Market Advisory Committee

Agenda

Meeting No.	35
Location:	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date:	Wednesday 9 February 2011
Time:	2.00 – 5.00pm

Item	Subject	Responsible	Time
1.	**WELCOME**	**Chair**	2 min
2.	**MEETING APOLOGIES / ATTENDANCE**	**Chair**	2 min
3.	**MINUTES OF PREVIOUS MEETING**	**Chair**	10 min
4.	**ACTIONS ARISING**	**Chair**	10 min
	a) Worked example of dispatch of peaker versus DSM (presentation)	**IMO**	20 min
5.	**MARKET RULES**		
	a) Market Rule Change Overview	**IMO**	2 min
	b) PRC_2010_28 Capacity Credit Reduction	**IMO**	20 min
	c) PRC_2010_31: De-registration of Rule Participants who no longer meet registration requirements	**IMO**	15 min
	d) PRC_2011_01: Profile Methodology for the Relevant Demand calculation	**EnerNoc**	30 min
6.	**MARKET PROCEDURES**		
	a) Overview	**IMO**	5 min
7.	**WORKING GROUPS**		

Item	Subject	Responsible	Time
	a) Overview and membership updates	**IMO**	2 min
	b) MRCPWG Update	**IMO**	10 min
	c) RDIWG Update	**IMO**	10 min
8.	**STATUTORY REVIEWS UNDER THE ELECTRICTY CORPORATIONS ACT 2005**	**OoE**	15 min
9.	**GENERAL BUSINESS** a) Operational workload and the Market Evolution Program		
10.	**NEXT MEETING: 9 March 2011 (2.00 – 5.00pm)**		

Independent Market Operator

Market Advisory Committee

Minutes

Meeting No.	34
Location	IMO Board Room Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date	Wednesday 15 December 2010
Time	Commencing at 2.00 pm

Attendees	**Class**	**Comment**
Allan Dawson	Chair	
Troy Forward	Compulsory – IMO	
Stephen MacLean	Compulsory – Customer	
Ken Brown	Compulsory – System Management	
Andrew Everett	Compulsory – Generator	
Peter Mattner	Compulsory – Network Operator	
Steve Gould	Discretionary – Customer	
Corey Dykstra	Discretionary – Customer	
Geoff Down	Discretionary – Contestable Customer Representative	Proxy
Andrew Sutherland	Discretionary – Generator	
Shane Cremin	Discretionary – Generator	
Chris Brown	Observer – ERA	
Nerea Ugarte	Minister's appointee	
Paul Biggs	Small Use Customer Representative	
Apologies	**Class**	**Comment**
Peter Huxtable	Discretionary – Contestable Customer Representative	
Also in attendance	**From**	**Comment**
Fiona Edmonds	IMO	Minutes
Jenny Laidlaw	IMO	Minutes
Phil Kelloway	System Management	Presenter
Jacinda Papps	IMO	Observer
Shannon Turner	IMO	Observer
Courtney Roberts	IMO	Observer
Greg Ruthven	IMO	Observer (3.45pm-4.55pm)
Pablo Campillos	DMT Energy	Observer

Item	Subject	Action
1.	**WELCOME** The Chair opened the meeting at 2.00pm and welcomed members to the 34th meeting of the Market Advisory Committee (MAC). The Chair noted that it was the last MAC meeting of the year and thanked members for their contribution over the last 12 months. Additionally, the Chair noted that the IMO was currently undertaking its annual review, with requests for nominations closing at 5pm, 22 December 2010.	
2.	**MEETING APOLOGIES / ATTENDANCE** An apology was received from Mr Peter Huxtable. The Chair noted that Mr Paul Biggs had been appointed by the Minister as the representative for Small Use Customers, replacing Mr Michael Kerr. The following other attendees were noted: • Geoff Down (proxy for Peter Huxtable) • Jacinda Papps (Observer) • Pablo Campillos (Observer) • Phil Kelloway (Presenter) • Shannon Turner (Observer) • Courtney Roberts(Observer) • Greg Ruthven (Observer)	
3.	**MINUTES OF PREVIOUS MEETING** The minutes of MAC Meeting No. 33, held on 10 November 2010, were circulated prior to the meeting. The following points were raised: ***Page 10: Section 6d: RDIWG Update*** Mr Corey Dykstra suggested the following amendment: • "~~Mr Dykstra noted that there is a lot of focus on generation and in particular encouraging greater efficiency. Mr Dykstra stated that a review of the RCM would impact directly on consumption.~~" ***Page 11: Section 7b: Partial Commissioning for Intermittent Generators [PRC_2010_22]*** Mr Dykstra noted that it was unclear that the proposed changes would improve consistency in treatment between Scheduled Generators and Intermittent Generators. Mr Dykstra requested clarification of how Scheduled Generators can take a commercial position when they enter the market. Mr Dykstra also questioned whether an Intermittent Facility that has partially built its wind farm and is subsequently required to make capacity refunds, should be required to make the refunds on the amount of the capacity that has been built rather than the total amount of capacity that is required to be provided for the year. Mr Troy Forward agreed to discuss this further with Mr Dykstra and that the IMO would provide clarification of the process out of session. *Action Point: The IMO to provide clarification of the proposed*	**IMO**

	requirements for partial commissioned Intermittent Generators to MAC members out of session. ***Page 13: Section 7c: Calculation of the Capacity Value of Intermittent Generation (Work Package 2) [PRC_2010_25]*** Mr Dykstra suggested the following amendment: • "Mr Forward clarified that the minutes for the ~~RDIWG~~ REGWG reflected the agreement that…" ***Page 14: Section 7c: Calculation of the Capacity Value of Intermittent Generation (Work Package 2) [PRC_2010_25]*** Mr Shane Cremin suggested the following amendment: • "Mr Cremin considered that end users should bear the costs ~~of using an ineffective generation source~~ of generation where inefficient generation is incentivised by Federal Law" ***Page 20: Section 7d: Ancillary Services Payment Equations (Work Package 3) [PRC_2010_27]*** Mr Dykstra suggested the following amendment: • "Of the two methodologies, Mr Dykstra expressed a preference for the Full Load, Marginal Generation methodology, considering that it was not…" ***Page 24 Section 7g: Acceptable Credit Criteria [RC_2010_36]*** The Chair noted that the IMO had received the following suggestion from Mr Peter Huxtable out of session: • "Mr Huxtable responded that he understood that the Western Australian Treasury Corporation was not permitted to provide this type of support and..." 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. 33 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 88/89:** Mr Forward noted that the IMO had requested a copy of the gas contingency service options report. The Chair noted that he had been provided with a copy of this for review. A copy of the report would be distributed to MAC members by the OoE in due course.	

- **Item 126:** Mr Peter Mattner noted that the Office of Energy (OoE) and Western Power had agreed that there are no regulatory/statutory obstacles to Western Power contracting for Network Control Services (NCS). This is supported by the legal views (both OoE's and Western Power's) that this does not constitute a purchase of electricity and therefore is not a potential barrier. Notwithstanding, the OoE may consider clarifying the parts of the Access Code relating to NCS at a later date, as part of the formal Access Code review process to begin next year.

  Mr Mattner noted that Western Power had produced a first draft of an NCS technical specification which was currently being reviewed internally. Western Power would be engaging a Consultant to develop a standard form contract. Mr Mattner stated that Albany is expected to be the initial location for deployment of services.

- **Item 128:** Mr Forward noted that System Management and the IMO had met and agreed that the Market Rules are currently silent in relation to the priority of NCS dispatch over other dispatch and so it is currently at the discretion of System Management. For the purpose of transparency further amendments are required to the Market Rules. These amendments would give priority to the dispatch of the NCS. The IMO noted that it will update the proposed Amending Rules in the Draft Rule Change Report for RC_2010_11 accordingly.

- **Item 130:** Mr Forward noted that the IMO would consider whether information on new large loads should be included in the Statement of Opportunities (SOO) closer to the time when the SOO is prepared.

- **Item 136/137:** Mr Forward noted that the IMO has sought legal advice on use of drawn down security to fund Supplementary Reserve Capacity (SRC) and will be considering the issues further based on the outcome of that advice. Mr Forward noted that the IMO would consider a consolidated SRC fund separately to RC_2010_28.

- **Item 145/146:** Mr Forward noted that the further work on updating the Confidentiality Status Classes was planned for early in the New Year.

- **Item 149:** Mr Forward noted that the IMO was currently updating the REGWG Final Report to reflect the comments received from MAC members, where appropriate.

- **Item 154:** Ms Jenny Laidlaw noted that ROAM had estimated the financial impacts of re-allocating capacity costs for Spinning Reserve from Market Customers to Scheduled Generators. A copy of the estimate was distributed to MAC members and is provided as Appendix 1. Ms Laidlaw noted that re-allocation of Spinning Reserve capacity costs to Scheduled Generators would reduce the capacity costs for Load Following assigned to Loads and Intermittent Generators. This was because the capacity used for Load Following was also used for Spinning Reserve, resulting in a capacity cost saving that would be shared between the two user groups. For example, under the existing Market Rules the Load Following capacity payment for 2009/10 is approximately $6.5 million, but under ROAM's

proposal this would decrease to $5.2 million as a result of these shared cost savings.

In response to questions from both Mr Andrew Sutherland and Mr Dykstra Ms Laidlaw confirmed that these are not new costs but rather a re-allocation of existing capacity costs from Loads to Scheduled Generators. Mr Sutherland considered that the end user should pay for the service, rather than the generator. Mr MacLean noted that changes to the cost allocation methodology introduce regulatory risk.

Mr Cremin noted that this would provide a further incentive for Scheduled Generator Facilities not to exceed 200 MW. Mr Ken Brown noted that it had always been the case that smaller sized plants have been incentivised to enter the market. Mr Cremin replied that larger units may result in lower cost energy. The Chair noted the importance of the market sending the right signals for investment in the right sized plant. Mr Cremin noted that issues such as the majority of electricity being supplied by a particular type of fuel should be considered. Mr MacLean suggested that increasing the largest size unit in the cost allocation mechanism from 200 MW to a higher value could be further considered.

The Chair noted that the changes being discussed do not currently constitute part of the Rule Change Proposal. The Chair noted that the MAC appeared to have polarised views on whether this inclusion should be made. The Chair questioned whether the re-allocation of Spinning Reserve capacity costs to Scheduled Generators should be included in the Rule Change Proposal. Specifically:

- Mr Cremin considered that this would incentivise smaller units entering the market.
- Mr Dykstra considered that the focus should be on the outcomes of the change, which in the short term would increase regulatory risk but have little impact on the reliability of services. Mr Dykstra suggested that capacity payments are the insurance that a Load pays for reliability. Ms Laidlaw noted that the Market Rules have adopted a “causer pays” approach for Load Following capacity costs.

The Chair questioned whether Verve Energy was the only supplier of Spinning Reserve Services to the market. In response, Mr Brown noted that there are currently other suppliers, but that as the Load Following requirement increases over time, the requirement for separate Spinning Reserve is expected to decrease. Mr Brown also noted the importance of not encouraging the entry of a very large unit into the market, as this would increase the Spinning Reserve requirement, particularly if the current standard (70 percent of the largest unit) needed to be reconsidered. Mr Brown noted that the reserve requirement in the National Electricity Market is 100 percent of the largest unit on the system.

The Chair questioned whether the MAC had been presented with enough information to make a decision around whether re-allocation of Spinning Reserve capacity costs should be incorporated into RC_2010_27. Mr Dykstra questioned the wider driver for a change

	(with respect to the Market Objectives), beyond simply ensuring consistency with the treatment of Load Following. The Chair suggested that the MAC reconsider this issue at a later time. Mr Cremin questioned whether the IMO will be reconsidering the cost allocation of Spinning Reserve at any time. The Chair agreed for the IMO to consider this issue along with any wider review of Spinning Reserve cost allocation. Mr Brown noted that previous experience in the WEM had lead to the decision to set a standard for Spinning Reserve of 70 percent of the largest unit on the system. Mr Brown noted that other markets hold around 100 percent of the largest unit back as reserve. Mrs Jacinda Papps noted that the last 5 year review of the Ancillary Services Requirements, which recommended maintaining the 70 percent requirement, was completed in 2008. Mrs Papps noted that a further review would be undertaken in 2013. Mr Kelloway noted that some work had been undertaken by Mr David Newton a few years ago, which suggested that the Spinning Reserve requirement would increase to 100 percent if the size of the largest unit approached around 400 MW. Mr Kelloway offered to make the results of this work available to MAC members. Several MAC members expressed an interest in seeing these results. Mr Forward suggested including further consideration of the potential re-allocation of capacity costs for Spinning Reserve to Scheduled Generators in the 2013 Review of Ancillary Services requirements. The MAC agreed with this suggestion. *Action Point: System Management to distribute the results of Mr David Newton's work on Spinning Reserve requirements to MAC members.* *Action Point: The IMO to include further consideration of the potential re-allocation of capacity costs for Spinning Reserve in the 2013 Review of Ancillary Services requirements.*	**SM** **IMO**
5a	**MARKET RULE CHANGE OVERVIEW** The MAC noted the Market Rule Change Overview. Mr Forward noted that the IMO had recently undertaken an internal review of the Rule Change Issues Log which has resulted in the rationalisation of a number of issues. Mr Forward notified the MAC that they would see a decrease in the number of recorded issues in February 2011. Mr Forward also noted that the IMO had also commenced a series of discussions with individual Market Participants around their operational issues which would be incorporated into the Rule Change Issues Log for prioritisation.	
5b	**LIMITS TO EARLY ENTRY CAPACITY PAYMENTS [PRC_2010_30]** The Chair noted that at the November 2010 MAC meeting, the IMO had agreed to provide its external advice from Marchment Hill Consulting (MHC) on the consistency of PRC_2010_30 with the Market Objectives to the MAC for discussion. The Chair noted that when Alinta had first tabled the proposal he had personally expressed concern as to whether the proposal would meet the test against the Market Objectives and so had	

	recommended that external advice be sought on the change to information Alinta prior to formal submission. Mr Dykstra noted that this had been a novel approach and questioned whether this approach would continue to be adopted in the future. The Chair confirmed that this would be the case if there was again an obvious risk of a draft rule change not meeting the test against the Market Objectives. Mr Cremin noted that the original Rule Change Proposal: Changing the Window of Entry into the Reserve Capacity Mechanism (RC_2009_11) had had a number of competing impacts associated with it. The MAC had agreed that the benefits to reliability outweighed the costs associated with additional capacity payments. Mr Cremin noted the importance of quantifying costs and benefits when making a decision like this. Mr Dykstra noted that the costs of capacity credits to DSM programmes would be approximately $2.5 million and $8.5 million for the 2011/12 and 2012/13 Capacity Years respectively. Mr Sutherland noted that during the last MAC meeting there was a discussion about the proposal being a regulatory risk to DSM providers, as they had already contracted their capacity from 1 August. Mr Sutherland noted that a Scheduled Generator would not contract for a 1 August start date as it would not be that certain that it would be able to supply the capacity at that time. Mr Sutherland noted that while he sympathised with the position of DSM providers he considered that the current allowance for early entry of DSM Programmes was an unintended outcome from RC_2009_11. Mr Pablo Campillos noted that the business models for DSM Programmes and Scheduled Generators differ, stating that Alinta's proposal would change the operating rules after DSM Programmes had already made their investments for the 2012/13 Capacity Year. As such, Mr Campillos considered that any potential change should apply from the next capacity cycle. Mr MacLean noted that the IMO did not support grandfathering arrangements. Mr Campillos replied that he was not advocating grandfathering but rather delayed implementation, similar to that adopted for the Rule Change Proposal: Demand Side Management – Operational Issues (RC_2008_20). The Chair noted that in the case of RC_2008_20 the preference expressed by the MAC had been for a delayed implementation because there were retail supply contracts already in place, and so it would have been inequitable to implement the amendments prior to the end of the current capacity cycle. Members agreed that this had been the rationale for the delayed implementation, although Mr MacLean noted that as there are costs associated with RC_2010_30 the impacts on the market are inherently different. Mr Cremin questioned whether a facility that has been registered to commence operation in the 2012/13 Capacity Year and which has not yet commenced in the market could tender for Supplementary Reserve Capacity (SRC). Mr Forward considered that this was the case, noting that the only exclusion is that a DSM provider that has not filled its programme cannot tender for SRC. The Chair noted that previously an upgraded	

	Facility that had not been allocated Capacity Credits for the current Capacity Year but which had received Capacity Credits for a future Capacity Year had participated in the last SRC tender process. Mr Dykstra stated that Alinta had not originally supported RC_2009_11, noting that the market currently recognises that a commissioning generator is unreliable for the first few months of commissioning, and so to try to improve the reliability of this product the proposal had created an incentive for earlier entry into the market. Mr Dykstra however noted that there were additional costs associated with encouraging a more reliable product to be available for the Hot Season. Mr Dykstra added that the analysis undertaken for RC_2009_11 had not quantified this. Mr Dykstra however noted that new generators enter the market relatively infrequently and so it is inherently difficult to quantify the impacts. Mr Dykstra noted the issues associated with treating capacity from all types of sources equally, despite DSM being clearly not available as frequently as Scheduled Generation. Mr Dykstra considered that this needs to be considered as part of the wider review of the RCM. Mr Dykstra stated that RC_2009_11 was specifically related to the commissioning activities of traditional Scheduled Generators and was never intended to cover DSM. The Chair agreed that there had been no discussion of DSM with regard to RC_2009_11. Mr Dykstra noted that earlier entry of a Scheduled Generator makes it available for dispatch by System Management, however the clause 7.7.4(c) of the Market Rules currently prescribes that DSM would be dispatched last. Mr Forward queried whether further consideration of this issue should be incorporated into the wider review of the Reserve Capacity Mechanism. Mr MacLean noted that this is a stand alone issue with a significant cost to the market. Mr MacLean considered that it is not discrimination if there is physical or practical reason to treat a technology type differently. Mr MacLean noted that operationally a Scheduled Generator is unique in this regard due to the quality of its product when first commissioned, and therefore should be treated differently to DSM. Dr Steve Gould noted that MHC's report suggested that the proposed change is contrary to Market Objective (c) because it provides for different treatment of different classes of early-commissioned capacity based only on asserted cost differences between those classes. Dr Gould noted that RC_2010_30 related to technical differences and not cost differences. Mr Campillos noted that RC_2009_11 originally referenced the improvements to reliability from earlier market entry, to which DSM clearly contributes. Mr MacLean noted that MHC's report states that socialising the cost of capacity is not a good idea. Mr Maclean questioned whether the MAC was reactive in this regard when considering RC_2009_11. Mr Forward noted that the basic engineering principles still hold when commissioning new plant, noting that Mr Dykstra's argument is that DSM is not exposed to this operational risk. Mr Forward agreed that in some instances DSM Programmes may need to install equipment but personally considered that this requirement is much lower than for Scheduled Generators.	

	The Chair noted that the MAC appeared to be in agreement that DSM should not be provided with access to the earlier window of entry. The Chair noted that the amendments need to be drafted in a manner which would clearly display the benefit to the Market Objectives. Mr Dykstra noted that in his view MHC's report misunderstands the proposal. Mr Dykstra questioned whether the basis for MHC's conclusions are accurate and reflect an understanding of the intent of the proposal. The Chair suggested that Mr Dykstra reflect the opinions of the MAC and the advice received from MHC's in Alinta's proposal, as this would take into account a number of the identified issues and suggestions. *Action Point – Alinta to progress RC_2010_30 through the Rule Change Process, subject to further clarification of the proposal based on the MAC's discussion.*	**Alinta**
5c	**SYSTEM RESTART COSTS [PRC_2010_33]** Mr Andrew Everett noted that the Pre Rule Change Discussion Paper from Verve Energy proposes to remove a current anomaly in the Market Rules which would require Verve Energy to pay to provide System Restart services if the current Cost_LR value is zero. Any costs for System Restart services provided by third party suppliers would be allocated to Market Customers through the Reconciliation Statement. Mr Dykstra questioned how a Cost_LR value of zero could result in Verve Energy paying for the services. Mr Everett confirmed that this would be the case and noted that this had been confirmed by both Verve Energy and the IMO. Mr MacLean questioned whether the ASP_Payment variable needs to be retained in the calculation contained in clause 9.9.1 given the new ASP_ Balance_Payment variable that has been proposed. Mr Everett agreed to review the drafting further to ensure that the calculation correctly reflects the required amendments. *Action Point: Verve Energy to review the drafting proposed by RC_2010_33 to determine whether any further adjustments to the calculation specified in clause 9.9.1 are required.* Discussion ensued around the chain of events which lead to the situation where Cost_LR had been set equal to zero. Mr Chris Brown noted that the ERA will be soon releasing an issues paper and consulting on the revised Cost_LR value with industry. Mr Ken Brown noted that the process for Cost_LR approval is time consuming. Mr Phil Kelloway noted that System Management is currently preparing an issues paper for the MAC regarding this. *Action Point: Verve Energy to progress RC_2010_33 through the Rule Change Process, subject to the incorporation of any further necessary amendments.*	**Verve Energy** **Verve Energy**
5d	**CALCULATION OF CAPACITY VALUE FOR INTERMITTENT**	

GENERATORS [RC_2010_25 & RC_2010_37]

The Chair noted that the IMO had received a Rule Change Proposal from Griffin Energy (RC_2010_37) proposing an alternative approach to calculating the capacity value for Intermittent Generators to that proposed by the IMO in RC_2010_25. The Chair noted that the IMO had sought external advice on how to proceed with the two proposals with the prospect of joining the two rule changes. This was not possible under the Market Rules and the IMO had subsequently aligned the two consultation timelines to allow participants to have an opportunity consider both proposals.

Mr Cremin noted that the process undertaken by the IMO in progressing the two Rule Change Proposals at the same time appears reasonable and well constructed. Mr Cremin noted that progressing the proposals together will allow interested parties to compare the proposals. Mr Cremin noted that the Griffin Energy Rule Change Proposal had the support of a number of members of the REGWG.

Mr Forward noted that System Management had provided some further analysis of the impacts of Intermittent Generation on the WEM and the associated capacity valuation methodology. A copy of the additional analysis is provided as Appendix 2.

