support. Mr Dykstra stated that he could not see the benefits for other participants. The Chair considered that the proposal did appear to introduce more competition, but that Synergy needed to provide further detail on: • specific benefits to the market; • mechanisms to monitor and control Market Power; and • the mechanics of how the proposal would work in practice, including impacts on Resource Plans and incentives. Mr Forward offered Synergy the opportunity to present their proposal to members of the Market Rules Design Team for review and feedback. Mr MacLean thanked Mr Forward for his offer. Mr Smith stated that if option B or C was selected as the preferred market design option then Synergy may choose not to submit the proposal but instead to seek its consideration during the development of the selected option. *Action Point: Synergy to review its proposal for the Extension of Bilateral Submissions to Market Customers in more detail, and if appropriate re-present the proposal to the MAC, providing further detail on:* • *specific benefits to the market;* • *mechanisms to monitor and control Market Power; and* • *the mechanics of how the proposal would work in practice, including impacts on Resource Plans and incentives.*	**Synergy**
10	**FUTURE PROCUREMENT OF SPINNING RESERVE AND LOAD FOLLOWING** Mr Alistair Butcher presented an overview on the Future Procurement of Spinning Reserve and Load Following paper. System Management completed an Expression of Interest (EOI) process for Load Following in December 2009 with no response. Given this outcome, System Management investigated the reasons why there had been no responses and developed alternative procurement options for presentation to the MAC.	

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	Mr Butcher noted that participants had expressed a desire for greater participation in the provision of Ancillary Services, but were not willing to offer under the current pricing mechanism. As a result System Management developed the following two options to facilitate the future procurement of Ancillary Services. • Option 2 – introduction of a payment mechanism based on lowest tendered fixed price for a fixed period. In this option least cost providers will be first called on to provide the service. This represents a simple tender process that would reduce the requirement on Verve Energy and help to create a level playing field for the provision of Ancillary Services. • Option 3 (preferred by System Management) – introduction of 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. This option will allow a transparent, cost reflective price to be derived via a market mechanism. System Management noted the following points about option 3: • A similar process had been adopted in the NEM; • The bid stack prices would be published; • Payments would be made using the current market mechanisms; • Due to security constraints dispatch might not always take place entirely according to the bid stack; • Development would not impede the progress of the Market Rules Design Review work, as the proposed solution would work successfully with any of the options under consideration; • Similar mechanisms had already operating successfully in other markets; and • Implementation of such a mechanism could be within 6-12 months. Mr Butcher noted that System Management is exploring the issues at this stage and that any formal proposal will be assessed against the Wholesale Market Objectives. As such, Mr Butcher sought MAC comments as well as MAC's endorsement for System Management to further explore option 3. The following points were discussed/noted. • What is the boundary between balancing and Ancillary Services, noting that the solution is similar to a competitive balancing regime? It was noted that the two are related but that different payment mechanisms are involved. • Under the proposed mechanism it is currently expected that units used for Load Following will provide energy at MCAP. The proposed amendments mainly affect the availability payments. However, the detail is still to be worked through. • Will auctions be held every day, including weekends? Mr Butcher confirmed that this was the intention. • Will there be sufficient offers on the bid stack under option 3? Mr	

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	Butcher responded that there are a number of facilities with the capability to provide Load Following and suggested that the generator representatives might be able to provide comment on this question. • How will System Management differentiate among multiple generators that were running and had capacity to provide the service? Mr Butcher noted that the decision would be based on the availability prices offered. There was some discussion about how the proposed payment mechanism varied from that prescribed in the current Market Rules. • When the Load Following auction would be held in relation to STEM processing? Ms Ng noted that Verve Energy is currently notified of its Ancillary Services obligations before the closure of the STEM window. • If option 3 was implemented but Verve Energy was the only bidder then it might be in a position to bid whatever it wanted. Mr Butcher noted the mechanisms that currently exist to prevent the abuse of Market Power. Mr Forward noted that the issue of Ancillary Services provision needs to be looked at in its entirety and stated that the REGWG had spent some time considering Load Following services. However, Mr Forward noted that these issues presented by System Management started to go outside the REGWG bounds. It was noted that System Management's concern was with the provision of the services, while the REGWG was concentrating more on the allocation of costs to participants. The Chair considered that there were still outstanding questions about costs and the details of how the mechanism will operate, including its interaction with the STEM. The Chair requested comments on what the proposal was looking to resolve, those noted were: • Wider participation; • Efficient costs; • Flexibility for System Management; and • Reducing the dependency on Verve Energy. The Chair noted that the proposal replaced the current regulated pricing with a market determined price, and asked the views of the Market Customer representatives. In response to the Chair's request: • Mr MacLean noted that the proposal has some advantages and would help break down the close relationship between System Management and Verve Energy. Mr MacLean considered that the requirement was not for cheaper prices but for more efficient prices; and • Mr Dykstra noted that Ancillary Service costs have risen and considered that this indicates the need for competitive pressure. The Chair questioned whether the MAC wanted System Management to	

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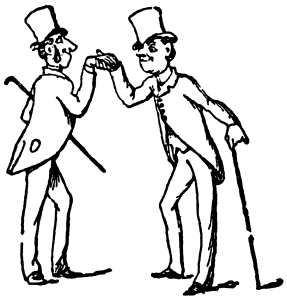
	progress the issue itself or via a working group convened under the MAC. Mr Brown considered that the involvement of the MAC was crucial. It was agreed that System Management would undertake additional analysis and then report back to the MAC. At that stage a decision on whether to convene a working group would be made. *Action Point: System Management to further develop the details of option 3 for the future procurement of Spinning Reserve and Load Following and then provide an update to the MAC.*	**SM**
11	**GENERAL BUSINESS** The Chair noted that Special Meeting No. 3 of the MAC will be held on the morning of Monday 19 July 2010. The Chair noted that the intention of the meeting was to get a preference from the MAC on the pathway. In addition to the discussion under agenda item 8a, the following was noted regarding the Market Rules Design Review: • More information was needed regarding the details of options B and C. • The reason for needing a pathway decision in July was questioned. The Chair responded that the MAC had been looking at this for some time and that whichever pathway was chosen there was still a comprehensive cost/benefit analysis to be undertaken before any final decisions were made on options B or C. • Mr Dykstra stated that he still had a high level of discomfort about packages A1 and A2. Mr Dykstra considered that if the MAC decision was for pathway 3 then there was a need to decide on a list of the most important market issues that need to be addressed in the short term. There was no other business raised.	
12	**NEXT MEETING** Special Meeting No. 3 will be held on Monday 19 July 2010 (9:00am – 12:00pm). Meeting No. 30 will be held 11 August 2010 (2:00-5:00pm).	
CLOSED: The Chair declared the meeting closed at 5:20pm		

Extension of Bilateral Submissions to Market Customers

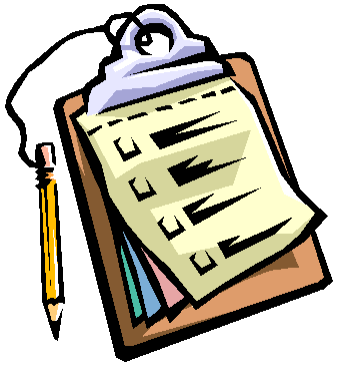
Concept Paper Proposal by Synergy

CP_2010_08



Presentation Agenda

- The Proposal
- Impacts on the WEM mechanisms to facilitate trade
- Market Registration
- Presumed Market Power; and
- Consideration for the Market Rules Design Review



The Proposal

- Currently the Market Rules only allows Market Generators to make bilateral submissions to the IMO
- This proposal extends the submission ability to all Market Participants
- Removes the requirement for third party involvement in commercial transactions where a cooperation from a Market Generator is required.
- Facilitates the ability for Market Participants to mange risk with greater efficiency.

Impact on WEM Mechanisms

- Bilateral Market
  - Facilitate the opportunity for improved competition in the bilateral market creating an improved playing field for **all** participants to offer excess supply into the market.
  - Give Market Customers the ability to offer is supply independent of third party conditions at a predetermined price, volume and duration.

Impact on WEM Mechanisms

- STEM (Short Term Energy Market)
  - Purpose of the STEM is two fold:
    - Facilitate the ability to respond to fluctuations in demand due to changes in supply or demand such as weather for the applicable trading day; and
    - to allow generation to satisfy their reserve capacity obligations if not fulfilled within the bilateral market.
  - Liquidity in the STEM is not determined by the ability for a participant to participate in the bilateral market but by either:
    - the magnitude of change in conditions between the close of the bilateral and STEM windows; and
    - propensity for a participant to speculate on price and volume

Kynan

Market Registration

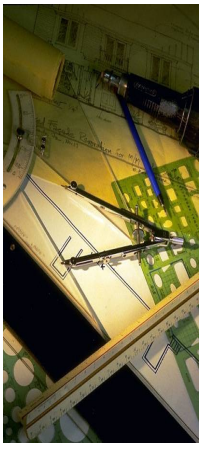
- Market Rule 2.28.8 states:
  - A person who intends to own, control or operate a generation system which has a rated capacity that equals or exceeds 0.005 MW and is or will be electrically connected to a transmission system of distribution system which forms part of the South West Interconnected System, or is electrically connected to that system, may register as a Rule Participant in the Market Generator class.
- A person who never intends to own, control or operate a generation system is then disallowed from making bilateral submissions and participating in the bilateral market without such an arrangement.
- This precludes the potential participation intermediaries such as electricity aggregators

* Note, in the consultation paper it was noted UDAP and DDAP penalties may apply, this would be in the case where a Market Generator actually had an associated facility registered.

Market Power

- Market Power is ability of a person or entity to alter and or influence the market price of a good or service.
- Within the Market Rules the IMO or ERA is responsible for monitoring the behaviour related to market power.
- It is not illegal to have Market Power, however it is illegal to abuse the use of Market Power.
- Regardless as to how it is defined or applicable to, the monitoring and penalising of its abuse should be applied equally to all participants .
- This proposal does not alter or impact current market power realities

Market Design Review Process



- The Market Design Review Process should remain separate to the Rule Change Process, except in the situation where a change that would otherwise be considered as part of the broader review is urgently required and essential for the safe, effective and reliable operation of the market or the SWIS.
- The concept proposed can fit within the existing market structure (under a single bilateral window as proposed) and any future market structure.
- Outcomes and timings of the eventual Market Design Review Process are at this time unknown with the timing thereafter associated with such implementation also unknown.
- If the proposal meets the criteria of the market objectives then there is no reason why such a rule change should not proceed now.

Questions?

Independent Market Operator

Market Advisory Committee

Minutes

Meeting No.	SPECIAL MEETING NO. 3
Location:	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Monday 19 July 2010
Time:	Commencing at 9.00 – 10.50 am

Attendees	**Class**	**Comment**
Allan Dawson	Chair	
Troy Forward	Compulsory – IMO	
Stephen MacLean	Compulsory – Customer	
Ken Brown	Compulsory – System Management	
Wendy Ng	Compulsory – Generator	
Neil Gibbney	Compulsory – Network Operator	Proxy
Corey Dykstra	Discretionary – Customer	
Steve Gould	Discretionary – Customer	
Peter Huxtable	Discretionary – Contestable Customer Representative	
Andrew Sutherland	Discretionary – Generator	
Shane Cremin	Discretionary – Generator	
Chris Brown	Observer – ERA	
Tony Perrin	Minister's appointee/ Small Use Customers	
Also in attendance	**From**	**Comment**
Greg Thorpe	Oates Implementation Review Team	Presenter
Jim Truesdale	Concept Consulting	Presenter
Jenny Laidlaw	IMO	Minutes
Jacinda Papps	IMO	Observer
Matt Pember	IMO	Observer
Fiona Edmonds	IMO	Observer
Rob Pullella	ERA	Observer
John Rhodes	Synergy	Observer
Jason Waters	Verve Energy	Observer
Apologies	**From**	**Comment**
Peter Mattner	Compulsory – Network Operator	

Item	**Subject**	**Action**
1.	**WELCOME** The Chair opened the meeting at 9.00 am and welcomed members to Special Meeting No. 3 of the Market Advisory Committee (MAC).	

Item	Subject	Action
2.	**MEETING APOLOGIES / ATTENDANCE** Apologies were received from: • Peter Mattner (Western Power). Mr Ky Cao had requested to attend the meeting as an Observer, but later sent his apologies. The following other attendees were noted: • Neil Gibbney (proxy for Peter Mattner) • Greg Thorpe (Presenter) • Jim Truesdale (Presenter) • Rob Pullella (Observer) • John Rhodes (Observer) • Jason Waters (Observer) • Jacinda Papps (Observer) • Fiona Edmonds (Observer) • Matt Pember (Observer)	
3	**PATHWAY DISCUSSION AND DECISION** The Chair provided a summary of the three pathways under consideration. The Chair noted that the decision before the MAC was not whether to move to option B or C, as any such decision would be subject to a full cost/benefit analysis. The Chair opened the floor to discussion. Mr Corey Dykstra sought clarification of what was encompassed in Pathway 2 with regard to options A1 and A2. The Chair responded that the current expectation was that Pathway 2 would include option A1 and further consideration of options B and C. Mr Dykstra queried whether a decision between options A1 and A2 was therefore implied by the choice of Pathway 1 or Pathway 2. The Chair responded that the key difference between Pathway 1 and Pathway 2 was the decision whether to further consider options B or C. If Pathway 2 was selected but the benefits of options B or C were not found to outweigh the costs then there would be scope to push the A1/A2 options further. Mr Tony Perrin considered that there were timing issues affecting the pathway decision. Mr Perrin noted that significant elements of the industry were currently under financial stress. Further, some significant industry reviews were in progress or scheduled to commence shortly, including the review of the moratoriums on Synergy and Verve Energy, review of the regulatory regimes for gas and electricity franchise tariffs, the Strategic Energy Initiative (SEI) and the Generation Outlook work. The outcomes of these reviews would be working their way out to the public domain in the near future. Mr Perrin considered that a decision to move towards a B or C option was a significant exercise, which should align with the outcomes of these reviews and future policies relating to full retail contestability (FRC) and ownership structure. Mr Perrin considered that given these issues the market may not yet be ready for a Pathway 2/3 decision. Mr Dykstra summarised his view of the history leading up to the current pathway decision from the initial development of the Market Rules Evolution Plan (MREP) in June 2009. Mr Dykstra considered that, looking at the	

Item	Subject	Action
	paper, not much detail had been developed although there was now a better understanding of the relevant issues. Mr Dykstra explained that he had originally supported option B because he had considered that options A1 and A2 did not achieve the required outcomes. Mr Dykstra believed that participants have been artificially constrained in considering options A1/A2, and recommended that the MAC go back to the challenges of the market and reassess what can be achieved in the short term. Mr Dykstra considered that this should not be option A1 or A2, but instead a solution that initially addresses balancing and Reserve Capacity refund issues. Mr Dykstra asked why the MAC could not use the existing Rule Change processes, addressing balancing as the priority. Mr Shane Cremin supported Mr Dykstra's suggestion. Mr Cremin considered that the SEI showed that there were bigger issues facing the market than a B/C decision, and that nothing would be achieved by implementing a good gross/net market without addressing the other issues. Mr Cremin considered that the pathways are all set pieces of work and most participants would be happy to return to the old way of working to address issues such as balancing and Ancillary Services. Mr Cremin suggested that work commence immediately to address balancing issues, using a working group convened under the MAC. The Chair noted that this proposal was not inconsistent with Pathway 1, except that Pathway 1 represented a "beefed up" process with additional funding. There was no suggestion to not use the normal Rule Change process. The Chair noted that the pathway label related primarily to funding. Mr Andrew Sutherland noted that choosing Pathway 2 did not equate to demanding a move to a B/C option. Mr Sutherland considered that participants still did not fully understand the details of these options, for example what the options would cost Verve Energy, System Management, etc. The Chair commented that the Market Rules Design Team (MRDT) had found options B and C difficult to cost and that to refine the estimates it would be necessary to look at specific design features. Mr Sutherland noted that his main concern is the balancing issue, considering that if a generator was out for a month in summer they could be bankrupted by the current DDAP penalties. The Chair noted that balancing, UDAP/DDAP and Reserve Capacity refund issues were inextricably linked. Mr Sutherland considered that no-one knew what options B or C would look like or what benefits they would bring to the market. The Chair noted that at this stage the costs were also not well defined and that the Minister and the ERA would need to be convinced that the benefits of moving to a B/C option were sufficient. The Chair considered that the benefits would need to exceed the costs for approval to be likely. Mr Sutherland considered that Mr Dykstra's suggestion was good, but questioned whether it would also be possible to look further at the B/C options. Mr Perrin noted that currently IMO and participant resources are spread very thinly. Mr Perrin discussed some of the balancing issues relating to renewable energy and suggested that the cost of balancing may increase significantly by 2015, providing greater benefits for the B/C options. Mr Ken Brown stated that he had considered the three pathways but would	

Item	Subject	Action
	like to see some critical issues addressed as soon as possible. Mr Brown suggested that the main balancing, UDAP/DDAP and Reserve Capacity refund issues should be addressed first, and the market then reassessed to see how large a problem remained. Mr Brown considered that the baseline for a cost/benefit analysis of option B or C should be taken after these key issues have been addressed within the current hybrid market design. Mr Cremin agreed that it was possible to do more within the current market design, noting as an example the options for Ancillary Services recently suggested by System Management. Mr Brown suggested that this approach may fix 60-80% of the problems, but that if it did not a B/C option could then be pursued. Mr Brown considered that the decision to move to a B/C option should not be made by a MAC working group alone. Mr Perrin questioned whether it was appropriate for a B/C decision to be driven from the MAC, given that it was fundamentally a policy decision. The Chair responded that the intention behind Pathways 2 and 3 was to investigate the options and present information to the appropriate decision makers. There was no suggestion that the MAC would make the decision to implement either option. Mr Dykstra noted that the WEM had come a long way since it began less than four years ago. Mr Dykstra considered that its shortcomings related mainly to the areas referred to as “mechanisms”, where it had not been possible to implement a “market” in the first instance. Mr Dykstra suggested that it was now possible to look at establishing markets to replace some of these mechanisms. Mr Dykstra considered that talking about options such as A1 or A2 results in a loss of clarity about what the issues are. Mr Dykstra again suggested that the MAC focus on addressing balancing issues, possibly using Balancing Support Contracts and/or implementing an approach similar to that proposed by System Management for Ancillary Services. Mr Dykstra stated that just modifying the balancing price would not fix the problems. The Chair responded that the pathways were covering these issues, noting that there is no point in looking at Ancillary Services if issues such as UDAP/DDAP and Reserve Capacity refunds are not addressed. The Chair considered that the only difference between business as usual and Pathway 1 is the additional funding under Pathway 1 to expedite the development process. Mr Dykstra considered that the work arising from the Verve Energy Review had actually stalled the MREP process, which was now behind its original schedule. The Chair and Mr Perrin disagreed with this opinion, considering that there had been significant progress in identifying the issues and in high level design. Mr Troy Forward stated that there are operational choices and also a strategic choice to be considered. Choosing Pathway 1 takes away the strategic choice to look further at options B and C. The operational aspects will always be subject to debate as to what provides the most benefit to the market. Mr Dykstra responded that he did not believe that choosing Pathway 1 removed the future consideration of options B and C completely. The Chair considered that sometimes it is easier to embark on strategic paths than at other times, and while the B/C options could be raised in the	

Item	Subject	Action
	future it was easier to do this now. Mr Perrin questioned this view, considering that there was not a broad understanding of the benefits arising for end consumers. While Mr Perrin believed that competition would give the best result to consumers in the medium term, he did not consider that there was a general acceptance of this at present. Mr Cremin reiterated his opinion that there was no point in implementing a sophisticated market design if there was no competition. Mr Perrin added that security of supply was a key consideration for stakeholders. Mr Greg Thorpe considered that there had been too much emphasis on pathway labels. The A1/A2 options were basically business as usual, with the key point being that Verve Energy remained the primary balancer. Mr Thorpe considered that the key question was whether, if changes are made, the market retains or moves away from the "special relationship" with Verve Energy. Mr Thorpe agreed that it was a dramatic change to go to option B or C. Under the A options it would be possible to move towards either a net or a gross market, and it would be necessary to decide a direction even for incremental changes. Mr Thorpe considered that Pathway 1 meant committing to the special relationship. Mr Dykstra questioned whether Mr Thorpe meant committing to the special relationship for the life of the relevant IT systems. Mr Thorpe confirmed that this was the case. Mr Dykstra considered that the expected life of these systems was around 5-7 years. The Chair noted that the systems would be written off after 3 years. There was some discussion about how/whether it was possible to predict if the hybrid model would be adequate for the life of the IT systems. Some of the issues that might impact on a future market decision were also discussed, including FRC, a move towards a constrained grid, gas supply issues and the growth in renewable energy. Mr Ken Brown reiterated his concern about assessing the benefits of option B or C against the current state, before the short term balancing issues have been addressed. Mr Brown considered that this would result in an exaggeration of the benefits of these options. Mr Jim Truesdale noted that the paper indicated only the benefits that would need to be realised to make these options viable. The Chair indicated that the expected timeline for Pathway 1 was 1-2 years. Mr Ken Brown and Ms Wendy Ng questioned why the timeline was so long. Mr Forward noted that under the Market Rules a standard Rule Change Proposal took at least four to five months to process and commented that it would be difficult to justify fast-tracking the amendments under the existing criteria. The Chair noted that a lot of the analysis had already been done and that the next problem was to agree and prioritise the work. The Chair considered that the prioritising needed to be done in the next MAC meeting (11 August 2010). Mr Cremin stated that some participants would like to be more involved in the design process to develop their understanding of the issues. The Chair questioned whether consideration of the B/C options is a wider	

Item	Subject	Action
	policy issue outside the remit of the MAC. There was some discussion about the appropriate group to consider this issue and the likely scope of such a group. Mr Perrin considered that the MREP represented a path of continuous improvement within the remit of the MAC, while a B/C decision represented a discontinuous change that should be subject to a different decision making process. Mr Dykstra stated that he could not see any driver from industry to look at the B/C options at this time. Mr Dykstra reiterated his view that the MAC should look at balancing, UDAP/DDAP and Reserve Capacity refunds as a priority and his concerns about the use of option and pathway labels. In response to a query from Mr Thorpe, Mr Dykstra confirmed that he is happy with the current hybrid market design at present. The Chair stated that Pathway 1 is just a condensed version of the MREP, and that it was easier in terms of stakeholder management and the acquisition of funding to use the pathway label. Mr Forward noted that the functional decisions for Pathway 1 are still to be worked through. The Chair commented that more can be added to Pathway 1 if required. Mr Dykstra considered that in terms of balancing, Pathway 1 only deals with partial IPP involvement. Mr Truesdale disagreed, considering that there are other possibilities that could be considered and that the design was not fixed. Mr Dykstra advised that he would be happy if the MAC were to label a set of issues to be addressed as Pathway 1, without prescribing solutions. The Chair replied that he was happy to define Pathway 1 as pushing the existing hybrid market model as far as possible. Pathway 1 involved taking consideration of options B and C off the table due to the shortage of resources and uncertainty about whether the MAC was the correct body to consider this. Mr Dykstra reiterated that Alinta's original support for the more mature market options was due to its concern that the A1/A2 options did not address the key issues. Mr Cremin considered that other industry participants had supported the B and C options for this reason. Mr Cremin noted that he had originally rejected A1/A2, but now sees more flexibility in these options. Mr Cremin expected that eventually the market would need a more mature model, but noted the current struggles facing participants. Mr Dykstra suggested that it was not realistic to contemplate options B or C at the MAC level, as this could require consideration of issues such as the future separation of the IMO and System Management. Mr Forward informed the MAC that he had received a message from Mr Ky Cao, who was unable to attend the meeting. Mr Cao had sent his apologies and advised that he would support any decision to pursue options A2, B or C. In response to a question from the Chair, the MAC agreed that this was not the time to consider the B/C options. The Chair then asked if the advice of the MAC to the IMO Board was to pursue Pathway 1, which involved pushing the current hybrid market design as far as possible in order to address MREP issues and the issues from the Verve Energy Review. The Chair noted that the IMO Board would consider this advice if offered and convey it to the Minister.	

Item	Subject	Action
	Mr Ken Brown queried why any advice needed to go to the Board if the decision was effectively to continue with business as usual. The Chair replied that the aim was only to advise the Board, and that no approval was being sought. Mr Cremin noted that there was little difference between Pathway 1 and Pathway 2, with Pathway 2 having just an additional step to look at the B/C options. Mr Cremin queried whether the MAC was missing an opportunity in choosing Pathway 1. Mr Forward noted that the expectation for Pathway 2 was for two working groups operating in parallel, one focussing on the short term fixes as per the MREP and the other undertaking a cost/benefit analysis for the B/C options. Mr Dykstra suggested that if industry wished to see further exploration of the B/C options then a letter requesting this might be sent to the Office of Energy and/or the Minister. Mr Peter Huxtable queried whether the MAC should develop an approach with regard to the B/C options, to prevent design decisions under Pathway 1 that might interfere with future developments. The Chair responded that the existing model will always have problems, and that no Pathway 1 changes would preclude moving to either option B or option C in the future. Mr Sutherland raised a query about the cost/benefit basis for decisions under Pathway 1, citing a proposed rewrite of the WEM rules engine at a cost of $1 million as an example. Mr Dykstra considered that some replacement of old IT systems will need to be done under any circumstances. The Chair agreed, noting that the systems under consideration would have no value by 2015. Mr Dykstra considered that such IT costs were not really a constraint on a future B/C decision due to the lead times involved. There was further discussion to confirm the details of the MAC's decision. Mr Dykstra was happy with the decision as described by the Chair, but stated that he would like to review the actual wording before confirming his agreement. *Action Point: The IMO to circulate a draft of the MAC pathway decision to MAC members for review and comment.* Ms Ng sought clarification on the implementation approach, querying whether there would be a series of implementations or one large implementation. The Chair responded that this was something to decide in the August 2010 MAC meeting, and that the approach would in part depend on what changes needed to be packaged together. The Chair thanked the MAC members for their engagement in the process. The Chair advised that he will get the wording of the pathway decision out for MAC review as soon as possible.	**IMO**
12	**NEXT MEETING** Meeting No. 30 will be held 11 August 2010 (2:00-5:00pm).	
CLOSED: The Chair declared the meeting closed at 10.50am.		

Agenda item 4: 2009/2010 MAC Action Points

Legend:

Shaded	Shaded action points are actions that have been completed since the last MAC meeting.
Unshaded	Unshaded action points are still being progressed.
Missing	Action items missing in sequence have been completed from previous meetings and subsequently removed from log.

#	Action	Responsibility	Meeting arising	Status/Progress
35	MAC members to request meetings or forward questions to the IMO on the Oates Review Implementation and design, if necessary.	IMO	March	Completed. This action item is now out of date.
37	IMO, in consultation with System Management and Western Power, to prepare a Rule Change Proposal to: • remove the requirement to conduct an NCS expression of interest and tender process from the Market Rules; and • facilitate the operation of an NCS (i.e. dispatch and settlement of energy) within the broader market processes.	IMO	April	Completed. A Pre-Rule Change Discussion paper (PRC_2010_11) is on today's meeting agenda.
41	MAC Chair to update the letter to the Minister to reflect MAC comments and send to Minister.	MAC Chair	April	Completed. The letter was sent to the Minister on 22 June 2010.

#	Action	Responsibility	Meeting arising	Status/Progress
59	The IMO to investigate whether it is able to strengthen the requirements for awarding Certified Reserve Capacity.	IMO	May	This will be progressed as part of the CRC wash-up process.
60	The IMO to investigate the appropriate level of testing for a participant to demonstrate ability to meet its Reserve Capacity Obligations and so become eligible for the release of its Reserve Capacity Security.	IMO	May	Completed. A Pre-Rule Change Discussion paper (PRC_2010_12) is on today's meeting agenda.
61	The IMO to progress a Rule Change Proposal to reflect the RCS discussion.	IMO	May	Completed. A Pre-Rule Change Discussion paper (PRC_2010_12) is on today's meeting agenda.
62	The IMO to send a letter to the Office of Energy and the ERA on behalf of the MAC requesting the introduction of licensing obligations for DSM Providers.	IMO	May	Underway. Awaiting the Pre-Rule Change Discussion Paper for Curtailable Loads.
63	The IMO to proceed with a Rule Change Proposal to allow a Market Participant other than a Market Customer to contract for the Reserve Capacity associated with a Curtailable Load.	IMO	May	Underway.
65	The IMO to investigate and report to the MAC on options for the selection of Discretionary Members of the MAC.	IMO	May	Underway. The IMO has contracted Marchment Hill Consulting to assist with this review. It is anticipated that a draft report will be on the September 2010 MAC meeting agenda.
66	The IMO to amend the minutes of Meeting No. 28 to reflect the points raised by the MAC and publish on the website as final.	IMO	June	Completed.
67	The OoE to update the MAC on the progress of the review of gas contingency service options every second MAC meeting.	OoE	June	
68	The IMO and Alinta to discuss whether Alinta's issues around Certified Reserve Capacity and Intermittent Generators should be included in PRC_2010_14.	IMO and Alinta	June	This was not completed. Alinta formally submitted its Rule Change Proposal: Adjustment of Relevant Level for Intermittent Generation Capacity (RC_2010_24) into the Rule Change Process.

#	Action	Responsibility	Meeting arising	Status/Progress
69	The IMO to take the MAC's comments into consideration when preparing the Draft Rule Change Report for RC_2010_15.	IMO	June	Completed. The Draft Rule Change report was published on 3 August 2010.
70	IMO to publish the updated Terms of Reference for the IMO Procedure Change and Development Working Group.	IMO	June	Completed.
71	MAC members to email the IMO their information requirements and questions on the market design options by Wednesday 23 June 2010.	Members	June	Completed.
72	The IMO to consolidate the MAC's information requirements and questions on the market design options and circulate to the MAC.	IMO	June	Completed. Emailed to MAC members 30 June 2010.
73	The IMO to provide responses to the information requirements and questions on the market design options raised by the MAC as soon as possible but not later than 12 July 2010.	IMO	June	Completed. Included in the papers circulated to the MAC on 13 July 2010.
74	The IMO to work with System Management to develop estimates of the personnel impacts for each of the market design options.	IMO and SM	June	Completed. Included in the papers circulated to the MAC on 13 July 2010.
75	The IMO to assess the impact of selecting options B or C on the IMO's IT Roadmap.	IMO	June	Completed. Included in the papers circulated to the MAC on 13 July 2010.
76	The IMO to continue to work with DAA on the methodology for measurement of Relevant Demand and report back to the MAC with the results of the study.	IMO	June	Completed. A paper is on today's meeting agenda.
77	Synergy to review its proposal for the Extension of Bilateral Submissions to Market Customers in more detail, and if appropriate re-present the proposal to the MAC, providing further detail on: • specific benefits to the market; • mechanisms to monitor and control Market Power; and • the mechanics of how the proposal would work in practice, including impacts on Resource Plans and incentives.	Synergy	June	Synergy to provide a verbal update at the meeting.

#	Action	Responsibility	Meeting arising	Status/Progress
78	System Management to further develop the details of option 3 for the future procurement of Spinning Reserve and Load Following and then provide an update to the MAC.	SM	June	System Management to provide a verbal update at the meeting.
79	The IMO to circulate a draft of the MAC pathway decision to MAC members for review.	IMO	July (Special Meeting)	Completed.

Agenda Item 5a: Overview of Market Rule Changes

Below is a summary of the status of Market Rule Changes that are either currently being progressed by the IMO or have been registered by the IMO as potential Rule Changes to be progressed in the future.

