



# Single Electricity Market

## FINAL RECOMMENDATION REPORT

**MOD\_05\_24 CLARIFICATION OF START UP PAYMENT  
CONDITIONS  
20 JUNE 2024**

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## Document History

Version	Date	Author	Comment
1.0	18th July 2024	Modifications Committee Secretariat	Issued to Modifications Committee for review and approval
2.0	25 <sup>th</sup> July 2024	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 Form</a>
<a href="#">Presentation</a>

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## 1. MODIFICATIONS COMMITTEE RECOMMENDATION

### RECOMMENDED FOR APPROVAL– UNANIMOUS VOTE

Recommended for Approval by Unanimous Vote		
Andrew Burke (Vice-Chair)	Renewable Generator Member	Approve
Nick Heyward	Flexible Participant Alternate	Approve
Robert McCarthy	DSU Member	Approve
Nick Brown	Supplier Alternate	Approve
Bryan Hennessy	Supplier Member	Approve
Andrew Kelly	Generator Alternate	Approve
Andrew McCorrison	Generator Alternate	Approve
Patrick Larkin	Assetless Alternate	Approve
Sean McParland	Generator Member	Approve

## 2. BACKGROUND

This Modification Proposal was raised by SEMO and received by the Secretariat on 5<sup>th</sup> June 2024. The Proposal was raised and voted on at Meeting 123 on 20<sup>th</sup> June 2024.

This modification provides clarification to F.11.2.2(a) of the Code with respect to the conditions for which Start Up Costs (CSU) are paid resulting from Bid Offer Acceptances (BOA) being settled on complex Commercial Offer Data (COD). It has been raised following engagement between SEMO, CRU and UREGNI.

When the ISEM went live in Oct 2018, the settlement system calculated CSU by examining the first imbalance settlement period (ISP) of a period of physical operation (PPOP) and if any BOAs in this first ISP were settled using complex COD then CSU was paid accordingly.

However, as the market matured and more data became available for analysis, it was determined this logic was not entirely correct as it would result in units not receiving CSU if the first ISP of a PPOP was settled on simple COD, but the unit had a BOA, with a Bid Offer Acceptance Time equal to the Instruction Issue Time of a Synchronise Dispatch Instruction (SYNC DI), settled on complex COD in a subsequent ISP in the same PPOP. Albeit, this scenario was relatively rare with approx. 3% of BOAs settled on simple COD (average since market go-live).

As a result, and to ensure units were remunerated correctly, SEMO raised a change request to its vendor to modify the system to pay CSU for any BOA with a Bid Offer Acceptance Time equal to the Instruction Issue Time of a Synchronise Dispatch Instruction (SYNC DI) and which was settled on complex COD.

Unfortunately, this resulted in an unintended outcome whereby units would not be paid CSU in certain scenarios because of instruction profiling, with the primary scenario being when a unit has been dispatched down from its Final Physical Notification (FPN) to 0 MW and is subsequently dispatched back up from 0 MW to its FPN, and ramps to its FPN from 0 MW within a single ISP. This issue arises under these certain rare scenarios due to how profiling is used to calculate BOA volumes as per Appendix O of the Code.

Consequently, to mitigate the risk of this issue occurring, SEMO implemented a workaround to ensure units received CSU when required. Following this, SEMO engaged with the RAs to determine how to proceed with the determination logic of CSU and this modification is a result of this engagement.

This modification does not change the market design nor change the intent of the Code with regards to CSU. It is intended as only a clarification of F.11.2.2(a) to clarify which scenarios are eligible for CSU payment. However, if approved, this modification will require a minor change to the Settlement system to implement it and thus remove the need for the workaround.

### **3. PURPOSE OF PROPOSED MODIFICATION**

#### **3A.) JUSTIFICATION OF MODIFICATION**

The existing conditions for determining when CSU should be paid are somewhat ambiguous under certain rare scenarios and consequently this modification has been raised to clarify the conditions under which CSU should be paid to units.

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

The current conditions in the Code for CSU are somewhat ambiguous under certain rare scenarios and this could result in future settlement queries and disputes where these rare scenarios occur.

To avoid any ambiguity, this modification clarifies the conditions under which CSU should be paid.

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

- (a) to facilitate the efficient discharge by the Market Operator of the obligations imposed upon it by its Market Operator Licences;
- (b) to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
- (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;
- (e) to provide transparency in the operation of the Single Electricity Market;
- (f) to ensure no undue discrimination between persons who are parties to the Code; and

By providing a clarification the Code to ensure units are remunerated correctly.

