Electricity Industry (Wholesale Electricity Market) Regulations 2004

# Wholesale Electricity Market Amendment (Market Suspension) Rules 2023

# Commencement

The amending rules set out below commence at 8:00 AM (WST) on 1 October 2023.

Where there are market rules made by the Minister for Energy in accordance with regulation 7(5) of the *Electricity Industry (Wholesale Electricity Market) Regulations 2004* prior to the date this Instrument is made which are specified to come into operation on the same day as the amending rules set out in this Instrument, the amending rules set out in this Instrument come into operation immediately after the commencement of those market rules.

# 1. Section 3.4 amended

1.1 Clause 3.4.4(d) is amended by inserting the words 'where relevant, and otherwise in accordance with information available to AEMO' after the word 'Facility'.

# 2. Section 4.26 amended

2.1 Clause 4.26.1D is amended by deleting the formula for calculating 'NISCRQ(f,t)' and replacing it with the following:

 $NISCRQ(f,t) = \frac{5}{30} \times \sum_{DI \in t} \begin{cases} 0, \text{ if } RTMSuspFlag(DI) = 1, \text{ otherwise} \\ min(RCOQ(f,DI) - CAFO(f,DI), \text{ } NISCap(f,DI)) \end{cases}$ 

- 2.2 Clause 4.26.1D(c) is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.
- 2.3 Clause 4.26.1D(d) is deleted and replaced with the following:
  - (d) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and
  - (e) DIEt denotes all Dispatch Intervals DI in Trading Interval t.
- 2.4 Clause 4.26.1F is amended by deleting the formula for calculating 'ESRCSF(c,DI)'\_and replacing it with the following:

$$\mathsf{ESRCSF}(\mathsf{c},\mathsf{DI}) = \begin{cases} 0, \text{ if } \mathsf{RTMSuspFlag}(\mathsf{DI}) = 1, \text{ otherwise} \\ 0, \mathsf{RCOQ}(\mathsf{c},\mathsf{DI}) - \mathsf{CAFO}(\mathsf{c},\mathsf{DI}) - \\ 12 \times \mathsf{max}(0, \mathsf{ChargeLevel}(\mathsf{c},\mathsf{DI}) - \mathsf{MinChargeLevel}(\mathsf{c},\mathsf{DI})) \end{cases}$$

2.5 Clause 4.26.1F(c) is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.

- 2.6 Clause 4.26.1F(d) is amended by deleting the full stop at the end of the clause and replacing it with the words '; and'.
- 2.7 Insert the following new clause 4.26.1F(e):

(e) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.

2.8 Clause 4.26.1H is amended by deleting the formula for calculating 'RTMOSF(f,DI)' and replacing it with the following:

 $RTMOSF(f,DI) = \begin{cases} 0 \text{ if } RTMSuspFlag(DI) = 1, \text{ otherwise} \\ max(0,RCOQ(f,DI) - OfferAvail(f,DI)) \end{cases}$ 

- 2.9 Clause 4.26.1H(a) is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.
- 2.10 Clause 4.26.1H(b) is amended by deleting the full stop at the end of the clause and replacing it with the words '; and'.
- 2.11 Insert the following new clause 4.26.1H(c):
  - (c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.
- 2.12 Clause 4.26.1J is amended by inserting the words 'Dispatch Instruction with a' after the words 'has been issued a' in each place they occur.

## 3. Section 6.3A amended

- 3.1 Clause 6.3A.2A is amended by deleting the words ', the Forecast Operational Demand and Forecast Operational Withdrawal as determined from the most recent Pre-Dispatch Schedule that AEMO has made available to Market Participants.' and replacing them with a colon ':'.
- 3.2 Insert the following new clauses 6.3A.2A(a) and 6.3A.2A(b):
  - (a) the most recent Forecast Unscheduled Operational Demand; and
  - (b) subject to clause 7.11D.5, the Forecast Operational Demand and Forecast Operational Withdrawal from the most recently determined Pre-Dispatch Schedule or Week-Ahead Schedule containing that Trading Interval which AEMO has made available to Market Participants.

#### 4. Section 7.1 amended

4.1 Clause 7.1.1 is amended by inserting the words ', subject to clause 7.11D.5,' after the word 'and'.

# 5. Section 7.2 amended

- 5.1 Clause 7.2.2. is amended by inserting the words 'Subject to clause 7.11D.5,' before the word 'AEMO'.
- 5.2 Insert the following new clause 7.2.2A:

- 7.2.2A. If AEMO has suspended the Real-Time Market under clause 7.11D.1, AEMO must use its reasonable endeavours to maximise what it considers would likely be the value of Real-Time Market trading if the Real-Time Market were not suspended:
  - (a) within the parameters for maintaining Power System Security and Power System Reliability in accordance with Chapter 3; and
  - (b) where they are available, and to the extent that is practicable, taking into account Real-Time Market Submissions.
- 5.3 Clause 7.2.4 is amended by deleting the word 'The' before the words 'Dispatch Algorithm' and replacing it with the words 'Subject to clause 7.11D.5, the'.

## 6. Section 7.5 amended

- 6.1 Clause 7.5.6 is amended by deleting the words 'Central Dispatch Process' and replacing them with the words 'Dispatch Algorithm'.
- 6.2 Clause 7.5.7 is amended by deleting the words 'Central Dispatch Process' and replacing them with the words 'Dispatch Algorithm'.

