



Single Electricity Market

FINAL RECOMMENDATION REPORT

MOD_02_23 DSU ENERGY PAYMENTS

22 FEBRUARY 2023

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Document History

Version	Date	Author	Comment
1.0	9 th March 2023	Modifications Committee Secretariat	Issued to Modifications Committee for review and approval
2.0	16 th March 2023	Modifications Committee Secretariat	Issued to Regulatory Authorities for final decision

Reference Documents

Document Name
Trading and Settlement Code
Mod_02_23 DSU Energy Payments

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1. MODIFICATIONS COMMITTEE RECOMMENDATION

RECOMMENDED FOR APPROVAL– MAJORITY VOTE

Recommended for Approval by Majority Vote		
Cormac Daly	Generator Member	Approve
Robert McCarthy	DSU Member	Approve
Eamonn Boland	Renewable Generator Alternate	Approve
Eoghan Cudmore	Supplier Alternate	Approve
Stacy Feldmann (Chair)	Generator Member	Approve
Colm Oireachtaigh	Supplier Member	Approve
David Morrow	Generator Alternate	Reject
Therese Murphy	Generator Alternate	Approve
Cormac Fagan	Assetless Alternate	Approve
David Caldwell	Supplier Alternate	Approve

2. BACKGROUND

This Modification Proposal was raised by Utility Regulator and CRU and received by the Secretariat on 9th February 2023. The Proposal was raised and voted on at Meeting 115 on 22nd February 2023.

The RAs proposed this Modification that will enable DSUs access to energy payments at all times and not only at times of scarcity. This Modification Proposal has been drafted in conjunction with the TSOs/MO and following consultation with relevant industry participants.

In July 2019, the SEM Committee (SEMC) published an ‘interim solution’ ([SEM-19-029 - DSU Compliance with State Aid Decision Paper](#)) to ensure that Demand Side Units (DSUs) had access to energy payments at times of scarcity in line with State Aid requirements. The 2019 ‘interim solution’ was implemented as per approved [Mod 17 19: DSU State Aid Compliance Interim Approach](#) which outlined the changes required to the Trading & Settlement Code and associated systems changes. The Clean Energy Package, published in 2019, also includes a number of obligations designed to fully integrate DSUs into electricity markets. This was further recognised in the [SEMC’s Forward Work Plan](#) for October 2021- September 2022, with a key project being the development of a demand side management enduring solution for energy payments.

Following [Consultation SEM-22-036 in July 2022](#), SEMC published [Decision SEM-22-090 in November 2022](#) to enable a phased approach that would ensure DSU access to energy payments in the balancing market at all times and not just at times of scarcity. The Decision included a proviso that the TSOs/MO would carry out an assessment of the impact of this Decision on the Imperfections Charges, and therefore cost to consumer. The outcome of this will be considered by the RAs in terms of materiality.

This Modification will essentially reverse some of the changes implemented under Mod_17_19 (which were designed to limit access to energy payments for DSUs to times of scarcity and will therefore involve removal of Part B paragraph F.2.5.6 and section H.14 Interim Rules in the Code to remove the specific treatment of the Trading Site Supplier Unit (TSSU). Other minor wording changes throughout Sections B, F, G, and AP01 are necessary to tidy up relevant references to DSUs. Elements of the original framework will remain in place, such as continuing to use dispatched quantity as a proxy for metered quantity and the use of the Imperfections Charges to fund DSU energy payments.

3. PURPOSE OF PROPOSED MODIFICATION

3A.) JUSTIFICATION OF MODIFICATION

The SEMC recognises that replacing the current interim solution to give DSUs full access to the market provides a more level playing field with other market participants. The purpose of the phased approach, as outlined in the Decision Paper SEM-22-090, is that before the enduring Phase 2 is implemented, Phase 1 would allow DSUs full market access in the near term. This would enable assessment of the effectiveness of Phase 1 and act as an incentive to DSUs to participate fully in the market, potentially adding additional flexibility as early as possible. This modification will help to ensure that the SEM is in line with requirements of the Clean Energy Package and associated obligations (Article 17 of the Electricity Directive and Article 6 of the Electricity Regulation) designed to fully integrate DSUs into the market. In ensuring access to energy payments at all times, DSUs will have equal access to the market and will be appropriately compensated for their contribution to the system.

