



Single Electricity Market

FINAL RECOMMENDATION REPORT

MOD_13_23 SDP_01 TREATMENT OF NON-PRIORITY DISPATCH
RENEWABLES V2

8 MARCH 2024

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Document History

Version	Date	Author	Comment
1.0	8 th March 2024	Modifications Committee Secretariat	Issued to Modifications Committee for review and approval
2.0	15 th March 2024	Modifications Committee Secretariat	Issued to Regulatory Authorities for final decision

Reference Documents

Document Name
Trading and Settlement Code
Modification Proposal Form
Modification Proposal Form v2
Presentation 05.12.23
Presentation 08.02.24

Table of Contents

1. MODIFICATIONS COMMITTEE RECOMMENDATION	3
RECOMMENDED FOR APPROVAL– MAJORITY VOTE.....	3
2. BACKGROUND.....	3
3. PURPOSE OF PROPOSED MODIFICATION	5
3A.) JUSTIFICATION OF MODIFICATION	5
3B.) IMPACT OF NOT IMPLEMENTING A SOLUTION	5
3C.) IMPACT ON CODE OBJECTIVES	5
4. WORKING GROUP AND/OR CONSULTATION	5
5. IMPACT ON SYSTEMS AND RESOURCES.....	6
6. IMPACT ON OTHER CODES/DOCUMENTS.....	6
7. MODIFICATION COMMITTEE VIEWS.....	6
MODIFICATIONS MEETING 120 – 5 TH DECEMBER 2023	6
MODIFICATIONS MEETING 121 – 8 TH FEBRUARY 2024	6
8. PROPOSED LEGAL DRAFTING.....	7
9. LEGAL REVIEW.....	7
10. IMPLEMENTATION TIMESCALE	7
1 APPENDIX 1: MOD_13_23 SDP_01 TREATMENT OF NON-PRIORITY DISPATCH RENEWABLES.....	8

1. MODIFICATIONS COMMITTEE RECOMMENDATION

RECOMMENDED FOR APPROVAL– MAJORITY VOTE

Recommended for Approval by Majority Vote		
Stacy Feldmann (Chair)	Generator Member	Approve
Nick Heyward	Flexible Participant Alternate	Approve
Andrew Burke	Renewable Generator Member	Approve
Andrew Kelly	Generator Alternate	Abstain
Sean McParland	Generator Member	Abstain
Eoghan Cudmore	Supplier Alternate	Approve
Bryan Hennessy	Supplier Member	Approve
Paul Hutchinson	Generator Member	Approve
David Caldwell	Supplier Member	Abstain
Robert McCarthy	DSU Member	Approve
Eoin Murphy	Assetless Member	Approve

2. BACKGROUND

This Modification Proposal was raised by EirGrid, SONI & SEMO and received by the Secretariat on 21st November 2023. The Proposal was discussed at Meeting 120 on 5th December 2023. An Industry Call was held on the 17th of January and a further call on 24th January 2024. A version 2 of the Proposal was raised and voted on at Meeting 121 on 8th February 2024.

The Clean Energy for all Europeans Package (CEP) Regulation (EU) 2019/943 entered into force in July 2019 with the majority of the articles applying from January 2020. Article 12, 'Dispatching of generation and demand response', and Article 13, 'Redispatching', of this Regulation were identified by the SEM Committee as areas to be addressed. These articles set out new rules with respect to the treatment of renewable generators in energy markets, including requirements that TSOs provide for the inclusion of certain renewable generators in energy markets without Priority Dispatch.

Following consultation, the SEM Committee published SEM-21-027, 'Proposed Decision on Treatment of New Renewable Units in the SEM'. This proposed decision stated that controllable, non-dispatchable generators without priority dispatch should be treated in the balancing market like dispatchable units for energy balancing ('dispatch') and like other controllable, non-dispatchable renewable generators for curtailment ('redispatch'). Based on further conversations between the TSOs and SEMO and the Regulatory Authorities it was agreed that for an interim implementation it would be acceptable to continue the pro-rata constraint of all controllable, non-dispatchable renewable generators (with or without priority dispatch) also.

