INDEPENDENT MARKET OPERATOR

Market Advisory Committee

Minutes

Meeting No.	55
Location	IMO Board Room Level 17, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date	Wednesday 14 November 2012
Time	2.00pm – 4.10pm

Attendees	Class	Comment
Allan Dawson	Chair	
Suzanne Frame	Compulsory - IMO	
Geoff Gaston	Discretionary – Generator	
Ben Tan	Discretionary – Generator	
Steve Gould	Discretionary – Customer	
Nenad Ninkov	Discretionary – Customer	
Peter Huxtable	Discretionary – Contestable Customer Representative	
Jacinda Papps	Compulsory – Generator	Proxy
Stephen MacLean	Compulsory – Customer	
Phil Kelloway	Compulsory – System Management	
Michael Zammit	Discretionary – Customer	
Peter Mattner	Compulsory – Network Operator	
Chin Koay	ERA - Observer	Proxy
Apologies	**Class**	**Comment**
Nerea Ugarte	Minister's appointee - Observer	
Wana Yang	ERA - Observer	
Andrew Everett	Compulsory – Generator	
David Murphy	Small Use Consumers' Representative	
Shane Cremin	Discretionary – Generator	
Also in attendance	**From**	**Comment**
George Sproule	IMO	Minutes
Jenny Laidlaw	IMO	Presenter
Brendan Clarke	System Management	Presenter

Courtney Roberts	IMO	Observer
Natasha Cunningham	IMO	Observer
Aditi Varma	IMO	Observer
Andrew Stevens	Griffin Energy	Observer
Wayne Trumble	Griffin Energy	Observer

Item	Subject	Action
1.	**WELCOME** The Chair opened the meeting at 2.00 pm and welcomed members to the 55th meeting of the Market Advisory Committee (MAC).	
2.	**MEETING APOLOGIES / ATTENDANCE** The following apologies were received: • Nerea Ugarte (Minister's appointee - Observer) • Wana Yang (ERA – Observer) • Andrew Everett (Compulsory – Generator) • David Murphy (Small Use Consumers' Representative) • Shane Cremin (Discretionary – Generator) The following other attendees were noted: • Chin Koay (Proxy for Wana Yang) • Jacinda Papps (Proxy for Andrew Everett) • Jenny Laidlaw (Presenter) • Brendan Clarke (Presenter) • George Sproule (Minutes) • Wayne Trumble (Observer) • Andrew Stevens (Observer) • Courtney Roberts (Observer) • Aditi Varma (Observer) • Natasha Cunningham (Observer)	
3.	**MINUTES OF PREVIOUS MEETING** The minutes of MAC Meeting No. 53, held on 12 September 2012, were circulated prior to the meeting. Mr Geoff Gaston queried whether the IMO could provide further information around how a Facility's Capacity Credits could exceed its Declared Sent-Out Capacity (DSOC).	

	The following amendments were agreed. ***Page 4, Section 5a: Market Rule Change Overview*** "Mr Everett noted that Verve Energy did not support the statement, included in the IMO's description of the Dispatch Tolerance issue, that Facilities in the Verve Energy Balancing Portfolio should not be treated differently to other facilities. ~~Mr Everett noted however that he had no issues with the IMO's proposed solution to this issue (as reflected in CP_2012_04).~~ Mr Everett also noted that, with respect to the medium priority issue relating to "certification", he was concerned that the comment on Capacity Credits needing to be limited to the declared sent out capacity (DSOC) for multiple Facilities sharing a DSOC may be inaccurate. ~~Mr Everett considered that the DSOC is a financial constraint on a generator not a physical constraint.~~ Mr Neil Gibbney clarified that the DSOC should be regarded as a physical constraint. Mr Gaston…" ***Page 9, Section 6a: CP_2012_03: Dispatch Tolerance Ranges*** • "Mr Kelloway noted that using the summation of all the Facilities operating in the Verve Energy Balancing Portfolio to determine the tolerance to apply in each Trading Interval may have an impact on ~~the Load Following requirement~~ <u>dispatch security and dispatch outcome</u>." 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. 53 to reflect the agreed changes and publish on Market Web Site as final.*	**IMO**
4.	**ACTIONS ARISING** The following comments were noted on action items: • **Item 2011/33:** Ms Suzanne Frame advised that Ms Jenny Laidlaw would present an update on the Pre Rule Change Proposal: Ancillary Services Payment Equations (PRC_2010_27) which should close off the action item. • **Item 10:** Mr Greg Ruthven advised that he had received verbal feedback from the ERA (Economic Regulation Authority) and that a meeting was planned between the IMO, the ERA and Western Power to progress the issues. Mr Ruthven noted that he would report back to the MAC in early 2013. • **Items 11 and 29:** Mr Phil Kelloway noted that in regard to item 11 the instance described by Mr. Ben Tan had been investigated and a glitch in the process had been identified. Mr Kelloway noted that the feedback provided to him by network operations was not specific enough and proposed that the action item remain open. Mr Kelloway noted that he would like to discuss the event in more detail with Mr Tan. Mr Tan noted that since discussing the issue with Mr Kelloway, Tesla had started receiving information on network outages in	