The Chair welcomed a discussion from the MAC on both proposals. The following points were raised:

- Mr Andrew Sutherland expressed concern around having two rule changes in the formal process which would have significant impacts on new and existing projects. Mr Sutherland stated that the IMO needs to be conscious of the regulatory risks being created and the signals that are being provided to the market. Mr Sutherland also noted a higher level concern that existing assets will be devalued. Mr Sutherland was uncertain which of the proposed methodologies was the right one to implement.
- Mr Paul Biggs considered that any delay in addressing this issue would lock in the current arrangements as more wind farms continue to enter the market and that this would be an investment concern.
- Mr Sutherland suggested that the IMO consider grandfathering of these Market Rules. Mr MacLean noted that although the IMO was not in favour of grandfathering, the current proposal sends a signal that any investment could be subject to changed market conditions in the future. The Chair noted that the construct of the WEM is currently based around the possibility that the Market Rules would change, noting the IMO signals this in advance where possible. Specifically, this change had been signalled in the past three Statement of Opportunities.
- Mr Dykstra questioned the driver of the change and the solution being proposed. Mr Dykstra reiterated his concerns around the IMO's independent expert's proposed solution being rejected in favour of another methodology. In response, the Chair noted that the IMO had proposed a methodology on the basis that that the independent expert's solution was based on modelling using a limited data set which did not reflect a one in ten year event. The Chair also noted that

	System Management had raised concerns around the security associated with allocations of Capacity Credits to Intermittent Generators at the current levels. Mr Ken Brown noted that system security is paramount, stating that comparatively other electricity markets (with and without capacity markets) make much lower capacity allowances to wind farms. • Mr Cremin noted that the REGWG process had continued to look at the outcome from a reliability perspective. Mr Cremin noted that the fundamentals are that federal legislation is driving investments in renewables and that these will be built in Western Australia. Mr Cremin considered that a lower capacity valuation for this would mean that additional gas turbines would need to be built to cover existing wind farms. Mr Cremin noted that this would result in the same outcome as changing the reliability criteria - that is a bigger capital base would be required to meet the IMO's forecast capacity requirements. Mr Cremin questioned why the path of changing the capacity valuation for Intermittent Generators was being pursued when the same outcome could be achieved using a different process. Mr Cremin stated that the current path would result in disincentives for wind farms. • Mr Brown noted that even if the reliability criteria were changed there would still be a number of wind farms who would claim to be able provide a large amount of the required capacity. Mr Brown stated that it was perverse that Western Australia wanted to make capacity payment of 40 percent to Intermittent Generators when other markets recognise that they are less reliable and so make reduced payments. Mr Cremin noted that he was suggesting that Intermittent Generators should be certified at 40 percent and that additional generation should then be procured to meet the reliability criteria. Mr Cremin suggested that the additional capacity would be naturally restricted to not coming from other Intermittent Generators. Mr Cremin suggested that this would result in the same outcome without distorting the investment signals to Intermittent Generators. • Mr Kelloway noted that Mr Cremin's suggestion would result in the market paying a larger amount to a wind farm than the true value of its capacity. Mr Cremin responded that he was unsure whether the macro implications of what was being done were considered. Mr Kelloway noted that the data available now shows some trends that the capacity contribution of wind farms during peak periods is quite variable. Mr Kelloway noted that taking an averaging approach when determining their contribution hides these peak periods. • Mr Brown agreed with Mr Cremin that there should be separate security and capacity payments but noted that this is inconsistent with the current market design. Mr Brown noted that he is not aware of any other power system that uses averages to value the capacity of Intermittent Generators. Mr Kelloway reiterated that there is a lot of variance in the output of wind farms that even on a given day can range between 5 and 45 percent. Furthermore, the average from one year to the next can vary significantly. • Mr Cremin considered that the decision being made around the valuation of capacity from Intermittent Generation will have significant impacts at a policy level and that this should have been more	

	consciously considered through the REGWG deliberations. • Mr Everett noted that it is not the MAC's role to decide what types of technology should be installed but rather the job of policy makers. The Chair noted that the requirement is for 20 percent of capacity to be from renewable sources by 2020 and noted the previous advice the MAC had received from the Minister on this. Mr Biggs noted that other mechanisms existed to incentivise the development of renewable technologies and stressed the importance of providing transparency on costs. Mr Biggs noted that if the Market Rules provide this transparency then it is a policy decision as to what incentives are required to achieve the targets for renewables. • Mr Pablo Campillos noted that if the policy setting is fundamentally changed then a transition process should be considered. The Chair noted that he would support a transition process. • The Chair noted that grandfathering a range of provisions could result in a different set of Market Rules applying to each Market Participant. This creates distortions in the market and results in Market Participants finding it difficult to determine what their risks are as any costs are allocated differently to each Market Participant. Mr Cremin noted that there may however be cases where grandfathering of clauses is warranted. The Chair suggested that the MAC consider the timing of implementation of any Amending Rules rather than the introduction of grandfathering provisions. The Chair noted that the Reserve Capacity Cycle creates a natural timeframe for the implementation of any Amending Rules. • Mr Brown expressed his surprise with the large allocations of Capacity Credits to be made to Photovoltaic (PV) technologies under both of the proposed methodologies. Mr Brown noted that modelling of the impacts of PV are starting to indicate that if the proposed incentives were put in place, then the system peak would be likely to no longer occur in summer. Mr MacLean noted that neither of the proposed methodologies would impact on household investment in PV. The Chair noted that the 12 peak periods may have a significant impact on this clarifying that if the peak periods move away from the periods when solar is experiencing its peak output then this would be accounted for in the Load for Scheduled Generation calculation. • Mr Dykstra questioned whether it would make sense to defer a decision around the capacity valuation methodology to the broader review of the RCM process. Mr Dykstra noted that the level of capacity from Intermittent Generators currently in the market is much lower than for DSM which also has restricted availability. The Chair noted that it is important to resolve the current issues around the capacity valuation methodology from an investment perspective. Mr Forward noted that there was benefit in pursing an amended capacity valuation methodology as it is arguable that the current mechanism was a manifest error at market start. • Mr Dykstra questioned how the IMO would consider two competing proposals designed to achieve the same outcome as both may be considered consistent with the Market Objectives. The Chair responded that the IMO was likely to compare how well the two proposals served the Market Objectives.	

6a	**MARKET PROCEDURE CHANGE OVERVIEW** The MAC noted the overview of recent and upcoming procedure changes.	
6b	**SRC MARKET PROCEDURE** The Chair noted the new Market Procedure for Supplementary Reserve Capacity (SRC) had been recently developed by the IMO in conjunction with the IMO Procedure Change and Development Working Group (Working Group). The Chair noted that as it is a proposed new Market Procedure it had been included on the agenda for discussion by the MAC. Mrs Papps noted that the Working Group had reviewed the proposal three times. Mr MacLean questioned whether the proposed Market Procedure reflected the Working Group's comments. It was noted that the version reflecting the Working Group's comments was available on the public webpage. Mrs Papps noted that submissions on the proposed new Market Procedure are due on 20 December 2010.	
7a	**WORKING GROUP OVERVIEW** The MAC noted the Working Group overview.	
7b	**MRCPWG UPDATE** Mr Mattner noted that Western Power would like to review the report being prepared by Sinclair Knight Merz on an appropriate calculation methodology for Western Power to follow when estimating deep connection costs. Mr Ruthven noted that the report would be provided to all MRCPWG members prior to the next Working Group meeting. The MAC noted the overview of the MRCPWG.	
7c	**RDIWG UPDATE** Mr Forward thanked MAC members for their participation in the operational workshop held on 14 December 2010.	
8	**LOAD FOLLOWING ANCILLARY SERVICES** The Chair asked MAC members if they required a formal presentation on System Management's proposal for the partial competitive procurement of Load Following Ancillary Services (LFAS), as the proposal had been presented at the 23 November 2010 RDIWG meeting. Mr Kelloway noted that the concept paper circulated with the papers for today's meeting provided an overview of how the component processes for prequalification, Scheduling Day, Trading Day and settlement would operate. There was general agreement that a formal presentation was not necessary. The Chair noted that in the previous day's RDIWG meeting it was agreed that the proposals for competitive Balancing and Ancillary Services should not be developed in isolation. The Chair expressed an interest in understanding how the two proposals could work together. Mr Kelloway advised that System Management was still considering some of the details of the proposal, such as the minimum block length requirement. Minimum block length, the requirement for symmetric bids and the restriction of the contestable LFAS quantity to 20 MW appeared to be the main issues of concern to participants. Mr MacLean suggested that	

	the proposal could be seen as a trial, which could be extended if successful. Mr Kelloway, while considering that the proposal represented more than a trial, suggested that some form of desktop testing may be appropriate before a full implementation. Mr Sutherland considered that further work on the LFAS proposal should be undertaken as part of the Market Evolution Program (MEP), with Mr Douglas Birnie responsible for project management. This would help to ensure that the LFAS and Balancing proposals were compatible. Mr Kelloway noted that the Economic Regulation Authority (ERA) and Market Participants have in the past expressed a strong interest in the implementation of contestable LFAS, which has acted as a strong incentive for System Management to take action. Mr Kelloway considered that this work could continue as either part of the MEP or as a separate work stream, stating that his only concern with the former path was with the potential for delays. Mr Dykstra considered that the proposal failed to address any of the issues raised by participants in their responses to System Management's tender for LFAS last year. Mr Kelloway disagreed, considering that the MCAP issue had been addressed by the proposal. Mr Dykstra did not believe that the proposal in its current form would achieve its objectives, stating that Alinta would definitely not be able to participate in the provision of LFAS under the specified conditions. Mr Dykstra considered that there little point in pursuing the current proposal unless other generators had a significantly different position. The Chair considered it would be difficult to justify the effort and cost involved in implementing the LFAS proposal in isolation. Mr Kelloway replied that he was not suggesting this approach. The Chair suggested that Mr Jim Truesdale and System Management collaborate to determine the mechanics of how competitive Balancing and LFAS could work together and report back to the RDIWG with their findings. Mr Cremin supported the Chair's suggestion, stating that he would prefer to push forward with the LFAS work given the impact on generators of the currently proposed changes to the cost allocation mechanisms for LFAS. Mr Sutherland noted that he agreed with Mr Dykstra's comments and wanted to see a proposal that addressed the issues that had been raised by participants. Mr Kelloway noted that System Management was happy to work with Mr Truesdale but would like to make sure that the ERA supported this approach. Mr Chris Brown noted that the ERA's previous comments on competitive LFAS pre-dated the work of the MEP. The ERA Secretariat was still keen to see work on competitive procurement of LFAS proceeding, but supported the approach suggested by the Chair. MAC members agreed that the proposals for competitive Balancing and LFAS provision should be developed together as a package. *Action Point: Mr Jim Truesdale and System Management to work together to develop a combined proposal for competitive Balancing and Load Following Ancillary Services provision, and report back to the February*	**IMO /SM**

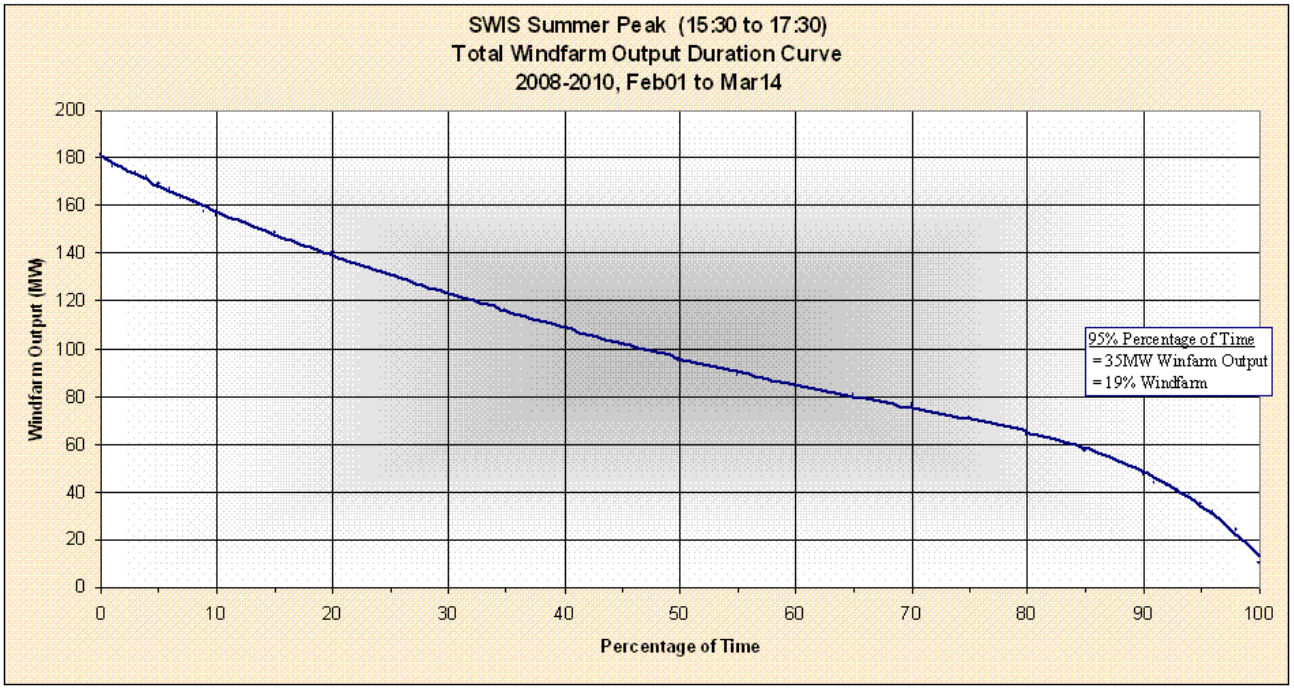
	2011 meeting of the RDIWG. The Chair advised the RDIWG that the Minister for Energy had approved the budget for the MEP the previous day.	
9	**RESERVE CAPACITY MECHANISM** The Chair noted that the IMO had prepared a presentation outlining the details of its recent report to the IMO Board on the Reserve Capacity Mechanism (RCM). The presentation slides are included in the papers for this meeting. The Chair advised that as a result of the presentation the IMO Board has commissioned a review of the RCM, to identify potential changes to reduce the oversupply of capacity and the cost to the market of this oversupply. A draft scope of works was presented to the IMO Board at its 16 December 2010 meeting. The IMO expects the appointment of a consultant in the first half of 2011. The Chair offered to provide MAC members with a copy of the scope of works for information. Mr Dykstra questioned the suggestion in the presentation that the oversupply of capacity resulted in increased market costs. There was some discussion about the extent to which the adjustment for excess capacity in the calculation of the Reserve Capacity Price prevented any cost increase. Mr MacLean suggested that the continuing excess of new capacity despite the reduced price indicated that the price was still inefficient. Mr Forward considered that regardless of the Reserve Capacity Price the market would still eventually have to pay for any excess capacity built in the SWIS. In response to a request from Mr Campillos the Chair agreed to circulate the scope of works for its review of the Reserve Capacity Mechanism to interested stakeholders. *Action Point: The IMO to circulate the scope of works for its review of the Reserve Capacity Mechanism to interested stakeholders.*	**IMO**
10	**2010 YEAR IN REVIEW** The MAC noted the IMO's 2010 Year in Review overview.	
11	**GENERAL BUSINESS** There was no general business. Mr Forward wished MAC members a Merry Christmas on behalf of the IMO.	
12	**NEXT MEETING** Meeting No. 35 will be held on Wednesday 9 February 2011.	
CLOSED: The Chair declared the meeting closed at 4.55pm.		

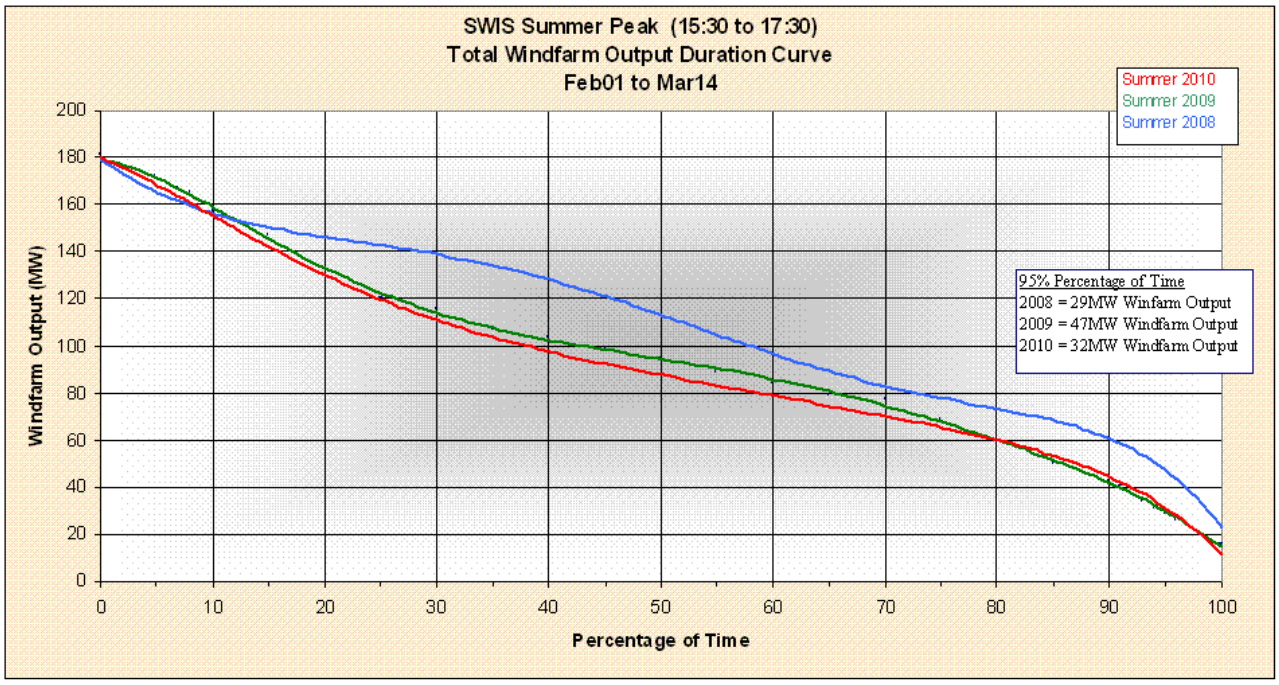
Agenda item 3 Appendices:

- Appendix 1 – Estimates of Generator Trip Reserve Capacity Costs
- Appendix 2 – SWIS Graphs

Table 2.1 - Estimates of Generator Trip Reserve Capacity Costs			
		2009-10	**2012-13 (Scenario 1 Forecast)[1]**
FKR(m)	Frequency Keeping Requirement	60 MW	133 MW
Max(GTR(m))	Maximum Generator Trip Reserve Requirement in the year (Peak Period)	240 MW	240 MW
	Reserve Capacity Price[2] ($/MW/year)	$108,459	$186,001
Existing Rules[3]	Frequency Keeping Capacity Payment	$6.5 m	$24.7 m
	Generator Trip Reserve Capacity Payment	$0	$0
Proposed Rule Change	Frequency Keeping Capacity Payment	$5.2 m	$15.9 m
	Generator Trip Reserve Capacity Payment	$20.8 m	$28.7 m

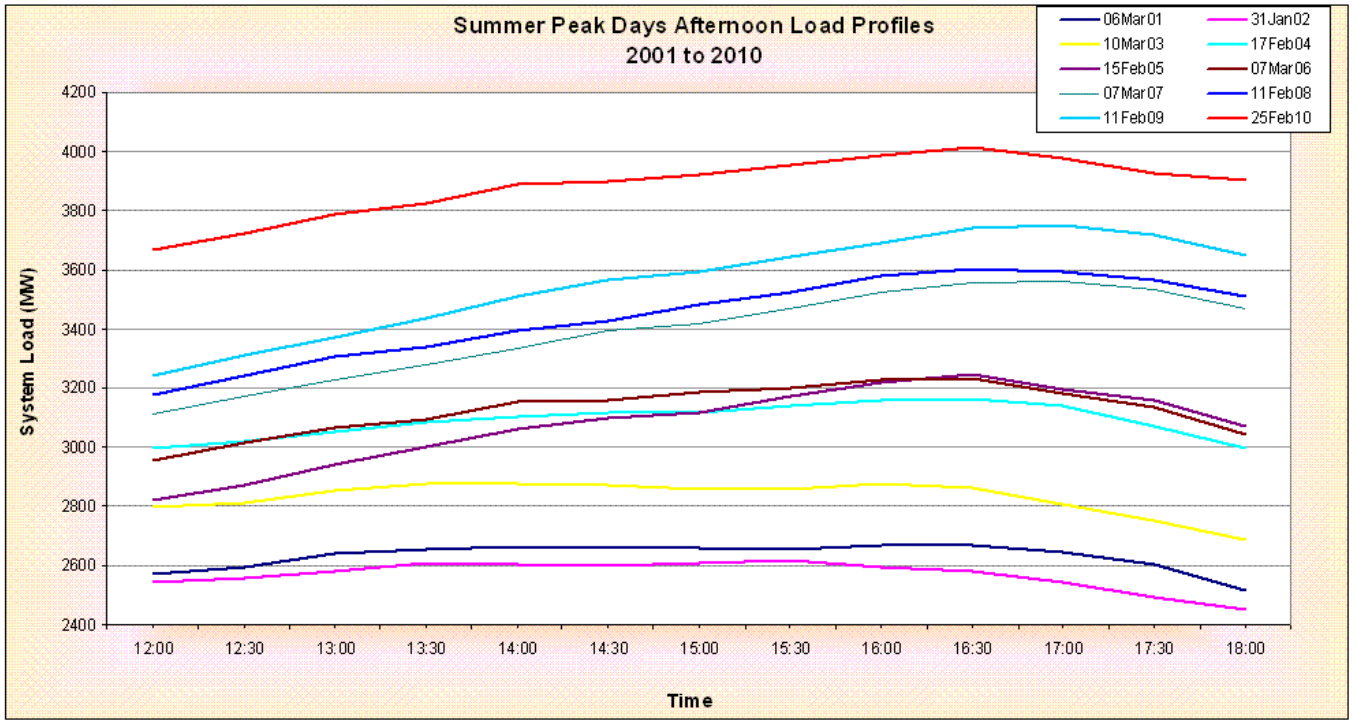
[1] Scenario 1 refers to scenarios used in ROAM Consulting Report to IMO, "Assessment of FCS and Technical Rules", Nov 2010.
[2] As published on IMO website http://www.imowa.com.au/mrcp
[3] Values for 2009-10 as published in the Ancillary services Report 2010, prepared under clause 3.11.11 of the Market Rules by System Management, 21 May 2010.