# 7. Section 7.6 amended

- 7.1 Clause 7.6.1 is amended by inserting the words 'Subject to clause 7.11D.5,' before the word 'AEMO'.
- 7.2 Clause 7.6.2 is amended by inserting the words 'Subject to clause 7.11D.5,' before the word 'AEMO'.
- 7.3 Clause 7.6.4 is amended by deleting the words 'use the Central Dispatch Process to'.
- 7.4 Clause 7.6.4(a) is amended by deleting the words '7.11A, 7.11B and 7.11C' and replacing them with the words '7.11A, 7.11B, 7.11C and 7.11E'.
- 7.5 Clause 7.6.5 is amended by:
  - (a) deleting the words 'an instruction' and replacing them with the words 'a direction'; and
  - (b) inserting the words 'for the purposes of clause 7.2.1' before the words ', directing the Market Participant'.
- 7.6 Clause 7.6.5(b) is amended by:
  - (a) deleting the words 'enable the Registered Facility to provide a' and replacing them with the words 'vary the enablement'; and
  - (b) inserting the words 'for a Registered Facility' after the word 'Service'.
- 7.7 Clause 7.6.8(d)(ii) is amended by inserting the words 'and the Dispatch Instruction is issued by the Dispatch Algorithm' after the words 'Semi-Scheduled Facility'.
- 7.8 Clause 7.6.8(d)(iii) is amended by inserting the words 'and the Dispatch Instruction is issued by the Dispatch Algorithm' after the word 'basis'.

- 7.9 Clause 7.6.12 is amended by inserting the words 'use the Dispatch Algorithm to' after the words 'AEMO must not'.
- 7.10 Clause 7.6.14 is amended by:
  - (a) deleting the words 'to implement' and replacing them with the words 'in accordance with'; and
  - (b) deleting the words 'or 3.5.5 or section 7.7' and replacing them with the words ', 3.5.5 or 7.11D.2A'.
- 7.11 Insert the following new clause 7.6.22A:
  - 7.6.22A. AEMO may, for a Dispatch Instruction that was not issued by the Dispatch Algorithm, retrospectively record the required information after the relevant Dispatch Interval has ended, and must make the information recorded available to the Market Participant for the Registered Facility.

## 8. Section 7.7 amended

- 8.1 Clause 7.7.1 is deleted and replaced with the following:
  - 7.7.1. To support the Central Dispatch Process and to maintain Power System Security and Reliability, AEMO may direct a Market Participant to operate a Registered Facility in a particular way in accordance with Chapters 3 and 3A.
- 8.2 Clause 7.7.8 is amended by deleting the words 'Dispatch Targets' and replacing them with the words 'Dispatch Instructions'.
- 8.3 Clause 7.7.9 is amended by:
  - (a) deleting the words 'as a result of a direction issued by AEMO in accordance with this section 7.7 or' and replacing them with the words 'in accordance with a direction'; and
  - (b) deleting the words 'or 3.5.5' and replacing them with the words ', 3.5.5 or 7.11D.2A'.

# 9. Section 7.10 amended

- 9.1 Clause 7.10.1 is amended by deleting the word 'A' before the words 'Market Participant' and replacing it with the words 'Unless otherwise directed by AEMO, a'.
- 9.2 Clause 7.10.4 is amended by deleting the word 'Where' and replacing it with the words 'Subject to clause 7.10.6A, if'.
- 9.3 Clause 7.10.4(a) is amended by deleting the word 'or' immediately after the semi-colon at the end of the clause.
- 9.4 Clause 7.10.4(b) is amended by deleting the full stop at the end of the clause and replacing it with the words '; or'.
- 9.5 Insert the following new clause 7.10.4(c):
  - (c) required to comply with a direction issued by AEMO.

- 9.6 Clause 7.10.6 is amended by deleting the word 'Where' and replacing it with the words 'Subject to clause 7.10.6A, if'.
- 9.7 Clause 7.10.6(a) is amended by deleting the word 'or' immediately after the semi-colon at the end of the clause.
- 9.8 Clause 7.10.6(b) is amended by deleting the full stop at the end of the clause and replacing it with the words '; or'.
- 9.9 Insert the following new clause 7.10.6(c):
  - (c) required to comply with a direction issued by AEMO.
- 9.10 Insert the following new clause 7.10.6A:
  - 7.10.6A. Clauses 7.10.4 and 7.10.6 do not apply when AEMO issues a Dispatch Instruction for the Semi-Scheduled Facility that does not include a Dispatch Forecast.

#### 10. Section 7.11A amended

- 10.1 Clause 7.11A.1(a) is amended by:
  - (a) inserting the words 'and sections 7.11B and 7.11E' after the word '7.11A'; and
  - (b) deleting the words 'Central Dispatch Process' and replacing them with the words 'Dispatch Algorithm'.
- 10.2 Clause 7.11A.1(d) is amended by deleting the words 'Central Dispatch Process' and replacing them with the words 'Dispatch Algorithm'.

