



INDEPENDENT  
MARKET  
OPERATOR

## Rule Change Notice

### Assignment of Capacity Credits to Network Control Service Facilities (RC\_2012\_03)

This notice is given under clause 2.5.7 of the Market Rules.

**Submitter:** Greg Ruthven, IMO

**Date Submitted:** 27 March 2013

#### The Proposal

A Network Control Service (NCS) is a service provided by generation or demand side management that can act as a substitute for transmission or distribution network upgrades (clause 5.1.1). An NCS is provided by a Facility in accordance with an NCS Contract, which exists between the relevant Market Participant and the Network Operator.

NCS Facilities are capable of simultaneously providing network support, deferring the need for network expenditure, and providing Reserve Capacity to the market, either in the form of reduced demand or additional generation capacity. Further, these Facilities may be capable of providing this Reserve Capacity to the market in times when the NCS service is not required by the network.

Due to an oversight in the Market Rules, although both NCS Facilities and Facilities which are associated with a pre-existing Long Term Special Price Arrangement (LT-SPA) may be assigned Certified Reserve Capacity, neither are assigned Capacity Credits for their Certified Reserve Capacity in clause 4.20.5A. The lack of assignment of Capacity Credits can result in a number of perverse and inefficient outcomes. This includes an inability for the IMO to include this capacity in the calculation of Reserve Capacity Requirements potentially resulting in a false shortfall and potentially inequitable treatment of new and existing Facilities that enter an NCS Contract.

The Rule Change Proposal seeks to amend the Market Rules so that both Facilities that are subject to an NCS Contract and those that are associated with a pre-existing LT-SPA with Certified Reserve Capacity are automatically assigned Capacity Credits. A number of additional amendments are also proposed that ensure the assigned capacity is properly considered in the Reserve Capacity Mechanism and to correct several clause references and typographical errors in the relevant sections of the Market Rules.

Appendix 1 contains the Rule Change Proposal and gives complete information about:



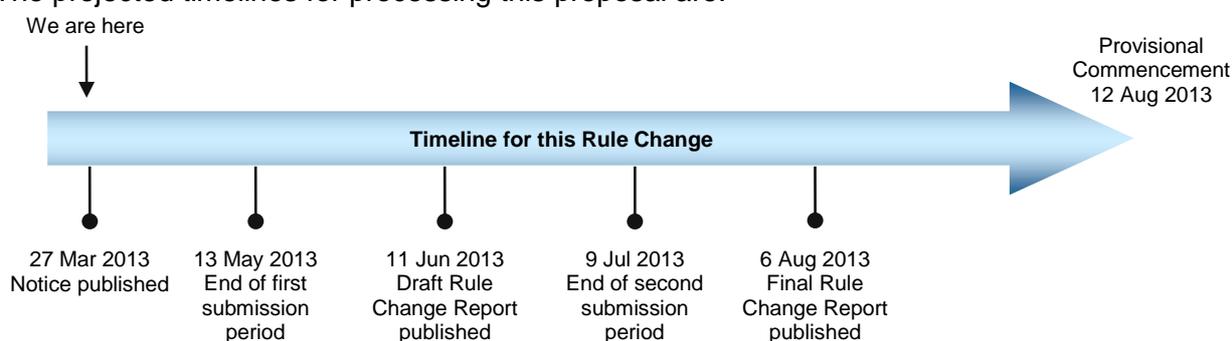
- the proposed amendments to the Market Rules;
- relevant references to clauses of the Market Rules and any proposed specific amendments to those clauses; and
- the submitter's description of how the proposed amendments would allow the Market Rules to better address the Wholesale Market Objectives.

## Decision to Progress the Rule Change

The IMO has decided to progress the Rule Change Proposal on the basis that Rule Participants should be given an opportunity to provide submissions as part of the rule change process.

## Timeline

The projected timelines for processing this proposal are:



## Call for Submissions

The IMO invites interested stakeholders to make submissions on this Rule Change Proposal. The submission period is 30 Business Days from the Rule Change Notice publication date. Submissions must be delivered to the IMO by **5.00pm** on **Monday, 13 May 2013**.

The IMO prefers to receive submissions by email (using the submission form available on the Market Web Site: <http://www.imowa.com.au/rule-changes>) to: [market.development@imowa.com.au](mailto:market.development@imowa.com.au)

Submissions may also be sent to the IMO by fax or post, addressed to:

### Independent Market Operator

Attn: Group Manager, Development and Capacity  
 PO Box 7096  
 Cloisters Square, PERTH, WA 6850  
 Fax: (08) 9254 4399



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## Wholesale Electricity Market Rule Change Proposal

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**Rule Change Proposal ID:** RC\_2012\_03  
**Date received:** 27 March 2013

### Change requested by:

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<b>Date submitted:</b>	27 March 2013
<b>Urgency:</b>	Medium
<b>Change Proposal title:</b>	Assignment of Capacity Credits to Network Control Service Facilities
<b>Market Rules affected:</b>	Clauses 4.1.13, 4.13.9, 4.14.3, 4.14.10, 4.15.2 and 4.20.5A

### Introduction

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

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

#### Independent Market Operator

Attn: Group Manager, Development and Capacity  
PO Box 7096  
Cloisters Square, Perth, WA 6850  
Fax: (08) 9254 4339  
Email: [market.development@imowa.com.au](mailto: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.