	advance. Mr Kelloway confirmed that he would discuss the matter with Mr Tan and following this report back to the MAC on item 11 and item 29.	
	• **Item 32:** Ms Laidlaw reported that Western Power had estimated the Distribution Loss Factor for the Notional Wholesale Meter as 1.063 under the proposed methodology compared with the current value of 1.0522. Ms Laidlaw also noted that these values had been used to recalculate the Individual Reserve Capacity Requirements (IRCRs) and associated TDL Ratios for October 2011 to November 2012 with the results indicating that difference using the proposed methodology was not large compared with the overall IRCR quantities. Ms Laidlaw confirmed that the proposed methodology change would not have an impact on the Statement of Opportunities (SOO) because it is based on the estimated sent out generation total not the interval meter readings of Loads. Ms Laidlaw indicated that the IMO intended to submit the Pre Rule Change Proposal into the formal rule change process and take the Procedure Change Proposal to the IMO Procedure Change and Development Working Group (IMOPWG) meeting scheduled for 27 November 2012. The MAC agreed to progress PRC_2012_07 into the formal rule change process.	
	Action Point: The IMO to submit the Pre Rule Change Proposal: Loss Factor Determination (PRC_2012_07) into the formal rule change process.	**IMO**
	• **Item 34:** Mr Kelloway noted that the interface specification and operating agreement for AGC and ABC had been distributed to interested parties. Discussion ensued on which interested parties had received the interface specification. The Chair clarified that AGC and ABC is an interface pack and a user agreement to allow people to electronically connect and receive Dispatch Instructions and that it was not confined to LFAS Facilities but covered any Balancing Facility. Mr Kelloway agreed to send a copy of the interface specification and operating agreement to all generators.	
	Action Point: System Management to send a copy of the interface specification and operating agreement for AGC and ABC to all Market Generators.	**System Mgmt**
	• **Item 35:** Ms Laidlaw reported on the requirements under the Market Rules for the determination of the LFR quantity used in the reallocation of Load Following capacity costs. Ms Laidlaw noted that under the original Market Rules the LFR parameter was provided to the settlement system by the IMO under Clause 3.22.1, described as "LFR as described in clause 3.13.1(aA)(i)(2)". The parameter was described in clause 3.13.1(aA)(i)(2) as "LFR, the capacity necessary to meet the Ancillary Services Requirements for Load Following in that month". Ms Laidlaw also noted that clause 3.11.11 requires the annual Ancillary Services report to include Ancillary Service Requirement quantities for the coming year and so since market start the IMO had used the figures from the Ancillary Service reports for the LFR parameter. With the introduction of the new LFAS Market LFR was replaced with LF_Up_Capacity, which is basically the upwards LFAS	

