



**WORKING GROUP 1 REPORT**  
**MOD\_01\_21, MOD\_02\_21, MOD\_04\_21**  
**22 MARCH 2021**

**CONFERENCE CALL**

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## Document History

Version	Date	Author	Comment
1.0	29 March 2021	Modifications Committee Secretariat	Issued to Attendees at the meeting for review
2.0	6 April 2021	Modifications Committee Secretariat	Issued to committee for review

## Distribution List

Name	Organisation
Modifications Committee Members	Modifications Committee
Working Group Attendees	Various

## Reference Documents

Document Name	Document Reference
Mod_01_21	<a href="#">Proposal Form</a>
Mod_01_21	<a href="#">Presentation</a>
Mod_02_21	<a href="#">Proposal Form</a>
Mod_02_21	<a href="#">Presentation</a>
Mod_04_21	<a href="#">Proposal Form</a>
Mod_04_21	<a href="#">Presentation</a>
Terms of Reference	<a href="#">Terms of Reference</a>

## In Attendance

Name	Company
Anne Trotter (Chair)	EirGrid
Sean McParland	Energia
David Gascon	Bord na Mona
Philip Carson	Power NI
Andrew Burke	Energia
Cormac Daly	Tynagh Energy Ltd
Paraic Higgins	ESB
Eamonn Boland	Brookfield Renewable
Ian Mullins	Bord Gais Energy
Julie-Anne Hannon	Bord Gais Energy
Stacy Feldmann	SSE
Eoin Murphy	ElectroRoute
Brian Malone	EirGrid
Grainne Black	CRU
Gina Kelly	CRU
Karen Shiels	Uregni
Katia Compagnoni	SEMO
Robert McCarthy	Electricity Exchange
Sinead O'Hare	Power NI
Rowan Tunnicliffe	Mutual Energy
Paddy Fitzgerald	Bord Gais Energy
Paul Hutchinson	EPUKI
Paddy O'Hagan	SSE
Mairead Cousins	Enel X
Rory Cafferky	EirGrid

Conall Heusaff	CRU
Eamonn Garrigan	EirGrid
Esther Touhey	SEMO
Sandra Linnane	SEMO

## 1 INTRODUCTION & BACKGROUND

Secretariat welcomed all Participants and thanked them for committing their time to the Working Group.

The Secretariat advised that in terms of the Working Group process timeline further groups would be scheduled if required pending the outcome of Working Group 1. This scheduling would take into account dates of other Market Modifications events and resources.

### Mod\_01\_21 Removal of Difference Charges where operational constraints are binding

The Proposer gave a background on the proposal noting that the main purpose of this Modification was to remove the unintended consequence of exposing plants holding an RO, to difference payments in circumstances beyond their control due to an unforeseen operational constraint. The Modification was previously presented as part of consultation SEM-19-024 and received significant support at the time. The Proposer received confirmation by SEMO that this Modification would not have an impact on the socialisation fund while reducing the charges would by 40%. The Proposer noted that he was made aware from the TSO testing, that the System Service Flag cannot be turned 'ON' for Constraints that are 'OFF' in Pricing. This creates a conflict with the MWR constraint, which has been turned off in Pricing following implementation of Mod\_09\_19 and this would need to be discussed further. The Proposer recognised the importance of maintaining the MWR constraint turned off, however this meant that the System Service Flag could not be turned on for it.

### Mod\_02\_21 Setting a flag for Interconnector Actions above 500/MWh

The Proposer gave an overview of the Modification noting that as with Mod\_01\_21 the focus was specifically with regard to Interconnector counter trading, which if left unflagged would cause unfair exposure to Difference Payments. Two sets of legal drafting were submitted in the proposal to choose from, both achieving the same goal of trying to remove an unfair exposure to units, when the imbalance price goes above the threshold of 500€/MWh. This would also prevent bias on the system by applying to all units.