Rule changes: Formally submitted (see appendix 1)	4 August 2010
Fast track with Consultation Period open	0
Standard Rule Changes with 1st Submission Period Open	0
Fast Track Rule Changes with Consultation Period Closed (final report being prepared)	0
Standard Rule Changes with 1st Submission Period Closed (draft report being prepared)	1
Standard Rule Changes with 2nd Submission Period Open	5
Standard Rule Changes with 2nd Submission Period Closed (final report being prepared)	0
Rule Changes - Awaiting Minister's Approval and/or Commencement	4
Total Rule Changes Currently in Progress	**10**

Potential changes logged by the IMO- Not yet formally submitted	June	July
High Priority (to be formally submitted in the next 3/6 months)	0	0
Medium Priority (may be submitted in the next 6/12 months)	17	21 (+4)
Low Priority (may be submitted in the next 12/18 months)	25	26 (+1)
Potential Rule Changes (H, M and L)	**42**	**47**
Minor and typographical (submitted in batches three times per year)	26	37 (+11)
Total Potential Rule Changes	**68**	**84**

The changes in the rule change and issues log (from June to July) has arisen from:

Priority	What	Status
High	• Nil.	• Nil.
Medium	In: • There is a disconnect in the Market Rules between the Minister's approval of the annual budget, and the date by which the IMO is required to publish the fees of the IMO, System Management and ERA at the start of each financial year. The IMO is required to publish an approved budget (and consequently the new market Fee rate) by 30 June of each year, however there is the possibility that the Minister has not approved the budget by this time.	• Currently on the Rule Change and Issues register, a Pre Rule Change Discussion Paper is planned for the September MAC meeting.
	• The IMO is required to publish near real time operating data (clause 10.5.1(z)). Two aspects of this (total generation and total Spinning Reserve) are provided in MW and the third aspect, Operational System Load Estimate, is provided in MWh. The IMO considers that all three aspects of this data should be published in the same format.	• Currently on the Rule Change and Issues register, awaiting prioritisation.
	• Step 1 of appendix 5 outlines the measurement process for the IRCR peak Trading Intervals. The IMO considers that the Market Rules need to be amended to either specify that this calculation will use total generation calculated in settlements or loss adjusted load.	• Currently on the Rule Change and Issues register, awaiting prioritisation.
	• Under the IMO's amended registration process (as a result of the Market Participant Registration project), the IMO will register a facility on the date that it specifies in clause 2.33.3(c)(vii)1. As this will be the date that they commence operation in the market it will not be possible for System Management to approve a Commissioning Test for this facility as it will no longer be defined as "yet to commence operation".	• Currently on the Rule Change and Issues register, awaiting prioritisation. Likely to be included in the Rule Change Proposal arising from the Market Participant Registration project.
Low	In: • Clause 4.25.3A specifies that the IMO must not undertake a Reserve Capacity Test if a Facility is undergoing Opportunistic Maintenance, a Forced Outage or Consequential outage, among other things. However these events occur after the IMO has requested System Management to undertake the test and so therefore can not be taken into account by the IMO.	• Currently on the Rule Change and Issues register, awaiting prioritisation. This will be bundled with the other issues in the log related to Reserve Capacity Testing.

APPENDIX 1: FORMALLY SUBMITTED RULE CHANGES

Standard Rule Change with First Submission Period Closed

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_08	15/04/2010	Removal of DDAP uplift when less than facility minimum generation	Griffin Energy	Publish Draft Rule Change Report	13/09/2010

Standard Rule Change with Second Submission Open

ID	Date submitted	Title	Submitter	Next step	Date
RC_2009_37	14/05/2010	Equipment Tests	System Management	Submission period ends	23/08/2010
RC_2010_04	07/04/2010	Settlement in Default Situations	IMO	Submission period ends	23/08/2010
RC_2010_10	17/05/2010	Bilateral Submission Window	Verve Energy	Submission period ends	23/08/2010
RC_2010_06	27/04/2010	Application of Spinning Reserve to Aggregated Facilities	Griffin Energy	Submission period ends	09/09/2010
RC_2010_15	18/05/2010	MAC Membership Review	Perth Energy	Submission period ends	31/08/2010

Standard Rule Change with Final Report Published

ID	Date submitted	Title	Submitter	Next step	Date
RC_2009_08	21/04/2009	Updates to Commissioning Provisions	IMO	Commencement	18/12/2009
RC_2009_22	15/10/2009	The use of tolerance levels by System Management	System Management	Commencement	01/11/2010

Fast Track Rule Change with Final Report Published

ID	Date Submitted	Title	Submitter	Next Step	Date
RC_2010_18	18/06/2010	Change of Review Board name	IMO	Ministerial approval	17/08/2010
RC_2010_16	30/06/2010	Updates to Reserve Capacity Obligation Provisions	IMO	Commencement	01/09/2010

Agenda Item 5b: Removal of Network Control Services expression of interest and tender process from the Market Rules (PRC_2010_11)

1. BACKGROUND

At the April 2010 Market Advisory Committee (MAC) meeting the Office of Energy presented a paper covering issues associated with implementing a Network Control Service (NCS) under the Wholesale Electricity Market Rules (Market Rules). In this paper the Office of Energy recommended that the IMO give consideration to removing from the Market Rules the requirement on the IMO to conduct the expression of interest and tender process for an NCS. The MAC endorsed this concept. The IMO undertook to prepare, in consultation with System Management and Western Power, a Rule Change Proposal to:

- remove the requirement to conduct an NCS expression of interest and tender process from the Market Rules; and
- facilitate the operation of an NCS (i.e. dispatch and settlement of energy) within the broader market processes.

The IMO has prepared the attached Pre Rule Change Discussion Paper. In doing so, a number of areas were identified for additional consideration by the MAC. These issues are outlined below.

2. ISSUES

2.1 Energy Payment Price

Under the current Market Rules, if System Management instructs a Market Participant to increase output or reduce consumption under a Network Control Service Contract (NCSC) then the Market Participant is paid its contracted pay-as-bid price for the energy dispatched. This can result in a cross subsidy from Market Participants to the SWIS users benefitting from the NCS.

As outlined in the Pre Rule Change Discussion Paper, the IMO proposes to avoid any cross subsidy by changing the price paid by the market for energy dispatched under an NCSC to:

- MCAP, if the NCS is provided by generation; or
- zero, if the NCS is provided by demand side management.

For generation NCSCs, MCAP has been chosen to reflect the price paid by a balancer for the energy it did not generate in order to balance the energy dispatched under an NCS. While the balancing price is not always MCAP, the IMO considers that the impact of non-Verve Energy balancers on the average price is not significant under the current balancing regime, and so MCAP should be used for the sake of simplicity. Obviously, the use of MCAP for this purpose will need to be reviewed as part of any future changes to the arrangements for balancing in the market.

The IMO considers that no energy payment is required from the market for an NCS delivered by demand side management, as this involves no additional generation requiring settlement, but only a simple reduction in the consumption of one or more loads.

However, the IMO notes that in theory both types of NCS require a balancer to reduce output to balance the quantities dispatched by System Management under an NCSC. As such, an NCS involving large quantities of energy could have a significant impact on the overall balancing requirements for the market.

Discussion point 1: Should the price paid by the market for energy dispatch under an NCSC be:

- MCAP, if the NCS is provided by generation; and
- zero, if the NCS is provided by demand side management?

2.2 ERA information requirements

The proposed amendments remove the IMO's responsibility to manage the expression of interest, tender and contracting processes for NCSs. Instead, Network Operators will undertake these processes under the regulatory oversight of the ERA, in accordance with the provisions of the Access Code. As such, the IMO (and the market in general) will have only limited visibility of the details of NCSCs.

The IMO has not included any new requirements in the proposed amendments for the provision of information relating to NCSCs by any Rule Participants to the ERA.

Discussion point 2: Do the proposed amending rules need to include any additional requirements for the provision of NCS details to the ERA by Rule Participants?

2.3 Reserve Capacity for NCS Facilities

In its proposed amendments the IMO has retained the obligation of a Market Participant providing an NCS to seek Reserve Capacity certification for the relevant Facility. Further, to the extent that such a Facility is certified it will be assigned Capacity Credits automatically, which the Market Participant will be free to trade bilaterally.

The IMO considers that there may be a further issue regarding the potential double payment to an NCS provider if the contracted NCS payments are not netted off with respect to any payments received under the Reserve Capacity Mechanism. Various discussions with Western Power and the Office of Energy have indicated that these issues will be dealt with via the ERA's regulatory oversight (under the Access Code).

Discussion point 3: Is there a potential issue regarding the double payment of an NCS provider for its capacity? If so, how is this issue best addressed?

3. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** each of the issues raised in section 2;
- **Agree** for the IMO to formally submit PRC_2010_11 as a Rule Change Proposal.

Agenda item 5b, appendix 1:

Wholesale Electricity Market
Pre Rule Change Discussion Paper

Change Proposal No: PRC_2010_11
Received date: TBA

Change requested by

Name:	Jacinda Papps
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Organisation:	Independent Market Operator
Address:	Level 3, Governor Stirling Tower, 197 St George's Terrace
Date submitted:	TBA
Urgency:	Standard Rule Change Process
Change Proposal title:	Removal of Network Control Services expression of interest and tender process from the Market Rules
Market Rules affected:	Clauses 2.1.2, 2.8.13, 2.17.1, 2.22.1, 2.37.6, 2.37.7, 2.37.8, 2.38.1, 2.38.2, 2.38.3, 2.38.4, 2.38.5, 5.1.1, 5.1.2, 5.1.3, 5.1.4, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.3.6, 5.3.7, 5.3.8, 5.3.9, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.4.10, 5.4.11, 5.4.12, 5.4.13, 5.4.14, 5.5.1, 5.5.2, 5.5.3, 5.5.4, 5.6.1, 5.6.2, 5.6.3, 5.7.1, 5.7.2, 5.8.1, 5.8.2, 5.8.3, 5.8.4, 5.8.5, 5.8.6, 5.8.7, 5.8.8, 5.9.1, 6.17.6, 7.1.1, 7.6.6, 9.12.1, 9.12.2, 9.14.1, 9.14.2, 9.18.3, 9.24.3, the Glossary and Appendix 1 with the addition of new clauses 5.2A.1, 5.2A.2, 5.2A.3, 5.3A.1, 5.3A.2, 5.3A.3, 5.3A.4, 5.9.2, 5.9.3 and 10.5.1(vD).

Introduction

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the Independent Market Operator (IMO)) may make a Rule Change Proposal by submitting a completed Rule Change Proposal form to the IMO.

This Rule Change Proposal can be posted, faxed or emailed to:

Independent Market Operator
Attn: Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339
Email: market.development@imowa.com.au

The IMO will assess the proposal and, within five Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;

(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;

(c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;

(d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and

(e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

A Network Control Service (NCS) is a service provided by generation or Demand Side Management (DSM) that can be a substitute for transmission or distribution network upgrades. An NCS is provided under a Network Control Service Contract (NCSC).

Chapter 5 of the Wholesale Electricity Market Rules (Market Rules) currently outlines the process for NCS procurement and how this service would be operated within the context of the Wholesale Electricity Market (WEM). The chapter includes the Independent Market Operator (IMO) tendering for NCS, contracting for NCS, how the service would be paid for and related compliance and settlement issues.

An NCSC allows System Management to issue real time dispatch instructions to a Facility as required to maintain system security and reliability. This is within the availability limits of the contract. For its part, the Facility providing an NCS gets guaranteed minimum revenue and is not precluded from operating in the energy market.

The current Market Rules require that a Market Participant contracted to provide an NCS must seek certification for Reserve Capacity for the relevant Facility. To the extent that such a Facility is certified, it will be issued Capacity Credits and settled at the prevailing Reserve Capacity price. The NCS payment for a Facility will be reduced by the value of Capacity Credits held by the Facility. There is currently also no restriction on an NCS facility trading its Capacity Credits bilaterally. To the extent this happens, its payment under the Reserve Capacity Mechanism will be reduced.

The energy price that is associated with a Facility providing NCS would be used as the pay-as-bid price in balancing whenever the service is called upon. Apart from the energy payment, which is settled in balancing, the IMO recovers the cost of the payments made under the NCS contract from the relevant Network Operator.

Late in 2009, the policy reasons for the original procurement framework were examined in greater detail. As such, the Office of Energy presented an issues paper at the April 2010 Market Advisory Committee (MAC) meeting[1], which recommended that the IMO give consideration to removing the requirement on the IMO to conduct the EOI and tender processes. The MAC endorsed this concept.

Issue: IMO undertaking tender process

The Office of Energy issues paper noted that chapter 5 is triggered by the Network Operator requesting that the IMO undertake an expression of interest (EOI) process for an NCS under a requirement within the Access Code. No such requirement exists in the Access Code, so it is considered that Chapter 5 could never be formally triggered under the requirements of the Access Code.

The Office of Energy stated that it would appear that the original policy intent, in having the IMO undertake an NCS process and then outlining how the costs are to be allocated, reflected the vertically integrated nature of Western Power at the time of drafting. Since then, Western Power has been disaggregated, with the networks business being separated from generation and retail businesses and regulated under the Access Code.

The Office of Energy issues paper suggested that the need for an NCS instead of a more expensive network enhancement solution would be considered under the Regulatory Test requirements of Chapter 9 of the Access Code. The Regulatory Test only applies to major enhancements, which are defined as exceeding the threshold capital costs of $15 million for distribution and $30 million for transmission projects.

Therefore, the Office of Energy considered that in evaluating any NCS proposal, it would need to be compared to network alternatives within a Regulatory Test environment. Also, the Network Operator would want certainty from the ERA that any NCS costs that it bears can be passed on to network users or potential users.

From the above, the Office of Energy recommended that an NCS, as an option to network augmentation, is more efficiently and effectively addressed by Western Power under the Access Code, with regulatory oversight by the ERA.

[1] www.imowa.com.au/Special_Meeting_No2

Proposal:

The proposal is to remove the NCS EOI, tender and contracting processes from Chapter 5 of the Market Rules. This will allow a Network Operator to undertake these processes under the regulatory oversight of the ERA, in accordance with the provisions of the Access Code.

Issue: Potential cross subsidies from NCS energy payments

Under the current Market Rules, if System Management instructs a Market Participant to increase output or reduce consumption under an NCSC then the Market Participant is paid its contracted price for the energy dispatched. This can result in a cross subsidy from Market Participants to the SWIS users benefitting from the NCS. The developers of the Market Rules were probably aware of the cross subsidy, but may have considered it to be acceptable as there was an assumption that the quantity of energy dispatched under NCSCs would be low.

However, recent investigations into network constraints in the Eastern Goldfields have raised the possibility of large quantities of energy being dispatched under an NCSC. This could potentially lead to cross subsidies in the order of millions of dollars per year.

If a generation Facility is dispatched by System Management under an NCSC, then (all else being equal) one or more Facilities providing balancing services will reduce output accordingly. The dispatch should have no impact on any other Market Participants. As a result, the energy payment made to the NCS provider will be offset by payments made by balancers. Under the current balancing regime the balancer is usually Verve Energy and so the payments are priced at MCAP.

The situation is slightly different for an NSC provided by a DSM option, where an instruction from System Management to reduce consumption actually reduces the net quantity of energy generated. Assuming no other variations, one or more Facilities providing balancing services would be expected to reduce output to compensate for the reduction in consumption. However, in theory the dispatch would also leave one or more Market Customers with an excess of energy over their Net Contract Positions, which would be sold into the market at MCAP. Assuming an MCAP balancing price, any payments made by the balancing generator(s) would be counteracted by payments made to Market Customers, leaving no amount to offset the energy payment made to the NCS provider.

In order to prevent a cross subsidy, the market should pay an NCS provider no more than the market balancing price for the energy generated in response to an NCS dispatch.

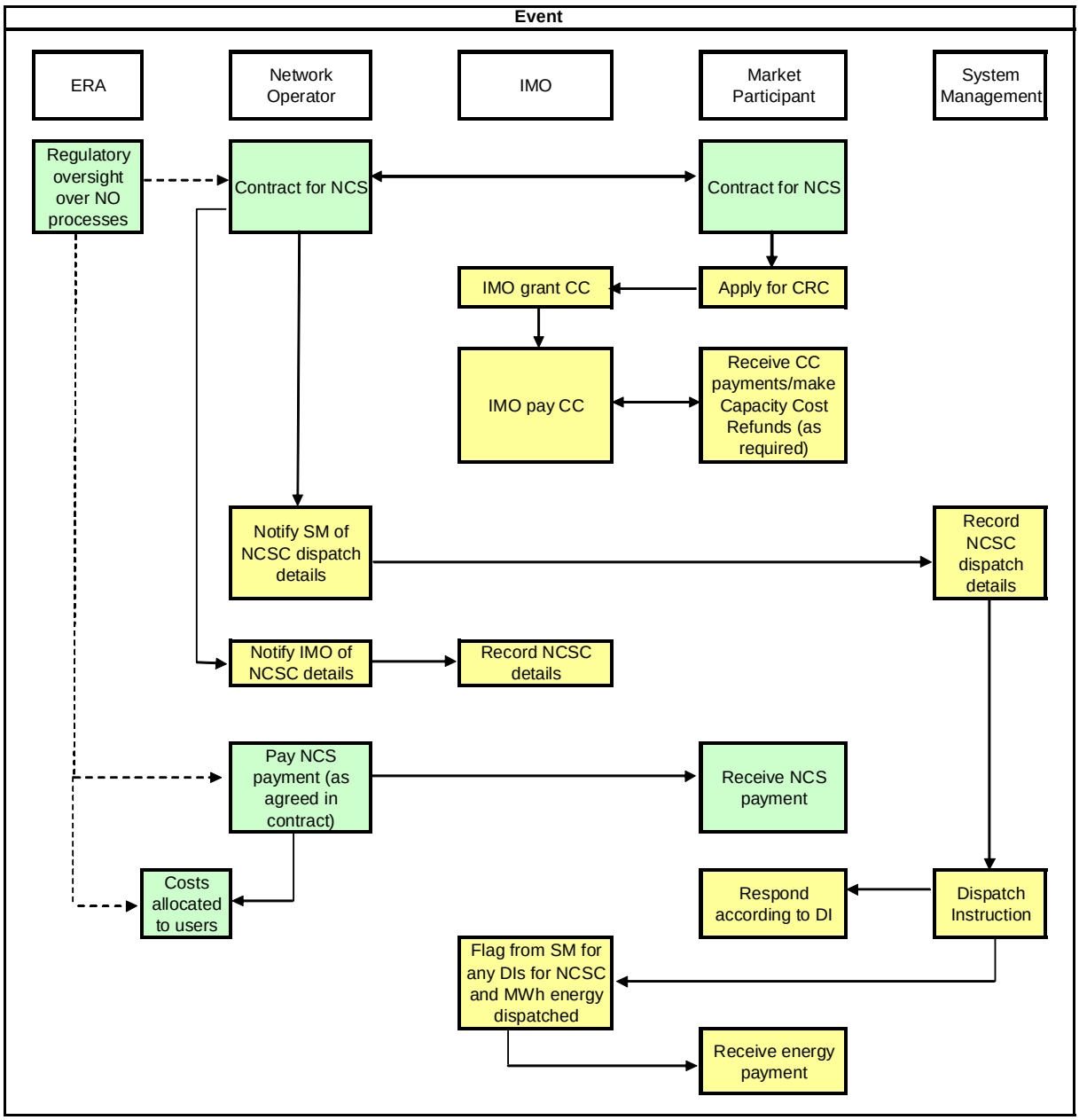
Proposal:

The IMO proposes to amend the Market Rules to change the energy price paid by the market to NCS providers to:

- for NCS provided through generation, MCAP; and
- for NCS provided through DSM, zero.

Overview of proposed process

The proposed amendments facilitate the operation of the NCS process within the broader market processes. This process is outlined in the diagram below (at a high level) with the Market processes indicated in yellow and the off-market processes are indicated in green.



In order to achieve this a number of areas of the Market Rules need to be amended. An explanation of the proposed amendments follows:

Clause/ Section	Explanation of proposed amendments
2.1.2 (e)	Amend IMO role to remove the NCS EOI, Tender and Contract obligations.
2.8.13	Remove the reference to clauses 5.2.3, 5.2.7 and 5.5.1 from the list of protected provisions as these are being removed from chapter 5 (see below).
2.17.1	Remove the reference to clauses 2.37.6, 2.37.7, 5.2.6, 5.2.7 and 5.3.6 from the list of Reviewable Decisions as these decisions are being removed (see below). The IMO will also request that the Office of Energy consider removing these from the Electricity (Wholesale Electricity Market) Regulations.
2.22.1	Delete the reference to chapter 5 in this list of services provided by the IMO for the purposes of the IMO's budget.
2.37 – 2.38	Remove the references to Network Operator in the Credit Limit and Credit Support arrangements as the NCS payment will be a contractual off-market payment. The IMO will also amend the Market Procedure for determining Credit Limits to remove the reference to NCS and Network Operators.
5.1	Amend NCS and NCS contract definitions. Remove clauses 5.1.3 and 5.1.4 as these are related to the procurement process.
5.2, 5.3, 5.4, 5.5 & 5.6	Remove these sections in their entirety. The IMO will also need to repeal the Market Procedure for the Procurement of Network Control Services.
New 5.2A	Add a new section: Registration and Certification. This is to ensure that a Market Participant entering into an NCS contract is registered and applies for Certified Reserve Capacity for the relevant facilities. These clauses are similar in their drafting to the current clauses 5.4.12 and 5.4.13.
New 5.3A	Add a new section: Information required from the Network Operator. This is to ensure that the Network Operator provides: • the IMO with the information it requires to settle the energy payments; and • System Management with the information required to enable System Management to dispatch the services.
5.7	• Delete clause 5.7.1 as this is covered by the new clause 5.3A.2. • Amend clause 5.7.2 to refer to the information that the Network Operator provides to System Management for Dispatch. • No change to clause 5.7.4.
5.8	Delete entire clause as this will now be an off-market contractual payment between the Network Operator and the NCS Provider. Also the IMO will not be undertaking the procurement process therefore will not need to invoice for its costs associated with this.
5.9.1	Amend clause 5.9.1 to remove the reference to the monthly NCS payment and prices for NCS energy payments.
New 5.9.2 and 5.9.3	Add new clauses requiring the IMO to provide the relevant Network Operator with information about a dispatch under an NCSC.

Clause/ Section	Explanation of proposed amendments
6.17.6(e)	Amend the energy price for NCS dispatches to MCAP for generation contracts and zero for DSM contracts. Note that no changes are anticipated to clauses 6.15.1, 6.17.2 and 6.18.3.
7.1.1	Updated to refer to the NCS contract data received from the Network Operator (rather than the IMO) and update the clause reference.
7.6.6	Updated to refer to the NCS contract data received from the Network Operator.
9.12	Remove these clauses as this payment is now an off-market contractual payment.
9.14.1	Remove the reference to Market Participant Network Control Service settlement amount (MPNCSA) as this input (from clause 9.12.1) is no longer required.
9.14.2	Remove this clause as the calculation is no longer required.
9.18.3	Remove the reference to NCS settlement in the non-STEM settlement statement as this has been removed by deleting clause 9.12. This payment is now an off-market contractual payment.
9.24.3	Remove the reference to "payments which the IMO is required to make under Network Control Services" from the list of priority payments for settlement in default situations.
10.5.1(vD)	Add a new clause requiring the IMO to publish reports providing the MWh quantities of energy dispatched under NCSCs by Facility and Trading Interval, similar to those required for Balancing Support Contracts under clause 10.5.1(vC).
Glossary	• Credit Limit: Remove the sentence relating to Network Operators. • Monthly Availability Payment: Remove this definition as this payment is now an off-market contractual payment between a Network Operator and a Market Participant contracted to provide an NCS. • Network Control Service: No change to this definition. • Network Control Service Certification: Remove this definition as the NCS certification no longer applies. This was certification for the tender process. • Network Control Service Contract: Amend to refer to a Network Operator and not the IMO. Also remove the reference to a contract entered into pursuant to chapter 5. • Prudential Obligations: Remove the reference to Network Operators.
Appendix 1: Standing data	Delete the references to the limits on the availability of a facility for NCS, the Monthly Availability Payment and the identity of the Network Operator required to fund the Monthly Availability payment.

In addition to the rule changes identified a number of Market Procedures may need amendment. These are:

- Procurement of NCS;
- Prudential Requirements;
- Dispatch;
- Operational Data Points for Generating Plant;
- Operational Data Points for Non Western Power Networks, Substations, and Loads;

- Certification of Reserve Capacity;
- Declaration of Bilateral Trades and Reserve Capacity Auction;
- Facility Registration, de-Registration and Transfer;
- Reserve Capacity Testing; and
- Settlement.

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2. Explain the reason for the degree of urgency:

The IMO proposes that the Rule Change Proposal be progressed via the Standard Rule Change Process.

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3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and underline words added)

2.1.2. The functions of the IMO are:

…

(e) ~~to administer tender processes for Network Control Services where required by these Market Rules and to enter into Network Control Service Contracts;~~ [Blank]

…

2.8.13. The following clauses are Protected Provisions:

(a) clauses 1.1 to 1.3 and 1.5 to 1.9 ;

(b) clauses 2.1 to 2.24, 2.28, 2.31.1, 2.31.3, 2.31.5(a), 2.31.6, 2.34.1 and 2.36.1;

(c) clauses 3.15, 3.18.18 and 3.18.19;

(d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.22, 4.1.24, 4.1.27, 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.13.10, 4.13.10A, 4.13.11, 4.13.11A, 4.13.11B, 4.16, 4.24.1, 4.24.2 and 4.24.12;

(e) ~~clauses 5.2.3, 5.2.7 and 5.5.1;~~ [Blank]

(f) clauses 9.16.3, 9.16.4 and 9.20.2; and

(g) clauses 10.1.1, 10.1.2, 10.2.1, 10.3 and 10.4.

2.17.1. Decisions by the IMO made under the following clauses are Reviewable Decisions:

…

(h) clauses 2.37.1 to 2.37.3;

~~(i) clause 2.37.6 and 2.37.7;~~ [Blank]

(j) clause 4.9.9;

(k) clause 4.15.1;

(l) clause 4.27.7;

(m) clause 4.28.7; and

(n) ~~clauses 5.2.6 and 5.2.7;~~ [Blank]

(o) ~~clause 5.3.6; and~~ [Blank]

(p) clause 10.2.1.

2.22.1. For the purposes of this clause 2.22, the services provided by the IMO are:

(a) market operation services, including the IMO's operation of the Reserve Capacity market, STEM and Balancing and the IMO's settlement and information release functions;

(b) system planning services, including the IMO's performance of the Long Term PASA function ~~and functions under Chapter 5~~; and

(c) market administration services, including the IMO's performance of the Market Rule change process, Market Procedure change process, the operation of the Market Advisory Committee and other consultation, monitoring, enforcement, audit, registration related functions and other functions under these Market Rules.

2.37.6. ~~The IMO must determine a Credit Limit for each Network Operator that is required under these Market Rules to fund a Network Control Service Contract, where this Credit Limit is the dollar amount determined by the IMO as being equal to maximum possible amount payable over a 70 day period under the Network Control Service Contracts relating to the Network Operator.~~ [Blank]

2.37.7. ~~The IMO must review the Network Operator's Credit Limit when a Network Control Services Contract relating to the Network Operator commences or terminates.~~ [Blank]

2.37.8. The IMO must notify each Market Participant~~, and each Network Operator required to fund a Network Control Service Contract,~~ of their Credit Limit, and provide details of the basis for the determination of the Credit Limit.

2.38.1. Where at any time a Market Participant~~, or Network Operator that is required to fund a Network Control Service Contract,~~ does not meet the Acceptable Credit Criteria set out in clause 2.38.6, then the Market Participant~~, or Network Operator required to fund a Network Control Service Contract,~~ must ensure that the IMO holds the benefit of Credit Support in an amount not less than its Credit Limit.

2.38.2. Where a Market Participant's ~~or a Network Operator's~~ existing Credit Support is due to expire or terminate, then that Market Participant ~~or Network Operator~~ must, at least 10 Business Days before the time when the existing Credit Support will expire or terminate, ensure that the IMO holds the benefit of a replacement Credit Support in an amount not less than the level required under clause 2.38.1 that will become effective at the expiry of the existing Credit Support.

2.38.3. Where a Market Participant's ~~or a Network Operator's~~ Credit Limit is increased, or where the existing Credit Support is no longer current or valid (for example, because the credit support provider ceases to meet the Acceptable Credit Criteria) or where some or all of the Credit Support has been drawn on by the IMO in accordance with these Market Rules, then that Market Participant ~~or Network Operator~~ must ensure that the IMO holds the benefit of a replacement Credit Support in an amount not less than the level required under clause 2.38.1 within one Business Day.

2.38.4. The Credit Support for a Market Participant ~~or Network Operator~~ must be:

(a) an obligation in writing that:

i. is from a credit support provider, who must be an entity which meets the Acceptable Credit Criteria and which itself is not a Market Participant;

ii. is a guarantee or bank undertaking in a form prescribed by the IMO;

iii. is duly executed by the credit support provider and delivered unconditionally to the IMO;

iv. constitutes valid and binding unsubordinated obligations to the credit support provider to pay to the IMO amounts in accordance with its terms which relate to obligations of the relevant Market Participant ~~or Network Operator~~ under the Market Rules; and

v. permits drawings or claims by the IMO to a stated amount; or

(b) a cash deposit ("**Security Deposit**") made with the IMO by or on behalf of the Market Participant ~~or Network Operator~~.

2.38.5. Where Credit Support is provided as a Security Deposit in accordance with clause 2.38.4(b), it will accrue interest daily at the Bank Bill Rate, and the IMO must pay the Market Participant ~~or Network Operator~~ the interest accumulated at the end of each calendar month less any liabilities and expenses incurred by the IMO, including bank fees and charges.

For ease of reference a "clean" version of the proposed chapter 5 is contained in appendix 1 to this Rule Change Proposal.

5 Network Control Service~~s Procurement~~

Network Control Service ~~Tender~~ Process ~~and Timelines~~

5.1. Definitions ~~and Obligations~~

5.1.1. A Network Control Service is ~~any service specified according to clause 5.2.1~~ a service provided by distributed generation or demand side management that can be a substitute for transmission or distribution network upgrades.

5.1.2. A Network Control Service Contract is a contract between ~~the IMO~~ a Network Operator and a Market Participant for the Market Participant to provide a Network Control Service.

5.1.3. ~~The IMO must not enter into a Network Control Service Contract except:~~

~~(a) following a tender process under clause 5.4; or~~

~~(b) in the case of a Network Control Service Contract to apply from Energy Market Commencement, with the approval of the Minister.~~ [Blank]

5.1.4. ~~The IMO must seek to carry out the expression of interest, certification and tender processes in this Chapter 5 in a way that minimises its costs of doing so.~~ [Blank]

5.2. ~~Network Control Service Procurement Requirements~~ [Blank]

5.2.1. ~~Where required by the Access Code to submit a major augmentation, as defined in the Access Code, to the tender process set out in the Market Rules, a Network Operator must notify the IMO of the opportunity for network support generation or Demand Side Management to compete with a transmission or distribution upgrade. The notification must include:~~

~~(a) a specification of the services that would be required from the facility, including:~~

~~i. the maximum active and reactive power quantities required, specified in MW and MVAr;~~

~~ii. the estimated number of hours per year that the services would be required; and~~

~~iii. the required period of notice to call upon the services;~~

(b) the location at which the facility would need to connect to the relevant network;

(c) the Network Operator's estimate of the costs involved in connecting a generation facility that could provide the services specified in paragraph (a) from the location specified in paragraph (b);

(d) the date by which the facility is required to be in service;

(e) the Network Operator's estimate of the cost of an augmentation to the Network that would provide the services; and

(f) the minimum period over which the services would be required, from the date specified in paragraph (d). [Blank]

5.2.2. The minimum period over which the Network Control Service is required is the period specified under clause 5.2.1(f). The IMO may at any time extend the length of the contracted period. [Blank]

5.2.3. The IMO must call for expressions of interest from potential service providers to identify whether any other person could provide the required Network Control Service. [Blank]

5.2.4. A person ("**potential service provider**") may submit a written expression of interest to the IMO indicating that the potential service provider considers that it would be able to provide the Network Control Service. The expression of interest must contain:

(a) the approximate quantity of the Network Control Service that the potential service provider would be able to supply;

(b) whether the Network Control Service will be provided by a generation facility or Demand Side Management option ;

(c) indicative arrangements for activating the Network Control Service;

(d) the approximate cost of the Network Control Service; and

(e) other material terms and conditions which the potential service provider proposes would apply to the provision of the Network Control Service. [Blank]

5.2.5. An expression of interest is not binding on the potential service provider. A person is not required to have submitted an expression of interest to submit a tender response for any Network Control Service tender under clause 5.4. [Blank]

5.2.6. Where, after considering the responses to the expression of interest, the IMO identifies that no person could provide the required Network Control Service for a

~~cost that is less than 50% above the Network Operator's estimate referred to in clause 5.2.1(e), then the IMO must:~~

~~(a) notify that Network Operator that there are no other alternative providers; and~~

~~(b) notify each person that submitted an expression of interest that no tender will be held.~~ [Blank]

5.2.7. ~~Where the IMO identifies that a person other than the Network Operator described in clause 5.2.1 could provide the required Network Control Service, for a cost that is less than 50% above the Network Operator's estimate referred to in clause 5.2.1(e), then the IMO must:~~

~~(a) make the announcement in clause 5.4.1 within 10 Business Days of the closing date for expressions of interest; and~~

~~(b) carry out the tender process described in clause 5.4.~~ [Blank]

5.2A Registration and Certification

5.2A.1. Where a Market Participant enters into a Network Control Service Contract for a Facility, the Market Participant must ensure that the Facility is registered as a Registered Facility during the period for which Network Control Services are to be provided under the Network Control Service Contract.

