

**ELECTRICITY INDUSTRY ACT**

**ELECTRICITY INDUSTRY (WHOLESALE ELECTRICITY  
MARKET) REGULATIONS 2004**

**WHOLESALE ELECTRICITY MARKET RULES**

**Power System Operation Procedure:  
Facility Outages**

| <b><u>Version history</u></b>     |  |
|-----------------------------------|--|
| 21 September 2006                 | Power System Operation Procedure (Market Procedure) for Facility Outages                           |
| 1 April 2009                      | System Management amended changes to the procedure resulting from Procedure Change Report PPCL0003 |
| 21 June 2011                      | System Management amended changes to the procedure resulting from Procedure Change Report PPCL0017 |
| Balancing Market Commencement Day | System Management replacement of the procedure resulting from Procedure Change Report PPCL0023     |

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## RELATIONSHIP WITH MARKET RULES

1. This Power System Operation Procedure (PSOP): Facility Outages (Procedure) has been developed in accordance with, and should be read in conjunction with, the Wholesale Electricity Market Rules (Market Rules).
2. References to particular Market Rules within the Procedure in bold and square brackets **[MR XX]** are current as of the Balancing Market Commencement Day. These references are included for convenience only, and are not part of this Procedure.
3. This Procedure is subservient to the Market Rules. In the event of conflict between this Procedure and the Market Rules or any other document, the order of precedence is as set out in the Market Rules **[MR 1.5.2]**.
4. This Procedure may include explanatory text, including quotations from the Market Rules. Such explanatory text is for information only, does not form part of the Procedure, and is italicised and contained in a rectangular box.
5. A word or phrase defined in the Electricity Industry Act 2004, or in the Regulations or Market Rules made under that Act, has the same meaning when used in this Procedure.

## RELATED DOCUMENTS

1. This Procedure is related to, and should be read in conjunction with, the following:
  - a. PSOP: Communications and control;
  - b. PSOP: Commissioning and Testing;
  - c. PSOP: Power System Security; and
  - d. Market Procedure: IMS Interface.

## COMMENCEMENT

1. This replacement Procedure has effect from the Balancing Market Commencement Day.

## 1 SCOPE

1. This Procedure has been developed in accordance with the Market Rules **[MR 3.18.21, 3.19.14, 3.21.12 and 4.11.1(h)]** and:
  - a. details the processes to be followed by:
    - i. System Management, the IMO, Market Participants and Network Operators when planning for an outage of a Network, Market Generator, Load or a Ancillary Service Facility;
    - ii. System Management, Market Participants and Network Operators when conducting final approval of outages;
    - iii. System Management, Market Participants and Network Operators when determining and reporting Forced Outages and Consequential Outages; and
  - b. the formula to be used for determining the Planned Outage and Forced Outage rates of a Facility.
2. This Procedure includes details of the processes:
  - a. that enable Market Participants and Network Operators to gain agreement with System Management on the timing of outages of facilities;
  - b. to resolve possible conflicts between Outage Plans of different Rule Participants; and
  - c. to assist System Management in the management of Power System Security.

## 2 COMMUNICATIONS AND CONTACTS

### 2.1 Rule Participant Contacts

1. Depending on the circumstances, System Management may communicate directly with Rule Participants or request Rule Participants to seek resolution of Outage Plan conflicts amongst themselves.
2. Market Participants and Network Operators must provide System Management with the communication details of the operating person(s) authorised to submit Outage Plans and request cancellations of Planned Outages for each of their facilities.
3. System Management must maintain a record of details as advised in Paragraph 2.1.2 and make them available to Market Participants and other involved parties on an as needed basis.

### 2.2 System Management Contacts

1. System Management must from time to time advise Market Participants and Network Operators of its contact details and modes of communication in respect of outages.

## 2.3 Communication and publication of Outage Plans, Schedules and Approvals

1. Communication of outage notices and schedules shall be made through System Management's Market Information Technology System ("SMMITS") web interface as soon as practicable, unless otherwise directed by System Management where SMMITS is unavailable.

