

## EXTRACT OF DRAFT PROPOSED AMENDING RULES FOR SECTION 3.7 – SYSTEM RESTART (v0.2)

### **Explanatory Note**

Section 3.7 deals with System Restart, including determining the System Restart Standard and procurement of System Restart Service contracts.

System Restart service is an Essential System Service that allows the SWIS to be restored by black start equipped capacity – i.e. capacity that does not require energy from the Network to start – following a blackout.

Section 3.7 does not deal with the recovery of costs for the provision of System Restart Services. Those arrangements are provided in the amendments for Market Settlement published as part of Tranche 2 Amending Rules.

Clause 3.10.6 has been moved to and modified under clause 3.7.1 to cover the System Restart Service Standard.

The current framework has been expanded to refer to a 'major supply disruption' as an event requiring System Restart Service.

Further amendments may be required as a result of any changes to the overall framework for the procurement and provision of Non-Co-optimised Essential System Services.

### **3.7. System Restart**

#### System Restart Standard and System Restart Plan

3.7.1. AEMO must determine the System Restart Standard in accordance with clause 3.7.2.

3.7.2. The System Restart Standard:

- (a) must identify the maximum length of time for which a System Restart Service will be able to operate continuously following a system shutdown or major supply disruption;
- (b) must specify the technical requirements that a Registered Facility must demonstrate to be eligible to provide a System Restart Service,
- (c) must include guidelines addressing the diversity of System Restart Services, including diversity of locations within the SWIS;
- (d) must include requirements for mitigating against the risk of unavailability of any System Restart Service during a system shutdown or major supply disruption; and
- (e) may include any other matters that AEMO determines are necessary to ensure the SWIS is restarted in the event of a system shutdown or major supply disruption.

3.7.3. AEMO must develop and maintain the System Restart Plan for the purposes of managing and coordinating restart and restoration of the SWIS in the event of system shutdown or major supply disruption.

3.7.4. The System Restart Plan must:

- (a) be consistent with the System Restart Standard;
- (b) cover the whole of the SWIS but may consist of one or more separable components; and
- (c) take into account any Local Black Start Procedures.

3.7.5. AEMO must:

- (a) in developing the System Restart Plan in accordance with clause 3.7.3; and
- (b) making any revisions to the System Restart Plan pursuant to clauses 3.7.10 or 3.7.11,  
consult in good faith with each Network Operator that AEMO considers may be impacted by the System Restart Plan, or the proposed revision to it, to assist AEMO to ensure that the System Restart Plan is effective and achievable, including in relation to viable restart paths.

3.7.6. Each Network Operator impacted by the System Restart Plan must conduct any studies or analyses that are reasonably required to provide input into the System Restart Plan, within a reasonable timeframe to be agreed with AEMO.

3.7.7. AEMO must, in developing, and making revisions to, the System Restart Plan, take into account any input provided by a Network Operator under clause 3.7.6, including any information in relation to:

- (a) viable restart paths; and
- (b) following a successful restart, the restoration of any sensitive Loads on the Network Operator's Network.

3.7.8. Where a Network Operator considers that the conditions on its Network have changed sufficiently to require changes to the System Restart Plan, the Network Operator:

- (a) may request AEMO to review the System Restart Plan; and
- (b) must, where a request is made by the Network Operator under clause 3.7.8(a), provide details of the changes to the conditions on its Network with the request.

3.7.9. Where the System Restart Plan, or any revision to it, requires a Network Operator to change or modify any Network equipment, AEMO and the Network Operator must agree a timeframe that is sufficient for the Network Operator to make any such change or modification, including time to undertake appropriate and reasonable testing.

3.7.10. Where AEMO:

- (a) has received a request from a Network Operator under clause 3.7.8; or

(b) considers, for any reason, that the System Restart Standard (or any part of it) is no longer achievable or effective.

AEMO must review the System Restart Standard or the System Restart Plan, or both, if required, and make any revisions that AEMO considers are necessary to ensure that the System Restart Standard and the System Restart Plan are achievable and effective for restarting the SWIS in the event of system shutdown or major supply disruption.

3.7.11. Without limiting the frequency of reviews AEMO may undertake in accordance with clause 3.7.10, AEMO must review the System Restart Standard and the System Restart Plan to ensure they are appropriate and consistent with the requirements of this section 3.7 within three years of the commencement of the System Restart Standard and System Restart Plan and then at least once in every three-year period from completion of the previous review.