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## Details of the Proposed Rule Change

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

#### Background

The Wholesale Electricity Market (WEM) includes a Reserve Capacity Mechanism (RCM) that facilitates the provision of adequate generation and Demand Side Management (DSM) capacity to meet the defined reliability criteria. These criteria define the Reserve Capacity Target (RCT), which is determined from the forecasted maximum demand for the South West interconnected system (SWIS) and an appropriate reserve margin.

The IMO procures capacity to meet the RCT by encouraging Market Participants to apply for Capacity Credits corresponding to the amount of capacity they can provide to the market. Any shortfall or excess in capacity has a negative financial impact on the market.

The RCM includes a methodology (Appendix 3 of the Market Rules) to limit excess capacity – except for capacity from committed Facilities that is intended to be traded bilaterally. In the event of a shortfall in meeting the RCT, the IMO would be required to procure additional capacity through the Reserve Capacity Auction or Supplementary Reserve Capacity mechanisms to meet the shortfall.

#### Facilities subject to Network Control Service Contracts

A Network Control Service (NCS) is a service provided by generation or demand side management that can act as a substitute for transmission or distribution network upgrades (clause 5.1.1). An NCS is provided by a Facility in accordance with an NCS Contract, which exists between the relevant Market Participant and the Network Operator.

A Market Participant with a Facility that is subject to an NCS Contract is required in clause 5.2A.2 of the Market Rules to apply for Certified Reserve Capacity. Further, it is possible under the Market Rules for a Market Participant with an existing Facility which has already been assigned Capacity Credits to enter into an NCS Contract with a Network Operator.

NCS Facilities may be capable of simultaneously providing network support, deferring the need for network expenditure, and providing Reserve Capacity to the market, either in the form of reduced demand or additional generation capacity. Further, these Facilities may be capable of providing this Reserve Capacity to the market in times when the NCS service is not required by the network.

### **Long Term Special Price Arrangements**

To assist new Facilities entering the market in an auction situation to finance their project without bilateral contracts a Long Term Special Price Arrangement (LT-SPA) option is available. Where capital costs of not less than 10 percent of the Maximum Reserve Capacity Price (MRCP) per MW are incurred in supplying new capacity, either from an upgrade of an existing Facility or from a new Facility, then that Facility is eligible for a LT-SPA. This arrangement allows the Market Participant to receive the (inflation adjusted) auction price it earns in the first year in each year the LT-SPA applies, which may be up to 10 years.

A holder of a LT-SPA is required to apply to have its capacity re-certified each year, and the guaranteed LT-SPA price will only be paid on the lesser of the capacity actually certified in each year and the original capacity upon which the LT-SPA was granted.

### **Issues**

The IMO has identified a number of issues within the Market Rules associated with NCS Facilities and one issue associated with LT-SPA Facilities.

- A Facility subject to an NCS Contract or a pre-existing LT-SPA is not assigned Capacity Credits for its Certified Reserve Capacity in clause 4.20.5A. This is at odds with other sections of the Market Rules that require these Facilities to apply for Certified Reserve Capacity. This may result in economically inefficient outcomes where some available, certified capacity is not considered in the determination of whether there exists a shortfall in Reserve Capacity.
- A Market Participant with an NCS Facility is obliged to offer its capacity into the Reserve Capacity Auction under clause 4.14.10. This is in conflict with clause 4.14.3, which effectively prohibits the Market Participant from offering this capacity into the Reserve Capacity Auction.
- Clause 4.13.9, which prescribes the date by which Reserve Capacity Security for a new Facility (or an existing Facility which has undergone an upgrade) must be provided to the IMO, does not cover Facilities subject to an NCS Contract. This means that the Certified Reserve Capacity of a new NCS Facility would not lapse if the Market Participant failed to provide any Reserve Capacity Security.
- There is an error in the cross references in clause 4.13.9. Clause 4.13.9(a) refers to clause 4.1.13(a) but should refer to both clause 4.1.13(a)(i) and clause 4.1.13(b)(i). Clause 4.13.9(b) refers to the clause 4.1.13(b) when it should refer to both clause 4.1.13(a)(ii) and clause 4.1.13(b)(ii) to align with the intended outcome.
- The calculation of the Reserve Capacity Auction Requirement in clause 4.15.2 does not consider NCS capacity, though this capacity is deducted in the determination of

the capacity requirement for each Availability Class in Appendix 3 of the Market Rules (Reserve Capacity Auction & Trade Methodology).

### **April 2012 MAC meeting**

This Rule Change Proposal was initially presented to and discussed with the MAC in April 2012<sup>1</sup>. A number of issues were raised at the meeting including:

- Appropriateness of the market versus network users bearing the cost of capacity credits;
- Payment of Capacity Credits envisioned in the original market design;
- The role of the NCS contract and Capacity Credits as inputs into Western Power's assessment of network solutions; and
- The allocation of network solution costs and the incentives where the market bears the cost of the Capacity Credits.

At the conclusion of the discussion, the Chair noted that the IMO would like to still provide these facilities with Capacity Credits as it would ensure that the amount of capacity available to the market is correctly reflected.

The Chair also informed the MAC that the IMO and Western Power would further consider a revised design for the treatment of NCS Facilities and that following that discussion a revised Pre Rule Change Proposal would be presented at a future MAC meeting.