## 3 SWIS EQUIPMENT LIST

*The Market Rules [MR 3.18.2(a)&(b)] require System Management to compile and maintain a list of all equipment in the SWIS that is subject to outage scheduling by System Management.*

### 3.1 Content of the equipment list

1. In addition to the requirements of the Market Rules [MR 3.18.2(c)] the list of equipment must include:
  - a. All network circuits that could affect the output from a generating Facility during a Planned Outage of that circuit; and
  - b. All Verve Energy generating facilities; and
  - c. All Non-Verve Energy generating facilities with output ratings in excess of 10MW; and
  - d. Any facilities contracted to provide Ancillary Services that are not covered by the above.
2. Market Generators and Loads with a name plate capacity rating less than 10 MW may be included in the equipment list, where outage scheduling is required for the maintenance of Power System Security and Power System Reliability, as specified in the Market Rules [MR 3.18.2A].
3. System Management must consider the following factors in making a decision as to whether to include or exclude a piece of equipment on the list:
  - a. The safety of equipment, personnel and the public; and
  - b. Power System Security and Power System Reliability.

### 3.2 Reconsideration of items on the equipment list

1. A Market Participant or Network Operator may request that the Independent Market Operator reassess the inclusion or exclusion of its Facility or item of equipment on the list in accordance with the Market Rules [MR 3.18.3].
2. Before requesting the IMO to conduct a reassessment under Paragraph 3.2.1 a Market Participant or Network Operator may initially contact System Management to discuss the inclusion or exclusion of its Facility or item of equipment on the list.

## 4 OUTAGE SCHEDULE

*The requirements for System Management to maintain an outage schedule, containing information on all Scheduled Outages are specified in the Market Rules [MR 3.18.4].*

1. The outage schedule must contain a list of all accepted and approved outages.
2. The outage schedule must contain the identity of the item of equipment and the planned starting and completion times of each Outage Plan accepted by System Management, up to three years ahead.

*The Market Rules [MR 3.18.5D] specify that System Management may disclose information from the outage schedule to a Network Operator to coordinate outage timings.*

## 5 OUTAGE PLANS

### 5.1 Outage Plan

1. System Management must accept an Outage Plan that:
  - a. contains the information specified in the Market Rules [MR 3.18.6]; and
  - b. is submitted in accordance with the requirements of this Procedure; and
  - c. meets the criteria for evaluating Outage Plans specified in the Market Rules [MR 3.18.11].
2. Market Participants and Network Operators must submit all Outage Plans and requests for on-the-day and day-ahead Opportunistic Maintenance in accordance with Paragraph 2.3.1.
3. System Management may require the Market Participant to clarify or provide additional information in relation to an accepted Outage Plan prior to approval of the Outage Plan.
4. The time of lodgement of the Outage Plan shall be deemed as the time when the outage plan is transmitted to System Management and an acknowledgement of the submission has been provided.

### 5.2 Changes to an Outage Plan

*The requirements for Market Participants or Network Operators to revise plans to remove from service or de-rate an item of equipment are specified in the Market Rules [MR 3.18.8 and MR 3.18.9].*

1. A Market Participant or Network Operator wishing to change or withdraw an Outage Plan pursuant to the Market Rules [MR 3.18.8 or MR 3.18.9] must:
  - a. if the Outage is planned to commence within 24 hours, inform System Management by telephone as soon as practicable and provide confirmation in accordance with Paragraph 2.3.1; or

- b. otherwise, inform System Management through SMMITS or as otherwise directed from time to time by System Management where SMMITS is unavailable.
2. If changes to an Outage Plan are considered by System Management to be minor in nature, do not materially impact Power System Security or other Outage Plans and do not change the timing of the Planned Outage, System Management may accept these changes without requiring the plan to be resubmitted.

*Note that it is the Market Participant's responsibility to ensure their Balancing Submissions are consistent with their Outage Plans at all times.*

### **5.3 Outage Plans lodged within the final six weeks**

*The requirements applying to an Outage Plan first submitted within 6 weeks of the commencement time of the outage are specified in the Market Rules [MR 3.18.7A].*

1. In assessing whether to reject an Outage Plan [MR 3.18.7A], System Management must take into account:
  - a. If the Outage Plan arises from a need to carry out relatively urgent and unforeseen maintenance on its Facility, when the Market Participant or Network Operator became aware of the need; and
  - b. Whether the nature of the work to be carried out on the Facility makes it difficult to plan times accurately in advance, or the work is contingent on actions outside the control of the Market Participant or Network Operator.
2. When System Management is unable to assess an Outage Plan in the time available, System Management may reject the Outage Plan and require the Market Participant or Network Operator to resubmit the Outage Plan.

### **5.4 Grouping of Associated Outage Plans**

*The requirements for Market Participants and Network Operators to coordinate outages are specified in the Market Rules [MR 3.18.5C].*

1. In the situation where a close interdependency exists between outages on multiple Facilities or items of equipment, System Management may assess the associated Outage Plans together and may approve, review or reject the group as a whole.

