

ELECTRICITY INDUSTRY ACT 2004

ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY
MARKET) REGULATIONS 2004

WHOLESALE ELECTRICITY MARKET RULES

Market Procedure for:
Certification of Reserve Capacity

Version 3

Commencement: This Market Procedure is to have effect from 8:00am (WST) on the same date as the Wholesale Electricity Market Rule.

Version history

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PROCEDURE FOR CERTIFICATION OF RESERVE CAPACITY	1
1.1. Interpretation	1
1.2. Purpose	1
1.3. Application	1
1.4. Overview of Reserve Capacity Certification	2
1.5. Procedure steps to be followed by IMO in preparing for Certification of Reserve Capacity	2
1.6. Application for Certification of Reserve Capacity	4
1.7. Procedure steps to be followed by an applicant applying for Certification of Reserve Capacity	5
1.8. Procedure steps to be followed by an applicant applying for Early Certified Reserve Capacity	7
1.9. Procedure steps to be followed by the IMO in Processing an Application for Certification of Reserve Capacity	8
1.10. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for an existing non-intermittent generation Facility and for an existing intermittent generation Facility	12
1.11. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for an existing, Curtailable Load or Dispatchable Load	15
1.12. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new non-intermittent generating Facility	17
1.13. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new intermittent generating Facility	19
1.14. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new Curtailable Load or Dispatchable Load	20
1.15. Procedure steps to be followed by the IMO in advising an applicant of its Certified Reserve Capacity	22
APPENDIX A	24

1. Procedure for Certification of Reserve Capacity

1.1. Relationship with the Market Rules

- 1 This Reserve Capacity Market Procedure (Procedure) has been developed in accordance with clause 4.9.10 of the Market Rules, and should be read in conjunction with chapter 4 of the Market Rules.
- 2 Reference to particular Market Rules within the Procedure in bold and square brackets **[MR XX]** are current as at 1 April 2010. These references are included for convenience only and are not part of this procedure.

1.2. Purpose

- 1 This Procedure:
 - (a) Describes the steps that a Market Participant is required to complete to make an application for Certification of Reserve Capacity **[MR 4.9.10]**;
 - (b) Specifies the format of the data required to be submitted by a Market Participant applying for certification of Reserve Capacity **[MR 4.9.3 (a)]**;
 - (c) Describe the steps that the IMO must follow in processing an application for Certification of Reserve Capacity, including:
 - (i) How Certified Reserve Capacity is assigned; and
 - (ii) How Reserve Capacity Obligation Quantities are set **[MR 4.9.10]**; and
 - (d) Describes the process for applying for and approving Early Certified Reserve Capacity **[MR 4.28C.15]**.

1.3. Application

- 1 This Procedure applies to:

- (a) A Market Participant wishing to submit an application for Certified Reserve Capacity for:
 - (i) Scheduled Generators;
 - (ii) Intermittent Generators; and/or
 - (iii) Curtailable Loads; Interruptible Loads or Dispatchable Load.
- (b) A Market Participant wishing to submit an application for Early Certified Reserve Capacity; and
- (c) The IMO in processing applications for Certification of Reserve Capacity and Early Certified Reserve Capacity.

1.4. Associated Market Procedures

- 1 The following IMO Market Procedures are associated with this Procedure:
 - (a) Declaration of Bilateral Trades and the Reserve Capacity Auction;
 - (b) Capacity Credit Allocation;
 - (c) Reserve Capacity Security;
 - (d) Reserve Capacity Performance Monitoring;
 - (e) Facility Registration, De-Registration and Facility Transfer;
 - (f) Registration and De-Registration of Rule Participants; and
 - (g) Notices and Communications.
- 2. The following Power System Operation Procedures are associated with this Procedure:
 - (a) Facility Outages.

1.5. Interpretation

- 1 In this Procedure the conventions specified in clauses 1.3-1.5 of the Market Rules apply

1.6. Procedure steps to be followed by IMO in preparing for Certification of Reserve Capacity

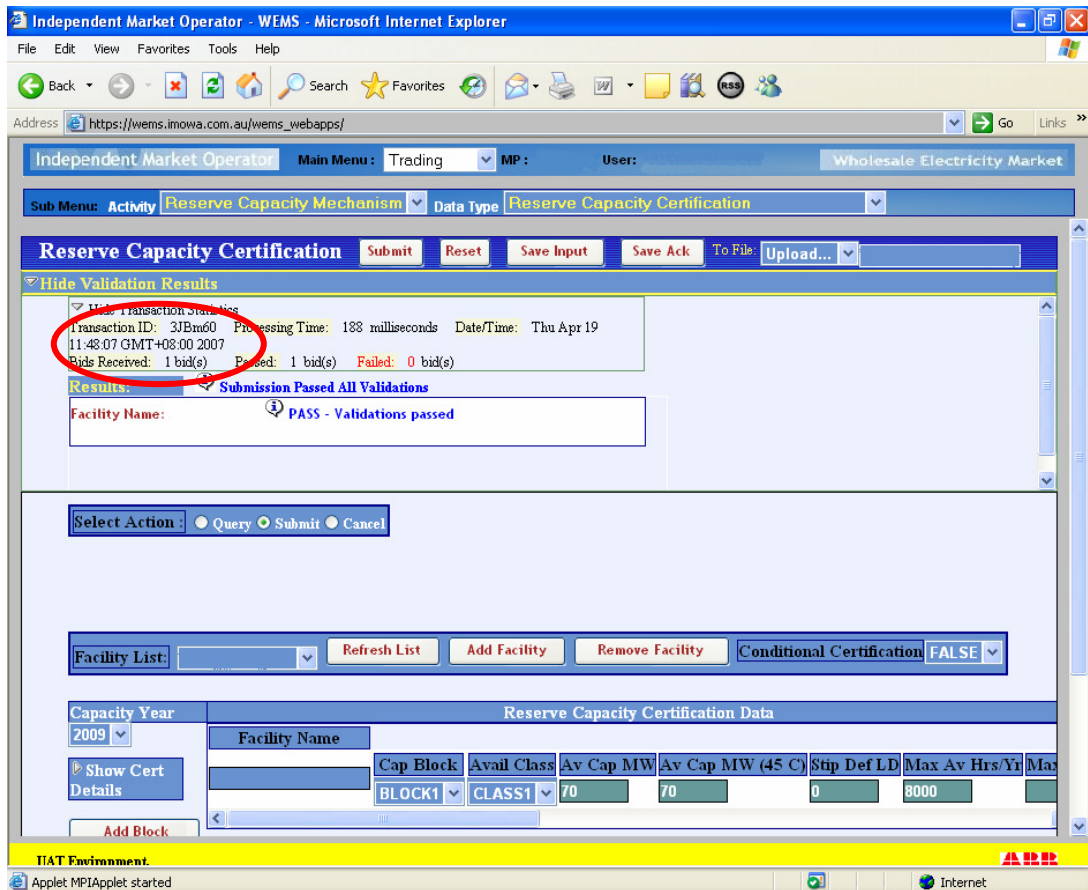
- 1 By 1 May of Year 1 of the relevant Reserve Capacity Cycle, the IMO must advise all Market Participants that the certification process has commenced **[MR 4.1.7]**. Market Participants will be notified through the Wholesale Electricity Market System (WEMS).

