

Change Proposal No: RC_2007_16

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Wholesale Electricity Market Rule Change Proposal

Submitted by

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| Name: | Alistair Butcher |
| Phone: | 9427 5787 |
| Fax: | 9427 4228 |
| Email: | Alistair.butcher@westernpower.com.au |
| Organisation: | System Management |
| Address: | |
| Date submitted: | 17 August 2007 |
| Urgency: | High |
| Change Proposal title: | Outage Notification to the IMO (originally Forced Outage Notification to the IMO) |
| Market Rule(s) affected: | Clauses 3.18.6, 3.21.4, 7.3.4, 7.13.1, 6.3A.2 |

Details of the proposed Market Rule Change

1) Outline the issue concerning the existing Market Rules that is to be addressed by the proposed Market Rule change:

Currently, the Reserve Capacity Refund Mechanism (RCRM) results in an inequitable treatment of certain Market Participants with respect to unplanned outages. Participants with Scheduled Generators that have available capacity greater than their Reserve Capacity Obligation Quantity (RCOQ) are penalised in the event of a forced outage.

For example, if a facility that has a capability of 120 MW, with an RCOQ of 100 MW, has an unplanned outage of 30 MW, the Participant will pay refunds for the entire 30 MW. This is inequitable as the Participant only receives payment for the provision of 100 MW of capacity.

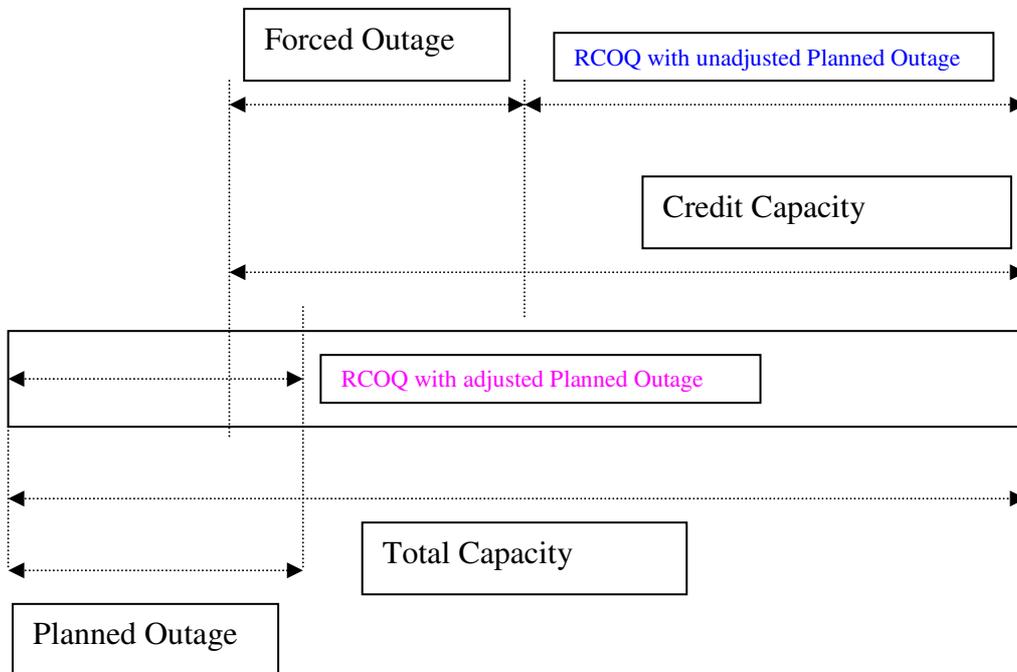
In effect the Participant is being disadvantaged for providing capacity in excess of the requirement. An equitable approach would result in a refund of only 10 MW.

This discrepancy penalises those Participants with facilities that have available capacity greater than RCOQ. This may provide a disincentive for Participants to provide capacity to the SWIS in excess of RCOQ, which would impact upon Power System Security and Reliability, and reduces the opportunity for Participants to schedule planned outages due to reduced system margins.