### Mod\_04\_21 Expansion of System Service Flag to include Cross-Zonal Actions for System Security reasons

The Proposer explained that this Modification was also quite specific and focused on expanding the System Service Flag to cross-zonal actions. It is the opinion of the Proposer that the current implementation does not meet the requirements of the original I-SEM detailed design that intended to incentivise flexible units. This is not happening when flexible units, such as Peakers, are not dispatched, albeit being available during times of cross-zonal trades. There was recognition that the use of peaking plants for Reserve during these events would not make these units economically viable going forward. The Proposer advised that this Modification would add a new provision in Appendix N allowing for a System Service Flag to be set to zero, where a generator is available, during Cross-Zonal actions taken for security reasons.

### Actions from Modifications Committee Meeting 103

- System Operator to look at any potential alternative short term fixes – **Open**
- Secretariat to convene a Working Group and draft a Terms of Reference – **Closed**
- System Operator to provide analysis of further testing to implement Mod\_01\_21 with particular regards to the interaction with MWR constraint – **Open**
- SEMO to provide analysis of the impact of potential implementation of Mod\_01\_21 on the socialization Fund based on SO testing cases – **Open**
- SEMO to investigate high level Impact Assessment with vendor - **Open**

The Chairperson then spoke of the open actions from Modifications Meeting 103 in relation to the 3 Modifications. A summary was given on the background to the actions assigned to the System Operator.

It was advised that following an assessment of potential alternative solutions, there was none identified as a new viable quick fix solution without significant system changes. Assurance was given that more exploration could be done for flagging interconnector constraints as part of Transmission Constraint Groups, but creating a new constraint type would be a significant change and the full impact needs to be assessed. It was advised that any system change could not get through until at least Release I in spring 2022. A reminder was given that a test to switch on the System Service Flag on units when operational constraints are binding was carried out. The results showed that the System Service Flag cannot be turned on for Constraints that are off in the Pricing system and currently there are at least three constraints in this position, including MWR, which was introduced with Mod\_09\_19. This update was given at Modifications Meeting 103 however it is possible to apply the System Service Flag for all other constraints, without system changes, as they are configured individually.

The Chair moved on to the actions which were assigned to the Market Operator. The analysis of the impact of Mod\_01\_21 on the socialisation fund was discussed and assurance provided that no red flags were spotted. It was advised that even with a 40% reduction of Difference Payments, there still was no need to access the socialisation fund.

The impact of assessment on charges was then discussed, with advice given that a detailed assessment could not be requested at this early stage, however, a high level impact assessment shows that both Mod\_02\_21 and Mod\_04\_21 require a substantial change to the systems and in relation to Mod\_01\_21, this would also be the case, should the MWR constraint remain off in Pricing, while the System Service Flag is turned on; details could not be provided of what the impact was, if Mod\_09\_19 was reversed, as the assurance was given that the flag could be turned on and off easily for all other constraints, that were not off in Pricing.

The scope for Release I was discussed noting that if a decision was made on any of the Modifications in Meeting 104 in April, it would be likely to be considered for the scope of Release I in April 2022. This would, however, still be dependent on the complexity of the change, the vendor assessment and the prioritisation with other changes. Based on current evidence, an impact assessment has a turnaround time from the vendor of between 6 to 8 weeks; for this to be completed in time before the closing of the scope (expected to be in June/July 2021), a vote would need to be completed at meeting 104 in April to allow for FRR completion, RAs' decision, drafting of the change Request and vendor impact assessment.

## 2 DISCUSSION

The Chair opened the floor for discussion on each of the Modifications individually. A question was raised if it was the general view of the Working Group that it was appropriate for a Modification to protect generators from RO exposure when they are available.

A number of Participants agreed with this statement, noting it was their belief that if a unit was subject to an operational constraint, it should be protected. The RAs advised they were conscious that most Market Participants are in favour of this change and when it was brought up first it was in the early days of the market with not many events happening and therefore not much data available. This has changed now and they are open to give further consideration to the issue.