Accreditation of Independent Experts

- 2 The IMO must accredit independent experts to prepare reports on the estimated Reserve Capacity of Intermittent Generators that are yet to commence operation. The IMO must ensure that at least two accredited independent experts are available to Market Participants at any time. **[MR4.11.6]**
- 3 The IMO must ensure that each accredited independent expert is competent to estimate Reserve Capacity of Intermittent Generators. The IMO may remove accreditation at any time subject to the completion of any work in progress by the expert in estimating Reserve Capacity of Intermittent Generators. **[MR 4.11.6]**
- 4 The IMO must publish on the Market Web Site the contact details of independent experts who are accredited by the IMO for estimating Reserve Capacity of Intermittent Generators. **[MR 4.11.6]**

Applications for Certified Reserve Capacity

- 5 The IMO must accept applications for Certification of Reserve Capacity from Market Participants beginning from 9 AM on the first Business Day following 1 May of Year 1 until 5 PM on the last business day falling on or before 20 July of Year 1 of the Reserve Capacity Cycle. **[MR 4.9.1]**
- 6 The IMO will only accept applications for Certified Reserve Capacity that have been appropriately entered through the WEMS.
- 7 The IMO must accept applications from Market Participants for future Reserve Capacity Cycles at any time until the closing date specified for that Reserve Capacity Cycle. **[MR 4.9.1]**
- 8 The IMO must notify an applicant for certification of Reserve Capacity of receipt of the application within one Business Day of receipt. **[MR 4.9.6]** Notification will be provided through the WEMS as a Transaction ID.



- 9 The IMO must process all applications for Certification of Reserve Capacity for the current Reserve Capacity Cycle by 5 PM of the last Business Day on or before 5 August of Year 1 of that Reserve Capacity Cycle. **[MR 4.1.12]**
- 10 The IMO must process all applications for certification of Reserve Capacity for future Reserve Capacity Cycles (i.e. applications for Conditional Certified Reserve Capacity or Early Certified Reserve Capacity) within 90 days of the IMO receiving the application. **[MR4.9.8]**
- 11 The IMO must notify each applicant of the results of the certification process pertaining to that applicant and include in its notification the information contained in step 1.16. The IMO must notify all applicants by the time and date specified in steps 1.6.9 and 1.6.10, as appropriate. This notification will be provided through the WEMS.
- 12 Reserve Capacity will only be certified once the IMO has issued the notice of results of application for Certification of Reserve Capacity listed in step 1.6.11.

1.7. Application for Certification of Reserve Capacity

- 1 The information to be included in an application for Certified Reserve Capacity is listed in the document "Information for Applications for Certification of Reserve Capacity" on the IMO Website. The information provided must be consistent with the Reserve Capacity Cycle for which the application is being made. The information must be provided for each Facility. **[MR4.9 & 4.10]**

- 2 All primary information provided in respect of an application for Certified Reserve Capacity must be provided through the WEMS. Supporting evidence must be submitted to the IMO in both electronic format (through the WEMS) and in hard copy format (via email or courier).
- 3 The information provided through the WEMS should be entered in accordance with the WEMS User Guides and online help.

1.8. Procedure steps to be followed by an applicant applying for Certification of Reserve Capacity

During each Reserve Capacity Cycle, applications may be submitted for Certified Reserve Capacity that will apply to future Reserve Capacity Cycles. In this case certification granted will be either Conditional Certified Reserve Capacity or Early Certified Reserve Capacity. For example,

- i. a proposed Facility can be conditionally certified, but then must be recertified during the Reserve Capacity Cycle corresponding to the period that the Facility is expected to commence operation; or
 - ii. if the Facility is deemed committed prior to 1 January of Year 1 of the Reserve Capacity Cycle for which it intends to provide Capacity and is a generating system, the Facility may then apply for Early Certified Reserve Capacity in accordance with step 1.9 of this Procedure.
- 1 Before submitting an application for Certification of Reserve Capacity, Market Participants should familiarise themselves with the relevant Market Rules and the related Reserve Capacity Market Procedures specified in step 1.5 of this Procedure.
 - 2 Before submitting an application for Certification of Reserve Capacity, the applicant must ensure they are registered as a Market Participant. The applicant should follow the Market Procedure for Registration and De-Registration of Rule Participants which can be found on the IMO Website: <http://www.imowa.com.au/market-procedures>
 - 3 All Facilities must be registered in the WEMS for the purposes of certified capacity prior to submitting an application for Certification of Reserve Capacity. In respect of new Facilities, the Market Participant must register the Facility for the purposes of Certified Reserve Capacity. Note that this is not the same as being a Registered Facility under the Market Rules. Market Participants should consult the Market Procedure for Facility Registration, De-Registration and Facility Transfer and associated Market Rules for this purpose.
 - 4 Market Participants submitting an application for Certified Reserve Capacity must allow sufficient time, as required under the Market Procedure Facility Registration, De-Registration and Facility Transfer, for the registration of the Facility to be completed. Market Participants may submit an application for Facility registration for the purposes of Reserve Capacity prior to 1 May of Year 1 of the Reserve Capacity Cycle to which the application relates.
 - 5 Market Participants applying for Certification of Reserve Capacity must make an application to the IMO during the application open period, which is between 9 AM on the first Business Day following 1 May of Year 1 and 5 PM

on the last business day falling on or before 20 July of Year 1 of the Reserve Capacity Cycle. **[MR 4.9.1]**

6 Market Participants must follow this Procedure in applying for Certified Reserve Capacity. **[MR 4.9.10]**

7 All primary information provided by a Market Participant in respect of an application for Certified Reserve Capacity must be provided through the WEMS. Supporting documentation is uploaded through the WEMS file exchange in any of the following formats:

- compressed ZIP files (where the files in the archive must be in any of the formats listed below);
- MS Office 2003 (xls, doc or ppt); and
- Adobe PDF.

