

Single Electricity Market

|  |
| --- |
| Final REcommendation ReportMod\_34\_18 Removal of make-whole payments for biased quantities and negative imbalance revenue and small clarifications to determination of start up costs incurred and saved11 January 2019 |

COPYRIGHT NOTICE

All rights reserved. This entire publication is subject to the laws of copyright. This publication may not be reproduced or transmitted in any form or by any means, electronic or manual, including photocopying without the prior written permission of EirGrid plc and SONI Limited.

DOCUMENT DISCLAIMER

Every care and precaution is taken to ensure the accuracy of the information provided herein but such information is provided without warranties express, implied or otherwise howsoever arising and EirGrid plc and SONI Limited to the fullest extent permitted by law shall not be liable for any inaccuracies, errors, omissions or misleading information contained herein.

Document History

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Author** | **Comment** |
| 1.0 | 11 January 2019 | Modifications Committee Secretariat | Issued to Modifications Committee for review and approval |
| 2.0 |  | Modifications Committee Secretariat | Issued to Regulatory Authorities for final decision |

Reference Documents

|  |
| --- |
| **Document Name** |
| [Trading and Settlement Code](http://www.sem-o.com/MarketDevelopment/MarketRules/TSC.docx) |
| [Modification Proposal Form](https://buzz.grid.ie/sites/EA/miam/Shared%20Documents/Mod_34_18.docx) |
| [Presentation](https://buzz.grid.ie/sites/EA/miam/Shared%20Documents/Mod_34_18%20-%20Martin%20Kerin.pptx) |
|  |
|  |

Table of Contents

[1. MODIFICATIONS COMMITTEE RECOMMENDATION 3](#_Toc534809027)

[**Recommended for approval– unanimous Vote** 3](#_Toc534809028)

[2. Background 3](#_Toc534809029)

[3. PURPOSE OF PROPOSED MODIFICATION 4](#_Toc534809030)

[**3A.) justification of Modification** 4](#_Toc534809031)

[**3B.) Impact of not Implementing a Solution** 6](#_Toc534809032)

[**3c.) Impact on Code Objectives** 6](#_Toc534809033)

[4. Working Group and/or Consultation 6](#_Toc534809034)

[5. impact on systems and resources 6](#_Toc534809035)

[6. Impact on other Codes/Documents 7](#_Toc534809036)

[7. MODIFICATION COMMITTEE VIEWS 7](#_Toc534809037)

[**Meeting 88 – 12 december 2018** 7](#_Toc534809038)

[8. Proposed Legal Drafting 8](#_Toc534809039)

[9. LEGAL REVIEW 8](#_Toc534809040)

[10. IMPLEMENTATION TIMESCALE 8](#_Toc534809041)

[1 Appendix 1: Mod\_34\_18 removal of make whole payments for biased quantities and negative imbalance revenue and small clarifications to determination of start up costs incurred and saved 9](#_Toc534809042)

# MODIFICATIONS COMMITTEE RECOMMENDATION

## Recommended for approval– Subject to the completion of six actions noted belows

|  |
| --- |
| **Recommended for Approval by Unanimous Vote** |
| Julie Anne Hannon (Chair) | Supplier Member | Approve |
| Robert McCarthy | DSU Alternate | Approve |
| Philip McDaid | Supplier Member | Approve |
| William Steele | Supplier Member | Approve |
| Paraic Higgins | Generator Member | Approve |
| Sinead O’Hare | Generator Member | Approve |
| Mark Phelan | Supplier Alternate | Approve |
| Kevin Hannafin | Generator Member | Approve |
| Cormac Daly | Generator Member  | Approve |

# Background

This Modification Proposal was raised by SEMO and was received by the Secretariat on the 28th November 2018. This proposal was raised and voted on at Meeting 88 on the 12th December 2018.

An issue has come to light in the Fixed Cost Payment or Charge where some participants are being made whole for their negative imbalance revenue, including when the unit has no balancing market related costs (variable or fixed), which is not the intention for the Make Whole Payment mechanism from the SEMC Detailed Design (see Energy Trading Arrangements – Markets Decision SEM-15-065, in particular the executive summary on Form of Offers and Bids, sections 5.4, 5.5 and 8.4 on mentions of fixed or start-up costs).