### **February 2013 workshop with Western Power, ERA and PUO**

As committed at the April 2012 MAC meeting, the IMO and Western Power, along with representatives from the Economic Regulation Authority (ERA) and the Public Utilities Office (PUO) met on 7 February 2013 to discuss NCS Contracts and Capacity Credits.

In addition to discussing several of the issues covered in the April 2012 MAC meeting, the workshop also covered in more detail:

- The ability for Facilities to simultaneously both provide capacity and fulfill obligations under an NCS Contract;
- The appropriate compensation mechanisms for NCS Facilities, whether from the market or from Western Power via an NCS Contract;
- The consideration of Capacity Credits as an input into network solution assessments; and
- Possible implications for the allocation of NCS costs where the need is driven by a block load versus organic growth and the role of Capacity Credit payments in this cost allocation.

A summary of the issues discussed at this meeting and the agreed views are outlined in Appendix 1 along with the issues raised at the April 2012 MAC meeting.

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<sup>1</sup> MAC Meeting No. 48 Final Minutes (18 April 2012), available at: [http://www.imowa.com.au/MAC\\_48](http://www.imowa.com.au/MAC_48)

## Proposal

In preparing this Rule Change Proposal, the IMO has considered the current market design, historical amendments to the Market Rules, potential outcomes from assigning or not assigning Capacity Credits to NCS Facilities and Facilities subject to a LT-SPA, and the administration and associated market processes around NCS Facilities. Consistent with the request from the April 2012 MAC Meeting, the IMO has reconsidered the design of the NCS and the relationship to investment decisions made by the Network Operator.

The IMO has determined to propose rule amendments which ensure NCS Facilities and LT-SPA Facilities are assigned Capacity Credits (assuming that they are certified) and that these Capacity Credits are administered in the same manner as all other Capacity Credits.

The IMO's decision to progress the Rule Change Proposal in this manner was made on the following basis:

### *Assignment of Capacity Credits to NCS Facilities and Facilities subject to a LT-SPA*

If these Facilities are assigned Capacity Credits the IMO is able to consider the potential capacity available from these Facilities in the determination of any shortfall in Reserve Capacity. There is potential for a 'false' shortfall in Reserve Capacity to arise if these Facilities are granted Certified Reserve Capacity but not assigned Capacity Credits. This may result in the IMO being required to procure additional capacity from elsewhere at a higher overall cost to the market.

NCS Facilities are required under clause 5.2A.2 of the Market Rules to apply for Certified Reserve Capacity. The original Market Rules were silent on the assignment of Capacity Credits to all Facilities including NCS Facilities and LT-SPA Facilities. There is nothing in the previous Rule Change Proposals (RC\_2010\_11<sup>2</sup> and RC\_2010\_14<sup>3</sup>) to suggest that NCS Facilities and LT-SPA Facilities should not be assigned Capacity Credits. RC\_2010\_11 specifically includes steps in the overview process diagram where NCS Facilities are granted Capacity Credits following approval of Certified Reserve Capacity<sup>4</sup>. See Appendix 2 for further detail.

The Market Rules do not preclude a Facility that has already been assigned Capacity Credits for a Capacity Year (two years prior to the commencement of the relevant Capacity Year) from subsequently entering into an NCS contract for that period. This may create perverse incentives for parties to delay the execution of an NCS Contract until Capacity Credits have already been assigned.

An existing Facility with Capacity Credits may secure an NCS Contract. It would be perverse for that Facility to no longer receive Capacity Credits as a result of the NCS Contract when the Facility remains capable of providing Reserve Capacity to the market.

A LT-SPA exists to provide long-term certainty of income for a Facility that is cleared in a previous Reserve Capacity Auction. It seems contrary to this intent for the Facility to not receive Capacity Credits, and the corresponding income stream, due to the existence of the LT-SPA.

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<sup>2</sup> Full details of RC\_2010\_11 are available at: [http://www.imowa.com.au/RC\\_2010\\_11](http://www.imowa.com.au/RC_2010_11)

<sup>3</sup> Full details of RC\_2010\_14 are available at: [http://www.imowa.com.au/RC\\_2010\\_14](http://www.imowa.com.au/RC_2010_14)

<sup>4</sup> Final Rule Change Report for RC\_2010\_11 (17 August 2010), Overview of Proposed Process, page 36

### *Payment of Capacity Credits by the market using existing mechanisms*

The market benefits from the provision of Reserve Capacity by an NCS Facility, regardless of the support the Facility is providing to the Network, commensurate with the benefit from the provision of Reserve Capacity by non-NCS Facilities. As such, the IMO considers it appropriate that the market should compensate the Facilities for its capacity.

An existing Facility with Capacity Credits, which are already being funded by the market, may secure a NCS Contract. It would be perverse for the market to cease to fund those Capacity Credits simply because the Facility secured an NCS Contract when the Facility remains capable of providing Reserve Capacity to the market.

### *Participation of NCS Facilities in the Reserve Capacity Auction*

The function of the Reserve Capacity Auction is to procure any shortfall in capacity needed to meet the Reserve Capacity Requirement. As such, any capacity that has already been accounted for in the calculation of the shortfall should not be allowed to participate in the auction. This currently includes bilaterally traded capacity, and capacity which is the subject of a LT-SPA.

If NCS Facilities are assigned Certified Reserve Capacity and subsequently receive Capacity Credits then the associated capacity would have formed part of the initial calculation of the shortfall and it should be clarified that this capacity is also not eligible for participation in the Reserve Capacity Auction.