It was queried if any of the 3 Modifications would be preferred to the others. It was the opinion of a Generator Participant that all 3 Modifications have individual merits and all three could be voted on. It was also noted that Mod\_02\_21 should be looked at on its own and Mod\_01\_21 and Mod\_04\_21 are more concerned with exposure so they could be discussed together.

### Solutions

#### Mod\_01\_21

The Proposer reminded the Working Group that this Modification looks at the CRM position and aims to strip out the lack of flexibility.

A Generator Participant agreed that there was a clear justification for this Modification and it holds a lot of merit because it puts the emphasis on a unit's flexibility, which was at the core of the Detailed Design and it doesn't appear that the intent of the Detailed Design is achieved with the current implementation. There was also an agreement that Mod\_01\_21 and Mod\_04\_21 have a connection and both Proposers provided support for the two of them to be looked at together. It was also appreciated that Mod\_01\_21 is clearer and there is a consultation behind it already.

Another Generator Participant expressed doubts on Mod\_04\_21 because it is specific to Interconnector only, which means that if an issue with other constraints arises in the future, there could be similar unfair outcomes. The Proposer of Mod\_04\_21 explained that the Modification was part of TSO tools to accept cross-zonal pricing. It was noted that in settlement the use of the System Service flag was not taken into merit thus enabling the market price to reflect the market value.

Support was given for Mod\_04\_21 concerning its piece about flexibility and detailed design. The DSU Participant agreed that Mod\_04\_21 targets specific cross-zonal actions and flexibility, as per the detailed design. It was also queried as to whether there could be other ways of looking at a unit's flexibility, such as within the TOD sets.

A discussion ensued around the implications of Mod\_01\_21 on previously approved Mod\_09\_19 and the MWR constraint. SEMO confirmed that individual constraints can be turned on or off; however, the full impact of switching MWR back on would require a large modelling analysis, similar to that provided in 2019, which would require significant time and resources. It was confirmed that if the MWR constraint (and all other constraints currently set to 'off' in Pricing) was omitted, then the System Service Flag could be changed for all others in the configuration, without vendor intervention. The Chair asked the Working Group if they were happy to implement Mod\_01\_21 without reversing Mod\_09\_19 SEMO confirmed that by maintaining MWR Constraint off in Pricing and applying the System Service flag to all other constraints that are 'on', Mod\_01\_21 could be easily tackled with a simple change to the legal drafting in Appendix N.

A Generator Participant queried how the system flag worked through settlement and how did this process work for a unit which is turned off all of the time? The System Operator advised that in relation to the System Service Flag, the constraints are determined in RTD and some of these constraints will flag units that are off. The TSO agreed to look at this separately and provide further details for the next Mods panel.



#### Mod\_04\_21

The discussion then continued on Mod\_04\_21 and there was initial agreement from a number of Participants that this Modification correctly raises the question as to whether the detailed design as intended is considered in the rules and in the systems correctly.

A Generator Participant queried if Mod\_01\_21 already addresses the recognition of flexibility of plants specified in Mod\_04\_21? The Proposer agreed it would in terms of being part of a constraint but questioned if it would work in terms of the pricing mechanism.

The Proposer voiced a concern that Mod\_01\_21 may not address the question of whether it is correct that a flag is created when reserve is available. Is it correct to connect the Flag to the Reserve? A Generator Participant agreed that was a good question and gave his belief that no Modification addressed this issue. Mod\_04\_21 raises this matter and could be changed, to reflect that issue about detailed design, not being reflected correctly.

A DSU Participant continued the discussion around detailed design and voiced concern that the SEMC decision was not implemented correctly. Clarity was sought from the RAs on what the intention was of the decision. Was it intended to cover flexibility or system services? It was also asked if it was the SEM Committee's intention that units shouldn't be exposed to penalties, only during price events when there is not enough reserve and if unit is otherwise providing reserve should it be exposed? This should be reflective of flexibility for all System Services and not just provision of a single service (reserve). The RAs were queried as to whether the decision reflected either or both and they agreed to take these questions away for consideration, in particular around the impact of widening RO exemptions for the Capacity Market and the potential impact on the Socialisation Fund, and will provide further feedback for the next meeting.