The Make-Whole Payment mechanism (detailed in F.11.4) is designed to calculate the difference between the Make-Whole Payment Operating Cost and Revenue for a contiguous period of operation. Where this is greater than zero, indicating that the costs exceeded the revenue for the period, this difference is included as a payment in the fixed cost payment or charge (CFC) calculation.

The current algebra for calculating the Make-Whole Payment Revenue for use in this mechanism includes (inter alia) Imbalance, Premium and Discount charges which is resulting in all negative imbalance revenue items being included where these occur. As a result the Make Whole Payment mechanism is at times incorrectly insulating Generators from negative imbalance revenues where the intended operation of this mechanism is only to ensure the appropriate recovery of costs where this has not already occurred via payments for balancing market quantities.

This effect is proposed to be removed through changing the equation for calculating a unit’s balancing market revenue for the Make-Whole Payment to explicitly reference balancing market quantities only, rather than all imbalance revenues. This is done by removing the Premium, Discount and Imbalance Charges and replacing them with the product of the imbalance volume and appropriate rate (greater of bid and imbalance price for accepted offers and lesser of bid and imbalance price for accepted bids).

Another change which is proposed entails having Biased Quantities, Trade Opposite TSO quantities, and Non-Firm quantities, taken away from the balancing quantities included in calculating Make-Whole Payment Operating Costs in order to align the operational costs to be on the same basis as the revenue calculation for the make-whole payment.

This is necessary if the proposal to address the issue with the revenue calculation described above is implemented because otherwise these items would be removed from the revenue calculation and still included in the cost calculation which would distort the resulting Make-Whole Payment where these volumes have occurred. This is because they would be applied when determining the volume for consideration in calculating costs but be removed from the equivalent volume against which revenues are calculated.

We also propose a minor structural change to paragraphs F.11.2.2 and F.11.2.4 which contains logic on the determination of Start Up Cost and Recoverable Start Up Cost respectively. Both of these paragraphs currently take the form ‘*a variable shall be a given value if (i); (ii) or (iii); (iv)’*.

While it is relatively clear from the text that the intended interpretation is that the variable shall have the given value if any of (i), (ii) or (iii) apply and shall have a value of zero if none of (i), (ii) or (iii) apply as detailed in (iv) the structure of this drafting could cause confusion. Since this structure as currently written could potentially be misconstrued to mean that the variable will have the given value if (i) and (ii) or (iii) and (iv) or otherwise misinterpreted.

We propose a change here so that the structure better represents the intended interpretation and is less likely to be misinterpreted i.e. this becomes ’*variable shall be a given value if (i); (ii) or (iii). If not (i), (ii) or (iii) then the value shall be zero’.* This drafting approach is more in line with universal legal drafting conventions for this type of construct.

# PURPOSE OF PROPOSED MODIFICATION

**3A.) justification of Modification**

The intention of the make-whole payment element of Fixed Cost Payments or Charges (CFC) is to recover fixed costs that have not been recovered through market revenues. There is an issue where some participants are being made whole for their negative imbalance revenue, including when the unit has no balancing market related costs (variable or fixed), which is not the intention. This is due to the structure of the equations in section F.11.4, in particular F.11.4.2 and how it relates to F.11.4.3. Even if a participant has no balancing market operating costs, and no revenues from balancing market actions, they can still have a negative imbalance revenue which is included in their Make-Whole Payment Revenue (CREVMWP), creating a negative number. When the negative number is included in the Make-Whole Payment (CMWP) again a Make-Whole Payment Operating Cost (COCMWP) of zero, the negative number is after the minus sign, making it a positive number, and therefore as an amount to be made whole. Clearly it is not the intention of the market design to make a unit whole for their imbalance costs, but rather only to make them whole for their operating costs.

The proposed approach intends to focus the make-whole payment on the differences between the cost of the balancing action and the revenue for that balancing action only, excluding any imbalances which are unrelated to balancing actions which occurred on the unit. This strengthens a principle in fixed cost recovery that the make-whole payment is based solely on the costs and the revenues of the balancing quantities. It does this by removing the Imbalance Component (CIMB) Premium Component (CPREMIUM) and Discount Component (CDISCOUNT) from the revenue part of the calculation, and replacing it with an explicit calculation of the revenue the balancing quantity would receive at the better of the Imbalance Price or Bid Offer Price.