#### **Local Black Start Procedures**

3.7.12. AEMO must publish guidelines for developing Local Black Start Procedures on the WEM Website.

3.7.13. Unless exempted by AEMO (in its absolute discretion), a Market Participant with a Registered Facility that is an energy producing system must:

(a) develop and maintain Local Black Start Procedures in accordance with the guidelines published by AEMO under clause 3.7.12 and any modifications published under clause 3.7.16; and

(b) promptly provide the Local Black Start Procedures to AEMO, including any amendments to them.

3.7.14. Local Black Start Procedures must provide sufficient information to enable AEMO to understand the likely condition and capabilities of Registered Facilities following a system shutdown or major supply disruption such that AEMO is able to develop and maintain the System Restart Plan.

3.7.15. If AEMO forms the view, acting reasonably, that it would be useful for the effective operation of the System Restart Plan, AEMO must provide each Network Operator with the Local Black Start Procedures that AEMO considers are relevant to the Network Operator.

3.7.16. Following a review conducted under clauses 3.7.10 or 3.7.11, AEMO may modify the guidelines for Local Black Start Procedures by publishing the modified guidelines on the WEM Website, which are deemed to take effect from the date of publication or later date notified by AEMO.

3.7.17. Following any modification to the guidelines for Local Black Start Procedures, AEMO may require a Market Participant with a Registered Facility that is an

energy producing system to amend the Local Black Start Procedures for the Registered Facility. Any such request by AEMO must:

- (a) set out the reasons for the requested amendments; and
- (b) specify a timeframe, which must be reasonable having regard to the extent and complexity of the request, by when the amendments to the Market Participant's Local Black Start Procedures for the Registered Facility must be made.

#### **Explanatory Note**

The System Restart Standard will be published by AEMO. However, the System Restart Plan and any other operational plans AEMO develops and maintains to restart the SWIS will be confidential to certain relevant parties such as AEMO, a Network Operator, the Economic Regulation Authority and the Coordinator of Energy, due to the likelihood of those plans containing confidential information regarding sensitive Loads. The confidentiality status assigned to the System Restart Plan may need to be amended following the review of the market information framework in Chapter 10 of the WEM Rules.

#### **Publication**

3.7.18. AEMO must publish the System Restart Standard, including any revisions following a review in accordance with clauses 3.7.10 or 3.7.11, on the WEM Website.

3.7.19. The System Restart Plan, and any revisions following a review in accordance with clauses 3.7.10 or 3.7.11, are AEMO Confidential.

#### **Explanatory Note**

Clauses 3.7.20 to 3.7.24 deal with obligations of Network Operators and Market Participants to support AEMO with the implementation of the System Restart Plan in the event it is enacted.

#### **Obligations to Restart the SWIS**

3.7.20. AEMO must use its reasonable endeavours to ensure the SWIS is restarted or restored in the event of system shutdown or major supply disruption.

3.7.21. In performing its obligation under clause 3.7.20, AEMO must, when coordinating with Network Operators regarding the restoration of the SWIS following a successful restart, have reasonable regard to the information provided by the Network Operator in relation to restoration of priority or sensitive Loads.

3.7.22. Each Network Operator must use its reasonable endeavours to ensure that, at all times, its Network is capable of being restarted or restored in accordance with the System Restart Plan in the event of a system shutdown or major supply disruption.

3.7.23. Each Network Operator must take all actions necessary to support and enable AEMO to implement the System Restart Plan in the event the System Restart Plan is enacted, including by:

- (a) complying with any directions from AEMO;
- (b) providing timely information to AEMO on the status of its Network and whether the System Restart Plan may need to be adjusted to address the actual conditions on the Network at that time;
- (c) coordinating with AEMO during the restoration of the SWIS on revisions that may be required to the System Restart Plan to address the actual conditions on the Network during the restoration; and
- (d) cooperating with any requests from AEMO, including using best endeavours to provide any information requested by AEMO within the time specified by AEMO.

3.7.24. Where directed by AEMO, a Market Participant must take all actions necessary to support the enactment of the System Restart Plan, including by:

- (a) committing or de-committing any, or all, of its facilities, or individual energy producing systems within its facilities, or operating them in a manner required by AEMO;
- (b) operating a Facility or individual energy producing system or equipment within a Facility in a particular manner, consistent with the relevant Registered Generator Performance Standards or Standing Data for that Facility;
- (c) providing an Essential System Service if the Facility is accredited for that Essential System Service; and
- (d) cooperating with any requests from AEMO, including using best endeavours to provide any information requested by AEMO within the time specified by AEMO.