SWIS Summer Peak (15:30 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14
Windfarm Output (MW)
Percentage of Time
95% Percentage of Time
= 35MW Winfarm Output
= 19% Windfarm

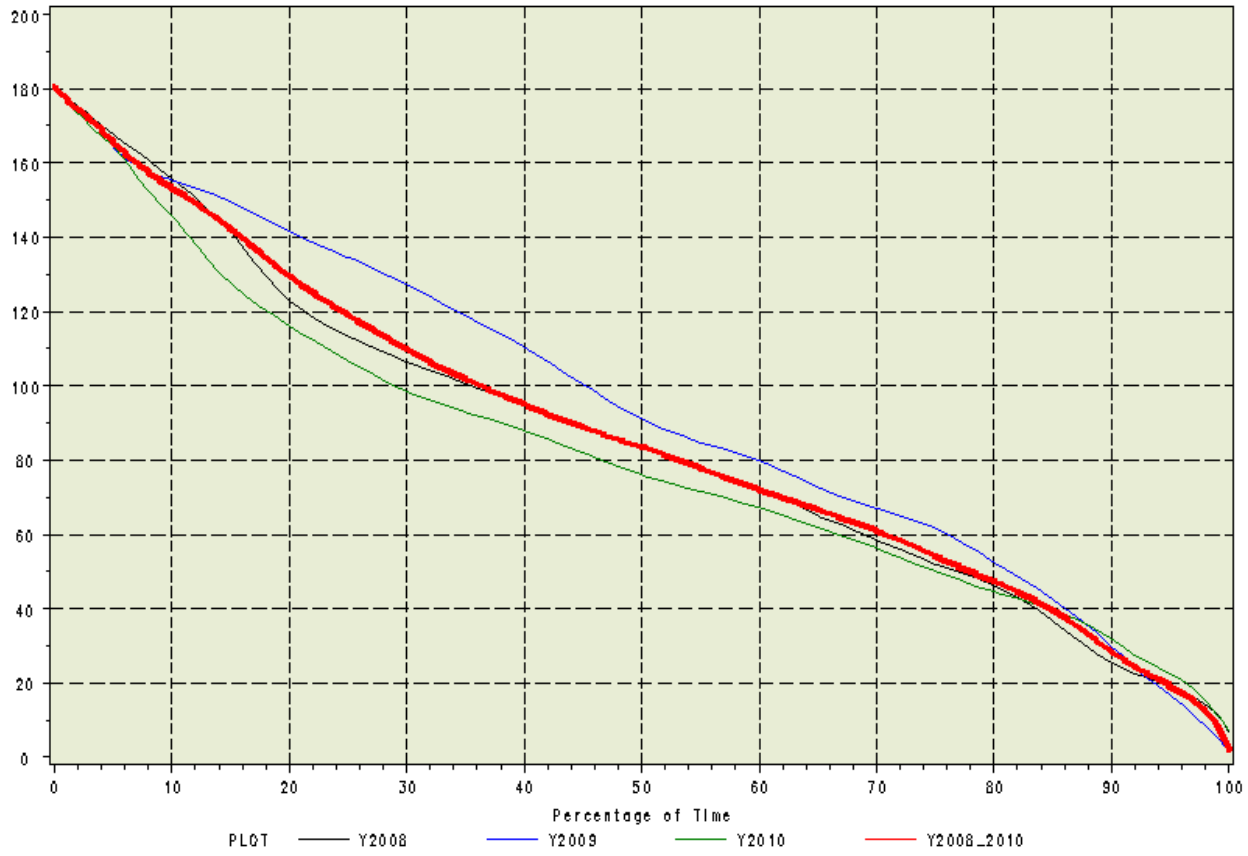

SWIS Summer Peak (15:30 to 17:30)
Total Windfarm Output Duration Curve
Feb01 to Mar14
Summer 2010
Summer 2009
Summer 2008
Windfarm Output (MW)
Percentage of Time
95% Percentage of Time
2008 = 29MW Winfarm Output
2009 = 47MW Windfarm Output
2010 = 32MW Windfarm Output

SWIS Summer (Feb01-Mar14) Windfarm Generation
Percentage Of Time Duration Values

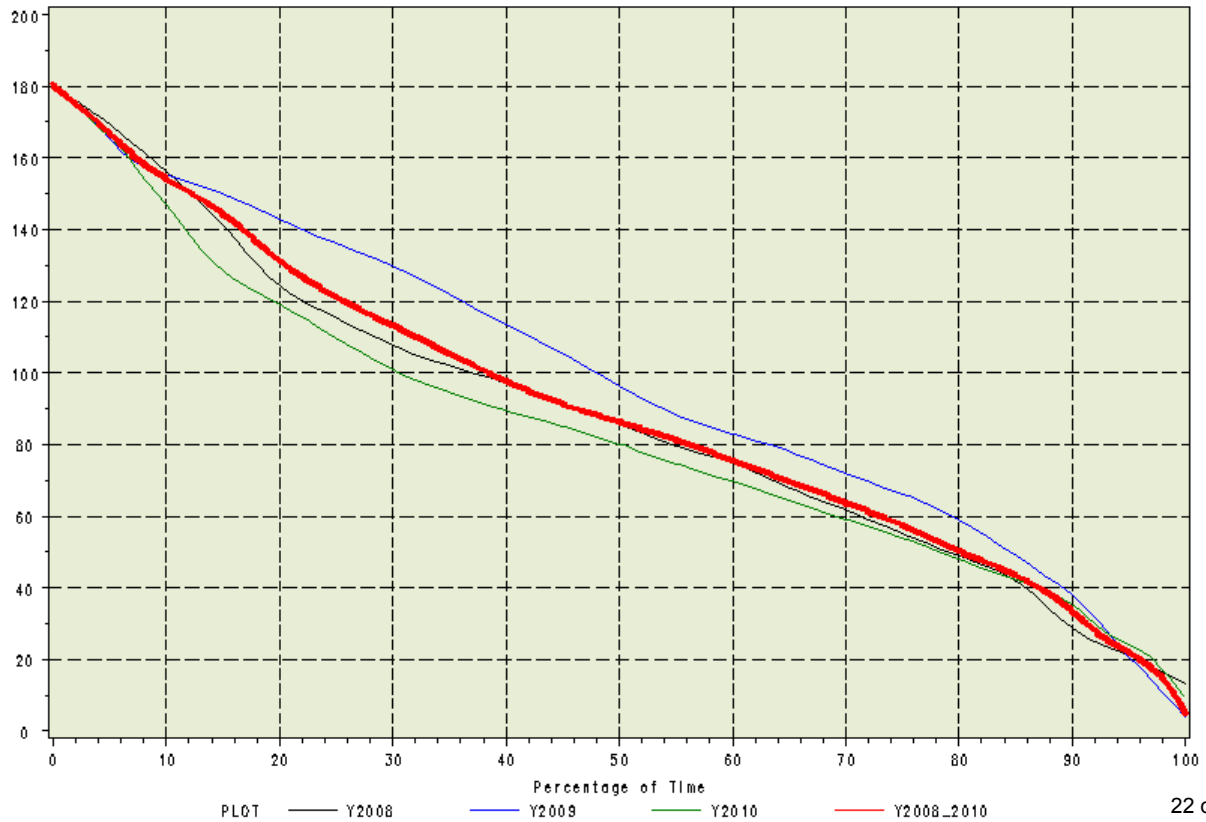
Peak Intervals	*Min*	*5%*	*10%*	*15%*	*20%*	*25%*	*30%*	*35%*	*40%*	*50%*
13:00 to 17:30										
2008	6	19	25	37	47	52	59	65	73	84
2009	1	17	30	43	52	62	67	72	81	91
2010	7	24	32	40	44	50	56	62	67	76
2008-2010	1	20	29	40	47	54	61	67	72	84
13:30 to 17:30										
2008	13	21	29	43	49	55	62	68	75	86
2009	4	21	38	49	59	66	72	78	83	96
2010	10	24	36	42	48	54	59	65	70	80
2008-2010	4	22	34	44	50	58	64	70	76	87
14:00 to 17:30										
2008	14	22	32	45	51	59	65	73	78	88
2009	4	28	45	55	63	70	77	82	86	101
2010	10	25	37	44	51	56	63	69	71	82
2008-2010	4	25	39	47	55	62	68	73	78	89
14:30 to 17:30										
2008	15	24	40	48	55	64	70	76	79	90
2009	4	38	49	61	67	73	80	84	88	107
2010	10	26	40	47	54	61	65	70	74	85
2008-2010	4	28	42	50	59	65	71	76	81	91
15:00 to 17:30										
2008	15	26	42	49	60	67	75	78	84	93
2009	17	43	56	63	70	77	82	86	91	111
2010	10	32	41	51	57	63	69	72	76	86
2008-2010	10	32	45	54	62	69	74	78	84	94
15:30 to 17:30										
2008	16	29	43	50	59	69	77	79	85	95
2009	17	47	61	67	73	80	83	88	97	113
2010	10	32	44	54	61	65	70	74	78	87
2008-2010	10	35	47	57	64	71	77	81	85	96



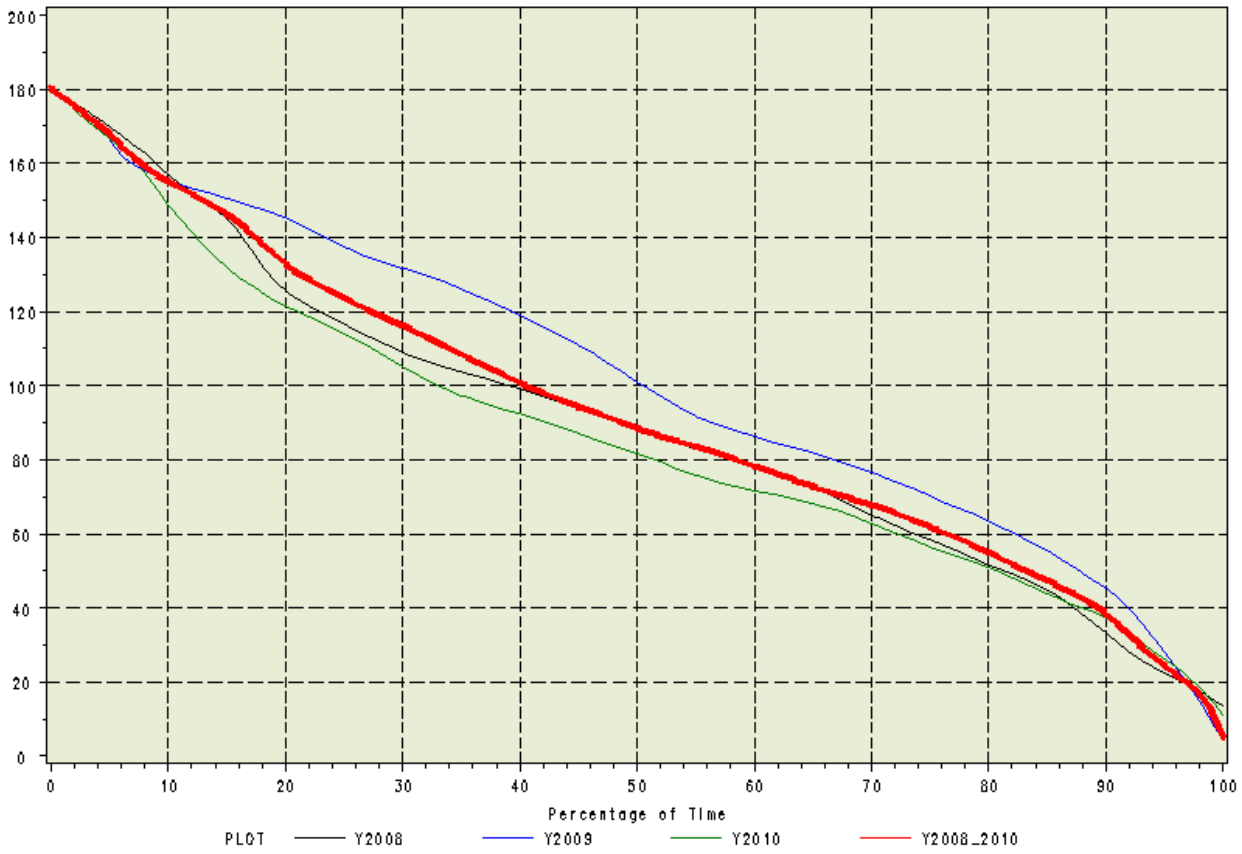
SWIS Summer Peak (13:00 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



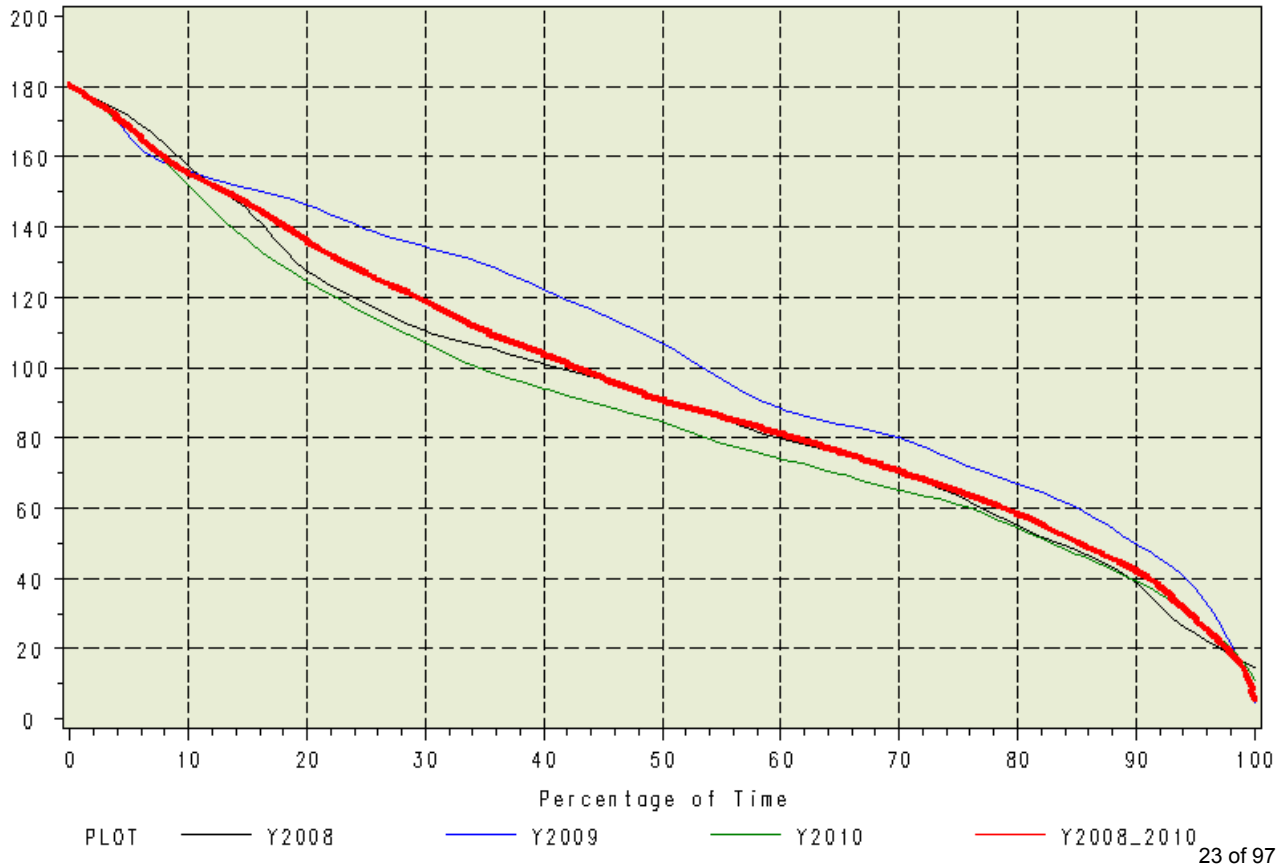
SWIS Summer Peak (13:30 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



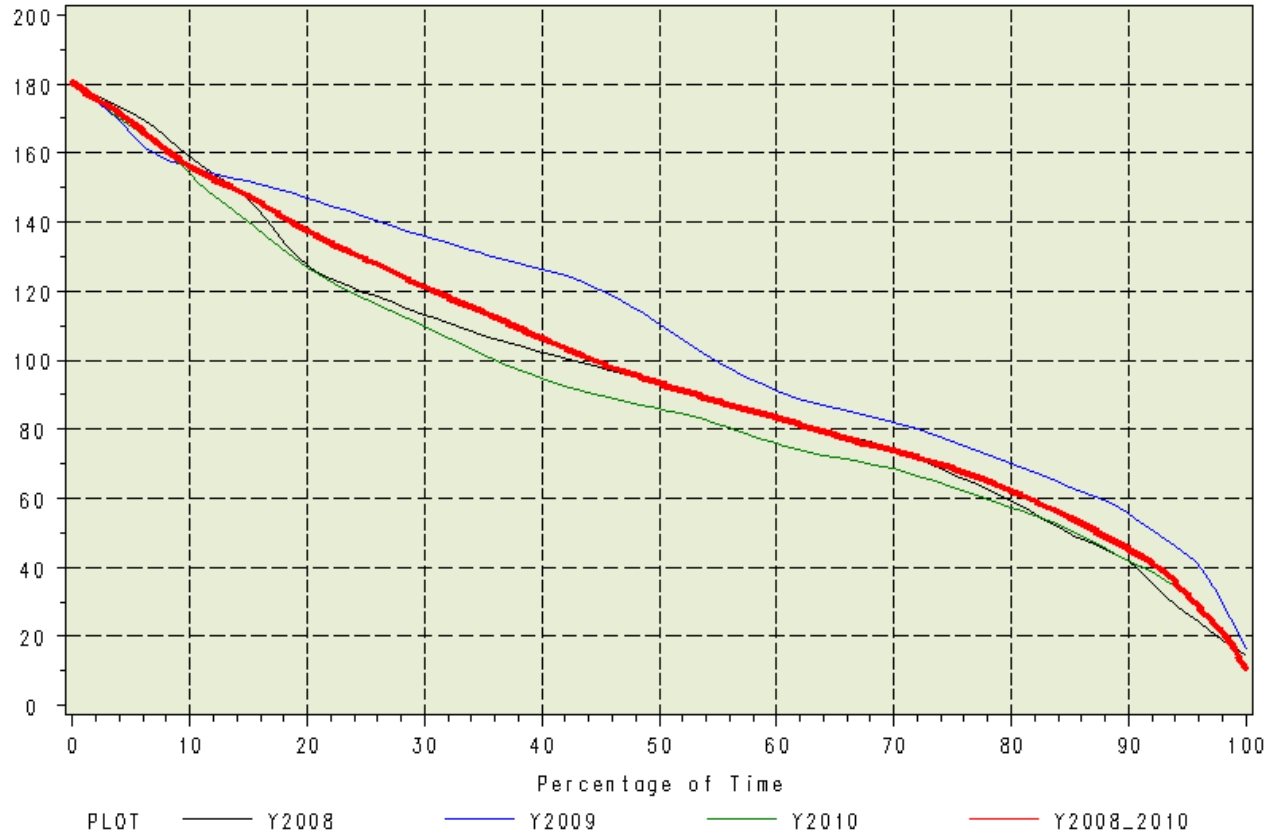
SWIS Summer Peak (14:00 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



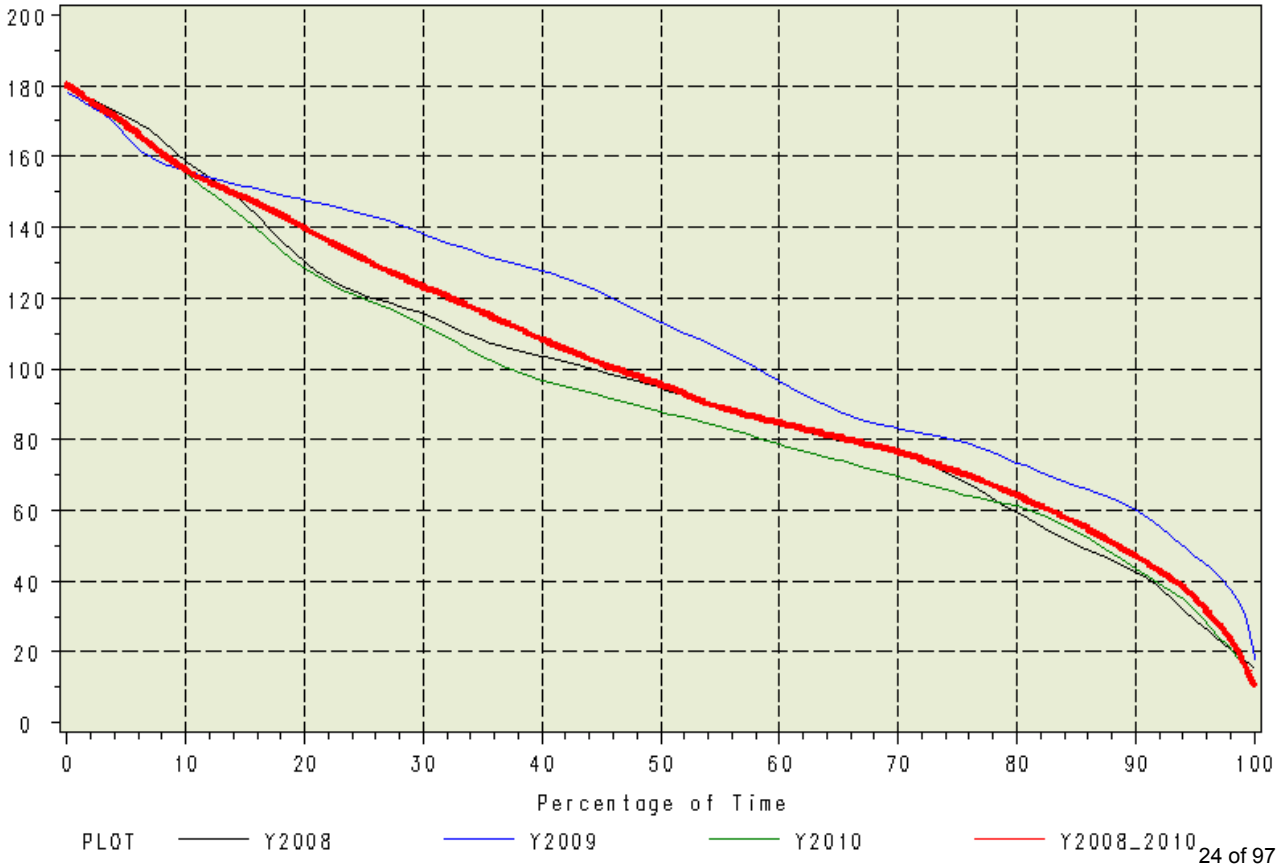
SWIS Summer Peak (14:30 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



SWIS Summer Peak (15:00 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



SWIS Summer Peak (15:30 to 17:30)
Total Windfarm Output Duration Curve
2008-2010, Feb01 to Mar14



Agenda item 4: 2010/11 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.

#	Year	Action	Responsibility	Meeting arising	Status/Progress
88	2010	The Office of Energy to provide the IMO with a copy of its report on gas contingency service options for distribution to MAC members.	OoE	August	The Office of Energy (OoE) provided the IMO with this late 2010 for comment. The IMO had concerns on this report and has provided the OoE with these. This report will be circulated once the OoE addresses the IMO's comments and provides an updated report.
89	2010	The IMO to distribute the report provided by the Office of Energy on	IMO	August	See above.