Allowing participation in the Reserve Capacity Auction could result in adverse auction outcomes and higher overall costs for the Wholesale Electricity Market. A Facility which has already secured an NCS Contract may be provided an opportunity to seek out a higher payment for its Capacity Credits than either the contracted or Administered Price would provide for. This would ultimately come at a higher cost to all Market Customers and is contrary to the economically efficient supply and minimization of long-term cost of electricity services to the market.

### *Reserve Capacity Security for new NCS Facilities*

Clause 4.13.9 prescribes the date by which Reserve Capacity Security for a new Facility (or an existing Facility which has undergone an upgrade) must be provided to the IMO and allows the Certified Reserve Capacity of the Facility to lapse if the Reserve Capacity Security is not provided by the specified date.

The clause currently covers Facilities with Certified Reserve Capacity that is to be bilaterally contracted and Facilities with Certified Reserve Capacity that is to be offered into the Reserve Capacity Auction. By virtue of omission, a Facility with Certified Reserve Capacity that is to be the subject of an NCS Contract (and will not be bilaterally traded) may fail to provide Reserve Capacity Security by the required date and yet its Certified Reserve Capacity would not lapse.

Consistent with the intention of reducing the risk that new Facilities fail to meet their capacity obligations, the IMO considers inclusion of a specific reference to Facilities subject to an NCS Contract in this clause is appropriate.

### *Alignment of clause 4.15.2 and Appendix 2 of the Market Rules*

Clause 4.15.2 outlines information to be published by the IMO when the Reserve Capacity

Auction is not cancelled. Part (b) of the clause includes a calculation for the Reserve Capacity Auction Requirement which is equal to the Reserve Capacity Requirement less capacity to be traded bilaterally less Capacity Credits assigned under the Early Certified Reserve Capacity process. Capacity subject to NCS Contracts or LT-SPAs is not considered in this calculation.

However, the calculation of the capacity requirement for each Availability Class, outlined in Appendix 3 of the Market Rules, accounts for NCS Facilities and LT-SPAs by deducting these from the Availability Class requirement that is included within the Availability Curve in clause 4.5.12(c) (Early Certified Reserve Capacity is also deducted).

This inconsistency means that the Reserve Capacity Auction Requirement would be overstated by the amount of capacity associated with NCS Facilities and LT-SPAs.

The consideration of capacity associated with NCS Facilities and LT-SPAs would avoid this potential overstatement in capacity shortfall and is consistent with the proposal that NCS Facilities that are granted Certified Reserve Capacity should also be assigned Capacity Credits.

### **Proposed Amendments**

The IMO proposes to amend the relevant clauses so that:

- a Facility subject to an NCS Contract with Certified Reserve Capacity is automatically assigned Capacity Credits and does not enter the Reserve Capacity Auction;
- a Facility is automatically assigned Capacity Credits for Certified Reserve Capacity that is associated with a pre-existing LT-SPA;
- clause 4.13.9 specifies the date by which Reserve Capacity Security must be provided for a new NCS Facility and the cross references to 4.1.13 in this clause are corrected; and
- clause 4.15.2 considers capacity associated with NCS Facilities and LT-SPAs in the calculation of the Reserve Capacity Auction Requirement so that it aligns with Appendix 3 of the Market Rules.

The IMO also proposes a number of amendments to address incorrect clause references and minor and typographical errors which have been identified in the relevant sections of the Market Rules.

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## **2. Explain the reason for the degree of urgency:**

Western Power has indicated on several occasions during the last two years that it has been considering the use of NCS in three areas of the network (Albany, North Country, Goldfields). At the workshop on 7 February 2013, Western Power indicated that it did not have any immediate plans to enter into a NCS Contract, but that clarity on the assignment of Capacity Credits for NCS Facilities is desirable for the purposes of contract negotiations.

In light of the Reserve Capacity Cycle timelines and the advice on potentially entering the first NCS Contract, the IMO proposes to assess this Rule Change Proposal under the Standard Rule Change Process outlined in clause 2.7 of the Market Rules. If the proposed amendments were approved, the Standard Rule Change Process could allow for any Amended Rules to commence prior to the assignment of Capacity Credits for the 2013

Reserve Capacity Cycle, which is anticipated to occur on 4 September 2013.

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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)*

4.1.13. Each Market Participant must provide to the IMO any Reserve Capacity Security required in accordance with clause 4.13.1 not later than 5:00 PM of the last Business Day falling on or before:

(a) for Reserve Capacity Cycles up to and including 2010:

- i. 10 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c); or
- ii. 29 August of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c);

(b) for Reserve Capacity Cycles from 2011 onwards:

- (i) 2 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c) or the Facility is subject to a Network Control Service Contract; or
- (ii) 14 September of Year 1 of the relevant Reserve Capacity Cycle if any of the Facility's Certified Reserve Capacity is specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c).

4.13.9. If a Market Participant does not comply with clause 4.13.1 in full by the date and time specified in:

- (a) clause 4.1.13(a)(i) or clause 4.1.13(b)(i), as applicable, in the case of a Facility with Certified Reserve Capacity specified to be traded bilaterally in accordance with clause 4.14.1(c) or a Facility subject to a Network Control Service Contract; or
- (b) ~~clause 4.1.13(b)~~ 4.1.13(a)(ii) or clause 4.1.13(b)(ii), as applicable, in the case of a Facility with Certified Reserve Capacity specified to be offered into the Reserve Capacity Auction in accordance with clause 4.14.1(a) and where none of the Facility's Certified Reserve Capacity is specified to be traded bilaterally in accordance with clause 4.14.1(c),

for the Reserve Capacity Cycle to which the certification relates, the Certified Reserve Capacity of that Facility will lapse.