With the publication of SEM-21-027, the TSOs and SEMO began the process of impact assessing current arrangements in the context of the changes included in Regulation (EU) 2019/943 and in the proposed decision paper. The changes to the Trading and Settlement Code identified through that work are as follows:

- Controllable, non-dispatchable generators without Priority Dispatch will be required to submit Commercial Offer Data (COD) similarly to dispatchable generators, as set out in SEM-21-027. As is the case for dispatchable generators this will include at least default Complex COD and may also include Simple COD.
 - Start-Up and No-Load to be mandated to be submitted as zero as these are concepts relating to the synchronisation of thermal generators to the grid, and these units will be permanently energized except when on outage.
- Controllable, non-dispatchable generators without Priority Dispatch will be required to submit Technical Offer Data (TOD) similarly to dispatchable generators, as set out in SEM-21-027.
- Controllable, non-dispatchable generators without Priority Dispatch will be required to submit Physical Notifications (PNs) reflecting their ex-ante position as set out in SEM-21-027.
 - Final Physical Notifications used for settlement to be based on participant submitted Physical Notifications as they are for dispatchable generators, rather than being set to availability ex-post as they are for controllable, non-dispatchable generators with Priority Dispatch.
- Controllable, non-dispatchable generators without Priority Dispatch will be required to submit Forecast Availability, Minimum Output and Minimum Stable Generation as set out in SEM-21-027.
 - Forecast Minimum Stable Generation to be mandated to be submitted as zero. This is to reflect that these units will be considered 'on' when Forecast Availability is greater than zero, and can be scheduled to anywhere in the range between zero and Forecast Availability.
- Bid Offer Acceptances resulting from redispatch (constraint or curtailment) will have a deemed decremental price of zero applied to mirror the existing treatment of controllable, non-dispatchable generators with Priority Dispatch.
- Bid Offer Acceptances resulting from dispatch (energy balancing) will have Commercial Offer Data prices applied to mirror the existing treatment of dispatchable generators as set out in SEM-21-027.
- The Engineering Tolerance Uninstructed Imbalance parameter (TOLENG) will be redefined as a per-unit parameter so that a suitable value can be applied to controllable, non-dispatchable generators only, as provided for in SEM-21-027.

This will allow for instantaneous ramp rates to be included in market systems as it is for controllable, non-dispatchable generators with priority dispatch, without penalising these generators for the difference between actual ramp rates and the assumed instantaneous rates. It will also allow for variations from Dispatch Quantity for these units caused by fluctuations in their underlying variable renewable resource (i.e. wind or solar irradiance).

- New and updated Instruction Profiling rules are required to allow for the profiling and ordering of concurrent energy balancing Dispatch Instructions ('MWOFS' and resulting Pseudo Instructions) and constraint and curtailment Dispatch Instructions ('LOCLs', 'CURLs', 'LCLOs', 'CRLOs').
 - Updates were made to the mod proposal since it was first proposed in the Instruction Profiling Appendix of the T&SC. These updates were to include an updated proposed approach for instruction profiling of these units to better reflect their actual intended operation and the mandate of the Clean Energy Package Regulation (EU) 2019/943. In the initial proposal all actions (energy balancing/constraint/curtailment) were to be taken incrementally from the previous action. In the new proposal energy balancing

actions are based on merit order lists only independent of constraint and curtailment. In this way energy balancing actions will be taken before constraint and curtailment, and constraint and curtailment will be taken incrementally from that energy balanced market position.

3. PURPOSE OF PROPOSED MODIFICATION

3A.) JUSTIFICATION OF MODIFICATION

These changes will allow the TSOs and SEMO to accommodate controllable, non-dispatchable renewable generators without Priority Dispatch in energy markets as per the treatment outlined in SEM-21-027, as required under Clean Energy Package Regulation (EU) 2019/943.

This will also allow renewable participants greater control over their participation in energy markets and greater certainty around their outcomes.

3B.) IMPACT OF NOT IMPLEMENTING A SOLUTION

If this modification is not implemented it will not be possible to treat controllable, non-dispatchable generator units without Priority Dispatch differently to controllable, non-dispatchable generator units with Priority Dispatch, and the SEM will not be compliant with Clean Energy Package Regulation (EU) 2019/943.

Controllable, non-dispatchable generators without Priority Dispatch will not be required to submit Commercial Offer Data, Technical Offer Data, or Physical Notifications. It will also not be possible to profile or apply the correct prices to energy balancing actions taken on these units, meaning that these units will not be settled using commercial prices for energy balancing actions.

This will mean that market systems will not have the ability to include these units in scheduling, dispatch, pricing or settlement as per the treatment described in SEM-21-027.