**Explanatory Note**

Clause 3.7.25 outlines that AEMO must use reasonable endeavours to procure System Restart Services. If AEMO is unable to procure System Restart Services, then it would use emergency direction powers in the event of a major supply disruption or system shutdown to direct capable generators to restart the system.

**Procurement of System Restart Services**

3.7.25. AEMO must use its reasonable endeavours to procure System Restart Services to meet the System Restart Standard.

3.7.26. AEMO may enter into a System Restart Service Contract with a Market Participant.

3.7.27. AEMO must prepare a specification for a System Restart Service requirement to meet the System Restart Standard in accordance with the WEM Procedure specified in clause 3.7.40.

3.7.28. AEMO must publish a call for submissions for the provision of System Restart Service, no later than 20 Business Days prior to the proposed closing date for submissions, on the WEM Website and at least one major tender portal.

3.7.29. AEMO must include in the call for submissions referred to in clause 3.7.28:

- (a) the date and time for lodgement of submissions, which must be in accordance with the standard form contract referred to in clause 3.7.30;
- (b) contact details for AEMO;
- (c) a description of the technical requirements, including any locational requirements, for the System Restart Service;
- (d) the location on the WEM Website of the standard form contract referred to in clause 3.7.30; and
- (e) the location on the WEM Website of the specification prepared by AEMO in accordance with clause 3.7.27 for the System Restart Service.

**Explanatory Note**

Clause 3.7.30 sets out the minimum mandatory information to be provided by a Market Participant in the form of a standard form contract for the provision of System Restart Service.

3.7.30. AEMO must develop, maintain and publish on the WEM Website, a standard form contract for the provision of a System Restart Service which must include, at a minimum, the following fields:

- (a) the name of the Market Participant and its Registered Facility that is proposed to provide the System Restart Service;
- (b) the offer price for each cost component specified by AEMO, which may include, where applicable:
  - i. a price to cover the cost of capital works;
  - ii. a service availability price, including for ongoing maintenance works;
  - iii. a service testing price; and
  - iv. a service usage price;
- (c) the proposed contract term for the System Restart Service; and
- (d) the availability requirements for the System Restart Service.

3.7.31. A submission made by a prospective System Restart Service Provider in response to a call for submissions under clause 3.7.28 must:

- (a) be made in good faith;
- (b) be in the standard form contract published by AEMO in accordance with clause 3.7.30;

- (c) be capable of being accepted by AEMO and binding on the Market Participant and AEMO; and
- (d) include the cost information and any assumptions used to calculate the proposed offer for the provision of the System Restart Service.

3.7.32. Any costs incurred by a prospective System Restart Provider to determine the adequacy and capability of its equipment to assist it in making a valid submission under clause 3.7.31 are to be borne by that prospective System Restart Provider. To avoid doubt, this includes the costs of any negotiations with a Network Operator in respect to any Network equipment augmentation that may assist the prospective System Restart Service Provider in making a valid submission.

3.7.33. Where a prospective System Restart Service Provider approaches a Network Operator in respect to a proposed submission by the prospective System Restart Service under clause 3.7.31, the Network Operator must negotiate in good faith with the prospective System Restart Service Provider in respect of identifying and, if possible, resolving issues that would prevent the delivery of effective System Restart Services proposed by the prospective System Restart Service Provider.

#### Sharing System Restart Service submissions

3.7.34. Where a Market Participant makes a submission under clause 3.7.31, the Market Participant consents to AEMO sharing information contained in the submission in accordance with clause 3.7.35.

#### **Explanatory Note**

The information in a System Restart Service submission may also need to be shared with other entities such as the Coordinator for Energy and the Economic Regulation Authority. Clause 3.7.35 may therefore be further amended as part of the market information framework.

3.7.35. AEMO may, as part of assessing a submission under clause 3.7.31, provide details of the submission, except for the offer price and any other commercially sensitive information, to each relevant Network Operator to assist AEMO to determine whether the proposal in the submission is technically feasible, including whether any augmentation of the Network is required to make the proposal technically feasible.

#### **Explanatory Note**

Clauses 3.7.36 and 3.7.37 set out the obligations on AEMO to notify Market Participants and the market as to the awarding of System Restart Service Contracts and the forming of a System Restart Service Contract.