5.2A.2 Where a Market Participant enters into a Network Control Service Contract for a Facility then the Market Participant must apply to the IMO for Certified Reserve Capacity in respect of the Facility, in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period for which Network Control Services will be provided under the relevant Network Control Service Contract.

5.3. ~~Network Control Service Certification~~ [Blank]

5.3.1. ~~A person must be registered as a Market Participant before applying for a Facility to be certified under clause 5.3.2.~~ [Blank]

5.3.2. ~~A Market Participant wishing to submit a Network Control Service tender under clause 5.4 must apply to the IMO for certification that the IMO considers that the Facility can provide the relevant Network Control Service and of the level of that service that the IMO considers the Facility can reliably provide ("**Network Control Service Certification**").~~ [Blank]

5.3.3. ~~The Network Operator referred to in clause 5.2.1 does not need to apply to the IMO for certification.~~ [Blank]

5.3.4. ~~A Market Participant may apply for Network Control Service Certification in respect of a Facility that is not a Registered Facility.~~ [Blank]

5.3.5. ~~The Market Participant applying for Network Control Service Certification must provide to the IMO the information specified for this purpose in the Network Control Service Procedure.~~ [Blank]

5.3.6. ~~The IMO may certify a Facility for a level of Network Control Service. The IMO must only certify a Facility for a level that the IMO is satisfied that the Facility can reliably provide.~~ [Blank]

5.3.7. ~~A Network Control Service Certification must contain:~~

~~(a) the Network Control Service tender for which the Network Control Service Certification was issued;~~

~~(b) the Facility to which the Network Control Service Certification pertains;~~

~~(c) the quantity of Network Control Service that may be reliably provided by the Facility, including any additional conditions or performance information; and~~

~~(d) the notice period for calling upon the Network Control Service.~~ [Blank]

5.3.8. ~~Network Control Service Certifications expire after the IMO announces the results of the Network Control Service tender to which they relate.~~ [Blank]

5.3.9. ~~The IMO must document the procedure it follows in processing applications for Network Control Service Certification in the Network Control Service Procedure, and the IMO, Market Participants and Network Operators must follow that documented Market Procedure when processing Network Control Service Certification applications.~~ [Blank]

5.3A Information required from the Network Operator

5.3A.1. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must as soon as practicable and not less than 20 Business Days prior to a Network Control Service Contract taking effect, provide the IMO with:

(a) the identity of the Market Participant;

(b) the identity of the Facility providing the service;

(c) a unique identifier for the Network Control Service Contract;

(d) the period over which the services are to be provided by the Network Control Service Contract; and

(e) whether the Network Control Service Contract requires that the Facility not be part of an aggregated Facility.

5.3A.2 When any change occurs to the details of a Network Control Service Contract listed in clause 5.3A.1 the Network Operator must inform the IMO as soon as practicable.

5.3A.3. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must provide System Management with the details of the Network Control Services Contract to enable System Management to dispatch the services provided under it. Despite this, the Network Operator must not provide System Management with the payment terms of the contract, which must be kept confidential.

5.3A.4 When any change occurs to the details of a Network Control Service Contract provided to System Management under clause 5.3A.3 the Network Operator must inform System Management as soon as practicable.

~~**5.4. Network Control Service tenders**~~ **[Blank]**

5.4.1. ~~Where it is required to carry out a tender process for Network Control Service, the IMO must publish details of the tender process and timelines, including:~~

~~(a) the date by which Network Control Service Certification must be obtained for a tender to be submitted;~~

~~(b) the date on which the invitation to tender will be published;~~

~~(c) the last date on which the tenders may be submitted; and~~

~~(d) the date on which the IMO will announce the results of the tender process.~~ [Blank]

5.4.2. ~~By the date specified in clause 5.4.1(a), Market Participants wishing to submit a tender must have secured Network Control Service Certification for the relevant Facility in accordance with clause 5.3.~~ [Blank]

5.4.3. ~~By the date specified in clause 5.4.1(b), the IMO must issue an invitation to tender for the acquisition of the relevant Network Control Service.~~ [Blank]

5.4.4. ~~An invitation to tender for the acquisition of a Network Control Service must contain:~~

~~(a) the quantity of the Network Control Service to be acquired under the invitation to tender including location and timing of the requirements, and any other limitations on the provision of the service, including minimum acceptable quantities;~~

~~(b) the period over which the service is to be provided, determined in accordance with clause 5.2.2, including details of any extension options;~~

(c) terms and conditions of the tender, including proposed terms and conditions for the Network Control Service Contracts to be entered into as a result of the tender process;

(d) the required format and content of tender responses, including:

i. the name and contact details of the tenderer;

ii. the Facility which will provide the Network Control Service;

iii. the quantity of the Network Control Service available from the Facility and any limitations on the time periods for which the Network Control Service will be available, including where applicable:

1. times of the day, of the week, or of the year for which the Facility will not be available to provide the Network Control Service, or will only be able to provide the service in reduced quantity or subject to other restrictions;

2. a maximum number of times which the Facility may be called upon to provide the Network Control Service in a time period;

3. the maximum duration of each occasion when the Facility may be called upon to provide the Network Control Service; and

4. a maximum cumulative duration for which the Facility may be called upon to provide the Network Control Service in a time period;

iv. availability of the Facility, including arrangements when Planned Outages are scheduled;

v. the notice period for calling on the Facility to provide the Network Control Service;

vi. whether the IMO must accept the entire quantity offered, or whether it can accept a part of the quantity offered;

vii. an offered Monthly Availability Payment amount in dollars; and

viii. an offered per MWh price to apply when the Facility is called upon to provide the Network Control Service; and

(e) process details for submitting tenders. [Blank]

5.4.5. A Market Participant or the Network Operator referred to in clause 5.2.1 may respond to the invitation to tender by submitting written tenders in the form, and by the date, specified in the invitation to tender. A Market Participant or the Network

~~Operator referred to in clause 5.2.1 may offer for all or part of the Network Control Service requirements.~~ [Blank]

5.4.6. ~~A Market Participant submitting a tender in response to an invitation to tender must not offer more capacity than is indicated by the relevant Network Control Service Certification.~~ [Blank]

5.4.7 ~~A Market Participant submitting a tender in response to an invitation to tender must not offer a per MWh price to apply when the Facility is called upon to provide the Network Control Service that is greater than the Alternative Maximum STEM Price.~~ [Blank]

5.4.8. ~~In determining the result of a tender process, and entering into Network Control Service Contracts, the IMO must seek to achieve the lowest total cost of the tenders selected, evaluating each tender on the basis of:~~

~~(a) the offered Monthly Availability Payment amount contained in the tender;~~

~~(b) plus an amount equal to:~~

~~i. the offered per MWh price to apply when the Facility is called upon to provide the Network Control Service contained in the tender;~~

~~ii. multiplied by the estimated number of hours per year that the services would be required specified in accordance with clause 5.2.1(a)(ii) divided by 12.~~ [Blank]

5.4.9. ~~The IMO is not under any obligation to accept any tender, or enter into a Network Control Service Contract in respect of any tender, made in response to an invitation to tender under this clause 5.4. However, where the IMO accepts a tender, it must accept it in relation to the entire quantity offered unless the relevant Market Participant or Network Operator indicated that the IMO may accept a part of the quantity offered.~~ [Blank]

5.4.10. ~~The IMO must notify each Market Participant and Network Operator that submitted a tender as to whether it has been successful by the date specified in accordance with clause 5.4.1(d).~~ [Blank]

5.4.11. ~~Where a selected tender response is not from the Network Operator referred to in clause 5.2.1, then the IMO and the selected Market Participant must execute a Network Control Service Contract.~~ [Blank]

5.4.12. ~~Where a selected tender response is not from the Network Operator referred to in clause 5.2.1, then the selected Market Participant must apply to the IMO for Certified Reserve Capacity in respect of each of the Facilities set out in the selected tender response, in respect of each Reserve Capacity Cycle that each Facility would be eligible to participate in over the period for which Network Control~~

~~Services will be provided under the relevant Network Control Service Contract.~~ [Blank]

5.4.13. ~~Where a Market Participant executes a Network Control Service Contract pertaining to a Facility, the Market Participant must ensure that the Facility is registered as a Registered Facility during the period for which Network Control Services are to be provided under the Network Control Service Contract.~~ [Blank]

5.4.14. ~~The IMO must document the procedure it follows in carrying out Network Control Service tender processes in the Network Control Service Procedure, and:~~

(a) ~~the IMO must follow that documented Market Procedure when carrying out tender processes under this clause 5.4; and~~

(b) ~~Market Participants and Network Operators must follow that documented Market Procedure when participating in a tender process under this clause 5.4.~~ [Blank]

~~Network Control Service Contracts~~[Blank] ~~-~~

5.5. ~~Contract Conditions~~[Blank]

5.5.1. ~~Prior to the first tender process under clause 5.4, the IMO must develop a standard form Network Control Service Contract which accords with the requirements of this clause 5.5.~~ [Blank]

5.5.2. ~~The IMO must consult with System Management when developing or amending the standard contractual terms.~~ [Blank]

5.5.3. ~~A standard form Network Control Service Contract must contain the following:~~

(a) ~~the Network Control Service being provided;~~

(b) ~~the duration of the contract, in accordance with clause 5.2.2, and specifying any extension options;~~

(c) ~~the procedures for the IMO, via System Management, to call on the Facility to provide the service, including:~~

i. ~~operational arrangements under which the IMO will allow System Management to call on the relevant Facility to provide the service;~~

ii. ~~the quantities of the service that will be provided, including where applicable, any limitations on the time periods for which the relevant Facility can be called on to provide the service, including:~~

1. ~~times of the day, or of the week, or of the year at which the relevant Facility cannot be called on to provide the service,~~

~~or can only be called on to provide the service in reduced quantity or with other restrictions;~~

~~2. a maximum number of times which the relevant Facility can be called on to provide the service, in a week, or in a year, as applicable;~~

~~3. the maximum duration of each occasion when the relevant Facility can be called on to provide the service; and~~

~~4. a maximum cumulative duration for which the relevant Facility can be called on to provide the Network Control Service in a day, or in a week, or in a year, as applicable.~~

~~iii. availability of the service, including arrangements when Planned Outages of the Facility are scheduled; and~~

~~iv. the notice period for calling on the relevant Facility to provide the service.~~

~~(d) the Facility that will provide the service, and a requirement that the Facility is registered as a Registered Facility during the period for which Network Control Service are to be provided;~~

~~(e) any conditions required to ensure that if the relevant Facility is transferred or disposed of, the transferee will be bound by the contract obligations (for example, by requiring the execution of a deed of assumption or novation);~~

~~(f) the technical standards which the relevant Facility must comply with;~~

~~(g) the Monthly Availability Payment and monthly payment terms, which must be in accordance with clause 5.8;~~

~~(h) the per MWh price to apply when the Facility is called upon to provide the service;~~

~~(i) measurement of the quantity of service provided;~~

~~(j) compliance standards, testing procedures and liquidated damages for the Market Participant, which must be in accordance with clause 5.6;~~

~~(k) procedures for the Market Participant to inform the IMO and System Management when the capability of any of the relevant Facilities to provide the service changes materially;~~

~~(l) contract modification procedures;~~

~~(m) provisions dealing with contract suspension, default, termination, force majeure conditions, and assignment; and~~

~~(n) such other terms and conditions as the IMO considers appropriate.~~ [Blank]

5.5.4. ~~Despite the existence of the standard form Network Control Service Contract, the IMO may enter into a Network Control Service Contract that varies from the standard form Network Control Service Contract. The IMO must consult with System Management before entering into a Network Control Service Contract that varies substantially from the terms of the standard form.~~ [Blank]

5.6. ~~Network Control Service Contract Compliance Conditions~~[Blank]

5.6.1. ~~Testing processes, compliance processes and non-compliance liquidated damages are to be defined within each Network Control Service Contract.~~ [Blank]

5.6.2. ~~If the Market Participant fails to provide a Network Control Service in the quantity and at the time and location requested by the IMO or System Management in accordance with the contract, the IMO and the Market Participant must follow the procedure in the Network Control Service Contract.~~ [Blank]

5.6.3. ~~A Network Control Service Contract must contain a procedure to be used following the failure of a Market Participant to provide a Network Control Service in the quantity and at the time and location requested by the IMO or System Management in accordance with the contract, and this procedure must include:~~

~~(a) a requirement that the IMO must issue to the Market Participant a request for:~~

~~i. a written explanation; and~~

~~ii. a written plan to remedy the failure;~~

~~(b) a requirement that the Market Participant must respond to the request within five Business Days of receiving the request; and~~

~~(c) if the IMO finds the explanation or the plan to remedy the failure to be unsatisfactory, then it may, in accordance with the Network Control Service Contract:~~

~~i. require a test of the Registered Facility's ability to provide the Network Control Service in accordance with the contract terms. The Market Participant must bear its own costs associated with the tests; and~~

~~ii. withhold or reduce the Market Participant's payments for the Network Control Service for a period.~~ [Blank]

5.7. Network Control Service Dispatch

5.7.1. ~~The IMO must provide System Management with the details of the Network Control Services Contract to enable System Management to dispatch the services provided under it. Despite this, the Network Operator must not provide System~~

~~Management with the payment terms of the contract, which must be kept confidential.~~ [Blank]~~-~~

5.7.2. System Management may call upon the relevant Facility to provide services under a Network Control Services Contract in accordance with the terms of the contract, as advised to it by the Network Operator in accordance with clause 5.3A.3 and amended in accordance with clause 5.3A.4.

~~Payments and~~ Settlement Data

5.8. ~~Network Control Service Contracts Payments~~ [Blank]

5.8.1. ~~The monthly Network Control Service Contract payment to a Market Participant that has a Network Control Service Contract with the IMO in respect of a Facility is to be the greater of zero and:~~

~~(a) the Monthly Availability Payment determined in accordance with the contract; less~~

~~(b) the value of Capacity Credits held by the Market Participant for that Facility, where this value is the sum of the total value of all of those Capacity Credits, where each Capacity Credit is valued at the applicable Monthly Reserve Capacity Price even if those Capacity Credits are traded bilaterally; less~~

~~(c) the value of any liquidated damages payable under the contract in respect of a failure of the Market Participant to meet its obligations under the Network Control Service Contract.~~ [Blank]

5.8.2. ~~The IMO must pay the Market Participant the monthly Network Control Service Contract payment in accordance with Chapter 9.~~ [Blank]

5.8.3. ~~The Network Operator referred to in clause 5.2.1 must pay the IMO the monthly Network Control Service Contract payment in accordance with Chapter 9.~~ [Blank]

5.8.4. ~~After receiving the notification described in clause 5.2.1 but before commencing Network Control Services procurement, the IMO may estimate the costs described in clause 5.8.5(a), and invoice the Network Operator referred to in clause 5.2.1 for the estimated amount.~~ [Blank]

5.8.5. ~~The IMO must determine the dollar amount that is:~~

~~(a) the costs it has incurred in:~~

~~i. the expression of interest process described in clause 5.2;~~

~~ii. the certification process described in clause 5.3;~~

~~iii. the tender process described in clause 5.4,~~

in respect of any tender process for Network Control Services

(b) less the amount received under any relevant invoice issued under clause 5.8.4. [Blank]

5.8.6. Where the dollar amount determined in clause 5.8.4 is a positive amount, the IMO must issue an invoice to the Network Operator referred to in clause 5.2.1, and subject to clause 5.8.8, the Network Operator must pay the IMO the invoiced amount. [Blank]

5.8.7. Where the dollar amount determined in clause 5.8.4 is a negative amount, the IMO must issue an invoice the Network Operator referred to in clause 5.2.1, and subject to clause 5.8.8, the IMO must pay the Network Operator the determined amount. [Blank]

5.8.8. Where the Network Operator disputes the amount on an invoice issued under clauses 5.8.4, 5.8.6 or 5.8.7, the dispute resolution process set out in clauses 2.18 to 2.20 apply. [Blank]

5.9. Settlement Data

5.9.1. The IMO must provide the following information to the settlement system:

(a) for each month's Network Control Service Contract Payment:

i. the amount of the payment set out in accordance with clause 5.8.1;

ii. the Market Participant to which the payment will be made; and

iii. the Network Operator by which the payment will be made. [Blank]

(b) for each Network Control Service Contract energy payment:

i. the prices set out in the Network Control Service Contract in accordance with clause 5.5.3(h); and [Blank]

ii. the Market Participant to which the payment will be made.

5.9.2. The IMO must provide Network Operators with details of any quantities dispatched under their Network Control Service Contracts in a Trading Month by 5:00 PM on the Invoicing Date for Non-STEM Settlement Statements for that Trading Month.

5.9.3 The information provided by the IMO to a Network Operator under clause 5.9.2 must include, for each relevant Facility and Trading Interval:

(a) the unique identifier of the Network Control Service Contract under which the Dispatch Instruction was issued;

(b) the MWh quantity by which the Facility was instructed by System Management to increase its output as specified by System Management in

accordance with clause 7.13.1(dB) (Loss Factor adjusted to the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB);

(c) the per MWh price paid by the IMO for the quantity dispatched under the Network Control Service Contract; and

(d) the total amount paid by the IMO to the Market Participant for the quantity dispatched under the Network Control Service Contract.

6.17.6. The Dispatch Instruction Payment, DIP(p,d,t), for Market Participant p and Trading Interval t of Trading Day d equals the sum of:

(a) zero, if Market Participant p:

…

(e) if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract ~~f~~Facilities registered by the Market Participant of the amount that is the product of:

i. the quantity by which the ~~f~~Facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (where for the purpose of this calculation a Loss Factor adjustment is to be applied to the quantity specified by System Management so that the result is measured at the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB); and

ii. the price defined as: ~~as applicable under the relevant Network Control Service Contract for the facility as specified in clause 5.9.1(b).~~

1. MCAP for Trading Interval t, if the Facility was instructed to increase its output; or

2. zero, if the Facility was instructed to reduce its consumption.

7.1.1. System Management must maintain the following data set, and must use this data set when determining which Dispatch Instructions it will give:

…

(m) Network Control Service Contract data, if any, received from ~~the IMO~~ a Network Operator in accordance with clauses ~~5.7.1~~ 5.3A.3 and 5.3A.4.

7.6.6. System Management may issue Dispatch Instructions to Market Participants other than the Electricity Generation Corporation:

(a) in accordance with any Ancillary Service Contract;

(b) in accordance with any Balancing Support Contract;

(c) in accordance with the details of any Network Control Service Contract, as advised to System Management by a Network Operator in accordance with clause 5.3A.3 or updated by a Network Operator in accordance with clause 5.2A.4;

(d) in connection with any test of equipment allowed under these Market Rules; or

(e) under clause 7.6.3 or clause 7.6.4.

9.12. ~~Network Control Service Calculations for a Trading Month~~ [Blank]

9.12.1. ~~The Market Participant Network Control Service settlement amount for Market Participant p for Trading Month m is:~~

~~MPNCSA(p,m) = Sum(f∈F,n∈N,Network Control Service Contract Payment(p,m,f,n))~~

~~Where~~

~~Network Control Service Contract Payment (p,m,f,n) is the net payment to be made by the IMO under a Network Control Service Contract to Market Participant p, for Trading Month m for Registered Facility f as specified by the IMO under clause 5.9.1 which relates to Network Operator n;~~

~~F is the set of all Market Participant p's Registered Facilities, where "f" refers to a member of that set; and~~

~~N is the set of all Network Operators, where "n" refers to a member of that set.~~ [Blank]

9.12.2. ~~The Network Operator Network Control Service settlement amount for Network Operator n for Trading Month m is:~~

~~NONCSA(n,m) = Sum(p∈P,f∈F, Network Control Service Contract Payment(p,m,f,n))~~

~~Where~~

~~Network Control Service Contract Payment(p,m,f,n) is the net payment to be made by the IMO under a Network Control Service Contract to Market Participant p, for Trading Month m for Registered Facility f which relates to Network Operator n as specified by the IMO under clause 5.9.1;~~

~~P is the set of all Market Participants, where "p" refers to a member of that set; and~~

~~F is the set of all Market Participant p's Registered Facilities, where "f" refers to a member of that set.~~ [Blank]

9.14.1. The Net Monthly Non-STEM Settlement amount for the IMO to Market Participant p for Trading Month m is:

NMNSSA(p,m) = RCSA(p,m) +Sum(d,BSA(p,d,t)) + ASSA(p,m)
+ COCSA(p,m) + RSA(p,m) + ~~MPNCSA(p,m) +~~ MPFSA(p,m)

9.14.2. ~~The Net Monthly Network Operator Settlement Amount for the IMO to Network Operator n for Trading Month m~~

~~NMNOSA (n,m) = (-1) × NONCSA(n,m)~~

~~Where NONSCA is defined in clause 9.12.2.~~[Blank]

9.18.3. A Non-STEM Settlement Statement must contain the following information:

…

ix. details of amounts calculated for the Market Participant under clauses 9.7 to 9.14 with respect to:

1. Reserve Capacity settlement;
2. Balancing settlement;
3. Ancillary Services settlement
4. Commitment and Outage Compensation settlement

4A. Non-Compliance Cost settlement;

5. Reconciliation settlement;
6. ~~Network Control Service settlement; and~~ [Blank]
7. Fee settlement; and
8. Net Monthly Non-STEM Settlement Amount;

9.24.3. Notwithstanding anything else in these Market Rules, if at any time the total amount received by the IMO from Rule Participants in cleared funds ("**Total Amount**") is not sufficient to make the payments which the IMO is required to make under these Market Rules (for example, as a result of default by one or more Rule Participants), then the IMO's liability to make those payments is limited to the Total Amount. The IMO must apply the Total Amount as follows:

(a) first, the IMO must apply the Total Amount to satisfy:

i. payment of Revenue Requirement Settlement Amounts to the IMO, System Management and the Economic Regulation Authority (including as contemplated by clause 9.22.10);

ii. payments which the IMO is required to make under Supplementary Capacity Contracts or to a provider of Ancillary Services holding an Ancillary Service Contract with System Management; and

iii. ~~payments which the IMO is required to make under Network Control Service Contracts; and~~ [Blank]

iv. funds required to be disgorged or repaid by the IMO as contemplated by clause 9.24.2; and

…

10.5.1. The IMO must set the class of confidentiality status for the following information under clause 10.2.1, as Public and the IMO must make each item of information available from the Market Web-Site after that item of information becomes available to the IMO:

…

(vC) reports providing the MWh quantities of energy dispatched under Balancing Support Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dA), for each Trading Month which has been settled;

(vD) reports providing the MWh quantities of energy dispatched under Network Control Service Contracts by Facility and Trading Interval, as specified by System Management in accordance with clause 7.13.1(dB), for each Trading Month which has been settled;

…

Credit Limit: In respect of a Market Participant, the amount determined by the IMO in accordance with clause 2.37.4. ~~In respect of a Network Operator, the amount determined by the IMO in accordance with clause 2.37.6.~~

~~**Monthly Availability Payment**: The maximum monthly payment by a Network Operator to a Market Participant providing capacity under a Network Control Service Contract.~~

~~**Network Control Service Certification**: Has the meaning given in clause 5.3.2.~~

Network Control Service Contract: A contract between ~~the IMO~~ a Network Operator and a Market Participant~~, entered into pursuant to chapter 5,~~ to provide a Network Control Service.

Prudential Obligations: In respect of a Market Participant ~~or Network Operator~~, the obligations set out in clauses 2.37 to 2.43.

Appendix 1: Standing Data

This Appendix describes the Standing Data to be maintained by the IMO for use by the IMO in market processes and by System Management in dispatch processes.

Standing Data required to be provided as a pre-condition for Facility Registration, and which is to be updated by Rule Participants as necessary, is described by clauses (a) to (j).

Standing Data not required to be provided as a pre-condition for Facility Registration but that which is required to be maintained by the IMO includes the data described in clauses (k) onwards.

...

(k) For each Registered Facility:

...

ii. Network Control Service information including:

1. the identity of any Network Operator that has entered into a Network Control Service Contract in relation to the Facility~~limits on the availability of a facility~~;

2. the unique identifier for any Network Control Service Contract applicable to the Facility provided by a Network Operator in accordance with clause 5.3A.1(c)~~the Monthly Availability Payment for the facility~~; and

3. whether the Facility is subject to a Network Control Service Contract that requires the Facility not to part of an aggregated Facility~~the identity of the Network Operator required to fund the Monthly Availability Payment~~; and

iii. the Facility Dispatch Tolerance;

---

4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system.

The IMO considers that the proposed amendments will promote the economically efficient production and supply of electricity in the SWIS. The proposed amendments allow a Network Operator to more effectively manage its own risk in contracting for NCSs. The amendments also remove the potential energy payment cross subsidy from Market Participants to the SWIS users benefitting from an NCS.

Additionally, the IMO considers that the amendments may be more efficient in facilitating the procurement of NCSs (where required), which will assist in ensuring the reliable supply of electricity.

---

5. Provide any identifiable costs and benefits of the change:

Costs:

There may be some costs associated with:

- removing the settlement calculations from the Settlement Systems operated by the IMO; and
- amending the relevant MPI elements from the IT Systems.

Benefits: Allowing a Network Operator to manage its own risks regarding contracting for an NCS, and removal of a potential cross subsidy relating to energy payments for NCSs.

Appendix 1: Clean version of Chapter 5

5 Network Control Services

Network Control Service Process-

5.1. Definitions

5.1.1. A Network Control Service is a service provided by distributed generation or demand side management that can be a substitute for transmission or distribution network upgrades.

5.1.2. A Network Control Service Contract is a contract between a Network Operator and a Market Participant for the Market Participant to provide a Network Control Service.

5.2 [Blank]

5.2A Registration and Certification

5.2A.1. Where a Market Participant enters into a Network Control Service Contract for a Facility, the Market Participant must ensure that the Facility is registered as a Registered Facility during the period for which Network Control Services are to be provided under the Network Control Service Contract.

5.2A.2 Where a Market Participant enters into a Network Control Service Contract for a Facility then the Market Participant must apply to the IMO for Certified Reserve Capacity in respect of the Facility, in respect of each Reserve Capacity Cycle that the Facility would be eligible to participate in over the period for which Network Control Services will be provided under the relevant Network Control Service Contract.

5.3 [Blank]

5.3A Information required from the Network Operator

5.3A.1. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must as soon as practicable and not less than 20 Business Days prior to a Network Control Service Contract taking effect, provide the IMO with:

(a) the identity of the Market Participant;

(b) the identity of the Facility providing the service;

(c) a unique identifier for the Network Control Service Contract;

(d) the period over which the services are to be provided by the Network Control Service Contract; and

(e) whether the Network Control Service Contract requires that the Facility not be part of an aggregated Facility.

5.3A.2 When any change occurs to the details of a Network Control Service Contract listed in clause 5.3A.1 the Network Operator must inform the IMO as soon as practicable.

5.3A.3. When a Network Operator has entered into a Network Control Service Contract with a Market Participant, the Network Operator must provide System Management with the details of the Network Control Services Contract to enable System Management to dispatch the services provided under it. Despite this, the Network Operator must not provide System Management with the payment terms of the contract, which must be kept confidential.

5.3A.4 When any change occurs to the details of a Network Control Service Contract provided to System Management under clause 5.3A.3 the Network Operator must inform System Management as soon as practicable.

5.4 [Blank]

5.5 [Blank]

5.6 [Blank]

5.7. Network Control Service Dispatch

5.7.1 [Blank]

5.7.2. System Management may call upon the relevant Facility to provide services under a Network Control Services Contract in accordance with the terms of the contract, as advised to it by the Network Operator in accordance with clause 5.3A.3 and amended in accordance with clause 5.3A.4.

Settlement Data

5.8 [Blank]

5.9. Settlement Data

5.9.1. The IMO must provide the following information to the settlement system:

(a) [Blank]

(b) for each Network Control Service Contract energy payment:

i. [Blank]

ii. the Market Participant to which the payment will be made.

5.9.2. The IMO must provide Network Operators with details of any quantities dispatched under their Network Control Service Contracts in a Trading Month by 5:00 PM on the Invoicing Date for Non-STEM Settlement Statements for that Trading Month.

5.9.3 The information provided by the IMO to a Network Operator under clause 5.9.2 must include, for each relevant Facility and Trading Interval:

(a) the unique identifier of the Network Control Service Contract under which the Dispatch Instruction was issued;

(b) the MWh quantity by which the Facility was instructed by System Management to increase its output as specified by System Management in accordance with clause 7.13.1(dB) (Loss Factor adjusted to the Reference Node) or reduce its consumption as specified by System Management in accordance with clause 7.13.1(dB);

(c) the per MWh price paid by the IMO for the quantity dispatched under the Network Control Service Contract; and

(d) the total amount paid by the IMO to the Market Participant for the quantity dispatched under the Network Control Service Contract.

Agenda Item 5c: Required Level and Reserve Capacity Security (PRC_2010_12)

1. BACKGROUND

At the 12 May 2010 Market Advisory Committee (MAC) meeting the IMO presented the Concept Paper: Reserve Capacity Security (CP_2010_04). This paper outlined the issues identified by the IMO following a comprehensive review of the administration of Reserve Capacity Security. The paper also presented a number of recommended solutions which were discussed by the MAC.

Based on the advice received from the MAC, the IMO has prepared the attached Pre Rule Change Discussion Paper: Required Level and Reserve Capacity Security (PRC_2010_12). The IMO also wishes to note the additional streams of work associated with this Rule Change Proposal. These are:

- Recommending the inclusion of clauses 4.13.3 and 4.13.4 as civil penalty provisions in the Electricity (Wholesale Electricity Market) Regulations 2004. This will involve recommending civil penalty amounts to the Office of Energy for consideration and will occur simultaneously with the formal Rule Change Process;
- Engaging an external consultant to map the process around the provision and return of Reserve Capacity Security under the proposed Amending Rules. This is to ensure that there are no unintended consequences arising from the drafting. The IMO considers that this work can occur during the first submission period and the IMO will disseminate the results to interested stakeholders prior to this period finishing. This will allow any analysis to be taken into account in submissions. The IMO considers that this process will ensure that the integrity of the proposed amendments; and
- Developing a Rule Change Proposal to introduce the concept of an Intermittent Generator being partially commissioned for the purposes of Reserve Capacity refunds. In particular, a new Intermittent Generator is currently required to make Reserve Capacity refunds until it is deemed to be commissioned by the IMO. Under the proposed amendments contained in the Required Level and Reserve Capacity Security proposal (PRC_2010_12) it is possible that an Intermittent Generator may never be deemed commissioned. For example a 100MW wind farm (comprising of five 20MW turbines) may have commissioned three turbines (60MW) but would not be deemed by the IMO to be completely commissioned and therefore required to make full refunds.

  The IMO will propose that clause 4.26.1 be amended to allow for a progressive scale of refunds for new Intermittent Generators who have not operated at 100% of the Required Level but which the IMO considers to be Commercial Operation[1].

2. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Note** that the IMO will be undertaking these additional streams of related work; and
- **Endorse** the IMO formally submitting PRC_2010_12 as a Rule Change Proposal.

[1] This will be defined in the Reserve Capacity Market Procedure.

Agenda item 5c

Wholesale Electricity Market
Pre Rule Change Discussion Paper

Change Proposal No: PRC_2010_12
Received date: TBA

Change requested by

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Address:	Level 3, Governor Stirling Tower, 197 St George's Terrace
Date submitted:	TBA
Urgency:	Medium
Change Proposal title:	Required Level and Reserve Capacity Security
Market Rules affected:	Clauses 4.1.21, 4.1.27, 4.13.1, 4.13.3, 4.13.10, 4.13.10A, 4.13.11, 4.13.11A, 4.25.2, 4.25A.3, 4.26.1, 4.28C.8, 4.28C.12 and new clauses 4.13.10B, 4.13.10C, 4.28C.8A, 4.28C.12A and the Glossary.

Introduction

Clause 2.5.1 of the Wholesale Electricity Market Rules (Market Rules) provides that any person (including the Independent Market Operator (IMO)) may make a Rule Change Proposal by submitting a completed Rule Change Proposal form to the IMO.

This Rule Change Proposal can be posted, faxed or emailed to:

Independent Market Operator
Attn: Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850

Fax: (08) 9254 4339
Email: market.development@imowa.com.au

The IMO will assess the proposal and, within five Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;

(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;

(c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;

(d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and

(e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

When a Market Participant has committed to the development of a new Facility, or a Facility upgrade, the Wholesale Electricity Market (WEM) Rules (Market Rules) require the Market Participant to provide Reserve Capacity Security in respect of the Facility. This security is required after either:

- the Bilateral Trade Declaration for the Facility is made – if the Market Participant indicates that it intends to bilaterally trade the Certified Reserve Capacity (CRC) associated with the Facility; or
- at the time the Reserve Capacity Auction Offer for the Facility is made – if the CRC is to be offered into the Reserve Capacity Mechanism through the Reserve Capacity Auction process.

The Market Rules require Market Participants to provide a Reserve Capacity Security for a new Facility or upgrade to an existing Facility due to the greater delivery risk associated with the unproven capacity. Currently the IMO holds in excess of $24 million dollars in Reserve Capacity Security.

Clause 4.13.10 of the Market Rules outlines that the Reserve Capacity Security is no longer required once:

- The Reserve Capacity Obligations commence; and

- The Facility has operated at 100% of its Reserve Capacity Obligation Quantity (RCOQ) for one Trading Interval within the Reserve Capacity Year. In this case the requirement ceases immediately, subject to a processing period; or
- The Facility has demonstrated that it has operated to a level of at least 90% (but not 100%) of its RCOQ within the Reserve Capacity Year. In this case the requirement for Reserve Capacity Security ceases following the end of the Reserve Capacity Year.

Note: if the Facility has an RCOQ of zero, the Reserve Capacity Security is to be returned at the end of the Reserve Capacity Year.

If a Facility fails to satisfy the obligations specified in clause 4.13.10 during the Reserve Capacity Year the Reserve Capacity Security is first used to fund any Supplementary Reserve Capacity required in that year, with the remainder distributed to Market Customers proportional to their Individual Reserve Capacity Requirement level.

Issues

After a comprehensive review of the administration of Reserve Capacity Security a number of issues with the process have been identified. These issues have been further highlighted as new and diverse facilities have begun commissioning and started to participate in the WEM. Additionally, the recent failure of some Market Participants to meet their obligations has brought these issues to the forefront.

A paper outlining these issues was presented to the Market Advisory Committee (MAC) at its 12 May 2010 meeting. In preparing this Pre Rule Change Discussion Paper, the views expressed by the MAC have been taken into account.

Reserve Capacity Security related issues have also been identified for the treatment of Demand Side Programmes, Load Reduction Curtailable Loads and Stipulated Default Loads. These issues will be addressed in a separate Rule Change Proposal regarding Curtailable Loads to be presented later this year.

Finally, there is no civil penalty currently associated with the failure to provide Reserve Capacity Security as required by clauses 4.13.3 and 4.13.4. The IMO considers that a contravention of these clauses should attract a civil penalty. For example, consider a Reserve Capacity Security provided by means of a Bank Undertaking from Bank X. If Bank X's Acceptable Credit Criteria status changes the obligation to provide the new Reserve Capacity Security is with the Market Participant. If the Market Participant fails to update the Bank Undertaking then currently no civil penalty will apply.

The IMO will work with the Office of Energy to include these as civil penalty provisions in the Electricity (Wholesale Electricity Market) Regulations 2004. The IMO will recommend that the civil penalties associated with the failure to provide Reserve Capacity Security mirror those associated with the failure to provide Credit Support (clauses 2.38.2 and 2.38.3 of the Market Rules). These are both Category B civil penalty provisions and are set at:

- First contravention: $25,000 plus a daily amount of $5,000; and
- Subsequent contraventions: $50,000 plus a daily amount of $10,000.

Issue 1: Treatment of Facilities once the first Reserve Capacity Cycle has lapsed

Currently the Market Rules are ambiguous as to whether it is necessary to maintain Reserve Capacity Security after the end of the first Reserve Capacity Cycle. In particular, clause 4.13.1 and 4.1.13 require that Market Participants with Facilities that have been assigned Certified Reserve Capacity by the IMO provide Reserve Capacity Security to the IMO in August of Year 1 of the relevant Reserve Capacity Cycle. The Market Rules are silent as to whether this requirement is repeated for every Reserve Capacity Cycle that the Certified Reserve Capacity appears in for new capacity.

The practice since market start has been to only require Reserve Capacity Security to be provided for the first Reserve Capacity Cycle regardless of whether the Certified Reserve Capacity was delivered in full, partially or not at all.

Proposed Solution

Clause 4.13.1 has been amended to remove any doubt and clearly state that Reserve Capacity Security is to either be returned to the Market Participant or forfeited within the first Reserve Capacity Cycle and that no further Reserve Capacity Security obligation will apply to that Certified Reserve Capacity thereafter, unless a Market Participant decides to upgrade the Facility at a later date.

Clause 4.13.3 has also been amended to clarify that replacement Reserve Capacity Security is only required if the obligation to provide security extends beyond the period of the validity of the current security. For example, it would not be necessary to provide a replacement security if the existing security happens to expire a day after the end of Year 4 of the first Reserve Capacity Cycle for which the Market Participant applied for certification.

Issue 2: Treatment of Intermittent Facilities

Clause 4.13.11A (via a reference to clause 4.13.11) stipulates that the Reserve Capacity Security provided will be forfeited for Facilities that cannot, at least once during the Capacity Year, operate at least at 90% of the RCOQ level, in a Trading Interval when the RCOQ for that Facility is greater than zero. Intermittent Facilities have an RCOQ level of zero at all times and it is therefore impossible for them to meet the requirements of clause 4.13.11A.

At the same time, clause 4.13.10(c), stipulates that the Facilities captured by that clause (which applies to Intermittent Facilities) should have their securities returned by the end of the Reserve Capacity Cycle irrespective of performance. This is in contrast to the requirements under clause 4.13.11A.

As agreed at the May 2010 MAC meeting, all Facilities (conventional and non-conventional) should be entitled to receive their Reserve Capacity Security back when they can prove to the IMO that they can perform to the level at which their certification is based.

Proposed Solution

It is prudent to develop a criterion for the return of Reserve Capacity Security which would ensure consistent treatment of all generation types but at the same time take into account each generation type's unique characteristics (in particular Intermittent Generators). The IMO

proposes to define a level of output a Facility is required to perform at (the "Required Level" outlined in new clause 4.13.10B). The Required Level for each Facility type will be calculated by the IMO as follows:

- for Facilities assigned CRC under clause 4.11.1(a), using the Metered Schedule and Temperature Dependence Curves submitted to the IMO under clause 4.10.1(e)i. and converted to a sent out basis at 41°C;

- for Facilities assigned CRC under clause 4.11.2(b), using either the:

    - a value which equals the 95 percentile of the 3-year expected peak output for the Facility, expressed in MW, provided to the IMO under clause 4.10.3; or

    - in the case where the value which equals the 95 percentile is not considered to be appropriate by the IMO, an alternative value, expressed in MW, to that identified in the report provided under clause 4.10.3; and

- Curtailable Loads and Demand Side Management Programmes using the Facility's Relevant Demand minus Capacity Credits assigned to that Facility.

Note that a Facility will also be required to operate at the Required Level for a specified number of Trading Intervals (two for the purposes of the return of Reserve Capacity Security) and also be in Commercial Operation. For a Traditional Facility, CRC is assigned on a Facility's ability to meet a specified output level during a Capacity Year. However, a Facility assigned CRC under 4.11.2(b) would be certified based on an average output over a three year period, with no assumptions about output being achieved in consecutive intervals. Therefore for the purposes of the return of Reserve Capacity Security the intervals at which the Required Level must be achieved need not be consecutive. Under the IMO's proposed amendments a Facility will be required to meet a Required Level which mirrors the basis on which it was assigned CRC.

The IMO proposes to define the term Commercial Operation in the Market Rules. The specific details of how the IMO determines a Facility is in Commercial Operation will be specified in the Market Procedure for Reserve Capacity Security (see Appendix 1 of this proposal for further details). The IMO will also include details of its basis for determining whether an alternative value to the 95 percentile should be accepted in the Market Procedure for Reserve Capacity Security.

In determining the Required Level to be met for Facilities assigned CRC under clause 4.11.2(b) (mainly Intermittent Generators), the views of the IMO's panel of independent experts were sought on:

- the appropriate number of Trading Intervals an Intermittent Facility should meet the Required Level for; and

- how to set the value for the Required Level for an Intermittent Facility.

Further details of this advice provided by Senergy Econnect and McLennan, Magasanik and Associates (MMA) are presented in Appendix 2 of this proposal. The IMO met with a number of key stakeholders while developing the proposed basis for calculating the Required Level

for Intermittent Generators. The concerns expressed by these stakeholders have, where possible, been taken into account in developing this methodology.

Based on the advice received, using the 95th percentile of the 3 year expected output will accurately represent the maximum output that a Facility should be able to achieve in at least two Trading Intervals over the year. For example, the use of the 95th percentile will not subject a wind farm to the risk that the wind does not blow (at least to the extent of achieving 90% of the Required Level).

In the case where an independent expert does not consider that the value corresponding to the 95th percentile will be appropriate for a Facility, an alternative value may be proposed to the IMO for consideration when setting the Required Level (Clause 4.10.3(b)). The IMO will advise Market Participants of the Required Level that has been set for each of its Facilities following its determination (new clause 4.13.10C).

The introduction of a Required Level to be met by each type of generation will ensure equitable treatment of both conventional and non-conventional technologies. Clause 4.13.10 will be amended to specifically set out the requirement for a Facility to operate at its Required Level, as scaled to its level of Capacity Credits as assigned for the Capacity Year, for at least two Trading Intervals before its Reserve Capacity Security may be returned. Clause 4.13.10 will also be amended to refer to the 90% test having been achieved within the relevant Capacity Year, as previously contained in clause 4.13.11. The requirement to scale the Required Level to the level of Capacity Credits assigned for the Capacity Year will ensure that if the Capacity Credits for the Facility are reduced by the IMO (e.g. following a test) these will not be taken into account in determining whether Reserve Capacity Security can be returned.

Reserve Capacity Testing and refunds

The concept of a Required Level will be also used for the purposes of Reserve Capacity Testing and Reserve Capacity refunds. Clause 4.26.1 will be amended to link the IMO's decision that an Intermittent Facility is commissioned to when it has met 100% of its Required Level. This will be as scaled to the level of Capacity Credits assigned for the Capacity Year, in at least two Trading Intervals and is considered by the IMO to be in Commercial Operation. Further details of this proposed change and the introduction of partial commissioning of Intermittent Generators are discussed in issue 2.2.

Note that the IMO proposes to scale the Required Level for the purposes of Reserve Capacity Testing to the level of Capacity Credits assigned to the Facility. By using the dynamic level of Capacity Credits, the level of Capacity Credits as amended by the IMO following any previous tests will be taken into account when undertaking any Reserve Capacity Testing. This proposal does not amend the requirement to meet the Required Level for at least one Trading Interval.

Issue 3: Timing for return of Reserve Capacity Security

The earliest opportunity for a Market Participant to prove it can met its capacity obligations and request the IMO to return the associated Reserve Capacity Security is once a RCOQ exceeding zero applies to the Facility (e.g. from 1 July in Year 3). Currently early commissioning of a Facility (which is allowed for under the Market Rules) does not entitle the Market Participant to have its Reserve Capacity Security returned earlier than the first date

that the RCOQ's apply. The IMO considers that this treatment places an unnecessary financial burden on early commissioning Facilities.

Proposed Solution

As with the solution to issue 2.1, the IMO proposes that the Market Rules be amended (clause 4.13.10) to introduce the concept of a Required Level and allow for the return of the Reserve Capacity Security when a Facility can operate at this level and is considered by the IMO to be in Commercial Operation regardless of whether this occurs before or after an RCOQ greater than zero applies.

Issue 4: Treatment of upgraded Facilities

A Market Participant will be required to provide Reserve Capacity Security when it undertakes an upgrade of an existing facility (clause 4.13.1). However, for the purposes of determining whether to return any security, it is currently unclear how the IMO would assess that part of a Facility has performed at its Required Level (either 100% or 90%) where the upgrade is not independent of the rest of the plant.

It is particularly the application of the 90% requirement in clause 4.13.11 (to be amended to clause 4.13.10(c)) that presents difficulties with regard to upgraded Facilities. For example consider a Market Participant who upgrades its previous 100MW Facility by installing inlet cooling and increasing the output of the facility to 120MW. Currently it is unclear whether the Required Level of output for the return of any Reserve Capacity Security should be at:

- 118 MW (the existing 100MW Facility and 90% of upgrade);
- 108 MW (90% of the existing 100MW Facility and 90% of the upgrade); or
- 108 MW (90% of the Facility as a whole).

Proposed Solution

As agreed at by the MAC, the Market Rules will be amended to clarify that, for the purposes of returning Reserve Capacity Security held for upgrades to Facilities, those Facilities as a whole must pass the relevant test in clause 4.13.10(b) (the 100% test) or clause 4.13.10(c) (the 90% test).

Issue 5: Treatment of Early Certification of Capacity

On 1 February 2010 the Rule Change Proposal "Early Certified Reserve Capacity" (ECRC) (RC_2009_10) was implemented. This provided an avenue to allow potential Reserve Capacity providers to certify capacity earlier than was previously possible under the Market Rules. The changes to the Market Rules were implemented via new clause 4.28C.

Following implementation of RC_2009_10 the following additional amendments to section 4.28C have been identified, including:

- Splitting clause 4.28C.8 (Reserve Capacity Security for ECRC) into two clauses. This will ensure consistency with the current drafting of clause 4.13.9 and uniformity in treatment between capacity that enters the market via the ECRC provisions and

capacity that enters the market via the "normal" route. New clause 4.28C.8A will state that if a Market Participant does not comply with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the ECRC assigned to that Facility will lapse.

- Clause 4.28C.12 deals with the transition of early Reserve Capacity Security provisions and Reserve Capacity Obligations to the starting point of the normal certification and security provisions. To ensure consistency in treatment of all capacity, ECRC should be subject to the same requirements as capacity that enters the system via the normal process from this point forward (i.e. the time and date specified in clause 4.1.14(a)).

- Amending the wording of clause 4.28C.12 to clarify that it is the IMO's responsibility to perform the calculation to determine whether the Reserve Capacity Security amount should be adjusted. The current wording only stipulates that a calculation must take place, without firmly identifying the party responsible for the calculation.

- If the calculation in 4.28C.12 results in a reduction in a Market Participant's required level of Reserve Capacity Security there is currently no explicit obligation for the IMO to return any excess Reserve Capacity Security within a stipulated timeframe. This part of the Market Rules should be consistent with the provisions that apply to capacity that is certified via the standard process. Therefore, a change is proposed to explicitly mandate that in the case when the calculation in 4.28C.12 results in a reduction in Reserve Capacity Security, any excess held by the IMO must be returned within 10 Business Days in accordance with clause 4.13.10A. This will ensure consistency with the provisions in clause 4.13.10A.

- There are a number of provisions in clause 4.13 that apply to "normal" capacity and the security for that capacity that were not mirrored in the drafting of clause 4.28C. To ensure consistency in the treatment of ECRC and "normal" capacity the following clauses from section 4.13 will also apply to ECRC:

    - Clause 4.13.3 – expiration of security;
    - Clause 4.13.4 – non-valid or non-current security;
    - Clause 4.13.5 – acceptable security;
    - Clause 4.13.6 – any interest to accrue on cash provided as security;
    - Clause 4.13.7 – the acceptable credit criteria;
    - Clause 4.13.8 – establishing that the IMO must have a procedure in place and any special requirements for ECRC; and
    - Clause 4.13.10 – 4.13.12 – the criteria for the return of the security or forfeiting the security as the case may be.

Issue 6: Clarification of rules surrounding return of non-cash Reserve Capacity Security

Currently, clause 4.13.10A(c) stipulates that a Reserve Capacity Security in the form of a cash deposit must be returned within 10 Business Days. This is once the IMO has determined the Market Participant's facility has fulfilled the requirements of clause 4.13.10, met the 100% test and 90% test . The clause is silent as to the treatment of non-cash Reserve Capacity Security.

Proposed Solution

Clauses 4.1.21, 4.1.27, and 4.13.10A have been amended so that non-cash Reserve Capacity Security is treated in the same manner as Reserve Capacity Security provided as a cash deposit.

Issue 7: Typographical amendments

A minor change to clause 4.1.21 is required to rectify an erroneous reference in clause 4.1.21 to clause 4.13.10 and replace it with a link to clause 4.13.10A as well as some minor changes to the wording of the clause. This is to correctly reflect the responsibilities held by the IMO and Market Participants in relation to release of Reserve Capacity Security.

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2. Explain the reason for the degree of urgency:

The IMO proposes that the Rule Change Proposal be progressed via the Standard Rule Change Process.

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3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and underline words added)

The proposed changes to the Market Rules to implement each of the proposed solutions identified are provided below.

The proposed amendments to clause 2.8.13 will remove the clause 4.1.27 as being a Protected Provision and therefore requiring the Ministers approval for any changes to be made. The proposed removal of this clause is consistent with the IMO's intent to remove clause 4.1.27, as presented below.

2.8.13. The following clauses are Protected Provisions:

(a) clauses 1.1 to 1.3 and 1.5 to 1.9 ;

(b) clauses 2.1 to 2.24, 2.28, 2.31.1, 2.31.3, 2.31.5(a), 2.31.6, 2.34.1 and 2.36.1;

(c) clauses 3.15, 3.18.18 and 3.18.19;

(d) clauses 4.1.4 to 4.1.12, 4.1.15 to 4.1.19, 4.1.21, 4.1.22, 4.1.24, ~~4.1.27,~~ 4.5.10, 4.5.11, 4.5.15 to 4.5.20, 4.13.10, 4.13.10A, 4.13.11, 4.13.11A, 4.13.11B, 4.16, 4.24.1, 4.24.2 and 4.24.12;

(e) clauses 5.2.3, 5.2.7 and 5.5.1;

(f) clauses 9.16.3, 9.16.4 and 9.20.2; and

(g) clauses 10.1.1, 10.1.2, 10.2.1, 10.3 and 10.4.

The proposed amendments to clause 4.1.21 will remove the substantive details around Reserve Capacity Security obligations from this clause. They will be provided in new clause 4.10.2A. Clause 4.1.21 will simply provide details around the timelines for the IMO to calculate the amount of Reserve Capacity Security to be held.

4.1.21. ~~Not later than~~ The IMO must calculate the amount of Reserve Capacity Security required to be held by the IMO for a Facility in accordance with clause 4.13.2(b) by 5 PM of the last Business Day falling on or before 23 December of Year 1 of a Reserve Capacity Cycle. ~~The IMO must, in accordance with clause 4.13.10:~~

~~(a) notify a Market Participant that has provided a Reserve Capacity Security for a Facility that the Reserve Capacity Security is no longer required; and~~

~~(b) return any Reserve Capacity Security which was provided in the form of a cash deposit,~~

~~in the event that the Market Participant does not hold Capacity Credits for the Facility to which the Reserve Capacity Security relates in the relevant Reserve Capacity Cycle~~.

The proposed amendment to clause 4.1.27 will remove this clause as it duplicates the requirements specified in clause 4.13.10A. The IMO notes that section 4.1 provides timelines for Reserve Capacity Cycle, where as clause 4.1.27 provides details of the requirement for Reserve Capacity Security to be provided by a Market Participant which is replicated in section 4.13.

4.1.27. ~~The IMO must in accordance with clause 4.13.10 notify a Market Participant that has provided a Reserve Capacity Security for a Facility that the Reserve Capacity Security is no longer required, and return any cash deposit within five Business Days of the first day that the Facility to which the Reserve Capacity Security relates is considered by the IMO to be in commercial operation and capable of meeting its Reserve Capacity Obligation.~~ [Blank]

The proposed amendment to clause 4.10.3 will require the report provided by an independent expert for the purposes of CRC to include details of the value of the 95 percentile of the 3-year expected output of the Facility. An alternative value may also be proposed to the IMO for consideration in the case where the independent expert does not consider the value corresponding with the 95 percentile is appropriate. In proposing an alternative value the independent expert must provide reasons why the value is appropriate for the IMO's consideration under clause 4.13.10B.

4.10.3. An application for certification of Reserve Capacity that includes a nomination to use the methodology described in clause 4.11.2(b) for a~~n Intermittent Generator~~ Facility that is yet to enter service must include a report prepared by an expert accredited by the IMO, in accordance with the Reserve Capacity Procedure~~, where this report is to be used to assign the Certified Reserve Capacity for that Facility in accordance with clause 4.11.1(e)~~. The report must include:

a. a value, expressed in MW as a sent out value, which equals the 95 percentile of expected peak output for the Facility for all the Trading Intervals that occurred within the last three years up to, and including, the last Hot Season, where this value is to be used to assign the Certified Reserve Capacity for that Facility in accordance with clause 4.11.1(e);

b. a proposed alternative value to that specified in clause 4.10.3(a), expressed in MW as a sent out value, to apply for the purposes of the Required Level, if applicable; and

c. the reasons for any proposed alternative value provided under clause 4.10.3(b).

The proposed amendment to clause 4.13.1 clarifies that Reserve Capacity Security will only be required for the first Reserve Capacity Cycle that a Facility will receive Capacity Credits for unless the facility is upgraded. The proposed amendments will also clarify that an upgrade to an existing facility constitutes a Facility for the purposes of clause 4.13.

4.13.1. Where the IMO assigns Certified Reserve Capacity to a Facility ~~(which for the purposes of this clause 4.13 includes part of a Facility and a Demand Side Programme)~~ that is ~~yet to be commissioned~~ yet to commence operation, the relevant Market Participant must ensure that the IMO holds the benefit of a Reserve Capacity Security in an amount ~~not less than the amount~~ determined under clause 4.13.2(a) by the date and time specified in clause 4.1.13.~~for the Reserve Capacity Cycle to which the Certified Reserve Capacity relates~~. The obligation to provide Reserve Capacity Security does not apply where the Market Participant has provided Reserve Capacity Security in relation to the same Facility for a previous Reserve Capacity Cycle, unless the existing Facility is undergoing an upgrade. For the purposes of this clause 4.13, a Facility includes part of a Facility, any upgrade to an existing Facility, and a Demand Side Programme, unless otherwise stated.

The proposed amendment to clause 4.13.2 clarifies that the amount of Reserve Capacity Security to be held by a Market Participant will be re-determined by the IMO following the outcomes of the Auction and Bilateral Trade Declaration process. The amended value under clause 4.13.2(b) will be compared to that originally determined under clause 4.13.2(a) to determine whether any excess security needs to be returned to a Market Participant under clause 4.13.2A. This will take into account the situation where a Facility offers Certified Reserve Capacity into both the Auction and Bilateral Trade Declaration but are only assigned Capacity Credits through one of these mechanisms (i.e. the Market Participants offer does not clear in the Auction).

4.13.2. The amount for the purposes of clause 4.13~~.1~~ is:

(a) at the time and date specified in clause 4.13.1, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity is assigned, expressed in $/MW per year, multiplied by an amount equal to:

(~~a~~i.) the Certified Reserve Capacity assigned to the Facility; less

(~~b~~ii.) the total of any Certified Reserve Capacity amount specified in accordance with clause 4.14.1(d) or referred to in clause 4.14.7(c)(ii)~~.~~; and

(b) at the time and date specified in clause 4.1.21, twenty-five percent of the Maximum Reserve Capacity Price included in the most recently issued Request for Expressions of Interest at the time the Certified Reserve Capacity was assigned, expressed in $/MW per year, multiplied by an amount equal to the Capacity Credits provided by the Facility under clause 4.20.1(a).

The proposed new clause 4.13.2A will clarify that following the IMO's re-calculation in clause 4.13.2, if an excess amount of Reserve Capacity Security is determined to be held for a Facility, then the IMO will return any excess Reserve Capacity Security to the Market Participant. The proposed amendments also clarify that security may also be provided in a non-cash form (e.g. bank undertaking) and that in this situation it is the Market Participants responsibility to provide a replacement non-cash deposit prior to the IMO returning any existing non-cash deposits.

4.13.2.A If the amount calculated by the IMO under clause 4.13.2 (b) is less than that calculated under clause 4.13.2 (a) then the IMO must:

(a) notify a Market Participant, that has provided a Reserve Capacity Security for a Facility, of its determination that the current ~~-~~Reserve Capacity Security is greater than ~~no longer~~ required under clause 4.13.2(b); ~~and~~

(b) return any excess Reserve Capacity Security that was provided in the form of a cash deposit~~,~~; and

(c) once the Market Participant has provided any replacement Reserve Capacity Security in accordance with clause 4.13.4, return any excess Reserve Capacity Security that was provided in the form of a non-cash deposit, as specified under clause 4.13.5(a), and use reasonable endeavours to relinquish any rights to draw on the Reserve Capacity Security.

The proposed amendment to clause 4.13.3 clarifies that replacement security will only be required if the obligation to provide security extends beyond the period of validity of the current security.

The IMO will include details around the requirement for the replacement Reserve Capacity Security to be in place at least 10 Business Days before the existing Reserve Capacity Security is due to terminate in the Market Procedure for Reserve Capacity Security.

4.13.3. Where a Market Participant's existing Reserve Capacity Security is due to ~~expire or~~ terminate and after that termination the Market Participant will continue to have an obligation to ensure the IMO holds the benefit of a Reserve Capacity Security under clause 4.13.1, then that Market Participant must ensure that the IMO holds the benefit of a replacement Reserve Capacity Security ~~in an amount not less than the level required under clause 4.13.2 that will become effective at the expiry of the existing Reserve Capacity Security~~ . The replacement Reserve Capacity Security must:

a) be in an amount not less than the level required under clause 4.13.2; and

b) become effective before the termination of the existing Reserve Capacity Security.

The proposed amendment to clause 4.13.10 will allow for the return of security once the Required Level of output has been met regardless of whether this occurs before or after an RCOQ of greater than zero applies. This will allow for Facilities which have commissioned early to receive their security back on the day where they meet the IMO's Required Level for two Trading Intervals. For example if a Facility is commissioned and meets its Required Level before 30 November for Reserve Capacity Cycles up to an including 2009 or 1 October for the 2010 Reserve Capacity Cycle and are determined by the IMO to be in Commercial Operation onwards they will be entitled to have their security returned.

The IMO proposes to include new sub-clause (c) to clarify that in order to receive security back after the end of the relevant Capacity Year, the Market Participant must have operated the whole of the Facility (including for an upgrade of an existing Facility) in at least two Trading Intervals at at least 90% of the Required Level during the relevant Capacity Year. This was previously covered under clause 4.13.11. The IMO considers that merging clauses 4.13.10 and 4.13.11 will ensure that the Market Rules follow a logical sequence.

The IMO proposes to scale the Required Level for the purposes of Reserve Capacity Security under both sub-clause (b) and (c) to the level of Capacity Credits originally assigned to the Facility. This will ensure that the Facilities obligations are measured against the Capacity Credits assigned to it for the Capacity Year. This will ensure that if the Capacity Credits for the Facility are reduced by the IMO (e.g. following a test) these will not be taken into account in determining whether Reserve Capacity Security can be returned.

The proposed amendment to sub-clause (a) will remove the reference to clause 4.20. The IMO notes that this reference does not currently take into account all situations where a Market Participant may not have any Capacity Credits. The sub-clause is proposed to be amended to clarify that a Market Participant who does not have Capacity Credits at 5pm on the Business Days falling on or before 23 December of Year 1 of the Capacity Cycle, will not be required to hold security from that time onwards.

The IMO also proposes to remove the reference to a new Facility in sub-clause 4.13.10(b) as a Facility is defined in clause 4.13.1 for the purposes of clause 4.13.

4.13.10. A Market Participant is no longer required to ensure that the IMO holds the benefit of a Reserve Capacity Security:

(a) For a ~~Reserve Capacity Security relating to a~~ Facility that provides no Capacity Credits ~~(as notified by the relevant Market Participant under clause 4.20)~~ at the time and date specified in clause 4.1.21, after that time and date;

(b) For a ~~new~~ Facility that:

(i) has operated at 100% of its Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a), ~~satisfies 100% of its Reserve Capacity Obligation Quantity for the Facility (as determined under clause 4.12.4 and before any adjustment made under clause 4.12.6)~~ in at least ~~one~~ two Trading Intervals prior to the end of the relevant Capacity Year; and

(ii) is considered by the IMO to be in Commercial Operation,

after the first day on which the Facility satisfies that Required Level.

(c) For a Facility that:

(i) has operated at at least 90% of its Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals before the end of the relevant Capacity Year; and

(ii) is considered by the IMO to be in Commercial Operation,

after the end of the relevant Capacity Year during which the Facility satisfies that Required Level.

~~when the Reserve Capacity Obligation Quantity exceeds 0 MW occurring between the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 and the day from which Reserve Capacity Obligations cease to apply in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle, the later of:~~

~~i. the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 in respect of the Reserve Capacity Cycle;~~

~~ii. the first day on which a new Facility first satisfies its Reserve Capacity Obligations under clause 4.12.1(a) or (b) (as applicable) in respect of the Reserve Capacity Cycle.~~

The proposed amendment to clause 4.13.10A clarifies that non-cash Reserve Capacity Security will be treated in the same manner as Reserve Capacity Security provided via a cash deposit. A typographical change from “refund the cash deposit” to “return the cash deposit” has been made for consistency with clause 4.1.21.

The IMO also proposes to specify the process for returning Reserve Capacity Security following the outcomes of the 90% requirement (clause 4.13.10(b)), 100% requirement (clause 4.13.10(c)) and for early certified facilities the IMO's recalculation under clause 4.28C.12 (b). The IMO notes that the return of security where a facility has met the 90% requirement will be amended from 20 Business Day to 10 Business Days after the end of the relevant Capacity Year.

4.13.10A Where a Market Participant considers that clause 4.13.10 or clause 4.28C.12 (b) applies to it in relation to a Facility, the Market Participant may request the IMO to release the relevant Reserve Capacity Security. Within 10 Business Days after receiving such a request the IMO must:

(a) determine whether the need to maintain the Reserve Capacity Security has ceased;

(b) notify the Market Participant of its determination; ~~and~~

(c) if the Reserve Capacity Security is a cash deposit that is no longer required to be held, ~~refund~~ return the cash deposit (plus interest earned)~~.~~; and

(d) if the Reserve Capacity Security is a non-cash deposit that is no longer required to be held, return the non-cash deposit and use reasonable endeavours to relinquish any rights to draw on the Reserve Capacity Security.