	quantity activated at the end of the Trading Interval. Ms Laidlaw noted that the IMO had never used the estimate of the Minimum Frequency Keeping Capacity (MFKC) that is used in determining the Reserve Capacity Target. Ms Laidlaw noted that it would be inappropriate to do so because this value is determined two years before the relevant Capacity Year, at a time when the mix of generators that will operate in the Capacity Year is still unknown. Mr Gaston queried whether those offering Load Following get a capacity payment as well. Ms Laidlaw responded that that there is definitely no double payment. Ms Laidlaw noted that no parallel readjustment occurs for Spinning Reserve capacity. The Chair queried whether there is any inconsistency between the handling of capacity costs for LFAS Facilities as opposed to Spinning Reserve Facilities. Ms Laidlaw responded that the discrepancy has existed since market start. • **Items 36 and 37:** Ms Frame noted that System Management and Verve Energy met with the IMO on 12 November 2012 to progress this issue and would report back to the MAC in December. Ms Laidlaw noted the issue was more complex than first anticipated. • **Item 38:** The IMO acknowledged that under the relevant Market Procedure it is required to provide notice on the Market Web Site and should have done so, as well as notify participants by email. The Chair apologised on behalf of the IMO for the oversight.	
5a.	**MARKET RULE CHANGE OVERVIEW** Ms Frame provided an update to the MAC on the current Rule Changes under development. Ms Frame noted that two high priority rule issues had entered the Rule Change log. The first issue was on the agenda for discussion at this meeting. The second issue related to where a Market Participant had been deemed to be non-compliant with a Dispatch Instruction. Ms Frame explained that in such instances the current Market Rules give the IMO the power to reduce the participant's Out of Merit generation to zero. Ms Frame noted however that there is no express time requirement on either the IMO or System Management for determining whether or not someone was compliant with a Dispatch Instruction, and in some circumstances this was difficult and time consuming to ascertain. Ms Frame noted that the current settlement rules do not allow the IMO to make the necessary adjustments to Settlement Statements after the initial settlement run, and so the IMO does not have sufficient time to adjust Constrained On/Off Compensation in such instances. Ms Frame noted that the Market Rules clearly contemplate adjustment of Constrained On/Off Compensation and therefore requested the MAC to consider whether this issue might be progressed through the Fast Track Rule Change Process as a manifest error. Ms Jacinda Papps noted that because these errors are quite complex, even if it is a manifest error, the standard rule change process might be more appropriate because it will allow stakeholders two rounds of consultation. The Chair noted that this issue is resulting in a financial impact on the market which means there is a trade-off to having a longer rule change process. Ms Laidlaw noted that there is a difference	

	between a manifest error and a manifestly easy solution. Mr Stephen MacLean agreed that the issue was clearly a manifest error and noted that that he was comfortable with it being fast-tracked. Mr MacLean also noted that there was a possibility to extend a Fast Track Rule Change Proposal if required. Mr Nenad Ninkov queried whether the IMO can change any settlement outcomes for any circumstance. Ms Laidlaw noted that the IMO has the ability to vary settlement outcomes but that this depends upon the IMO disputing the initial Invoice. Mr Tan queried what the proposed time frame to dispute a settlement outcome would be. Ms Laidlaw responded that it would be the standard year for adjustments. The Chair noted that the compliance team had already determined which generators did not comply in July, August and September. Mr Gaston noted this proposal could correct some of the problems that have occurred in July and August. . Ms Laidlaw noted that it would apply in situations since Balancing Market Start in which someone had not complied with Dispatch Instructions and had received an erroneous Constrained On or Off payment. Mr Ninkov queried whether the Invoice would be changed prior to or following a participant dispute and indicated he would be interested to know what the process would be. The Chair confirmed the IMO will provide information on processes and timelines and will bring the PRC back to the MAC in December. *Action Point: The IMO to develop a Pre Rule Change Proposal to allow the IMO to recover Constrained On/Off Compensation after the initial settlement run where a Facility is found to be non-compliant with a Dispatch Instruction, for presentation at the December 2012 MAC meeting.*	**IMO**
5b	**PRC_2012_19: Constrained On/Off Compensation for Non-Scheduled Generators** Ms Laidlaw presented an overview of the IMO's Pre Rule Change Proposal: Constrained On/Off Compensation for Non-Scheduled Generators (PRC_2012_19). The following points were raised during the ensuing discussion. • Ms Papps queried what the longer term solution to this problem was. Ms Laidlaw responded that the longer term solution would appear to involve the use of interval meter readings to calculate Theoretical Energy Schedules for Non-Scheduled Generators, and allowing Theoretical Energy Schedules to be recalculated in line with other settlement parameters. Ms Laidlaw also noted that the solution proposed in PRC_2012_19 completely resolved the problem caused by SCADA/interval meter reading variations. • The Chair noted that this issue had resulted in a significant cost to a Market Participant. It also resulted in significant payments to parties that appeared perverse. Mr Gaston queried if payments had been cancelled only for particular Intermittent Generators. The Chair confirmed that this was the case and noted that the IMO had only adjusted the relevant Facility's Settlement Tolerance in cases where	