## **6 ACCEPTANCE OF OUTAGE PLANS**

### **6.1 Assessment of Outage Plans**

1. A Market Participant or Network Operator must make application for the acceptance of an outage plan via SMMITS unless otherwise directed from time to time by System Management where SMMITS is unavailable.



2. System Management must use reasonable endeavours to respond to a request for a proposed Outage Plan received from a Market Participant or Network Operator within 10 business days of receipt of a generation Outage Plan and within 20 Business Days of receipt of a network Outage Plan.
3. System Management must take all reasonable steps to expedite assessments of all submitted Outage Plans.

## **6.2 Adequacy criteria for assessing the acceptability of Outage Plans**

1. System Management must assess the acceptability of Outage Plans using the criteria specified in the Market Rules **[MR 3.18.11 (a) to (d) & MR 3.18.12]**, based on the information specified in the PSOP: Power System Security.
2. Acceptance by System Management of an Outage Plan must be based on the 2nd standard deviation (SD) PASA load forecast as specified in the Market Rules **[MR 3.18.11(a)]**.

*Due to the fact that, during summer, the 2nd SD of the weather adapted load forecast may exceed the 2nd SD of the PASA load forecast, an outage in the summer period is only accepted conditionally. However, this does not imply that the outage can or will be approved. Due to the variability of summer loads the final assessment is normally carried out 2 days prior to the scheduled outage commencement. This is because the assessment must be based on the more reliable weather-corrected load forecast. To increase the likelihood of approval, participants are advised to plan long duration outages to occur outside of the summer months, which are typically from the beginning of December to the end of March.*

*System Management may find an Outage Plan to be acceptable, acceptable under some circumstances, or not acceptable. The actions System Management is required to take in each case are specified in the Market Rules **[MR 3.18.13]**.*

## **6.3 Criteria for selection of Outage Plans in the event of conflicting Outage Plans**

*System Management must adhere to the criteria for the selection and prioritisation of outage plans as specified in the Market Rules **[MR 3.18.14]**.*

1. System Management must notify all affected Market Participants and Network Operators of any decision made **[MR 3.18.14]** via SMMITS or an alternative communication method as defined in the PSOP: Communications and Controls Systems, and must use reasonable endeavours to confirm its decision by telephone.

## 6.4 Acceptance of non-complying Outage Plan for reasons of System Security

*The Market Rules provide for System Management to permit an Outage Plan to proceed even if it does not meet the criteria for acceptance as specified in the Market Rules [MR 3.18.11(e)].*

*This situation could, for example, arise in relation to outages intended to address ongoing plant unreliability.*

1. Where an Outage Plan does not meet the criteria for acceptance specified in Paragraph 6.2.1 [MR 3.18.1(a) to (d)] System Management may still accept the Outage Plan if it considers that the increased security risk over the period of the outage is less than the longer-term risk reduction that would be achieved by allowing the outage to go ahead [MR 3.18.11(e)].
2. If System Management accepts an Outage Plan pursuant to Paragraph 6.4.1, System Management must document its estimation of the extent of the risk including the likelihood and consequences, and ongoing advantages that arise over the longer term, as a result of accepting an Outage Plan.

## 7 CHANGES TO POWER SYSTEM CONDITIONS AFFECTING SCHEDULED OUTAGES

1. Where System Management's forecast of power system conditions for a period coinciding with an Outage Plan occurs, such that the Outage Plan would no longer meet the criteria for acceptance, System Management may withdraw its acceptance of the Outage Plan and either deem that that the Outage Plan is unacceptable, or deem that the Outage Plan is acceptable under certain circumstances.
2. Where System Management withdraws its acceptance of an Outage Plan, it must inform the relevant Market Participant or Network Operator of its decision via SMMITS or an alternative communication method as defined in the PSOP: Communications and Controls Systems. System Management must use reasonable endeavours to confirm its decision by telephone.

## 8 PRE-ACCEPTED OUTAGES

1. No earlier than 8am on the 7th day prior to the Trading Day in which the outage commences, a Market Participant may make a request via telephone for an outage where this communication may be deemed as a request for acceptance ('Pre-Accepted Outage').
2. Where requesting a Pre-Accepted Outage, a Market Participant must first telephone System Management, where contact details are advised from time to time, and obtain a verbal agreement that there is a likelihood that the request can be approved.
3. Following the telephone call in Paragraph 8.2. or as otherwise directed, the Market Participant must provide the proposed Outage Plan via SMMITS, or

as otherwise directed from time to time by System Management where SMMITS is unavailable, as soon as practicable.