The following diagram illustrates the need to also include Planned Outages in any adjustment related to Forced Outages.

The Reserve Capacity Obligation Quantity (RCOQ) is reduced from the Reserve Capacity Credits awarded to a facility by a Planned Outage. Without adjusting the Planned Outage amount the facility RCOQ will be reduced from the capacity credits to the level labelled in blue in the diagram below. This will result in a capacity below that which the facility is capable of providing.

An adjusted Planned Outage amount would reduce the facility RCOQ to the level labelled in pink. This is the level the facility is capable of performing.



Following discussions with the IMO and Verve Energy, System Management proposes to adjust both forced and planned outages in a manner illustrated in Attachments (a) to (c).

System Management proposes this Rule Change as an interim solution to the issue which must ultimately be solved within the settlements system.

With the proposed change to outages the Maximum Supply Capability could exceed the physical capacity. This is captured in the addition to clause 6.3A.1B(a).

2) Explain the reason for the degree of urgency:

The issue is a manifest error of the Market Rules and should be resolved as soon as possible.

Therefore, System Management submits that the amendment should be subject to the Fast Track Rule Change process, on the basis that it satisfies MR 2.5.9(b).

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

- 3.18.6. The information submitted in an Outage Plan must include:
- (a) identity of the Facility or item of equipment that will be unavailable;
 - (b) the quantity of any de-rating, where, if the Facility is a generating system, this quantity is in accordance with clause 3.21.5;
 - (c) the reason for the outage;
 - (d) the proposed start and end times of the outage;
 - (e) an assessment of risks that might extend the outage;
 - (f) details of the time it would take the Facility or item of equipment to return to service, if required; and
 - (g) contingency plans for the early return to service of the Facility or item of equipment (“Outage Contingency Plans”).
- 3.21.4. If a Facility or item of equipment that is on the list described in clause 3.18.2 or a Facility or generation system to which clause 3.18.2A relates suffers a Forced Outage or Consequential Outage, then the relevant Market Participant or Network Operator must inform System Management of the outage as soon as practical. Information provided to System Management must include:
- (a) the time the outage commenced;
 - (b) an estimate of the time the outage is expected to end;
 - (c) the cause of the outage;
 - (d) the Facility or item of equipment or Facilities or items of equipment affected; and
 - (e) for each affected Facility or item of equipment, the expected quantity of any de-rating available capacity by Trading Interval, where, if the Facility is a generating system, this quantity is to be submitted in accordance with clause 3.21.5.
- 3.21.5 The quantity of an outage notification submitted to System Management is the reduction in capacity from the relevant Facility’s maximum capacity measured on a sent out basis at 41 degrees Celsius where the maximum capacity is as found in the Standing Data file for Temperature Dependence provided under Appendix 1(b) iv and converted to a sent out basis at 41 degrees Celsius. The remaining capacity, determined as the maximum capacity minus the notified outage, must be available to System Management for dispatch.
- 3.21.6 The following will apply for the purposes of clauses 7.3.4 (a) and 7.13.1 (e):
- a) outage data will be entered by Market Participants in System Management’s computer interface system on a sent out basis at 15 degrees Celsius. System Management will convert the outage data to a sent out basis at 41 degrees Celsius by multiplying the outage quantity at 15 degrees Celsius by the ratio of

the maximum capacity at 41 degrees Celsius to the maximum capacity at 15 degrees Celsius for the Facility as found in the Standing Data file for temperature dependence provided under Appendix 1(b) iv on a generated basis for that facility. Market Participants will submit the outage data at 41 degrees Celsius as displayed by System Management's computer interface system;