For Phase 1 of the SEMC Decision to deliver access to energy payments to DSUs, the removal of specific treatment of the TSSU will be required. This removal will result in concerns relating to 'double counting' as the energy payments are effectively a double counting of energy (against the DSU and the reduced consumption at the Supplier Unit(s)). This consequence will remain until the enduring solution is implemented in Phase 2, but it remains the only way to ensure DSUs have access to energy payments at all times to move forward with Phase 1.

This proposal will be implemented through configuration changes rather than requiring extensive systems changes and can therefore be readily reconfigured if there are unintended consequences arising from the modification. The RAs will consider the extent of the impact assessment, including the impact on Imperfections Charges. As referenced in the SEMC Decision, other performance metrics, such as a GPI, may be introduced at any time.

3B.) IMPACT OF NOT IMPLEMENTING A SOLUTION

If this proposal is not implemented, then the SEM may become non-compliant with the requirements of the Clean Energy Package and associated obligations. There may also be implications on the behaviour and performance of DSUs in the market, leading to a detrimental impact on security of supply.

3C.) IMPACT ON CODE OBJECTIVES

- (b) to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
- (f) to ensure no undue discrimination between persons who are parties to the Code.

4. WORKING GROUP AND/OR CONSULTATION

Not required for this Modification to enable implementation Phase 1 of the Decision. Extensive engagement was undertaken pre- and post-consultation, and in the drafting of this Modification. A Working Group will likely be necessary when developing proposals for the enduring Phase 2 solution.

5. IMPACT ON SYSTEMS AND RESOURCES

Impacts on Market Operator, DSU and Supplier Settlement systems and Settlement processes. SEMO will provide a high-level impact assessment on resources, systems and the impact on Imperfections Charges. The RAs will consider the outcome of the impact assessment in considering approval of this modification. As this Modification requires configuration changes rather than extensive systems changes, it can therefore be readily reconfigured if there are unintended consequences arising from the modification.

6. IMPACT ON OTHER CODES/DOCUMENTS

N/A

7. MODIFICATION COMMITTEE VIEWS

MODIFICATIONS MEETING 115 – 22ND FEBRUARY 2023

The Proposer advised that this Proposal was developed following a SEMC consultation process to integrate DSUs, enabling them to have access to energy payments and not only at times of scarcity. The Decision was that the RAs would work with the TSOs to commence performance monitoring and payment would commence when the phase one solution is implemented. It was also advised that the impact assessment on imperfections was significant.

DSU Member welcomed the work done by SEMO and RAs in relation to the preparation of this Modification and advised Committee Members that it was a good solution to avoiding implementation costs by addressing the right parts of the Code.

Generator Member queried how the Modification was drafted in relation to energy Payments and if these were made open to DSUs to earn via availability. RA Member confirmed this was the case and that there is a key difference between performance and availability monitoring. An assessment of performance will monitor the effectiveness of dispatch quantity as a proxy for metered quantity; availability will not be monitored as part of the assessment but may be revisited after the Mod goes live.

Generator Member voiced concerns about not having access to Impact Assessment in advance and queried if there could be a possibility of a double payment. MO Member advised that the Impact Assessment in this case has two sides: one is the actual changes to the system which have been tested and do not require planning via the bi-annual System release because they could be applied with a configuration change of the Supplier type. It was advised that this leads to the cessation of all links between the DSU and the variables created with Mod_17_19 to only pay DSUs when the Imbalance Price is greater than the Strike Price. Although the initial testing provided a successful proof of concept, SEMO will have to satisfy itself fully via a further suite of regression testing and end to end processes. These are only possible as the testing environments are made available with appropriate data setting. SEMO will inform all parties affected should any issue arise from those.