Note that the WEMS file exchange cannot receive documents which are larger than 4MB, however, there is no limit to the number of documents that can be exchanged.

8 The application must include the data and information specified in clause 4.9.3 of the Market Rules. Further details of the data and information required to be submitted in support of an application is provided in the “Information for Applications of Certification of Reserve Capacity” document on the IMO Website. Additional clarification of some of the data required to be supplied by Market Participants in support of their application is provided in Appendix A of this Procedure.

9 In the case that a Market Participant is resubmitting a certification application in respect of a Facility that has received Conditional Certified Reserve Capacity, it must also submit details of any Network Access offer(s) and Environmental Approvals in accordance with clause 4.10.1(c)i and 4.10.1(c)ii. This will assist the IMO to make a determination as to whether the Facility will be a Registered Facility during the Reserve Capacity Year and if there are any potentially limiting factors associated with the application.

10 Market Participants should receive notification that the application has been received. This will be in the form of a WEMS receipt. Market Participants should maintain a record of this receipt.

11 Market Participants must contact the IMO and must resubmit the application in the event that receipt of acknowledgement has not been received within 1 Business Day of the application having been provided to the IMO. The resubmission of an application must be made during the application open period, which is from 9 AM on the first Business Day following 1 May of Year 1 until 5 PM on the last business day falling on or before 20 July of Year 1 of the Reserve Capacity Cycle.

12 Market Participants must make an application for certification for each subsequent Reserve Capacity Cycle that it requires Capacity Credits for. **[MR 4.9.5]**

- 13 Market Participants must respond to any requests for clarification or further information received from the IMO to assist in processing the Market Participants application.

1.9. Procedure steps to be followed by an applicant applying for Early Certified Reserve Capacity

- 1 Before submitting an application for Early Certification of Reserve Capacity, Market Participants should familiarise themselves with the relevant Market Rules and the related Reserve Capacity Market Procedures specified in step 1.5 of this Procedure.

- 2 Before submitting an application for Early Certified of Reserve Capacity, the applicant must ensure they are registered as a Market Participant. The applicant should follow the Market Procedure for Registration and De-Registration of Rule Participants which can be found on the IMO Website: <http://www.imowa.com.au/market-procedures>

- 3 All Facilities must be registered in the WEMS for the purposes of certified capacity prior to submitting an application for Early Certification of Reserve Capacity.

- 4 All Facilities must be deemed to be of committed status by the IMO prior to submitting an application for Early Certification of Reserve Capacity. Details on the process for becoming committed can be found in Appendix 1 of the Market Procedure for Declaration of Bilateral Trades and the Reserve Capacity Auction. Note that an application to be deemed committed is not linked to the Bilateral Trade Declaration Date.

- 5 Market Participants applying for Early Certified Reserve Capacity may make an application to the IMO at anytime between the dates the Facility is deemed committed by the IMO and 1 January of Year 1 of the Capacity Cycle to which the application relates. **[MR 4.28C.2]**

- 6 All information provided by a Market Participant in respect of an application for Certified Reserve Capacity must be provided through the WEMS. Supporting documentation is uploaded through the WEMS file exchange in any of the following formats:

- compressed ZIP files (where the files in the archive must be in any of the formats listed below)
- MS Office 2003 (xls, doc or ppt)
- Adobe PDF

Note that the WEMS file exchange can not support documents which are larger than 4MB.

- 7 The application must include the data and information listed in clause 4.9.3 of the Market Rules. Further details of the data and information required to be submitted in support of an application is provided in the “Information for Applications of Certification of Reserve Capacity” document on the IMO Website. Additional clarification of the some of the data required to be

supplied by Market Participants in support of their application is provided in Appendix A of this Procedure.

- 8 Market Participants should receive notification that the application has been received. This will be in the form of a WEMS receipt. Market Participants should maintain a record of this receipt.
- 9 Market Participants must contact the IMO and must resubmit the application in the event that receipt of acknowledgement has not been received within 1 Business Day of the application having been provided to the IMO.
- 10 Market Participants must make an application for certification for each subsequent Reserve Capacity Cycle that it requires Capacity Credits for. **[MR 4.9.5]**
- 11 The application must state that the applicant intends to trade all assigned Certified Reserve Capacity bilaterally. **[MR4.28C.4]**
- 12 Each application for Early Certified Reserve Capacity must relate to a single future Reserve Capacity Cycle. A Market Participant should not submit more than one application for certification of Reserve Capacity per facility per calendar year. **[MR4.28C.3]** This includes both Early Certified Reserve Capacity and Certified Reserve Capacity applied for in accordance with sections 1.8 and 1.9 this Procedure, respectively.
- 13 The applicant must provide Reserve Capacity Security in accordance with clause 4.28C.9 within 30 Business Days of receiving notification of the amount of Early Certified Reserve Capacity assigned to the Facility **[MR4.28C.8]**. More information on how to submit the Reserve Capacity Security can be found in the Market Procedure for Reserve Capacity Security.

1.10. Procedure steps to be followed by the IMO in Processing an Application for Certification of Reserve Capacity

Acknowledgement of application

- 1 The IMO must notify the applicant within one business day that its application has been received. This will be provided through the WEMS.

Eligibility check

- 2 The IMO must determine whether the applicant is a Market Participant and has either registered the Facility or intends to register the Facility by the commencement date of the Reserve Capacity Obligations for the relevant Reserve Capacity Year specified in clause 4.1.26. This requirement will be completed automatically on the premise that the Facility is registered or that it is registered for the purposes of Reserve Capacity. **[MR 4.8.1]**
- 3 The IMO must determine that the Facility is not a Network. **[MR 4.8.1]**
- 4 If the application fails either of the steps within this eligibility check, the IMO must reject the application and advise the Market Participant.