4. System Management must apply the approval framework in accordance with Section 9 of this Procedure to the proposed Outage Plan. Where System Management approves the request, the telephone conversation seeking approval to submit the Pre-Accepted Outage will be deemed as satisfying the request for Acceptance.

## 9 APPROVAL OF SCHEDULED OUTAGES

*The requirements for a Market Participant or Network Operator to request approval of a Scheduled Outage plan are specified in the Market Rules [MR 3.19.1].*

*The criteria that System Management must adhere to when assessing whether to grant approval of Scheduled Outage requests are specified in the Market Rules [MR 3.19.6].*

1. A Market Participant or Network Operator must make application for, and receive, approval of an accepted Outage Plan prior to conducting the Outage referred to in the Outage Plan.
2. Where a Market Participant requires an approval of an outage earlier than the two days in advance as specified in the Market Rules [MR 3.19.1], the Market Participant may raise a request to System Management. System Management must assess each such request on its own merits.
3. The application referred to in Paragraph 9.1 must be made via SMMITS, or as otherwise directed where SMMITS is unavailable from time to time by System Management.
4. At the time the application is made under Paragraph 9.1 the Market Participant or Network Operators must also advise System Management of any change to the information contained in the Outage Plan originally provided to System Management.
5. Before approving a Scheduled Outage request, System Management may at its sole discretion require a Market Participant's or Network Operator's authorised personnel included in the relevant contact list to make a written declaration that the unit is available prior to the outage commencing. System Management must reject any Scheduled Outage request where the relevant Market Participant or Network Operator does not comply with such a request.

*Paragraph 9.5 relates to System Management's right under the Market Rules [MR 3.19.3A(c)] to reject an outage request that it considers to be made principally to avoid exposure to Reserve Capacity refunds.*

6. Notification by System Management of either an approval or rejection of a Scheduled Outage must be made via SMMITS or as otherwise directed by System Management where SMMITS is unavailable.

*System Management would consider fuel in evaluating an Outage Plan only when there is known shortage of fuel to the extent that it may impact on the availability of generators and the security of the system. The fuel shortage can be due to*

*restrictions arising from supply or transportation. When this happens, System Management would confirm the feasibility of its dispatch plans with the relevant Market Participants. Where the participant confirms the loss of generation due to fuel, System Management would simulate accordingly in the PASA.*

## **10 OPPORTUNISTIC MAINTENANCE**

*Opportunistic Maintenance refers to approved outages that are carried out without previously having been subject to Acceptance. Applications for opportunistic maintenance generally carry a lower probability of approval because more of the factors governing power system security are 'locked in' by the time such an application is made.*

*The requirements for a Market Participant or Network Operator to request approval of Opportunistic Maintenance are specified in the Market Rules **[MR 3.19.2(a)]** ("day-ahead opportunistic maintenance") and **[MR 3.19.2(b)]** ("on the day Opportunistic Maintenance").*

*The criteria that System Management must adhere to when assessing whether to grant approval for Opportunistic Maintenance requests are specified in the Market Rules **[MR 3.19.6]**.*

### **10.1 Opportunistic Maintenance**

1. System Management must not approve an Opportunistic Maintenance request which would require any change in energy scheduled in accordance with the Forecast BMO, or in scheduled Ancillary Services.

*As a consequence of Paragraph 10.1.1, generating Facilities which are not part of the Verve Energy Balancing Portfolio cannot have an Opportunistic Maintenance request approved that would result in the generator being unable to perform in accordance with the BMO and latest Forecast BMO.*

2. Before approving an Opportunistic Maintenance request System Management may at its sole discretion require a Market Participant's or Network Operator's authorised personnel included in the relevant contact list to make a written declaration that the unit is available prior to the outage commencing. System Management must reject any day-ahead Opportunistic Maintenance request where the relevant Market Participant or Network Operator does not comply with such a request.

*Paragraph 10.1.2, relates to System Management's right under the Market Rules **[MR 3.19.3A(c)]** to reject an outage request that it considers to be made principally to avoid exposure to Reserve Capacity refunds.*

### **10.2 Day-ahead Opportunistic Maintenance**

1. A Market Participant or Network Operator must make application for the approval of a day-ahead Opportunistic Maintenance outage request by telephone, and confirm the request via SMMITS, or as otherwise directed

from time to time by System Management where SMMITS is unavailable, as soon as practicable.