- 4.14.3. A Market Participant ~~may~~ must not make a submission under clause 4.14.1 with respect to a Facility subject to a Network Control Service Contract.
- 4.14.10. A Market Participant must make available in any Reserve Capacity Auction held in accordance with clause 4.15 any Certified Reserve Capacity it holds for a Facility, except to the extent that:
- (a) clause 4.14.8 applies;
  - (b) the Certified Reserve Capacity is covered by a pre-existing Long Term Special Price Arrangement; ~~or~~
  - (c) the IMO has notified the Market Participant in accordance with clause 4.14.9 that the Certified Reserve Capacity can be traded bilaterally; ~~or~~
  - (d) the Certified Reserve Capacity is issued to a Facility that is subject to a Network Control Service Contract.
- 4.15.2. If the Reserve Capacity Auction for a Reserve Capacity Cycle is not cancelled in accordance with clause 4.15.1, then, by the date and time specified in clause 4.1.16, the IMO must publish a notice specifying:
- (a) that the Reserve Capacity Auction will be held;
  - (b) the Reserve Capacity Auction Requirement, where this equals the
    - i. Reserve Capacity Requirement; less
    - ii. the total amount of Certified Reserve Capacity which the IMO has notified Market Participants can be traded bilaterally under clause 4.14.9 or is covered by a pre-existing Long Term Special Price Arrangement; less
    - iii. the amount of Capacity Credits assigned under clause 4.28C for the relevant Reserve Capacity Cycle; ~~and~~ less
    - iv. the total amount of Certified Reserve Capacity assigned to Facilities that are subject to a Network Control Service Contract; and
  - (c) the amount of Reserve Capacity required to be procured via the auction from each Availability Class.
- 4.20.5A. Where a Reserve Capacity Auction is:
- (a) cancelled under clause 4.15.1 the IMO must assign Capacity Credits:
    - i. \_\_\_\_\_ to each Facility included in a notification under clause 4.14.9. ~~The~~ where the quantity of Capacity Credits assigned will equal the quantity in the notification; ~~;~~
    - ii. \_\_\_\_\_ to each Facility assigned Certified Reserve Capacity that is subject to a Network Control Service Contract, where the quantity of

Capacity Credits assigned will equal the quantity specified under clause 4.9.9(a); and

iii. to each Facility assigned Certified Reserve Capacity with a pre-existing Long Term Special Price Arrangement, where the quantity of Capacity Credits assigned will equal the quantity specified under clause 4.14.1(b),

~~and~~ The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.16;

- (b) not cancelled under clause 4.15.1 the IMO must assign Capacity Credits:
- i. to each Facility for which a Market Participant lodged a notification under clause 4.20.1(a). ~~The~~, where the quantity of Capacity Credits assigned will equal the quantity notified under that clause and confirmed by the IMO under clause 4.20.2; ~~and~~
  - ii. to each Facility included in a notification under clause 4.14.9. ~~The~~, where the quantity of Capacity Credits assigned will equal the quantity notified under that clause, as may be amended by a notification given under clause 4.20.1 and confirmed by the IMO under clause 4.20.2;
  - iii. to each Facility assigned Certified Reserve Capacity that is subject to a Network Control Service Contract, where the quantity of Capacity Credits assigned will equal the quantity specified under clause 4.9.9(a); and
  - iv. to each Facility assigned Certified Reserve Capacity with a pre-existing Long Term Special Price Arrangement, where the quantity of Capacity Credits assigned will equal the quantity specified under clause 4.14.1(b),
- ~~and~~ The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.21A; and
- (c) not cancelled under clause 4.15.1 and the IMO receives no notification under clause 4.20.1 from a Market Participant, the IMO must not assign Capacity Credits to that Market Participant.

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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 proposed amendments will improve the integrity of the Market Rules and better achieve Wholesale Market Objectives (a), (b) and (c).

The proposed amendments will provide certainty to Market Participants that they will receive Capacity Credits for Certified Reserve Capacity that is subject to an NCS Contract or a LT-SPA. This will:

- encourage Market Participants to enter into NCS Contracts and locate in areas that

assist the operation of the network, better promoting the economically efficient and reliable production and supply of electricity and electricity related services in the SWIS (Wholesale Market Objective (a));

- encourage and facilitate the entry of new capacity that will be subject to an NCS or a LT-SPA to the market, thereby increasing competition (Wholesale Market Objective (b)); and
- ensure that the long-term cost of electricity supplied is minimised by avoiding higher costs associated with procuring capacity in the event of a 'false' shortfall in capacity; and by reducing the overall cost of the combined network and energy costs by providing appropriate compensation and incentives for new Facilities that, by locating in a particular region, may avoid higher alternative network augmentation costs (Wholesale Market Objective (c)).

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

### **Costs:**

No significant costs have been identified.

This proposal would not require any changes to market or dispatch systems.

### **Benefits:**

The proposed amendments clarify the assignment of Capacity Credits to NCS Facilities and Facilities subject to a pre-existing LT-SPA.