Date accuracy and sufficiency check

- 5 The IMO must check all data provided in the application to determine that:
 - (a) All required information has been provided;
 - (b) The information provided is of sufficient depth; and
 - (c) Information has been specifically provided to support the applicant's claims in respect to the capacity of the Facility.
- 6 The IMO may seek information from Network Operators to confirm the accuracy of data provided to it by the applicant to enable the IMO to determine the Certified Reserve Capacity for a Facility. **[MR 4.11.5]**
- 7 The IMO must not provide information to any Network Operator that was provided to it as part of an application for Certified Reserve Capacity except with the permission of the applicant.
- 8 If the information provided by the applicant is insufficient or incomplete, the IMO must notify the applicant and request additional data in accordance with the Market Procedure for Notices and Communications.
- 9 If the information provided by the applicant is sufficient, including any additional information provided by the applicant, the IMO must process the application.

Reserve Capacity Cycle check

- 10 The IMO must determine whether the application is for the current Reserve Capacity Cycle or for a future Reserve Capacity Cycle.
- 11 If the application is for the current Reserve Capacity Cycle the IMO must proceed to process the application as an application for Certified Reserve Capacity in accordance with steps 1.10, 1.11, 1.12, 1.13, 1.14 or 1.15 as applicable.
- 12 If the application is for a future Reserve Capacity Cycle, the IMO must determine if the application is for Conditional Certified Reserve Capacity or for Early Certified Reserve Capacity. The IMO must then proceed to process the application in accordance with step 1.10., 1.11, 1.12, 1.13, 1.14 or 1.15 as applicable.

Application where Participant has previously been granted Conditional Certified Reserve Capacity

- 13 If the applicant is re-lodging an application and already has Conditional Certified Reserve Capacity the IMO must determine:
 - (a) whether the application is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned; and
 - (b) whether the information is correct.
- 14 If the re-lodged application is for re-certification and the Market Participant has not submitted details of Network Access offer(s) and Environmental

Approvals in accordance with step 1.8.9 of this Procedure, the IMO will deem the application to be inconsistent with the initial application by which the Facility received Conditional Certification of Reserve Capacity. This will be deemed to be made on the basis that the Facility detailed in the initial application for Conditional Certified Reserve Capacity would be a Registered Facility in accordance with clause 4.11.1(f) and there were no potentially limiting factors.

- 15 If the re-lodged application is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned and the information is correct, the IMO must confirm the Certified Reserve Capacity or Conditional Certified Reserve Capacity, as appropriate, and report to the applicant as per steps 1.10.31 or 1.10.32 below.
- 16 If the re-lodged application is not consistent with the information upon which the Conditional Certified Reserve Capacity was assigned or the information is not correct, the IMO must not take the Conditional Certified Reserve Capacity into account when processing the application. **[MR4.9.5]**

Timing check

- 17 The IMO must determine which Reserve Capacity Cycle the applicant is requesting certification for.
- 18 The IMO must determine if the Facility is scheduled to first commence operations before the time that Reserve Capacity Obligations will apply for that Facility for that Reserve Capacity Cycle. **[MR 4.11.1(c)]**
- 19 The IMO must determine if the Facility will cease operation permanently such that it can no longer meet its Reserve Capacity Obligations before the time that Reserve Capacity Obligations will no longer apply for that Facility for the Reserve Capacity Cycle. **[MR 4.11.1(c)]**
- 20 The IMO must set the Reserve Capacity for a Reserve Capacity Cycle at zero for a Facility that is not scheduled to commence operations or that will cease operations as determined in steps 1.10.17 or 1.10.19, respectively. **[MR 4.11.1(c)]**
- 21 The IMO must determine if the Facility is expected to be a Registered Facility by the time its Reserve Capacity Obligations take effect. The IMO must not assign Certified Reserve Capacity to a Facility that is not expected to be registered by that time. **[MR 4.11.1 (f)]**

Forced outage and planned outage check

- 22 The IMO must determine if the Facility has operated for at least 36 months and, if so, whether it has had a Forced Outage rate of greater than 15% or a combined Planned Outage rate and Forced Outage rate of greater than 30% over the preceding 36 months. This must be determined in accordance with the Power System Operating Procedure: Facility Outages. **[MR 4.11.1 (h)]**
- 23 The IMO must determine if the Facility has operated for less than 36 months or is yet to commence operation and, if so, whether the IMO has cause to believe that over a period of 36 months the Facility is likely to have a Forced Outage rate of greater than 15% or a combined Planned Outage rate and

Forced Outage rate of greater than 30%. This must be determined in accordance with the Power System Operating Procedure: Facility Outages. **[MR 4.11.1 (g)]**

- 24 The IMO may consult with System Management to determine the Forced and Planned Outage rates in respect of steps 1.10.22 or 1.10.23.
- 25 If the criteria in steps 1.10.22 or 1.10.23 of this Procedure apply to the Facility, the IMO may seek information from the applicant in respect to the present and future performance of the Facility including:
 - (a) the causes of outages;
 - (b) steps being taken, or that have been taken, to reduce outages; and
 - (c) the expected level of future outages.
- 26 The IMO must determine whether or not to grant Certified Reserve Capacity for the Facility if the criteria in steps 1.10.22 or 1.10.23 of this Procedure apply to that Facility. In making this determination the IMO may consider, amongst other factors:
 - (a) The actions being taken by the Market Participant to reduce the level of outages at the Facility;
 - (b) The likelihood that these actions will reduce the outages at the Facility; and
 - (c) Whether or not the outages at the Facility are compromising, or are likely to compromise, the security and reliability of the SWIS.
- 27 The IMO may consult with System Management in deciding whether or not to refuse to grant Certified Reserve Capacity for a Facility where the criteria in steps 1.10.22 or 1.10.23 of this Procedure may apply to that Facility. **[MR 4.11.1 (h)]**
- 28 If the IMO determines not to grant Certified Capacity Credits to the Facility it must advise the applicant of this decision in accordance with the timeframes specified in step 1.10.31 and 1.10.32 of this Procedure.
- 29 If the IMO determines that it may grant Certified Capacity Credits to the Facility, the IMO must proceed to process the application.