### **4. WORKING GROUP AND/OR CONSULTATION**

N/A

### **5. IMPACT ON SYSTEMS AND RESOURCES**

Changes will be required to Counterparty Settlement and Billing (CSB; SEMO Settlement system) to implement this modification.

### **6. IMPACT ON OTHER CODES/DOCUMENTS**

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N/A

## 7. MODIFICATION COMMITTEE VIEWS

### MODIFICATIONS MEETING 123 – 20<sup>TH</sup> JUNE 2024

The Proposer gave a [presentation](#) of this Modification Proposal and a background on the proposal. An overview was given on how CSU was implemented and how this Modification Proposal was looking at units that were not receiving their start-up costs when getting settled on their first period of continuous operation, on simple CODs.

The Proposer confirmed that a change request was discussed with the vendor and deemed minor. The Proposer discussed the cause of the issue and noted that a workaround was developed to avoid any impact to generators. This Modification Proposal was drafted after discussion with the Regulators to make sure that the correct interpretation of the process was being applied. Assurance was given that this was not a policy change but just a clarification requiring minor system changes.

Renewable Generator Member gave support for this proposal but voiced concern with the overall governance shown and suggested that testing should have been carried out to ensure the fix was working correctly. The

Proposer agreed that lessons were learned from this, and processes were put in place so that this would not happen again by increasing the regression testing samples so that as many varieties of unit types and scenarios would be included in testing although it could never be guaranteed that all scenarios can be captured.

## 8. PROPOSED LEGAL DRAFTING

As per Appendix 1.

## 9. LEGAL REVIEW

N/A

## 10. IMPLEMENTATION TIMESCALE

It is recommended that this Modification is implemented on a Settlement Day, after two Working Days of the publication of the SEMC decision. Although System changes are suggested, this is only a clarification of the interpretation not a policy change. A manual workaround is in place and the Modification can be effective regardless of the IT Releases.

## 1 APPENDIX 1: MOD\_05\_24 CLARIFICATION OF START UP PAYMENT CONDITIONS

<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>
<b>SEMO</b>	<b>5<sup>th</sup> June 2024</b>	<b>Standard</b>	<b>Mod_05_24</b>
<b>Contact Details for Modification Proposal Originator</b>			
<b>Name</b>	<b>Telephone number</b>	<b>Email address</b>	
<b>SEMO</b>		<b>balancingmodifications@sem-o.com</b>	
<b>Modification Proposal Title</b>			
<b>Clarification of Start Up Payment Conditions</b>			
<b>Documents affected</b> <i>(delete as appropriate)</i>	<b>Section(s) Affected</b>	<b>Version number of T&amp;SC or Agreed Procedure used in Drafting</b>	
<b>T&amp;SC Part B</b>	<b>F.11.2.2</b>	<b>V28</b>	
<b>Explanation of Proposed Change</b> <i>(mandatory by originator)</i>			
<p>This modification provides clarification to F.11.2.2(a) of the Code with respect to the conditions for which Start Up Costs (CSU) are paid resulting from Bid Offer Acceptances (BOA) being settled on complex Commercial Offer Data (COD). It has been raised following engagement between SEMO, CRU and UREGNI.</p> <p>When the ISEM went live in Oct 2018, the settlement system calculated CSU by examining the first imbalance settlement period (ISP) of a period of physical operation (PPOP) and if any BOAs in this first ISP were settled using complex COD then CSU was paid accordingly.</p> <p>However, as the market matured and more data became available for analysis, it was determined this logic was not entirely correct as it would result in units not receiving CSU if the first ISP of a PPOP was settled on simple COD, but the unit had a BOA, with a Bid Offer Acceptance Time equal to the Instruction Issue Time of a Synchronise Dispatch Instruction (SYNC DI), settled on complex COD in a subsequent ISP in the same PPOP. Albeit, this scenario was relatively rare with approx. 3% of BOAs settled on simple COD (average since market go-live).</p>			

As a result, and to ensure units were remunerated correctly, SEMO raised a change request to its vendor to modify the system to pay CSU for any BOA with a Bid Offer Acceptance Time equal to the Instruction Issue Time of a Synchronise Dispatch Instruction (SYNC DI) and which was settled on complex COD.

Unfortunately, this resulted in an unintended outcome whereby units would not be paid CSU in certain scenarios because of instruction profiling, with the primary scenario being when a unit has been dispatched down from its Final Physical Notification (FPN) to 0 MW and is subsequently dispatched back up from 0 MW to its FPN, and ramps to its FPN from 0 MW within a single ISP. This issue arises under these certain rare scenarios due to how profiling is used to calculate BOA volumes as per Appendix O of the Code.