The proposed new clause 4.13.10B outlines how the IMO will determine the Required Level for each Facility. The Required Level will form the basis for the return of Reserve Capacity Security, Reserve Capacity Testing and determination of when an Intermittent Facility will be required to make Reserve Capacity refunds. The proposed new clause will also clarify that upgrades for existing Facilities will be tested as a whole for the purposes of the return of Reserve Capacity Security.

4.13.10B The IMO will determine the Required Level (which for an upgraded Facility is calculated for the Facility as a whole):

(a) For Facilities assigned Certified Reserve Capacity under clause 4.11.1(a), using the Metered Schedule and temperature dependence information submitted to the IMO under clause 4.10.1(e)i. and converted to a sent out basis to 41°C;

(b) For Facilities assigned Certified Reserve Capacity under clause 4.11.2(b), using either:

(i) the value, expressed in MW as a sent out value, that equals the 95 percentile of expected peak output for the Facility, submitted to the IMO in the report described in clause 4.10.3(a);or

(ii) the proposed alternative value, expressed in MW as a sent out value, provided in the report described in clause 4.10.3(b), where the IMO has assessed the reasons for the proposed

alternative value provided under clause 4.10.3(c) and considers these to be appropriate; and

(c) For Curtailable Loads and Demand Side Management Programmes, using the Facility's Relevant Demand minus the Capacity Credits assigned to that Facility.

The proposed new clause 4.13.10C will ensure that Market Participants are advised of the Required Level for each of its Facilities following the outcomes of the IMO's determination in clause 4.13.10B within 20 Business Days.

4.13.10C The IMO must notify a Market Participant of the Required Level for a Facility following its determination in clause 4.13.10B within 20 Business Days.

The proposed amendment to clause 4.13.11 will remove this clause as details of the 90% requirement for the return of security will be included in clause 4.13.10.

~~4.13.11. If a Market Participant that provides a Reserve Capacity Security in respect of a Facility under this clause 4.13 operates the Facility:~~

~~(a) at a level (expressed in MWh) that is at least 90% of one-half of the Reserve Capacity Obligation Quantity for the Facility (as determined under clause 4.12.4 and before any adjustment made under clause 4.12.6, expressed in MW) in at least one Trading Interval when the Reserve Capacity Obligation Quantity exceeds 0 MW; and~~

~~(b) the Trading Interval falls between the date from which Reserve Capacity Obligations apply in accordance with clause 4.1.26 and the day from which Reserve Capacity Obligations cease to apply in accordance with clause 4.1.30 in respect of the Reserve Capacity Cycle,~~

~~then, unless the IMO has already returned the Reserve Capacity Security to the Market Participant under clause 4.13.10A, the IMO will return the Reserve Capacity Security to the Market Participant within 20 Business Days after the end of the relevant Capacity Year.~~ [Blank]

The proposed amendment to clause 4.25.1 is to refer to the Required Level established under clause 4.10.13B in place of the maximum Reserve Capacity Obligation Quantity.

The IMO proposes to scale the Required Level to the level of Capacity Credits. This will ensure that for the purposes of Reserve Capacity Testing the level of Capacity Credits as amended by the IMO following any previous tests will be taken into account.

The IMO notes that clause 4.25.1 of the Market Rules will be updated to reflect the Amending Rules resulting from the Rule Change Proposal: Demand Side Management Operational Issues (RC_2008_20) on 1 October 2010.

4.25.1. The IMO must take steps to verify, in accordance with clause 4.25.2, that each Facility providing Capacity Credits:

(a) can, during the term the Reserve Capacity Obligations apply, operate at its ~~maximum Reserve Capacity Obligation Quantity~~ Required Level, scaled to the level of Capacity Credits currently held, at least once during each of the following periods and in the case of a generation system, such operation must be achieved on each type of fuel available to that Facility notified under clause 4.10.1(e)(v):

i. 1 October to 31 March; and

ii. 1 April to 30 September; and

(b) can, during the six months prior to the Reserve Capacity Obligations for the first Reserve Capacity Cycle taking effect, operate at its maximum Reserve Capacity Obligation Quantity at least once and, in the case of a generating system, such operation on each type of fuel available to that Facility notified under clause 4.10.1(e)(v). This paragraph (b) does not apply to facilities that are not commissioned prior to their Reserve Capacity Obligations coming into force.

The proposed amendment to clause 4.25.2 is to refer to the Required Level established under clause 4.10.13B. This clause provides clarification around how the IMO determines the Required Level previously referenced in this clause. This is currently only contained in the Market Procedure for Reserve Capacity Testing.

The IMO notes that clause 4.25.2 of the Market Rules will be updated to reflect the Amending Rules resulting from the Rule Change Proposal: Demand Side Management Operational Issues (RC_2008_20) on 1 October 2010.

4.25.2. The verification referred to in clause 4.25.1 can be achieved:

(a) by the IMO observing the Facility operate at the ~~r~~Required ~~l~~Level, scaled to the level of Capacity Credits currently held, at least once as part of normal market operations in Metered Schedules specific to the Facility; or

(b) by the IMO:

i. in the case of a generation system, requiring System Management in accordance with clause 4.25.7 to test the Facility's ability to operate at the ~~r~~Required ~~l~~Level, scaled to the level of Capacity Credits currently held, for not less than 60 minutes and the Facility successfully passing that test; and

ii. in the case of Interruptible Loads, Curtailable Loads and Dispatchable Loads, requiring System Management, in accordance with clause 4.25.7, to test the process and systems to activate a reduction in demand without requiring demand to actually reduce, and the Facility successfully passing that test.

The proposed amendment to clause 4.25A.3 is to refer to the Required Level for the purposes of determining whether a Verification Test has been successful.

4.25A.3. The Verification Test is failed if a reduction in demand equal to at least 10% of the Required Level scaled to the level of Capacity Credits currently held ~~Capacity Credits~~ is not identified from the Curtailable Load meter data.

The proposed amendment to clause 4.26.1 is to refer to the Required Level established under clause 4.10.13B in place of Intermittent Generators being deemed commissioned by the IMO. The IMO proposes to insert the same scaling factor to Capacity Credits assigned at the beginning of the Capacity Year as used for the purposes of the return of Reserve Capacity Security.

4.26.1. If a Market Participant holding Capacity Credits associated with a generation system fails to comply with its Reserve Capacity Obligations applicable to any given Trading Interval then the Market Participant must pay a refund to the IMO calculated in accordance with the following provisions.

REFUND TABLE

Dates	**1 April to 1 October**	**1 October to 1 December**	**1 December to 1 February**	**1 February to 1 April**
Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	1.5 x Y	1.5 x Y	4 x Y	6 x Y
Non-Business Days Off-Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.25 x Y	0.25 x Y	0.5 x Y	0.75 x Y
Non-Business Days Peak Trading Interval Rate ($ per MW shortfall per Trading Interval)	0.75 x Y	0.75 x Y	1.5 x Y	2 x Y
Maximum Participant Refund	The total value of the Capacity Credit payments paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the previous 1 October assuming the IMO acquires all of the Capacity Credits held by the Market Participant and the cost of each Capacity Credit so acquired is			

	determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable).

Where:

For an Intermittent Facility that has operated at 100% of its Required Level, scaled to the level of Capacity Credits specified in clause 4.20.1(a), in at least two Trading Intervals and is considered by the IMO to be in Commercial Operation ~~been commissioned~~: Y equals 0

For all other facilities, including Intermittent Facilities that are not considered by the IMO to be in Commercial Operation ~~have not been commissioned~~: Y is determined by dividing the Monthly Reserve Capacity Price (calculated in accordance with clause 4.29.1) by the number of Trading Intervals in the relevant month.

~~For the purposes of this clause, an Intermittent Facility will be deemed to be commissioned when the IMO determines that the facility is fully operational. In this case the IMO must apply the principle that the Facility is fully operating in accordance with the basis on which the Facility applied for, and was granted, Certified Reserve Capacity, in accordance with clause 4.10 and 4.11 respectively and was subsequently assigned Capacity Credits in accordance with clause 4.14.~~

The proposed amendment to clause 4.26.1A will update the reference in subclause 4.21.1A(a)(iv) to not have been deemed in Commercial Operation rather than commissioned. This is consistent with the proposed amendments to clause 4.21.1.

The IMO notes that amendments to clause 4.26.1A of the Market Rules are currently proposed under the Rule Change Proposal: Updates to Reserve Capacity Obligation Provisions (RC_2010_16).

4.26.1A. The IMO must calculate the Forced Outage refund for each Facility ("**Facility Forced Outage Refund**") as the lesser of:

(a) the sum over all Trading Intervals t in Trading Month m of the product of:

i the Off-Peak Trading Interval Rate or Peak Trading Interval Rate determined in accordance with the Refund Table applicable to Trading Interval t; and

ii the Forced Outage Shortfall in Trading Interval t,

where the Forced Outage Shortfall for a Facility is equal to which ever of the following applies:

iii. if the Facility is required to have submitted a Forced Outage under clause 3.21.4, the Forced Outage in that Trading Interval measured in MW; or

iv. if the Facility is an Intermittent Facility which is deemed to have not been ~~commissioned~~ in Commercial Operation, for the purposes of clause 4.26.1, the number of Capacity Credits associated with the

relevant Intermittent Facility; or

v. if, from the Trading Day commencing on 1 October of Year 3, the Facility is undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; or

vi. if, from the Trading Day commencing on 1 October of Year 3, the Facility is not yet undergoing an approved Commissioning Test and, for the purposes of permission sought under clause 3.21A.2, is a new generating system, the number of Capacity Credits associated with the relevant Facility; and

(b) the total value of the Capacity Credit payments associated with the relevant Facility paid or to be paid under these Market Rules to the relevant Market Participant for the 12 Trading Months commencing at the start of the Trading Day of the most recent 1 October, assuming the IMO acquires all of the Capacity Credits associated with that Facility and the cost of each Capacity Credit so acquired is determined in accordance with clause 4.28.2(b), (c) and (d) (as applicable), less all Facility Forced Outage Refunds applicable to the Facility in previous Trading Months falling in the same Capacity Year.

The proposed amendment to clause 4.28C.8 and new clause 4.28C.8A will ensure that the drafting better mirrors that in clause 4.28C.9. This will also ensure consistency in treatment between capacity that enters the market via the early certification route and that which enters the market during the standard route.

4.28C.8. Within 30 Business Days of the applicant receiving notification by the IMO of the amount of Early Certified Reserve Capacity assigned to the Facility the applicant must ensure that the IMO holds the benefit of a ~~provided~~ Reserve Capacity Security equal to the amount specified in clause 4.28C.9.~~, else the Early Certified Reserve Capacity assigned to the Facility will lapse.~~

4.28C.8A If a Market Participant does not comply in relation to a Facility with clause 4.28C.8 in full by the time specified in clause 4.28C.8, the Early Certified Reserve Capacity assigned to that Facility will lapse.

The proposed amendment to clause 4.28C.12 will clarify that in the case when the calculation of clause 4.28C.12 results in a reduction in Reserve Capacity Security, any excess held by the IMO must be returned within 10 Business Days (in accordance with

clause 4.13.10A). The proposed amendment also clarifies that it is the IMO's responsibility to perform the re-calculation.

4.28C.12. ~~The Reserve Capacity Security provided by the Market Participant under clause 4.28C.4 (b) must, b~~By the time and date in clause 4.1.13 (a), in ~~y~~Year 1 of the first Reserve Capacity Cycle in which the Facility will commence operation the IMO must ~~be~~ recalculate~~d~~ the amount of Reserve Capacity Security to be provided by each Market Participant under clause 4.28C.8 in accordance with clause 4.28C.9~~,~~ and:

(a) If an additional amount of Reserve Capacity Security is required, the Market Participant must ensure that the IMO holds the benefit of the additional Reserve Capacity Security; and

(b) If a reduced amount of Reserve Capacity Security is required, the Market Participant may request the IMO to return any additional Reserve Capacity Security, in accordance with clause 4.13.10A, provided that at all times the IMO holds a Reserve Capacity Security to the level determined in accordance with this clause 4.28C.12.

~~the difference paid to the IMO or refunded to the Market Participant as applicable,~~

The proposed amendment to clause 4.28C.12A will ensure consistent treatment of Facilities which enter the market via the early certification route with regard to the provision and return of Reserve Capacity Security in accordance with clause 4.13.

4.28C.12A From the time and date specified in clause 4.1.13(a) in Year 1 of the first Reserve Capacity Cycle in which the Facility will commence operation, all of the provisions of clause 4.13 apply equally to the Reserve Capacity Security of Facilities with Early Certified Reserve Capacity.

Glossary

Commercial Operation: Has the meaning provided in the Reserve Capacity Market Procedure.

Reserve Capacity Security: Is the reserve capacity security to be provided for a Facility as calculated and re-calculated under clause 4.13 and clause 4.28C. ~~Has the meaning given in clause 4.13.1~~.

Required Level: The level of output (expressed in MW) required to be met by a Facility or Demand Side Programme as determined in clause 4.13.10B.

4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO's assessment of the impact of each of the discrete proposed changes is presented below:

Issue 1: Treatment of Facilities once the first Reserve Capacity Cycle has lapsed

The IMO considers the changes proposed to the treatment of Facilities once the first Reserve Capacity Cycle has lapsed to have the following impact on the Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	b
Consistent with objective.	a, c, d, e
Inconsistent with objective.	

The IMO considers the proposed changes would allow the Market Rules to better address Market Objective (b). In particular by removing the current ambiguity around whether Reserve Capacity Security may need to be provided beyond the initial Capacity Cycle, a potential perceived barrier to entry will be removed. This will encourage greater competition in the WEM.

The IMO considers the proposed amendments are consistent with the other market objectives.

Issue 2: Treatment of Intermittent Facilities

The IMO considers the changes proposed to the treatment of Intermittent Facilities will have the following impact on the Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	c
Consistent with objective.	a, b, d, e
Inconsistent with objective.	

The IMO considers the proposed change to introduce a Required Level to be met by a Facility for the purposes of the return of Reserve Capacity Security, Reserve Capacity Testing and capacity refunds will allow the Market Rules to better address Market Objective (c) by ensuring equivalent treatment of conventional and non-conventional technologies. In making this change a current potential discrimination against Intermittent Generation will be removed.

The IMO considers the proposed amendments are consistent with the other market objectives.

Issue 3: When should Facilities be entitled to have their Reserve Capacity Security returned

The IMO considers the changes proposed to the timelines for when Facilities should be entitled to have their Reserve Capacity Security returned to have the following impact on the Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	b
Consistent with objective.	a, c d, e
Inconsistent with objective.	

The IMO considers the proposed changes would allow the Market Rules to better address Market Objective (b) by facilitating the efficient entry of new competitors by allowing Reserve Capacity Security to be released earlier. This is expected to have a positive effect by releasing potential working capital earlier.

Issue 4: Treatment of upgraded Facilities

The IMO considers the changes proposed to the treatment of upgraded Facilities to have the following impact on the Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	c
Consistent with objective.	a, b, d, e
Inconsistent with objective.	

The IMO considers the proposed changes would allow the Market Rules to better address Market Objective (c) by ensuring equitable treatment of new Facilities and upgraded Facilities, a level playing field will be provided and a potential current discrimination under the Market Rules removed.

Issue 5: Treatment of Early Certification of Capacity

The IMO considers the changes proposed to the treatment of Early Certification of Capacity to have the following impact on the Market Objectives:

Impact	Market Objectives
Allow the Market Rules to better address the objective.	c
Consistent with objective.	a,b, d, e
Inconsistent with objective.	

The IMO considers the proposed changes would allow the Market Rules to better address Market Objective (c).by ensuring that ECRC is treated as far as is possible, in the same way as capacity that follows the normal path for certification.

Issue 6: Clarification of rules surrounding return of non-cash Reserve Capacity Security

The IMO considers the changes proposed to the treatment of non-cash Reserve Capacity Security will be consistent with the Market Objectives.

Issue 7: Typographical Amendments

The IMO considers the minor changes proposed to clause 4.1.21 will be consistent with the Market Objectives. :

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5. Provide any identifiable costs and benefits of the change:

Costs:

- The IMO will have IT costs associated with this proposal. These costs will be quantified during the first submission period.

Benefits:

- Equivalent treatment of conventional and non-conventional generation types;
- Clarification of the requirements for the return of Reserve Capacity Security (at both the 100% and 90% level);
- Clarification that capacity which enters via the early certification route will be treated equally to that which enters via the standard route;
- Clarification that if an existing facility undertakes a upgrade the Facility as a whole will be tested;
- Introduction of the concept of a Required Level for the purposes of the return of Reserve Capacity Security, Reserve Capacity Testing and determining the capacity refunds to apply for an Intermittent Generator. The IMO considers that the introduction of a single concept will ensure clarity and consistency throughout the Market Rules; and
- Clarification of the rules surrounding the provision of a non-cash deposit as a Reserve Capacity Security.

Appendix 1: Updates to the Reserve Capacity Security Market Procedure

The IMO proposes to amend the Market Procedure: Reserve Capacity Security to provide details of how a Market Participant may apply to the IMO to be considered "in Commercial Operation" and the basis under which the IMO will make a decision a Facility is in Commercial Operation. This will ensure consistency with the proposed new definition of Commercial Operation. In particular the IMO will amend the Market Procedure to incorporate the details specified below:

Following a request from a Market Participant, the IMO will make a decision that a Facility is in Commercial Operation for the purposes of the Reserve Capacity Mechanism once:

- *the Facility had had its commissioning flag removed and produced energy for two Trading Intervals;*
- *the IMO has received formal advice from the Market Participant that they have completed commissioning and are commercially operational; and*
- *the IMO has considered any additional information it considers relevant.*

Prior to submission of this proposal into the formal Rule Change Process, the IMO will further develop the specific proposed amendments to the Market Procedure. This will ensure that interested parties submitting on the Rule Change Proposal will be provided with transparency of the proposed changes to the Market Procedure.

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28 July 2010
Ref: J1923

Ms Fiona Edmonds
Independent Market Operator
Level 3 Governor Stirling Tower,
197 St Georges Terrace,
Perth WA 6000

Dear Fiona

Re: Required Level and the Reserve Capacity Mechanism

This document summarises my advice in relation to your proposal.

My understanding:

Based on my discussions with yourself and Ben Williams, it is now my understanding that the following describes how the IMO intends to use 'Required Level' in the Reserve Capacity Mechanism:

1. The term 'Required Level' will be applied to intermittent facilities that are entering service, and that have also been assigned Certified Reserve Capacity under 4.11.2(b) of the Market Rules.

2. The Required Level will be used as part of a process to determine that a facility is commissioned for the purpose of sections 4.26 (the Refund Table) and 4.13 (Reserve Capacity Security) of the Market Rules:

    a. Once the facility enters service, its output will be monitored over a period that could extend up to the end of the first capacity year (let's call this the monitoring period);

    b. There will be numerous review points during this monitoring period when the IMO will assess the output performance of the facility. The frequency of these review points may be monthly, or even interval by interval;

c. During this monitoring period, if the facility demonstrates output over a defined number of trading intervals that is at least equal to 100% of its Required Level, then the IMO will consider the plant commissioned for the purpose of the Refund Table;

d. If the facility reaches 100% of its Required Level it can request the IMO to return its Reserve Capacity Security, and if it reaches 90% of its Required Level, the IMO will return this security at the end of the year;

e. Provided that the facility is determined by the IMO to be in commercial operation, if the facility can demonstrate some output, but this output is less than the Required Level, then it will be treated by the IMO as if it is partially commissioned as per the Refund Table. So, if the facility can demonstrate output at 50% of its Required Level for a sufficient number of trading intervals, then it will only be subject to 50% of the liabilities under the Refund Table. This varies from the current rules where if it is not 100% commissioned, it is liable for 100% of the refund liabilities under clause 4.26 of the Market Rules;

f. If the facility cannot demonstrate that it is in commercial operation, then it will not be considered commissioned per the Refund Table. It will therefore continue to be liable for penalties.

3. The Required Level will define a performance level for the facility. It will be specified as a level of output, expressed in MW for a given site, and set with reference to a maximum level of assumed output that is consistent with the assumptions that were used in the determination of its Certified Reserve Capacity.

4. For most facilities, it is assumed the Required Level will be set equal to a given percentile of the 3-yr production output duration curve that was used by the IMO in setting the Certified Reserve Capacity of the facility.

   a. If the setting of the amount of Certified Reserve Capacity was based on some other method or set of assumptions, then the setting of the Required Level for this facility would need to be consistent with this other method or set of assumptions.

5. You are seeking advice on an appropriate setting for the Required Level of a facility, and also want advice on the number of trading intervals that should be used as part of this calculation.

<u>My comments and advice:</u>

6. The concept of the Required Level, so far as you have described its intended application and use in the Market Rules, provides a practical approach to determine the extent that a facility is commissioned for the purpose of the Refund Table, and to determine the return of its Reserve Capacity Security.

7. The intended application and use of the concept of Required Level appears consistent with the achievement of the Market Objectives.

8. The Required Level should be set with reference to the same method and assumptions that were used in the determination of the facility's Certified Reserve Capacity.

    a. If the amount of Certified Reserve Capacity that was set by the IMO for a facility did not rely on a 3-yr production output duration curve, as per the Market Rules, then the setting of the Required Level for this facility would need to be consistent with the other method and set of assumptions that were used to determine its amount of Certified Reserve Capacity.

9. In the case of a wind-based generator, the setting for Required Level could be quite high because power curves tend to flatten out for a relatively wide wind-speed range near the nameplate rating of a typical turbine. This is similarly the case for solar plants because generation tends to reach rated capacity in the peak of the day-time. A 3-year production output duration curve for these technologies would typically be quite flat over the range when generation is above zero.

10. I would suggest that a default setting for a facility's Required Level is the 95th percentile of the 3-year production output duration curve that was used in the determination of the facility's Certified Reserve Capacity. The IMO will need provisions in the Market Rules to vary from this default setting if there were atypical assumptions, or the use of alternative methods, that featured in its determination of Certified Reserve Capacity for the facility.

11. For the purpose of this advice I will refer to periodic evaluations of a facility's maximum generation output as assessments to determine its Demonstrated Maximum Generation (DMG or DMG evaluations). These are the evaluations that I am assuming the IMO will conduct at defined review points during the monitoring period for the purpose of assessing the facility's performance in respect of its Required Level.

12. DMG evaluations should be based on the maximum demonstrated output (MW) that is achieved over at least three trading intervals, that is, DMG should be set equal to the highest demonstrated output for the facility that is achieved or exceeded for at least three trading intervals. These need not be contiguous intervals.

    a. This will provide some assurance that the facility can sustain and replicate the performance level.

    b. The choice of three intervals is somewhat arbitrary, and should be subject to a future review.

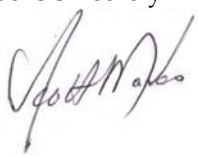
13. The extent that a facility is determined to be partially commissioned can be based on the proportion [DMG/Required Level]. If the Required Level is set at the 95th percentile of the 3-year production output duration curve, this is a generous measure of partiality.

14. I would suggest running this approach past the settlements team to be sure that it is not too onerous for them, particularly to ensure that they can manage the frequency of these calculations, including possible recalculations during subsequent processes of data revision. Given that DMG may ratchet up in some circumstances (say as new turbines

enter service according to a sequenced process of installation and commissioning), changes to past measures of DMG due to meter data revisions may trigger new calculations for each subsequent interval. The consequences for settlements may be too time-consuming.

15. This entire approach is novel, and it may be used by intermittent resources other than wind. For this reason, I would recommend testing the concept with your working groups, and assume a need for a post implementation review at some point in the future –say after 12 months of operational experience.

Yours sincerely



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July 29th 2010

Response to Request for Expert Advice on when Intermittent Generators can be Deemed Commissioned

Dear Fiona,

Ref: Email correspondence on 28/07/2010 and 29/07/2010. "RE: IMO REF MAD054 Senergy Econnect response".

In reference to the details of the aforementioned email correspondence Senergy offers the following response:

Based on the information provided from the IMO, our opinion is that the 95th percentile value, as determined from the intermittent generators load duration curve used for the setting of Certified Reserve Capacity, will be acceptable as a basis for setting the Required Level. The IMO should also include an option for the consideration of an alternative value on a case by case basis (as suggested by the IMO). A single trading interval should be used to assess the capability of the generator against the Required Level (which corresponds to Clauses 4.13.10 and 4.13.11).

The monitoring period should be as long as possible. We expect that this cannot begin until the Certified Reserve Capacity (and Required Level) has been assigned (Aug 5th of Year 1 of the capacity year) which suggests that the remainder of the first capacity year should be considered. New generators can then exercise an assessment of an alternative value to suite this time frame if the expectations are considered unreasonable.

We thank you for this opportunity and look forward to further opportunities of this nature.

Yours sincerely,

Tom Butler

Senergy Econnect Australia Pty Ltd

ABN 89 103 102 138

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Agenda Item 5d: IRCR Timelines (PRC_2010_17)

1. BACKGROUND

Under the current Wholesale Electricity Market Rules (Market Rules) the IMO must determine and publish the Individual Reserve Capacity Requirements (IRCRs) for Trading Month n in Trading Month n-1, using data from Trading Month n-3. Capacity Credit holders can allocate Capacity Credits to Market Customers for Trading Month n during month n+1. Any unallocated Capacity Credits or uncontracted IRCRs are invoiced as part of Non-STEM Settlement in month n+2.

Under this arrangement a Market Customer retains the IRCR liability for a load for three months after it has churned to another Market Customer. Synergy has prepared a Pre Rule Change Discussion Paper proposing amendments that reduce this delay from three months to one month. Under Synergy's proposal, the IRCRs for Trading Month n would be calculated in Trading Month n+1, using data from Trading Month n-1. The timelines for Capacity Credit Allocation Submissions and Non-STEM Settlement would remain unchanged. A copy of Synergy's paper is attached as Appendix 1.

The IMO has undertaken an initial assessment of the Pre Rule Change Discussion Paper. In doing so, the IMO has identified a number of discussion points for the MAC. These are a mix of points relating specifically to Synergy's proposal and some more general issues about IRCR determination. The IMO considers that these could be included in a combined Rule Change Proposal to improve the rules for the IRCR determination, if the MAC was in support of the concept presented in Synergy's Rule Change Proposal.

2. ISSUES

2.1 Compression of Capacity Credit Allocation timelines

Under the current Market Rules:

- a Market Customer is notified of its initial IRCR (for October) by 5 PM on the last Business Day falling on or before 10 September in the same year;
- a Market Customer is notified of its updated IRCR for each Trading Month by 5 PM five Business Days before the start of that Trading Month; and
- the Capacity Credit Allocation Submission window for Trading Month n starts no earlier that the first Business Day of month n+1 and ends no later than the third Business Day of month n+2 (in practice, the window usually opens on the first Business Day of month n+1 and closes in the middle of month n+1, to allow ample time for the resolution of over-allocations and for preparation for settlement processing).

Under Synergy's proposal the IMO would publish the IRCRs for any Trading Month n by 5 PM on the eighth Business Day of n+1. This is more than a month after the existing deadline, and would fall after usual opening date for the Capacity Credit Allocation Submission window. For example, the IRCRs for May 2010 were published on 23 April 2010 and the corresponding window for Capacity Credit Allocation Submissions was open from 1 June 2010 to 15 June

2010. If the proposed amendments had been in effect, the IRCRs for May 2010 would have been published on 11 June 2010.

The IMO considers that the IRCR publication date could, if necessary, be three Business Days earlier (i.e. on the fifth Business Day of n+1 rather than the eighth Business Day), but would prefer that Capacity Credit Allocation Submission windows continue to close around the middle of each month to avoid any potential impacts on Non-STEM Settlement timelines.

Discussion point 1: Do the proposed amendments give Market Participants sufficient time to make their bilateral trade arrangements and submit the required Capacity Credit Allocation Submissions? If not, what is the minimum window length for these activities?

2.2 Timelines for NTDL, Intermittent Load and DSM measure details

In its Pre Rule Change Discussion Paper Synergy has proposed the following timelines:

- Market Customers would provide details of Intermittent Loads to first apply in IRCR calculations for Trading Month n by 5 PM on the last Business Day on or before the 20th day of n-1; and
- Market Customers would provide details of NTDLs and DSM measures to first apply in IRCR calculations for Trading Month n by 5 PM on the last Business Day of month n.

The IMO has assessed the operational impacts of the proposed timelines. While there is no issue with the proposed deadline for Intermittent Loads, the IMO considers that the proposed deadlines for NTDL and DSM measure details may not allow sufficient time to assess the details before they are first used in an IRCR calculation. The IMO would prefer that these deadlines were:

- for DSM measures, the same as for Intermittent Load details (i.e. 5 PM on the last Business Day on or before the 20th day on month n-1); and
- for NTDLs, 5 PM on the last Business Day on or before the 20th day of month n.

Discussion point 2: What deadlines should apply for the provision of NTDL, Intermittent Load and DSM measure details to the IMO under clause 9.28.8?

2.3 Separate treatment of initial and updated IRCR determinations

The Market Rules refer to IRCRs as “initial” IRCRs that are published before the start of a Capacity Year and then updated each Trading Month. In practice, an IRCR is calculated for each Market Customer for each Trading Month. The first Trading Month of a Capacity Year is treated differently from other Trading Months in that:

- the publication date for initial IRCRs is earlier (relative to the applicable Trading Month) than for updated IRCRs;
- the deadline for the provision of NTDL, Intermittent Load and DSM measure details is earlier (relative to the applicable Trading Month) than for other Trading Months;
- Capacity Requirements for existing Intermittent Loads must be resubmitted each Capacity Year prior to the determination of the initial IRCRs; and
- details of existing NTDLs must be resubmitted each Capacity Year prior to the determination of the initial IRCRs, and if accepted at this time will ensure that a load is treated as an NTDL for the entire Capacity Year.

In some parts of the Market Rules (e.g. clauses 4.28.7 and 4.28.11) the processing of initial and updated IRCRs are treated separately, while in other parts both are covered together (e.g. clause 4.28.8 and Appendix 5). The mixture of approaches can be confusing and in some cases contradictory, as for example in the conflicting deadlines for Intermittent Loads in clauses 4.28.8 and 4.28.8A.

Synergy's proposal eliminates most of the differences between initial IRCRs and updated IRCRs, in that the deadlines proposed for IRCR publication and preliminary data provision are the same for all IRCRs relative to their applicable Trading Months. Only the rules relating to the annual resubmission of NTDL and Intermittent Load details have been retained.

Given the proposed changes it would be possible to further streamline the amended rules to remove duplication and add clarity about the annual/monthly obligations of Market Customers. This could involve replacing the concept of an initial IRCR that is updated periodically with the concept of an IRCR being determined for each Trading Month. Alternatively, the concept of initial IRCRs could be retained and strengthened by ensuring that the relevant clauses and appendices are explicit about whether/where they are applicable to initial IRCRs, IRCR updates or both.

Discussion point 3: If Synergy's proposed timelines were to be adopted, should the concept of "initial" IRCRs that are updated over the Capacity Year be retained or replaced by the concept of IRCRs generated for each Trading Month?

2.4 Use of data from Trading Month "n" for Intermittent Loads

In Appendix 4A and Appendix 5 Intermittent Loads are assessed and their IRCR contribution for Trading Month n determined using registration details applicable to that Trading Month. In contrast, other loads are assessed and their IRCR contributions for Trading Month n determined using data from Trading Month n-3.

The different treatment of Intermittent Loads can be confusing and creates several anomalies, including the following examples.

- Step 6 of Appendix 5 specifies that d(w,i) (which determines the extent of a particular Market Customer's liability for an Intermittent Load) is calculated using the number of days that a meter was registered to a Market Customer i during Trading Month n. This is not possible as the information is not available when IRCRs are calculated for Trading Month n in the previous month. While Synergy's proposal would make the necessary information theoretically available, in practice there may still be delays in receiving details of churns or de-registrations that could impact on the accuracy of the IRCR calculations.
- A new Intermittent Load first registered in Trading Month n-3 incurs an IRCR liability from Trading Month n-3, while other loads commencing in Trading Month n-3 do not incur an IRCR liability until Trading Month n. On the other hand, if an Intermittent Load is de-registered then there does not appear to be anything to prevent it incurring an IRCR liability as a Temperature Dependent Load (TDL) for a further three months.