The CIMB component contained all imbalance revenues including those not related to the balancing quantity, and CPREMIUM and CDISCOUNT component are adjustment payments to the balancing actions within the CIMB component if the most beneficial price for the unit to be net settled at is the Bid Offer Price. Therefore all three components need to be changed to explicitly reference the net impact they would have on the balancing quantity only. The CAOOPO, CABBPO and CCURL components are not changed as they only explicitly reference the balancing quantities already.

A benefit of this approach is that the costs to the unit from imbalances do not get recovered, ending the issue that has been seen thus far where units without any balancing market costs get a make-whole payment to recover their negative imbalance revenues. A disbenefit of this approach is that if a unit is paid for an imbalance, this does not count as meeting their fixed costs, which is correct if you strictly interpret the principle that only costs and revenues related directly to the balancing quantity are to be recovered, but could also be seen as potentially a unit being overpaid (against the principles in the SEM-15-065 Energy Trading Arrangements – Markets decision from the SEMC) as they have imbalance revenue which could have met their fixed costs which would be retained in addition to make-whole payments.

Another change which is proposed that is less principled and more about aligning two components to have the same reference is also proposed. This entails including the Biased, Trade Opposite TSO, and Non-Firm quantities in the calculation of the operating costs for the make-whole payment. At the moment, a unit would not be paid either the Imbalance Settlement Price or Bid Offer Price for their biased quantities, but the operating costs considers it still as a part of their costs, meaning that the costs and the revenues are not on the same basis. This increases the operating costs over what is considered in the revenues, and therefore increases the chances of a unit being overpaid for their make-whole payments. Therefore it is proposed to have biased quantities taken away from the balancing quantities considered for operational costs, as these biased quantities should be covered through ex-ante market revenue for biased incs or just do not have an operational cost associated with them for biased decs.

Similarly for Trade Opposite TSO and Non-Firm quantities, while these are quantities of Bid Offer Acceptances that the participant has met and did not have ex-ante market revenue to cover so the costs could be seen as incurred under the BM, the reason why they exist in the premium/discount is because the SEMC decided they should be settled differently (where applicable, i.e. Non-Firm is actively settled differently while Trade Opposite TSO is not currently active), where it is just settled at the Imbalance Price. However if they are considered under the revenue element, but not under the costs element, then it acts as negating the effect of having that treatment in the main energy settlement: they can be made-whole for it because their revenue would be less advantageous than their costs, leading to a similar situation as when units with a negative CIMB are being made-whole despite the units not having fixed costs to recover. Therefore it is also proposed to have these quantities taken away from the balancing quantities in operational costs.

The structural changes to F.11.2.2 and F.11.2.4 are intended to add clarity and ensure that the interpretation of these paragraphs is not unclear as described in the explanation section.

**3B.) Impact of not Implementing a Solution**

Fixed Costs would not reflect the market design principles, in such a way that it would result in much higher costs. This would have an effect of increasing Imperfections Charges, where these additional costs would need to be passed on to suppliers. It would also distort the signals for participants to minimise their imbalances, as negative imbalance revenues could be made-whole.

In addition, the potential confusion in the interpretation of F.11.2.2 and F.11.2.4 would remain.

**3c.) Impact on Code Objectiv****es**

* to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
* to promote competition in the Single Electricity Market;
* 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 objectives are furthered if this proposal is implemented by ensuring that Generators are not inappropriately insulated from negative imbalance revenues via an unintended nuance of the Make-Whole Payment mechanism.

This in turn will ensure that balancing market signals for Generators to be balance responsible are not inappropriately dulled due to diminished exposure to negative imbalance revenues, and Dispatch Balancing Costs are not inappropriately elevated, thus promoting competition, benefiting consumers and furthering the financially secure operation of the SEM.

# Working Group and/or Consultation

N/A

# impact on systems and resources

This modification would also require changes in the settlement systems which calculate the make-whole payment, a change request would need to be raised with the vendor for this.

The intention of this proposal is to request that the rules change be made effective from the time of the approval decision rather than from the time of the system change. This would mean that until the system change has been implemented, the make-whole payments calculated would not reflect the modified rules, instead reflecting the current version of the rules, and therefore resettlement would be required to align the amounts paid with the modified rules for the affected periods after the approval date.

We believe that this is the appropriate approach given that the raising of this modification will inform participants of an unintended means by which to insulate themselves from the important fundamental market signal of negative imbalance charges. This approach ensures that while in the short term settlement may not accurately reflect this signal, through resettlement the signal will ultimately be preserved.

For the absence of doubt, it is not intended to request that this modified approach be enacted retroactively for dates prior to the approval of this modification proposal.