#### 11. Section 7.11B amended

- 11.1 Clause 7.11B.1A is deleted and replaced with the following:
  - 7.11B.1A. Subject to clause 7.11D.5, if AEMO fails to run the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval, then AEMO must:
    - (a) determine the Market Clearing Prices for the Dispatch Interval from the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B; and
    - (b) determine the information identified in clauses 7.13.1BA, 7.13.1DA and 7.13.1EA for the Dispatch Interval using the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B.
- 11.2 Insert the following new clause 7.11B.1B:
  - 7.11B.1B. For the purposes of clauses 7.11B.1A and 7.11C.2, AEMO must identify a replacement Market Schedule containing the Dispatch Interval as follows:

- (a) if the Dispatch Interval has been included in a previous Dispatch Schedule, then AEMO must identify the most recent Dispatch Schedule, if available, that contains the Dispatch Interval and which AEMO reasonably considers does not include manifestly incorrect data;
- (b) if AEMO is unable to identify a Dispatch Schedule in accordance with clause 7.11B.1B(a), then AEMO must identify the most recent Pre-Dispatch Schedule, if available, that contains the Dispatch Interval and which AEMO reasonably considers does not include manifestly incorrect data; and
- (c) if AEMO is unable to identify a Market Schedule under clauses 7.11B.1B(a) or 7.11B.1B(b), then AEMO must identify the most recently determined Dispatch Schedule or Pre-Dispatch Schedule that contains the Dispatch Interval.
- 11.3 Clause 7.11B.2 is amended by deleting the words '7.11B.3, 7.11B.4 and 7.11B.5' and replacing them with the words '7.11B.1A, 7.11B.3, 7.11B.3A, 7.11B.3B, 7.11B.4, 7.11B.4A and 7.13.1CB'.
- 11.4 Clause 7.11B.3 is amended by deleting the word 'If'and replacing it with the words 'Subject to clause 7.11D.5, if'.
- 11.5 Clause 7.11B.3(a) is amended by deleting the words 'Market Clearing Prices for the Dispatch Interval have not already been determined by' and replacing them with the words 'Dispatch Interval has not already been subject to'.
- 11.6 Clause 7.11B.3(b) is amended by inserting the words 'Dispatch Algorithm used for the' before the words 'Central Dispatch'.
- 11.7 Clause 7.11B.3A(a) is amended by deleting the word 'and'and replacing it with the word 'or'.
- 11.8 Clause 7.11B.3B(a) is amended by deleting the word 'and'and replacing it with the word 'or'.
- 11.9 Clause 7.11B.5 is deleted.

#### 12. Section 7.11C amended

- 12.1 Clause 7.11C.1 is amended by:
  - (a) deleting the word 'automatic'; and
  - (b) inserting the words 'within the timeframes contemplated under clause 7.11C.2' after the words 'Affected Dispatch Intervals'.
- 12.2 Clause 7.11C.1A is amended by inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'.
- 12.3 Clause 7.11C.2 is amended by:

- deleting the words 'and no more than 30 minutes have passed since the publication of the Market Clearing Prices for the Affected Dispatch Interval,'; and
- (b) inserting the words ', by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval' after the words 'AEMO must'.
- 12.4 Clause 7.11C.2(a) is amended by deleting the words 'with the corresponding prices for the Last Correct Dispatch Interval; and' and replacing them with the words 'for the Dispatch Interval with the Market Clearing Prices from the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B;'.
- 12.5 Clause 7.11C.2(b) is amended by deleting the full stop at the end of the clause and replacing it with the words '; and'.
- 12.6 Insert the following new clause 7.11C.2(c):
  - (c) determine the information identified in clauses 7.13.1BA, 7.13.1DA and 7.13.1EA for the Dispatch Interval using the Reference Scenario for the Dispatch Interval in the Market Schedule identified in accordance with clause 7.11B.1B.
- 12.7 Clause 7.11C.3 is amended by deleting the words 'action referred in' and replacing them with the words 'actions referred to in'.
- 12.8 Clause 7.11C.4 is amended by deleting the word 'automated'.
- 12.9 Clause 7.11C.6 is amended by inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'.

#### 13. Section 7.11D amended

- 13.1 Clause 7.11D.1(c) is amended by deleting the words 'that it is necessary because it has become impossible to maintain Power System Security' and replacing them with the words ', in its reasonable opinion, that actions undertaken to maintain Power System Security and Power System Reliability are significantly impacting market settlement'.
- 13.2 Clause 7.11D.2 is deleted and replaced with the following:
  - 7.11D.2. When AEMO determines to suspend the Real-Time Market under clause 7.11D.1 it must:
    - (a) issue a Market Advisory which must include:
      - the time from which the Real-Time Market will be suspended,
         which must be from the commencement of a Dispatch Interval;
      - ii. the reason AEMO has been required to suspend the Real-Time Market; and

- where applicable, any additional actions to those specified in the WEM Procedure under clause 7.11D.4 required of Market
   Participants during the suspension period; and
- (b) from the time specified in clause 7.11D.2(a)(i):
- i. where AEMO determines that the Dispatch Algorithm cannot be used, cease the use of the Dispatch Algorithm in the Central Dispatch Process;
- ii. determine Market Clearing Prices in accordance with section 7.11E;
- iii. determine the Minimum RoCoF Control Requirement, Additional RoCoF
   Control Requirement and RoCoF Control Requirement for each Dispatch
   Interval when the Real-Time Market will be suspended as zero; and
- iv. determine the Facility Performance Factor for each Frequency
   Co-optimised Essential System Service for each Registered Facility for
   each Dispatch Interval when the Real-Time Market will be suspended as
   one.
- 13.3 Insert the following new clause 7.11D.2A:
  - 7.11D.2A. If AEMO has suspended the Real-Time Market in accordance with 7.11D.1, AEMO may in addition to any other ability:
    - direct any Rule Participant to provide Essential System Services where they are capable of doing so;
    - (b) cease the use of the Dispatch Algorithm in the Central Dispatch Process;
    - (c) issue directions to Rule Participants to operate Registered Facilities at a particular level or in a particular way; and
    - (d) take other actions as considered necessary, consistent with good electricity industry practice, in order to maintain Power System Security or Power System Reliability in the SWIS.
- 13.4 Clause 7.11D.3 is deleted and replaced with the following:
  - 7.11D.3. Where AEMO determines, in its reasonable opinion, it is practicable to resume the operation of the Real-Time Market it must:
    - (a) issue a Market Advisory which must include:
      - the time from which the Real-Time Market suspension will be lifted which must be the commencement of a Trading Interval and provide a notice period of not less than two hours; and
      - where applicable, any additional actions to those specified in the WEM Procedure under clause 7.11D.4 required of Market