3C.) IMPACT ON CODE OBJECTIVES

- c) to promote competition in the Single Electricity Market;

These changes will allow controllable, non-dispatchable generators without Priority Dispatch to participate competitively in energy markets.

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

These changes will ensure no undue discrimination as controllable, non-dispatchable generators without Priority Dispatch will have the ability to participate in energy markets similarly to dispatchable generators.

- g) to promote the short-term and long-term interests of consumers of electricity on the island of Ireland with respect to price, quality, reliability, and security of supply of electricity.

These changes will promote the interests of consumers by creating more competition for energy balancing actions and reducing the need for non-market based redispatch for energy reasons, thereby reducing Dispatch Balancing Costs.

4. WORKING GROUP AND/OR CONSULTATION

N/A

5. IMPACT ON SYSTEMS AND RESOURCES

Large impact on MA in relation to updated instruction profiling logic.

Medium impact on MI in relation to data submission requirements.

Medium impact on participant processes and systems in relation to additional data submission requirements.

Medium impact on System Operations and Market Operations systems and processes.

Minor impact on Grid Codes.

6. IMPACT ON OTHER CODES/DOCUMENTS

N/A

7. MODIFICATION COMMITTEE VIEWS

MODIFICATIONS MEETING 120 – 5TH DECEMBER 2023

The Proposer gave a [presentation](#) on this Modification Proposal noting that the intention for the meeting today was to introduce this Proposal and additional sessions will be organized similar to the process undertaken for Mod_11_23 and a vote requested at Modifications Committee Meeting 121.

The Proposer provided a background on this Modification Proposal noting that it was based around consideration arisen from SEMC decision SEM-21-027, the Clean Energy Package and other regulations. It was advised that under this Modification, non-priority dispatch units would be required to submit PNs. The Commercial Offer Data and Fixed Costs were discussed, with evidence requested from Participants on the application of Fixed Costs. It was noted that units would be required to submit technical offer data.

The Proposer went through the details of the Proposals and provided example of instruction profiling and of energy balancing actions. Members offered support for this Proposal and welcomed further Industry Calls to discuss in more detail.

Clarifications were requested on the application of Tolerance on dispatch and the presenter replied that the approach of using the existing percentage tolerance (TOLENG) on a per unit basis will be used.

The question was raised on whether the recent Judicial Review would have an impact on this proposal. The Presenter replied that based on their assessment the proposal was not affected by the outcome of the judicial review and the RAs noted that they would monitor further developments of the judge's order to confirm that. Also questioned the timelines for delivery of this proposal and of a vote in February would still leave time for the end of year release. Proposer said that compared to other Mods this was heavily developed in collaboration with the vendor and a February vote could still ensure those timelines provided the detailed impact assessment would not raise any issue.

MODIFICATIONS MEETING 121 – 8TH FEBRUARY 2024

The Proposer delivered a [presentation](#) on v2 of this Modification Proposal listing the principles behind this Modification and the more up to date changes. A question was raised by the Chair on the lack of approved fundings for the changes and how this delay was going to affect the current work. An Observer from EirGrid explained that currently the project is at the design stage for which funding is secured. The lack of funding concerns phase 3 (implementation) but they are working with the RAs to get that finalized.

Another question was raised with relation to TOLENG, in light of the fact that RA Member advised that any new value for TOLENG would need to be consulted on. It was advised that the consultation on the

values will not affect the Proposal which focuses on the delivery of individual fields for the values for each unit. The process to derive the correct values is outside the scope of the Proposal.

Renewable Generator Member made the point that this Modification was not implementing a Market based Re-dispatch as recommended by the Clean Energy Package (CEP). The Proposer clarified that this was intended to be an Interim solution and that this could be considered in an enduring solution.

A number of Members also supported the point made in relation to this Modification not implementing a Market based Re-dispatch solution. A generator member noted for the record that the proposal referred to SEM-21-027 'Proposed Decision' rather than Decision Paper SEM-22-009 and also noted that this Modification is very much an Interim solution but that this is not explicitly stated within the body of the Modification proposal.

It was also proposed that the fact that this was an interim solution would be better highlighted in a new V3 version of the Modification to reflect the above points and vote on the Modification on that basis and that the timelines for implementation of the enduring solution are made clear. MO Member proposed that text could be added in a prominent way in the Final Recommendation Report in order to clarify the interim nature of the Modification and that it was not implementing a Market based Re-dispatch. With regards to the timeline for an enduring solution, EirGrid Observer said that this would have to be seen in the context of other projects on the pipeline and that they would need to take it away and provide more details at a later stage. A generator member asked could the RAs outline if they were committed to looking at implementing Market based re-dispatch in an enduring solution and the timelines for that. RA member stated they couldn't give a comment or view on an enduring solution.