The amendments ensure all certified Facilities that are capable of providing capacity to the market, including NCS Facilities and Facilities subject to a LT-SPA, are appropriately assigned Capacity Credits and are considered when the IMO determines if there is sufficient capacity to meet the Reserve Capacity Target. This avoids a potential 'false' shortfall of capacity in the market and the potentially higher costs associated with such circumstances.

The amendments also remove inconsistencies in the Market Rules and update cross references to align with the intended outcomes.

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## Appendix 1: Summary of issues raised and agreed responses

Topic	Comments	Agreed response (IMO, WP, ERA, PUO)
<b>Should a Facility be able to be dispatched for two purposes?</b>	At the February 2013 workshop, the ability for Facilities to provide both NCS and Reserve Capacity was discussed.	It was agreed that Facilities are able to provide both services and that this ability should be recognised in the Market Rules. The IMO considers it would be beneficial to the market to use Facilities in both capacities and that Facilities should be compensated for the services provided.
<b>Should a NCS facility be eligible to be assigned Capacity Credits?</b>	At the February 2013 workshop, the IMO noted that NCS Facilities are already required to register and apply for Certified Reserve Capacity. The benefit to the market of assigning these Facilities Capacity Credits was discussed.	It was agreed that assigning Capacity Credits to these Facilities (provided that they satisfy the requirements for Certified Reserve Capacity) would benefit the market. It was agreed that an NCS Facility can provide Reserve Capacity in the same way as other Facilities. This would avoid the potential adverse outcome of a 'false' shortfall in Reserve Capacity. In this scenario, additional capacity would need to be procured by the IMO at a potentially higher cost to the market. Further, it is possible for existing Market Participants which have already been assigned Capacity Credits to enter into an NCS Contract. It was agreed that it would not be appropriate for an existing Facility to no longer receive Capacity Credits simply because it has secured an NCS Contract.
<b>Should a NCS Facility be required under the Market Rules to apply for Certified Reserve Capacity?</b>	At the February 2013 workshop, the IMO noted that NCS Facilities were currently required to register and apply for Certified Reserve Capacity.	The consensus view at the workshop was that it was likely that an NCS Facility would apply for Certified Reserve Capacity, but that the risk of a 'false' shortfall would remain if there was no specific requirement. It was agreed that the requirement for NCS Facilities to apply for Certified Reserve Capacity should be retained.

<p><b>If a Facility receives Capacity Credits, who should bear the costs of Capacity Credits?</b></p>	<p>At the April MAC meeting, Mr Dykstra queried why conceptually the market should bear the costs and not the network users given that an NCS contract is a replacement for a network solution.</p> <p>Mr Dykstra suggested that either the marginal load that triggers the need for the upgrade or more generally the users of that area of the network should pay for the transmission network upgrade through the network charges, so that specific users bear the costs and not the market. This would be more consistent with the impacts of the network solution having been undertaken.</p> <p>This issue was explored further at the February 2013 workshop.</p>	<p>The consensus view at the workshop was that the Reserve Capacity available from an NCS Facility would benefit the market in the same manner that Reserve Capacity from a non-NCS Facility provides a benefit. As such, the market should provide compensation for this in the same manner as other Facilities.</p> <p>The workshop attendees considered the scenario where an existing Facility secured an NCS Contract and noted that it would be perverse for the market to stop paying that Facility merely because of the existence of the NCS Contract. Although not directly related, Western Power also advised at the workshop that it is required to consider all costs and benefits to all stakeholders in the market when assessing network solutions. As such, the workshop participants agreed that the cost of Capacity Credits would be considered in network constraint assessments regardless of who bore the costs of Capacity Credits.</p>
<p><b>Should Western Power or the Facility be paid for Capacity Credits?</b></p>	<p>Following agreement that NCS Facilities should be eligible for Capacity Credits and that the Market is the most appropriate mechanism through which compensation is provide, the issue of who would be paid (the Facility or Western Power) was discussed at the February 2013 workshop.</p>	<p>The consensus view at the workshop was that the Market Participant with the NCS Facility should be paid capacity income directly. This would align with existing mechanisms and allows that a Facility may enter into an NCS for less than the total capacity that it is able to provide.</p> <p>Further, it was noted that Western Power is not a Market Participant and is precluded from trading in the market.</p>
<p><b>How was the assignment and payment of Capacity Credits envisioned in the original market design?</b></p>	<p>During the April 2012 MAC meeting, Mr Dykstra noted that the original market design document had an availability payment and dispatch payment for a NCS contract. The IMO paid the availability costs less the value of Capacity Credits for that Facility, with the recovery of those costs being from System Management. Mr Dykstra considered that this suggests that there would not be a net cost to the market of the NCS. Mr Gaston considered that this makes more sense.</p>	<p>The IMO has reviewed the original market design documents and the original Market Rules as part of this Rule Change Proposal (see Appendix 2).</p> <p>There have been a number of changes to the Market Rules regarding NCS since the start of the market. In considering the issues and possible solutions, the IMO considered the assignment and payment for Capacity Credits in the context of the current market design and Market Rules and found that the proposed solution best meets the Market Objectives.</p>

