



# Single Electricity Market

## FINAL RECOMMENDATION REPORT

### MOD\_05\_21 COLLATERAL EXPOSURE OF AUTOPRODUCER AND DSU

1 MARCH 2021

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## Document History

Version	Date	Author	Comment
1.0	1 <sup>st</sup> March 2021	Modifications Committee Secretariat	Issued to Modifications Committee for review and approval
2.0	8 <sup>th</sup> March 2021	Modifications Committee Secretariat	Issued to Regulatory Authorities for final decision

## Reference Documents

Document Name
<a href="#">Trading and Settlement Code</a>
<a href="#">Modification Proposal</a>
<a href="#">Presentation</a>

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## 1. MODIFICATIONS COMMITTEE RECOMMENDATION

### RECOMMENDED FOR APPROVAL– UNANIMOUS VOTE

Recommended for Approval by Unanimous Vote		
Paraic Higgins (Chair)	Generator Member	Approve
Sean McParland	Generator Alternate	Approve
Stacy Feldmann	Generator Member	Approve
Bryan Hennessy	Supplier Member	Approve
Ian Mullins	Supplier Member	Approve
Andrew Burke	Supplier Member	Approve
Alan Mullane	Assetless Member	Approve
Cormac Daly	Generator Member	Approve
Robert McCarthy	DSU Member	Approve
Philip Carson	Supplier Member	Approve

## 2. BACKGROUND

This Modification Proposal was raised by Aughinish Alumina Ltd and was received by the Secretariat on 28<sup>th</sup> January 2021. The proposal was raised and voted on at Meeting 103 on 11<sup>th</sup> February 2021.

Autoproducers Units and Demand Side Units would be over-collateralised under the standard calculation in Part B of the TSC. Extensive discussion of this and the treatment of Autoproducers and DSUs have taken place through a number of Committee Meetings and Working Groups.

MOD\_09\_18 is currently providing an interim solution. It was approved by the RAs on 24<sup>th</sup> August 2018.

The enduring solution MOD\_03\_18 was approved by the Modification Committee on 5 Dec 2019. The subsequent impact assessment indicated its deployment could impact on wider system performance. This was discussed at Meeting 100 and it was agreed that the Modification Proposers would develop an alternative proposal with SEMO. MOD\_03\_18 was rejected on 10 Dec 2020 with the understanding that an alternative solution is currently being developed with less impact on system performance.

This Modification is proposed as an enduring solution.

### 3. PURPOSE OF PROPOSED MODIFICATION

#### 3A.) JUSTIFICATION OF MODIFICATION

The unique imbalance position of Trading Sites was recognised in the SEM Committee decision I-SEM ETA Markets (SEM-15-065) back in 2015

“The principle of the existing treatment of trading sites will be retained in I-SEM. This will be progressed further through the implementation phase.”

The current drafting of the Trading & Settlement Code Part B results in unnecessarily high credit cover requirements for Participants with units registered under an Autoproducer. This proposed modification corrects the determination of required credit cover, thereby reducing the required credit cover requirements for Participants in respect of their Autoproducer. The change proposed is in line with the intended design of this mechanism.

#### 3B.) IMPACT OF NOT IMPLEMENTING A SOLUTION

If this proposal is not implemented the SEM may be over collateralized and affected Participants may be exposed to higher credit requirements than would have originally been intended by the market design.

This could also potentially result in commercial issues for those affected and also have an adverse impact on trading and liquidity (see Mod\_03\_8 for specific implications for Aughinish Alumina Ltd.).

#### 3C.) IMPACT ON CODE OBJECTIVES

- (a) to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;

Facilitates efficient and economic operation of the SEM by removing inefficient and uneconomic overcollateralization.

- (c) to facilitate the participation of electricity undertakings engaged in the generation, supply or sale of electricity in the trading arrangements under the Single Electricity Market;

Facilitates Participation by removing unnecessarily and inappropriately burdensome credit requirements.