- b) System Management will calculate the Forced Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
 - i. zero and
 - ii. the sum of all Forced Outages notified for that Facility minus the difference of the Facility maximum capacity and its Reserve Capacity Obligation Quantity;
- c) System Management will calculate the Planned Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
 - i. zero and
 - ii. the sum of all Planned Outages minus the greater of:
 - 1. zero and
 - 2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages notified for the Facility before the adjustment in (a) above is made by System Management; and
- d) System Management will calculate the Consequential Outage (on a sent out basis at 41 degrees Celsius) for a Facility in a Trading Interval as the greater of:
 - i. zero and
 - ii. the sum of all Consequential Outages minus the greater of:
 - 1. zero and
 - 2. the maximum capacity of the Facility minus its Reserve Capacity Obligation Quantity minus the sum of all Forced Outages and the sum of all Planned Outages notified for the Facility before the adjustments in (a) and (b) above are made by System Management;
- e) the IMO will provide System Management the Reserve Capacity Obligation Quantity of each Facility as currently applicable;
- f) the maximum capacity used in this clause is the value defined in clause 3.21.5.

6.3A.2 By 9:00 AM on the Scheduling Day the IMO must have calculated and released to each Market Participant the following parameters to be respected by that Market Participant in forming its STEM Submissions for each Trading Interval in the Trading Day:

- (a) the Maximum Supply Capability where this equals the maximum Loss Factor adjusted quantity of energy, in units of MWh, that could be supplied during the Trading Interval based on the Standing Data of that Market Participant's Scheduled Generators and Non-Scheduled Generators and assuming the use of the fuel which maximises the capacity of each Facility:

- i. less an allowance for outages of which the IMO has been made aware by System Management in accordance with clauses 7.3.4 or 7.3.6; and
- ii. less, for each Market Participant that is a provider of Ancillary Services, the estimated Loss Factor adjusted quantity of energy, in units of MWh, that could potentially be called upon by System Management from that Market Participant after 1:00 PM on the Scheduling Day to meet Ancillary Service requirements for each Trading Interval of the Trading Day, as provided to the IMO by System Management in accordance with clauses 7.2.3B or 7.2.3C; and

where the Maximum Supply Capability may be higher than the actual capacity available during the Trading Interval;

[other subclauses not shown]

7.3.4. System Management must provide to the IMO the following information:

- (a) a schedule of Planned Outages, Forced Outages and Consequential Outages for each Registered Facility of which System Management is aware at that time, where outages are calculated in accordance with clause 3.21.6;
- (b) [Blank]

for each Trading Interval of a Trading Day, between 8:00 AM and 8:30 AM on the Scheduling Day prior to the Trading Day.

7.13.1. System Management must provide the IMO with the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:

- (e) the schedule of all Planned Outages, Forced Outages and Consequential Outages relating to each Trading Interval in the Trading Day by Market Participant and Facility, for any Facility with a Reserve Capacity Obligation Quantity greater than zero, where outages are calculated in accordance with clause 3.21.6;

[other subclauses not shown]

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

This proposed Rule Change would better address the following Market Objectives:

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

This Rule Change Proposal would not discourage Participants from providing capacity to the SWIS in excess of RCOQ. This would increase Power System Security and Reliability.

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

This Rule Change Proposal would remove inequitable penalties to Participants, and would allow further opportunity for Participants to schedule planned outages due to increased system margins. Both of which would reduce costs to Participants and therefore reduce the long-term cost of electricity supplied to customers.

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

Benefits:

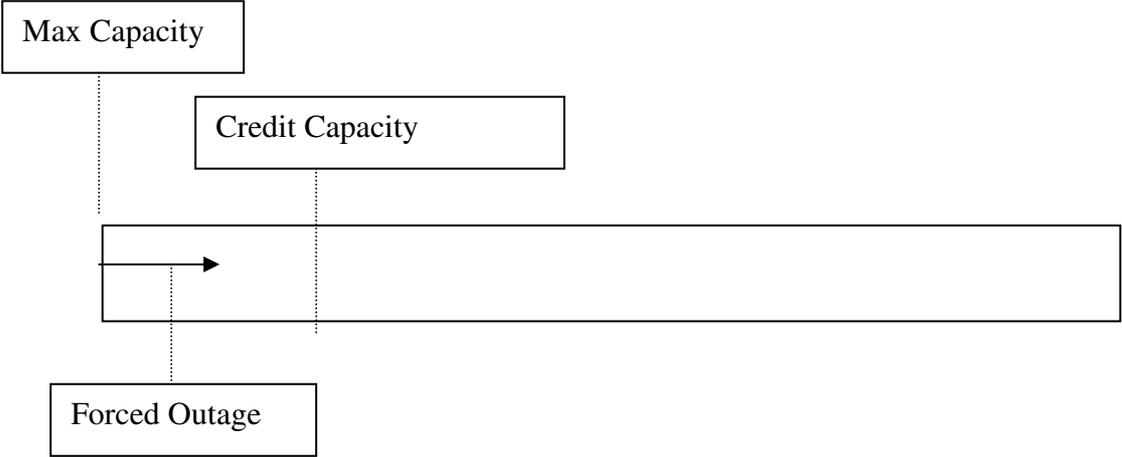
- Participants providing capacity in excess of RCOQ not penalised inappropriately.
- Increased Power System Security and Reliability through the provision of capacity in excess of RCOQ.
- Greater ability for Participants to schedule planned outages due to increased system margins.
- Reduced costs to Participants.

Costs:

- This change will require modifications to SMMITS. The currently approved budget for the SMMITS project should cover the required changes and should not require System Management to seek a Declared Market Project. Under currently scheduling, System Management intends to complete SMMITS changes by October 2007 should this Rule Change Proposal be approved.
- No changes to WEMS are required.
- No changes to Participant processes are required.

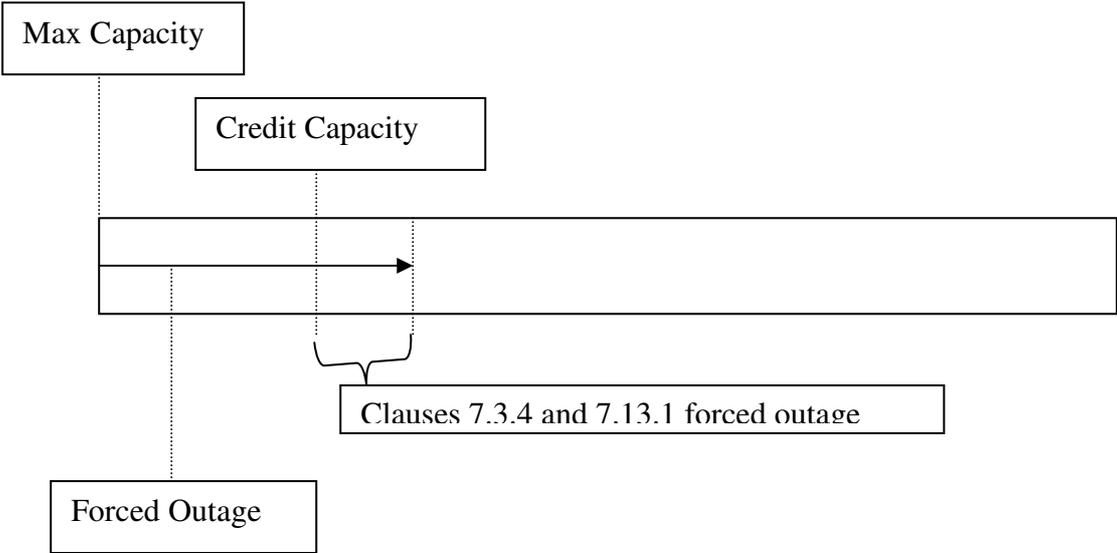
Attachment (a) Forced Outages only

(i) Forced outage less than excess of maximum capacity over RCOQ:



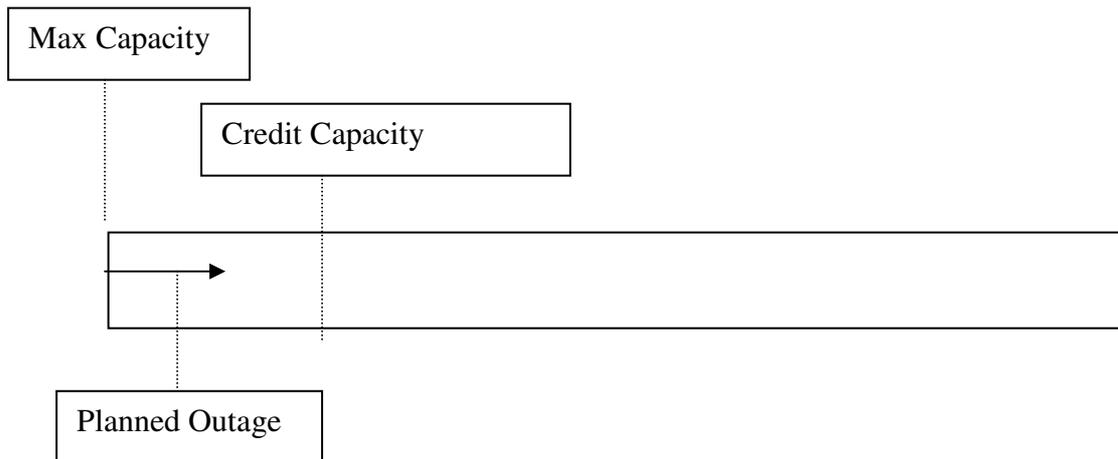
Forced outage for clauses 7.3.4 and 7.13.1 will be zero in this example

(ii) Forced outage larger than excess of maximum capacity over RCOQ:



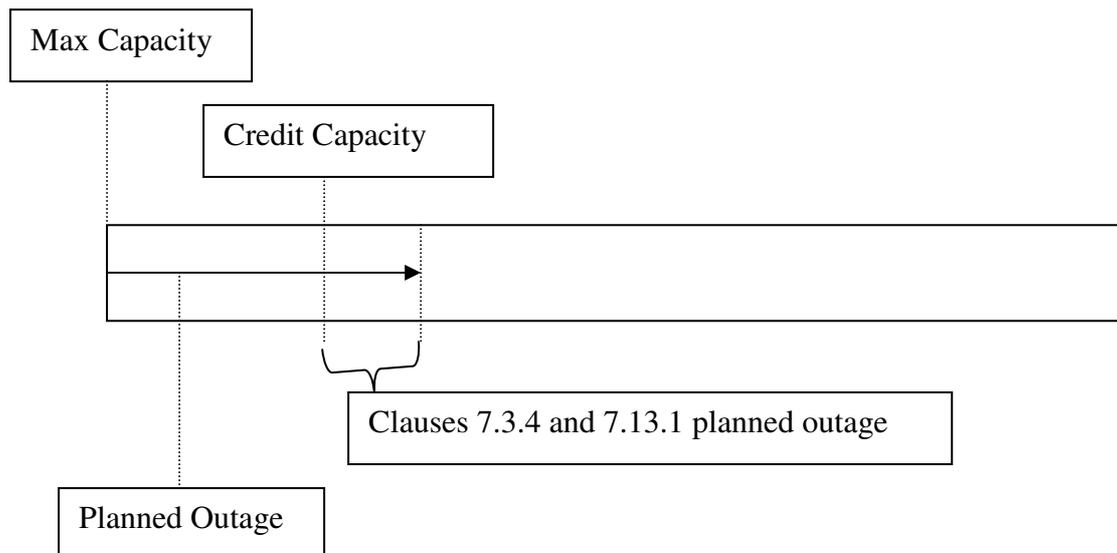
Attachment (b) Planned Outages only

(i) Planned outage less than excess of maximum capacity over RCOQ:



Planned outage for clauses 7.3.4 and 7.13.1 will be zero in this example

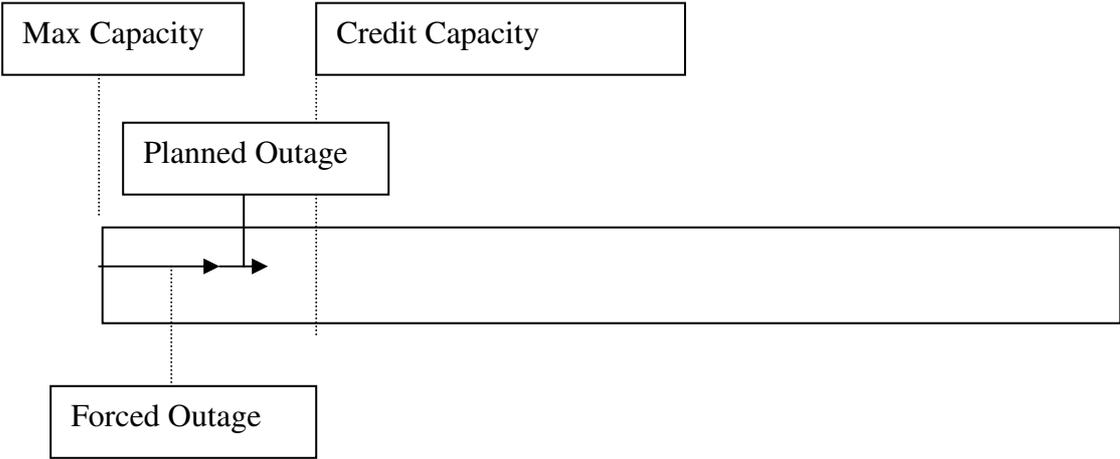
(ii) Planned outage larger than excess of maximum capacity over RCOQ:



Attachment (c) Forced and Planned Outages simultaneously

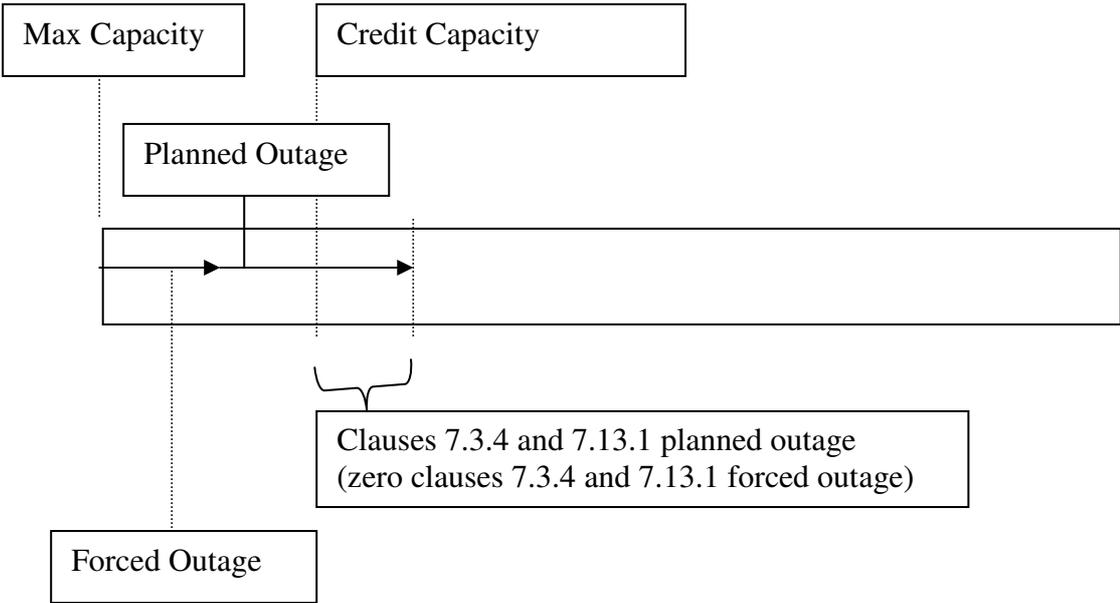
(i) Forced outage less than excess of maximum capacity over RCOQ:

1. Small planned outage



Both forced and planned outages for clauses 7.3.4 and 7.13.1 will be zero in this example

2. Big planned outage



- (ii) Forced outage more than excess of maximum capacity over RCOQ:
Small or planned outage