Further concerns were raised in relation to the impact of the outcome of the Judicial Review and if the Modification could be contradicting the Regulation. The Proposer explained that the CEP allows for non-Market Re-dispatch although giving preference to Market-based ones.

A question was raised about how many units could be impacted by this. The Proposer advised that, although the figures were not available at the moment, it impacted all new units or units that underwent a significant change since 2019. This is not expected to represent a very large volume at the moment but following the implementation of the Modification, units could apply to change their status if they so wish and there is no estimate of how many would choose to do so.

8. PROPOSED LEGAL DRAFTING

[TSC Part B – Tracked Changes](#)

[TSC Part B Appendices – Tracked Changes](#)

[T&SC Part B Glossary – Tracked Changes](#)

9. LEGAL REVIEW

N/A

10. IMPLEMENTATION TIMESCALE

It is recommended that this Modification is implemented on a Trading Day basis following the relevant Market System Release.

1 APPENDIX 1: MOD_13_23 SDP_01 TREATMENT OF NON-PRIORITY DISPATCH RENEWABLES V2

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>
EirGrid/SONI/SEMO	26 th January 2024	Standard	Mod_13_23 v2
Contact Details for Modification Proposal Originator			
Name	Telephone number	Email address	
Grace Burke		Grace.Burke@EirGrid.com	
Modification Proposal Title			
SDP_01 – Treatment of Non-Priority Dispatch Renewables			
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 Appendices Part B Glossary Part B	D.3.2.2, D.3.2.3, D.4.2.1, D.4.2.15, D.4.3.3, F.2.1.10, F.2.4.1, F.2.4.4, F.3.2.3, F.3.2.5, F.9.1.2, F.9.2.4. Appendix E – Table 2. Appendix I – 4(e), 11(e), Table 2. Appendix K – Table 30. Appendix O – 2, 8, 16, Table 3, 17, 18, 19, 20, 22, Table 8, 37(e). Glossary Part B Definitions and List of Variables and Parameters.	V28.0	
Explanation of Proposed Change <i>(mandatory by originator)</i>			
<p>The Clean Energy for all Europeans Package (CEP) Regulation (EU) 2019/943 entered into force in July 2019 with the majority of the articles applying from January 2020. Article 12, ‘Dispatching of generation and demand response’, and Article 13, ‘Redispatching’, of this Regulation were identified by the SEM Committee as areas to be addressed. These articles set out new rules with respect to the treatment of renewable generators in energy markets, including requirements that TSOs provide for the inclusion of certain renewable generators in energy markets without Priority Dispatch.</p> <p>Following consultation, the SEM Committee published SEM-21-027, ‘Proposed Decision on Treatment of New Renewable Units in the SEM’. This proposed decision stated that controllable, non-dispatchable generators without priority dispatch should be treated in the balancing market like dispatchable units for energy balancing (‘dispatch’) and like other controllable, non-dispatchable renewable generators for curtailment (‘redispatch’). Based on further conversations between the TSOs and SEMO and the Regulatory Authorities it was agreed that for an interim</p>			

implementation it would be acceptable to continue the pro-rata constraint of all controllable, non-dispatchable renewable generators (with or without priority dispatch) also.

With the publication of SEM-21-027, the TSOs and SEMO began the process of impact assessing current arrangements in the context of the changes included in Regulation (EU) 2019/943 and in the proposed decision paper. The changes to the Trading and Settlement Code identified through that work are as follows:

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 - Final Physical Notifications used for settlement to be based on participant submitted Physical Notifications as they are for dispatchable generators, rather than being set to availability ex-post as they are for controllable, non-dispatchable generators with Priority Dispatch.
- Controllable, non-dispatchable generators without Priority Dispatch will be required to submit Forecast Availability, Minimum Output and Minimum Stable Generation as set out in SEM-21-027.
 - Forecast Minimum Stable Generation to be mandated to be submitted as zero. This is to reflect that these units will be considered 'on' when Forecast Availability is greater than zero, and can be scheduled to anywhere in the range between zero and Forecast Availability.
- Bid Offer Acceptances resulting from redispatch (constraint or curtailment) will have a deemed decremental price of zero applied to mirror the existing treatment of controllable, non-dispatchable generators with Priority Dispatch.
- Bid Offer Acceptances resulting from dispatch (energy balancing) will have Commercial Offer Data prices applied to mirror the existing treatment of dispatchable generators as set out in SEM-21-027.
- The Engineering Tolerance Uninstructed Imbalance parameter (TOLENG) will be redefined as a per-unit parameter so that a suitable value can be applied to controllable, non-dispatchable generators only, as provided for in SEM-21-027.