	a perverse market outcome occurred. Mr Gaston considered that the adjustments should be applied to everyone in the interest of fairness. • Mr MacLean queried what the timeframe would be for the long term solution. Ms Frame responded that it was expected to be progressed in early 2013. The MAC agreed for the IMO to progress PRC_2012_19 as a Fast Track Rule Change. *Action Point: The IMO to formally submit the Pre Rule Change Proposal: Constrained On/Off Compensation for Non-Scheduled Generators (PRC_2012_19) and progress the proposal using the Fast Track Rule Change Process.*	**IMO**
5c	**PRC_2012_16: Alignment of Settlement Tolerance Ranges and Tolerance Ranges** Ms Laidlaw presented an overview of the IMO's Pre Rule Change Proposal: Alignment of Settlement Tolerance Ranges and Tolerance Ranges (PRC_2012_16). The following points were raised during the ensuing discussion. • Mr Gaston queried whether System Management could provide a flag to the IMO to indicate whether a Balancing Facility had been dispatched Out of Merit. Ms Laidlaw responded that she was unsure whether System Management's current systems were sufficiently sophisticated to do this. Ms Laidlaw also noted that System Management may not be certain whether it is dispatching a Facility Out of Merit because the final Relevant Demand Quantity for the Trading Interval is unknown at the time the Dispatch Instruction is issued. • The Chair noted that it was a perverse outcome if a Market Participant could receive significant Constrained On/Off Compensation by manipulating its offer prices without breaching the Market Rules related to dispatch. The Chair also noted that at the time the Settlement Tolerances were set in RC_2011_10 the IMO did not know what the Dispatch Tolerances were because they were set subsequently by System Management. The Chair also noted that now that the IMO is aware that the Settlement and Dispatch Tolerances materially differ the IMO recommends that they should be aligned. • Mr Gaston queried whether Settlement Tolerances would be set equal to the Dispatch Tolerance or vice versa. Ms Laidlaw responded that the Settlement Tolerances will be set equal to the Dispatch Tolerances if this rule change is approved. • Mr Tan queried which Facilities would fall under clause 6.17.9(b). Ms Laidlaw responded that Non-Scheduled Generators fall under the clause. • Mr MacLean suggested a drafting improvement to clause 2.13.6L. The Chair responded that the IMO was happy to consider redrafting the clause. • Mr Kelloway queried how often the tolerance values change. Ms	

	Laidlaw responded that it depends on how System Management determines the tolerances. Ms Laidlaw noted that System Management determines the tolerance values by a formula which is fixed for the year until it is reviewed. Ms Laidlaw noted that any changes in a Facility's relevant Standing Data values would change its Dispatch Tolerance. Ms Laidlaw also noted that it would be desirable if the inputs to the formula were clarified so that it could be published on the Market Web Site. Ms Laidlaw noted that the simpler System Management's processes were, the simpler the interface could be. The Chair queried whether the formula changes often. Mr Kelloway responded that it does not. • The MAC agreed for the IMO to progress PRC_2012_16 as a Fast Track Rule Change Proposal, subject to consideration of an amendment to clause 2.13.6L. *Action Point: The IMO to formally submit the Pre Rule Change Proposal: Alignment of Settlement Tolerance Ranges and Tolerance Ranges (PRC_2012_16) and progress the proposal using the Fast Track Rule Change Process, subject to considering the drafting amendment suggested by Synergy.*	**IMO**
5d	**PRC_2012_21: 5-Yearly Review of the Planning Criterion** Mr Greg Ruthven presented an overview of the IMO's Pre Rule Change Proposal: 5-Yearly Review of the Planning Criterion (PRC_2012_21) Mr Ruthven noted that the only recommendation from the 5-Yearly Review of the Planning Criterion was to lower the reserve margin from 8.2% down to 7.6%. Mr Ruthven noted that the review involved a cost benefit analysis that matched the cost of an incremental MW of capacity against the benefits of a reduction in unserved energy. Mr Ruthven noted that the review was essentially an update of the 2007 review with the recommendation reflecting the changing SWIS demand profile with peak demand continuing to grow at a faster rate than annual energy consumption. Mr Ruthven noted that the review had included public consultation prior to publishing the final report and also noted that there will be another two opportunities for stakeholders to make submissions through the Rule Change Process. The following points were raised during the ensuing discussion: • Mr MacLean queried how the 10% Probability of Exceedence (POE) is calculated. Mr Ruthven noted that Synergy had raised this issue in its submission on the 5-yearly review of SWIS Forecasting Processes and added that ACIL Tasman's report would be updated with further information on the POE methodology. • Mr Trumble queried whether peak demand excludes Demand Side Management (DSM). The Chair responded that DSM is included in peak demand if it has been dispatched • Mr MacLean suggested that the reference to the required percentage of reserve margin of the one in ten year peak could be taken out of the Market Rules and put into the Market Procedure because it is expected to change over time and is the sort of detail that should be in a Market Procedure. Ms Papps noted the heads of power in the Market Rules may need to be changed to facilitate this. The Chair noted that the IMO will consider whether it would be	