The second part of the impact assessment was the forecast of the changes that this Modification will cause to Imperfections. TSO Member advised that following a review of data for the year 2022, it was estimated that, all things remaining equal, there would be an additional imperfection cost of between €60 - €65 million. This amount would not be proportionately distributed with only a handful of the 49 units registered in the observed period receiving the vast majority of it due to their specific market conditions. The TSO is aware that the Market Monitoring Unit is reviewing the data of these units.

Generator Member questioned how Energy Payments were not explicitly referred to in the Legal Drafting.

DSU and MO Member explained that DSU will now be treated like any other Generator Unit and due to the nature of their set up Energy Payments indicates the totality of payments which for DSUs is

expressed by the retention of the Imbalance Charge (CIMB) component. This payment to the DSU currently is taken back by equal amount charged on the Supplier side. By breaking the link with this Modification, the DSU will retain the CIMB.

In relation to the question of double accounting of the demand, MO Member advised that the double payment would be eliminated in Phase 2 when the demand of the individual demand sites within the DSU unit could be metered by the DSOs. At the moment this was not yet possible, but Phase 2 would be progressed as soon as possible.

A Supplier Member raised the issue that performance monitoring should have happened before the implementation due to the large impact on imperfections. It was also questioned if such impact could be alleviated anywhere else. TSO Member explained that the current process is to contact DSU units and request explanations when it is noticed that performances would be under 70%. Also, the TSO is looking at developing specific new Generator Performance Incentives under the Grid Code.

The Proposer also expressed the view that prices would likely come down, reducing the forecasted impact on Imperfections and that the appropriateness of Imperfections as a mechanism for recovery would be reviewed. The TSO Member agreed that the reduction in price could lower the forecast as observed in the intervening period between the response to the consultation and now where the impact was reduced from €100M to €60m to €65m, however this was not a clear cut because there were numerous other factors that could have an impact including but not limited to DSUs bidding strategy, Ex-Ante Trading, demand and system conditions.

TSO Member advised there was no estimate done for Phase 2 when metering for the Individual Demand Sites would be received by the DSOs and it was also too hard to determine and out of scope at this point.

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 basis on the second Settlement Day following publication of RAs decision.

1 APPENDIX 1: MOD_02_23 DSU ENERGY PAYMENTS

Proposer <i>(Company)</i>	Date of receipt <i>(assigned by Secretariat)</i>	Type of Proposal <i>(delete as appropriate)</i>	Modification Proposal ID <i>(assigned by Secretariat)</i>
UR/CRU	9th February 2023	Standard	Mod_02_23
Contact Details for Modification Proposal Originator			
Name	Telephone number	Email address	
Leigh Greer		Leigh.greer@uregni.gov.uk	
Modification Proposal Title			
DSU Energy Payments (Phase 1)			
Documents affected <i>(delete as appropriate)</i>	Section(s) Affected	Version number of T&SC or Agreed Procedure used in Drafting	
T&SC Part B Agreed Procedures Part B	SECTIONS B, F, G, H AP01 SECTION 2.3, APPENDIX 3	V27	
Explanation of Proposed Change <i>(mandatory by originator)</i>			
<p>The RAs are proposing a modification that will enable DSUs access to energy payments at all times and not only at times of scarcity. This modification proposal has been drafted in conjunction with the TSOs/MO and following consultation with relevant industry participants.</p> <p>In July 2019, the SEM Committee (SEMC) published an ‘interim solution’ (SEM-19-029 - DSU Compliance with State Aid Decision Paper) to ensure that Demand Side Units (DSUs) had access to energy payments at times of scarcity in line with State Aid requirements. The 2019 ‘interim solution’ was implemented as per approved Mod 17 19: DSU State Aid Compliance Interim Approach which outlined the changes required to the Trading & Settlement Code and associated systems changes. The Clean Energy Package, published in 2019, also includes a number of obligations designed to fully integrate DSUs into electricity markets. This was further recognised in the SEMC’s Forward Work Plan for October 2021- September 2022, with a key project being the development of a demand side management enduring solution for energy payments.</p>			

Following [Consultation SEM-22-036 in July 2022](#), SEMC published [Decision SEM-22-090 in November 2022](#) to enable a phased approach that would ensure DSU access to energy payments in the balancing market at all times and not just at times of scarcity. The Decision included a proviso that the TSOs/MO would carry out an assessment of the impact of this Decision on the Imperfections Charges, and therefore cost to consumer. The outcome of this will be considered by the RAs in terms of materiality.