Determination of Certified Reserve Capacity

- 30 The IMO must use the methodology contained in the following sections of this Procedure for setting the Certified Reserve Capacity of a Facility:
 - (a) For existing non-intermittent and intermittent generation Facility – Section 1.11;
 - (b) For existing Curtailable Loads and Dispatchable Loads – Section 1.12;
 - (c) For new non-intermittent generation Facility – Section 1.13;
 - (d) For new intermittent generation Facility – Section 1.14;

- (e) For new Curtailable Loads and Dispatchable Loads– Section 1.15;

Reporting to Applicant

- 31 The IMO must produce a report on the outcomes of its determinations which is consistent with the requirements of Section 1.16 of this Procedure and clause 4.9.5 and 4.9.9 of the Market Rules.
- 32 If the application was for Certified Reserve Capacity, the IMO must deliver its report to the applicant by 5 August of Year 1 of that Reserve Capacity Cycle.
- 33 If the application was for Conditional Certified Reserve Capacity the IMO must deliver its report to the applicant within 90 days of the application having been received.
- 34 If the application was for Early Certified Reserve Capacity the IMO must provide its decision within 90 days of the application having been received. **[MR4.28C.7]**

1.11. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for an existing Scheduled Generator or Intermittent Generator

- 1 The IMO must complete its certification of a generating Facility based on the following steps using the information provided by the applicant and based on any other information that the IMO may require to make its determinations.

Assessment of potentially limiting factors

- 2 The IMO must determine whether the Facility has failed any test conducted in accordance with clause 4.25 and, if so, determine:
- (a) Whether the test results were a reasonable indication of the capacity expected to be available for supply from the Facility when it is operating normally;
 - (b) Whether there are any mitigating circumstances such that the test results are not a reasonable indication of the capacity expected to be available for supply from the Facility when it is operating normally; and
 - (c) The level of capacity indicated by the tests, taking account of any mitigating circumstances, that is expected to be available from the Facility when it is operating normally.
- 3 The IMO must determine whether there are any restrictions on the capacity expected to be available due to staffing or availability and, if so, what level of capacity is expected to be available. **[MR4.10.1(g)]**
- 4 The IMO must determine whether the Facility will be subject to a Network Control Service contract and, if so, whether the capacity that the Facility can usefully contribute is likely to be limited by transmission constraints. **[MR 4.11.1(g)]**

- 5 The IMO must determine whether there are any other reasons to think that the Facility may not be able to provide the level of Reserve Capacity nominated by the Market Participant.

Selection of assessment methodology

- 6 The IMO must determine whether the applicant has nominated, in accordance with clause 4.10.1(i), for the capacity of its Facility to be assigned in accordance with the methodology described in clause 4.11.2(b).
- 7 If the applicant has nominated the methodology described in clause 4.11.2(b), then the IMO must determine whether it considers that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity Cycle to which the Certified Reserve Capacity applies. **[MR4.11.2(a)]**
- 8 In making the determination in step 1.11.7, the IMO may consider any potentially limiting factors. **[MR4.10.1(g)]**
- 9 If the IMO considers that the capacity of the Facility has permanently declined, or is anticipated to permanently decline prior to or during the Reserve Capacity cycle to which the Certified Reserve Capacity applies, then the IMO must set the Certified Reserve Capacity in accordance with steps 1.11.12 to 1.11.15 (“Methodology A”), otherwise it must set the Certified Reserve Capacity in accordance with steps 1.11.17 to 1.11.18 (“Methodology B”).
- 10 If the application for Certified Reserve Capacity relates to an Intermittent Generator, the IMO must use assessment “Methodology B”.
- 11 If the applicant has not nominated the methodology in Market Rule 4.11.2(b), then the IMO must set the Certified Reserve Capacity in accordance with “Methodology A”.

Methodology A for setting Certified Reserve Capacity

- 12 The IMO must determine the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic loads that can be guaranteed to be available for supply to the network from the Facility when it is operated normally at an ambient temperature of 41°C. **[MR 4.10.1(e)]**
- 13 The IMO must determine the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic loads, beyond the capacity described in step 1.11.12 that can be made available for supply to the network from the Facility at an ambient temperature of 41°C allowing for any restrictions on the availability of that capacity, including limitations on duration. **[MR 4.10.1(e) & 4.10.1(g)]**
- 14 The IMO may consult with System Management as required.
- 15 Based on the outcome of steps 1.11.12 to 1.11.13, and the assessment of potentially limiting factors, the IMO must determine its reasonable expectation of the amount of Reserve Capacity likely to be available from the Facility during daily peak demand times from 1 October in Year 3 to 31

July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C. **[MR 4.11.1(a)]**

- 16 For the purposes of step 1.11.15 'daily peak demand times' are taken to have the same meaning as Peak Trading Intervals as defined in the Market Rules.

Methodology B for setting Certified Reserve Capacity

- 17 The IMO must set the Relevant Level in respect of a Facility at a point in time which is determined by the IMO as follows:
- (a) take all the Trading Intervals that fell within the last three years up to, and including, the last Hot Season;
 - (b) determine the amount of electricity (in MWh) sent out by the Facility in accordance with Metered Data Submissions received by the IMO in accordance with clause 8.4 during these Trading Intervals;
 - (c) if the Generator has not entered service, or if it entered service during the period referred to in step 1.11.17(a), estimate the amount of electricity (in MWh) that would have been sent out by the Facility, had it been in service, for all Trading Intervals occurring during the period referred to in step 1.11.17(a) which are prior to it entering service; and
 - (d) set the Relevant Level as double the sum of the quantities determined in step 1.11.17(b) and step 1.11.17(c) divided by 52,560. **[MR4.11.3A]**
- 18 In the case where three years of data is not available, the Market Participant may have the quantity, determined in accordance with step 1.11.17(b), estimated by an independent expert which has been accredited by the IMO in accordance with step 1.6.2 of this Procedure. The independent expert must use any and all data available to the Market Participant, to evaluate the expected amount of electricity in accordance with step 1.11.17 above. The intention should be to validate any models and results based on the data available for the period of operation.
- 19 In respect of step 1.11.17 above, the IMO will use metered data provided in accordance with clause 8.4 where possible. If meter data is not available, the IMO may consult with System Management to obtain appropriate SCADA data records to determine the Relevant Level. The IMO may also set the Relevant Level to take into account embedded, interruptible and parasitic loads.
- 20 The IMO must set the Certified Reserve Capacity of the Facility equal to the Relevant Level determined in step 1.11.17, while considering the outcome of steps 1.11.18 and 1.11.19 and any potentially limiting factors.

Assignment of Certified Reserve Capacity

- 21 The IMO must assign Certified Reserve Capacity to the Facility equal to the minimum of the level nominated by the applicant, or the level determined at step 1.11.15 or 1.11.20, as appropriate.