	appropriate to move the reference into the Market Procedure. • The MAC agreed for the IMO to progress PRC_2012_21. *Action Point: The IMO to submit PRC_2012_21: 5-Yearly Review of the Planning Criterion into the formal Rule Change process*	**IMO**
5f	**PRC_2012_22: Commitment and Decommitment Notification Requirements** Mr Brendan Clarke presented an overview of System Management's Pre Rule Change Proposal: Commitment and Decommitment Notification Requirements (PRC_2012_22). The following points were raised during the ensuing discussion: • Mr Ninkov queried whether it is equitable to treat transmission and distribution generators differently. Mr Clarke responded that the two are already treated differently in the Technical Rules. • Mr Ninkov queried what the maximum sized generator was which can connect to the distribution network. Mr Clarke responded that the generators which are currently connected are around 10 MW although there is one large alumina refinery connected to the distribution network which is much bigger. • Ms Laidlaw queried whether the permission to synchronise without prior notification given by System Management could ever be reversed. Mr Clarke agreed that it could. • Mr Peter Huxtable queried whether there is a penalty if a generator's control system fails and does the opposite of the expectation. Mr Clarke responded that there was no penalty under the Market Rules but that there may be under the Access Code. • Mr Ninkov queried what the motivation was for this proposal. Mr Clarke responded that it was to remove a superfluous requirement. Mr Ninkov responded that the requirement was superfluous to System Management. Mr Clarke responded that it was superfluous to Market Participants and System Management. Mr Andrew Stevens noted that any instances where System Management removes unnecessary compliance obligations should be encouraged and supported. • Ms Laidlaw noted that some small amendments to the drafting were required, for example to provide System Management with the ability to withdraw its permission for a Facility to commit or decommit without prior notification. *Action Point: The IMO to work with System Management to update the drafting contained in the Pre Rule Change Proposal: Commitment and Decommitment Notification Requirements (PRC_2012_22), prior to formal submission of the proposal into the Standard Rule Change Process.*	**IMO/SM**
5e	**PRC_2010_27: Ancillary Services Payment Equations** Ms Frame noted that this agenda item related to action item 2011/33. The Chair noted PRC_2010_27 came out of the Renewable Energy Generation Working Group (REGWG), however since a Load Following	

	Ancillary Services (LFAS) Market was going to be implemented the determination of how to allocate LFAS costs was delayed until this had occurred. The Chair noted that since the implementation of the new LFAS Market the IMO had resumed work on PRC_2010_27, and that Ms Laidlaw would present the initial findings of the IMO's recent analysis. Ms Laidlaw provided an update on the IMO's work relating to the Pre Rule Change Proposal: Ancillary Services Payment Equations (PRC_2010_27). A copy of the presentation is available on the Market Web Site http://www.imowa.com.au/MAC_55. Ms Laidlaw explained that ROAM Consulting (ROAM) in its report for the REGWG on Work Package 3 proposed an approach whereby Loads would pay for the Load Following that they caused, while Intermittent Generators would pay for the additional incremental Load Following that they caused. Ms Laidlaw explained that the methodology used by ROAM to estimate the Load Following Requirement assumed different levels of predictability for Loads and Intermittent Generators. Ms Laidlaw noted that the methodology for calculating the Load Following Requirement for Intermittent Generators was very conservative and effectively assumed that it was not possible to predict the underlying trend of Intermittent Generator output. The Chair noted that now there are significantly better forecasting tools and data available for predicting Intermittent Generators than at the time when the ROAM report was produced. Ms Laidlaw noted that following its analysis ROAM developed a Pre Rule Change Proposal which was first presented to the MAC at its November 2010 meeting. A number of issues were raised about the proposal, including whether uninstructed Scheduled Generator fluctuations should be considered in the allocation of Load Following costs. Ms Laidlaw noted that there was also some discussion about the difference between the capacity cost reallocation for Load Following and the lack of any capacity cost reallocation for Spinning Reserve. Ms Laidlaw noted that the proposal was placed on hold due to the Market Evolution Program and that since then significant changes had taken place in the WEM such as the introduction of the new Balancing and LFAS Markets. Ms Laidlaw noted that non-wind Intermittent Generators such as landfill gas and solar Facilities may have significantly different levels of volatility to wind farms, which may need to be considered when determining their contribution to the Load Following Requirement. Ms Laidlaw noted that the IMO's analysis indicated that the Minimum Frequency Keeping Capacity (MFKC) calculation in clause 3.10.1(a) does not accurately reflect the current Load Following Requirement as estimated by System Management. Ms Laidlaw also noted that System Management had confirmed that it is no longer using the MFKC calculation is it considers it to be unreliable. Mr Kelloway noted that it is difficult to predict in advance what the impact of a new Intermittent Generator is going to be on the overall Load Following Requirement. Ms Laidlaw noted that even applying the MFKC calculations to historical data does not produce results which align with the reported Load Following Requirement and noted that System Management currently estimates the Load Following Requirement on a trial and error basis.	