This modification will essentially reverse some of the changes implemented under Mod_17_19 (which were designed to limit access to energy payments for DSUs to times of scarcity and will therefore involve removal of Part B paragraph F.2.5.6 and section H.14 Interim Rules in the Code to remove the specific treatment of the Trading Site Supplier Unit (TSSU). Other minor wording changes throughout Sections B, F, G, and AP01 are necessary to tidy up relevant references to DSUs. Elements of the original framework will remain in place, such as continuing to use dispatched quantity as a proxy for metered quantity and the use of the Imperfections Charges to fund DSU energy payments.

Legal Drafting Change

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

Changes to Legal Drafting of main T&SC:

B.9.1.7 An Associated Supplier Unit may contain Demand outside of the Trading Site [except when a Demand Side Unit is registered on that Trading Site](#).

B.9.5.4 For each Demand Side Unit, a Party (or Applicant as applicable) shall register as part of a single Trading Site in accordance with this section B.9:

- (a) the Demand Side Unit;
- (b) a single Supplier Unit which is [an Associated Supplier Unit with only the single Demand Side Unit registered to it](#)~~Trading Site Supplier Unit~~; and
- (c) no other Unit.

F.2.5.6 ~~INTENTIONALLY BLANK~~~~If the value for any Day-ahead Trade Price (PTDA_{xuh}), Intraday Trade price (PTID_{xuh}) or Balancing Trade Price (PTBuy_k) associated with a trade, x, or position, k, in the ranked set, for~~

~~Generator Unit, u, which is a Demand Side Unit, is greater than the value of the Strike Price (PSTRm), then the value of the Metered Quantity (QM_v) for each Trading Site Supplier Unit, v, which is on a Trading Site, s, associated with that Generator Unit, in each Imbalance Settlement Period, y, associated with the relevant Balancing Trade Price or partially or wholly within the relevant Day-ahead Trading Period or Intraday Trading Period, shall be the value as submitted by the Meter Data Providers in accordance with Section C.6. Otherwise, the value of the Metered Quantity (QM_v) for each Trading Site Supplier Unit, v, which is on a Trading Site, s, associated with a Generator Unit, u, which is a Demand Side Unit, shall be deemed to be equal to the negative of the Dispatch Quantity (QD_{uy}) of that Demand Side Unit.~~

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 ~~relevant Associated Supplier Unit~~~~Trading Site Supplier~~ and the forecast Metered Generation of all Demand Side Units on the Trading Site.

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 an ~~Associated Supplier Unit~~~~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 a New Participant or an Adjustment 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.14 ~~INTENTIONALLY BLANK~~~~INTERIM RULES TO APPLY FOR A FIXED PERIOD OF TIME FOR DEMAND SIDE UNIT SETTLEMENT~~

~~(all sub-paragraph from H.14.1 to H.14.1.4 to be fully removed)~~

Changes to Legal Drafting of Agreed Procedure 01 – Registration

2.3. Units as Part of Trading Sites

Each Generator Unit (excluding Pumped Storage Units, Battery Storage Units, Interconnector Residual Capacity Units, Interconnector Error Units, Assetless Units), including Trading Units and Demand Side Units shall be registered as part of a Trading Site. The following rules apply to registering Units as part of Trading Sites:

- (a) Each Trading Site shall contain at least one Generator Unit (except where the Generator Unit is registered as a Trading Unit).
- (b) Where the Generator Unit registered on a Trading Site is a Demand Side Unit, no other Generator Unit can be registered on that site.
- (c) All Trading Sites must record to it an Associated Supplier Unit or a Trading Site Supplier Unit.
- (d) Any Party registering an Autoproducer Site must register a Trading Site Supplier Unit as part of the relevant Trading Site.
- (e) A Trading Unit can only be registered on a Trading Site that is an Autoproducer Site. Each Unit registered as part of a Trading Site shall be registered to the same Participant except where the Party does not intend to register a Trading Site Supplier Unit.
- (f) A Trading Site containing an Aggregated Generator Unit must record to it an Associated Supplier Unit.
- (g) This Associated Supplier Unit may be registered by a different Participant to the Participant registering the Generator Unit.
- (h) A Supplier Unit can be registered as an Associated Supplier Unit for multiple Trading Sites except when a Demand Side Unit is registered on that Trading Site.
- (i) A Trading Site Supplier Unit can only contain Demand related to the Trading Site to which it is registered.
- (j) The Firm Access Quantity of a Trading Site shall be recorded within the Participation Notice, where a Generator Unit operates under a Connection Agreement which provides for a Firm Access Quantity which is less than the Maximum Export Capacity of the relevant site.

AP01 – Registration - Appendix 3

Trading Site Supplier Unit Flag	This will indicated if a Supplier Unit is a Trading Site Supplier Unit. Indicated as 'Y' 'N'.
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Note: Each Demand Side Unit registered must also register a Trading Site Supplier Unit.

Modification Proposal Justification

(Clearly state the reason for the Modification)

The SEMC recognises that replacing the current interim solution to give DSUs full access to the market provides a more level playing field with other market participants. The purpose of the phased approach, as outlined in the Decision Paper SEM-22-090, is that before the enduring Phase 2 is implemented, Phase 1 would allow DSUs full market access in the near term. This would enable assessment of the effectiveness of Phase 1 and act as an incentive to DSUs to participate fully in the market, potentially adding additional flexibility as early as possible. This modification will help to ensure that the SEM is in line with requirements of the Clean Energy Package and associated obligations (Article 17 of the Electricity Directive and Article 6 of the Electricity Regulation) designed to fully integrate DSUs into the market. In ensuring access to energy payments at all times, DSUs will have equal access to the market and will be appropriately compensated for their contribution to the system.

For Phase 1 of the SEMC Decision to deliver access to energy payments to DSUs, the removal of specific treatment of the TSSU will be required. This removal will result in concerns relating to 'double counting' as the energy payments are effectively a double counting of energy (against the DSU and the reduced consumption at the Supplier Unit(s)). This consequence will remain until the enduring solution is implemented in Phase 2, but it remains the only way to ensure DSUs have access to energy payments at all times to move forward with Phase 1.

This proposal will be implemented through configuration changes rather than requiring extensive systems changes and can therefore be readily reconfigured if there are unintended consequences arising from the modification. The RAs will consider the extent of the impact assessment, including the impact on Imperfections Charges. As referenced in the SEMC Decision, other performance metrics, such as a GPI, may be introduced at any time.

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)

- (b) to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
- (f) to ensure no undue discrimination between persons who are parties to the Code.

Implication of not implementing the Modification Proposal

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

<p>If this proposal is not implemented, then the SEM may become non-compliant with the requirements of the Clean Energy Package and associated obligations. There may also be implications on the behaviour and performance of DSUs in the market, leading to a detrimental impact on security of supply.</p>	
<p style="text-align: center;">Working Group</p> <p style="text-align: center;"><i>(State if Working Group considered necessary to develop proposal)</i></p>	<p style="text-align: center;">Impacts</p> <p style="text-align: center;"><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>
<p>Not required for this modification to enable implementation Phase 1 of the Decision. Extensive engagement was undertaken pre- and post-consultation, and in the drafting of this modification. A working group will likely be necessary when developing proposals for the enduring Phase 2 solution.</p>	<p>Impacts on Market Operator, DSU and Supplier Settlement systems and Settlement processes. SEMO will provide a high-level impact assessment on resources, systems and the impact on Imperfections Charges. The RAs will consider the outcome of the impact assessment in considering approval of this modification. As this modification requires configuration changes rather than extensive systems changes, it can therefore be readily reconfigured if there are unintended consequences arising from the modification.</p>
<p>Please return this form to Secretariat by email to balancingmodifications@sem-o.com</p>	