Discussion point 4: When determining IRCRs for Trading Month n, should IRCR liabilities for Intermittent Loads be calculated using data from Trading Month n-3 (or n-1 under Synergy's proposal) instead of Trading Month n?

2.5 Clarification of NTDL and Intermittent Load status rules

Appendix 5 implies, but does not state explicitly, that loads are divided into three distinct categories for IRCR calculations, namely TDLs, NTDLs and Intermittent Loads, and that a load cannot belong to two categories concurrently. It is not stated clearly whether a load can change category during a Trading Month, or what should happen to the status of a load as an NTDL or Intermittent Load if it churns to a new Market Customer. The IMO considers that these points should be covered explicitly in the Market Rules to avoid any confusion, regardless of whether Synergy's proposed amendments are adopted.

Discussion point 5: Should a load retain its status as an NTDL or Intermittent Load if it churns to a new Market Customer?

Discussion point 6: Should a load be assigned to one category only (TDL, NTDL or Intermittent Load) in a Trading Month for the purposes of IRCR determination?

2.6 Transition Issues

Synergy's Pre Rule Change Discussion Paper does not as yet deal with how the transition from the old IRCR timelines (where IRCRs for Trading Month n are determined in n-1 using data from n-3) to the new timelines (where IRCRs for Trading Month n are determined in n+1 using data from n-1) would be managed. A transition strategy would need to be developed and incorporated into the proposed amendments, to avoid the publication of two different sets of IRCRs for a Trading Month and to clarify the Market Customer submission deadlines around the changeover period.

Assuming that Trading Month n was the first month for which IRCRs were calculated using the new timelines, one strategy would be to:

- publish the IRCRs for n-1 in n-2 using data from n-4;
- publish no IRCRs during n-1 or n;
- publish the IRCRs for n in n+1 using data from n-1;
- publish the IRCRs for subsequent months according to the new timelines; and
- apply the new deadlines for details provided under clause 4.28.8 from the start of month n-1.

Discussion point 7: Would the transition strategy proposed above be workable for Market Participants? What factors need to be considered in determining a transition strategy?

3. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** Synergy's Pre Rule Change Discussion Paper;
- **Endorse** the concept of shortening a Market Customer's IRCR liability in the event of customer churn; and
- **Discuss** each of the issues raised in section 2 and whether these issues should be included in an amalgamated IRCR Rule Change Proposal.

Agenda item 5d, appendix 1

Wholesale Electricity Market
Pre-Rule Change Discussion Paper

Change Proposal No: *[to be filled in by the IMO]*
Received date: *[to be filled in by the IMO]*

Name:	Stephen MacLean
Phone:	6212 1498
Fax:	
Email:	stephen.maclean@synergy.net.au
Organisation:	Synergy
Address:	228 Adelaide Terrace, Perth
Date submitted:	TBA
Urgency:	medium
Change Proposal title:	IRCR Timelines
Market Rules affected:	Clauses 4.1.23, 4.1.23A (new), 4.1.23B (new), 4.1.24, 4.1.28, 4.28.8, 4.28.8A, 4.28.11, Appendix 5 and Appendix 5A.

Introduction

Market Rule 2.5.1 of the Wholesale Electricity Market Rules provides that any person (including the IMO) may make a Rule Change Proposal by completing a Rule Change Proposal Form that must be submitted to the Independent Market Operator.

This Change Proposal can be posted, faxed or emailed to:

Independent Market Operator
Attn: Manager Market Development and System Capacity
PO Box 7096
Cloisters Square, Perth, WA 6850
Fax: (08) 9254 4339
Email: market.development@imowa.com.au

The Independent Market Operator will assess the proposal and, within 5 Business Days of receiving this Rule Change Proposal form, will notify you whether the Rule Change Proposal will be further progressed.

In order for the proposal to be progressed, all fields below must be completed and the change proposal must explain how it will enable the Market Rules to better contribute to the achievement of the wholesale electricity market objectives. The objectives of the market are:

(a) to promote the economically efficient, safe and reliable production and supply of electricity and electricity related services in the South West interconnected system;
(b) to encourage competition among generators and retailers in the South West interconnected system, including by facilitating efficient entry of new competitors;
(c) to avoid discrimination in that market against particular energy options and technologies, including sustainable energy options and technologies such as those that make use of renewable resources or that reduce overall greenhouse gas emissions;
(d) to minimise the long-term cost of electricity supplied to customers from the South West interconnected system; and
(e) to encourage the taking of measures to manage the amount of electricity used and when it is used.

Details of the proposed Market Rule Change

1. Describe the concern with the existing Market Rules that is to be addressed by the proposed Market Rule change:

Background

Under the current Market Rules, the IMO must determine and publish an Individual Reserve Capacity Requirement (IRCR) for each Market Customer and each Trading Month. The IMO calculates the IRCRs that will apply for Trading Month n during Trading Month n-1, using Meter Registry and meter reading data from Trading Month n-3. The IMO must publish initial IRCRs, which apply for the Trading Month of October, by 5 PM on the last Business Day falling on or before 10 September of the same year (clause 4.1.24).

The IMO must then publish updated IRCRs for each Trading Month by 5 PM five Business Days before the start of the Trading Month to which they will apply (clause 4.1.28).

A Market Customer is required to provide the IMO with the following information to assist it in its determination of IRCRs (clause 4.28.8):

- a list of interval meters that the Market Customer wishes to be treated as Non-Temperature Dependent Loads (NTDLs);
- details of any Demand Side Management (DSM) measures implemented by the Market Customer since the previous Hot Season that the Market Customer wishes the IMO to consider; and
- nominations of capacity requirements for Intermittent Loads.

If accepted, this information is used by the IMO in its IRCR calculations and has the effect of reducing the size of the Market Customer's IRCR.

Market Customers are required to submit this information for each Capacity Year, by 5 PM on the last Business Day on or before 20 August prior to the start of the Capacity Year (clause 4.1.23). If a Market Customer fails to do this then any registrations of their loads as NTDLs or Intermittent Loads will lapse from the start of the Capacity Year (by their nature, details of DSM measures are only applicable for a single Capacity Year).

Market Customers can submit details of new NTDLs, DSM measures and Intermittent Loads throughout the Capacity Year. For NTDLs and DSM measures the details must be supplied by 5 PM on the Business Day being 25 Business Days prior to the start of the first Trading Month for which they will be used in IRCR calculations (clauses 4.28.8 and 4.1.28(b)). For new Intermittent Loads clause 4.28.8 prescribes the same deadline as for NTDLs and DSM measures, but clause 4.28.8A conflicts with this, setting the deadline for Intermittent Loads as no later than 10 Business Days prior to the start of the first affected Trading Month.

Issue

The current Market Rules create a three month delay in the transfer of IRCR liability for a churned customer. A Market Customer that loses a load will pay IRCR costs for that load for an additional three months after the transfer date, while the Market Customer that wins the load avoids its IRCR liability for the same period. While it is understood that some delay is necessary due to the availability of the meter data required for the calculations, a delay of three months appears to be unjustified.

Proposal

It is proposed that the Market Rules for IRCR determination be amended so that the IRCRs to apply for Trading Month n are calculated early in Trading Month n+1, using data from Trading Month n-1. This amendment moves the time IRCRs are determined from before the relevant Trading Month to after the relevant Trading Month, and results in a reduction in the transfer delay from three months to a single month.

In summary, the following new timelines are proposed.

- IRCRs to apply for Trading Month n will be calculated using data from Trading Month n-1.
- IRCRs for Trading Month n will be published by 5 PM on the eighth Business Day of month n+1. This applies to both the initial IRCRs and the monthly updates.
- Market Customers will provide details of Intermittent Loads to first apply in IRCR calculations for Trading Month n by 5 PM on the last Business Day on or before the 20th day of n-1.
- Market Customers will provide details of NTDLs and DSM measures to first apply in IRCR calculations for Trading Month n by 5 PM on the last Business Day of month n.

A more detailed explanation of the proposed changes is provided below,

Clause 4.1.23 has been replaced with clauses 4.1.23A and 4.1.23B to differentiate between the dates that apply to different pieces of information. Replacement clause 4.1.23A allows

the participant until the end of the applicable Trading Month to provide details of DSM measures and NTDLs (e.g. for the initial IRCR which will be calculated in November for October based on data up until the end of September the participant has until the end of October to provide these details). Clause 4.1.23B requires a participant to declare that a load is to be treated as an Intermittent Load prior to the month commencing. As there are links to outages and other Standing Data it is reasonable to require that this information be provided in advance. This clause should align with 2.30.B7, which has an Intermittent Load being deregistered from the end of a Trading Month. This way an Intermittent Load will be treated as such for the whole of the Trading Month and not be split between a normal load and an Intermittent Load during the month.

Clause 4.1.24 has been updated to change the deadline for the publication of initial IRCRs from September to November.

Clause 4.1.28 has been amended to change the deadline for the publication of updated IRCRs for Trading Month n to 5 PM on the eighth Business Day of the month n+1.

Clause 4.28.8 has been modified to account for the new determination date.

Clause 4.28.8A has been modified to update the timeline requirements for the registration of new Intermittent Loads.

Clause 4.28.11 has been updated to move the publication of IRCRs for a Trading Month to the following Trading Month.

Appendix 5 STEP 4 has been modified to amend the cross-reference from clause 4.28.7A to Appendix 4A, to allow for new Intermittent Loads registered throughout the Capacity Year.

Appendix 5 STEP 5, 6 and 7 have been modified to change the month providing meter data from n-3 to n-1.

Appendix 5A has been modified to reflect that the meter data used for IRCR calculation comes from Trading Month (n-1) instead of (n-3), and that Market Customers provide NTDL details by the end of Trading Month (n). Note that the period examined in Step 1 has been extended by two months (as the additional data is available), but still commences in November to ensure that the entire Hot Season is assessed. The reference to clause 4.1.23 has been replaced by a more explicit statement that month (n) is the first Trading Month of the Capacity Year.

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2. Explain the reason for the degree of urgency:

Synergy proposes that this Rule Change Proposal be progressed through the Standard Rule Change Process.

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3. Provide any proposed specific changes to particular Rules: (for clarity, please use the current wording of the Rules and place a ~~strikethrough~~ where words are deleted and <u>underline</u> words added)

~~4.1.23. Each Market Customer must provide to the IMO the information described in clause 4.28.8 by:~~

~~(a) in the case of the first Reserve Capacity Cycle, 5 PM on the Business Day being 15 Business Days prior to the day on which the Initial Time occurs; and~~

~~(b) in the case of a subsequent Reserve Capacity Cycle, 5 PM on the last Business Day falling on or before 20 August of Year 3 of that cycle.~~

4.1.23A. Each Market Customer must provide to the IMO the information described in clause 4.28.8(a) and clause 4.28.8(b) by 5 PM on the last Business Day of the first Trading Month to which the information will apply.

4.1.23B. Each Market Customer must provide to the IMO the information described in clause 4.28.8(c) by 5 PM on the last Business Day falling on or before the 20th day of the month prior to the first Trading Month to which the information will apply.

4.1.24. The IMO must publish the initial Individual Reserve Capacity Requirement for each Market Customer in accordance with clause 4.28.7 by:

(a) in the case of the first Reserve Capacity Cycle, 5 PM on the Business Day being 10 Business Days prior to the day on which the Initial Time occurs; and

(b) in the case of a subsequent Reserve Capacity Cycle, by 5 PM on the eighth ~~last~~ Business Day of November ~~falling on or before 10 September~~ of Year 3 of that cycle.

4.1.28. Every month between 1 ~~October~~ December of Year 3 and 31 October~~30 September~~ of Year 4 of a Reserve Capacity Cycle after the first Reserve Capacity Cycle and every month between Energy Market Commencement and 30 September of Year 4 of the first Reserve Capacity Cycle:

(a) the IMO must update the values of each Market Participant's Individual Reserve Capacity Requirement in accordance with clause 4.28.11; and

(b) the IMO must publish updated Individual Reserve Capacity Requirements no later than by 5:00 PM on the eighth Business Day ~~being five Business Days~~ of the month following ~~prior to the commencement of~~ the Trading Month from which the updated Individual Reserve Capacity Requirements will apply.

4.28.8. To assist the IMO in determining Individual Reserve Capacity Requirements in accordance with clause 4.28.7 and updating Individual Reserve Capacity Requirements in accordance with clause 4.28.11, Market Customers must, by the

dates and times specified in clauses 4.1.23A and 4.1.23B (as applicable) ~~or no later than by 5:00 PM on the Business Day being twenty Business Days prior to the date and time specified in clause 4.1.28(b),~~ provide to the IMO:

(a) a list of interval meters associated with that Market Customer that the Market Customer wants the IMO to treat as Non-Temperature Dependent Loads;

(b) details of any Demand Side Management measures that the Market Customer has implemented since the previous Hot Season, including the expected MW reduction in peak consumption resulting from those measures; and

(c) nominations of capacity requirements for Intermittent Loads, expressed in MW, where the nominated quantity cannot exceed the greater of:

i. the maximum allowed level of Intermittent Load specified in Standing Data for that Intermittent Load at the time of providing the data; and

ii. the maximum Contractual Maximum Demand expected to be associated with that Intermittent Load during the Capacity Year to which the nomination relates. The Market Customer must provide evidence to the IMO of this Contractual Maximum Demand level unless the IMO has previously been provided with that evidence.

where for each Capacity Year a Market Customer may only provide the IMO with the information specified in this clause once with respect to each load.

4.28.8A. A Market Customer ~~Any Intermittent Load that was not registered by the date and time specified in clause 4.1.23~~ must provide the IMO with the information described in clause 4.28.8(c) for any new Intermittent Load no later than the date and time specified in 4.1.23B, ~~5 Business Days prior to the date and time specified in clause 4.1.28(b)~~ where that date and time relates to the Trading Month in which the Intermittent Load will first commence operation.

4.28.11. The IMO must determine and publish an updated Individual Reserve Capacity Requirement for each Market Customer by the date and time specified in clause 4.1.28(b) where this Individual Reserve Capacity Requirement:

(a) is determined using the methodology described in Appendix 5 and based on Individual Reserve Capacity Requirements for Intermittent Loads determined for each Trading Month in accordance with Appendix 4A;

(aA) is calculated using data that may be modified in accordance with clause 4.28.11A; and

(b) applies from the commencement of the ~~first~~most recently completed Trading Month ~~commencing after~~ as at the date of publication of the updated Individual Reserve Capacity Requirement.

Appendix 5: Individual Reserve Capacity Requirements

This Appendix presents the method for annually setting and monthly adjusting Individual Reserve Capacity Requirements.

…

STEP 4: For each Intermittent Load meter w set its Individual Intermittent Load Reserve Capacity Requirement, IILRCR(w), to equal the amount defined in accordance with ~~clause 4.28.7A~~Appendix 4A.

STEP 5: When determining the Individual Reserve Capacity Requirements for Trading Month n identify meters that were not registered with the IMO during one or more of the 12 peak Trading Intervals in the preceding Hot Season but which were registered by the end of Trading Month n-~~3~~1.

Identify the 4 Peak SWIS Trading Intervals of Trading Month n-~~3~~1, being the 4 highest demand Trading Intervals, where demand refers to total demand, net of embedded generation, in the SWIS.

For a new meter u that measures Non-Temperature Dependent Load set NMNTCR(u) to be 1.1 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-~~3~~1.

For a new meter v that measures Temperature Dependent Load set NMTDCR(v) equal to be 1.3 times the MW figure formed by doubling the median value of the metered consumption for that meter during the 4 Peak SWIS Trading Intervals of Trading Month n-~~3~~1.

For a new meter w that measures Intermittent Load set IILRCR(w) in accordance with Appendix 4A to the value applicable to Trading Month n.

STEP 5A: When determining the Individual Reserve Capacity Requirements for Trading Month n.

Find the MW figure formed by doubling the median value of the metered consumption for the Notional Wholesale Meter v*, during the 4 Peak SWIS Trading Intervals of Trading Month n-~~3~~1 (“Median Notional Wholesale Meter”).

Divide the Median Notional Wholesale Meter by the number of non-interval or accumulation meters that existed at the end of Trading Month n-~~3~~1 ("Average Non-Interval Meter").

Subtract the number of non-interval or accumulation meters disconnected during Trading Month n-~~3~~1 from the number of non-interval or accumulation meters connected during Trading Month n-~~3~~1 ("Non-Interval Meter Growth").

Multiply the Non-Interval Meter Growth and the Average Non-Interval Meter. ("New Notional Wholesale Meter").

For the New Notional Wholesale Meter set NMTDCR(v) equal to be 1.3 times the New Notional Wholesale Meter.

STEP 6: Calculate the values of d(u,i) for Non-Temperature Dependent Load, d(v,i) for Temperature Dependent Loads and d(w,i) for Intermittent Loads such that:

- d(u,i) has a value of zero if meter u measures Intermittent Load or was not registered to Market Customer i during Trading Month n-~~3~~1 , otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Customer i in Trading Month n-~~3~~1 divided by the number of days in Trading Month n-~~3~~1 .
- d(v,i) has a value of zero if meter v measures Intermittent Load or was not registered to Market Customer i during Trading Month n-~~3~~1 , otherwise it has a value equal to the number of full Trading Days the meter was registered to Market Customer i in Trading Month n-~~3~~1 divided by the number of days in Trading Month n-~~3~~1 .
- d(w,i) has a value of zero if meter w was not registered to Market Customer i during Trading Month n, otherwise it has a value of one if Market Customer i nominated capacity for the Intermittent Load measured by meter w in accordance with clause 4.28.8(c), with the exception that if the Intermittent Load was for Load at a meter registered to Market Customer i for only part of Trading Month n, then it has a value equal to the number of full Trading Days that meter was registered to Market Customer i in Trading Month n divided by the number of days in Trading Month n.

STEP 7: Identify the set NM of all those new meters v that measured consumption that was measured by meter v=v* during the preceding Hot Season and set TDLn(v) for meter v=v* to equal:

$$TDLn(v^*) = TDL(v^*) - Sum(v \in NW, NMTDCR(v) \times d(v,q))$$

Where

q denotes a Market Customer to which the new meter is associated.

d(v,q) is the number of days the new meter is registered to Market Participant q divide by number of days in the trading month n-~~3~~31.

Appendix 5A: Non-Temperature Dependent Load Requirements

This Appendix presents the method and requirements for accepting, in accordance with clause 4.28.9, a load measured by an interval meter in the list provided in accordance with clause 4.28.8(a) as a Non-Temperature Dependent Load.

For the purpose of this Appendix the meter data to be used in any calculations is to be the most current set of meter data as at the time of commencing the calculations.

The IMO must perform the following steps in deciding whether to accept, in accordance with clause 4.28.9, a load measured by an interval meter in the list provided in accordance with clause 4.28.8(a) as a Non-Temperature Dependent Load:

Step 1:

- If, in accordance with clause 4.28.8(a), the IMO is provided by a Market Customer in Trading Month (n-~~2~~) with a list that includes an interval meter associated with that Market Customer that it wants the IMO to treat as a Non-Temperature Dependent Load from Trading Month (n); and

- If Trading Month (n) is the first Trading Month in a Capacity Year~~If the list including the interval meter is provided by the date and time specified in clause 4.1.23~~; and

- If the load was treated as a Non-Temperature Dependent Load in Trading Month (n-~~8~~10),

then the IMO must accept the load as a Non-Temperature Dependent Load if:

(a) the median value of the metered consumption for that load was in excess of 1.0MWh, calculated over the set of Trading Intervals defined as the four peak SWIS intervals in each of the Trading Months starting from the start of Trading Month n-11 to the end of Trading Month n-~~3~~31; and

(b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during the period from the start of Trading Month (n-11) to the end of Trading Month (n-~~3~~1) except during Trading Intervals where:

i. the consumption was 0 MWh; or

ii consumption was reduced at the request of System Management; or

iii evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

Step 2:

- If, in accordance with clause 4.28.8(a), the IMO is provided by a Market Customer in Trading Month (n~~-2~~) with a list that includes an interval meter associated with that Market Customer that it wants the IMO to treat as a Non-Temperature Dependent Load from Trading Month (n); and

- If the load is not treated as a Non-Temperature Dependent Load in Trading Month (n-1); and

- If the load was not treated as a Non-Temperature Dependent Load for any of the Trading Months in the Capacity Year in which Trading Month (n) falls,

then the IMO must accept the load as a Non-Temperature Dependent Load for Trading Month (n) if:

(a) the median value of the metered consumption values for that load during the 4 Peak SWIS Trading Intervals in Trading Month (n-1~~3~~) was in excess of 1.0MWh; and

(b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during Trading Month (n-1~~3~~) except during Trading Intervals where:

i. the consumption was 0 MWh; or

ii consumption was reduced at the request of System Management; or

iii. evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

Step 3:

- If a load was not accepted under Step 1 as a Non-Temperature Dependent Load for Trading Month (n); and

- If the load was accepted under Step 2, or previously under this Step 3, as a Non-Temperature Dependent Load for Trading Month (n-1),

then the IMO must accept the load as a Non-Temperature Dependent Load for Trading Month (n) if:

(a) the median value of the metered consumption for that load was in excess of 1.0MWh, calculated over the set of Trading Intervals defined as the four peak SWIS intervals in each of the Trading Months commencing at the start of the

Trading Month for which metered consumption values were used by the IMO to accept the load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month (n-1~~3~~); and

(b) the load did not deviate downwards from the median consumption in paragraph (a) by more than 10% for more than 10% of the time during the period from the start of the Trading Month for which metered consumption values were used by the IMO to accept the load as a Non-Temperature Dependent Load under Step 2 to the end of Trading Month (n-1~~3~~) except during Trading Intervals where:

i. the consumption was 0 MWh; or

ii consumption was reduced at the request of System Management; or

iii. evidence is provided by the Market Customer that the source of the consumption was operating at below capacity due to maintenance or a Saturday, Sunday or a public holiday throughout Western Australia.

Step 4:

Otherwise, the IMO must treat a load as a Temperature Dependent Load.

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4. Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The market objectives would better be addressed with this rule change proposal by efficiently passing on the cost of capacity the relevant Market Customer. Therefore this proposed market rule change would align with market objective (a) in promoting economic efficiency.

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5. Provide any identifiable costs and benefits of the change:

Agenda Item 6a: Overview of Recent and Upcoming IMO and System Management Procedure Change Proposals

Legend:

Shaded	Shaded rows indicate procedure changes that have been completed since the last MAC meeting.
Unshaded	Unshaded rows are procedure changes still being progressed.

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
IMO Procedure Change Proposals					
PC_2009_04	Certification of Reserve Capacity	The proposed updates are to: • Provide for an application form and checklist to be part of the application; • Specify some of the information requirements in more detail; • Provide improved decision making support to the IMO; and • Provide guidance when the IMO can request further information from applicants.	Discussed at 22 April Working Group meeting.	• IMO to update with comments from Working Group meeting. • IMO will present updated version of the Market Procedure to Working Group • IMO to submit into the Procedure Change Process.	TBA
PC_2009_09	Supplementary Reserve Capacity (SRC)	The proposed new Market Procedure describes the process that the IMO and System Management will follow in: • acquiring Eligible Services, • entering into SRC Contracts;	Discussed at 22 April Working Group meeting.	• IMO to update with comments from Working Group meeting. • IMO will present updated version of the Market	TBA

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
		• determining the maximum contract value per hour of availability for any contract; and • Details the information that is required to be exchanged.		Procedure to Working Group • IMO to submit into the Procedure Change Process.	
PC_2009_10	Reserve Capacity Testing	The proposed updates are to: • define testing cycles and Temperature Dependence Curves; • define how passes and fails of Reserve Capacity Tests are determined using the Temperature Dependence curve; • detail how the IMO measures temperature; • correct a number of minor and typographical errors; and • include details relating to the Amending Rules and associated procedure steps resulting from Rule Change Proposal RC_2008_20 (effective from 1 October 2010).	Version 2 commenced 1 June 2010.	Version 3 will commence 1 October 2010.	October 2010
PC_2010_01	Procedure Administration	The proposed update is to revise to conform to recently adopted style changes.	Discussed at 27 July Working Group meeting	• IMO to update with comments from Working Group meeting. • IMO to submit into the Procedure Change Process.	August 2010
PC_2010_02	Notices and Communications	The proposed update is to revise to conform to recently adopted style changes.	Discussed at 27 July Working Group meeting	• IMO to update with comments from Working Group meeting. • IMO to submit into the Procedure Change Process.	August 2010
PC_2010_03	Monitoring Protocol	The proposed updates are to: • Allow the IMO to disclose the identity of System	Discussed at 27 July Working	• IMO to update with comments from Working	TBA

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
		Management as a participant that notifies us of alleged breaches; and • Update to conform to recently adopted style changes.	Group meeting	Group meeting (including a thorough review of a monitoring process descriptions provided in Appendix A). • IMO will present updated version to the Working Group. • IMO to submit into the Procedure Change Process.	
PC_2010_04	Determination of the Maximum Reserve Capacity Price	The proposed updates are to reinstate the 2009 MRCP Major Component values (removed as part of PC_2009_12). N.b. This Market Procedure has not been updated to reflect the IMO's recently adopted style given it is currently under further review by the MRCPWG.	Discussed at 27 July Working Group meeting	• IMO to update with comments from Working Group meeting. • IMO to submit into the Procedure Change Process.	September 2010
PC_2010_05	Reserve Capacity Performance Monitoring	The proposed updates are to: • Include the changes to the Amending Rules arising from RC_2010_11, RC_2009_19 and RC_2010_02; • Update to conform to recently adopted style changes.	Discussed at 27 July Working Group meeting	• IMO to update with comments from Working Group meeting. • IMO will present updated version to the Working Group. • IMO to submit into the Procedure Change Process.	TBA
System Management Procedure Change Proposals					
PPCL0016	Monitoring and Reporting Protocol	The proposed updates are to provide further details around how System management will determine and review the annual Tolerance Range and any Facility Tolerance Ranges to apply for the purposes of clause	Under development	To be discussed at the Working Group meeting 3 August 2010.	3 August 2010

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
		7.10.1 and 3.21 of the Market Rules. The proposed updates will ensure consistency with the requirements of RC_2009_22 and in particular the new clause 2.13.6K.			

Agenda Item 7a: Working Group Overview and Membership Updates

1. WORKING GROUP OVERVIEW

Working Group (WG)	Status	Date commenced	Date concluded	Latest meeting date	Next scheduled meeting date
Reserve Capacity 2007 WG	Closed	Feb 07	May 07	-	-
NTDL WG	Closed	Oct 07	Nov 07	-	-
Energy Limits WG	Closed	Dec 07	Jan 08	-	-
DSM WG	Closed	Jan 08	May 08	-	-
SRC WG	Closed	Jun 08	Sept 08	-	-
Reserve Capacity 2008/09 WG	Closed	Dec 08	Jan 09	-	-
Renewable Energy Generation WG	Active	Mar 08	Ongoing	27/05/2010	24/06/2010
System Management Procedures WG	Active	Jul 07	Ongoing	12/11/2009	03/08/2010
IMO Procedures WG	Active	Dec 07	Ongoing	27/07/2010	28/09/2010
Maximum Reserve Capacity Price WG	Active	May 10	Ongoing	02/07/2010	17/08/2010
Rules Development Implementation WG	Planning	TBA	TBA	TBA	TBA

2. WORKING GROUP MEMBERSHIP UPDATES

In accordance with the Terms of Reference (ToR) the Market Advisory Committee (MAC) must approve the appointment and substitution of members for the:

- IMO Procedure Change and Development Working Group;
- System Management (SM) Procedures Working Group; and
- Renewable Energy Generation Working Group.

The MAC has received a number of requests by current members of each of these groups to withdraw from membership, along with recommendations to the MAC of potential replacement members. These are outlined below (and attached as tracked changes to the relevant Working Group's ToR).

(a) IMO Procedure Change and Development Working Group

- Alistair Butcher to withdraw from the Working Group due to his new role in Western Power. Western Power has recommended Grace Tan as his replacement member.
- An amended ToR is attached as appendix 1.

(b) SM Procedures Working Group

- Alistair Butcher to withdraw from the Working Group. Western Power will recommend a new member once the position has been filled.
- An amended ToR is attached as appendix 2.

(c) Maximum Reserve Capacity Price Working Group

- Alistair Butcher to withdraw from the Working Group. Western Power has recommended Neil Hay as his replacement.
- The ToR does not specifically list the members, so an amended ToR is not required.

(d) Renewable Energy Generation Working Group

- Matthew Fairclough to withdraw from the Working Group due to his new role in Western Power. Western Power has recommended Brendan Clarke as his replacement.
- The ToR does not specifically list the members, so an amended ToR is not required.

3. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Agree** with the proposed amendments to the membership of each of the Working Groups.

Agenda item 7a Appendix 1:

Terms of Reference

The IMO Procedure Change and Development Working Group

SCOPE

The Working Group's scope of work includes consideration, assessment and development of changes to IMO Market Procedures which the Market Rules require the IMO to develop. A Report on each Procedure Change proposed by the Working Group will be provided to MAC which demonstrates that the proposed change is consistent with the Wholesale Market Objectives and the Market Rules.

TERMS OF REFERENCE

- Members of the Working Group are appointed and substituted by MAC.
- The members of the Working Group are:

Jacinda Papps (Chair)	-	IMO
Bill Truscott	-	Industry Representative, Alinta Limited
Yin Heng	-	Industry Representative, Perth Energy
Steve Gould	-	Industry Representative, Landfill Gas and Power
~~Alistair Butcher~~	-	~~System Management Representative~~
Grace Tan	-	System Management Representative
John Rhodes	-	Synergy Representative
Andrew Everett	-	Verve Energy Representative
Fiona Edmonds	-	IMO

- An issue can be referred to the Working Group for consideration by the MAC or the IMO. Generally, issues referred to the Working Group will relate to proposed procedure changes.
- The Working Group will be convened by the Chair upon request from the MAC Chair, or as required to complete its Scope of Work within the required timeframes.
- The Working Group will meet as required to provide the MAC and the IMO with a detailed analysis and advice regarding the issue referred to them.
- The Working Group will consider and develop, where appropriate, procedure changes within the timeframes set by the Chair with respect to each proposed procedure change.
- Procedure changes proposed by the Working Group must be consistent with the Wholesale Market Objectives and the Market Rules.
- Members are expected to attend as many Working Group meetings as practicable.
- The MAC may review, amend and extend these terms of reference, as necessary.

Agenda item 7a Appendix 2

Terms of Reference

The System Management Procedure Change and Development Working Group

SCOPE

The Working Group's scope of work includes consideration; assessment and development of changes to System Management Market Procedures which the Market Rules require System Management to develop. A Report on each Procedure Change proposed by the Working Group will be provided to MAC which demonstrates that the proposed change is consistent with the Wholesale Market Objectives and the Market Rules.

MEMBERSHIP AND PROCESS

- Members of the Working Group are appointed and substituted by MAC.
- The members of the Working Group are:

Phil Kelloway (Chair)	-	System Management
Debra Rizzi		Industry Representative, Alinta Limited
Shane Cremin		Industry Representative, The Griffin Group
James Heng	-	Industry Representative, Perth Energy
Rene Kuypers	-	Industry Representative, Infigen Energy
Steve Gould	-	Industry Representative, Landfill Gas & Power
Nick Walker	-	Verve Representative
Wesley Medrana	-	Synergy Representative
~~Alistair Butcher~~	~~-~~	~~System Management~~
TBD	-	System Management
Fiona Edmonds	-	IMO
Jacinda Papps	-	IMO

- An issue can be referred to the Working Group for consideration by MAC or the IMO. Generally, issues referred to the Working Group will relate to proposed Procedure Changes.
- The Working Group will meet as required to provide MAC and the IMO with a detailed analysis and advice regarding the issue referred to them.
- The Working Group will consider and develop, where appropriate, Procedure changes within the timeframes set by the Chair with respect to each proposed Procedure change.
- Procedure Changes proposed by the Working Group must be consistent with the Wholesale Market Objectives and the Market Rules
- Members are expected to attend as many Working Group meetings as practicable.
- MAC may review, amend and extend these terms of reference, as necessary.