- (f) to ensure no undue discrimination between persons who are parties to the Code; and

Ensures no undue discrimination by ensuring that credit requirements are fair and reflective of actual exposures for those Participants affected by the issue.

### 4. WORKING GROUP AND/OR CONSULTATION

N/A

### 5. IMPACT ON SYSTEMS AND RESOURCES

N/A

### 6. IMPACT ON OTHER CODES/DOCUMENTS

N/A

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## 7. MODIFICATION COMMITTEE VIEWS

### MEETING 103 – 11 FEBRUARY 2021

The Proposer delivered a [presentation](#) on this Modification explaining the difficulty with how the Trading Site Supplier Unit was set up and the collateral exposure that would have resulted should an interim solution agreed pre-go live not be in place.

This Modification extends out the interim solution and clarifies the process.

It was explained that Mod\_03\_18 was the enduring solution but following a risk assessment it was rejected. Assurance was given that this Modification would replace Mod\_03\_18. It would have less effect on software and be more cost effective.

DSU Member noted that this was an issue that came up pre I-SEM and this Modification would extend out the interim solution as an enduring one. It was advised that this only relates to Undefined Exposure, while the remaining collateral calculations will not be affected. .

A Supplier Member asked why Mod\_03\_18 was rejected and how this Modification would be better. The Proposer explained that the Impact Assessment highlighted that Mod\_03\_18 would be complex and costly to implement and would put the software under more strain affecting Settlement performances. Mod\_05\_21 doesn't get into the Code and there are no changes to the software only to manual processes. Assurance was given that the changes would only be on the registration and Credit Cover areas to ensure there is compliance.

## 8. PROPOSED LEGAL DRAFTING

As per legal drafting section of Appendix 1.

## 9. LEGAL REVIEW

N/A

## 10. IMPLEMENTATION TIMESCALE

It is recommended that this Modification should be made effective from the first Settlement Date following publication of the SEM Committee decision.

# 1 APPENDIX1: MOD\_05\_21 COLLATERAL EXPOSURE OF AUTOPRODUCER AND DSU

## MODIFICATION PROPOSAL FORM

<b>Proposer</b> <i>(Company)</i>	<b>Date of receipt</b> <i>(assigned by Secretariat)</i>	<b>Type of Proposal</b> <i>(delete as appropriate)</i>	<b>Modification Proposal ID</b> <i>(assigned by Secretariat)</i>
Aughinish Alumina Ltd	28 <sup>th</sup> January 2021	Standard	Mod_05_21
<b>Contact Details for Modification Proposal Originator</b>			
<b>Name</b>	<b>Telephone number</b>	<b>Email address</b>	
Thomas O'Sullivan		Thomas.osullivan@augh.com	
<b>Modification Proposal Title</b>			
<b>Collateral exposure of Autoproducer and DSU</b>			
<b>Documents affected</b> <i>(delete as appropriate)</i>	<b>Section(s) Affected</b>	<b>Version number of T&amp;SC or AP used in Drafting</b>	
T&SC Part B AP09 Glossary	Section G and H Glossary	V23	
<b>Explanation of Proposed Change</b> <i>(mandatory by originator)</i>			
<p>Autoproducers Units and Demand Side Units would be over-collaterised under the standard calculation in Part B of the TSC. Extensive discussion of this and the treatment of Autoproducers and DSUs has taken place through a number of Committee Meetings and Working Groups.</p> <p>MOD_09_18 is currently providing an interim solution. Approved by the RAs 24 Aug 2018.</p> <p>The enduring solution MOD_03_18 was approved by the Modification Committee on 5 Dec 2019. The subsequent impact assessment indicated its deployment could impact on wider system performance. This was discussed at Meeting 100 and it was agreed that the Modification Proposers would develop an</p>			

alternative

proposal with SEMO. MOD\_03\_18 was rejected on 10 Dec 2020 with the understanding that an alternative solution is currently being developed with less impact on system performance.

This modification is proposed as an enduring solution.