#	Year	Action	Responsibility	Meeting arising	Status/Progress
		gas contingency service options (action point 88) to MAC members.			
119	2010	The IMO, in March 2011, to review with System Management whether there is an issue with the registration and dispatch of a large number of small Demand Side Programmes, and report back to the MAC.	IMO	September	
121	2010	The IMO to present to the MAC a worked example comparing the payments associated with the dispatch of a peaker against those associated with the dispatch of a Demand Side Programme.	IMO	September	Completed. The IMO will present on this during the MAC meeting.
126	2010	The OoE and Western Power to provide bi-monthly updates to the MAC on status of any regulatory changes relating to NCS procurement.	OoE and WP	October	Completed. No regulatory changes needed (as discussed at the 8 December 2010 MAC meeting).
130	2010	The IMO to consider whether further information on new large loads should be included in the Statement of Opportunities (SOO).	IMO	October	The IMO will consider whether information on new large loads should be included in the SOO closer to the time when the SOO is prepared.
136	2010	The IMO to consider incorporating: • an ability to draw down of Reserve Capacity Security prior to the end of the Capacity Year and diverting this to a SRC fund; and • potential adjustments to the capacity price as a result of reducing a Market Participants Capacity Credits to zero, and update the Pre Rule Change Discussion Paper: Capacity Credit Reduction (PRC_2010_28) accordingly.	IMO	October	Completed, a paper is on today's agenda, see agenda item 5b.
137	2010	The IMO to present an updated version of the Pre Rule Change Discussion Paper: Capacity Credit Reduction (PRC_2010_28) to the MAC for further discussion at the December 2010 MAC meeting.	IMO	October	Completed, a paper is on today's agenda, see agenda item 5b.

#	Year	Action	Responsibility	Meeting arising	Status/Progress
149	2010	The IMO to update the REGWG Final Report to: • reflect comments received from MAC members; • remove references to Pre Rule Change Discussion Papers being developed by the IMO; • include an explanation of any acronyms used in the report; and • note that the report had been prepared by the IMO.	IMO	November	Completed. The REGWG Final Report was published on the IMO's website in January 2011. Refer to: http://www.imowa.com.au/REGWG
154	2010	The IMO to provide the MAC with an estimate of the financial impact on Market Participants of amending the Pre Rule Change Discussion Paper: Ancillary Services Payment Equations (PRC_2010_27) to include a Capacity Cost for Spinning Reserve and therefore allocate the capacity payment to Scheduled Generators providing the service.	IMO	November	Completed. Information provided at the 8 December 2010 MAC meeting.
164	2010	The IMO to extend the first submission period for the Rule Change Proposal: Acceptable Credit Criteria (RC_2010_36) as necessary to allow the IMO to complete its review of the issues raised by Market Participants around the Acceptable Credit Criteria requirements and present its findings in an addendum to the Rule Change Notice for further consideration by Rule Participants when preparing their submissions.	IMO	November	Completed. The IMO did not extend the first submission period for RC_2010_36 as the advice received from its external consultant was consistent with the approach proposed by Synergy, albeit with a number of minor process related refinements. The IMO is currently seeking the views of interested parties on the further refinements presented in the Draft Rule Change Report by 18 February 2011.
165	2010	The IMO to provide clarification of the proposed requirements for partial commissioned Intermittent Generators to MAC members out	IMO	December	Completed. The IMO and Alinta discussed informally whether the

#	Year	Action	Responsibility	Meeting arising	Status/Progress
		of session.			proposed changes to the treatment of Intermittent Generators would be consistent with the ability of a Scheduled Generator to take a commercial position in the market and agreed that this would be the case. It was noted that this change may distribute the risk from the Market Participant to the market associated with the unavailability of the full amount of capacity, as is currently the case with Scheduled Generators.
166	2010	The IMO to amend the minutes of Meeting No. 33 to reflect the points raised by the MAC and publish on the website as final.	IMO	December	Completed.
167	2010	System Management to distribute the results of Mr David Newton's work on Spinning Reserve requirements to MAC members	System Management	December	The IMO has requested this from System Management and will circulate once received.
168	2010	The IMO to include further consideration of the potential re-allocation of capacity costs for Spinning Reserve in the 2013 Review of Ancillary Services requirements.	IMO	December	This has been included in the IMO's internal procedure for this review.
169	2010	Alinta to progress RC_2010_30 through the Rule Change Process, subject to further clarification of the proposal based on the MAC's discussion.	Alinta	December	
170	2010	Verve Energy to review the drafting proposed by RC_2010_33 to determine whether any further adjustments to the calculation specified in clause 9.9.1 are required.	Verve	December	Completed. Verve Energy confirmed that the drafting did not need further amendment.

#	Year	Action	Responsibility	Meeting arising	Status/Progress
171	2010	Verve Energy to progress RC_2010_33 through the Rule Change Process, subject to the incorporation of any further necessary amendments.	Verve	December	Completed. The first submission period closes 4 February 2011.
172	2010	Mr Jim Truesdale and System Management to work together to develop a combined proposal for competitive Balancing and Load Following Ancillary Services provision, and report back to the February 2011 meeting of the RDIWG.	System Management and Mr Truesdale	December	Completed. Paper on 1 February 2011 RDIWG meeting agenda.
173	2010	The IMO to circulate the scope of works for its review of the Reserve Capacity Mechanism to interested stakeholders.	IMO	December	Completed. Emailed out on 13 January 2011.

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)	2 February 2011
Fast track with Consultation Period open	0
Standard Rule Changes with 1st Submission Period Open	3
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)	5
Standard Rule Changes with 2nd Submission Period Open	4
Standard Rule Changes with 2nd Submission Period Closed (final report being prepared)	2
Rule Changes - Awaiting Minister's Approval and/or Commencement	2
Total Rule Changes Currently in Progress	16

Potential changes logged by the IMO- Not yet formally submitted	November	December	January
High Priority (to be formally submitted in the next 3/6 months)	0	0	0
Medium Priority (may be submitted in the next 6/12 months)	26	21 (+2/-7)	20 (-1)
Low Priority (may be submitted in the next 12/18 months)	26	16 (-10)	17 (+1)
Potential Rule Changes (H, M and L)	52	37	37
Minor and typographical (submitted in three batches per year)	25	30	30
Total Potential Rule Changes	77	67	67

The changes in the rule change and issues log from November to December were largely as a result of an internal review. This review:

- Combined like issues i.e. instead of four separate LT PASA and SOO issues this is now on the log as just one issue, similarly instead of two Special Price Arrangement issues on the log this is now on the log as just one issue;
- Parked issues that are no longer seen as areas of concern i.e. removing all the remaining transitional rules (the IMO has already removed appendix 8);
- Reclassified issues from medium to low and vice versa;
- Moved a number of minor issues to the minor and typographical log (to be progressed in three batches in 2011); and
- Identified those issues that had been or will be addressed via other means, for example:
    - system changes (Capacity Credit allocation process and timelines; and standing conversions and window delays);
    - recently reviewed in the Renewable Energy Generation Working Group work (i.e. Spinning Reserve cost allocation);
    - being reviewed in the Market Evolution Program (i.e. Consolidated fund for Supplementary Reserve Capacity); and
    - being reviewed in the Reserve Capacity Mechanism Review (i.e. Dispatch Instruction payments for Demand Side Management).

The changes in the rule change and issues log from December to January have arisen from:

Priority	Issue	Status
High	N/a	N/a
Medium	Out: • Deregistration: A Market Participant which does not meet the criteria for which it was initially registered for cannot be deregistered by the IMO without applying to the Electricity Review Board. This is a costly and time consuming exercise and as such requires an alternative solution. The IMO would like to amend the rules to allow it to deregister participants who have never traded in the market and never intend to.	• Included in the February 2011 MAC agenda.
Low	In: • Currently the Market Rules state that only Facilities which are yet to commence operation have to file progress reports. This excludes upgrades of Facilities. The IMO	• On the Rule Change and Issues Log.

Priority	Issue	Status
	considers that Facilities which are certified as an upgrade should provide progress reports to inform the IMO of their progress as per all new Facilities.	

APPENDIX 1: FORMALLY SUBMITTED RULE CHANGES

Standard Rule Change with First Submission Period Open

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_25	29/11/2010	Calculation of capacity value for Intermittent Generators – Methodology 1 (IMO)	IMO	Submission period ends	14/03/2011
RC_2010_33	17/12/2010	Cost_LR	Verve Energy	Submission period ends	04/03/2011
RC_2010_37	30/11/2010	Calculation of capacity value for Intermittent Generators – Methodology 2 (Griffin Energy)	Griffin Energy	Submission period ends	14/03/2011

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	28/03/2011
RC_2010_12	17/11/2010	Required Level and Reserve Capacity Security	IMO	Publish Draft Rule Change Report	18/02/2011
RC_2010_14	06/12/2010	Certification of Reserve Capacity	IMO	Publish Draft Rule Change Report	23/02/2011
RC_2010_22	18/11/2010	Partial Commissioning of Intermittent Generators	IMO	Publish Draft Rule Change Report	18/02/2011

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_29	02/02/2010	Curtailable Loads and Demand Side Programmes	IMO	Publish Draft Rule Change Report	01/03/2011

Standard Rule Change with Second Submission Period Open

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_11	15/10/2010	Removal of Network Control Services Expression of Interest and Tender Process from the Market Rules	IMO	Submission period ends	10/02/2011
RC_2010_19	25/10/2010	Settlement Cycle Timeline	IMO	Submission period ends	22/02/2011
RC_2010_21	15/10/2010	Providing Price Related Standing Data to System Management	IMO	Submission period ends	10/02/2011
RC_2010_36	29/10/2010	Acceptable Credit Criteria	Synergy	Submission period ends	18/02/2011

Standard Rule Change with Second Submission Period Closed

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_20	08/10/2010	Market Fees	IMO	Publish Final Rule Change Report	03/03/2011
RC_2010_24	03/08/2010	Adjustment of Relevant Level for Intermittent Generation Capacity	Alinta	Publish Final Rule Change Report	01/04/2011

Rule Changes Awaiting Commencement/Ministerial Approval

ID	Date submitted	Title	Submitter	Next Step	Date
RC_2010_06	27/04/2010	Application of Spinning Reserve to Aggregated Facilities	Griffin Energy	Commencement	01/04/2011
RC_2010_23	03/08/2010	Consequential Outage – Relief from capacity refund and unauthorised deviation penalties	Alinta	Commencement	01/05/2011

Agenda Item 5b: Capacity Credit Reduction (PRC_2010_28)

1. BACKGROUND

At the October 2010 MAC meeting, the IMO presented the Pre Rule Change Discussion Paper: Capacity Credit Reduction (PRC_2010_28). The paper proposed for the IMO to be able to reduce the number of Capacity Credits to zero for a new Facility which is expected to be unable to deliver its entire capacity to the Wholesale Electricity Market (WEM) for the entire Capacity Year.

During the meeting the MAC generally supported the proposal but requested the IMO to consider incorporating:

- An ability to draw down on Reserve Capacity Security prior to the end of the Capacity Year and diverting this to a Supplementary Reserve Capacity (SRC) fund; and
- Potential adjustments to the capacity price as a result of reducing a Facility's Capacity Credits to zero.

A copy of the Pre Rule Change Discussion Paper is attached.

2. OUTCOME OF ACTION POINTS

2.1 Early draw down on Reserve Capacity Security

2.1.1 Background

Clause 4.13.11A of the Market Rules specifies that if a Market Participant fails to operate a Facility in accordance with clause 4.13.11 during the Reserve Capacity Year in which the Reserve Capacity Obligations commence, the Market Participant must pay to the IMO, as compensation to the market, an amount equal to the Facility's Reserve Capacity Security. Under the changes proposed by PRC_2010_28, the IMO would have already identified that the Facility would not be available for the entire Capacity Year prior to the start that Capacity Year and so would therefore be unable to meet the requirements of the 90 percent test (clause 4.13.11) in order to receive back its Reserve Capacity Security. The IMO's determination prior to the start of the relevant Capacity Year would provide an opportunity for the IMO to draw down on the Reserve Capacity Security earlier than under the current arrangements for forfeiting security (the end of the relevant Capacity Year). Drawing down of the Facility's security at the same time as reducing the Facility's Capacity Credits to zero would provide the market with earlier access to the security monies.

An overview of the process for forfeiting Reserve Capacity Security in the event that the IMO has identified that a Facility is unable to meet its Reserve Capacity Obligations during the Reserve Capacity Year in which the Reserve Capacity Obligations commence, under the current arrangements (Figure 1) and the alternative arrangement (Figure 2) is presented below.

Figure 1: Current arrangements for forfeiting security

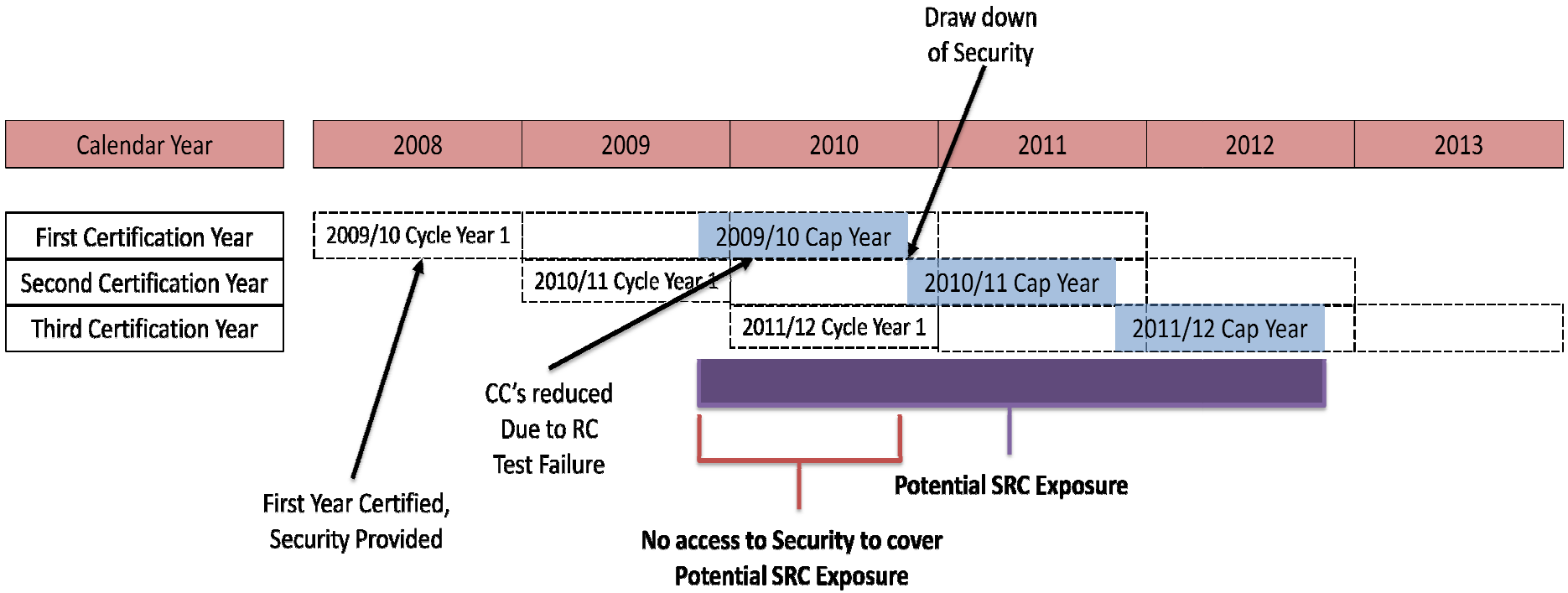
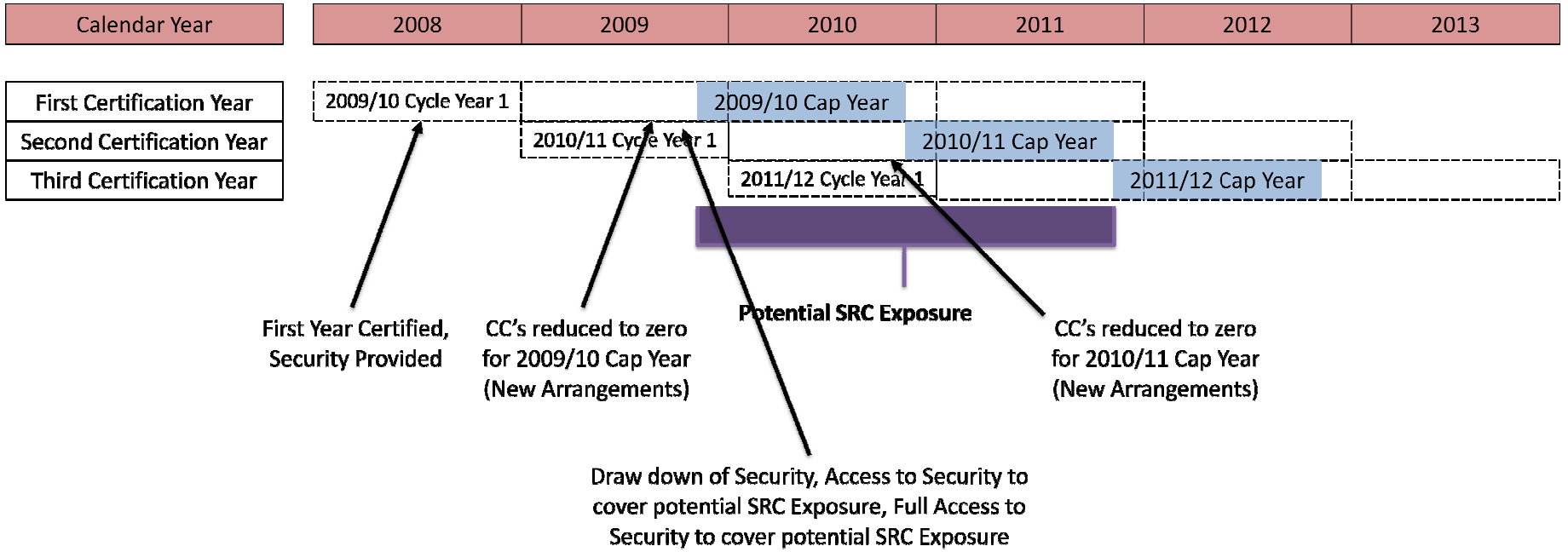


Figure 2: Alternative arrangements for forfeiting security



The example presented above assumes that the Facility is not also available for subsequent Capacity Years. Under both the current and alternative arrangements if the Facility is available during the 2010/11 Capacity Year and the following Capacity Years then the SRC risk will be removed for these Capacity Years as the Facility would be operating in accordance with the basis for which it was provided Capacity Credits. Note that where the IMO considers in a subsequent year that a Facility will be able to make its capacity available for the whole Capacity Year, the Market Participant will be required to provide a further Reserve Capacity Security (as the existing security would have been drawn down previously by the IMO).

The failure of a Facility to meet its Reserve Capacity Obligations, as illustrated above, creates a potential risk of SRC being called during subsequent Capacity Years until such time as the unavailability of the Facility can be taken into account by the IMO during its certification processes. The IMO notes that the end of the period that there is a risk of SRC being incurred will be either:

- the third Reserve Capacity Cycle following the cycle in which the Facility's Reserve Capacity Security is drawn down (current arrangements); or
- the second Reserve Capacity Cycle following the cycle in which the Facility's Reserve Capacity Security is drawn down following a reduction in its Capacity Credits to zero (alternative arrangements).

2.1.2 The IMO's Assessment

The IMO notes that under the current Market Rules there is a potential discrepancy between the timelines for drawing down on a Facility's security and the allocation of this money via the Shared Reserve Capacity Cost (SRCC) allocation (specified in clause 4.28.4). Clause 4.13.11B(a) requires the IMO to allocate the monies:

- firstly, to offset the cost of the market having to fund SRC for any capacity shortage stemming entirely or in part from the Facility not being available – this will occur once the SRC costs have been incurred and will continue until the security has been exhausted; and
- secondly, to pay a rebate to Market Customers in proportion to their Individual Reserve Capacity Requirements – this will occur following the end of the period during which there is a risk that SRC might be incurred and will be dependent on whether the security has already been exhausted.

Similarly the current SRCC calculation (sub-clause 4.28.4(aA)) requires the monies be held until an SRC event occurs and the security has been exhausted or the end of the SRC risk period. As such the security would be available to balance against any potential costs associated with an SRC event occurring during the remainder of 2009/10 (under the alternative arrangement of earlier draw down) and the 2010/11 and 2011/12 Capacity Years (under the current arrangement), while there still remains a risk that the level of capacity available is not sufficient to meet demand (particularly during the Hot Seasons).

The IMO notes that during the period between when the security for a Facility has been drawn down and when the monies would be paid out via the SRCC calculation, the monies are currently held by the IMO until such time as the risk of an SRC event associated with that Facility has lapsed. The IMO notes that the Market Rules currently do not specify what is to be done with the monies during this time, however in the absence of such provisions regulation 46(2) of the *Electricity Industry (Independent Market Operator) Regulations 2004* provides that the IMO may have an account or accounts at any bank and money received by and expenditure of the IMO is to be paid to or from such an account. To develop a specific SRC

fund would not be dissimilar to this current practice and provide greater clarity over how the funds will be maintained (for example what happens to any interest that may accrue prior to paying out the security via the SRCC equation).

For the purposes of PRC_2010_28 the IMO considers that there is no clear rationale to distinguish between monies that would be distributed to the fund following:

- a reduction in a Facility's Capacity Credits to zero; or
- the Facility's failure to meet the 90 percent test by the end of the relevant Capacity Year.

The IMO considers that it would be outside the scope of PRC_2010_28 to consider a SRC fund to apply for both of the situations noted above. It would be more appropriate that the development of an SRC fund be considered as part of the wider review being undertaken by the Rules Development Implementation Working Group (RDIWG), in which the development of an SRC fund is being considered for Capacity Cost Refunds.. The IMO notes that in considering the development of an SRC fund and the ability to draw down on security earlier when a Facility's Capacity Credits have been reduced to zero, the potential exposure to the market (as identified above) will need to be further considered and taken into account.

2.1.3 Recommendation

The IMO recommends that the ability to draw down on security earlier in the case where a Facility's Capacity Credits have been reduced to zero should be further considered in conjunction with the development of an SRC fund by the RDIWG.

2.2 Adjustments to the Capacity Price

2.2.1 Incidences where the capacity price may be amended

Under the changes proposed in PRC_2010_28 there would be an adjustment to the amount of Capacity Credits for that Capacity Year. Under the current Reserve Capacity Mechanism design there would be no subsequent adjustment to the price for Capacity Credits to reflect the new amount of capacity in the market.

The IMO notes that there are a number of situations under which the Capacity Credits assigned to a Facility may change (both conceptually and in practice) and as such it is appropriate to consider the concept of adjusting the Reserve Capacity Price in response to all of these situations rather than simply if there is a reduction in a Facility's Capacity Credits to zero. This is because the IMO considers that consistency of treatment should be ensured with regard to potential changes to the Reserve Capacity Price, unless there is a clear rationale to treat the circumstances for a change in the number of Capacity Credits differently. As such any adjustment of the Reserve Capacity Price should take into account the following incidences:

- Reduction in Capacity Credits:
    - following a Reserve Capacity test (clause 4.25.4)
    - as a result of an application from a Market Participant to reduce its Capacity Credits (clause 4.25.4A);
    - as a result of the IMO's decision under any proposed Amending Rules resulting from PRC_2010_28 (i.e. for a Facility that the IMO considers will not be available for the entire Capacity Year); or
    - as a result of a Forced Outage (clause 3.21).