Agenda Item 7b: REGWG Update

1. UPDATE ON REGWG WORK PACKAGES

The REGWG last met on 22 July 2010. At this meeting the following was discussed:

- Work Package 2: Analysis of capacity valuation options;
- Work Package 3: Final Report; and
- Work Package 4: Review of member comments.

The next REGWG meetings are tentatively scheduled for 26 August 2010 and 23 September 2010.

Work Package 1: Impacts of Government Policy on Intermittent Generation Penetration

At the 12 May 2010 MAC meeting it was noted that the Work Package 1 report was still an interim report as there were two forecasting elements to consider:

- The overnight load forecasts (which have since been resolved); and
- Ensuring that the long-term forecasts in the ROAM report align with the informal long-term forecasts recently prepared by NIER (for the Office of Energy).

Subsequent analysis of the forecasts contained in the ROAM report has confirmed that these are robust. The IMO is working with the Office of Energy to assess the implications of the issues with the NIEIR forecasts.

The IMO will be recommending to the REGWG that the Work Package 1 report be accepted as final.

Work Package 2: Valuing the Capacity of Intermittent Generation in the South-West interconnected system of Western Australia

Extensive consultation has followed the presentation by MMA at the April 2010 meeting of their supplementary report. As well as MMA's preferred valuation methodology, two alternative schemes have been proposed by REGWG members.

MMA is currently performing an assessment of the three valuation methodologies. The results of this work will be presented at the next meeting (dates to be confirmed) and the REGWG is expected to select one of the three methodologies at the meeting subsequent to this. This recommendation could then be presented at the October 2010 MAC meeting and would be followed by a Rule Change Proposal at the November 2010 MAC meeting.

Work Package 3 - Assessment of Frequency Control Services

The final report was delivered to the IMO by ROAM Consulting on 22 July 2010, and has now been distributed to REGWG members for review and comment. Pending REGWG acceptance, this will be tabled at the September 2010 MAC meeting.

The REGWG has discussed the scope of this Work Package and proposes to deliver rule change recommendations to MAC covering the calculation of the Load Following requirement and the allocation of Load Following and Spinning Reserve costs to Market Participants.

The following additional issues around Frequency Control Services have been identified during this work:

- Potential curtailment of Intermittent Generators in times of low system demand; and
- The impact of wind forecasting on Load Following requirements.

These are currently deemed to be outside of the REGWG scope as they are considered to be operational concerns. The REGWG recommends that the MAC discuss these and decide upon the best forum for addressing these issues.

Work Package 4 - Assessment of Technical Rules

The draft report was delivered by SKM on 7 May 2010 and presented at the 24 June 2010 meeting after preliminary review by the IMO and Western Power (as having primary responsibility for the Technical Rules). Western Power and System Management have provided comments on the report.

The IMO will work with these parties and SKM in the coming weeks in order to finalise the report. Once finalised, the REGWG proposes to hand over this report to the ERA's Technical Rules Committee.

2. RECOMMENDATIONS

It is recommended that the MAC:

- **Note** this update;
- **Accept** the interim Work Package 1 report as final; and
- **Discuss** the additional issues listed above that have been raised during the Work Package 3 analysis and decide upon the best forum for addressing these issues.

Agenda Item 7c: MRCPWG Update

1. OVERVIEW OF PROGRESS TO DATE

The MRCPWG last met on 2 July 2010, with the next meetings provisionally scheduled for 17 August and 31 August 2010.

At its first meeting, the Working Group agreed that the general construct of the current MRCP determination methodology is appropriate. The Working Group has subsequently reviewed several of the cost components, with higher priority assigned to those components that will require support from external Consultants.

The IMO has developed draft scope of work documents for Consultant services to review the WACC and deep transmission cost determinations. These documents have been reviewed by Working Group members and the IMO is currently in the process of updating these documents to take into account comments received by members. The IMO will then undertake a competitive tender process to select Consultants to carry out the two work scopes.

The following elements have been agreed by the Working Group thus far:

- Western Power is the appropriate party to determine shallow connection costs;
- The IMO should continue to determine the WACC with the ERA reviewing this in its approval of the MRCP in accordance with clause 2.26.1 of the Market Rules;

At the 22 June meeting, it was noted that the current WACC methodology is based on the assumption that an auction is held. The Working Group agreed to consult the MAC to determine whether this assumption should be reviewed under the Market Rules Evolution Plan.

2. RECOMMENDATIONS

It is recommended that the MAC:

- **Note** this update; and
- **Consider** whether the current WACC assumption that an auction is held should be reviewed as part of the Market Rules Evolution Plan.

Agenda Item 8a: Curtailable Loads - Relevant Demand Analysis

1. BACKGROUND

At the 12 May 2010 Market Advisory Committee (MAC) meeting the IMO presented an issues paper on Curtailable Loads in the Wholesale Electricity Market (WEM) Rules (Market Rules). One of the issues presented in the paper was the measurement of Curtailable Load performance. The following outlines the issue in more detail.

The Rule Change Proposal titled "Demand Side Management- Operational Issues" (RC_2008_20) introduced a new concept for measuring Curtailable Load performance. This is known as the Relevant Demand[1] (RD) level. The RD level determines the median value that a Curtailable Load consumes during 32 Trading Intervals of highest demand during the preceding Hot Season. This is to reflect a normal operating level during the intervals when the Demand Side Programme (DSP) is most likely to be dispatched.

Issue 1: Potential double payment

As the RD level is based on a small number of Trading Intervals there is currently a potential for double payment. This could be achieved by a Curtailable Load conducting maintenance over peak intervals, resulting in a reduction in the Curtailable Load's Individual Reserve Capacity Requirement (IRCR) while maintaining a high RD level. In this instance the Facility would already have been receiving a benefit associated with its reduced IRCR. This potential for double payment can be prevented by not allowing intervals to be excluded, for the purposes of the RD calculation, where those intervals are already resulting in a benefit to the load by reducing IRCR obligations.

Issue 2: Allocation of Capacity Credits for DSM programmes versus the loads which comprise these programmes

The second issue identified with the calculation of the RD level was that while DSM Programmes (DSP) are assigned Capacity Credits as a whole, the Curtailable Loads which comprise the DSP are assigned Capacity Credits on the individual RD level of the load. This makes sense under the current Market Rules because DSPs are not Registered Facilities and as such the comprising loads are required to be treated independently once registered.

One of the recommendations the IMO made in the May MAC meeting was to make DSP a defined Facility. As a result of this decision, the IMO considers that the RD level of the DSP should be calculated as a whole (a sum of its parts). The IMO has had analysis conducted on the impact on the Capacity Credits assigned to a DSP arising from changing the RD calculation to incorporate a DSP comprised of multiple loads. An added benefit of this methodology would be that the IMO is not required to calculate RD levels for the numerous Loads comprising DSPs, it would merely be required to calculate one RD level for each DSP.

[1] The consumption of a Curtailable Load as determined in clause 4.26.2C. The RD is used to set the maximum Certified Reserve Capacity that can be assigned to a Curtailable Load.

In the May MAC meeting the MAC agreed that the IMO should conduct further analysis into the RD calculation methodology for both issues. This is outlined below.

2. DAA ANALYSIS

The IMO engaged Data Analysis Australia (DAA) to assist in a comparison of the alternative RD calculation methodologies. The objective of this comparison was to devise an RD methodology that is both stable and reliable. The RD level should be stable in that the same Facilities will receive similar RDs year on year and reliable in that the RD will represent the actual available capacity a Facility will be able to curtail at the time of peak demand.

DAA has undertaken an investigation of alternative RD methodologies by comparing the RD values for a number of DSPs. Four different methodologies were used to calculate the RD as outlined below:

1. Status Quo – this method takes the median of 32 Peak Trading Intervals (PTIs). Eight intervals are taken from the day with the highest system load in each month of the Hot Season (December through March). The intervals selected are the eight consecutive intervals summing to the largest Curtailable Load on a given Trading Day.
2. IRCR method – this method takes the median of 12 PTIs for each Hot Season. The three consecutive intervals with the highest load are selected from the four days with the highest daily system load during the Hot Season.
3. Peak Trading Intervals during the Hot Season – this method calculates the RD as the median of all intervals between 8am and 10pm, Monday to Friday (excluding public holidays). There are approximately 2,200 half-hour intervals that occur between these times each Hot Season. This number varies due to the shift of the Easter public holidays from year to year, in and out of the Hot Season.
4. Top PTIs – this method calculates the RD as the median of the top 250, 500 and 750 PTIs in the Hot Season from the system load.

Further, DAA analysed the four methodologies using the following two RD calculation techniques: summing the RD for individual Loads (current methodology) and aggregation of the Loads then calculating the RD (proposed methodology).

DAA's paper, attached as appendix 1, outlines the following conclusions:

1. The IRCR method produces the most reliable result when it comes to predicting what the load will likely be operating at during a peak demand event the next year, the top 250 intervals produces the second most reliable results and the current 32 PTI method produces the second least reliable results;
2. The greater the number of intervals included when determining the RD, the greater the stability of the RD value year-on-year;
3. When a greater number of intervals are included a negative bias is introduced into the RD evaluation which would result in a potential under estimation of future curtailability;
4. It is the methodology used to calculate the RD (i.e. IRCR vs 32 PTIs) that is the main driver of the stability and reliability of the RD, rather than the order by which the aggregation of the RD is conducted into DSM groups (i.e. summing the RD for individual Loads vs aggregating the Loads then calculating the RD).

The full DAA paper is available on request.

3. CONCLUSIONS

Currently the Market Rules provide an incentive (through the IRCR structure) to reduce load at peak demand times while the RD calculation provides a incentive to have a high load measured in PTIs, both of these incentives support market objective (e)[2]. However, the ability for a Load to reduce its financial obligations under one incentive (IRCR) while simultaneously increasing payments under another (maintenance claims) seems a perverse outcome. Therefore the IMO considers that where a period of maintenance produces a reduction in IRCR for a Load, that Load should not also be financially rewarded with an increase in its RD level (and hence an increase in Capacity Credit payments).

4. RECOMMENDATIONS

The IMO recommends the following.

Recommendation 1: the RD level calculation methodology should be changed to be calculated on the IRCR intervals;

Recommendation 2: The exclusion due to maintenance clause 4.26.2C(d) should be removed from the Market Rules; and

Recommendation 3: the RD level be calculated based on the aggregated output of the DSP, and not by aggregating the RD of each CL associated with a DSP. The IMO considers that this will considerably reduce the complexity associated with other potential rule changes which may come out of the Curtailable Loads review.

The IMO recommends that the MAC:

- **Discuss** the IMOs recommendations; and
- **Note** the IMO will progress a Rule Change Proposal to reflect these recommendations.

[2] To encourage the taking of measures to manage the amount of electricity used and when it is used.

Agenda Item 8b: Information Confidentiality Project

1. BACKGROUND

Chapter 10 of the Wholesale Electricity Market (WEM) Rules (Market Rules) governs the information policy for the WEM. Broadly this chapter outlines:

- the information confidentiality statuses applied in the WEM (clause 10.2.2);
- the guiding principles for the IMO in setting the confidentiality status of each type of market related information or document produced (clause 10.2.3); and
- more specifically, the information to be released by the IMO via the Market Website (clause 10.5.1).

At the 11 November 2009 Market Advisory Committee (MAC) meeting Pacific Hydro presented on the concept of introducing greater availability of market data in the WEM. Pacific Hydro compared the availability of information in the WEM to that of the National Electricity Market (NEM), noting that the rules governing the NEM provide for a broad power to publish relevant information. In particular the Australian Energy Market Operator has the power to collect and disseminate the information "necessary to enable the market to operate efficiently".

Pacific Hydro suggested that the Independent Market Operator (IMO) should:

- consider redrafting the Market Rules to "authorise the IMO to have the responsibility of determining what information is necessary for publication for the efficient operation of an energy market";
- Consult with the industry to identify commercially sensitive information; and
- Consider a planned rollout of market data based on availability, cost and importance for market efficiency.

Since the Pacific Hydro presentation the IMO have embarked on a large information confidentiality review. The details of this project are outlined below.

2. PROJECT DETAILS

Phase 1: The IMO commissioned an independent expert from the Law and Economics Consulting Group (LECG) to prepare a report on the value of information transparency and impact of information asymmetry in Electricity Markets. Part of LECG's scope was to undertake a comparative review of information availability in other jurisdictions such as the:

- NEM;
- Pennsylvania, Jersey, Maryland Power Pool;
- Energy Market Company (Singapore);

- New Zealand Electricity Market; and
- Single Electricity Market Operator (Ireland).

This review compared the public availability of the following information:

- Full energy profiles by unit including fuel type;
- Outage information;
- Generation availability;
- Commissioning test information;
- System Operator dispatch and balancing decisions;
- Wholesale bids and offers by participants;
- Processes for dealing with network connections applications; and
- Deep connections.

Additionally LECG was also tasked with:

- Undertaking a review of the value of information availability on market outcomes in the WEM;
- Identifying impacts, both positive and negative, for the WEM associated with greater transparency of information; and
- Identifying any links between greater transparency and the Wholesale Market Objectives.

Phase 2: The second phase is to review the confidentiality status classes in the Market Rules (there are currently seven to administer), with a view to rationalising these. This phase will:

- Review the classes of confidentiality status that currently apply in the WEM;
- Review the information that is currently set under each of the classes of confidentiality status;
- Assess whether these classes of confidentiality status can be rationalised; and
- If so, recommend the appropriate classes of confidentiality status.

When undertaking the assessment regard will be given to the guiding principles for the provision of information to the market. That is, the IMO is to maximise the number of parties that may view any information or documents, subject to the information not containing commercially sensitive or potentially defamatory information in relation to a particular Rule Participant (clause 10.2.3).

The outcomes of this phase (and the report commissioned in the first phase of the project) will be presented at the 13 October 2010 MAC meeting.

Phase 3: This phase will include rule changes (if appropriate) amending the confidentiality status classes.

Phase 4: Finally, the IMO will classify all the documents produced and information exchanged by the Market Rules into the new confidentiality classes. As with phase 2, when undertaking this phase of the project, regard will be given to the guiding principles for the provision of information to the market. This phase will be done in consultation with the market (and may require a working group).

3. RECOMMENDATIONS

It is recommended that the MAC:

- **Note** this update.

Independent Market Operator

Market Rules Design: Problem Statement

Date: 11 August 2010

Contents

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1. PURPOSE

The purpose of this paper is to present the Market Advisory Committee (MAC) with a list of design problems and issues to be prioritised for development at the 11 August 2010 MAC meeting. These issues derive from:

- The Market Rules Evolution Plan[1] (MREP);
- Issues identified as part of the Verve Energy Review (Verve Review); and
- Additional issues identified by the MAC. These issues are those that have arisen since the development of the MREP and completion of the Verve Review (i.e. not those already prioritised as part of the MREP or Verve Review processes).

This list of design problems/issues will form part of the scope for the (yet to be initiated) Rules Development Implementation Working Group (RDIWG). Agenda items 9b and 9c of the August 2010 MAC meeting agenda outline the proposed terms of reference and working group structure.

2. BACKGROUND

2.1 Market Rules Evolution Plan

The MREP was created during 2009 to assist in setting the work priorities for the evolution of the WEM. The MREP was developed via a highly consultative process and incorporated a consolidated list of issues raised by various stakeholders since the market start. The MAC was invited to indicate the relative priority of each of the issues on the list to assist the IMO to set the work priorities for the next phase of Market Rules development. As a result of this exercise the top five issues were identified. For more detail see table 1.

The MREP work programme was presented at the October 2009 MAC meeting. This programme noted that the proposed priorities and timelines were independent of the implementation of the Verve Review recommendations and might change as a result of the Verve Review implementation plan.

2.2 Verve Review

In response to concerns about the financial outlook of Verve Energy, the Minister for Energy commissioned the Verve Review. As a result a number of recommendations were made in three broad areas:

- The Vesting Contract between Synergy and Verve Energy;
- Development of a generation outlook; and
- Review of the short term aspects of the WEM design and Market Rules. For more detail see table 1.

[1] http://www.imowa.com.au/market-rules

It should be noted that while the Verve Review looked at the operation of the WEM overall, the basic structure of the WEM (comprising a capacity mechanism, Short Term Energy market (STEM) and dispatch/balancing) was not under review.

2.3 Overlap between the MREP and Verve Review

The MREP and recommendations of the Verve Review both identified the need to review a number of aspects of the WEM.

Owing to the overlap in the issues to be addressed a Market Rules Design Team (MRDT) was formed comprising the Independent Market Operator (IMO), System Management, and Oakley Greenwood for the Verve Review Implementation project . The MRDT has been considering a number of areas of the design of the WEM where amendments to the design would lead to increased efficiency and effectiveness.

Table 1 lists the areas for change identified during the course of development of both the MREP and the Verve Review.

Table 1: Recommendations of the MREP and Verve Review

Market Rules Evolution Plan	**Verve Review**
Improvements to the Balancing mechanism	Broader participation in the Balancing mechanism
Review of the Reserve Capacity Mechanism	The capacity deficiency penalties
Improvements to STEM: • Closer to real time or multiple gate closures • Transparency of STEM offers • Preliminary calculation of MCAP	Pricing provisions relating to the STEM and the Balancing mechanism
Closer alignment of gas and electricity nominations	
Introducing markets in Ancillary Services	The provision of Ancillary services

The MRDT conducted two workshops and released three papers[2] in addition to discussions within the formal MAC meetings. The concept papers outlined potential development options, identified by the MRDT, to improve the coordination of resources within day ahead timeframes, these were:

- Enhancements to the current hybrid design; or

[2] Oakley Greenwood (OGW) January 2010, *Verve Energy Review, Market Rules Implementation Discussion Paper*
Independent Market Operator (IMO), *Oates Review Implementation Paper, March 2010*
Independent Market Operator (IMO), *Oates Review Implementation Paper, April 2010*

- Moving to a more mature market design (net or gross dispatch arrangements).

2.4 Development Pathway Decision

At the 19 July 2010 MAC meeting the MRDT presented the MAC with the following options:

- Pathway 1: Push the current design as far as possible;
- Pathway 2: Adapt the current design and at the same time evaluate a more mature market design; or
- Pathway 3: Move straight to the evaluation of a more mature market design.

At this meeting the MAC expressed a preference to maximise the development of the current hybrid structure of the WEM.

3. KEY ISSUES

This section discusses the key issues that were identified in the MREP and within the Verve Review. It reviews the initial problems that were identified and builds on these issues with information developed through the MRDT review process. These problems can generally be classified into gaps or misalignments with either the incentives or opportunities for efficient participation in the WEM. Therefore, when reviewing this section, it should be noted many of the issues identified are interrelated. As a result, improvements to the incentives or opportunities in one area of the market can impact on the incentives or opportunities in other areas of the market.

Each broad issue is discussed in terms of the case for change, which is expressed in terms of a framework that assesses improvements that can be made to the incentives and opportunities for efficient participation. Appendix 1 provides further detail on the framework. Providing a case for change will be a useful starting point when considering the merits of making improvements to the current market design.

3.1 Balancing Mechanism

Within the MREP, MAC members gave top priority to improvements to the Balancing Mechanism. The MREP identified the following issues:

- Under the current day ahead mechanism, balancing prices do not always reflect the final dispatch which impacts on the balancing generator – Verve Energy during the one-day lag;
- In addition, Independent Power Producers (IPPs) do not have the flexibility to move generation between their own units, or purchase from another generator within the dispatch day, without incurring unfavourable deviation prices in balancing; and
- There was a desire to allow IPPs to contribute towards balancing more effectively where this makes sense economically.

The Verve Energy Review highlighted that:

- Only Verve Energy provides Balancing and Ancillary Services and this is increasingly inefficient and costly; and
- On a day to day basis, managing low demand is potentially more difficult than managing high demand.

In the course of its work the MRDT:

- Has further analysed the arrangements for balancing and concluded that the calculation of MCAP and the role of UDAP and DDAP and creating distorted incentives that lead to inefficiency. Market Participants have also previously noted the importance of cost reflective balancing prices;
- Noted that Balancing Support Contracts (BSCs) that facilitate the participation of IPPs in balancing are contemplated by the current market rules but no such arrangements have yet been established; and
- Noted that there is a misalignment with the incentives to invest in flexible plant (in order to resolve the overnight load issues) and participant's actual investment decisions.

More detailed analysis of the design of the balancing arrangements and price outcomes is provided in Appendix 2

Design issue/problem 1: *There is very limited opportunity for participants other than Verve to participate in providing balancing services and this inevitably means the cost of balancing is higher than it needs to be.*

Design issue/problem 2: *Provisions for Balancing Support Contracts have not been effective to date.*

Design issue/problem 3: *The calculation of MCAP and the role of UDAP and DDAP mean that balancing prices are not cost reflective and this leads to inefficient incentives for decisions about prices and participation and inequitable financial transfers between participants that compromise the integrity of the WEM.*

3.2 Reserve Capacity Mechanism

MAC members identified a review of various elements of the Reserve Capacity Mechanism as having the second highest priority for the MREP. The following issues were specifically identified:

- Expressions of Interest process;
- Maximum Reserve Capacity Price (MRCP) and Weighted Average Cost of Capital (WACC);
- Secondary Market for Capacity Credits/Obligations;
- Shorten lead time for entry into mechanism; and

- Capacity Cost Refund mechanism.

A number of these elements have been reviewed, or are currently under review through other processes. The MRCP and associated WACC calculations are currently being reviewed by the MRCP Working Group established under the MAC. Shortening the lead time for entry into the mechanism was reviewed as part of a recent rule change proposal. When considered by the MAC, the rule change proposal was not progressed.

Discussion has also noted that the distribution of Capacity Cost Refunds is directed to Market Customers. On the other hand Supplementary Reserve Capacity arranges are funded via a separate, as needed, charge on the market. As these payments are volatile they are difficult to reflect end-user tariffs. Consideration has been given as to whether the Capacity Cost Refunds should be retained in order to fund future Supplementary Reserve Capacity Refunds.

The Verve Energy Review noted that the capacity deficiency penalties are very smoothed and only provide a general, not a specific incentive to have capacity available. Furthermore, it noted that capacity deficiency penalties provide a capped incentive for generators to make plant available when required, which limits the steps that they would be prepared to undertake to have plant available when required.

In addition the MRDT found that the static, time based, design of the Capacity Cost Refunds:

- is unable to recognise the inherent variability in reserves resulting from the impact of weather on customer demand and levels of generator availability. The variability of demand with time of day and weather means that reserve is generally higher in off peak times of day and year. As a result the value of capacity varies and can be very low at off peak times when reserve is high. This changing value is broadly reflected in the current schedule of refunds but only for the worst case condition at each time of year and it is not able to reflect short term variations; and
- do not provide for participants voluntarily to increase available capacity either by cancelling approved maintenance or operating above the level of accredited capacity. This indicates that the Capacity Cost Refunds do not provide an incentive for increases in capacity at times of system stress.

Design issue/problem 4: *At different times the capacity refund arrangements under and over price the value of capacity leading inefficient decisions by participants about the timing of maintenance and presentation of capacity.*

3.3 STEM operation and alignment of gas and electricity nominations

A number of issues were raised in the MREP concerning the STEM. Notably:

- Trade volume, price relevance and STEM predictability;
- Moving closer to real time or multiple gate closures;
- Transparency of STEM offers; and

- Preliminary calculation of Marginal Cost Administered Price (MCAP) (closer to real time).

The MRDT found that the timing of operation of STEM and the single pass design was restricting the ability of the market to develop accurate and efficient plans and in conjunction with the factors that are preventing balancing prices from being cost reflective this would compromise future participation in both STEM and balancing.

In making STEM submissions participants must forecast likely operating conditions and customer demand using the best information available at the time but cannot vary their positions once submissions are made – even where circumstances have clearly changed and they could amend their planned operation, for example where a later weather forecast shows demand is likely to be different to initial expectations. i.e. IPPs are effectively committed to dispatch (net contract) positions following STEM clearance and Verve is scheduled and dispatched by System Management, in anticipation of demand, wind and resource plans (submitted around 1:30pm) with no ability to adjust its offer curve (submitted around 5 hours earlier). The use of a single pass process that is completed well in advance of the time of dispatch (and the time that a central utility system operator would reconsider its planned operation) means that operation of Verve plant is optimised independent of its day ahead STEM submissions and only on the basis of dispatch guidelines and availability and price of IPP plant cannot be adjusted by the relevant IPP.

The WEM was designed so that Market Participants were informed about their electricity positions prior to making gas nominations. Recently a number of Market Participants have indicated a preference for closer alignment of these windows, some noting a firm preference for gas nominations to come first (due to fuel availability concerns).

The day ahead nature of the WEM, in conjunction with the nomination processes for gas shippers on the DBP, may act to constrain the ability of Market Participants to respond to short term fluctuations in demand and supply conditions. This is exacerbated by the contractual nature of the gas market, which for some smaller, new entrant generators does not provide them with the necessary flexibility to trade around their contracted gas positions.

As a result operation is less efficient for both Verve and IPPs.

The MRDT also noted that the requirement for facility resource plans to align with STEM outcomes was problematic as STEM is a simple financial portfolio contract trading calculation that does not account for physical limits on generation facilities.

For example as a result of large shifts in cleared STEM quantities in successive intervals that require IPP generation units to ramp rapidly up and then down, and as a result Verve units are expected to undertake inverse action. In order to prepare for these events System Management must operate additional flexible generation plant uneconomically. In order to address this situation a general review of the role of STEM focussing on whether its role is primarily a financial instrument or a form of pre dispatch would be appropriate. If it were to be a financial instrument only then it need not be as closely linked to Resource Plans but if it is to be part of a forecasting and planning for physical operation then it may need to be amended to become a security constrained pre-dispatch.

Design issue/problem 5: *The timing of operation and single pass design of STEM may be*

limiting the ability of the market to achieve efficient operation and cost reflective prices and accordingly creates a barrier for participation by all parties.

Design issue/problem 6: *The requirement for resource plans to match STEM outcomes may be limiting participation in STEM and/or forcing inefficient dispatch of IPPs and Verve (as balancer) as IPPs attempt to comply with the resultant resource plans.*

Design issue/problem 7: *Poorly aligned gas and electricity mechanisms inhibits flexibility to respond to changing circumstances and produces suboptimal outcomes in the WEM.*

Transparency

Transparency or the level of disclosure and the degree to which outcomes can be reconstructed and repeated is important to the credibility of many market situations. Disclosure of the basis for operations and understanding of processes therefore is a key factor in creating transparency but also needs to be balanced against the risk that operations are so constrained by process that transaction costs and operating efficiency are compromised or information adds to market power. The WEM is relatively complex and the information about the decisions of System Management in relation to scheduling Verve plant is limited. This lack of information detracts from the understanding and confidence of parties and therefore reduces confidence.

Design issue/problem 8: *Lack of transparency inhibits the ability of Market Participants to optimise interaction in the daily energy market.*

Net nominations

The market rules allow generators to make net submissions - netting-off self supplied load. This is invisible to the market until resource plans are submitted including the operation of generating capacity that was not represented in submissions. This will be efficient as long as the additional generation matches the self supplied load. If not then there is the prospect of any mismatch being reflected in MCAP formation (and any MCAP forecasts). The implications of allowing for net nominations may therefore warrant investigation to ensure that it does not create unintended or inappropriate incentives.

Design issue/problem 9: *Provision for net bilateral submissions compromises transparency and the accuracy of future price forecasts and may therefore lead to sub optimal decisions about participation by other market participants.*

Pay as bid pricing

Under the current rules, IPPs receive payment as bid price when System Management issues a dispatch instruction for them to move off Resource Plan. The pay as bid provision is tempered by the requirement to bid at SRMC (where a party has market power). However, establishing an accurate value for SRMC without knowing the dispatch pattern is highly problematic – as it is for Verve much of the time - and it appears it is common practice for IPPs to bid blocks of generation that are typically not expected to run at the relevant price cap.

Whereas there is a desire for IPPs to participate more in Balancing, the current arrangement in the WEM sets the market price from IPP resources that are essentially pricing themselves out of the (energy) market while remaining available for such situations. This raises issues of market efficiency and compliance monitoring.

Markets in other places use a range of different commercial and administrative approaches to remunerate resources that are called on when competitively bid resources are insufficient to meet demand and could be reviewed.

Design issue/problem 10: *Pay as bid pricing for dispatch of IPP plant for balancing (outside a balancing support contract) is incompatible with efficient wider participation in balancing and potentially over compensates IPPs which bid at price caps due to uncertainty of dispatch outcomes.*

3.4 Introducing Markets in Ancillary Services

The MREP noted the following in respect of Ancillary Services:

> "Ancillary Services are services required to support the WEM but which are not traded as part of the WEM. System Management are required to procure adequate quantities of these services, either from Electricity Generation Corporation (Verve) resources (the default option) or on a contestable basis from independent providers (if they provide a least cost option to Verve's facilities).
>
> Market Participants have indicated that the provision of ancillary services should be opened up to competition for spinning reserve, frequency control and black start."

The Verve Energy Review commented that:

> "Effective arrangements for load balancing and ancillary services. The most efficient and reliable way to provide these services should ensure that all generators face similar incentives to provide them. In competitive systems it becomes increasingly difficult, costly and increasingly impractical for a single generation company to provide all or most of these services as its total share of system capacity falls."[3]

Introducing market-based arrangements for Ancillary Services has been identified as a key priority by MAC members, and as an issue within the Verve Energy Review. While there has not been significant work conducted within this review on this topic, there are a number of other developments that have progressed in the meantime.

As part of the Renewable Energy Generation Working Group, Ancillary service standards and cost allocation have been reviewed with reference to increased penetration of intermittent generation on the SWIS. This work has identified the growth in Ancillary Service requirement in coming years and is reviewing the cost allocation methodology in situations of increased levels of penetration of intermittent generation.

[3] Pp 14

More broadly, System Management recently presented a discussion paper to the MAC process with an aim of increasing the level of participation in the provision of Ancillary Services.

4. SUMMARY OF DESIGN ISSUES/PROBLEMS

The summary of Design issues/problems is outlined below. These, plus any additional issues that the MAC agrees at the 19 August 2010 MAC meeting will form the scope of work for the RDIWG.

1. There is very limited opportunity for participants other than Verve to participate in providing balancing services and this inevitably means the cost of balancing is higher than it needs to be.

2. Provisions for Balancing Support Contracts have not been effective to date.

3. The calculation of MCAP and the role of UDAP and DDAP mean that balancing prices are not cost reflective and this leads to inefficient incentives for decisions about prices and participation and inequitable financial transfers between participants that compromise the integrity of the WEM.

4. At different times the capacity refund arrangements under and over price the value of capacity leading inefficient decisions by participants about the timing of maintenance and presentation of capacity.

5. The timing of operation and single pass design of STEM may be limiting the ability of the market to achieve efficient operation and cost reflective prices and accordingly creates a barrier for participation by all parties.

6. The requirement for resource plans to match STEM outcomes may be limiting participation in STEM and/or forcing inefficient dispatch of IPPs and Verve (as balancer) as IPPs attempt to comply with the resultant resource plans.

7. Poorly aligned gas and electricity mechanisms inhibits flexibility to respond to changing circumstances and produces suboptimal outcomes in the WEM.

8. Lack of transparency inhibits the ability of Market Participants to optimise interaction in the daily energy market.

9. Provision for net bilateral submissions compromises transparency and the accuracy of future price forecasts and may therefore lead to sub optimal decisions about participation by other market participants.

10. Pay as bid pricing for dispatch of IPP plant for balancing (outside a balancing support contract) is incompatible with efficient wider participation in balancing and potentially over compensates IPPs which bid at price caps due to uncertainty of dispatch outcomes.

5. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Note** the design issues/problems identified through the MREP, Verve Review and subsequent analysis by the MRDT;
- **Discuss** whether there are any other design issues/problems to be added to this list. These issues should be those that have arisen since the development of the MREP and completion of the Verve Review (i.e. not those already prioritised as part of these processes);
- **Agree** a final list of design issues/problems;
- **Note** that the final list of design issues/problems will form part of the RDIWG's scope of work.