Initial Reserve Capacity Obligation Quantity

- 22 The IMO must determine whether there are periods of time during which staffing or other factors will limit the Facility's ability to operate at full output.
- 23 The IMO must set the initial Reserve Capacity Obligation Quantity at a level equal to the Certified Reserve Capacity except for those periods of time determined at step 1.11.22, in which case the IMO may set the initial Reserve Capacity Obligation at a lower level for those periods
- 24 The IMO must set the initial Reserve Capacity Obligation Quantity to zero for an Intermittent Generator. **[MR 4.12.4.aA]**

1.12. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for an existing Curtailable Load, Interruptible Load or Dispatchable Load

- 1 The IMO must complete its certification of an existing Curtailable Load or Dispatchable Load based on the following steps using the information provided by the applicant and based on any other information that the IMO may require to make its determinations.

Availability classes

- 2 The IMO must assess each capacity block and accept only those where:
 - (a) The maximum number of hours per year that the block is available to provide Reserve Capacity is not less than 24; and
 - (b) The maximum number of hours per day that the block is available to provide Reserve Capacity is not less than four.
- 3 Each accepted capacity block is to be allocated to an Availability Class where:
 - (a) Blocks that are available for at least 24 hours but less than 48 hours are allocated to Availability Class 4;
 - (b) Blocks that are available for at least 48 hours but less than 72 hours are allocated to Availability Class 3; and
 - (c) Blocks that are available for at least 72 hours but less than 96 hours are allocated to Availability Class 2. **[Appendix 3]**

Assessment of potentially limiting factors

- 4 The IMO must determine whether there are any restrictions on the capacity expected to be available due to staffing or availability and, if so, what level of capacity is expected to be available. **[MR 4.10.1(g)]**
- 5 The IMO must determine whether the Facility will be subject to a Network Control Service contract and, if so, whether the capacity that the Facility can usefully contribute is likely to be limited by transmission constraints. **[MR 4.11.1(g)]**

- 6 The IMO must determine whether there are any other reasons to think that the Facility may not be able to provide the level of Reserve Capacity nominated by the Market Participant.

Assignment of Certified Reserve Capacity

- 7 Where the applicant has specified the Reserve Capacity expected to be available from a capacity block, the IMO is to assign Certified Reserve Capacity for that capacity block equal to the expected Reserve Capacity subject to the assessment of potentially limiting factors.
- 8 Where the applicant has specified the Stipulated Default Load for any capacity block, the IMO is to determine the expected load reduction based on historic load data and assign Certified Reserve Capacity to that capacity block equal to that expected load reduction subject to the assessment of potentially limiting factors.
- 9 Where the applicant has indicated that the Reserve Capacity is to be in the form of a Demand Side Programme, the IMO must assign Certified Reserve Capacity in consideration of clause 4.8.3 of the Market Rules. The following must be considered in the assignment of Certified Reserve Capacity:
- (a) No Intermittent Load may be included in the Demand Side Programme. **[MR 4.8.3(a)]**
 - (b) The Loads comprising the Demand Side Programme must be registered as Curtailable Loads if they are to count towards satisfying the relevant Reserve Capacity Obligations of the Demand Side Programme and must not have been separately awarded Capacity Credits. **[MR 4.8.3(b)]**
 - (c) As the Loads comprising the Demand Side Programme are registered, the IMO must assign Certified Reserve Capacity and Reserve Capacity Obligations to those Facilities and must correspondingly reduce the Certified Reserve Capacity and Reserve Capacity Obligations associated with the Demand Programme Side during the time those Facilities are registered. **[MR 4.8.3(c)]**
 - (d) After accounting for the modifications in step 1.12.9(c), if at any time a Market Customer has Reserve Capacity Obligations associated with its Demand Side Programme then, for settlement purposes, the Demand Side Programme must be treated by the IMO as a Facility that has failed to satisfy its Reserve Capacity Obligations. **[MR4.8.3(d)]**
 - (e) Loads comprising the Demand Side Programme must have the same or higher availability as the Demand Side Programme. **[MR 4.8.3(e)]**

Initial Reserve Capacity Obligation Quantity

- 10 The assigned Certified Reserve Capacity for each capacity block must be available for the number of hours per year that does not exceed the maximum specified by the applicant for that capacity block.

- 11 The assigned Certified Reserve Capacity for each capacity block must be available for the number of hours per day that does not exceed the maximum specified by the applicant for that capacity block.
- 12 The initial Reserve Capacity Obligation Quantity must take account of any staffing and other restrictions that may limit the ability of the Facility to provide energy upon request.

1.13. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new Scheduled Generator

- 1 The IMO must complete its certification for a new non-intermittent generating Facility based on the following steps using the information provided by the applicant and taking into account any other information that the IMO may require to make its determinations.

Assessment of potentially limiting factors

- 2 The IMO must determine whether there are any restrictions on the capacity expected to be available due to staffing or availability and, if so, what level of capacity is expected to be available. **[MR 4.10.1(g)]**
- 3 The IMO must determine whether the Facility will be subject to a Network Control Service contract and, if so, whether the capacity that the Facility can usefully contribute is likely to be limited by transmission constraints. **[MR 4.11.1(g)]**
- 4 The IMO must determine whether there are any other reasons to think that the Facility may not be able to provide the level of Reserve Capacity nominated by the Market Participant.
- 5 The IMO may consult with System Management when undertaking its assessment of any potentially limiting factors.

Methodology for setting Certified Reserve Capacity

- 6 The IMO must determine the maximum sent out capacity, net of Intermittent Loads embedded and Parasitic loads that can be guaranteed to be available for supply to the Network from the Facility when it is operated normally at an ambient temperature of 41°C. **[MR4.10.1(e)]**
- 7 The IMO must determine the maximum sent out capacity, net of Intermittent Loads, embedded and Parasitic loads, beyond the capacity described in step 1.13.6 that can be made available for supply to the Network from the Facility at an ambient temperature of 41°C allowing for any restrictions on the availability of that capacity, including limitations on duration. **[MR 4.10.1(e)]**
- 8 The IMO may use the information provided by the Market Participant or any other information deemed appropriate, which is required to set the level of Certified Reserve Capacity of the Facility.
- 9 Based on the outcome of steps 1.13.6 to 1.13.8, and the assessment of potentially limiting factors, the IMO must determine its reasonable

expectation of the amount of Reserve Capacity likely to be available from the Facility during daily peak demand times from 1 October in Year 3 to 31 July in Year 4 of the Reserve Capacity Cycle, assuming an ambient temperature of 41°C. **[MR4.11.1(a)]**

- 10 For the purposes of step 1.13.9 'daily peak demand times' are the Trading Intervals occurring between 8 AM and 10 PM. This is the same meaning as Peak Trading Intervals as defined in the Market Rules.