- Increase in Capacity Credits[1]:
  - following early entry of a generator (clauses 4.1.26 and 4.11.1); or
  - following entry of a new small generator (clause 4.28B).

The IMO notes that further consideration of any price adjustments following a Forced Outage would be required as these incidences are closely tied to the requirements for Capacity Cost Refunds. As a result the following analysis undertaken by the IMO (section 2.2.2) has excluded the incidence of a price adjustment following the occurrence of a Forced Outage.

2.2.2 Worked Example

The following example outlines the impact on the market of an adjustment to the Reserve Capacity Price following a change in the supply of Capacity Credits.

Consider a decision by the IMO to reduce the Capacity Credits for a 40MW Facility to zero for the 2010/11 Capacity Year. Assume that for the 2010/11 Capacity Year:

- The Reserve Capacity Requirement is 5150MW;
- The amount of procured capacity is 5300MW, including 150MW of excess capacity above the Reserve Capacity Requirement;
- The Maximum Reserve Capacity Price is $173,000;
- No Reserve Capacity Auction was run and so the Monthly Reserve Capacity Price is determined in accordance with clause 4.29.1(b) as follows:

$$Monthly\ Reserve\ Capacity\ Price = \frac{((0.85 \times MRCP) \times Excess\ Capacity\ Adjustment)}{12}$$

where the

$$Excess\ Capacity\ Adjustment = Min(1, \frac{Reserve\ Capacity\ Requirement}{Total\ Capacity\ Credits\ assigned\ by\ IMO})$$

Prior to the reduction in the Facility's Capacity Credits to zero the Monthly Reserve Capacity Price would have been determined as follows:

$$Monthly\ Reserve\ Capacity\ Price = \frac{\left((0.85 \times 173000) \times Min(1, \frac{5150}{5300})\right)}{12}$$

$$Monthly\ Reserve\ Capacity\ Price = \frac{\left((0.85 \times 173000) \times Min(1, 0.97)\right)}{12}$$

$$Monthly\ Reserve\ Capacity\ Price = \$11887$$

$$Reserve\ Capacity\ Price = \$142639$$

If the Monthly Reserve Capacity Price were to adjust to reflect the reduction in the capacity available during the 2010/11 Capacity Year the impact would be as follows:

[1] An increase in the number of Capacity Credits in the market can only occur prior to the start of the Capacity Year.

$$Monthly\ Reserve\ Capacity\ Price = \frac{\left((0.85\times 173000)\times Min\left(1,\frac{5150}{(5300-40)}\right)\right)}{12}$$

$$Monthly\ Reserve\ Capacity\ Price = \frac{\left((0.85\times 173000)\times Min(1,0.98)\right)}{12}$$

$$Monthly\ Reserve\ Capacity\ Price = \$12009$$

$$Reserve\ Capacity\ Price = \$144109$$

The Reserve Capacity Price would increase by $1470 per MW for the 2010/11 Capacity Year to reflect the reduction of 40 MW of available capacity. This equates to a change in price of approximately 1 percent (noting that participants are unable to respond to this change in price- for more information see section 2.2.3).

2.2.3 The IMO's Cost/Benefit Assessment:

The IMO has undertaken cost-benefit analysis of the proposal to adjust the Reserve Capacity Price following a change in the number of Capacity Credits assigned to a Facility. The IMO notes that while it is not hard to identify the costs and benefits associated with the concept, it is difficult to quantify them given that the impacts will differ dependent on the size of the change in the number of Capacity Credits. As such for the purposes of the assessment presented below the IMO has not quantified the costs and benefits but rather assessed them on a largely qualitative basis, relative to the current situation.

	Costs	**Benefits**
↓CC's (↑P)	• Price adjustment but not a price signal – as Market Participants can not respond. • Will change the financial impacts of a Market Generator failing a Reserve Capacity test as a Market Customer holding a contract with the Market Generator will have to source CC's at a higher price (this risk could be accounted for in contract). • Creates short term variability in the Reserve Capacity Price. • The impacts of the price increase resulting from the largest Market Generator failing a Reserve Capacity test would be inequitable as they would receive the benefit of a higher price over the remainder of their fleet (a smaller generator would receive less benefit from this). • Increases cost of refunds for all capacity providers.	• Reflects scarcity through price received for CC's by other Market Generators.
↑CC's (↓P)	• Price adjustment but not a price signal – as Market Participants can not respond. • Changes the price of CC's for other Market Generators. • Market Customers agreed during the public	• Limits cost to the market of excess capacity that is not required. • Reduces cost of refunds for all capacity providers.

	Costs	Benefits
	consultation period for the Rule Change Proposal: Early Certified Reserve Capacity (RC_2009_10) that they would accept the increase cost associated with early capacity payments as the risk of SRC would be reduced by encouraging early entry of capacity[2]. • Creates a short term variability in the Reserve Capacity price.	

Overall the IMO considers that adjusting the price for capacity under the current market design would be unlikely to result in a better allocation of resources as a Market Generator could not make a timely response to the price signals provided by the updated capacity price. Further, the IMO considers that the likely costs associated with developing a mechanism in the WEM to allow to Market Participants to respond to price changes, such as the development of a short term capacity trading market, would significantly outweigh the benefits to the market (as illustrated in section 2.2.2).

2.2.4 Recommendation

Under the current Reserve Capacity mechanism, amending the Reserve Capacity Price to reflect an increase/decrease in available Capacity Credits would provide a price adjustment but Market Participants would be unable to adjust their behaviour in response. Further any likely benefits to the market of being able to respond to any price signals provided by an updated capacity price would be marginal, and most likely outweighed by the cost of developing a mechanism in the market to enable such behaviour. As such the IMO does not propose to incorporate potential adjustments to the capacity price into PRC_2010_28.

3. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** whether the early draw down of Reserve Capacity Security should be further considered by the RDIWG in conjunction with the development of a consolidated SRC fund;
- **Note** that the IMO has not amended PRC_2010_28 following its assessment of the action points arising from the October 2010 MAC meeting; and
- **Agree** for PRC_2010_28 to be formally submitted as Rule Change Proposal.

[2] For further details of RC_2009_10 refer to the following webpage: http://www.imowa.com.au/RC_2009_10

Agenda item 5b

Wholesale Electricity Market
Pre Rule Change Discussion Paper

Change Proposal No: *PRC_2010_28*
Received date: *TBA*

Change requested by

Name:	Troy Forward
Phone:	(08) 9254 4300
Fax:	(08) 9254 4399
Email:	troy.forward@imowa.com.au
Organisation:	Independent Market Operator
Address:	Level 3, Governor Stirling Tower, 197 St George's Terrace
Date submitted:	TBA
Urgency:	High
Change Proposal title:	Capacity Credit Reduction
Market Rule(s) affected:	Clauses 2.17.1, 4.12.6, 4.25.12, 4.27.10, 4.27.10A and new clauses 4.20.8, 4.20.9, 4.20.10, 4.20.11, 4.20.12, 4.20.13, 4.20.14

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: General Manager Development
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

Over the past twelve months, the Wholesale Electricity Market (WEM) has experienced, for the first time, settlement in default as a result of failure of one Market Participant to pay invoices. The reason this event has occurred stems from within the Reserve Capacity Mechanism with the respective Market Participant being awarded Certified Reserve Capacity and Capacity Credits some years ago for the development, construction and commissioning of a new Facility. The Market Participant in question did not build its proposed Facility and consequently failed to provide Reserve Capacity to the WEM.

In this instance, the issues associated with this Facility were well known in advance by the IMO and there was no possibility of the capacity being delivered to the market within the Capacity Year.

Issue

The outworking of this situation resulted in all Market Participants being short-paid every month in the Non-STEM settlement process for the Capacity Year. These short-pay arrangements may extend for up to three years while Capacity Credits have been awarded to the Market Participant. This is a burdensome process applied to all Market Participants, none of which have contributed to this issue in the first place.

Proposed Solution

The IMO proposes that under conditions such as these, in respect of a new Facility which is expected to be unable to deliver its entire capacity to the WEM for the entire Capacity Year, the IMO will be able to reduce the number of Capacity Credits associated with the Facility for that year.

Specifically, the IMO proposes the following process apply:

- Prior to the beginning of each Capacity Year, and where the IMO becomes aware that a Facility assigned Capacity Credits is unlikely to be able to make its capacity available to the WEM for an entire Capacity Year, (as identified from the either the progress reports provided by a Market Participant under either clause 4.27.10 or 4.27.10A or as a result of any additional information the IMO may have available to it), the IMO would be required to issue a notice to the Market Participant of its intention to reduce its Capacity Credits to zero.

- The Market Participant would be provided a period in which it may respond to the IMO's notice of intention to reduce the Facility's Capacity Credits to zero. Where the Market Participant disagrees with the IMO's intention it will be required to provide supporting evidence as to why the Facility's Capacity Credits should not be reduced.

- The IMO would consider any supporting evidence provided by the Market Participant when making its final decision whether to reduce the Facility's Capacity Credits.

- If, in the IMO's reasonable expectation, it considers that the capacity will not be made available to the WEM, it may reduce the number of Capacity Credits assigned to the Facility for the period in question to zero.

- The IMO would then be required to draw down on any Reserve Capacity Security held in respect of the Facility and distribute the security in accordance with existing arrangements specified in the Market Rules. The IMO notes that no amendments to the Market Rules are required to implement this. Currently under clause 4.13.11 a Market Participant is required to operate at a level equivalent to its Certified Reserve Capacity and not its Capacity Credits. In the situation where a Facility has had its Capacity Credits reduced to zero the test level would still be measured against the pre-reduction level (refer to clause 4.12.6 for further details).[1]

Any decision by the IMO to reduce the Capacity Credits for a Facility to zero will apply for the whole Capacity Year. If in subsequent years the IMO also considers that the Facility will not be able to make its capacity available for the entire year it will undertake the above prescribed process again. This will provide Market Participants with an opportunity to

[1] The IMO notes that under RC_2010_12 the IMO has proposed a number of amendments to re-structure the clauses around Reserve Capacity Security. These will improve the integrity of the Market Rules. Any amendments resulting from RC_2010_12 will be taken into account when preparing the final drafting to implement the ability for the IMO to draw down of Reserve Capacity Security when a Facility has had its Capacity Credits reduced to zero.

respond to the IMO's notice of intention for subsequent Reserve Capacity Years in the case where it disagrees that the Facility will not be able to makes its capacity available for the whole year. Market Participants will not be able to apply for a reassessment of the IMO's decision during the relevant Reserve Capacity Year. This is because allowing a Market Participant to request a reassessment and have its Capacity Credits reinstated during the Capacity Year would:

- create a distortion with the current capacity refund mechanism (as refunds would not always equate to the income received from Capacity Credits in each month); and
- potentially introduce an opportunity for gaming for Facilities which a late completing development.

Where the IMO considers in a subsequent year that a Facility will be able to make its capacity available for the whole Capacity Year, the Market Participant will be required to provide a further Reserve Capacity Security (as the existing security would have been drawn down previously by the IMO).

It is also proposed that any decisions made by the IMO to reduce a Market Participant's Capacity Credits would be a reviewable decision, on appeal to the Electricity Review Board (ERB). The IMO will work with the Office of Energy to include this decision in the list of Reviewable Decisions in the Electricity (Wholesale Electricity Market) Regulations 2004 (WEM Regulations).

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2. Explain the reason for the degree of urgency:

The IMO 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 underline words added)

The proposed amendment will specify the IMO's decision to reduce a Facility's Capacity Credits to zero as being a reviewable decision. This allows the Market Participant to make an appeal to the ERB in the case where it disagrees with the IMO's decision. The IMO will work with the Office of Energy to include this decision in the list of reviewable decisions in the WEM Regulations.

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

…

(kA) clause 4.20.11;

The proposed amendment will specify that where a Facility has had its Capacity Credits reduced by the IMO for a Capacity Year and so its quantity of Capacity Credits is less than the Certified Reserve Capacity for a Facility, then the IMO must reduce the Facility's Reserve Capacity Obligation Quantity to reflect the amount by which Capacity Credits fall short of the Certified Reserve Capacity.

4.12.6. Subject to clause 4.12.7, any initial Reserve Capacity Obligation Quantity set in accordance with clauses 4.12.4, 4.12.5, 4.28B.4, or 4.28C.4 is to be reduced once the Reserve Capacity Obligations take effect, as follows:

(a) if the aggregate MW equivalent to the quantity of Capacity Credits (as modified from time to time under the Market Rules) for a Facility is less than the Certified Reserve Capacity for that Facility at any time (for example as a result of the application of clause 4.20.1, clause 4.20.11, clause 4.25.4 or clause 4.25.6), then the IMO must reduce the Reserve Capacity Obligation Quantity to reflect the amount by which the aggregate Capacity Credits fall short of the Certified Reserve Capacity;

…

The proposed new clause will specify that a Market Participant who has had its Capacity Credits reduced to zero by the IMO and so forfeited its original security will be required to provide additional security if it wishes to participate in the Reserve Capacity Mechanism in subsequent years.

The IMO notes that further amendments to this clause are proposed under the Rule Change Proposal: Reserve Capacity Security (RC_2010_12). In particular, RC_2010_12 proposes to amend clause 4.13.1 to clarify that Market Participants only need to provide security for a Facility for the first Reserve Capacity Cycle, unless it is for an existing facility which is undergoing significant maintenance or an upgrade. The IMO notes that the drafting as currently proposed takes into account this conceptual change as was agreed 12 May 2010 MAC meeting. Any final amendments to this clause will take into account the IMO's final decision on RC_2010_12.

4.13.1A The obligation under clause 4.13.1 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 IMO has reduced the Capacity Credits assigned to a Facility to zero in accordance with clause 4.20.11.

The proposed new clause will specify that prior to the beginning of each Capacity Year if the IMO becomes aware, either as a result of the progress reports provided by Market Participants or as a result of any additional information it may have available to it, that a Facility will not make available its capacity it may issue a Notice of Intention to reduce Capacity Credits.

4.20.8. By 1 August of each Capacity Year, if the IMO becomes aware that capacity associated with any Capacity Credits assigned to a Facility will not be made available to the market for an entire Capacity Year, it may issue a Notice of Intention to Reduce Capacity Credits to the Market Participant for that Facility for the Capacity Year.

The proposed new clause will require the IMO to issue a formal notice providing details and the reasoning behind the IMO potentially reducing the number of Capacity Credits assigned to the Facility. It will also provide details of the Capacity Year for which the potential reduction will apply.

4.20.9. A Notice of Intention to Reduce Capacity Credits issued to a Market Participant by the IMO, in accordance with clause 4.20.8, must include:

(a) the details of the Facility to which the Notice of Intention to Reduce Capacity Credits applies;

(b) the reasons identified by the IMO for potentially reducing the Capacity Credits assigned to the Facility to zero; and

(c) the Capacity Year for which the reduction in Capacity Credits assigned to the Facility will apply.

The proposed new clause will allow a Market Participant to make a submission to the IMO for consideration prior to reducing its Capacity Credits to zero. The IMO considers that 15 Business Days will provider sufficient time for the Market Participant to prepare a submission.
Note that there is no firm requirement for a Market Participant to make a submission as it may no longer exist (as a company). In the case where a Market Participant does not make a submission to the IMO regarding this matter, this will be taken into account by the IMO in making its decision.

4.20.10. Within 15 Business Days of being issued a Notice of Intention to Reduce Capacity Credits in accordance with clause 4.20.8, the Market Participant may make a submission to the IMO detailing any reasons it considers should be taken into account by the IMO in making a final determination to reduce the Capacity Credits assigned to the Facility to zero for the Capacity Year.

The proposed new clause will require the IMO to make a decision taking into account any submission made by the relevant Market Participant. The IMO's decision is not sequential on the receipt of a submission from a Market Participant as it is possible that one may not be made. To take this into account the timeframes for the IMO to make a decision are 15 Business Days after the last point at which a Market Participant may have made a submission.

The IMO considers that 15 Business Days will provide it with sufficient time to:

- consider the submission;
- inform and discuss with the IMO Board (if required); and
- make a decision.

4.20.11. Where the IMO has issued a Notice of Intention to Reduce Capacity Credits, in accordance with clause 4.20.8, the IMO must within 30 Business Days decide whether it will reduce Capacity Credits assigned to a Facility to zero for the Capacity Year.

The proposed new clause will require the IMO to notify a Market Participant of its decision regarding whether to reduce the Capacity Credits for a Facility to zero within 5 Business Days.

4.20.12. Where the IMO makes a decision to reduce the Capacity Credits assigned to Facility to zero for the Capacity Year in accordance with clause 4.20.11, it must notify the Market Participant of its decision within 5 Business Days, including:

(a) the details of the Facility;

(b) a response to all issues raised by the Market Participant in any submission made in accordance with clause 4.20.10;

(c) the reasons for the reduction of the Capacity Credits to zero; and

(d) the Capacity Year for which the reduction in Capacity Credits assigned to the Facility will apply.

The proposed new clause will require the IMO to publish on the Market Web Site the details of any Facilities that have had their Capacity Credits reduced to zero, the associated timeframes for the reduction and the reasons why.

4.20.13. Within 10 Business Days of making a decision, in accordance with clause 4.20.11, the IMO must publish on the Market Web Site the information specified in clause 4.20.12(a), (c) and (d).

The proposed new clause will clarify that where the IMO has made a decision under clause 4.20.12, it will reduce the Capacity Credits for a Facility for the relevant Capacity Year.

4.20.14. Where the IMO has made a decision in accordance with clause 4.20.11, the IMO must reduce the Capacity Credits assigned to the Facility to zero for the Capacity Year specified in clause 4.20.12 (d).

The proposed amendment to clause 4.25.12 will allow the IMO to use the information about the outcome of the Capacity Credit reduction in its assessment of Certified Reserve Capacity, Capacity Credit assignment and setting obligations in the future. This will be similar to if a Facility had its Capacity Credits reduced through the normal testing process.

4.25.12. The IMO may use the results of tests under this clause 4.25, or a reduction of Capacity Credits in accordance with clause 4.20.11 in respect of a Facility in assigning Certified Reserve Capacity and setting Reserve Capacity Obligation Quantities for the Facility for subsequent Reserve Capacity Cycles.

…

The proposed amendment to clause 4.27.10 will take into account the situation where a Facility has had its Capacity Credits reduced to zero. As currently drafted a Market Participant would not be required to provide the IMO with additional progress updates as they would no longer hold capacity credits.

4.27.10. Subject to clauses 4.27.11C and 4.27.10A, Market Participants ~~holding~~ assigned Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every three months from the date the Capacity Credit is confirmed under clause 4.20.

The proposed amendment to clause 4.27.10A will also take into account the situation where a Facility has had its Capacity Credits reduced to zero.

4.27.10A. Market Participants ~~holding~~ assigned Capacity Credits for Facilities that are yet to commence operation must file a report on progress with the IMO at least once every month between the commencement of the calendar year in which the date referred to in clause 4.10.1(c)(iii)(7) falls and the date the IMO has notified the Market Participant, in accordance with clause 4.13.10A, of its determination, that the need to maintain the Reserve Capacity Security for the Facility has ceased.

The proposed amended clause will define the information specified in clause 4.20.12(a), (c) and (d) as being public information.

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:

…

(f) the following Reserve Capacity information (if applicable):

i. Requests for Expressions of Interest described in clause 4.2.3 for the previous five Reserve Capacity Cycles;

ii. the summary of Requests for Expressions of Interest described in clause 4.2.7 for the previous five Reserve Capacity Cycles;

iii. the Reserve Capacity Information Pack published in accordance with clause 4.7.2 for the previous five Reserve Capacity Cycles;

iv. for each Market Participant holding Capacity Credits, the Capacity Credits provided by each Facility for each Reserve Capacity Cycle. In the case of a Market Participant with a Demand Side Programme, the IMO must publish the total Capacity Credits for the programme and not for each Curtailable Load comprising the programme;

v. the identity of each Market Participant from which the IMO procured Capacity Credits in the most recent Reserve Capacity Auction, and the total amount procured, where this information is to be published by January 7th of the year following the Reserve Capacity Auction;

vi. for each Special Price Arrangement for each Registered Facility:

1. the amount of Reserve Capacity covered;
2. the term of the Special Price Arrangement; and
3. the Special Reserve Capacity Price applicable to the Special Price Arrangement,

where this information is to be current as at, and published on, January 7th of each year;

vii. all Reserve Capacity Offer quantities and prices, including details of the bidder and facility, for a Reserve Capacity Auction, where this information is to be published by January 7th of the year following the Reserve Capacity Auction; ~~and~~

viii. reports summarising facility tests and reasons for delays in those tests, as required by clause 4.25.11.

ix. ~~T~~the following annually calculated and monthly adjusted ratios:

1. NTDL_Ratio as calculated in accordance with Appendix 5, STEP 8;
2. TDL_Ratio as calculated in accordance with Appendix 5, STEP 8; and
3. Total_Ratio as calculated in accordance with Appendix 5, STEP 10~~.~~; and

x. for a Facility that has had its Capacity Credits reduced to zero for the Capacity Year, the information specified in clause 4.20.12(a), (c) and (d).

…

Chapter 11: Glossary

Notice of Intention to Reduce Capacity Credits: A notice issued by the IMO under clause 4.20.8 and containing the information required under clause 4.20.9.

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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 IMO considers the changes proposed to allow the IMO to reduce a Facility's Capacity Credits to zero in a situation where the IMO does not consider will make its capacity available to the WEM for the entire Capacity Year.

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

The IMO considers that the proposed amendments will promote Market Objective (a) by ensuring that the estimates of capacity available in a particular Capacity Year reflect the true level of capacity available to the WEM.

By removing the Capacity Credits for a Facility, which the IMO considers will not make its capacity available to the WEM, the actual level of reliable capacity will be appropriately reflected. This will provide System Management with greater certainty that the expected capacity available from new entrants will actually be made available (enhancing the reliability of capacity in the market).

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

Costs:

- There will be some costs associated with the IMO's administration of the process for reducing a Facility's Capacity Credits to zero.

Benefits:

- Greater certainty that reliable capacity is available in the market.
- Removal of a burdensome requirement (which can last up to 3 years) on all Market Participant's associated with short pay arrangements.

Agenda Item 5c: De-registration of Rule Participants who no longer meet registration requirements (PRC_2010_31)

1. BACKGROUND

Under the Market Rules there are currently two avenues for Rule Participant de-registration, these are:

- The Rule Participant applies to the IMO to be de-registered (and pays any applicable fees); or
- The IMO applies to the Electricity Review Board (ERB) for the Rule Participant to be de-registered:

However to de-register a Rule Participant (in either the Market Generator or Market Customer class) who:

- has never actively participated in the market, or,
- no longer meets the requirements of its original registration (for example, no longer satisfies the criteria outlined in clause 2.28.19 of the Market Rules),

and assuming that the Rule Participant is either unwilling- or even unable - to pay the deregistration application fees to de-register themselves the IMO needs to undertake the lengthy and costly process of going to the ERB to de-register that Rule Participant. In these situations the IMO considers that it should be able to de-register the Rule Participant without the need to go to the ERB.