#### Legal Drafting Change

*(Clearly show proposed code change using **tracked** changes, if proposer fails to identify changes, please indicate best estimate of potential changes)*

### G.12.4 New Participants and Adjusted Participants

G.12.4.1 For the purposes of Credit Cover monitoring and calculations:

- (a) a Participant is a New Participant from the commencement of their participation; and
- (b) a Participant ceases to be a New Participant when the length of time between the commencement of their participation and the last Imbalance Settlement Period covered in the most recent Settlement Statement issued for that Participant is greater than the length of time covered by the Historical Assessment Period.

G.12.4.2 Where a Participant reasonably expects that, compared with time-weighted average of Metered Demand across all of the four most recent Billing Periods, the forecasted averaged Metered Demand with respect to its Supplier Units in any of the next four Billing Periods will increase or decrease by more in absolute terms than the Credit Cover Adjustment Trigger, or, compared with the average Total Daily Amounts across all of the four most recent Billing Periods the forecasted average Total Daily Amounts with respect to its Generator Units in any of the next four Billing Periods will increase or decrease in absolute terms by more than the Credit Cover Adjustment Trigger, then it shall notify the Market Operator as soon as reasonably possible. Such a Participant shall be called an Adjusted Participant. A Participant ceases to be an Adjusted Participant when the length of time between their notification and the last Imbalance Settlement Period covered in the most recent Settlement Statement issued for that Participant is greater than the length of time covered by the Historical Assessment Period. [For the avoidance of doubt any Adjusted Participants should submit a revised Forecast value if changes above the Credit Cover Adjustment Trigger occur as per this paragraph G.14.4.2 while they are treated as Adjusted Participants](#)

G.12.4.3 Where a Participant is a New Participant or becomes an Adjusted Participant, it shall notify the Market Operator of its forecast value of its Metered Demand and/or Imbalance for [any of](#) its Supplier Units and/or Generator Units respectively, [which are not listed in paragraph G.12.4.4 or G12.4.5](#). The forecast values notified by an Adjusted Participant shall represent the forecast of its average Metered Demand or forecasted Imbalance which will be applied in the calculations for Required Credit Cover. Each Adjusted Participant shall provide such additional information to the Market Operator as provided for pursuant to Agreed Procedure 9 "Management of Credit Cover and Credit Default" to enable the Market Operator to calculate revised values of Required Credit Cover in accordance with this Chapter G

(Financial and Settlement).

G.12.4.4 Any Participant who has a registered Autoproducer Unit shall notify the Market Operator of the net value of its Credit Assessment Volume calculated as follows –

a) Where the aggregate forecast Metered Generation of the Autoproducer Units on the Trading Site exceeds or is equal to the forecast Metered Demand of the Trading Site Supplier on the Trading Site, then the Credit Assessment Volume will be based on the aggregate forecast Imbalance of the Autoproducer Units on the Trading Site; or

b) Where the aggregate forecast Metered Generation of the Autoproducer Units on the Trading Site is less than the forecast Metered Demand of the Trading Site Supplier on the Trading Site, then the Credit Assessment Volume will be based on the aggregate of the forecast Metered Demand of the Trading Site Supplier and the forecast Metered Generation of all Autoproducer Units on the Trading Site.

G.12.4.5 Any Participant who has a registered Demand Side Unit shall notify the Market Operator of the net value of its Credit Assessment Volume calculated as follows - the aggregate of the forecast Metered Demand of the Trading Site Supplier and the forecast Metered Generation of all Demand Side Units on the Trading Site.

## **G.14 CALCULATIONS OF REQUIRED CREDIT COVER FOR THE UNDEFINED EXPOSURE PERIOD**

### **G.14.1 General**

G.14.1.1 The Market Operator shall undertake the following calculations leading to the determination of Participants' Undefined Potential Exposure which calculations are dependent on whether a Participant is a New Participant, an Adjusted Participant or a Standard Participant.