Assignment of Certified Reserve Capacity

- 11 If the application is for the current Reserve Capacity Cycle, the IMO must assign Certified Reserve Capacity to the Facility equal to the minimum of the level determined at step 1.13.9 or the level nominated by the applicant.
- 12 If the application is for Conditional Certified Reserve Capacity, the IMO must assign Conditional Certified Reserve Capacity to the Facility equal to the minimum of the level determined at step 1.13.9 or the level nominated by the applicant.
- 13 If the application is for Early Certified Reserve Capacity, the IMO must assign Early Certified Reserve Capacity to the Facility equal to the minimum of the level determined at step 1.13.9 or the level nominated by the applicant.
- 14 If the application is for re-certification and the IMO is satisfied that the application which has been re-lodged is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned and the information is correct then the IMO must confirm the Certified Reserve Capacity, or Conditional Certified Reserve Capacity, depending on the Reserve Capacity Cycle for which the application is being made, that was previously assigned by the IMO.
- 15 If the application is for re-certification and the Market Participant has not submitted details of Network Access offer(s) and Environmental Approvals in accordance with step 1.8.9 of this Procedure, the IMO will deem the application to be inconsistent with the initial application by which the Facility received Conditional Certification of Reserve Capacity. This will be made on the basis that the Facility detailed in the initial application for Conditional Certified Reserve Capacity would be a Registered Facility in accordance with clause 4.11.1(f) and there were no potentially limiting factors.
- 16 If the re-lodged application is not consistent with the information upon which the Conditional Certified Reserve Capacity was assigned or the information is not correct, the IMO must not take the Conditional Certified Reserve Capacity into account when processing the application. **[MR4.9.5]**

Initial Reserve Capacity Obligation Quantity

- 17 The IMO must determine whether there are periods of time during which staffing or other factors will limit the Facility's ability to operate at full output.
- 18 IMO must set the initial Reserve Capacity Obligation at a level equal to the Certified Reserve Capacity except for those periods of time determined at

step 1.13.17, in which case the IMO may set the initial Reserve Capacity Obligation at a lower level.

- 19 If the application is for Early Certified Reserve Capacity the IMO must set the Capacity Credits for the Facility equal to the Early Certified Reserve Capacity of the Facility once the Reserve Capacity Security is provided the IMO in accordance with clause 4.28C.8 **[MR4.28C.10]**.

1.14. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new Intermittent Generator

- 1 The IMO must complete its certification for a new intermittent generating Facility based on the following steps using the information provided by the applicant and based on any other information that the IMO may require to make its determinations.
- 2 If the applicant has submitted a report, in accordance with clause 4.10.3 of the Market Rules, prepared by an expert accredited by the IMO, the IMO must set Certified Reserve Capacity for the Facility based upon the estimate provided by the expert. **[MR 4.11.1(e)]**
- 3 If the applicant has not submitted a report in accordance with clause 4.10.3 of the Market Rules, the IMO will set the Certified Reserve Capacity to zero.

Assessment of potentially limiting factors

- 4 The IMO must determine whether there are any restrictions on the capacity expected to be available due to staffing or availability and, if so, what level of capacity is expected to be available. **[MR 4.10.1(g)]**
- 5 The IMO must determine whether the Facility will be subject to a Network Control Service contract and, if so, whether the capacity that the Facility can usefully contribute is likely to be limited by transmission constraints. **[MR 4.11.1(g)]**
- 6 The IMO must determine whether there are any other reasons to think that the Facility may not be able to provide the level of Reserve Capacity nominated by the Market Participant.

Assignment of Certified Reserve Capacity

- 7 If the application is for the current Reserve Capacity Cycle, for an Intermittent Generator that has not commenced operation, the IMO must assign Certified Reserve Capacity as the amount determined in step 1.14.2, subject to steps 1.14.4 and 1.14.6 (where applicable).
- 8 If the application is for Conditional Certified Reserve Capacity, the IMO must assign Conditional Certified Reserve Capacity as the amount determined in step 1.14.2, subject to steps 1.14.4 and 1.14.6 (where applicable).
- 9 If the application is for Early Certified Reserve Capacity, the IMO must assign Early Certified Reserve Capacity as the amount determined in Step 1.14.2, subject to steps 1.14.4 and 1.14.6 (where applicable).

- 10 If the application is for re-certification of Conditional Certified Reserve Capacity and the IMO is satisfied that the application which has been re-lodged is consistent with the information upon which the Conditional Certified Reserve Capacity was assigned and the information is correct then the IMO must confirm the Certified Reserve Capacity, or Conditional Certified Reserve Capacity, depending on the Reserve Capacity Cycle for which the application is being made, that was previously assigned by the IMO.
- 11 If the application is for re-certification and the Market Participant has not submitted details of Network Access offer(s) and Environmental Approvals in accordance with step 1.8.9 of this Procedure, the IMO will deem the application to be inconsistent with the initial application by which the Facility received Conditional Certification of Reserve Capacity. This will be deemed to be made on the basis that the Facility detailed in the initial application for Conditional Certified Reserve Capacity would be a Registered Facility in accordance with clause 4.11.1(f) and there were no potentially limiting factors.
- 12 If the re-lodged application is not consistent with the information upon which the Conditional Certified Reserve Capacity was assigned or the information is not correct, the IMO must not take the Conditional Certified Reserve Capacity into account when processing the application.

Initial Reserve Capacity Obligation Quantity

- 13 The initial Reserve Capacity Obligation Quantity for an Intermittent Generator is zero.
- 14 If the application is for Early Certified Reserve Capacity the IMO must set the Capacity Credits for the Facility equal to the Early Certified Reserve Capacity of the Facility once the Reserve Capacity Security is provided the IMO in accordance with clause 4.28C.8 **[MR4.28C.10]**.

1.15. Procedure steps to be followed by the IMO in setting the Certified Reserve Capacity for a new Curtailable Load, Interruptible Load or Dispatchable Load

- 1 The IMO must complete its certification of a new Curtailable Load or Dispatchable Load based on the following steps using the information provided by the applicant and based on any other information that the IMO may require to make its determinations.

Availability classes

- 2 The IMO must assess each capacity block and accept only those where:
 - (a) The maximum number of hours per year that the block is available to provide Reserve Capacity is not less than 24; and
 - (b) The maximum number of hours per day that the block is available to provide Reserve Capacity is not less than four.