<p><b>Consideration of Capacity Credit costs in Western Power's assessment of options for addressing network constraints</b></p>	<p>During the April 2012 MAC meeting, Mr Gaston pointed to a potential issue in Western Power's assessment of solutions. Namely, if Western Power procures a NCS Contract from a Facility which has included into its offer a reduced price in the expectation that it will also receive income from Capacity Credits then the price offer from the NCS provider will be lower than the actual costs of provision.</p> <p>He queried whether Western Power's assessment of whether or not to enter into a NCS contract would be based on an artificially low NCS price and therefore the decision on whether to physically upgrade the line to overcome the network constraint would potentially be distorted.</p>	<p>Western Power has advised that in assessing solutions for addressing a network constraint, it is required to consider the costs and benefits to all network users. As such, the cost of Capacity Credits would be considered as part of the assessment regardless of who paid for those Credits.</p>
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## Appendix 2: Relevant history of NCS and Capacity Credits

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### Original Market Design and Market Rules

The original market design document and the notes in the marked up version of the original Market Rules (gazetted on 19 September 2006) indicate that although NCS Facilities would not be eligible to participate in any Reserve Capacity Auction, that these Facilities would, if certified by the IMO, automatically receive Capacity Credits and hence would be required to make capacity available to the market.

*“The Network Control Service contract allows System Management to issue real-time dispatch instructions to the facility as required, within the capacity and availability limits of the contract. For its part, the facility providing Network Control Service gets guaranteed minimum revenue and is not precluded from participating in the energy market. The rules do require, however, that any facility contracted to provide Network Control Service must seek certification for Reserve Capacity. The Reserve Capacity rules ensure that to the extent such a facility is certified, it will be issued Capacity Credits and settled at the prevailing Reserve Capacity price.”<sup>5</sup>*

4.14.3. A Market Participant may not make a submission under clause 4.14.1 with respect to a Facility subject to a Network Control Service Contract.

~~These Facilities will be automatically assigned Capacity Credits.~~<sup>6</sup>

It was noted in the original market design documents that Capacity Credits assigned to Facilities subject to a NCS Contract would be settled at the prevailing Monthly Reserve Capacity Price. The original market design document states that in calculating the income a Facility receives from participating in the market, that the income for its Reserve Capacity would offset the Network Control Service payment.<sup>7</sup>

The IMO (which was responsible for the acquisition of NCS at the time) would recover only the net cost of the NCS Contract (less the value of the Capacity Credits and any payments due to non-compliance) from the Network Operator that requested the service be acquired.<sup>8</sup>

As such, it would appear that the original intention was to recover the cost of Capacity Credits through the usual market mechanisms and that payments in an NCS Contract would be separate from the payment for Reserve Capacity (albeit reduced to the extent that a Facility received income from its Reserve Capacity).

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<sup>5</sup> Wholesale Electricity Market Design Summary, September 2006, section 8.1, page 41, available at: <http://www.imowa.com.au/market-structure>

<sup>6</sup> Western Australian Government Gazette, 19 September 2006, No. 161 (special), page 92, available at: [http://www.slp.wa.gov.au/gazette/gazette.nsf/gazlist/43EDE36827EBE11F482571ED0023C9C5/\\$file/g161.pdf](http://www.slp.wa.gov.au/gazette/gazette.nsf/gazlist/43EDE36827EBE11F482571ED0023C9C5/$file/g161.pdf) Note the strike through included in the gazette simply reflect the removal of all explanation from within the Market Rules and were not intended to detract meaning from the explanation.

<sup>7</sup> Wholesale Electricity Market Design Summary, September 2006, section 8.1, page 42

<sup>8</sup> Ibid, page 43

## RC\_2010\_11 Removal of Network Control Services Expression of Interest and Tender Process from the Market Rules

Following a review by the Office of Energy (now the Public Utilities Office) that concluded in late 2009 and determined that the Network Operator, rather than the IMO, should be responsible for tendering and contracting NCS, the IMO progressed RC\_2010\_11 to remove the procurement process from the Market Rules.

As part of the proposal it was noted that:

*“The current Market Rules require that a Market Participant contracted to provide an NCS must seek certification for Reserve Capacity for the relevant Facility. To the extent that such a Facility is certified, it will be issued Capacity Credits and settled at the prevailing Reserve Capacity price. The NCS payment for a Facility will be reduced by the value of Capacity Credits held by the Facility. There is currently also no restriction on an NCS facility trading its Capacity Credits bilaterally. To the extent this happens, its payment under the Reserve Capacity Mechanism will be reduced.”<sup>9</sup>*

The process diagram included in the Rule Change Proposal and Final Report do not indicate a deviation from this process. Further, there is no discussion to suggest that NCS Facilities should not be required to be certified or that, upon certification, they would not automatically be assigned Capacity Credits by the IMO.

The Rule Change Proposal also sought to address and remove any potential cross subsidies from NCS energy payments associated with System Management issuing instructions under an NCS to either a generation or DSM facility. At the August 2010 MAC meeting, where a Discussion Paper on the removal of NCS procurement from the Market Rules was discussed, the IMO explained that the market, rather than the Network Operator, should be liable for the balancing energy payment because “electricity was being generated and purchased by the balancing generator and if the Network Operator paid for this and passed the charge through to customers, then those customers would be paying for their electricity twice.”<sup>10</sup> To this end, the Amending Rules provided that the energy price paid by the market to NCS providers who generate would be MCAP and the energy price paid to NCS providers who are DSM would be zero. Any additional energy payments on top of the balancing payment would be from the Network Operator to the NCS Facility in accordance with the NCS Contract.