	The Chair queried Mr Kelloway regarding how System Management estimates the Load Following Requirement. Mr Kelloway responded that a lot of experience goes into the estimates. Mr Clarke noted that clause 3.10.1(a) was originally introduced in 2004 prior to the introduction of a number of new wind farms. Ms Laidlaw noted that the Load Following Requirement needs to conform with the Technical Rules which require the system frequency to stay within a 49.8 to 50.2 Hz band for 99% of the time, whereas System Management was applying a test where the frequency must stay within this band 99.9% of the time, which presents a cost versus reliability trade-off. Ms Laidlaw noted that using data from September 2011 to August 2012 the MFKC was calculated as 35MW using the methodology implied in the Market Rules, where the consumption or output of Loads and Intermittent Generators in each minute n was compared with the average consumption or output over the period from minute n-15 to n+15. However, using the methodology applied in ROAM's Work Package 3 report, where the output of each Intermittent Generator in minute n was compared with the average output over the period from minute n-45 to n-15, a MFKC of 102 MW was determined. Ms Laidlaw noted that the level of Load Following Requirement would appear to be caused by a mixture of Load volatility, Intermittent Generation, Scheduled Generator deviations from their Dispatch Instructions and ramping adjustments. The Chair noted that generation would appear to be a bigger cause of Load Following than was previously thought. The Chair observed there is a trade-off between the frequency of Dispatch Instructions for generators and the size of the Load Following Requirement required to support Scheduled Generators' deviations. Ms Laidlaw noted that there is currently no clear boundary between what is being provided by Load Following versus Balancing. Trying to determine how much Load Following is being provided was difficult because details of the underlying Verve Energy Balancing Portfolio (VEBP) "Dispatch Instructions" are not available for analysis. The Chair queried whether this lack of visibility was only the case for the VEBP. Ms Laidlaw confirmed that Dispatch Instructions were available for all other Facilities. Mr Kelloway noted that the Market Rules for the Load Following standard do not cover ramping adjustments for Balancing Generators. Ms Laidlaw agreed that this was an existing problem with the Market Rules. Ms Laidlaw suggested that Scheduled Generator deviations and ramping adjustments may contribute materially to the Load Following Requirement. Ms Laidlaw also noted that when determining the boundary between Balancing and Load Following a trade-off is required between the dispatch cycle length and the quantity of Load Following required. The Chair noted that there was a balance between receiving multiple Dispatch Instructions at five or ten minute intervals, or receiving one Dispatch Instruction per Trading Interval and paying more for Load Following. Ms Laidlaw noted that a position needed to be reached on the 99.9%	