#### Mod\_02\_21

A Generator Participant gave a summary of this Modification, noting that it points to the Balancing Market Principle Statement. It was also queried as to whether an SO-SO trade can be an energy action. In relation to CACM Article 35, it was noted that SO-SO trades are not energy actions and should be flagged out altogether, regardless of whether the price was greater than 500€/MWh.

The Proposer mentioned that this was discussed with TSOs, who had confirmed that SO-SO trades had been done mainly for the security of the system. The functionality of securing the system would be open to the above argument. From the documentation prior to go live it seems that there was intent to consider those as non-energy actions so the question arises of what did change subsequently. The DSU Participant agreed that there was definite merit in considering the above, on whether SO-SO trades were energy or not. A point was made that if these actions were taken for system security reasons they were therefore non-energy actions. The SO flags currently come from RTD, while the Trades are created in advance and are fixed, so they don't take part in the scheduling process. This is something that could be potentially looked at from an implementation point of view.

It was agreed amongst Participants that this was a grey area and more clarity was needed on whether all SO-SO actions were being treated as energy. The Proposer of Mod\_02\_21 advised that this Modification does not have an impact on the Socialisation Fund but would have an impact on Imperfections. It is their view that this is an interim solution, while the discussion of trades being Energy or Non-Energy would be a wider discussion.

### 3 RECOMMENDATIONS

- Legal drafting changes discussed at the Working Group are to be reflected in second versions of the following Modification Proposals that will then be submitted for consideration and vote at Modifications Committee Meeting 104, scheduled for Wednesday 28<sup>th</sup> April, 2021 –
  - Mod\_01\_21 – removal of Constraints that are switched off in Pricing;
  - Mod\_02\_21 – removal of reference to Price threshold;
- Mod\_04\_21 to be discussed at Modifications Committee Meeting 104 with the option of a further Working Group to be scheduled if required pending this discussion and the outcome of responses to actions noted below;
- Actions noted below to be completed in advance of Modifications Committee Meeting 104 with updates communicated at the meeting;

## 4 NEXT STEPS & ACTIONS

### NEXT STEPS

- Secretariat to draft a Working Group Report.
- Actions below to be completed in advance of Modifications Committee 104.

### ACTIONS

- Proposer to make legal drafting changes to Mod\_01\_21 and submit a version 2 of this Modification for Modifications Meeting 104 by removing constraints that are off in Pricing ;
- Proposer to make legal drafting changes to Mod\_02\_21 submit a version 2 of this Modification for Modifications Meeting 104 by removing reference to price threshold of 500€/MWh;
- TSO to look at system service flag and how the process works for units that are off; TSO to look at impact on Imperfection in particular for Mod\_02\_21;
- RAs to provide more clarity on the intention of the Detailed Design and if it was expected to incentivise flexibility or provision of system services.
- RAs to provide more information on Capacity Market Design and whether adding further exemptions to RO charges should apply;
- SEMO/Proposer to complete an impact assessment on the socialisation fund for Mod\_04\_21 after consideration of RAs' clarifications above.

## 5 APPENDIX 1 – BORD NA MONA PROPOSAL

### 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>
<b>BnM</b>	<b>27<sup>th</sup> January 2021</b>	<b>Standard</b>	<b>Mod_01_21</b>

#### Contact Details for Modification Proposal Originator

<b>Name</b>	<b>Telephone number</b>	<b>Email address</b>
<b>David Gascon</b>		<b>David.gascon@bordnamona.com</b>

#### Modification Proposal Title

**Removal of difference charges where operational constraints are binding**

<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>
<b>Appendices Part B</b>		<b>V23</b>

#### Explanation of Proposed Change

*(mandatory by originator)*

This is the same proposal as previously submitted by the RAs as part of the consultation paper SEM-19-024 back in May 2019. This consultation set out the option to remove the exposure to Difference Charges of Generator Units whose scheduled output cannot be increased due to an Operational Constraint. This will cover all Operating and Replacement Reserves (except negative reserves) that limit an increase in a unit's output, these are:

- ✓ All Operating and Replacement Reserves (except Negative Reserves) – currently Replacement Reserve only;
- ✓ S\_MWR\_ROI, and S\_MWR\_NI – when transfers from Ireland to Northern Ireland and vice versa are at a maximum;
- ✓ S\_SNSP\_TOT – when the System Non-Synchronous Penetration (SNSP) level is equal to the SNSP limit;
- ✓ S\_RoCoF – ensures Ireland and NI power systems do not exceed Rate of Change of Frequency (RoCoF) limits;
- ✓ S\_INERTIA\_TOT- Operational limit for inertia. Ensures that all island Inertia does not fall below 23,000 MWs.
- ✓ S\_MWMIN\_MOYLE, S\_MWMAX\_MOYLE, S\_MWMIN\_EWIC, S\_MWMAX\_EWIC. Ensures all flows do not exceed a predetermined value for imports to Ireland and exports to GB.
- ✓ S\_MWMAX\_NI\_GT, S\_REP\_NI, S\_REP\_ROI, and S\_MWMAX\_ROI\_GT – combined MW output of OCGTs must be less than set MW number in Ireland and NI. This is required for replacement reserve in NI and Ireland;
- ✓ S\_MWMAX\_CRK\_MW , and S\_MWMAX\_STH\_MW – generation restriction in the Cork area and Southern Region; and
- ✓ other constraints that may be added from time to time. Please refer to the latest list of operational

constraints as published by the TSO.

Under this proposed option, units bound by a binding constraint would be flagged with a System Service Flag. This includes units that are included in the constraints that are available to deliver but OFF at the time.

Despite the support of the vast majority of respondents in favour of implementing this proposal, as a prudent approach the RAs decided to hold back any changes with the view of gathering additional operational experience over time. There has been over 15 months since the decision was taken, therefore, it is now time to reconsider this approach.

#### Legal Drafting Change

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

In terms of implementation, a TSC modification (Appendix N: Flagging and Tagging) would need to be progressed through the Modification process together with a revision to the TSOs' Methodology for Determining System Operator and Non-Marginal Flags. See proposed wording below:

#### **APPENDIX N: FLAGGING AND TAGGING**

##### **SYSTEM OPERATOR AND NON-MARGINAL**

1. For each Imbalance Pricing Period,  $\phi$ , the System Operators shall use information from the most recent Indicative Operations Schedule to identify whether a Generator Unit's scheduled output is bound by the presence of an Operational Constraint with the exception of those Operational Constraints relating to upper MW limits on the Transmission System and where they determine that the Generator Unit is so bound, shall set the System Operator Flag (FSOu $\phi$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\phi$ . Otherwise, the System Operators shall set the System Operator Flag (FSOu $\phi$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\phi$ .
2. For each Imbalance Pricing Period,  $\phi$ , the System Operators shall use information from the most recent Indicative Operations Schedule to identify whether a Generator Unit's scheduled output is bound by the presence of an Operational Constraint relating to the provision of Replacement Reserve, [or any other Operational constraint which limits the potential output the Generator's unit](#) and where they determine that the Generator Unit is so bound, shall set the System Service Flag (FSSu $\phi$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\phi$ . Otherwise, the System Operators shall set the System Service Flag (FSSu $\phi$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\phi$ .
3. For each Imbalance Pricing Period,  $\phi$ , the System Operators shall use information from the most recent Indicative Operations Schedule to identify whether a Generator Unit's scheduled output is bound by the presence of a Unit Constraint and where they determine that the Generator Unit is so bound, shall set the Non-Marginal Flag (FNMu $\phi$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\phi$ . Otherwise, the System Operators shall set the Non-Marginal Flag (FNMu $\phi$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\phi$ .