#### Awarding System Restart Service Contract

3.7.36. Where AEMO accepts a submission under clause 3.7.31, it must:

- (a) notify the Market Participant within five Business Days of accepting the submission; and

(b) publish a notice on the WEM Website within five Business Days of accepting the submission.

3.7.36A. AEMO and Market Participants, when entering into a System Restart Service Contract, must use the standard form contract published under clause 3.7.30. AEMO may allow changes from the standard form contract that AEMO considers are reasonably required having regard to the specific characteristics of the Facility that is accepted to provide the System Restart Service.

3.7.37. AEMO's acceptance of a submission under clause 3.7.31 will form a binding System Restart Service Contract on the Market Participant and AEMO and the Market Participant and AEMO must comply with the terms of the System Restart Service Contract.

**Explanatory Note**

Clause 3.7.38 describes the obligations of Network Operators in connection with the assessment of submissions by AEMO, including conducting analysis and supporting testing.

**Network Operator's Obligations to Facilitate System Restart Services**

3.7.38. A Network Operator must:

- (a) provide any information to AEMO and conduct any analysis which AEMO reasonably requires in order for AEMO to assess the capability of a System Restart Service to meet the System Restart Standard; and
- (b) where it is reasonable and practicable to do so, participate in or facilitate testing of a System Restart Service proposed to be provided by a prospective System Restart Service Provider, and any further testing once a System Restart Service Provider is contracted to provide a System Restart Service, to confirm the ongoing availability of the System Restart Service in accordance with the terms of the System Restart Service Contract.

**Explanatory Note**

Clause 3.7.39 requires each entity (AEMO, Network Operator or System Restart Service Provider) to bear its own costs of any activities in relation to System Restart Service where the costs of that activity are not recoverable under the WEM Rules or the System Restart Service contract.

**Recovery of Costs**

3.7.39. Except to the extent specified in these WEM Rules or the System Restart Service Contract, AEMO, each Network Operator and System Restart Service Provider must bear their own costs in respect of:

- (a) a System Restart Service Contract (including, to avoid doubt, the preparation or negotiation of it in accordance with this section 3.7); and
- (b) the provision of a System Restart Service.



### **Explanatory Note**

Clause 3.7.40 describes the methodologies and processes AEMO is required to document in a WEM Procedure.

#### 3.7.40. AEMO must document in a WEM Procedure:

- (a) the methodology and processes it uses to determine the System Restart Standard and System Restart Plan;
- (b) any additional requirements that the standard form contract for System Restart Service submissions may contain;
- (c) any variations to the standard form contract for System Restart Service submissions that AEMO may allow having regard to specific facility characteristics;
- (d) the processes to be followed by AEMO and Rule Participants in relation to the procurement of System Restart Services by AEMO;
- (e) the methodologies and processes to be followed by AEMO in:
  - i. determining whether a System Restart Service submission is valid;
  - ii. analysing and selecting System Restart Service submissions to meet the System Restart Standard; and
  - iii. accepting a System Restart Service submission to become an effective System Restart Service Contract;
- (f) the processes to be followed by AEMO in conducting a review under clauses 3.7.10 and 3.7.11 and consulting with Network Operators; and
- (g) any other matters AEMO considers relevant to this section 3.7.

### **Explanatory Note**

The following definitions in the Chapter 11 Glossary are proposed to be amended or added (some of which form part of the Tranche-2 Amending Rules but are repeated for completeness).

**Local Black Start Procedures:** The procedures developed by a Market Participant under clause 3.7.13 in accordance with the guidelines published by System Management AEMO under clause 3.7.12.

**System Restart Service Contract:** A contract between AEMO and a Market Participant for the provision of a System Restart Service to AEMO by that Market Participant's Registered Facility.

**System Restart Plan:** The plan described in clause 3.7.4.

**System Restart Service:** The ability of a Registered Facility with an energy producing system to start without requiring energy to be supplied from a Network to assist in the re-energisation of the SWIS in the event of system shut down or a major supply disruption. Has the meaning given in clause 3.9.8.

**System Restart Standard:** The standard, determined by AEMO under clause 3.7.1 and described in clause 3.7.2, for procurement of System Restart Services.

**System Restart Service Provider:** A Market Participant that agrees to provide System Restart Service to AEMO under a System Restart Service Contract.