2. System Management must provide confirmation of its approval or rejection via SMMITS or an alternative communication method as defined in the PSOP: Communications and Controls Systems.
3. Requests for approval of day-ahead Opportunistic Maintenance must be processed as follows:
  - a. Applications made between 10:00 am and 3:30 pm on the day prior to the Scheduling Day must be approved or rejected by 8:00 am on the Scheduling Day; or
  - b. Applications made between 3:30 pm on the day prior to the Scheduling Day and 6:00 am on the Scheduling Day must be approved or rejected by 8:00 am on the Scheduling Day subject to staff availability, and in any case by 12:00 pm on the Scheduling Day; or
  - c. Applications made between 6:00am and 10:00 am on the Scheduling Day must be approved or rejected by 12:00 pm on the Scheduling Day

*The time required for processing day-ahead Opportunistic Maintenance requests varies depending on the complexity of the assessment required. Participants are encouraged to allow as much time as possible as System Management must reject requests that cannot be assessed in the time available.*

4. System Management must not approve a request for a day-ahead Opportunistic Maintenance after 12:00 pm on the Scheduling Day.

### **10.3 On-the-day Opportunistic Maintenance**

1. System Management must as soon practicable advise a Market Participant or Network Operator of its decision to approve or reject a request for an on-the-day Opportunistic Maintenance outage by telephone and confirm the approval via SMMITS or where SMMITS is unavailable an alternative communication method as defined in the PSOP: Communications and Controls Systems.
2. System Management must log in SMMITS all approvals and rejections and the reasons for System Management's decision.

## **11 OUTAGE RECALLS**

1. When a situation arises where the Power System Security is at risk and the cancellation of outages could potentially alleviate the situation, System Management must consider all current Planned Outages and outages in progress and assess whether rejecting one or more Planned Outages or recalling equipment to service may assist in reducing the identified risk to power system security.

*In a High-Risk Operating State, System Management may cancel or defer planned outages that have not yet commenced. In an Emergency Operating State, System Management may additionally recall to service Facilities that are on outage according to their Outage Contingency Plans.*

2. If in the view of System Management there is benefit in the action referred to in Paragraph 11.1, System Management may contact the Market Participant or Network Operator and discuss the impact of rejecting the outage or recalling the equipment to service.
3. The Market Participant or Network Operator must cooperate with System Management and determine when the equipment can be returned to service and the best way of proceeding with such action. The Market Participant or Network Operator must give this information to System Management as soon as practicable.
4. Market Participants and Network Operators must comply with the directions of System Management to the extent that they are required to do so under the prevailing Operating State.

## 12 FORCED OUTAGES AND CONSEQUENTIAL OUTAGES

*The requirements for Forced or Consequential Outages are specified in the Market Rules [MR 3.21].*

1. Where a facility or item of equipment is unavailable or de-rated, the relevant Market Participant or Network Operator experiencing the unavailability or de-rating must communicate the nature of that unavailability or de-rating by telephone to System Management as soon as practicable, using contact details that are advised from time to time as specified in the Market Rules **[MR 3.21.7]**.
2. The relevant Market Participant or Network Operator must, upon request, inform System Management of the facility or item of equipment's status and provide a good-faith estimate of the likely return to service time.
3. Whenever System Management receives communications from a Market Participant or Network Operator, including but not limited to one or more of the following (as applicable):
  - a. Electronic communications via e-mail or SMMITS; or
  - b. Voice communications; or
  - c. SCADA,relating to the capabilities of their facility or facilities System Management must determine whether the facilities affected are unavailable for any period or periods.
4. The Market Participant or Network Operator must provide a full and final description of the outage to System Management, via SMMITS, or as otherwise directed from time to time by System Management where SMMITS is unavailable, by midnight on the date specified in the Market Rules **[MR 3.21.7]**.
5. System Management must investigate any communication relating to the availability of a Facility or item of equipment that is not in accordance with the information contained in SMMITS **[MR 3.21.7]**.