Participants leading up to the time of the suspension being lifted; and

- (b) where relevant, resume the use of the Dispatch Algorithm in the Central Dispatch Process from the time described in clause 7.11D.3(a)(i).
- 13.5 Clause 7.11D.4 is deleted and replaced with the following:
  - 7.11D.4. AEMO must document in a WEM Procedure:
    - the process by which AEMO will determine to suspend the Real-Time Market;
    - (b) any reasons under clause 7.11D.1(c)(iii) that AEMO may suspend the Real-Time Market;
    - the processes which Market Participants may be required to follow during the suspension;
    - (d) the processes AEMO will follow during the suspension and the process to lift the suspension; and
    - (e) any actions required of AEMO or Market Participants to resume the Real-Time Market.
- 13.6 Insert the following new clauses 7.11D.5 and 7.11D.6:
  - 7.11D.5. Where AEMO suspends the Real-Time Market under clause 7.11D.1, clauses
    6.3A.2A(b), 7.1.1, 7.2.2, 7.2.4, 7.6.1, 7.6.2, 7.11B.1A, 7.11B.3, 7.11C.1A, 7.11C.6,
    7.13.1, 7.13.1A, 7.13.1CC, 7.13.1D, 7.13.1DA, 7.13.1EA, 7.13.1G, 7.13A.1 and
    7.14.1 do not apply.
  - 7.11D.6. AEMO must set the RTM Suspension Flag for each Dispatch Interval to:
    - (a) one, if AEMO has suspended the Real-Time Market under clause 7.11D.1
       for the Dispatch Interval; or
    - (b) zero, otherwise.

# 14. Section 7.13 amended

- 14.1 Clause 7.13.1 is amended by:
  - (a) inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'; and
  - (b) inserting the words ', where the Dispatch Algorithm has successfully determined the Market Schedule' after the words 'Market Participants'.
- 14.2 Clause 7.13.1A is amended by:
  - (a) inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'; and

- (b) inserting the words ', where the Dispatch Algorithm has successfully determined the Market Schedule' after the words 'Market Participants'.
- 14.3 Clause 7.13.1B is amended by inserting the words 'for the Dispatch Interval' after the words 'available to Market Participants'.
- 14.4 Clause 7.13.1B(c) is amended by deleting the words 'for the relevant Dispatch Interval'.
- 14.5 Clause 7.13.1B(I) is amended by deleting the words ', in each Dispatch Interval'.
- 14.6 Insert the following new clause 7.13.1BA:
  - 7.13.1BA. Subject to clause 7.13.1K, if AEMO fails to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval or AEMO determines a Dispatch Interval to be an Affected Dispatch Interval, then AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval, make available to Market Participants the following information for the Dispatch Interval determined from the Market Schedule identified under clause 7.11B.1B in accordance with clauses 7.11B.1A(b) or 7.11C.2(c) (as applicable):
    - (a) Dispatch Targets, Dispatch Caps, Dispatch Forecasts, applicable for each Facility;
    - (b) Essential System Service Enablement Quantities, as applicable for each Registered Facility and each Frequency Co-optimised Essential System Service;
    - (c) binding Constraint Equations;
    - (d) Near Binding Constraint Equations;
    - (e) the Minimum RoCoF Control Requirement;
    - (f) the Additional RoCoF Control Requirement;
    - (g) the RoCoF Control Requirement;
    - (h) the Contingency Raise Offset;
    - (i) the Contingency Lower Offset;
    - (j) Facility Performance Factors; and
    - (k) the AEMO estimated quantity of Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility for which a Market Participant holds Capacity Credits.
- 14.7 Clause 7.13.1C is amended by deleting the word 'Within' and replacing it with the words 'Subject to clauses 7.13.1CB, 7.13.1CC and 7.13.1K, within'.
- 14.8 Clause 7.13.1CA is deleted and replaced with the following:

- 7.13.1CA. If a Market Clearing Price for a Dispatch Interval has been impacted by an Affected Dispatch Interval, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:
  - (a) determine revised Market Clearing Prices for each Market Service for the relevant Dispatch Interval in accordance with clause 7.11C.2(a);
  - (b) determine the revised Reference Trading Price for the relevant Trading Interval; and
  - (c) make the revised prices referred to in clauses 7.13.1CA(a) and7.13.1CA(b) available to Market Participants.
- 14.9 Clause 7.13.1CB is deleted and replaced with the following:
  - 7.13.1CB. If a Market Clearing Price for a Dispatch Interval has been impacted by a suspension of the Real-Time Market under clause 7.11D.1, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:
    - (a) determine Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with section 7.11E;
    - (b) determine the Reference Trading Price or revised Reference Trading Price for the relevant Trading Interval; and
    - (c) make the prices or revised prices referred to in clauses 7.13.1CB(a) and
       7.13.1CB(b) available to Market Participants.
- 14.10 Insert the following new clauses 7.13.1CC and 7.13.1CD:
  - 7.13.1CC. If a Market Clearing Price for a Dispatch Interval has been impacted by a failure of the Dispatch Algorithm in the Central Dispatch Process, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:
    - (a) determine Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with clause 7.11B.1A(a);
    - (b) determine the Reference Trading Price or revised Reference Trading Price for the relevant Trading Interval; and
    - (c) make the prices or revised prices referred to in clauses 7.13.1CC(a) and
       7.13.1CC(b) available to Market Participants.
  - 7.13.1CD. If a Market Clearing Price for a Dispatch Interval has been impacted by an AEMO Intervention Event, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval:

- determine revised Market Clearing Prices for each Market Service for the Dispatch Interval in accordance with clause 7.11B.4A;
- (b) determine the revised Reference Trading Price for the relevant Trading Interval; and
- (c) make the revised prices referred to in clauses 7.13.1CD(a) and
   7.13.1CD(b) available to Market Participants.
- 14.11 Clause 7.13.1D is amended by:
  - (a) deleting the word 'For' and replacing it with the words 'Subject to clause 7.11D.5, for'; and
  - (b) inserting the words 'where the Dispatch Algorithm has successfully determined the Market Schedule,' before the words 'AEMO must'.
- 14.12 Insert the following new clause 7.13.1DA:
  - 7.13.1DA. Subject to clause 7.11D.5, if AEMO fails to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for a Dispatch Interval, or AEMO determines a Dispatch Interval to be an Affected Dispatch Interval, AEMO must, by noon on the first Business Day following the end of the Trading Day which contains the Dispatch Interval, make available to each Market Participant the information specified in clause 7.13.1D from the Market Schedule that was identified under clause 7.11B.1B in accordance with clauses 7.11B.1A(b) or 7.11C.2(c) (as applicable).
- 14.13 Clause 7.13.1E(a)(iii) is amended by:
  - (a) deleting the word 'is' and replacing it with the word 'was'; and
  - (b) inserting the words 'the Dispatch Algorithm for the purposes of' before the words 'the Central Dispatch Process'.
- 14.14 Clause 7.13.1E(a)(ix) is amended by inserting the words 'the Dispatch Algorithm and used for the purposes of' before the words 'the Central Dispatch Process'.
- 14.15 Clause 7.13.1E(c) is deleted and replaced with the following:
  - (c) for each Frequency Co-optimised Essential System Service, the Essential System Service Enablement Quantities scheduled in each Dispatch Interval of the Trading Day as applicable for each Registered Facility;
- 14.16 Clause 7.13.1E(d) is amended by inserting the word 'and' immediately after the semi-colon at the end of the clause.
- 14.17 Clause 7.13.1E(e) is deleted and replaced with the following:

- the details captured by AEMO under clause 7.6.8 for each Dispatch Instruction issued to a Registered Facility for a Dispatch Interval of the Trading Day that was not generated by the Dispatch Algorithm.
- 14.18 Clauses 7.13.1E(f), 7.13.1E(g) and 7.13.1E(h) are deleted.
- 14.19 Insert the following new clause 7.13.1EA:
  - 7.13.1EA. Subject to clause 7.11D.5, AEMO must prepare and publish on the WEM Website the following data for a Trading Day by noon on the first Business Day following the day on which the Trading Day ends:
    - (a) details of each Real-Time Market Submission used as an input to the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c), for Dispatch Intervals in that Trading Day, including, as applicable:
      - i. the Registered Facility ID;
      - iA. the Market Service;
      - ii. Price-Quantity Pairs;
      - iii. In-Service Capacity for Injection;
      - iv. Available Capacity for Injection;
      - v. In-Service Capacity for Withdrawal;
      - vi. Available Capacity for Withdrawal;
      - vii. the Maximum Upwards Ramp Rate;
      - viii. the Maximum Downwards Ramp Rate;
      - ix. Enablement Minimums;
      - x. Enablement Maximums;
      - xi. Low Breakpoints;
      - xii. High Breakpoints;
      - xiii. Dispatch Inflexibility Profiles;
      - xiv. any reasons for revisions in accordance with clauses 7.4.26(a) or 7.4.27(a);
      - xv. if the Registered Facility is Inflexible;
      - xvi. the Unconstrained Injection Forecast; and
      - xvii. the Unconstrained Withdrawal Forecast;