- 3 Each accepted capacity block is to be allocated to an Availability Class where:
- (a) Blocks that are available for at least 24 hours but less than 48 hours are allocated to Availability Class 4;
 - (b) Blocks that are available for at least 48 hours but less than 72 hours are allocated to Availability Class 3; and
 - (c) Blocks that are available for at least 72 hours but less than 96 hours are allocated to Availability Class 2.

Assessment of potentially limiting factors

- 4 The IMO must determine whether there are any restrictions on the capacity expected to be available due to staffing or availability and, if so, what level of capacity is expected to be available. **[MR 4.10.1(g)]**
- 5 The IMO must determine whether the Facility will be subject to a Network Control Service contract and, if so, whether the capacity that the Facility can usefully contribute is likely to be limited by transmission constraints. **[MR 4.11.1(g)]**
- 6 The IMO must determine whether there are any other reasons to think that the Facility may not be able to provide the level of Reserve Capacity nominated by the Market Participant.

Assignment of Certified Reserve Capacity

- 7 Where the applicant has specified the Reserve Capacity expected to be available from a capacity block in accordance with clause 4.10.1(f)(i)(1) of the Market Rules, the IMO is to assign Certified Reserve Capacity for that capacity block equal to the expected Reserve Capacity reduction from the Relevant Demand level determined in accordance with clause 4.26.2C of the Market Rules and subject to the assessment of potentially limiting factors.
- 8 Where the applicant has specified the Stipulated Default Load for any capacity block, the IMO is to determine the expected load reduction based on expected load data and assign Certified Reserve Capacity to that capacity block equal to that expected load reduction subject to the assessment of potentially limiting factors.
- 9 Where the applicant has indicated that the Reserve Capacity is to be in the form of a Demand Side Programme, the IMO must assign Certified Reserve Capacity in consideration of clause 4.8.3. The following must be considered in the assignment of Certified Reserve Capacity:
- (a) No Intermittent Load may be included in the Demand Side Programme. **[MR 4.8.3(a)]**
 - (b) The Loads comprising the Demand Side Programme must be registered as Curtailable Loads if they are to count towards satisfying the relevant Reserve Capacity Obligations of the Demand Side Programme and must not have been separately awarded Capacity Credits. **[MR 4.8.3(b)]**

- (c) As the Loads comprising the Demand Side Programme are registered, the IMO must assign Certified Reserve Capacity and Reserve Capacity Obligations to those Facilities and must correspondingly reduce the Certified Reserve Capacity and Reserve Capacity Obligations associated with the Demand Programme Side during the time those Facilities are registered. **[MR 4.8.3(c)]**
- (d) After accounting for the modifications in (c), if at any time a Market Customer has Reserve Capacity Obligations associated with its Demand Side Programme then, for settlement purposes, the Demand Side Programme must be treated by the IMO as a Facility that has failed to satisfy its Reserve Capacity Obligations. **[MR 4.8.3(d)]**
- (e) Loads comprising the Demand Side Programme must have the same or higher availability as the Demand Side Programme. **[MR 4.8.3(e)]**

Initial Reserve Capacity Obligation Quantity

- 10 The assigned Certified Reserve Capacity for each capacity block must be available for the number of hours per year that does not exceed the maximum specified by the applicant for that capacity block.
- 11 The assigned Certified Reserve Capacity for each capacity block must be available for the number of hours per day that does not exceed the maximum specified by the applicant for that capacity block.
- 12 The initial Reserve Capacity Obligation must take account of any staffing and other restrictions that may limit the ability of the Facility to vary its demand upon request.
- 13 If the capacity of a Curtailable Load is specified in accordance with clause 4.10.1(f)(i)(1), the Certified Reserve Capacity assigned by the IMO to that Curtailable Load, including during the registration of that Curtailable Load in accordance with clause 4.8.3(c), must not exceed the Relevant Demand for the Curtailable Load set by the IMO in accordance with clause 4.26.2C of the Market Rules.

1.16. Procedure steps to be followed by the IMO in advising an applicant of its Certified Reserve Capacity

The IMO is to provide the following information to the applicant on the results of applications for Certified Reserve Capacity. **[MR 4.9.5 & 4.9.9]**

- 1 **Identity of Market Participant and Facility** – The identity of Market Participant making the application and the identification of the Facility for which the results apply.
- 2 **Application of Results for Facility** – The Reserve Capacity Cycle to which the result applies. **[MR 4.9.5]**
- 3 **Conditional Certified Reserve Capacity** – In the case of Certified Reserve Capacity relating to a future Reserve Capacity Cycle, the conditions of continued certification, including the requirements for reapplying for certification. **[MR 4.9.5]**

- 4 **Certified Reserve Capacity** – The amount of Certified Reserve Capacity to apply to the Facility. **[MR 4.9.9]**
- 5 **Initial Reserve Capacity Obligations** – The Initial Reserve Capacity Obligations associated with the Certified Reserve Capacity. **[MR 4.9.9]**
- 6 **Reserve Capacity Security Deposit Requirements** – Any Reserve Capacity Security Deposit required as a condition of the Facility holding the Certified Reserve Capacity. **[MR 4.9.9]**
- 7 **Calculation Basis for Certification** – The calculations upon which the IMO's determination is based.

APPENDIX A

This appendix specifies in more detail some of the information required by the Market Rules which Market Participants need to provide as part of their annual application for Certified Reserve Capacity.

Financing [MR 4.10.1 (c) iii 2.]

To facilitate verification of the key financing dates provided in the submission, the applicant must provide details of their financing status at the time of application, including any financing applications made and the current status of these applications.

Temperature Dependence [MR 4.10.1 (e) i.]

The applicant must provide temperature dependence curves in 0.1 degree intervals, for the capacity level applied for.

The temperature dependence curve must be verified from either the manufacturer or an independent engineering firm in intervals up to 5 degrees, where the intervals between each verified interval must be a linear interpolation.

If the application relates to an upgrade of a facility for which temperature dependence curves have previously been provided, the applicant must provide new heat rate curves reflecting the upgrade.

Environmental Approval [MR 4.10.1 (c) ii.]

The applicant must provide detail of all environmental approvals it has applied for and the status of each of the specific areas. Acceptable supporting evidence includes (but is not limited to):

- details and status of submissions made to the relevant Government instrumentalities i.e. the Environmental Protection Authority and/or Department of the Environment and Heritage.; or
- details relating to the above submissions provided by the Market Participant's appointed environmental contractor.