With this request it would also be easiest from an implementation point of view if the approval date was stated in such a way that there is one last whole Billing Period (week from Sunday to Sunday) with the current approach and the next whole Billing Period has the modified approach applied to it, rather than having a Billing Period which has two approaches applying within it.

# Impact on other Codes/Documents

N/A

# MODIFICATION COMMITTEE VIEWS

## Meeting  **88 – 12 december 2018**

Proposer delivered a [presentation](https://https:/www.sem-o.com/documents/market-modifications/Mod_34_18/Mod_34_18-MartinKerin.pptx) about the Imbalance Component in revenues for the Make-Whole Payment calculation. This modification changes the equation to explicitly reference balancing market quantities only, and to align quantities considered in costs and revenues, so that negative imbalance revenues will not be recovered and costs will not be recovered for a quantity that is not considered a balancing quantity (biased) or is intended to be settled at the imbalance price only (Trade Opposite TSO, Non-Firm).

The justification of this is to stop over-recovering of costs, in particular that some costs being recovered do not reflect the intended market design of recovering Start-up and No-Load costs. An observer questioned whether previous payment would be resettled. The proposer reassured all that this was a change request rather than a defect fix and it would not be appropriate to seek a resettlement for the past periods. However given the magnitude of the impact and the fact that the intent of the rules is to only recover incurred costs, the proposer seeks to apply the equation change from date of decision by the RAs instead of the date of the system change. This would mean that for a number of months some Generators would be over recovering costs that would be resettled at a later date.

A discussion began around the magnitude of this modification and the knock on impact to generators in particular in managing their cash flow and assessing the magnitude of the over recovery and subsequent resettlement. Supplier Member acknowledged Generator’s difficulties but expressed concerns that if this issue was not addressed timely there would be an ever increasing amount that would end up in Imperfection Charges that had not been factored in. It was asked to the proposer if there were any means to assist both Suppliers and Generators in assessing the amount that would end up in the Imperfection Charges and the daily impact to Generators going forward. The proposer agreed that a full analysis could be carried out to verify the full impact so far as the analysis to date focussed on a subset of Generators that were more easily identifiable as affected as no cost recovery was expected for them. This analysis showed that approximately €800,000/ month had been incorrectly paid out to generators in make whole payments. The proposer also agreed to make available to Generators a calculation template that would assist in their daily assessment going forward in advance of the Resettlement. An Observer questioned whether the MO would be in breach if the error still persisted in the system after the change would be made effective from the date of the RAs decision and prior to system changes being implemented. MO Alternate clarified that this would not be a breach because of the system constraints and because there would be a plan for resettling based on the corrected equation. RA Member also highlighted that the magnitude of the analysis carried out by the MO indicated that the issue was very material and whatever the decision from the Panel the RAs may take the view that it would be appropriate to make this change as soon as possible although it was recognised that retroactive changes would not be appropriate in normal circumstances. A Generator Member also raised concerns that the scenario testing was limited to only 5 scenarios and was worried about unintended consequences to other calculations. A Supplier Member responded that he did not feel comfortable in dictating what type of testing should be carried out as this should be done appropriately by SEMO’s IT department. Another Generator Member suggested an additional scenario for testing cases where Units were two shifted in Euphemia but not compensated even though they had sent their PNs through accordingly. Proposer agreed that this scenario could be also considered for testing. Testing cases were not necessarily limited in number but had been designed to accommodate the possible iterations of the equation and followed the standard testing process; however, if Participants thought of further scenarios and sent them in promptly by cob Wed 19th of December, these could also be considered. DSU Alternate question whether Resettlement could happen on an ad-hoc basis via Formal Settlement Queries should the amount be of high materiality. The MO replied that this should be the case once the system changes and the Resettlement facilities were in place but that SEMO will look into a possible workaround for these circumstances. It was agreed that this is very complex algebra and approval for this modification could only occur if the below actions were carried out prior to the decision. The RAs agreed that they could make their Decision dependent on the resolution of such actions.