G.14.1.2 The Undefined Potential Exposure for each New or Adjusted Participant in respect of its Supplier Units shall be based on the product of the Participant's Credit Assessment Volume and the Combined Credit Assessment Price.

G.14.1.3 The Undefined Potential Exposure for each New or Adjusted Participant in respect of its Generator Units shall be based on the product of the Participant's Credit Assessment Volume and the Credit Assessment Price.

G.14.1.4 The Market Operator shall calculate the Credit Assessment Price as set out in section G.14.2.

G.14.1.5 Participant p in respect of any of its Supplier Units, v. that is a Trading Site Supplier Unit which is registered as part of an Autoproducer Site in accordance with B.9.4 and B.9.1.2; or a Trading Site Supplier Unit which is registered as part of a Trading Site which contains a Demand Side Unit in accordance with B.9.5.4 shall be treated as New Participant or an Adjusted Participant. For the avoidance of doubt, once these Participants cease to be New they will be treated as Adjusted and will never be treated as Standard.



## **H.10 ~~CALCULATION OF UNDEFINED EXPOSURE PERIOD~~**

~~H.10.1.1~~ Until the date that is the Mod\_09\_18 Deployment Date, any Participant who has registered an Autoproducer Unit or a Demand Side Unit may apply to the Market Operator to be treated as an Adjusted Participant and the Market Operator shall facilitate this request. The Credit Assessment Volumes for such a Participant, submitted in accordance with G.14.3.1 and G.14.4.1 for Supplier and Generator Units respectively, may be amended by the Market Operator in order to represent within Required Credit Cover calculations the extent to which Generation and Demand are netted for Settlement calculations. Intentionally Blank

## **AP09**

### **2.11.2 *Adjusted Participant***

An Adjusted Participant is a Participant whose Generation or Demand configuration has changed (i.e. increased or decreased) significantly from historical patterns (defined as the time-weighted average of Metered Demand quantities or Total Daily Amounts for Suppliers and Generators respectively across all of the four most recent Billing Periods). This could be due to, for example, acquisition of new assets, winning significant new customers in the retail market or a significant Generator planned outage. In such cases, statistical analysis of historical exposures may not be a valid indicator of future performance and the process for New Participants described at paragraph 2.11.1 above will be applied.

The Adjusted Participant procedure also applies to any Participant who has registered an Autoproducer Unit or a Demand Side Unit as per G.12.4.4 and G.12.4.5.

Participants who are expecting the time-weighted average with respect to its Supplier and/or Generator Units of Metered Demand quantities and/or Total Daily Amounts across all of the four most recent Billing Periods compared with forecasted averaged Metered Demand quantities and/or Total Daily Amounts with respect to its Supplier and/or Generator Units, in any of the next four Billing Periods, to increase or decrease by more in absolute terms than the Credit Cover Adjustment Trigger, are required to notify the Market Operator. In these cases the Market Operator shall use a Participant's forecast Credit Assessment Volume to calculate the Participant's Undefined Potential Exposure.

The procedural steps in relation to Required Credit Cover for an Adjusted Participant are set out at section 3.5 below.

## AP09 table 3.5 step 2

See snip below with addition reference to G.12.4.4 in red text

### 3.5 New Participant and Adjusted Participant Credit Cover

Step	Procedural Step	Timing	Method	By/From	To
1	Either: (a) on receipt of Application form for Unit Participation (in respect of Unit that is not an Interconnector Unit), in accordance with Agreed Procedure 1 "Registration"; or (b) in the event that a Participant becomes an Adjusted Participant.	As required	-	New Participant / Adjusted Participant / Market Operator	-
2	Submit forecast data with respect to the Units registered to the Participant in accordance with the requirements of the Registration Pack for New Participants or in accordance with paragraph G.12.4.3 and <b>G.12.4.4</b> of Code for Adjusted Participants.	Within 1 WD of becoming a New Participant or Adjusted Participant as applicable	Email / Facsimile	New Participant / Adjusted Participant	Market Operator
3	Calculate and notify the Required Credit Cover, utilising the forecast data supplied. If an Adjusted Participant, continue to step 4, otherwise <b>end process</b> .	Within 1 WD of receipt of forecast data	Email / Facsimile	Market Operator	New Participant / Adjusted Participant
4	Calculate and notify the current Posted Credit Cover, as part of the Required Credit Cover Report.	Within 1 WD of receipt of forecast data	Balancing Market Interface	Market Operator	New Participant / Adjusted Participant