Consequently, to mitigate the risk of this issue occurring, SEMO implemented a workaround to ensure units received CSU when required. Following this, SEMO engaged with the RAs to determine how to proceed with the determination logic of CSU and this modification is a result of this engagement.

This modification does not change the market design nor change the intent of the Code with regards to CSU. It is intended as only a clarification of F.11.2.2(a) to clarify which scenarios are eligible for CSU payment. However, if approved, this modification will require a minor change to the Settlement system to implement it and thus remove the need for the workaround.

#### Legal Drafting Change

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

F.11.2.1 In each of the following circumstances the Start Up Costs (CSU<sub>uy</sub>) payable for each Generator Unit, u, in each Imbalance Settlement Period,  $\gamma$ , shall have a value of zero for each Imbalance Settlement Period,  $\gamma$ , falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends, as follows:

- (c) When all Accepted Offer Quantities and Accepted Bid Quantities within the Period of Physical Operation are priced on the basis of the Simple Bid Offer Data as determined in section **Error! Reference source not found.**;
- (d) For the first Period of Physical Operation in the Billing Period only, if the Initial Condition of Period of Physical Operation has a state of “on” and the Initial Condition of Period of Market Operation has a state of “off” in the Billing Period; and
- (e) When the Metered Quantity (QM<sub>uy</sub>) for the Generator Unit, u, has a value of zero for all Imbalance Settlement Periods,  $\gamma$ , falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends.

F.11.2.2 In all circumstances not listed in paragraphs **Error! Reference source not found.**, where:

- (i) ~~for~~ Any Bid Offer Acceptance, o, within the Period of Physical Operation which ~~is associated~~ has a Bid Offer Acceptance Time equal to the Instruction Issue Time ~~with a~~ of a Synchronise Dispatch Instruction; or

**(ii) Any Bid Offer Acceptance,  $o$ , within the first Imbalance Settlement Period,  $\gamma$ , within the Period of Physical Operation;**

and for which Complex Bid Offer Data is to be used in accordance with section **Error! Reference source not found.:**

- (a) CSU<sub>uy</sub> for the first Imbalance Settlement Period,  $\gamma$ , within the Period of Physical Operation shall have a value equal to the value of the Start Up Cost submitted in accordance with Chapter D (Balancing Market Data Submission) relating to the Warmth State at the time of the start time of the Period of Physical Operation for the Generator Unit as part of the applicable Complex Bid Offer Data if:
  - (i) The Final Physical Notification Quantity ( $qFPN_{uy}(t)$ ) for the Generator Unit,  $u$ , has a value of zero for all times within the Period of Physical Operation;
  - (ii) For the first Period of Physical Operation in the Billing Period only, the Initial Condition of Period of Physical Operation has a state of “off” and the Initial Condition of Period of Market Operation has a state of “on” in the Billing Period; or
  - (iii) The start of the Period of Physical Operation and the end of the previous Period of Physical Operation are within the same Period of Market Operation.

In all circumstances not listed in paragraph F.11.2.2(a)(i) to (iii), CSU<sub>uy</sub> for the first Imbalance Settlement Period,  $\gamma$ , within the Period of Physical Operation shall have a value of zero.

- (b) CSU<sub>uy</sub> shall have a value of zero for each other Imbalance Settlement Period,  $\gamma$ , falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends.

**Modification Proposal Justification**

*(Clearly state the reason for the Modification)*

The existing conditions for determining when CSU should be paid are somewhat ambiguous under certain rare scenarios and consequently this modification has been raised to clarify the conditions under which CSU should be paid to units.

**Code Objectives Furthered**

*(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&SC for Code Objectives)*

(a) to facilitate the efficient discharge by the Market Operator of the obligations imposed upon it by its Market Operator Licences;

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



(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;

(e) to provide transparency in the operation of the Single Electricity Market;

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

By providing a clarification the Code to ensure units are remunerated correctly.

#### Implication of not implementing the Modification Proposal

*(State the possible outcomes should the Modification Proposal not be implemented)*

The current conditions in the Code for CSU are somewhat ambiguous under certain rare scenarios and this could result in future settlement queries and disputes where these rare scenarios occur.

To avoid any ambiguity, this modification clarifies the conditions under which CSU should be paid.

<b>Working Group</b> <i>(State if Working Group considered necessary to develop proposal)</i>	<b>Impacts</b> <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>
N/A	Changes will be required to Counterparty Settlement and Billing (CSB; SEMO Settlement system) to implement this modification.
<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>	