<p><b>Modification Proposal Justification</b>  <i>(Clearly state the reason for the Modification)</i></p>	
<p>This proposal is needed to remove the unintended consequence of exposing plants holding a Reliability Option to Capacity Market difference payments, in circumstances where they are in merit and available to deliver and are not dispatched by the System Operator.</p>	
<p><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>	
<p>The aim of this Modification is to facilitate the achievement of the following objectives:</p> <ul style="list-style-type: none"> <li>(b) to facilitate the efficient, economic, and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;</li> <li>(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;</li> <li>(d) to promote competition in the Single Electricity Market;</li> <li>(e) to provide transparency in the operation of the Single Electricity Market; and</li> <li>(f) to ensure no undue discrimination between persons who are parties to the Code.</li> </ul>	
<p><b>Implication of not implementing the Modification Proposal</b>  <i>(State the possible outcomes should the Modification Proposal not be implemented)</i></p>	
<p>If this Modification proposal is not implemented, Generator Units which hold Reliability Option (RO) obligations will continue to be exposed by facing Difference Charges (where the imbalance price is higher than the RO strike price) while being unable to be dispatched up by the System Operators due to the presence of an Operational Constraint on the system. These affected units were in merit (in the balancing energy market), and available but were dispatched up to their RO MW level.</p>	
<p><b>Working Group</b>  <i>(State if Working Group considered necessary to develop proposal)</i></p>	<p><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,</i></p>

	<i>Exchange Rules etc.)</i>
<u>No</u>	Upon approval of this modification the decision could be implemented relatively quickly through configuration settings in the Central Market Systems avoiding the longer timelines needed for system changes.
<i>Please return this form to Secretariat by email to <a href="mailto:balancingmodifications@sem-o.com">balancingmodifications@sem-o.com</a></i>	

## 6 APPENDIX 2 – SSE PROPOSAL

MODIFICATION PROPOSAL FORM			
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>
SSE	28 <sup>th</sup> January 2021	Standard	Mod_02_21
Contact Details for Modification Proposal Originator			
Name	Telephone number	Email address	
Stacy Feldmann		Stacy.feldmann@sse.com	
Modification Proposal Title			
Setting a flag for Interconnector Actions above €500/MWh			
Documents affected <i>(delete as appropriate)</i>	Section(s) Affected	Version number of T&SC or AP used in Drafting	
T&SC Part B Appendices Part B	Appendix N TSC F.2		
Explanation of Proposed Change <i>(mandatory by originator)</i>			
<p>It has been seen during the later period of 2020 and in a more pronounced way during 2021, the effect of interconnector countertrades on cash-out where the interconnector countertrade has triggered RO difference payments on cheaper units available on the system and where it was not clear that there was in fact a system event (e.g. 7<sup>th</sup> Jan). In the same way as the 24<sup>th</sup> Jan 2019 market event, those available units were not dispatched and had RO difference payments levied on them due to external actions and specifically due to the effects of specific interconnector actions. The system has a €500/MWh spike price threshold. However, in this case where there are no system events, this trigger becomes an exposure point for units that are otherwise available but are not taken. We are proposing an interim action to protect units from unfair RO calls due to the flagging algorithm inability to effectively determine system actions on the IC's.</p> <p>It would be our preference for a more sophisticated method of flagging interconnector actions to reflect the nuances involved. Therefore, we would recommend this modification to have an interim effect until such time as a suitable alternative is arrived at, since we are aware that there is room for improvement on how interconnectors are flagged.</p>			



The focus of this modification is to mitigate the exposure of these actions on the market and specifically on generation units exposed to RO difference payments. We also wish to reflect the standards outlined in the Balancing Market Principles Statement, Counterparty Trading business process and the ISEM Technical Specifications document, all of which suggest that countertrades should be taken where they are needed for system reasons, that cheaper BOAs should be considered and taken first and that there should be transparency regarding IC activities.

This modification we would see as complementary to the other proposed SEMO mod proposal being re-tabled, as well as existing modifications relating to PMEA (Mod 01\_20) and exposure to RO's in certain circumstances (Mod 09\_19).