- (b) where applicable, for each Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval of the Trading Day, the Congestion Rental, generated by the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c), calculated under clause 7.14.1;
- (c) for each Dispatch Interval of the Trading Day, information used in the Dispatch Algorithm for the purposes of the Central Dispatch Process, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c):
  - i. all Facility Risks for that Dispatch Interval; and
  - ii. for each Network Contingency which is a Credible Contingency Event that is taken into account when setting the Contingency Reserve Raise requirement under clause 7.2.4 in that Dispatch Interval:
    - 1. the Network Risk associated with that Network Contingency; and
    - the Registered Facilities whose Facility Risks are included in the Network Risk associated with that Network Contingency;
- (d) for each Dispatch Interval of the Trading Day, for each Semi-Scheduled Facility and Non-Scheduled Facility, any alternative forecast quantities to the Unconstrained Injection Forecast and Unconstrained Withdrawal Forecast provided by the Market Participant in its Real-Time Market Submission that were determined and used by AEMO as an input to the Dispatch Algorithm for the purposes of the Central Dispatch Process under clause 7.2.4A, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c); and
- (e) where applicable, for each Scheduled Facility or Semi-Scheduled Facility and each Dispatch Interval, the Energy Uplift Price and the Uplift Payment Mispricing Trigger as determined by the Dispatch Algorithm, or revised in accordance with clauses 7.11B.1A(b) or 7.11C.2(c).
- 14.20 Clause 7.13.1G is amended by inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'.
- 14.21 Clause 7.13.11(a) is deleted and replaced with the following:
  - the information referred to in clauses 7.13.1, 7.13.1B, 7.13.1BA, 7.13.1C,
     7.13.1CA, 7.13.1CB, 7.13.1CC, 7.13.1CD, 7.13.1G and 7.13.1H; and

- 14.22 Clauses 7.13.1J and 7.13.1K are deleted and replaced with the following:
  - 7.13.1J. If AEMO is prevented from completing the relevant processes that enable the publishing of data on the WEM Website under clauses 7.13.1E, 7.13.1EA, 7.13.1F or 7.13.1I, AEMO must:
    - (a) issue a Market Advisory notifying of the delay; and
    - use reasonable endeavours to publish the information on the WEM
       Website as soon as practicable.
  - 7.13.1K. If AEMO is prevented from completing the relevant processes that enable the provision of the data described in clauses 7.13.1BA, 7.13.1CA, 7.13.1CB, 7.13.1CC, 7.13.1CD or 7.13.1DA, AEMO must:
    - (a) issue a Market Advisory notifying of the delay; and
    - use reasonable endeavours make the information available to Market Participants as soon as practicable.
- 14.23 Clause 7.13.1L is amended by deleting the words 'clause 7.13.1F(a),' and replacing them with the words 'clause 7.13.1F, delay the publication of data in clause 7.13.1F by up to two Business Days and'.

### 15. Section 7.13A amended

- 15.1 Clause 7.13A.1 is deleted and replaced with the follwing:
  - 7.13A.1. Subject to clause 7.11D.5, AEMO must determine the Not In-Service Capacity for each Scheduled Facility or Semi-Scheduled Facility f for which a Market Participant holds Capacity Credits, in the Dispatch Interval DI as:
    - (a) if AEMO has failed to use the Dispatch Algorithm for the purposes of the Central Dispatch Process for Dispatch Interval DI or AEMO has determined that Dispatch Interval DI is an Affected Dispatch Interval:

NISCap(f,DI) = 0

 (b) if clause 7.13A.1(a) does not apply and AEMO has directed a Registered Facility to offer its capacity as In Service:

> NISCap(f,DI) = Max(0, Min(RCOQ(f,DI), ReqDispEnergy(f,DI)) – Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))

- or
- (c) otherwise:

NISCap(f,DI) = Max(0, Min(RCOQ(f,DI), EstDispEnergy(f,DI)) -Max(ISSDCEnergy(f,DI), ISDispEnergy(f,DI))

where:

- i. NISCap(f,DI) is the Not In-Service Capacity quantity for the relevant Facility f in Dispatch Interval DI;
- EstDispEnergy(f,DI) is the quantity of estimated energy dispatch immediately prior to the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.2;
- iii. ISSDCEnergy(f,DI) is the quantity of In-Service Capacity offered immediately after the Start Decision Cutoff time for the relevant Facility f in Dispatch Interval DI, calculated in accordance with clause 7.13A.3;
- iv. ISDispEnergy(f,DI) is the total MW quantity of In-Service Capacity for the relevant Facility f included in the Real-Time Market Offers for energy that were used to formulate Dispatch Instructions and calculate Market Clearing Prices for Dispatch Interval DI; and
- v. ReqDispEnergy(f,DI) is the quantity of In-Service Capacity for the relevant Facility f required by AEMO in Dispatch Interval DI.
- 15.2 Clause 7.13A.2 is amended by inserting the words 'by the Dispatch Algorithm' after the words 'scheduled for dispatch' in each place they occur.

# 16. Section 7.14 amended

- 16.1 Clause 7.14.1 is amended by:
  - (a) inserting the words 'Subject to clause 7.11D.5,' before the words 'AEMO must'; and
  - (b) inserting the words 'invoked in the Dispatch Algorithm' after the words 'full set of Network Constraints'.

# 17. Section 9.9 amended

- 17.1 Clause 9.9.8(a) is amended by inserting the words 'which will equal 1 when AEMO has suspended the Real-Time Market under clause 7.11D.1 in the Dispatch Interval or' after the words 'Dispatch Interval DI'.
- 17.2 Clause 9.9.9(b) is amended by deleting the words 'calculated in accordance with clause 7.14.1' and replacing them with the words 'published under clause 7.13.1EA(b)'.
- 17.3 Clause 9.9.10(a) is deleted and replaced with the following:
  - (a) MarginalOfferPrice(f,DI) is:
    - the highest price associated with any cleared (or scheduled) Price-Quantity Pair in respect of a Market Participant's Real-Time Market Submission for energy that was dispatched for Registered Facility f in Dispatch Interval DI; or

ii. if AEMO has suspended the Real-Time Market under clause
 7.11D.1, the highest price Price-Quantity Pair in respect of a
 Market Participant's Real-Time Market Submission for energy
 associated with the MW Injection or Withdrawal of Registered
 Facility f for Dispatch Interval DI as monitored by AEMO's SCADA
 system as prepared under clause 7.13.1E(a)(vi); and