APPENDIX 1: ASSESSMENT FRAMEWORK FOR INCENTIVES AND OPPORTUNITIES

1. THE NET EFFECT OF PRICE AND COST ALLOCATION

Economic efficiency is a core element in the Wholesale Market Objectives (Market Objectives), against which any proposed changes will be assessed. A disaggregated market looks to Market Participants to make individual decisions about investment and some aspects of day to day operation that together lead to an economically efficient price for wholesale electricity. The Wholesale Electricity Market Rules (Market Rules) determine the incentives that influence the decisions of Market Participants and hence their design is crucial to delivery of economic efficiency.

Incentives result from the combined effect of price and allocation to participants that together create market revenues to individual participants. Clearly incentives can be distorted if the market price is too high or too low and also if the "wrong" parties are exposed (or "right parties" are not exposed) to a price.

1.1 Price

The WEM was conceived as a net market based around physical bilateral contracts, meaning that dispatch was expected to be in accordance with physical contract positions except for the effect of forecasting inaccuracy and plant failures, when Balancing and Ancillary Services would ensure supply and demand are matched. For this reason the processes that allow participants to establish their final net bilateral contracting positions are crucial to the WEM delivering efficient outcomes and reduce the call for Balancing in the absence of any major forecasting errors or plant failures.

The STEM was expected to be a significant driver for efficient contracting in the WEM, but in practice has seen only limited activity, although this has increased. To be effective and efficient, market prices and processes should be designed to create incentives for contract nominations and Resource Plans to align with contracts, and for contracts and contract nominations to align with demand. However, to the extent on the day Balancing is required, this should be economically efficient – drawing on the lowest cost combination of resources that are available.

In practice the WEM was implemented as a hybrid design. That is, with Independent Power Producers (IPPs) participating on a net basis and Verve Energy on a gross basis, and System Management obligated to apply dispatch guidelines prepared by Verve Energy that are designed to optimise the operation of its plant. Verve Energy is obligated under the market Rules to provide the Balancing service and currently IPPs are excluded from this role unless the parties enter Balancing Support Contracts or Verve Energy would otherwise operate very high cost liquid fuelled plant when an IPP could operate lower cost plant.[4]

The resulting design allowed the WEM to commence operation, but is relatively complex and, as detailed later, a number of aspects of the Market Rules cannot deliver efficient or cost

[4] System Management is able to dispatch IPPs for system security purposes, in accordance with criteria in the Rules at pay as bid prices. Strictly speaking this role is not Balancing per se but will affect Balancing requirements.,

reflective prices. This is leading to unnecessary operational costs that (arguably) also detract from the WEM's potential to attract efficient types and levels of new investment.

1.2 Allocation

The allocation of revenues and charges arising from energy transactions in the WEM appears generally sound and does not require realignment. For example, loads ('Market Customers') that consume more/less than their Net Contract Position are deemed to buy/sell the unused amount to/from Balancing and pay/receive a balancing price (MCAP) for that energy. Similarly generators producing more/less than Resource Plan are deemed to sell/buy the excess to/from Balancing and receive/pay a balancing price comprising MCAP for authorised deviations and fractions/multiples of this for unauthorised deviations.

Separately, the level and allocation of Ancillary Services are under review by the IMO but are not considered further in this paper.

1.3 Net incentive

In summary, broadly the allocation of market prices in the WEM produces directionally efficient incentives, although some of the individual prices are not efficient.

2. STATUS QUO INCENTIVES AND OPPORTUNITIES FOR PARTICIPATION

This section is based around a series of diagrams of the cycle of incentives in the WEM design and notes a number of gaps that should be filled to ensure the net incentives are consistent with efficient and reliable operation.[5] The incentive cycle also can be seen as describing the characteristics of an efficient market arrangement after major overhaul.

Figure 1 shows the operational processes within the cycle of operation of the WEM. Starting from the point where retailers and generators make their day ahead bilateral submissions (about 4 o'clock on the diagram and about 8am in real time) the processes include the STEM, Resource Plans and dispatch and Balancing operations. These operations result in the calculation of a number of prices and charges that are allocated to participants who are then influenced (or should be) as to subsequent investment, contracting and further daily cycles of operation.

Figure 2 provides additional detail and notes the key design outcomes at each step around the cycle. If any of the processes in the cycle do not, or cannot because of the design, operate as part of the coordinated cycle of incentives, there is a significant risk that subsequent steps will also not deliver outcomes consistent with efficient and reliable outcomes.

[5] The diagrams were first presented to a workshop for the industry in June 2010

Figure 1 WEM incentive cycle

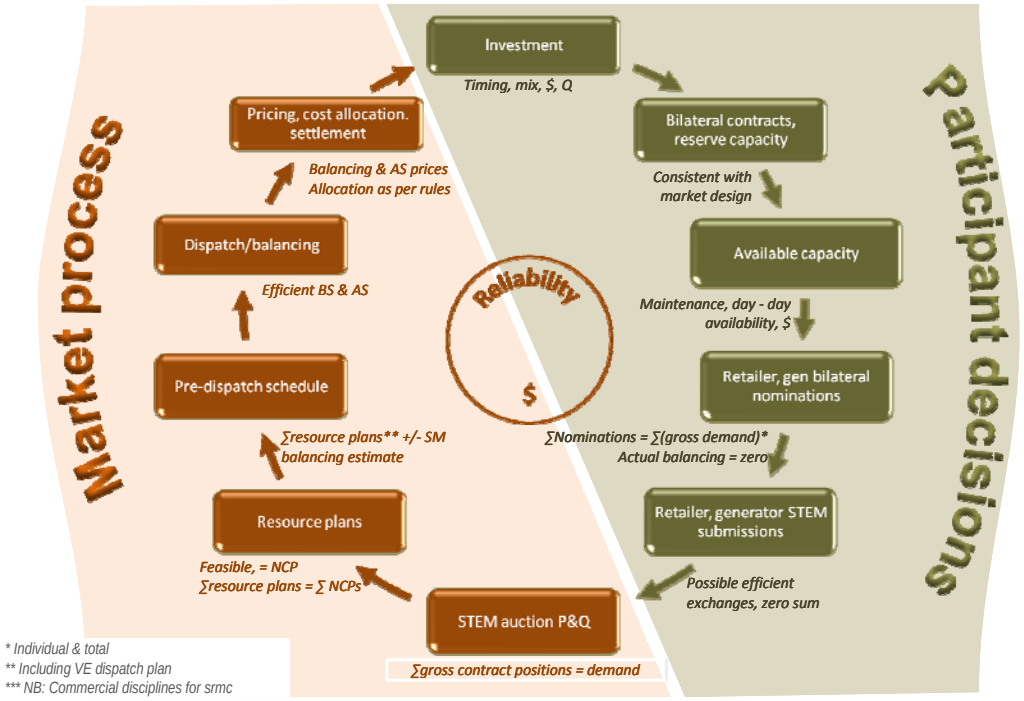


Figure 2 Characteristics of well functioning steps within the WEM incentive cycle

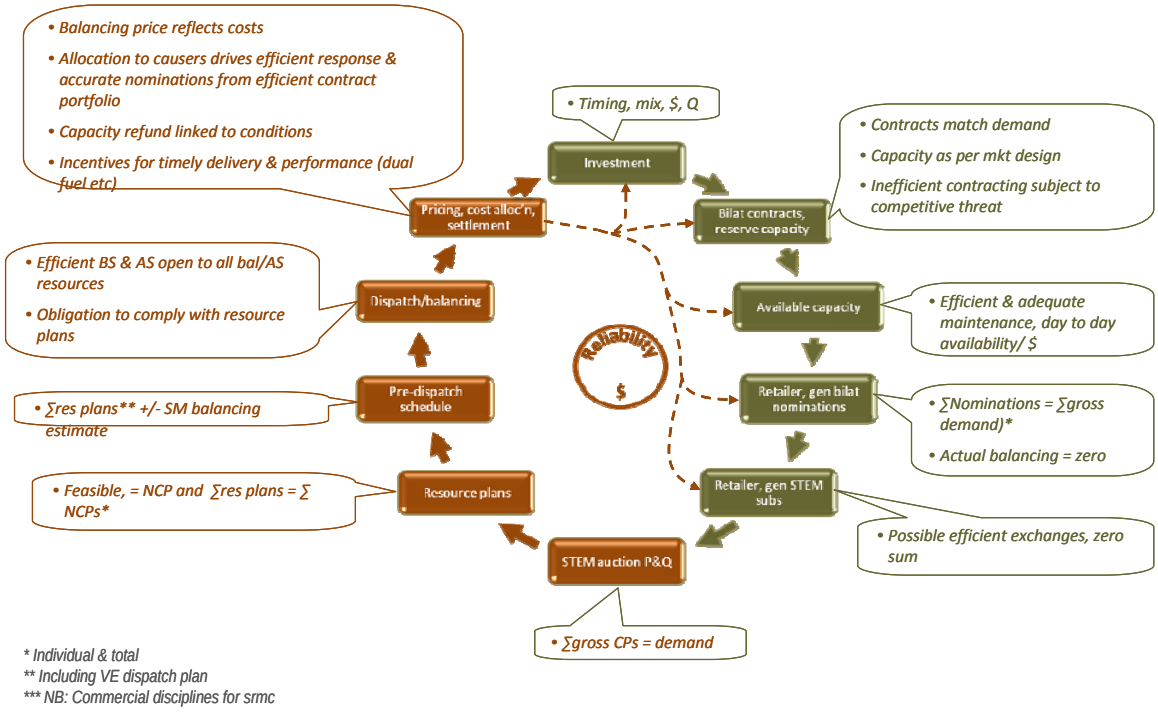
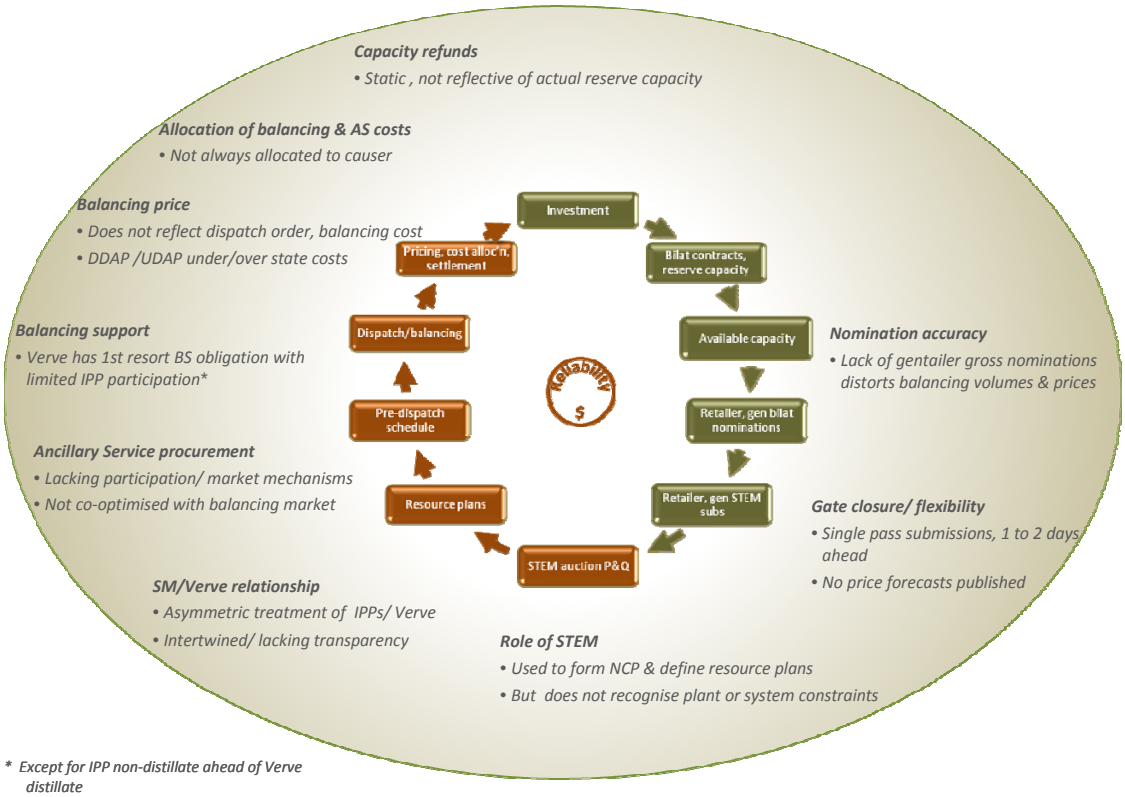


Figure 3 provides a summary of limitations in the operation of the current processes in the WEM. Together the limitations suggest that it is difficult for the WEM to operate effectively. It is also the case that repairing one limitation may not lead to substantial improvement because of limitations in subsequent processes. However, only relatively subtle changes are required to realign each incentive but a package of such changes is required to align the elements of the full cycle of incentives.

Figure 3 Summary critique of current WEM incentive cycle



* Except for IPP non-distillate ahead of Verve distillate

APPENDIX 2: ASSESSMENT OF BALANCING AND DISPATCH ARRANGEMENTS IN THE WEM

1. Current provisions

Under the WEM rules IPPs are scheduled and dispatched in accordance with Resource Plans, and Verve facilities dispatched in accordance with instruction from System Management. The dispatch order for Balancing duty is assigned on the basis of the fuel that will be used – a de facto cost basis. Except where Verve would generate from high cost liquid fuel, Balancing is assigned to Verve and IPP plant is called on if Verve would use liquid fuel. Although it is a complex rule driven process the principles are broadly in line with traditional economic dispatch.

However, IPPs are otherwise excluded from on the day Balancing and thus do not have the opportunity to participate (unless they have entered into a Balancing Support Contract). By implication, the WEM design therefore presumes that any IPP that was prepared to participate in Balancing could have submitted to STEM, and if economic the offer would have been accepted and reflected in the IPP Resource Plan submission. This is not the same as on the day Balancing but can be seen as an opportunity for the equivalent of economic (pre)-dispatch.

However, participation in STEM is also relatively limited. Potential barriers include the operation and timing of STEM and the distortion of Balancing price calculation (discussed below). As a result not all available Balancing resources are utilised and Balancing must by definition be less efficient than it could if all resources were used. However, Verve represents a decreasing percentage of the generating resource and its cost to balance will rise in the future meaning it will therefore shift up the market merit order and be more economic for downward Balancing and less so for upward Balancing except perhaps at higher system loads.

2. Balancing price

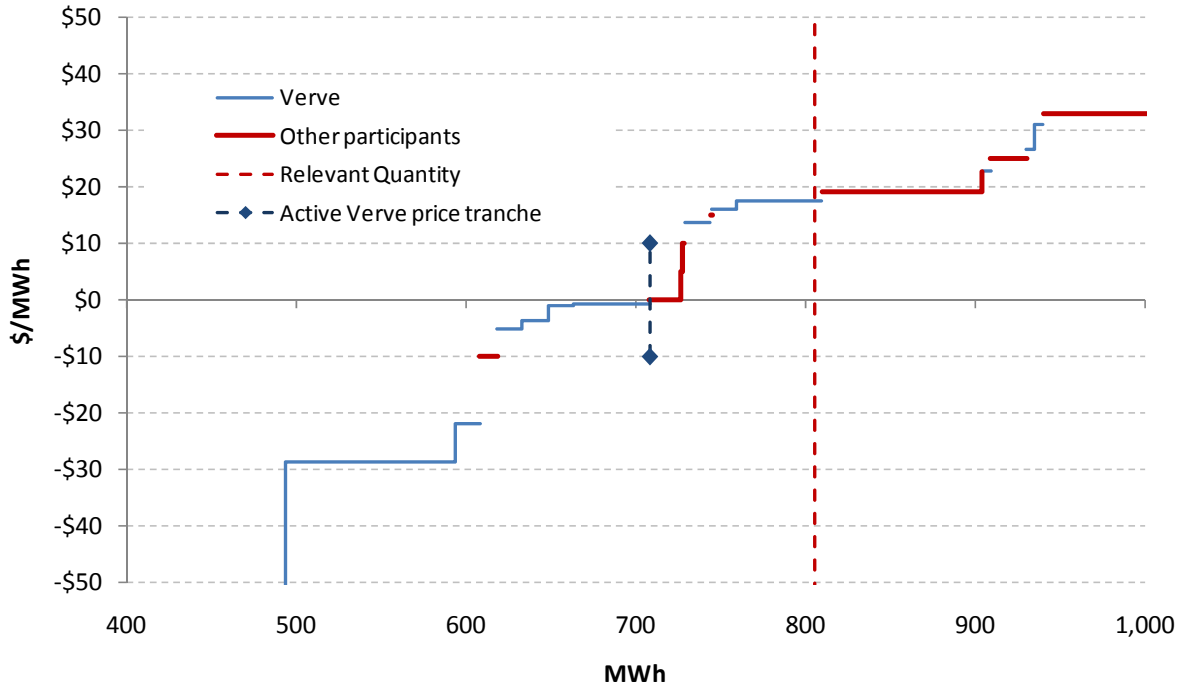
The Balancing price currently comprises three elements: MCAP, UDAP and DDAP. Currently MCAP is based on the price(s) of bids submitted to the STEM process, while and UDAP and DDAP factors are defined in the rules and modify the MCAP price for the purposes of settlement to encourage generators to adhere to Resource Plans.

Throughout the review process, investigation found that the Balancing price does not always reflect the cost of Verve providing the Balancing service. This is because the calculation includes the STEM bids of participants not involved in providing the balancing service (in most cases).

For example, figure 4 illustrates the effect for the trading interval starting at 1am on 24 February 2010. The chart shows a portion of the MCAP price curve with Verve and non Verve tranches highlighted separately. In this example, MCAP was set at almost $20 per MWh (at the intersection of the relevant quantity and the MCAP price curve). The vertical line denoted “active Verve price tranche” indicates the point at which Verve generation would have

intersected the Verve only price curve[6]. The price of that tranche was slightly negative. Thus the cost of balancing indicated by the Verve price curve was approximately $20 per MWh less than MCAP.

Fig 4: Price formation for trading interval stating 1am 24 Feb 2010.

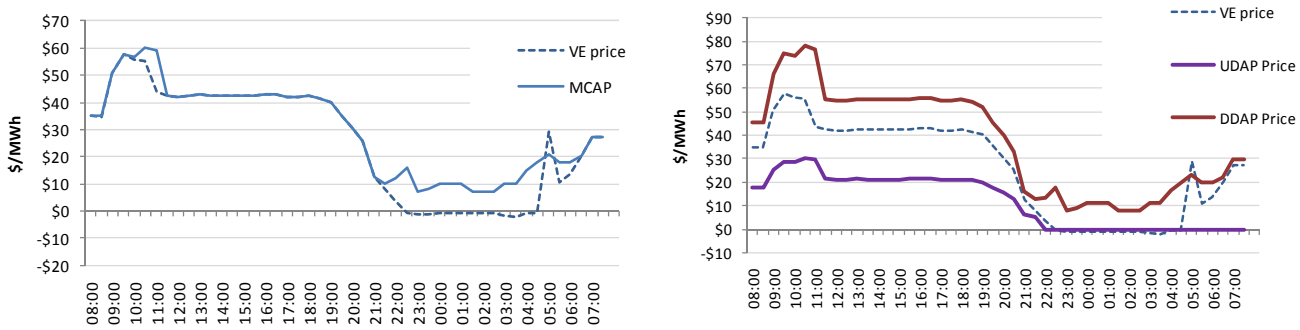


The difference from a "clean Balancing" price can be seen by an example presented to an industry meeting in June for the 24 hour period to 8am on 1 February 2010 (figure 5). Overnight, during low demand periods, MCAP was significantly higher than the proposed clean Balancing price. The Balancing price seen by the market was therefore not reflective of actual Balancing costs. There were also distortions at other times of the day when the price was higher than the actual cost of Balancing, as determined from the Verve bid prices which are required to be cost based.

It would make sense that the Balancing price curve should be comprised of bids relating to those facilities providing the service.

[6] In other words, the point at which the loss adjusted Verve quantity intersected the Verve only price curve. The Verve quantity was not actually 710 MWh – the line just highlights the point at which the Verve quantity (about 410 MWh) would have crossed the tranche in the Verve only price curve.

Figure 5 Actual MCAP vs cleaned price 1 Feb 2010



Over time, these distortions send inaccurate signals about the value and cost of Balancing. As illustrated above, DDAP and UDAP further distort the Balancing prices IPPs face for deviations from Resource Plan and/or contract positions. During the same year, the average "clean" Balancing price was approximately $30/MWh compared to an upward deviation price of approximately $15/MWh and downward deviation price of $48/MWh.

While individual days may exhibit distortions it is important to consider whether the effect is pervasive by an assessment over a longer period of time. Figure 6 compares the price duration characteristic for MCAP and the 'cleaned' (or Verve Energy curve) during the year ending 31 March 2010. The results support a conclusion that the effect is material and that the rules prevent prices from being cost reflective, thus embedding distorted operational remuneration and investment signals.

Figure 6 MCAP vs clean price 12 months to 31 March 2010

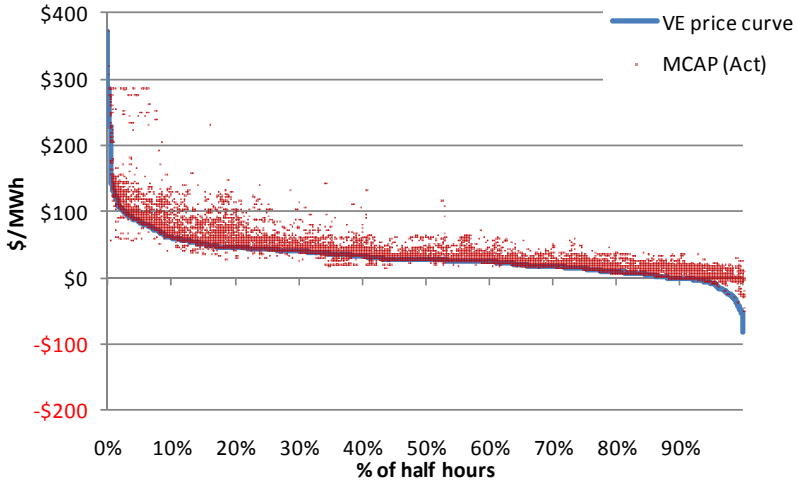
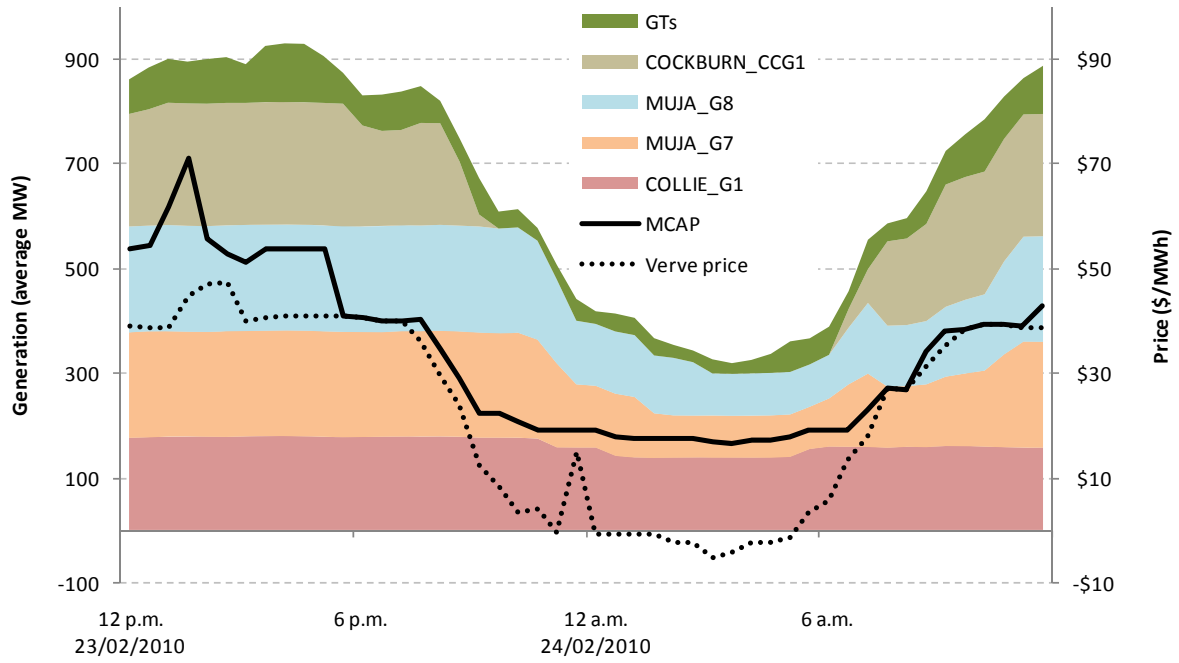


Figure 7 highlights potential inefficiencies and missed opportunities for IPP participation in balancing as a result of current arrangements. It shows generation from selected Verve facilities along with MCAP and Verve's balancing price (from its offer curve). It can be seen that during the low demand overnight period, Verve facilities were dispatched down to minimum levels or, in the case of Cockburn, taken out of service. Some gas turbine capacity

was also in service over this period. MCAP was significantly less that the Verve price at these times.

Figure 7 Inefficiencies and missed opportunities for IPP participation in balancing



MCAP thus significantly underestimated the value of an IPP being able to participate in balancing overnight, by around $20 per MWh. i.e. in principle, for any marginal cost above zero an IPP could have been dispatched downward profitably and bought from the balancing. i.e. at a price of around zero.

3. UDAP and DDAP incentives compared with compliance

In practice the most efficient outcome for generators in the light of changing conditions in the market may be to deviate from Resource Plans and similarly for loads to bias their nominations high or low depending on the view of the likely range of Balancing prices. A more dynamic market might allow for renominations and resubmission of prices including prices from the suppliers of Balancing. Not having the ability to financially adjust positions through renomination requires that generators maintain resource plan positions. This behaviour is incentivised by applying a price disincentive through UDAP and DDAP. It could be argued that the application of these factors operates as an incentive, but the magnitude of the multipliers is seen by some as being unduly harsh.

In some market environments, incentives to maintain resource plan position are administered through compliance monitoring and enforcement rather than by the application of automatic energy penalties.

4. Balancing Support Contracts

Balancing support contracts (BSCs) are contemplated by the current market rules but no such arrangements have yet been established. The current structures allow for BSCs to be established between IPPs and Verve Energy or IPPs and System Management.

A number of problems with establishing BSCs have been identified. For System Management initiated BSCs, the interleaving of IPP balancing bids with Verve Energy plant is problematic. Visibility of pricing is the key issue. Despite some efforts to establish BSCs between Verve Energy and some IPPs, there appear to be impediments to agreeing mutually acceptable commercial terms. This may require further investigation for the establishment of effective BSCs.

Agenda item 9b

DRAFT Terms of Reference

Rules Development Implementation Working Group

1. BACKGROUND

The Rules Development Implementation Working Group (Working Group) has been established, in accordance with Clause 2.3.17 of the Wholesale Market Rules and the associated Section 9 of the Constitution of the Market Advisory Committee (MAC). Consistent with these authorised functions and powers, the overarching function of *any* Working Group established under the MAC is to assist the MAC in providing advice to the Independent Market Operator (the IMO) and System Management in matters relating to Wholesale Electricity Market (WEM) Rule and Procedural Change Proposals, WEM operation and South West interconnected system (SWIS) operational matters, and the evolution of the Market Rules more generally.

2. SCOPE

The Working Group's Scope of Work includes consideration, assessment and development of changes to the Market Rules associated with the issues list agreed by the MAC at its 11 August 2010 meeting. This issues list is attached as appendix 1 to this document.

3. TERMS OF REFERENCE

The Working Group is to:

- Prioritise the issues identified by the MAC into three development work streams;
- Agree a work plan and timeline for consideration of each of the work streams; and
- Develop an integrated suite of solutions, including drafted Concept Papers and Rule Change Proposals to be presented to the MAC by way of presentation/s and supporting discussion paper/s.

The Rule Change Proposal(s) must include a full impact assessment prior to any recommendations being put forward to the MAC, including:

- Consideration of the implications of any changes on improving the delivery of the Market Objectives;
- Detailed feedback as to the implications to the operation of the existing WEM processes and physical outcomes; and
- Consideration of the financial costs and benefits of implementation.

Consistent with Section 9.5 of the MAC Constitution, all matters which are identified as falling outside the Scope and Terms of Reference of this Working Group must be referred back to the MAC for consideration.

4. OBJECTIVES AND PRINCIPLES

The Working Group must provide advice and report the extent to which its advice meets or is consistent with the Wholesale Market Objectives and the general principles reflected in the current Market Rules.

The Market Objectives are as outlined in Section 122 of the Electricity Industry Act 2004 and Clause 1.2.1 of the Market Rules.

5. MEMBERSHIP

The Working Group consists of a Chair and members appointed by the MAC from nominees, being representatives of Rule Participants and other interested stakeholders. In addition, staff, representatives and consultants of the IMO work with and support the group. Replacement and/or new nominees can be submitted to the MAC for consideration at any time.

6. TENURES

The Chair and members are appointed by MAC and remain in tenure until the appointment is duly revoked by the MAC or the Working Group is disestablished.

A member of the Working Group may resign by giving notice to the IMO in writing; this notice of resignation can include an appropriate replacement from the member's entity, for approval by the MAC.

7. RESPONSIBILITY OF THE CHAIR

The Chair provides guidance to the group to ensure that the outputs are appropriate and that they support the Working Group's role of providing advice to the MAC. The Chair works closely with the MAC, the IMO and the Working Group to achieve this.

In carrying out the above role, the Chair must ensure the documented output reflects a balanced representation of the group views.

8. RESPONSIBILITY OF MEMBERS

Members have been selected for their particular expertise and accordingly:

- Members are to make themselves available for meetings;
- Members have a duty to prepare for meetings;
- Members are to consider the interests of all stakeholders currently operating within the WEM;

- Members do not represent their own organisations (although the range of commercial and technical experience inevitably adds diversity to the group's capabilities); and

- Any views expressed by members are not to be taken as being those of their employer or nominating organisation.

9. KEY TASKS AND MILESTONES – THE WORK PLAN

The Chair works with both the IMO and Working Group to develop the Work Plan, setting out the key tasks and milestones within the Terms of Reference.

The Chair has responsibility for the implementation of the approved Work Plan, efficient meetings of the Working Group and reporting to the MAC on achievement of agreed milestones.

10. NATURE OF DELIVERABLES

The Working Group delivers reports, advice and comments on the tasks within the scope of the Terms of Reference and as agreed and set out in the Work Plan. Such deliverables may be varied from time to time by direct request from the Chair of the MAC.

In some circumstances, the MAC may decide that comments, rather than advice, are required from the group. These circumstances may arise due to:

- Issue complexity and contentiousness;

- Parallel industry wide consultation; and

- Time frames.

The documented output in those circumstances would note the various issues raised by the group and advise on them.

11. REPORTING ARRANGEMENTS

Routine reporting will be via Working Group reports to the MAC. Consistent with section 9.4 of the MAC Constitution, the Working Group must report back to the MAC once every month. The Chair will also personally report to the MAC at agreed key milestones.

12. ADMINISTRATION

The Working Group activities are to be as transparent as practical. The Chair must ensure that key decisions and action points from meetings are recorded.

Agenda Item 9c: Rules Development Implementation Working Group- Proposed Structure

1. PROPOSED STRUCTURE

The Rules Development Implementation Working Group (Working Group) will require frequent workshop style meetings, which will most likely be scheduled for full days. For efficiency, the IMO considers that optimal group size would be for no more than 12 participants. Therefore, the IMO proposes the following structure:

- IMO Chair;
- three Market Generator representatives;
- three Market Customer representatives;
- one System Management representative;
- one Network Operator representative (optional); and
- two Observer members (Economic Regulation Authority and Office of Energy).

This membership will be supported by the IMO and supplemented by consultants (as required).

Due to the specialised nature of the work, the IMO recommends that proxies will not be accepted for this Working Group.

2. RECOMMENDATIONS

It is recommended that the MAC:

- **Discuss** the proposed Working Group structure; and
- **Note** that the IMO will call for nominations following the August 2010 MAC meeting.