**Housekeeping Part B Glossary**

If this modification is approved and implemented a housekeeping modification will be required to update or remove the deployment date in the Glossary. This can only happen after SEMC decision to approve and the effective date has passed.

<b>Minimum Storage Quantity</b>	is part of the Technical Offer Data for a Pumped Storage Unit and means the minimum quantity of energy that can be generated by the reservoir for a Trading Day submitted in accordance with paragraph D.5.1.4.	
<b>Mod_10_17 Deployment Date</b>	means the date proposed by the Market Operator following discussion with the Modifications Committee, and approved by the Regulatory Authorities for the purpose of H.9, such date to be published on the Market Operator web site at least three Working Days in advance of the date concerned.	Thomas O'Sullivan Deleted: Mod_09_16 Deployment Date
<b>Mod_11_17</b>	means the date proposed by the Market Operator following discussion with the	Thomas O'Sullivan Deleted: means the date proposed by the Market Operator following discussion with the Modifications Committee, and approved by the Regulatory Authorities for the purpose of H.10, such date to be published on the Market Operator web site at least three Working Days in advance of the date concerned.

**Modification Proposal Justification**  
*(Clearly state the reason for the Modification)*

The unique imbalance position of Trading Sites was recognised in the SEM Committee decision I-SEM ETA Markets (SEM-15-065) back in 2015

“The principle of the existing treatment of trading sites will be retained in I-SEM. This will be progressed further through the implementation phase.”

The current drafting of the Trading & Settlement Code Part B results in unnecessarily high credit cover requirements for Participants with units registered under an Autoproducer. This proposed modification corrects the determination of required credit cover, thereby reducing the required credit cover requirements for Participants in respect of their Autoproducer. The change proposed is in line with the intended design of this mechanism.

<b>Code Objectives Furthered</b>	
<i>(State the Code Objectives the Proposal furthers, see Section 1.3 of Part A and/or Section A.2.1.4 of Part B of the T&amp;SC for Code Objectives)</i>	
<p>2. to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;</p> <p>Facilitates efficient and economic operation of the SEM by removing inefficient and uneconomic overcollateralization.</p> <p>3. to facilitate the participation of electricity undertakings engaged in the generation, supply or sale of electricity in the trading arrangements under the Single Electricity Market;</p> <p>Facilitates Participation by removing unnecessarily and inappropriately burdensome credit requirements.</p> <p>6. to ensure no undue discrimination between persons who are parties to the Code; and</p> <p>Ensures no undue discrimination by ensuring that credit requirements are fair and reflective of actual exposures for those Participants affected by the issue.</p>	
<b>Implication of not implementing the Modification Proposal</b>	
<i>(State the possible outcomes should the Modification Proposal not be implemented)</i>	
<p>If this proposal is not implemented the SEM may be over collateralized and affected Participants may be exposed to higher credit requirements than would have originally been intended by the market design.</p> <p>This could also potentially result in commercial issues for those affected and also have an adverse impact on trading and liquidity (see Mod_03_8 for specific implications for Aughinish Alumina Ltd.).</p>	
<b>Working Group</b>	<b>Impacts</b>
<i>(State if Working Group considered necessary to develop proposal)</i>	<i>(Indicate the impacts on systems, resources, processes and/or procedures; also indicate impacts on any other Market Code such as Capacity Market Code, Grid Code, Exchange Rules etc.)</i>
<p><b>Please return this form to Secretariat by email to <a href="mailto:balancingmodifications@sem-o.com">balancingmodifications@sem-o.com</a></b></p>	