The amendments to the relevant parts of old clause 6.17.6 were as follows:

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

...

- (e) *if the participant is given an instruction under a Network Control Service Contract then the sum over all Network Control Service Contract  $f$  Facilities registered by the Market Participant of the amount that is the product of:*
  - i. *the quantity by which the  $f$  Facility was instructed by System Management to increase its output as specified by System*

<sup>9</sup> Final Rule Change Report for RC\_2010\_11, page 32, available at:

[http://www.imowa.com.au/RC\\_2010\\_11](http://www.imowa.com.au/RC_2010_11)

<sup>10</sup> MAC Meeting No. 30 Final Minutes (11 August 2010), page 12, available at:

<http://www.imowa.com.au/n2541.html>

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

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

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

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

This Rule Change also clarified the dispatch protocols for NCS Facilities. The IMO notes that while this discussion focused primarily on the Dispatch Merit Order for Facilities with DSM that provide NCS, it also sheds light on the dispatch arrangements that would apply to NCS Facilities more generally.

Discussions between the IMO and System Management regarding the inclusion of NCS in the Dispatch Merit Order following an action point at the October 2010 MAC Meeting<sup>11</sup> resulted in clause 7.6.1A being inserted into the Market Rules. This clause gives priority to the dispatch of an NCS Facility if the NCS provided under contract is required to assist System Management meet the Dispatch Criteria.

## **RC\_2010\_14 Certification of Reserve Capacity**

RC\_2010\_14 was put forward by the IMO to address a number of issues with the Market Rules surrounding certification of Reserve Capacity.

One of the issues related to the timing of the assignment of Capacity Credits and the publication of this information. As part of the solution, a new clause 4.20.5A was introduced.<sup>12</sup> Clause 4.20.5A provides specifically for the assignment of Capacity Credits. Prior to the introduction of this clause, the Market Rules did not specify when the actual assignment of Capacity Credits would take place.

4.20.5A Where a Reserve Capacity Auction is:

(a) cancelled under clause 4.15.1 the IMO must assign Capacity Credits to each Facility included in a notification under clause 4.14.9. The quantity of Capacity Credits assigned will equal the quantity in the notification. The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.16.

(b) not cancelled under clause 4.15.1 the IMO must assign Capacity Credits:

<sup>11</sup> MAC Meeting No. 32 Final Minutes (13 October 2010), page 13 available at: <http://www.imowa.com.au/n2849.html>

<sup>12</sup> Final Rule Change Report, RC\_2010\_14, pages 59 to 60, available at: [http://www.imowa.com.au/RC\\_2010\\_14](http://www.imowa.com.au/RC_2010_14)

i. to each Facility for which a Market Participant lodged a notification under clause 4.20.1(a). The quantity of Capacity Credits assigned will equal the quantity notified under that clause and confirmed by the IMO under clause 4.20.2; and

ii. to each Facility included in a notification under clause 4.14.9. The quantity of Capacity Credits assigned will equal the quantity notified under that clause, as may be amended by a notification given under clause 4.20.1 and confirmed by the IMO under clause 4.20.2.

The IMO must publish the Capacity Credits assigned, by Facility, by the date and time specified in clause 4.1.21A; and

(c) not cancelled under clause 4.15.1 and the IMO receives no notification under clause 4.20.1 from a Market Participant, the IMO must not assign Capacity Credits to that Market Participant.

The assignment of Capacity Credits was linked in clause 4.20.5A to the outcomes of the Bilateral Trade Declaration and Reserve Capacity Auction processes. As such, Facilities which were the subject of a NCS Contract or a LT-SPA would not be specifically assigned Capacity Credits in this clause.

The issues covered in this Rule Change were discussed at both the September 2010 and October 2010 MAC Meetings<sup>13</sup>. However, Facilities subject to an NCS Contract or a LT-SPA were not noted as being discussed and there is nothing in the Rule Change Proposal or subsequent reports to indicate that these Facilities were intentionally excluded from the assignment of Capacity Credits.

The IMO further notes that the Rule Change did not seek to amend any of the associated clauses requiring these Facilities to register and apply for Certified Reserve Capacity.

## **RC\_2011\_10 Competitive Balancing and Load Following Market**

The introduction of the Balancing and Load Following Market necessitated a number of changes to the Market Rules. As part of the Rule Change, a number of the clauses and terms used in the dispatch process were amended. Specifically, System Management now issues both Operating Instructions and Dispatch Instructions when scheduling Facilities that are the subject of a NCS Contract.

The settlement process for the Balancing Market includes adjustments to the Out of Merit Generation for Trading Intervals where the Facility is complying with an Operating Instruction (clauses 6.16A.1, and 6.16B.1). These adjustments ensure that Constrained On payments are not made for actions undertaken to comply with an Operating Instruction.

The drafting of these clauses preserved the intentions of the old clause 6.17.6(e) which provided payments of MCAP to generation Facilities that are dispatched for NCS purposes and zero for Demand Side Management curtailed for NCS purposes.

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<sup>13</sup> Refer to MAC Meeting No. 31 Final Minutes (8 September 2010), available at: [http://www.imowa.com.au/MAC\\_31](http://www.imowa.com.au/MAC_31); and MAC Meeting No. 32 Final Minutes (13 October 2010), available at: <http://www.imowa.com.au/n2849.html>