This will allow for instantaneous ramp rates to be included in market systems as it is for controllable, non-dispatchable generators with priority dispatch, without penalising these generators for the difference between actual ramp rates and the assumed instantaneous rates. It will also allow for variations from Dispatch Quantity for these units caused by fluctuations in their underlying variable renewable resource (i.e. wind or solar irradiance).
- New and updated Instruction Profiling rules are required to allow for the profiling and ordering of concurrent energy balancing Dispatch Instructions ('MWOFS' and resulting Pseudo Instructions) and constraint and curtailment Dispatch Instructions ('LOCLS', 'CURLs', 'LCLOs', 'CRLOs').
 - Updates were made to the mod proposal since it was first proposed in the Instruction Profiling Appendix of the T&SC. These updates were to include an updated proposed approach for instruction profiling of these units to better reflect their actual intended operation and the mandate of the Clean Energy Package Regulation (EU) 2019/943. In the initial proposal all actions (energy balancing/constraint/curtailment) were to be taken incrementally from the previous action. In the new proposal energy balancing actions are based on merit order lists only independent of constraint and curtailment. In this way energy balancing actions will be taken before constraint and curtailment, and constraint and curtailment will be taken incrementally from that energy balanced market position.

Legal Drafting Change
<i>(Clearly show proposed code change using tracked changes, if proposer fails to identify changes, please indicate best estimate of potential changes)</i>
Tracked changes attached.
Modification Proposal Justification
<i>(Clearly state the reason for the Modification)</i>
<p>These changes will allow the TSOs and SEMO to accommodate controllable, non-dispatchable renewable generators without Priority Dispatch in energy markets as per the treatment outlined in SEM-21-027, as required under Clean Energy Package Regulation (EU) 2019/943.</p> <p>This will also allow renewable participants greater control over their participation in energy markets and greater certainty around their outcomes.</p>
Code Objectives Furthered
<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&SC for Code Objectives)</i>
<p>d) to promote competition in the Single Electricity Market; These changes will allow controllable, non-dispatchable generators without Priority Dispatch to participate competitively in energy markets.</p> <p>h) to ensure no undue discrimination between persons who are parties to the Code; and These changes will ensure no undue discrimination as controllable, non-dispatchable generators without Priority Dispatch will have the ability to participate in energy markets similarly to dispatchable generators.</p> <p>i) to promote the short-term and long-term interests of consumers of electricity on the island of Ireland with respect to price, quality, reliability, and security of supply of electricity. These changes will promote the interests of consumers by creating more competition for energy balancing actions and reducing the need for non-market based redispatch for energy reasons, thereby reducing Dispatch Balancing Costs.</p>
Implication of not implementing the Modification Proposal
<i>(State the possible outcomes should the Modification Proposal not be implemented)</i>
<p>If this modification is not implemented it will not be possible to treat controllable, non-dispatchable generator units without Priority Dispatch differently to controllable, non-dispatchable generator units with Priority Dispatch, and the SEM will not be compliant with Clean Energy Package Regulation (EU) 2019/943.</p> <p>Controllable, non-dispatchable generators without Priority Dispatch will not be required to submit Commercial Offer Data, Technical Offer Data, or Physical Notifications. It will also not be possible to profile or apply the correct prices to energy balancing actions taken on these units, meaning that these units will not be settled using commercial prices for energy balancing actions.</p>

This will mean that market systems will not have the ability to include these units in scheduling, dispatch, pricing or settlement as per the treatment described in SEM-21-027.

<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>Yes, additional sessions to be organised by TSOs as required.</p>	<p>Large impact on MA in relation to updated instruction profiling logic.</p> <p>Medium impact on MI in relation to data submission requirements.</p> <p>Medium impact on participant processes and systems in relation to additional data submission requirements.</p> <p>Medium impact on System Operations and Market Operations systems and processes.</p> <p>Minor impact on Grid Codes.</p>

Please return this form to Secretariat by email to balancingmodifications@sem-o.com