The attached Pre Rule Change Discussion Paper outlines a proposed process which allows the IMO to do so. At a high level, this is proposed to be a three stage process:

- IMO issues a Registration Correction Notice, allowing a Rule Participant 90 days to remedy the situation;
- If the situation is not remedied satisfactorily, the IMO issues a Deregistration Notice; and
- If the IMO de-registers a Rule participant that Rule Participant may apply to the ERB for a review of that decision.

2. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** the Pre Rule Change Proposal.

Agenda item 5c:

Wholesale Electricity Market
Pre Rule Change Proposal

Change Proposal Number: PRC_2010_31
Received Date: TBA

Submitted by

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Address:	Level 3, Governor Stirling Tower, 197 St Georges Terrace, Perth
Date submitted:	November 2010
Urgency:	Medium
Change Proposal title:	De-registration of Rule Participants who no longer meet registration requirements
Market Rule(s) affected:	2.17.1, 2.31.13 new clauses 2.32.7A, 2.32.7B, 2.32.7C, 2.32.7D, 2.32.7E, 2.32.7F and the glossary.

Introduction

This Pre Rule Change Discussion Paper can be posted, faxed or emailed to:

Independent Market Operator
Attn:Troy Forward, General Manager Development
PO Box 7096
Cloisters Square, Perth, WA 6850
Fax: (08) 9254 4399
Email: market.development@imowa.com.au

The discussion paper should 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

Generally, anyone subject to the Wholesale Electricity Market Rules (Market Rules) is required to register as a Rule Participant (there are some exemptions available). Since different Market Rules relate to different types of participants, a number of Rule Participant classes are defined (clause 2.28.1). In general, a Rule Participant can belong to more than one class, except where this is explicitly restricted. Rule Participants who trade, or intend to trade, in the Wholesale Electricity Market (WEM) are required to register as a Market Participant (i.e. Market Generator or a Market Customer).

Under the Market Rules there are currently two avenues for Rule Participant de-registration, these are:

Rule Participant applying to the IMO to be de-registered:

- Prior to an applicant applying to be de-registered as a Rule Participant they must have undertaken the following steps where they are also a Market Participant:

    i. ensure any Facilities registered do not hold Capacity Credits; and

    ii. apply to have its Facilities de-registered or transferred to another Rule Participant);

- Once the relevant Facility(s) has been transferred or de-registered by the IMO, the Rule Participant can apply to be de-registered. De-registration as a Rule Participant will only be effective from the date on which all (if any) outstanding debts to the market have been settled (clause 2.31.16).

- Once all accounts have been settled and the de-registration is effective, the IMO will repay any credit support held and, upon provision of a release form for execution by IMO Directors, release the fixed and floating charge.
- As per clause 2.31.16 of the Market Rules a Rule Participant's obligations will cease from the end of the first Business Day in which:

    i. their application to de-register from a Rule Participant class has been accepted by the IMO;
    ii. the Rule Participant has de-registered all their facilities applicable to the class to be de-registered from;
    iii. all outstanding disputes, investigations and enforcement actions have been resolved and settled;
    iv. all outstanding debts to the IMO have been paid; and

v. the Rule Participant has received final payment for the amounts owed to it by the IMO.

- The IMO may deny an application for de-registration (for reasons set out in clause 2.31.13 of the Market Rules). The IMO's decision to deny an application for de-registration may be appealed to the Electricity Review Board (clause 2.17.1(e)).
- It should be noted that this de-registration process attracts the following fees:

i. Rule Participant de-registration application fee: $290 per application; and
ii. Either- Facility de-registration application fee: $250 per application or Facility transfer application fee: $320 per application.

IMO applying to the Electricity Review Board (ERB) for the Rule Participant to be de-registered:

- Where a Rule Participant has been suspended for 90 days, the IMO may apply to the ERB for a de-registration order in accordance with the Regulations;
- Where the IMO receives notice that the ERB has made a decision in accordance with the Regulations that a Rule Participant be de-registered, the relevant Rule Participant ceases to be a Rule Participant from the time specified in the notice. The IMO must de-register all of the Facilities registered by the Rule Participant by the time specified in the notice (clause 2.32.7);
- It should be noted that applying to the ERB for a de-registration order is a lengthy and costly process.

The de-registration of a Rule Participant does not affect any rights, obligations or liabilities arising under or in connection with these Market Rules prior to the time the Rule Participant ceases to be a Rule Participant.

The Market Procedure: Registration and De-registration of Rule Participants outlines the processes that need to be followed by:

- Applicants when registering as a Rule Participant;
- Rule Participants when wishing to register in an additional Rule Participant class or wishing to de-register from one or more classes; and
- The IMO in processing applications for Rule Participant registration or de-registration.

Issue

While there are two processes outlined in the Market Rules for Rule Participant de-registration, to de-register a Rule Participant (in either the Market Generator or Market Customer class) who:

- has never actively participated in the market, or,
- no longer meets the requirements of its original registration (for example, no longer satisfies the criteria outlined in clause 2.28.19 of the Market Rules),

the IMO needs to undertake a lengthy and costly process of going to the ERB to de-register that Rule Participant. This assumes that the Rule Participant is either unwilling- or even unable - to pay the de-registration application fees to de-register themselves.

In situations where the Rule Participant (in either the Market Generator of Market Customer class) has clearly never participated in the market (or ever intends to) or it no longer meets the requirements of its original registration, the IMO considers that it should be able to de-register the Rule Participant without the need to go to the ERB.

Proposal

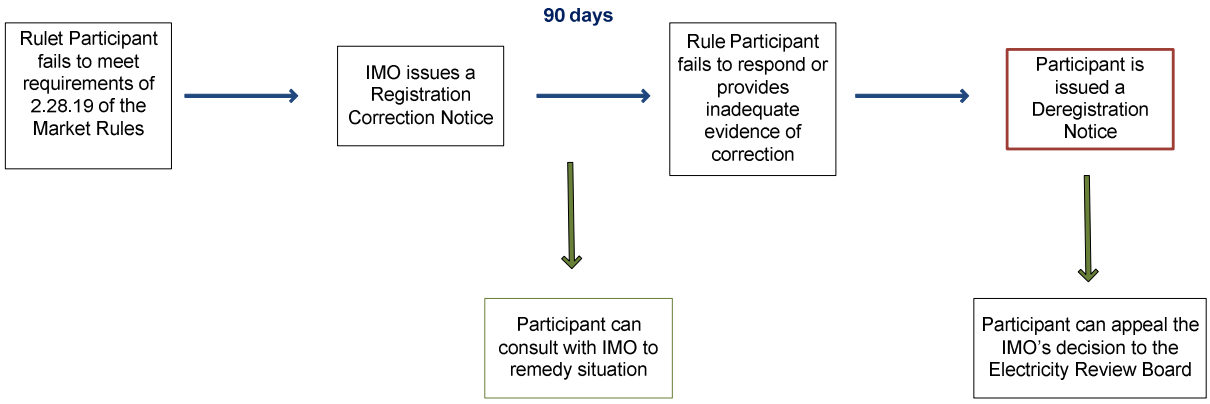
The IMO proposes to be able to de-register a Rule Participant if it is clear that they are unable to either actively participate in the market or if it is clear that the Rule Participant no longer meets the requirements of its original registration (outlined in clause 2.28.19 of the Market Rules).

The IMO proposes the following process:

- The IMO identifies (after consulting with System Management, if necessary) that:
  - The Rule Participant no longer meets the criteria for registration outlined in clause 2.28.19;
  - there is no evidence, after a defined period of time, that the Rule Participant owns, controls, or operates (or intends to own, control, or operate) a generation system connected to the South West interconnected system;
  - there is no evidence, after a defined period of time, that the Rule Participant sells or intends to sell electricity in the South West interconnected system;
- The IMO to prepare and issue a Registration Correction Notice which includes a proposed date for de-registration. This notice will allow 90 days for the Rule Participant to make submissions to the IMO as to any reason why the IMO should not de-register the participant, and how it can correct the situation;
- If the IMO does not receive any submissions from the Rule Participant at the end of the 90 day period outlined in the Registration Correction Notice, or if the Rule Participant does not provide the IMO with sufficient evidence proving that it has the potential to remedy the situation, the IMO will issue a De-registration Notice formally notifying the Rule Participant that it will cease to be registered from the time and date specified in that De-registration Notice. The IMO must also de-register all of the Facilities (if there are any) registered by the Rule Participant by the time specified in the notice (clause 2.32.7), unless these Facilities hold Capacity Credits;
- If the Rule Participant makes submissions (on the Registration Correction Notice) the IMO must consider them before making a decision;
- As with the other de-registration processes within the Market Rules, this proposal does not affect any rights, obligations or liabilities arising under or in connection with these Market Rules prior to the time the Rule Participant ceases to be a Rule Participant; and

- Rule Participants will be able to appeal the IMO's decision to de-register it to the ERB (this will be facilitated by adding the clause which enables to IMO to make a decision to de-register a Rule Participant to the list of Reviewable Decisions. The IMO will need to liaise with the Office of Energy to ensure that this amendment is also reflected in the Electricity Industry (Wholesale Electricity Market) Regulations 2004).

For a graphical representation of the process, please see below.



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2) Explain the reason for the degree of urgency:

The IMO 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 underline words added)

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

(a) clause 2.3.8;

(aA) clause 2.5.9;

(aB) clause 2.6.4(f);

(aC) clause 2.7.8(e);

(aD) clause 2.10.13;

(aE) clause 2.10.14;

(b) clause 2.13.28;

(c) clause 2.28.16;

(d) clauses 2.30.4 and 2.30.8;

(e) clause 2.31.10;

(eA) Clause 2.32.7E(b);

(f) clause 2.34.7;

(g) clause 2.34.11;

(h) clauses 2.37.1 to 2.37.3;

(i) clause 2.37.6 and 2.37.7;

(j) clause 4.9.9;

(k) clause 4.15.1;

(l) clause 4.27.7;

(m) clause 4.28.7;

(n) clauses 5.2.6 and 5.2.7;

(o) clause 5.3.6; and

(p) clause 10.2.1.

2.31.13. The IMO may only reject an application if:

…

(e) in the case of an application to register as a Rule Participant in any class where the person has previously been de-registered as a Rule Participant following an order from the Electricity Review Board or de-registered by the IMO under clause 2.32.7E(b), the IMO is not satisfied that person has remedied the reason for or underlying cause of the prior de-registration;

…

2.32.7A The IMO may at any time review whether a Rule Participant registered in the classes outlined in clause 2.28.1(b) or (c):

(a) continues to meet the criteria specified in clause 2.28.19;

(b) owns, controls, or operates (or intends to own, control, or operate) a generation system connected to the SWIS; or

(c) sells (or intends to sell) electricity in the SWIS.

2.32.7B If the IMO becomes aware that a Rule Participant registered in the classes outlined in clause 2.28.1(b) or (c):

(a) no longer meets the criteria to be a Rule Participant, as outlined in clause 2.28.19;

(b) does not own, control, or operate (or cannot produce sufficient evidence showing that it intends to own, control, or operate) a generation system connected to the South West interconnected system; or

(c) does not sell or cannot produce sufficient evidence that it intends to sell electricity in the South West interconnected system,

the IMO may issue a Registration Correction Notice to that rule Participant.

2.32.7C Each Registration Correction Notice must include:

(a) the reason for the issue of the Registration Correction Notice;

(b) A request that the Rule Participant correct the circumstances that are the subject of the Registration Correction Notice;

(c) A request to provide evidence to the IMO that it should remain registered as a Rule Participant;

(d) A date and time for response, which must be at least 90 Days from the date of the Registration Correction Notice;

(e) A date and time from which the de-registration of the Rule Participant will become effective, should that Rule Participant not provide sufficient evidence under paragraphs (b) or (c).

2.32.7D Where the IMO has issued a Registration Correction Notice it may extend the deadline for:

(a) correcting the circumstances that are the subject of the notice; or

(b) responding to the notice

for any period that it considers is appropriate in the circumstances.

2.32.7E The IMO must consider any evidence or submissions provided by a Rule Participant in response to a Registration Correction Notice and determine whether:

(a) It is satisfied that the Rule Participant should remain registered. If so, the IMO will notify the Rule Participant that no further action will be taken; or

(b) It is not satisfied that the Rule Participant should remain registered. If so, the IMO will issue a De-registration Notice notifying the Rule Participant that it will cease to be registered from the time and date specified in the De-registration Notice and the Rule Participant will cease to be registered with effect from that date and time.

2.32.7F Where the IMO de-registers a Rule Participant it must also de-register all of the Facilities registered by the Rule Participant by the time specified in the De-registration Notice. For the avoidance of doubt, the IMO must not de-register a Rule Participant, if that Rule Participant holds Capacity Credits for any of its Facilities.

Chapter 11: Glossary

De-registration Notice: means the notice issued by the IMO under clause 2.32.7E(b)

Registration Correction Notice: means a notice issued by the IMO under clause 2.32.7B

(a) Describe how the proposed Market Rule change would allow the Market Rules to better address the Wholesale Market Objectives:

The IMO considers the changes proposed to allow the IMO to de-register a Rule Participant, without applying to the ERB, in the event that it:

- has never actively participated in the market, or,
- no longer meets the requirements of its original registration (for example, no longer satisfies the criteria outlined in clause 2.28.19 of the Market Rules),

has the following impacts on the Wholesale Market Objectives.

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

The IMO considers that the proposed amendments will promote Market Objective (a) by ensuring that the IMO does not need to undertake a lengthy and costly process of applying to the ERB should it wish to de-register Rule Participants. The IMO considers that its proposed process is a more economically efficient process than the status quo.

(b) Provide any identifiable costs and benefits of the change:

Costs:

- It is expected that the IMO will encounter additional costs associated with the proposal, however, this is assessed to be less than the status quo (i.e. applying to the ERB);

- The IMO will need to update some of its internal procedures associated with de-registration. However, these costs are deemed to be within the IMO normal operating costs.

Benefits:

- The Proposal will allow the IMO to de-register Rule Participants that are clearly no longer able to take part the Market without the cost and administrative burden of going to the ERB.

Agenda Item 5d: Profile Methodology for the Relevant Demand calculation (PRC_2011_01)

1. BACKGROUND

The Relevant Demand calculation in the Market Rules measures the curtailability of Curtailable Loads. In its Rule Change Proposal: Curtailable Loads and Demand Side Programmes (RC_2010_29) the IMO proposed amendments to the Relevant Demand calculation methodology, these were (as agreed by the Market Advisory Committee):

- The Relevant Demand level be a static baseline measure, calculated on the IRCR intervals;
- The exclusion due to maintenance, clause 4.26.2C(d) be removed from the Market Rules; and
- The Relevant Demand level be calculated based on the aggregated output of the Demand Side Programme (DSP) and not by aggregating the Relevant Demand of each Curtailable Load associated with a DSP.

For more information on this refer to: www.imowa.com.au/RC_2010_29

EnerNOC has submitted a Pre Rule Change Discussion Paper outlining an alternative methodology to the static baseline Relevant Demand calculation (proposed by the IMO). This methodology is a dynamic profile-type baseline methodology. For more information on EnerNOC's proposal refer to the attached a Pre Rule Change Discussion Paper.

2. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** the Pre Rule Change Discussion Paper.

Agenda item 5d

Wholesale Electricity Market
Rule Change Discussion Paper:
Profile Methodology for the Relevant Demand calculation

Change requested by:

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Organisation:	EnerNOC Australia
Address:	RACV Tower 485 Bourke Street, Melbourne VIC 3000
Date submitted:	31 January 2011
Urgency:	3-high
Change Proposal title:	Profile Methodology for the Relevant Demand calculation
Market Rule(s) affected:	4.26.2C

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:

The current calculation methodology used for the Relevant Demand (RD) measure, described in 4.26.2C, as well as the methodology proposed by the IMO in its Rule Change Proposal: Curtailable Loads and Demand Side Programmes (RC_2010_29), employs an inaccurate static baseline measurement that risks overstating the actual amount of Demand Side Management (DSM) capacity in the Wholesale Electricity Market (WEM). The resulting inaccurate measurements can have significant implications in terms of reliability and system planning, as well as potentially inflating the overall cost of capacity in the market. Moreover, the static baseline measurement used (and proposed) as the RD level, also increases the likelihood of gaming and potentially creates conflicts for large commercial and industrial customers who seek to manage their Individual Reserve Capacity Requirement (IRCR) exposure.

As mentioned in EnerNOC's submission to RC_2010_29, EnerNOC believes that the IMO, Market Participants, and WA electricity users, would all benefit from a more accurate profile-type baseline methodology. While static measures like the IRCR calculation are appropriate for system planning purposes that must occur well in advance, their inability to account for changing load conditions makes them unsuitable for measuring capacity resources participating in a market such as the WEM. Conversely, profile baselines constantly update to reflect changes in consumption and are able to provide an accurate measure of DSM capacity and are specifically designed for use in an operational context. Such baselines have received support in numerous third party studies and are employed in electricity markets and utility-operated DSM programmes throughout the world.

This discussion paper will seek to outline the inaccuracies inherent in static baseline measurements and the resulting concerns that can (and likely do) negatively impact the WEM and the Wholesale Market Objectives. Rather than preserving this underlying inaccuracy or seek to mitigate some of the negative effects of it – as RC_2010_29 proposes – EnerNOC believes a better and more effective solution is to begin the process of moving towards a profile methodology for the calculation of the RD for DSM beginning in the 2012/2013 Capacity Year.

Static vs. Profile Baselines:

To understand the benefits of changing the RD measure from a static baseline to a profile calculation, it is first necessary to identify the problems that result from the use of a static measurement methodology.

The current calculation of RD and the proposed change under RC_2010_29 are both considered to be static methodologies since they use a single, fixed value as a forecast for CL or DSP loads for the following Capacity Year. By essentially predicting electricity consumption to be the same regardless of the time of day, day of the week, or season of the year, and based upon a consumption pattern that is 12 months in the past, such an approach is unable to accurately predict a given customer's (or DSP's) load at a given time. It can therefore not accurately measure the demand reduction that actually occurred when DSM is dispatched by System Management. Almost no electricity users have demands that remain flat over a day, let alone the course of a season or year. For example, in addition to fluctuating usage throughout the day, in the period since a CL's RD was calculated, a customer may have installed new equipment that has drastically increased or decreased their load profile. Consequently, a static RD simply cannot provide insight into whether or not a CL/DSP has

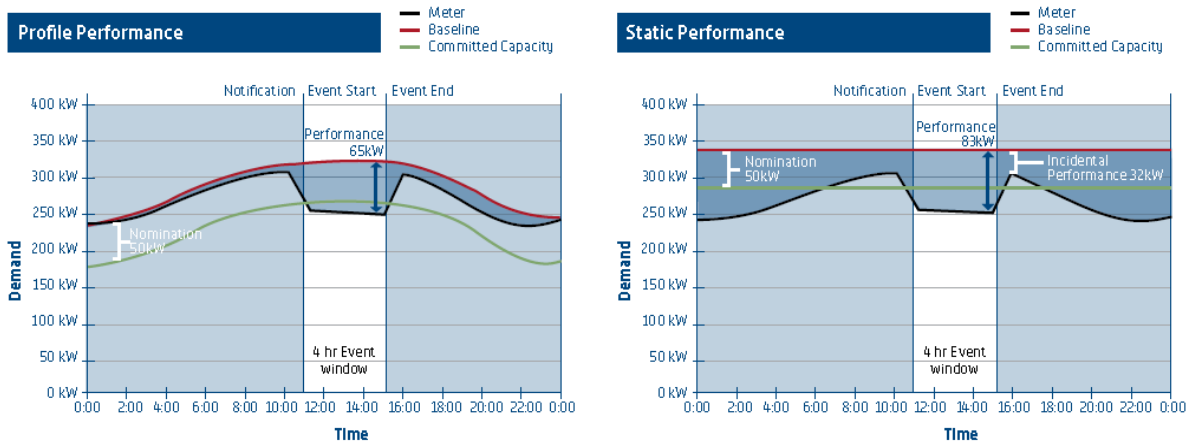
load reduction capabilities at the specific time SM needs them, nor can it be counted on to provide an accurate assessment of CL/DSP performance after a dispatch.

With the current and proposed RD based on demand during system peak periods, the RD is likely to result in "incidental performance", where a customer is already operating below their baseline and receives credit for greater levels of demand reductions than what actually took place. The IMO has recognised this inaccuracy, acknowledging that an "aggregated DSP (may) already be operating at below its RD level when dispatched and may not be required to curtail consumption at all to meet the Dispatch Instruction"[1].

This incidental performance can have serious implications. As the IMO has also identified, the inaccuracy could impact system reliability by overestimating the amount of available capacity, leading to System Management potentially allowing more outages than should be permitted to maintain reliability standards.

EnerNOC believes there is a clear choice to both accomplish the objectives of the IMO's proposed changes to the RD methodology under RC_2010_29 and to also improve its accuracy in general: a measurement methodology known as a "profile" baseline. Profile baselines, which closely resemble a site's actual load profile throughout the day and are based on historical interval meter data over a recent period prior to dispatch, stand in stark contrast to static baselines such as the current RD methodology. Profile baselines are also often referred to as "dynamic" as they are changed and updated to reflect recent conditions and consumption patterns. To compare the two baseline types of static and profile, an example has been shown in the figure below which assumes a customer has registered demand side capacity of 50kW.

Figure 1: Profile vs Static Baselines



Using a static baseline (right graph), the forecast baseline is far greater than the actual load throughout the entire day. Peak performance during dispatch is measured at 83kW, well above the expected 50kW.

Applying an accurate profile baseline generates closer alignment with actual consumption patterns. By having a baseline that follows actual metered demand before and after dispatch, performance is measured at 65kW, or more than 20% below the static baseline.

In the example shown, a static baseline provides 32kW of incidental performance, or nearly 40% of the recorded performance. This incidental capacity represents significant program costs for the WEM, with DSM comprising around 8% of the WEM's capacity. With over 450MW of DSM credited for 2012/13, were incidental performance levels of 20% or more being experienced this would indicate a potential capacity shortfall (or overpayment) of 100MW or more. This represents in excess of $15 million in 12/13 in unnecessary capacity costs and payments.