	versus 99% standard. Mr Trumble noted that the Technical Rules already specified 99% as the requirement and queried why a decision needed to be made. Mr Stevens noted that there was a significant cost to applying the higher 99.9% limit. Mr Kelloway responded that while it may seem reasonable to have the lower limit because it would save money, there would be other implications if the limit were to be reduced, such as an increase in the use of Spinning Reserve and failures of frequency sensitive generation. Mr Chin Koay noted that there might also be implications for equipment designed to a certain specification. The Chair noted that it would be reasonable to expect parties with frequency sensitive equipment to consider the 99% requirement in the Technical Rules before connecting their equipment to the network. Ms Laidlaw noted that System Management as part of the development of its SMARTS system had been reviewing the standard dispatch cycle interval. Mr Kelloway noted that having shorter dispatch intervals confines variations and uncertainties to a shorter time frame thereby reducing them. Mr Kelloway also noted that it would make it easier to manage Load Following Requirements associated with ramping changes. The Chair noted that System Management is developing its dispatch tool to provide a Dispatch Instruction cycle length of anywhere from 5 to 30 minutes and queried with whom System Management is consulting on the cycle length. Mr Kelloway responded that consultation had taken place with the IMO. The Chair responded that the IMO does not have a fixed view on cycle length but that an issue exists for Market Participants on the frequency of Dispatch Instructions because currently they are not receiving them electronically. Mr Gaston queried whether System Management could not already dispatch Facilities within one minute. Mr Kelloway confirmed that this was the case for some generators. Mr Gaston then queried whether an analysis of historical data could be undertaken to assess the cost impact of issuing more frequent Dispatch Instructions (possibly Out of Merit) to address unexpected variations in Load and Intermittent Generator output, rather than relying on LFAS. Ms Laidlaw responded that this may not be possible due to the lack of VEBP Dispatch Instructions. Mr Kelloway noted that dispatching the next generator may be Out of Merit anyway. Mr Gaston responded that it would be useful to assess the trade-off between paying a generator for Out of Merit quantities versus continuing to pay for 90 MW of Load Following. Mr Stevens considered that it would be possible to analyse the history of a Trading Day to determine whether the Load Following Requirement could have been reduced if System Management had issued additional intra-Trading Interval Dispatch Instructions. Ms Frame noted that part of the issue is the ability to differentiate between Load Following and Balancing. Ms Frame explained that Verve Energy gets a Dispatch Instruction every four seconds. Mr Gaston noted this must be for Load Following and cannot be for Balancing. The Chair queried how many Verve Facilities are on AGC. Mr Kelloway responded that there are eight or nine generators on AGC and of these probably only one or two used for frequency keeping in a particular Trading Interval. Ms Laidlaw noted that it may be possible to undertake the suggested modelling though it could be an expensive, complex exercise. Mr	

	Stevens noted that the more frequently a Dispatch Instruction is received the less Load Following is required and therefore it would be possible to simply assess what the best fit of all Dispatch Instructions would have been, with the remainder being regarded as Load Following. Ms Laidlaw noted that it might be possible to do this as a theoretical exercise and this could be investigated. The Chair noted that it was only worth considering what the optimal frequency of receiving Dispatch Instructions is when generators have the systems and tools necessary to cope with more frequent Dispatch Instructions. Mr Kelloway considered that the time to decide on frequency of Dispatch Instructions should be soon. Ms Laidlaw noted that the IMO and System Management intended to bring a discussion paper on the 99% versus 99.9% issue to the MAC in December and that the IMO would continue investigations into how the Load Following Requirement is estimated and how to allocate LFAS costs. Ms Frame noted that in light of the importance and urgency of these issues the IMO will endeavour to bring the Ancillary Services review forward to commence in the 2012/13 Financial Year, rather than the 2013/14 Financial Year as originally scheduled. The Chair noted that the IMO designed its systems to accommodate changes to the LFAS Requirement every half hour. Mr Gaston queried whether the Load Following Requirement would be reduced to 35 MW. Mr Kelloway responded that this would not be advisable without sufficient supporting analysis. Mr Stevens queried how much Load Following System Management is actually using. Mr Kelloway responded that System Management may use significantly less than 80 MW at some times but probably double 80 MW at other times. Mr Trumble noted that he was unaware that System Management was applying 99.9% in the Market Rules. Mr Kelloway noted that 99.9% is not in the Market Rules; rather 99% is in the Technical Rules. The Chair noted that the Market Rules refer to the Technical Rules. Mr Kelloway noted that the Market Rules have a 99.9% standard of their own. Ms Laidlaw noted that this related to the MFKC calculation which is different to the Load Following Requirement. The Chair noted that the IMO will seek the ERA's view on this issue, as well as information on the origin of the 99% standard in the Technical Rules. Mr MacLean noted that a strong case had been made that this work should be prioritised and queried whether it might be worth System Management experimenting with reducing the Load Following Requirement by a small amount to see whether it had any significant impacts. Mr Kelloway responded that such experimentation could pose a risk to system security and noted that if as a result of reducing LFAS there are variations to frequency then other services like Spinning Reserve will be need to be drawn upon. Ms Laidlaw noted that it would be worth investigating how much of the movement of the Load Following generators is due to Balancing because without knowing this it is not clear what is being monitored and measured. The Chair acknowledged that three weeks prior to the introduction of a significant gate closure change was not an appropriate time for System Management to undertake experimentation, but it may be appropriate later when System Management is comfortable with the new balancing arrangements.	