6. If the Market Participant believes the outage suffered is a Consequential Outage, the Market Participant may provide notice from an Authorised Officer (as defined in Corporations Act) (or equivalent for entities not covered by the Corporations Act) to System Management as to why the outage should be considered to be a Consequential Outage within the time limit specified in the Market Rules **[MR 3.21.8.]**
7. A notice provided under Paragraph 12.6 must be signed by an Authorised Officer (or equivalent for entities not covered by the Corporations Act) and may be provided to System Management in person, by email or post.
8. Where a Market Participant provides notice in accordance with Paragraph 12.6 above, System Management must provide a notification of receipt to the impacted Market Participant as soon as practicable.
9. System Management must determine whether to classify the outage as a Consequential Outage in accordance with the requirements of the Market Rules **[MR 3.21.2].**
10. In determining whether a Facility has experienced a Consequential Outage System Management must accept the information provided under Paragraph 12.6 unless the information is inconsistent with other information held by System Management **[MR 3.21.9].**

*The Market Rules define a Forced Outage **[MR 3.21.1]** and a Consequential Outage **[MR 3.21.2].***

*If a Market Participant does not provide System Management with a notice required under Paragraph 12.6 above, the Outage will not be deemed to be a Consequential Outage **[MR 3.21.10].***

### **13 FORCED OUTAGE AND CONSEQUENTIAL OUTAGE INFORMATION FOR THE IMO**

1. System Management must record in SMMITS the information provided by a Market Participant or Network Operator relating to each Forced Outage and Consequential Outage in accordance with the Market Rules **[MR 3.21].**
2. System Management must communicate this information to the IMO in accordance with the timelines specified in the market Rules **[MR 7.13.1A & MR 7.3.4]** and the Market Procedure: IMS Interface.
3. System Management must transmit to the IMO Forced Outage and Consequential Outage information it has been advised by a Market Participant or Network Operator in accordance with the Market Rules.

### **14 CALCULATION OF PLANNED OUTAGE RATE AND FORCED OUTAGE RATE**

1. The Planned Outage rate and Forced Outage rate for a Facility will be calculated in accordance with Appendix 1 of this Procedure.

## APPENDIX 1: CALCULATION OF PLANNED OUTAGE RATE AND FORCED OUTAGE RATE

The Planned Outage Rate and Forced Outage rate calculations are made in accordance with [MR 4.11.1(h)] the Market Rules.

### 1. Forced Outage Rate Calculation

| Outage Rate Calculation   | Definitions   |
|---|---|
| <p><b>Forced Outage Rate (%):</b></p> $\frac{(\text{FOH} + \text{EFDH})}{\text{PH}} \times 100$ | <p><b>FOH (Forced Outage Hours) = sum of all Trading Intervals,</b></p> <p>Where:</p> <p>Outage MW = Capacity Credit (MW) and the Outage Reason is Forced and during the period as required by the Market Rules [MR 4.11.1(h)], multiplied by 0.5.</p> <p><b>EFDH( Equivalent Forced Derated Hours) = sum of all Trading Intervals,</b></p> <p>Where:</p> <p>Outage MW &lt; Capacity Credit (MW) and the Outage Reason is Forced and during the period as required by the Market Rules [MR 4.11.1(h)], multiplied by 0.5 multiplied by Outage MW/Capacity Credit (MW).</p> <p><b>PH (Period hours) =</b></p> <p>where the Facility has been operating over the preceding 36 months, the number of Trading Intervals that occurred within the last 36 months, multiplied by 0.5; or</p> <p>where the Facility has been operating for less than 36 months, the number of Trading Intervals that occurred since the Facility commenced operation as advised by the IMO, multiplied by 0.5.</p> |



## 2. Planned Outage Rate Calculation

| Outage Rate Calculation  | Definitions  |
|--|--|
| <p><b>Planned Outage Rate (%):</b></p> $\frac{(\text{POH} + \text{EPDH})}{\text{PH}} \times 100$ | <p><b>POH (Planned Outage Hours) = sum of all trading intervals</b></p> <p>Where:</p> <p>Outage MW = Capacity Credit (MW) and the Outage Reason is Planned and during the period as required by the Market Rules <b>[MR 4.11.1(h)]</b>, multiplied by 0.5.</p> <p><b>EPDH (Equivalent Planned Derated Hours) = sum of all trading intervals</b></p> <p>Where:</p> <p>Outage MW &lt; Capacity Credit (MW) and the Outage Reason is Planned and during the period as required by the Market Rules <b>[MR 4.11.1(h)]</b>, multiplied by 0.5 multiplied by Outage MW/Capacity Credit (in MW).</p> <p><b>PH (Period hours) =</b></p> <p>where the Facility has been operating over the preceding 36 months, the number of Trading Intervals that occurred within the last 36 months, multiplied by 0.5; or</p> <p>where the Facility has been operating for less than 36 months, the number of Trading Intervals that occurred since the Facility commenced operation as advised by the IMO, multiplied by 0.5.</p> |