[1] Agenda Item 8a: Curtailable Loads - Relevant Demand Analysis, MAC Meeting No 30: 11 August 2010, pg1

Profile Baseline Considerations:

Across international markets that engage DSM, the most widely used profile calculations employ what is known as a High X of Y method to select the historical interval data that is used. Examples include the PJM Interconnection, the world's largest electric grid which covers the mid-Atlantic region of the United States; the Ontario Power Authority / Independent Electricity System Operator (IESO) in Canada; DR programs with utilities in the US states of California, Arizona, Florida, Idaho, and including the world's largest utility DR program run by the government utility / US federal agency the Tennessee Valley Authority. A High X of Y baseline takes the Y most recent days preceding a dispatch of DSM (also called an "event") and uses the data from the X days with the highest load within those Y days. High X in Y profile baselines have a few different components to them, as described below. There are various iterations of these components, but over recent years, best practices have begun to emerge – both as the result of experience and third party studies.

Profile calculations utilise the following components:

- Look-back Window – Because profile baselines are designed to change over time to reflect actual load conditions, they use consumption data from a recent period – the look-back window - prior to a dispatch (or test) to calculate the Relevant Demand. The look-back window determines the range of days prior to a dispatch of a DSM resource that should be considered in the baseline. In other words, the look back window is the value of Y in the High X of Y context. The length of the look back window is an important value in the baseline equation and must take into account a number of factors. First, a baseline that only considers very recent data may place an undue emphasis on short-term variations in load and might not accurately capture true demand reductions. Second, given sufficient or excessive warning and incentive to do so, a site could actively and intentionally increase consumption prior to a dispatch in order to maximise its baseline and thus overstate actual curtailment levels. A longer baseline window acts to prevent gaming such that the cost of active manipulation to elevate baseline levels outweighs the benefit as the customer's supply bills would quickly rise due to increased consumption and potentially higher demand charges – to game a baseline with a well-chosen Y value would therefore require increased consumption over the course of many days when the customer believes a dispatch is likely, an expensive proposition. In light of these issues, many other energy markets and programs such as the OPA/IESO and utility programs listed above, have accepted that a period of 10 (non-dispatch event) business days reasonably represents consumption for normal operations and therefore makes up a preferred baseline window for these markets and programs where DSM is primarily providing a capacity or reliability resource (as compared to ancillary services). Using a 10 day time window provides an appropriate balance of time for these markets, being short enough to account for near-term trends and long enough to limit opportunities for manipulation.
- Exclusion rules – Exclusion rules determine what data (X) can be included in the look-back window and are designed to ensure that the baseline is only utilising interval data that will lead to an accurate forecast of load during the time of a likely dispatch. Days outside of the availability window of the DSM resource – in the case of the WEM, weekends and public holidays– are excluded so as not to impact the baseline measure and its accuracy. These rules also usually exclude any days where the DSM resource was dispatched, since the load profile on such days is atypical and not indicative of normal operating conditions. Exclusion rules also ensure that data is used only from the hours when DSM can be dispatched – in the WEM, this is noon to 8pm, unless a CL/DSP has made themselves available outside of that range.
- Relationship between X and Y – Once a group of prior days is identified as the Y days, that group of days is narrowed down to a subset of X days in order to obtain a better representative group of data for use in the baseline calculation. When selecting X it is

important to consider the likely conditions in which DSM is likely to be dispatched. For example, for DSM that is called primarily for use during peak periods like in the WEM, dispatch is very much linked to weather conditions, which are a central determinant of electrical consumption. As such, the RD methodology used in the WEM must be explicitly designed to appropriately forecast electricity usage during extreme weather events. If all days from in the look-back window were used, data from days with less extreme weather conditions (and therefore less demand) would be used, which will consistently understate the baseline measure and its accuracy. To combat this understatement, best practice-based DSM programs use data only from select days with the highest loads from within the look-back window. A 'High 3 of 10' and 'High 5 of 10' are among the most common iterations, with the latter approach considered more amendable to addressing the issue of understated performance while incorporating 2 more days of load data, reducing volatility.

With these baseline parameters in mind, consider the following High 5 in 10 baseline example, as illustrated in Table 1. The baseline for each time interval, is determined by averaging the load on those five days for each hour. In this example, the top High 5 Days are 2, 4, 6, 7, and 9.

Table 1: High 5 of 10 Data

Day	Interval 1 (kW)	Interval 2 (kW)	Interval N (kW)	Average usage (kW)
1	2,000	2,100	2,000	2,033
2	2,100	2,200	2,100	2,133
3	2,000	2,100	2,000	2,033
4	2,200	2,500	2,200	2,300
5	2,000	2,100	2,000	2,033
6	2,100	2,200	2,100	2,133
7	2,400	2,300	2,400	2,367
8	2,000	2,100	2,000	2,033
9	2,600	2,700	2,600	2,633
10	2,000	2,100	2,000	2,033
Baseline	**2,280**	**2,380**	**2,280**	

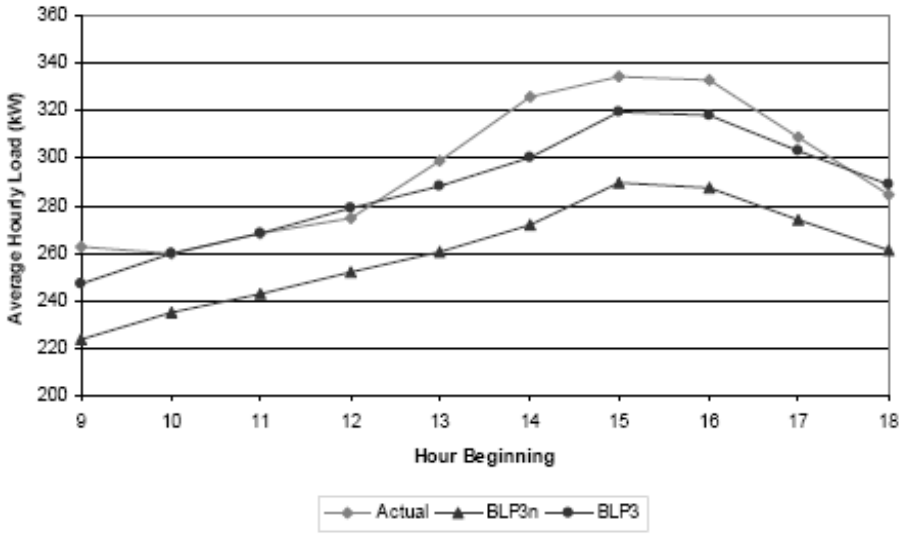
- Day of Adjustment – Since conditions on the day of a dispatch can be markedly different from what may have occurred during the look-back window, an adjustment is often applied to reconcile any deviations in usage between the baseline and the actual meter data. This is especially important in the WEM where DSM capacity is most likely to be dispatched during the peak periods of the Hot Season. Because X in Y baselines of the inevitably exhibit some downward bias – even ones that use the top 3 or 5 demand days out of the last 10 – it is important that the RD method can account for the higher-than usual consumption patterns that will be seen on days with such extreme weather. These day-of adjustments don't change the shape, or profile, of the baseline – rather, they simply transpose it along the y-axis to ensure accuracy by aligning it with actual load conditions on the day of a dispatch. While a final step in the profile baseline calculation, they are crucial to an accurate output. In a recent study[2] of baseline calculations by the Lawrence Berkeley National Laboratory (LBNL) based in California, the report authors concluded that "*applying a morning adjustment factor significantly reduces the bias and improves the accuracy of all baseline load profiles examined in our sample.*" Similar studies by the international energy consultancy KEMA[3], as

[2] Lawrence Berkeley National Laboratory, "Estimating Demand Response Load Impacts: Evaluation of Baseline Load Models for Non-Residential Buildings in California", January 2008, page 25
[3] KEMA – XENERGY, "Protocol Development for Demand Response Calculation- Findings and Recommendations", February 2003, p. 2-12.

well as the AEIC Load Research Committee[4], support the conclusion of the LBNL study that the use of a day of dispatch adjustment improves accuracy and reduces bias. EnerNOC's own internal data analysis, presented to the Association of Energy Services Professionals (AESP) in November 2010, provides further support for these conclusions and found that unadjusted baselines understate load.[5]

Consider the following example from the aforementioned LBNL study. Figure 2 below shows a comparison of actual meter data to an unadjusted 3 in 10 profile baseline (labelled BLP3n) and a 3 in 10 profile baseline with a day-of adjustment applied (labelled BLP3). While the unadjusted baseline clearly understates the actual metered load, once an adjustment is applied, the baseline comes very close to forecasting the actual load.

Figure 2: Unadjusted vs Adjusted 3 in 10 (LBNL)



One of the most crucial aspects of a day-of-adjustment is when it is applied – either at the time of dispatch, or at the beginning of the dispatch event (which can be hours later). To limit gaming and properly reward curtailment actions it is crucial that this adjustment is applied at the time of dispatch (or test). An adjustment applied at the event start time can result in an overstated baseline for a customer who is engaged in legitimate pre-curtailment activity, such as pre-cooling so that HVAC load can be curtailed during the event period. Equally important, adjustments applied post-dispatch at the event start time also invite the opportunity for customers to game the baseline by increasing load post-dispatch to raise the baseline higher than it would have otherwise been. For these reasons, EnerNOC recommends that day of adjustments should be applied at the time System Management dispatches DSM in order to ensure the integrity of the RD measure – an approach validated by third party studies as a way to combat the potential for gaming.[6]

It is also important to consider whether adjustments reflect demand conditions symmetrically (baseline adjusted up and down) or asymmetrically (baseline only adjusted up).The symmetric approach considers that day-of conditions can have a real impact on customer demand in both directions and therefore symmetric adjustments maximise the accuracy of a baseline calculation. However, they also permit downward adjustments that represent serious causes for concern. The reduction of a customer baseline based on day-of conditions can

[4] AEIC Load Research Committee. Estimation Errors in Demand Response with Large Customers. November 2009.
[5] Analysis of Baseline Methodologies and "Best Practice" Recommendations, EnerNOC Inc, Presented to AESP on 9 November 2010
[6] Working Group 2 Demand Response Program Evaluation – Program Year 2004 Final Report. Prepared for the Working Group 2 Measurement and Evaluation Committee, by Quantum Consulting Inc. and Summit Blue Consulting, LLC, 2004.

have damaging, unintended consequences. Symmetric adjustments are appropriate for programs in which events are less likely to occur on days of extreme load conditions. For example, in programs where dispatch may occur in Spring and Autumn, the event day may not be expected to have a significantly different load from previous days. Therefore there is an equal chance that an unadjusted baseline could be lower or higher than actual load prior to an event, in which case a symmetric adjustment would be appropriate. For all other programs however, asymmetric adjustments have been considered more appropriate given that they properly align incentives of participants with objectives of demand response programs. In their studies, both LBNL and KEMA recognised that a symmetric adjustment could penalise a customer if the adjustment window overlapped with pre-cooling or early curtailment actions. In this case, the meter readings would be below normal and the adjustment would shift the baseline downward too much. This would result in a smaller curtailment measurement that underestimated actual performance.

Symmetric baseline adjustments are of particular concern when coupled with lengthy periods of advanced notification, as is the case in the WEM (up to 4 hours). Under the Market Rules, dispatches from System Management could be received as early as 8:00am, a time at which some participating sites may not be fully operational. As day of adjustments are applied at the time sites are notified of an impending dispatch to avoid potential gaming, the adjustment would need to be applied at that early time, even though at such an hour consumption patterns are almost guaranteed to be a poor projection of consumption patterns later in the day. Consider the example of DSM dispatch to address a spike in demand due to extreme weather conditions in the afternoon – ambient temperatures, and the resulting HVAC loads, may not even be above average at 8:00 in the morning.

It is also worth recognising that adjustments can be done on an additive (kW) or a scalar (%) basis. The scalar technique is based on a percentage comparison. If load on an event day prior to notification is measured to be 30% above the calculated baseline, then each time interval of the baseline would be the product of the calculated baseline and 130%. The additive approach instead calculates the actual demand difference in kW. If load during the calculation period is 50 kW above the calculated baseline, then 50 kW is added to each interval in the actual event baseline. While this may not result in a mathematical difference at the first interval, it can lead to minor differences in measurements over the course of the dispatch event. LBNL found that either method greatly increases the accuracy of profile baselines, whereas KEMA, voiced greater support for an additive approach. EnerNOC is proposing an additive adjustment in this rule change proposal.

Because day-of-adjustments are so crucial to the accuracy of a baseline, any use of the Relevant Demand level to test DSM capacity availability (as proposed in RC_2010_29) in lieu of a dispatch from System Management must incorporate a methodology to allow for the inclusion of this integral baseline component.

Alternative Profile Methodologies for DSM Measurement

There are alternative methods of selecting data for the look-back window, namely rolling averages and regressions. Our experience indicates that a rolling average baseline is used by exclusively by ISO-NE, a System Operator of a 32 GW market in the Northeast US. This method uses historical meter data from many days, but gives greater weight to the most recent days, and is more complex than the typical High X of Y method. Another alternative is the regression method, which uses a regression analysis to estimate load based on prior load behaviour, weather conditions, calendar data, system demand, and time of day. Used in the Texas market of ERCOT, regression analysis is believed to be the most accurate of baseline methodologies because it takes into consideration more variables that influence load. However, regression baselines come with significant downsides, which outweigh their potential for improved accuracy. They are complex to calculate and require load,

weather, and day type data. They may rely on interval meter data from an entire summer to estimate load during event days of that summer. In this case, it is not possible to calculate a baseline during a dispatch, since the regression equation can only be created at the end of the summer. In EnerNOC's view, it is vital to chart the baseline during a dispatch because it can show if a customer is or is not meeting curtailment expectations. Therefore, because regression baselines require more types of input data and because they cannot be used to generate baselines during an event, EnerNOC believes they are not a preferred profile method.

A comparison of the baseline types available and discussed in this section is outlined in the table below.

Table 2: Baseline Comparison

Baseline Type	Operational Alignment	Load / Weather Sensitivity Addressed	Visible to CL during dispatch	Potential for Gaming
Static	Low. Better suited for system planning.	Low. RD measure does not change.	Yes. Known months in advance.	High. CL can be offline or below baseline without taking action.
High X of Y	High. Follows load profile; shows real-time capability	High. Uses comparable days and applies an adjustment factor	Yes. Systems can easily calculate in real-time.	Low. Look-back window and adjustments applied at dispatch prevent gaming.
Rolling Average	High. Follows load profile; shows real-time capability	Medium. Only applies and adjustment factor.	Yes. Systems can easily calculate in real-time.	Low. Look-back window and adjustments applied at dispatch prevent gaming.
Regression	High. Follows load profile; shows real-time capability	High. Incorporates weather, load, and comparable day data.	No. Requires data that is not available until at the end of the season.	Low. CL would need to significantly increase usage throughout the season.

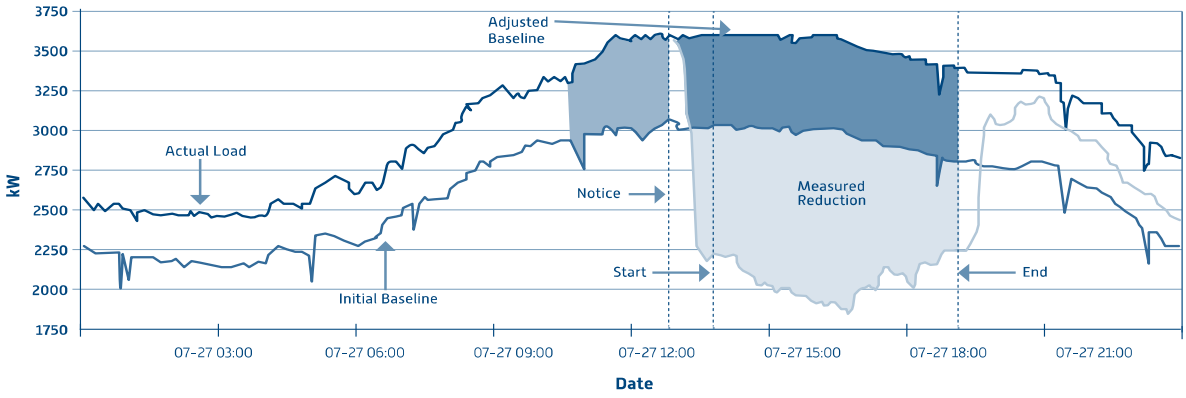
Proposed Methodology:

In light of the possible permutations identified in this paper, EnerNOC proposes **replacing the current RD calculation with a High 5 in 10 individual profile baseline, with an asymmetric day-of adjustment**. As is described below, this particular version of a profile baseline best aligns with the dispatch parameters and use of DSM in the WEM.

Our proposed baseline methodology addresses the concerns with inaccuracy inherent in the current RD methodology, and avoids the negative consequences of the RD-setting interval changes outlined in RC_2010_29 that have been outlined in our submission to that rule change. Moreover, our proposed approach seeks to improve the accuracy of DSM capacity and performance measurement, ensuring system stability and cost-efficiency.

A graphical representation of EnerNOC's proposed RD measure can be seen below.

Figure 2: Proposed Profile Baseline Method for RD Measure



The components of the proposed profile baseline method for RD include:

- **Look-back window.** A baseline needs to incorporate enough information to avoid bias from one or two data points. Consideration of the last 10 non-event, business days allows a robust number of days to be considered without going too far in the past in which load behaviour is different than current load behaviour. Use of only the top 5 days allows some of the lower usage days to be excluded, bringing the baseline closer to typically higher expected load on non-event days.
- **Asymmetric Adjustment applied at time of dispatch.** To ensure baseline integrity, EnerNOC is proposing that the baseline adjustment be applied at the time of dispatch, and consider the usage from the preceding two hours. As DSM capacity is most likely to be dispatched during the peak periods of the Hot Season, it is important that the RD method primarily seek to forecast likely usage patterns on those days – because an X in Y baseline type already exhibits some downward bias, we believe the likelihood of CL or DSP operation at below baseline levels is extremely low during these periods of dispatch in WA. In addition, the length of advanced notice for DSM dispatch in the WEM would make the application of a symmetric adjustment worrisome, as outlined previously. Since adjustments are crucial to baseline accuracy, and that a symmetric adjustment would be highly problematic because of the four-hour advanced notice in the WEM, EnerNOC is proposing an asymmetric adjustment calculated on an additive basis.
- **Individual Measurements**. When employing a dynamic baseline, it becomes more important to consider how the baseline is applied to the loads that comprise the DSP. Consider Figure 3 below – using the High Days for the aggregate portfolio of sites, Days 1, 2, 4, 5, and 8 would be used. While Participant 1's High 5 days match 80% to the portfolio, only 60% of Participant 2's do, and only a third of Participant 3's High days align.

Figure 3: Impact of Aggregation on Baseline Accuracy: Individual and Aggregate 5-in-10 Peak Load (kW)

	Participant 1	Participant 2	Participant 3	Aggregate Load
Day 1	200	65	100	365
Day 2	200	65	80	345
Day 3	200	65	70	335
Day 4	200	130	80	410
Day 5	200	130	60	390
Day 6	0	130	80	210
Day 7	0	130	110	240
Day 8	150	130	100	380
Day 9	150	65	125	340
Day 10	150	65	100	315
5-in-10, Individual	*200*	*130*	*107*	*378*
5-in-10, Aggregate	*190*	*104*	*84*	*378*

The top five loads are highlighted in blue for each participant and for the aggregate load. The average of the highlighted loads in each column is shown under *5-in-10, Individual*. The average of each participant's loads on the five peak days for the aggregate load is shown under *5-in-10, Aggregate*.

This is not just a theoretical issue. In looking at actual EnerNOC data from a March 2008 demand response dispatch employing an aggregated "High 3 of 10" method in California, less than 10% of customers had their highest three demand days aligned with those of the portfolio. In other words, over 90% of participants were not only unable to calculate their own baseline based on internal demand data, but also reliant on random (from the participants' perspective) information to understand their official performance. Also, for 16% of the participants, the "High 3" days used to calculate their baseline included none of their top demand days for the period, highlighting the inaccuracy of this approach from an individual customer perspective. Under such applications of the portfolio methodology, participating customers can understandably feel that the performance measurement process is not transparent.

Our advocacy for profile baselines to be applied at an individual level does not alter our view on the importance of performance being assessed on a portfolio basis, as the IMO has proposed in RC_2010_29, and which EnerNOC wholeheartedly supports. *Portfolio-based performance assessment is not at all mutually exclusive with individual baselines.* Performance is assessed for each comprising load in a DSP, and then summed together for the final figure of load curtailment that is delivered to the WEM. This allows for a DSP to manage its portfolio of sites and to ensure that the DSP as a whole can meet contractual obligations to the IMO by balancing out any underperforming sites with those that over perform. In fact, it can be argued that individual baselines are the best foundation for measuring aggregate portfolio performance, as they lead to the most accurate assessment of how much load an individual site actually provided during a dispatch.

Methodology Calculations

The step by step calculations required to support the profile baseline methodology proposed is outlined below to facilitate understanding:.

1. For a given time interval [t] (e.g. 30 minute Trading Interval), initial baseline [b] is calculated as the average interval demand among the 5 highest energy usage days out of the prior 10 non-dispatch days (this calculation is performed for each interval during the DR event, for example for each five minute window):

$$b_t = [C_{td1} + C_{td2} + C_{td3} + C_{td4} + C_{td5}] * 1/5$$

2. Adjustment factor [a] is calculated as the difference in observed demand and estimated baseline for a calibration period starting two hours before dispatch notification, with a minimum adjustment of 0:

$$a_t = \max\{[(C_{t-1} - b_{t-1}) + (C_{t-2} - b_{t-2})] * 1/2, 0\}$$

Baseline Variables

b = baseline average
d = non-event day
dn = nth highest energy usage day among previous 10 non-event days
t = time interval
c = highest kW energy consumption for a given time interval (t)

Adjustment Factor Variables

a = day-of adjustment
t-n = time interval starting n hours prior to event notification

Performance Calculation Variables

p = total performance
e = total time intervals during event

3. Total performance [p] is measured as the integrated difference between the sum of the baseline [b] and adjustment factor [a] less consumption [c] for each interval [t] over an event period beginning at time [0] and ending at time [e]:

$$p = \sum_{i=0}^{e} (b_i + a) - c_i$$

2. Explain the reason for the degree of urgency:

While the inaccuracies inherent in a static baseline methodology on their own justify the need for an improved RD measure, the urgent need to update the Relevant Demand calculation is driven by the IMO's proposed change to the measurement of CL performance in RC_2010_29.

By aligning the intervals used to determine a DSP's capacity capability, the RD measure, with those intervals used for IRCR purposes (as proposed under RC_2010_29), the market would be bundling two separate incentives and mechanisms that require distinct measurements for their own specific purposes. Moreover, by linking the RD to the IRCR methodology, the IMO appears to falsely presume that a DSP would only be dispatched by System Management (SM) in response to a capacity shortfall, and not for other likely purposes such as, transmission constraints, or unforeseen system contingencies. As a result, IRCR management and demand side participation in the Reserve Capacity Mechanism are likely to become mutually exclusive as successful attempts to reduce one's IRCR exposure will reduce the capacity available to the WEM.