	Mr Stevens expressed frustration at the lack of information and visibility available from the IMO in regard to the quantity of Load Following being used and the frequency levels being maintained. The Chair noted that it is only the introduction of the new Balancing Market and the data available from the new market structures that was enabling the IMO to better assess this issue. Ms Papps requested Ms Laidlaw to present these issues to Verve Energy staff. *Action Point: The IMO to re-present the update on PRC_2010_27 presented at the November 2012 MAC meeting to Verve Energy.* Ms Frame requested agreement from the MAC that on the basis of the analysis presented by Ms Laidlaw PRC_2010_27 would not be progressed and that the IMO would continue to progress investigation into these issues, and the MAC agreed. *Action Point: The IMO to seek the ERA's interpretation on the 99% standard and information on the origin of the requirement in the Technical Rules for system frequency to stay within a 49.8 to 50.2 hz band 99% of the time.* *Action Point: System Management to consult with stakeholders on the dispatch cycle length to be used from 5 December 2012.* *Action Point: The IMO to work with System Management to provide transparency of VEBP Dispatch Instructions.* *Action Point: System Management/IMO to present a discussion paper on the 99% versus 99.9% issue at the December 2012 MAC meeting.*	**IMO** **IMO** **SM** **IMO/SM** **IMO/SM**
6a.	**MARKET PROCEDURE CHANGE OVERVIEW** Ms Frame informed the MAC that an IMO Procedure Change and Development Working Group meeting has been scheduled for 27 November 2012. Ms Frame noted that the IMO expects to present the Market Procedure for Determining Loss Factors at this meeting. Ms Frame also noted that the IMO may present the revised Market Procedure for Prudential Requirements prior to year end. The MAC noted the overview of recent and upcoming Market Procedure changes.	
7a.	**WORKING GROUP OVERVIEW** The MAC approved the replacement of Michael Cross with John Nguyen as Perth Energy's representative on the IMO Procedure Change and Development Working group. The MAC noted the Working Group overview.	
7b.	**RCMWG UPDATE** Ms Frame reported that the Reserve Capacity Mechanism Working Group (RCMWG) last met on 11 October 2012. At this meeting Mr Mike Thomas presented a proposal in relation to proposed amendments to the Reserve Capacity Price formula and a proposal to implement a dynamic Reserve Capacity refund mechanism. Ms Frame noted that there had been agreement in principle around the concept of adopting a dynamic refund mechanism however agreement	

	had not yet been reached on the proposal to amend the Reserve Capacity Price formula. Ms Frame noted the half day meeting scheduled on 22 November for the RCMWG to complete its deliberations on the outstanding RCMWG matters. Ms Frame informed the MAC that this is intended to be the last RCMWG meeting prior to the IMO reporting back to the IMO Board at its December 2012 meeting. Ms Frame explained that this final meeting will also include a presentation from Dr Richard Tooth on the conditions under which DSM would be dispatched, which was an outstanding action item related to the harmonisation of DSM. Mr Tan queried whether the RCMWG papers been released yet. Ms Frame responded that the papers were due to be released the next day. Mr MacLean queried whether there was still an outstanding action item in regard to the issue about unlimited DSM dispatch events. Ms Frame clarified that this was not the case. Mr MacLean responded that from Synergy's point of view this remained an outstanding issue. Mr Stevens noted that the issue to be addressed was around the criteria by which a DSP is able to be dispatched and Ms Frame confirmed this was correct. The Chair noted that in an emergency situation there is unlimited dispatch since System Management can, under a High-Risk Operating State, dispatch as it sees fit. Mr MacLean noted that what tends to apply in an emergency situation is for other Loads to be shed on the basis of Forced Majeure under their contract, rather than the DSP provision which wouldn't be activated. Mr Stevens noted that DSP's get paid $190,000 per Megawatt and should be dispatched before those Loads which aren't receiving Capacity Credits. Mr MacLean noted that any Load can be required to curtail not only those which are being paid. The Chair expressed concern should System Management choose involuntary Load shedding before dispatching a DSP that had been allocated Capacity Credits. Mr MacLean noted that System Management had made such decisions in the past.	
8	**GENERAL BUSINESS** The MAC noted the proposed MAC Meeting Dates for 2013.	
CLOSED: The Chair declared the meeting closed at 4.10 pm.		