#### 18. Section 9.10 amended

- 18.1 Clause 9.10.3H is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'Dispatch Interval DI is'.
- 18.2 Clause 9.10.3K is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'Contingency Reserve Raise is'.
- 18.3 Clause 9.10.3L is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'Contingency Reserve Lower is'.
- 18.4 Clause 9.10.3M is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'RoCoF Control Service is'.
- 18.5 Clause 9.10.3N is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'Regulation Raise is'.
- 18.6 Clause 9.10.3O is amended by inserting the words 'zero if AEMO has suspended the Real-Time Market under clause 7.11D.1, otherwise' after the words 'Regulation Lower is'.
- 18.7 Clause 9.10.6(c)(i) is amended by deleting the words 'clause 7.13.1B(b)' and replacing them with the words 'clause 7.13.1E(c)'.
- 18.8 Clause 9.10.6(d) is amended by deleting the words 'published by AEMO under clause
  7.13.1B(k)' and replacing them with the words 'determined by AEMO under clause
  7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j)'.
- 18.9 Clause 9.10.10(c)(i) is amended by inserting the words 'as published under clause 7.13.1E(c)' after the words 'Dispatch Interval DI for Contingency Reserve Lower'.
- 18.10 Clause 9.10.10(d) is amended by deleting the words 'published by AEMO under clause7.13.1B(k)' and replacing them with the words 'determined by AEMO under clause7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j)'.
- 18.11 Clause 9.10.14(c)(i) is amended by inserting the words 'as published under clause 7.13.1E(c)' after the words 'Dispatch Interval DI for RoCoF Control Service'.
- 18.12 Clause 9.10.14(d) is amended by deleting the words 'published by AEMO under clause
  7.13.1B(k)' and replacing them with the words 'determined by AEMO under clause
  7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j)'.

- 18.13 Clause 9.10.16(b) is amended by deleting the words 'clause 7.13.1B(f)' and replacing them with the words 'clauses 7.13.1B(f) or 7.13.1BA(e)'.
- 18.14 Clause 9.10.16(c) is amended by deleting the words 'clause 7.13.1B(h)' and replacing them with the words 'clauses 7.13.1B(h) or 7.13.1BA(q)'.
- 18.15 Clause 9.10.22(c)(i) is amended by inserting the words 'as published under clause 7.13.1E(c)' after the words 'Dispatch Interval DI for Regulation Raise'.
- 18.16 Clause 9.10.22(d) is amended by deleting the words 'published by AEMO under clause
  7.13.1B(k)' and replacing them with the words 'determined by AEMO under clause
  7.11D.2(b)(iv) or published under clauses 7.13.1B(k) or 7.13.1BA(j)'.
- 18.17 Clause 9.10.23(c)(i) is amended by inserting the words 'as published under clause 7.13.1E(c)' after the words 'Dispatch Interval DI for Regulation Lower'.
- 18.18 Clause 9.10.23(d) is amended by deleting the words 'published by AEMO under clause
  7.13.1B(k)' and replacing them with 'determined by AEMO under clause 7.11D.2(b)(iv) or
  published under clauses 7.13.1B(k) or 7.13.1BA(j)'.
- 18.19 Clause 9.10.30 is amended by deleting the formula for calculating CR\_Recoverable(p,t) and replacing it with the following:

 $CR\_Recoverable(p,t) = \sum_{DI \in t} \begin{cases} CR\_Payable(DI) \times RTMSuspShare(p,DI), if RTMSuspFlag(DI) = 1 \\ CR\_Payable(DI) \times TotalRunwayShare(p,DI), otherwise \end{cases}$ 

- 18.20 Clause 9.10.30(b) is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.
- 18.21 Clause 9.10.30(c) deleted and replaced with the following:
  - (c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI;
  - (d) RTMSuspShare(p,DI) is Market Participant p's share of the total cost of procuring Contingency Reserve Raise when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI as calculated in clause 9.10.30A; and
  - (e) DI∈t denotes all Dispatch Intervals DI in Trading Interval t.
- 18.22 Insert the following new clause 9.10.30A:
  - 9.10.30A. Market Participant p's share of the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

 $RTMSuspShare(p,DI) = \frac{SuspParticipantQuantity(p,DI)}{SuspContributingQuantity(DI)}$ 

where:

- SuspParticipantQuantity(p,DI) is the contributing quantity of Market
   Participant p in Dispatch Interval DI, calculated in accordance with clause
   9.10.30B; and
- (b) SuspContributingQuantity(DI) is the total contributing quantity in Dispatch Interval DI, calculated in accordance with clause 9.10.30D.
- 18.23 Insert the following new clause 9.10.30B:
  - 9.10.30B. Market Participant p's contributing quantity to the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

 $SuspParticipantQuantity(p, DI) = \sum_{RSFacilities \in p} SuspFacilityQuantity(RSFacilities, DI)$ 

where:

- SuspFacilityQuantity(RSFacilities,DI) is the contributing quantity of runway share facilities RSFacilities in Dispatch Interval DI, calculated in accordance with clause 9.10.30C; and
- (b) RSFacilities∈p denotes the members of the set of runway share facilities in Dispatch Interval DI, determined in accordance with clause 2.1 of Appendix 2A, which are registered to Market Participant p.
- 18.24 Insert the following new clause 9.10.30C:
  - 9.10.30C. Facility f's contributing quantity to the total cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI is:

SuspFacilityQuantity(f, DI)

= { max(0,FacilityQuantity(f,DI)), if EOIQuantity(f,DI)>10 MW 0, otherwise

where:

- (a) FacilityQuantity(f,DI) is the:
  - Metered Schedule of Facility f in the Trading Interval in which Dispatch Interval DI falls, if f is included in Facilities(DI) under clauses 2.1(a) and 2.1(b) of Appendix 2A; or
  - MWh output of the electricity producing unit with the highest output in the Energy Producing System in the Dispatch Interval DI as published under clause 7.13.1E(a)(v), converted to loss-adjusted

MWh output using applicable Loss Factors, if f is included in Facilities(DI) under clause 2.1(c) of Appendix 2A; and

- (b) EOIQuantity(f,DI) is the EOI Quantity of Facility f in Dispatch Interval DI.
- 18.25 Insert the following new clause 9.10.30D:
  - 9.10.30D. The total contributing quantity to the cost of procuring Contingency Reserve Raise and the Additional RoCoF Control Requirement component of RoCoF Control Service when AEMO has suspended the Real-Time Market under clause 7.11D.1 for Dispatch Interval DI:

SuspContributingQuantity(DI)= 
$$\sum_{p \in P}$$
SuspParticipantQuantity(p,DI)

where:

- SuspParticipantQuantity(p,DI) is the contributing quantity of Market
   Participant p in the Dispatch Interval DI, calculated in accordance with clause 9.10.30B; and
- (b)  $p \in P$  denotes all Market Participants.
- 18.26 Clause 9.10.43 is amended by deleting the formula for calculating AdditionalRCS\_Recoverable(p,DI) and replacing it with the following:

AdditionalRCS\_Recoverable(p,DI) = {AdditionalRCS\_Payable(DI)×RTMSuspShare(p,DI), if RTMSuspFlag(DI)=1 AdditionalRCS\_Payable(DI)×TotalRunwayShare(p,DI), otherwise

- 18.27 Clause 9.10.43(a) is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.
- 18.28 Clause 9.10.43(b) is deleted and replaced with the following:
  - (b) RTMSuspShare(p,DI) is Market Participant p's share of procuring the SESSM Awards for RoCoF Control Service in Dispatch Interval DI where AEMO has suspended the Real-Time Market under clause 7.11D.1, as calculated in accordance with clause 9.10.30A;
  - (c) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI; and
  - (d) TotalRunwayShare(p,DI) is Market Participant p's share of procuring the Additional RoCoF Control Requirement component of RoCoF Control Service in Dispatch Interval DI as calculated following the steps set out in Appendix 2A and as finally calculated in clause 5.3 of Appendix 2A.

#### 19. Chapter 11 Glossary amended

- 19.1 The definition for 'Fully Co-Optimised Network Constraint Equation' in Chapter 11 (Glossary) is amended by inserting the words 'Dispatch Algorithm as part of the' before the words 'Central Dispatch Process'.
- 19.2 The definition for 'Last Correct Dispatch Interval' in Chapter 11 (Glossary) is deleted.
- 19.3 The definition for 'Market Clearing Price' in Chapter 11 (Glossary) is amended by inserting the words ', or section 7.11E if AEMO has suspended the Real-Time Market under clause 7.11D.1' after the words 'section 7.11B'.
- 19.4 The definition for 'Near Binding Constraint Equation' in Chapter 11 (Glossary) is amended by inserting the words 'Dispatch Algorithm as part of the' after the words 'used in the'.
- 19.5 Insert the following new definition in Chapter 11 (Glossary):

**RTM Suspension Flag**: A flag indicating whether the Real-Time Market was suspended by AEMO for a Dispatch Interval under clause 7.11D.1, determined in accordance with clause 7.11D.6.

## 20. Appendix 2A amended

- 20.1 Clause 2.1(b)(ii) of Appendix 2A is amended by deleting the words 'clause 7.13.1E(g)(i)' and replacing them with the words 'clause 7.13.1EA(c)(i)'.
- 20.2 Clause 2.2(a) of Appendix 2A is amended by deleting the words 'clause 7.13.1E(g)(i)' and replacing them with the words 'clause 7.13.1EA(c)(i)'.
- 20.3 Clause 4.2(a) of Appendix 2A is amended by deleting the words 'clause 7.13.1E(g)(ii)(1)' and replacing them with the words 'clause 7.13.1EA(c)(ii)(1)'.
- 20.4 Clause 4.5(a) of Appendix 2A is amended by deleting the words 'clause 7.13.1E(g)(ii)' and replacing them with the words 'clause 7.13.1EA(c)(ii)'.

## 21. Appendix 2C amended

21.1 Clause 2.6 of Appendix 2C is amended by deleting the formula for calculating SESSMRefund(a,DI) and replacing it with the following:

SESSMRefund(a,DI)=

- 21.2 Clause 2.6(h) of Appendix 2C is amended by deleting the word 'and' immediately after the semi-colon at the end of the clause.
- 21.3 Clause 2.6(i) of Appendix 2C is amended by deleting the full stop in the end of the clause and replacing it with the words '; and'.
- 21.4 Insert the following new clause 2.6(j) in Appendix 2C:
  - (j) RTMSuspFlag(DI) is the RTM Suspension Flag for Dispatch Interval DI.