While RC_2010_29 makes the need for the move to a more accurate profile RD methodology more urgent, the current RD methodology is itself sufficient cause for the profile RD measurement proposed here since the current static RD measure risks capacity overestimation in the WEM, and as a consequence, higher funding and operational costs for all Market Participants and end-users than may otherwise be necessary.

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)

4.26.2C. ~~The IMO must:~~

~~(a) Identify the eight consecutive Trading Intervals with the highest aggregate system demand in each month during the preceding Hot Season;~~

~~(b) Subject to clause 4.26.2C(c), set the Relevant Demand (in MW) for the Curtailable Load equal to the median of the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(a), where the Relevant Demand is a positive number.~~

~~(c) Where the metered consumption during the 32 Trading Intervals identified in clause 4.26.2C(b) is not available the IMO must set the Relevant Demand based on:~~

~~i. Available Meter Data, or~~

~~ii. Load information provided by the Rule Participant, or~~

~~iii. Other relevant information.~~

~~(d) Where evidence is provided by the Market Customer that the Curtailable Load was operating at below capacity due to its consumption being reduced at the request of System Management or because of maintenance during one or more of the 32 Trading Intervals, the IMO must set the Relevant Demand based on the IMO's estimate of the Curtailable Load consumption during those intervals.~~

(a) The Relevant Demand for a Curtailable Load must be calculated by the IMO for each Curtailable Load using the methodology described in clauses 4.26.2C(b)-(d).;In the case of a Demand Side Programme, the Relevant Demand for the Demand Side Programme as a whole will be equal to the sum of the Relevant Demand for each Curtailable Load comprising the Demand Side Programme.

(b) The Relevant Demand for each Curtailable Load for each Trading Interval during the hours the Curtailable Load or Demand Side Programme has made itself available – which must include the period specified in 4.10.1 (f) – shall be determined, subject to clause 4.26.2C(c), as the arithmetic mean of the measured demand, in kW, during such Trading Intervals in each of the Curtailable Loads' five Highest Energy Usage Days of the immediate past ten Trading Days, as defined in 4.26.2.C(c);

(c) The five Highest Energy Usage Days for a given Curtailable Load are those days having the highest average energy usage (in kWh) between the applicable hours of availability, as described in 4.26.2C(b). The past ten Trading Days shall exclude any day when Demand Side Management was dispatched by System Management, and shall only include Business Days.

(d) A Day-of Load Adjustment will be applied for each Curtailable Load for each Trading Interval in a calendar day when Demand Side Management is issued a Dispatch Instruction by

System Management, which shall be equal to the average difference (in kW) between calculated Relevant Demand and the Curtailable Load's actual energy usage during the two hour period ending with the Trading Interval immediately preceding the Trading Interval for which the Dispatch Instruction was issued by System Management.

(e) If the Day-of-Load adjustment calculated under clause 4.26.2(C)(d) would result in a decrease of the Curtailable Load's Relevant Demand, then the Day-of- Load adjustment quantity will be set by the IMO equal to zero.

Glossary

Highest Energy Usage Days: Has the meaning given in clause 4.26.2C (c) and determines which days of energy usage will be used to calculate the Relevant Demand of a CL/DSP

Day-of-Load Adjustment: refers to the adjustment made to the Relevant Demand measure in response to a dispatch from System Management and has the meaning given in clause 4.26.2C(d).

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

This proposed Market Rules change would allow the Market Rules to better address all Wholesale Market Objectives, as described below.

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

(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 proposed changes will enable significantly greater accuracy around DSM capabilities and provision, enabling improved efficiency and reliability in the use of DSM as a capacity service within the WEM

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

This proposed rule will ensure that DSM remains an attractive opportunity within the SWIS encouraging new entrants interested in providing clean, DSM capacity to the WEM. Further, it will look to remove "opportunistic" DSM contributions (i.e. incidental performances), enabling competition to be undertaken on a consistent basis, encouraging ongoing innovation and avoiding the potential for extremely short-term ("fly-by-night") competitive inputs that are likely to discourage innovation and breed "conservative" applications of DSM program management;

(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;

The proposed rules provide for a Relevant Demand methodology that will enable DSM to be considered as an effective and reliable capacity service, engendering greater utilisation by SM and removing current perceptions of DSM as being less than the functional equivalent of traditional generation sources.

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

As outlined in the discussion paper previously, the proposed rule changes enable much greater accuracy in determining DSM capabilities, avoiding the potential for significant "incidental performance" scenarios inherent in the existing RD measurement approach which are likely to cost customers millions of dollars on an annual basis.

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

The proposed rules ensure end-use customers remain able to manage their peak consumption levels as well as contribute DSM (particularly when this is not coincident with peak SWIS demand), while mitigating any attempt to game the measurement approaches for both DSM and capacity charges to achieve excessive economic returns. By enabling both opportunities to be pursued, the proposed rules seek to maximise the system-wide benefit able to be obtained through high utilisation of dynamic, flexible loads.

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

EnerNOC believes that there will be a limited one time cost for the IMO to ready itself to measure DSM performance under this methodology and settle accordingly. We believe it is important to weigh these costs against the savings the profile baseline will provide. Consider the possibility that the use of a more accurate profile baseline reduces measured DSM capacity by 10% by eliminating "incidental performance". With 454.5 MW of DSM capacity in the WEM in 2012/13, that would alone represent capacity savings of $8,453,747 in the first year of operation. EnerNOC does not estimate that IMO system changes and any additional costs associated with the proposed changes would equate to, at their maximum, more than 10-20% of this estimated benefit.

In addition to the benefit identified above, by removing the incidental performance potential inherent in existing static measurements of RD, further market benefits that could accrue from the proposed rule changes including the avoidance of potential Supplementary Reserve requirements and impacts on system reliability through overestimating the amount of available capacity.

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_2010_03	Monitoring Protocol	The proposed updates are to: • Allow the IMO to disclose the identity of System Management as a participant that notifies us of alleged breaches; and • Update to conform to recently adopted style changes.	• Submissions closed 16 December 2010 • Final Report being prepared	• Final Report to be published	TBA
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.	• Submissions closed 13 December 2010 • Final Report being prepared	• Final Report to be published	February 2011
PC_2010_06	Certification of Reserve Capacity	The proposed updates are to: • ensure that an appropriate amount of CRC for each Facility is set, and allow the IMO to determine the	• Finalised. Procedure commenced 15		15 December 2010

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
		viability of a new project and its prospects of proceeding through to completion before the start of the relevant Capacity Year • specify the steps for applying for and approving Early Certified Reserve Capacity. This will ensure consistency with the Rule Change Proposal: Early Certified Reserve Capacity (RC_2009_10); and • improve the integrity of the Market Procedure by including a number of minor and typographical amendments.	December 2010		
PC_2010_07	Market Procedure for Web Site Changes	The proposed updates are to: • Update to the new IMO procedures format; • expand the associated market documents to include the confidentiality status document (step 1.4.2); and • note the process where System Management has not been delegated the authority to directly post information or documents on the Market Web Site (step 2.1.1).	• Finalised. Procedure commenced 24 January 2011		24 January 2011
PC_2010_08	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; • determining the maximum contract value per hour of availability for any contract; and • Details the information that is required to be exchanged. This Market Procedure needs to be published (as required by the Market Rules) and will be revised following any rule changes (if applicable).	• Submissions closed 20 December 2010 • Final Report being prepared	• Final Report to be published	February 2011

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
TBD	Data and IT Interface Requirements	The proposed updates are to: • Reflect the IMO's new format arising from its Market Procedures project; • Include some minor and typographical amendments to improve the integrity of the Market Procedure; • Remove the minimum workstation requirements, specifically outlining just the recommended workstation requirements; • Clarify the internet explorer requirements for different versions of the Market Participant Interface; and • Update the IMO's Access Security section.	• Presented at the 2 February 2011 working group meeting.	• Formal submission into the Procedure Change Process (subject to any working group comments)	February 2011
TBD	Prudential Requirements	The proposed updates are to: • Reflect the IMO's new format arising from its Market Procedures project; • Include some minor and typographical amendments to improve the integrity of the Market Procedure; • Include amendments required as a result of two Rule Change Proposals: o RC_2010_11[1] Removal of Network Control Services (NCS) Expression of Interest and Tender Process from the Market Rules; and o RC_2010_36[2] Acceptable Credit Criteria; The IMO would like to note that the remainder of the	• Presented at the 2 February 2011 working group meeting.	• Formal submission into the Procedure Change Process (subject to any working group comments)	February 2011

[1] Refer to www.imowa.com.au/RC_2010_11
[2] Refer to www.imowa.com.au/RC_2010_36

Change ID	Title	Brief overview of changes	Status	Next Step(s)	Date
		Market Procedure is out of scope for the purposes of this Procedure Change Proposal, as the IMO is currently undertaking a more detailed process review regarding Prudential requirements. Any amendments resulting from this review will be presented to the Working Group.			
TBD	Undertaking the LT PASA and conducting a review of the Planning Criterion	The proposed updates are to: • Reflect the IMO's new format arising from its Market Procedures project; • Include some minor and typographical amendments to improve the integrity of the Market Procedure, including re-ordering some sections; • Include both reviews required under clause 4.5.15 of the Market Rules (Planning Criterion and forecasting processes); and • Remove the direct duplications of the Market Rules to provide a more concise Market Procedure.	• Presented at the 2 February 2011 working group meeting.	• Formal submission into the Procedure Change Process (subject to any working group comments)	February 2011
TBD	Procurement of Network Control Services	RC_2010_11[3] (Removal of NCS Expression of Interest and Tender Process from the Market Rules) removes the NCS expression of interest, tender and contracting processes from the Market Rules to allow a Network Operator to undertake these processes under the regulatory oversight of the Economic Regulation Authority. As this Rule Change Proposal removes the heads of power (and the requirement) for the Market Procedure the IMO proposes to revoke the Market Procedure in its entirety.	• Presented at the 2 February 2011 working group meeting.	• Formal submission into the Procedure Change Process (subject to any working group comments)	February 2011

[3] Refer to www.imowa.com.au/RC_2010_11

System Management Procedure Change Proposals					
TBD	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 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.	• Discussed at Working Group Meeting (28 October 2010)	• System Management to submit into the Procedure Change Process.	TBD
TBD	Dispatch	The proposed updates are to allow for discretion to be exercised in requesting daily dispatch profiles from Market participants with facilities smaller than 30 MW.	Discussed at Working Group Meeting (28 October 2010)	• System Management to submit into the Procedure Change Process	TBD
PPCL0016	Commissioning and Testing	The proposed update is to amend the procedure to reflect the commenced RC_2010_37 'Equipment Tests'.	• Submissions closed 13 January 2011. • Final Report being prepared by System Management	• Final Report to be provided to the IMO for approval	TBD
PPCL0017	Facility Outages	The proposed update is to amend the procedure to reflect the commenced RC_2010_05 'Confidentiality of Accepted Outages by System Management'.	• Submissions closed 13 January 2011. • Final Report being prepared by System Management	• Final Report to be provided to the IMO for approval	TBD

Agenda Item 7a: Working Group Overview

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	Closed	Mar 08	Nov 10	11/11/2010	-
System Management Procedures WG	Active	Jul 07	Ongoing	28/10/2010	TBA
IMO Procedures WG	Active	Dec 07	Ongoing	02/02/2011	23/03/2011
Maximum Reserve Capacity Price WG	Active	May 10	Ongoing	20/01/2011	17/02/2011
Rules Development Implementation WG	Active	Aug 10	Ongoing	01/02/2011	22/02/2011

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 Procedure Change and Development Working Group; and
- Maximum Reserve Capacity Price Working Group.

The MAC has received the following requests for amendments to membership:

(a) IMO Procedure Change and Development Working Group

- Adam Lourey to replace Corey Dykstra as Alinta's member.
- An amended ToR is attached as appendix 1.

(b) Maximum Reserve Capacity Price Working Group

- Adam Boyd to replace Nenad Ninkov as Pacific Energy's representative.
- The ToR does not specifically list the members, so an amended ToR is not required.

(c) System Management Procedure Change and Development Working Group

- Pete Ryan to be removed as Griffin Energy's member, Shane Cremin will advise an appropriate replacement at the MAC meeting
- The ToR will be amended following the MAC meeting.

3. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Note** that Shane Cremin will advise the MAC of an appropriate replacement for Pete Ryan for the System Management Procedure Change and Development Working Group; and
- **Agree** with the proposed amendments to the membership to the Working Groups (outlined in sections (a) and (b) above and advised by Shane Cremin at the MAC meeting).

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
~~Corey Dykstra~~ Adam Lourey	-	Industry Representative, Alinta Limited
Michael Frost	-	Industry Representative, Perth Energy
Steve Gould	-	Industry Representative, Landfill Gas and Power
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 7b: MRCPWG Update

1. RECENT PROGRESS

The Maximum Reserve Capacity Price Working Group (MRCPWG) last met on 20 January 2011. The IMO has scheduled the next Working Group for 17 February 2011.

At this meeting, the Working Group discussed the draft report from Pricewaterhouse Coopers (PwC) on the methodology for determining the Weighted Average Cost of Capital (WACC). Members have been asked to provide any additional feedback to the IMO by 3 February. The IMO will provide this feedback to PwC and hold further discussions on specific elements of the review paper to allow PwC to provide a final report for the next MRCPWG meeting.

The Working Group also reviewed an interim discussion report from Sinclair Knight Merz (SKM) that presented options for determining the deep connection costs. The MRCPWG agreed that SKM should further develop its preferred methodology for presentation in a draft report for the next meeting. The IMO will provide MRCPWG members an opportunity to comment on the draft report prior to development of a final report.

2. UPCOMING MRCPWG MEETINGS

The table below details the IMO's current expectation of the agendas for upcoming MRCPWG meetings.

Meeting Number	Date	Likely Agenda Items
7	17 Feb	SKM Draft Report (Deep Connection Costs) PwC Final Report (WACC) Review of 2011 MRCP including issues raised in submissions
8	March	SKM Final Report (Deep Connection Costs) Initial draft Market Procedure amendments
9	April	Final Market Procedure amendments Discussion of use of MRCP within Market Rules

4. RECOMMENDATION

It is recommended that the MAC:

- **note** this update.

Agenda Item 7c: RDIWG Update

1. UPDATE

The Rules Development Implementation Working Group (RDIWG) last met on 1 February 2011.

At this meeting the following was discussed:

- Balancing Market design details.
- Load Following Ancillary Services Market: details of how this could be incorporated into the Balancing Market proposal; and
- Update on Reserve Capacity Refunds.

The following documentation, presented as initial drafts, to support the Balancing Market design details was provided to the RDIWG, but not discussed:

- High level business requirements;
- System impacts;
- Initial rule change impacts; and
- Process Maps.

2. BALANCING MARKET DESIGN

The IMO presented the Balancing Market proposed design in 12 stages, each of these stages was discussed in detail. The following high level issues were identified as needing further consideration and/or discussion:

- Bilateral Submissions/STEM and Net Contract Positions: Use of STEM and changes to Resource Plans;
- Resource Plans: Ramp rates and Mega Watt overshoot;
- How the proposed Balancing Market and Load Following Ancillary Services Market will interact;
- Verve Energy Portfolio Supply Curve (PSC), the timing of the development of the PSC and the ability for Verve Energy to nominate standalone Facilities;
- Market Forecasts: Whether high and low forecasts should be provided and the number and timing of market forecasts; and
- Pricing: How constrained on/off payments should be allocated and use of generation data versus sent out data.

Additionally, the RDIWG requested that the IMO develop a number of pricing scenarios to present at the next RDIWG meeting.

The IMO will review each of the high level issues outlined above, and present the outcome, as well as the pricing scenarios, at the 22 February 2011 RDIWG meeting.

Subject to the RDIWG's consideration of these issues, the IMO anticipates presenting a paper with the key design attributes of the Balancing Market proposal (and their rationale) and the results of the cost benefit work at the next RDIWG meeting on 15 March 2011. The IMO envisages this paper would seek the RDIWG's endorsement of the proposal and would include a recommendation to the MAC that work on development of rule and system changes commences.

4. RECOMMENDATIONS

It is recommended that the MAC:

- **Note** this update.

Agenda Item 8: Statutory Reviews under the Electricity Corporations Act

1. BACKGROUND

The Office of Energy (OoE) has prepared a paper outlining the statutory reviews to be undertaken during 2011. These reviews related to:

- The restriction imposed on Verve Energy with regard to the supply of electricity;
- The prohibition on Synergy in relation to the generation of electricity; and
- The introduction of further (including full) retail contestability in the Western Australian electricity market.

The OoE paper (attached as appendix 1) outlines the purpose of these reviews and the process to be followed, including details of when and how the Market Advisory Committee will be engaged and kept informed of the process.

2. RECOMMENDATIONS

The IMO recommends that the MAC:

- **Discuss** the paper provided by the OoE.

Government of **Western Australia**
Office of **Energy**

Our ref: SEM/0566
Enquiries: Nerea Ugarte
Telephone: 9420 5613

24 January 2011

Attention:
Market Advisory Committee of the
Independent Market Operator

STATUTORY REVIEWS UNDER THE ELECTRICITY CORPORATIONS ACT 2005

ISSUE

The Office of Energy wishes to inform the Market Advisory Committee of the statutory reviews to be undertaken during 2011.

RECOMMENDATION

That the MAC notes the attached briefing.

BACKGROUND

Under the *Electricity Corporations Act 2005* (the Act), the Minister for Energy is required to review the operation of sections 38, 47 and 54 of the Act. These reviews relate to:

- the restriction imposed on the Electricity Generation Corporation (Verve Energy) with regard to the supply of electricity to a person for the person's own consumption;
- the prohibition imposed on the Electricity Retail Corporation (Synergy) in relation to the generation of electricity; and
- the introduction of further (including full) retail contestability in the Western Australian electricity market.

Further information on the purpose of these reviews and the process to be followed is provided in the attached briefing notes.

PAUL BIGGS
A/DIRECTOR GOVERNANCE

g:\operations\mb\restrictions on synergy and verve\consultation\agenda paper for mac jan 2011.doc

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ATTACHMENT 1

STATUTORY REVIEWS UNDER THE ELECTRICITY CORPORATIONS ACT 2005

REVIEW OF PROHIBITIONS ON VERVE ENERGY AND SYNERGY

Purpose of the Reviews

- Under sections 38 and 47 of the *Electricity Corporations Act 2005* (the Act), the Electricity Generation Corporation (Verve Energy) is restricted from retailing electricity and the Electricity Retail Corporation (Synergy) is prohibited from generating electricity for a designated period of:
  - seven years (up to 31 March 2013); or
  - ten years (up to 31 March 2016), if the Minister for Energy (the Minister) makes a declaration to extend the period, following a review of the operation of the prohibitions.
- The prohibitions were put in place to support the development of competition in the electricity market.
- Sections 39 and 48 of the Act require that the Minister review these prohibitions before the expiry of five years from the commencement of these sections (that is, before 1 April 2011).
  - The purpose of the reviews is to determine the effect that the prohibitions have had, and are likely to have, on the encouragement of competition in the generation, wholesale and retail electricity markets.
  - The findings of the reviews will inform the Minister's decision in relation to the potential extension of the designated period to 31 March 2016.

Review Process

- Under sections 39(3) and 48(3) of the Act, before the Minister carries out the review of the prohibitions, he is to obtain the views of the Economic Regulation Authority (the Authority) on the effect of the prohibitions on the development of competition in the generation, wholesale and retail electricity markets.
  - On 1 December 2010, the Minister wrote to the Authority requesting its views.
- In response, the Authority advised the Minister of its intention to undertake public consultation to assist it in forming a view on the effect that the restrictions have had and are likely to have on the market.
  - The Authority is planning to release an Issues Paper in January 2011.
  - The consultation will inform the Authority's preparation of a report to the Minister outlining its views on the operation of the restrictions. This report is scheduled to be submitted to the Minister in February 2011.
  - It is understood that the Authority will make its Issues Paper, any submissions received and its report to the Minister publicly available.

- It is important to note that the Authority's consultation process and report to the Minister do not constitute the review.
  - This is a process that the Authority has independently decided to follow to inform its views on the matters under consideration.

- The Office of Energy, on behalf of the Minister, will commence the reviews upon receipt of the Authority's advice. This process will include:
  - extensive research and analysis by the Office of Energy;
  - one-on-one discussions with key stakeholders, including members of the Market Advisory Committee (MAC) of the Independent Market Operator;
  - public consultation on discussion papers and/or recommendation papers to be prepared by the Office of Energy; and
  - a cost-benefit analysis (to be undertaken by a consultant).

- The Office of Energy will commence immediately its background research and hold discussions with stakeholders so that the official reviews can proceed quickly once the Minister has received the Authority's views.

- The views expressed by the Authority and interested parties in response to the Authority's consultation process will be taken into consideration by the Office of Energy, but the Authority's report should not be taken as pre-empting the Minister's position on the potential extension of the designated period.
  - The outcome of the Office of Energy's review and the Minister's decision may or may not be consistent with the Authority's advice to the Minister.

- The Office of Energy will take a strategic approach in its consideration of the effect of the prohibitions on the development of competition.
  - To the extent that there are synergies, the impact of the prohibitions will be considered in parallel with the review of the merits of introducing further electricity retail competition (see below).
  - Both reviews will be run in parallel and by the same team.

- Due to the range, complexity and importance of the issues to be considered as part of the reviews, it is likely that they will extend beyond 1 April 2011.
  - The Office of Energy is planning to submit its recommendations to the Minister by mid-2011.
  - A detailed project plan is being developed.
  - An update on the project will be provided to MAC once the plan is completed.

REVIEW AS TO INTRODUCTION OF FURTHER RETAIL COMPETITION

Purpose of the Review

- Pursuant to section 55 of the Act, the Minister is to undertake a review of the operation of section 54 and any orders made under section 54(4).
  - Section 54 relates to the level of contestability in the Western Australian electricity retail market.
  - Currently the contestability threshold is 50 MWh per annum.
- The purpose of the review is to consider whether or not further (including full) competition should be introduced in the electricity retail market.
- The Act requires this review to be undertaken as soon as practicable after the end of the period of three years beginning on the coming into operation of section 54, noting that section 54 came into operation on 1 April 2006.
- As soon as practicable after the review is completed, the Minister is to cause a report, based on the review, to be laid before each House of Parliament.

Review Process

- The Office of Energy will undertake the review on behalf of the Minister.
- This work will be undertaken in parallel with the reviews of the prohibitions on Verve Energy and Synergy.
- The process will include:
  - extensive research and analysis by the Office of Energy;
  - one-on-one discussions with key stakeholders, including members of MAC;
  - public consultation on discussion papers and/or recommendation papers to be prepared by the Office of Energy; and
  - a cost-benefit analysis (to be undertaken by a consultant).
- The Minister is not required to seek the views of the Authority in relation to this review.
- A detailed project plan is being developed.
  - The Office of Energy is planning to submit its recommendations to the Minister by mid-2011.
  - An update on the project will be provided to MAC once the plan is completed.