#### Legal Drafting Change

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

In terms of implementation, a TSC

In terms of legal drafting proposed for this modification, we suggest the following amendment to F.2 of the TSC

*F.2.4.8 Each System Operator shall, in accordance with the Settlement Calendar, submit to the Market Operator the SO Interconnector Trade Quantity and Price (in the form of Accepted Bid and Offer Quantities,  $QAB_{uoi,h}$ ,  $QAO_{uoi,h}$ , and Bid Offer Price,  $PBO_{uoi,h}$ ) for each Interconnector Residual Capacity Unit,  $u$ , relevant to an Interconnector,  $l$ , which is connected to its Jurisdiction, for each Bid Offer Acceptance,  $o$ , for Band,  $i$ , in Period,  $h$ . **The System Operators shall set the System Operator Flag ( $FSO_{u\phi}$ ) for any Interconnector Residual Capacity Unit,  $u$ , equal to zero for each Imbalance Pricing Period,  $\phi$ , in which an SO Interconnector Trade Quantity and Price is submitted.***

We also envisage the need for a modification to Appendix N: Flagging and Tagging) together with a revision to the TSOs' Methodology for Determining System Operator and Non-Marginal Flags. Upon approval of a modification the decision could be implemented relatively quickly through configuration settings in the Central Market Systems avoiding the longer timelines needed for system charges.

The symmetric amendment to Appendix N could be:

*For each Imbalance Pricing Period,  $\phi$ , the System Operators shall use information from the most recent Indicative Operations Schedule to identify whether a Generator Unit's scheduled output is bound by the presence of an Operational Constraint with the exception of those Operational Constraints relating to upper MW limits on the Transmission System and where they determine that the Generator Unit is so bound, shall set the System Operator Flag ( $FSO_{u\phi}$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\phi$ . **The System Operators shall set the System Operator Flag ( $FSO_{u\phi}$ ) for Interconnector Residual Capacity Units,  $u$ , for any relevant Imbalance Pricing Periods.** Otherwise, the System Operators shall set the System Operator Flag ( $FSO_{u\phi}$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\phi$ .*

However, we consider that both changes need not be made, but rather a decision can be taken as to whether the amendment is made in F.2.4.8 or Appendix N.

<b>Modification Proposal Justification</b> <i>(Clearly state the reason for the Modification)</i>	
This proposal is needed to remove the unintended consequence of exposing plants holding a Reliability Option to Capacity Market difference payments by addressing the specific interconnector actions directly causing this.	
<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>	
(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;	
<b>Implication of not implementing the Modification Proposal</b> <i>(State the possible outcomes should the Modification Proposal not be implemented)</i>	
If this Modification proposal is not implemented, Generator Units which hold Reliability Option (RO) obligations will continue to be exposed by facing Difference Charges (where the imbalance price is higher than the RO strike price) while being unable to be dispatched up by the System Operators due to the presence of an Operational Constraint on the system. These affected units were in merit (in the balancing energy market), and available but were not delivering energy up to their RO MW level.	
<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>
<b>Please return this form to Secretariat by email to <a href="mailto:balancingmodifications@sem-o.com">balancingmodifications@sem-o.com</a></b>	

## 7 APPENDIX 3 – DRAI PROPOSAL

### MODIFICATION PROPOSAL FORM

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>
EP Kilroot & EP Ballylumford	28 <sup>th</sup> January 2021	Standard	Mod_04_21

#### Contact Details for Modification Proposal Originator

Name	Telephone number	Email address
Paul Hutchinson		Paul.hutchinson@epuki.co.uk

#### Modification Proposal Title

Expansion of the System Service flag to include Cross-Zonal Actions for System Security reasons.

Documents affected <i>(delete as appropriate)</i>	Section(s) Affected	Version number of T&SC or AP used in Drafting
Appendices Part B	N.2	V23

#### Explanation of Proposed Change

*(mandatory by originator)*

Currently a number of peaking units are exposed to RO events due to SO-SO trades. These peaking units are offering power at a price considerably below the cost of the SO-SO trade but are not being scheduled due to a combination of reserve requirements or network limitations.

The System Service Flag was introduced to meet the requirement introduced in SEM -15-103 where “For any capacity utilised for DS3 System Services such as capacity providing reserve, difference payments will be paid based on the difference between the contracted utilisation payment for that service and the Strike Price.”

This detailed Design paper goes further though and states that :

*‘3.3.81 It was commented that the I-SEM is not a self-dispatched market, so a generator cannot be guaranteed to be scheduled in the settlement periods prior to a likely scarcity event, if demand in those periods is lower than the nearby peak during which*

*scarcity is expected to occur. If the plant is not sufficiently flexible, the plant may not be able to ramp up to its full RO volume in time, and hence may be exposed to RO difference payments without the full*

offsetting energy revenue.

3.3.82 Whilst such an eventuality is possible, we note that:

***“We would expect peaking plant to be reasonably flexible, and measures to implement DS3 System Services will also place greater incentives on plant to increase their flexibility.***

*It is appropriate that plant which is inflexible, and which cannot be guaranteed to contribute to system security in a stress event should face greater risk, and should price that risk into its bids, appropriately placing it at a legitimate competitive disadvantage in the CRM auctions relative to more flexible plant, and providing an appropriate exit signal for inflexible plant; ‘*

It was intended that flexible peaking plant would not be exposed to RO events where the unit was available. It was understood by all in the market development that these units would be called by the TSO where there was scarcity. It was not ‘expected’ that these flexible plants would not be called. Rather the issue was with less flexible units may not be able to ramp up in time.

It is clear from this detailed design that the current System Service flag does not meet either the explicit or implicit requirements of the detailed design.

While a more intense change to the System Service Flag may be appropriate, there is a need for an immediate change due to the recurring nature of the Cross-Zonal-Actions for System security reasons. This can be an interim change pending a detailed review of the System Service Flag.

#### Legal Drafting Change

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

#### Appendix N

2 For each Imbalance Pricing Period,  $\varphi$ , the System Operators shall:

- i. use information from the most recent Indicative Operations Schedule to identify whether a Generator Unit’s scheduled output is bound by the presence of an Operational Constraint relating to the provision of Replacement Reserve, and where they determine that the Generator Unit is so bound, shall set the System Service Flag ( $FSS_{u\varphi}$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\varphi$ . Otherwise, the System Operators shall set the System Service Flag ( $FSS_{u\varphi}$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\varphi$ .
- ii. where Cross-Zonal Actions have occurred for System security reasons, and where a generator is available and is providing contracted system services, shall set the System Service Flag ( $FSS_{u\varphi}$ ) for that Generator Unit,  $u$ , equal to zero for that Imbalance Pricing Period,  $\varphi$ . Otherwise, the System Operators shall set the System Service Flag ( $FSS_{u\varphi}$ ) for that Generator Unit,  $u$ , equal to one for that Imbalance Pricing Period,  $\varphi$ .

**Modification Proposal Justification**

*(Clearly state the reason for the Modification)*

We have had three RO events since November. High prices are a sign of a functioning market, but the nature of the Irish network means that the TSO only selects those peaking units from the location of the shortage. But even in those cases the TSO has been holding back energy from peaking units that are more in merit favouring power bought through Cross-Zonal Actions with the peaking assets used as Reserve.

The impact for peaking units is that it is likely to become uneconomic for them to continue to operate as they continue to be subject to this largely uncontrollable dispatch risk, leading to large RO difference payments. This is contrary to the detailed system design objectives, instead of flexibility being rewarded, it is being discriminated against due to the presence and management of Operational Constraints.

**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)*

Part B

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

**Implication of not implementing the Modification Proposal**

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

Failure to implement this modification will continue to see discrimination against peaking assets and undermine their economic viability.

**Working Group**

*(State if Working Group considered necessary to develop proposal)*

**Impacts**

*(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.)*

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