**Note from SEMO Regarding Actions Required to Inform Decision**

As mentioned above, Modifications Committee deliberations concluded that a number of actions should be completed prior to a final decision being taken on this proposal in order for their outcomes to be taken into consideration by the Regulatory Authorities. These outstanding actions, as detailed in the minutes of meeting 88, are as follows;

* SEMO to provide an estimated value to date for impact on Imperfection Tariff (SEMO will endeavour to have an estimate before the decision however a final assessment may require longer)
* SEMO to provide a summary of the knock on impact to generators to date and examples of cases analysed (required prior to decision)
* SEMO to provide details on the potential template that can be used to forecast the impact to generators going forward (required prior to decision)
* SEMO to review design testing scenarios to include additional PTs suggestions such as Euphemia two shifts cases and any new additional ones to be sent in by Wed 19th Dec 2018 (required prior to decision)
* **SEMO to organise a Q&A session for all participants in relation to the use of the template (not required prior to decision but intendedto be held in a timely manner after decision)**
* **SEMO to look into the application of a workaroundto apply in settlement to allow for resettlement on an ad-hoc basis if an upheld Formal Settlement Query is of high materiality (not required prior to decision)**

SEMO confirm that the required actions have been completed and details of these have been communicated separately.

During rigorous review of the design testing scenarios, carried out in order to confirm and evidence that the proposed solution is robust, one of the more complex scenarios involving an ‘undo’ action has highlighted a minor issue with the originally proposed legal drafting for the calculation of Make Whole Payment Revenue (CREVMWP) in F.11.4.2.

In this scenario, the net revenue for the undo action was incorrectly evaluating as the product of the associated undo quantity and the difference between the Bid Offer Price and the Imbalance Price as opposed to correctly evaluating the product of the associated undo quantity and the Bid Offer Price.

Enhanced legal drafting to correct this issue is presented in section 8 for consideration in the decision making process. The same issue would arise for Curtailment Quantities if they became relevant, and therefore a similar change is made to that component of the equation, however they are not currently relevant as non-dispatchable units are not considered for make-whole payments. This drafting arrives at the correct outcome for the scenarios tested by amending which terms are included in the amounts to be removed from the settlement calculation for CREVMWP as highlighted. Below are more details on the reasons for the change in the drafting of the equation:

* The terms QABBPOLF and QAOOPOLF are included in the amounts to be removed from the calculation of settlement at the better of the Imbalance Settlement Price and Bid Offer Price;
* This makes sense in the context of the CPREMIUM or CDISCOUNT on their own, because the unit should only have an adjustment payment or charge related to having the quantity net settled at the offer price. However in the context of combining the CPREMIUM, CDISCOUNT and CIMB equations, it does not make sense to simply remove this quantity from this component of the equation and have the CAOOPO/CABBPO settle the unit for the difference between the Imbalance Settlement Price and Bid Offer Price.
* Instead of CAOOPO and CABBPO, which are adjustment amounts away from the Imbalance Settlement Price, because the quantity is now being explicitly removed from the element which settled it at the Imbalance Settlement Price as well as the Bid Offer Price if better, it should have a term which explicitly just settles it at the Bid Offer Price.
* With the current modification text the amounts considered for revenues for undo quantities would be lower than intended and could give rise to greater make-whole payments than intended. This is because it is only the adjustment payment/charge between the imbalance price and the bid offer price, rather than the whole net settlement of the quantity at the bid offer price, which is considered.

# Proposed Legal Drafting

As set out in Appendix 1 with the following proposed enhancement to algebra in F.11.4.2 (highlighted in yellow), identified as discussed in section 7, for consideration:

**Enhanced F.11.4.2 drafting on foot of further scenario testing (Clean);**

F.11.4.2 The Market Operator shall calculate the Make-Whole Payment Revenue (CREVMWPuk) for each Generator Unit, u, for each Contiguous Operating Period, k, in each Billing Period, b, as follows:

where:

* + - * 1. is a summation over all Imbalance Settlement Periods, γ, within the Contiguous Operating Period, k;
				2. PBOuoiγ is the Bid Offer Price for each Accepted Bid Quantity and Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				3. QAOLFuoiγ is the Loss-Adjusted Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				4. QABLFuoiγ is the Loss-Adjusted Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				5. CAOOPOuγ is the Offer Price Only Accepted Offer Payment or Offer Price Only Accepted Offer Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				6. CABBPOuγ is the Bid Price Only Accepted Bid Payment or Bid Price Only Accepted Bid Charge, γ;
				7. CCURLuγ is the Curtailment Payment or Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				8. PIMBγ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);
				9. QAOTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				10. QABTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				11. QABNFLFuoiγ is the Loss-Adjusted Non-Firm Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.5;
				12. QAOUNDELuoiγ is the Undelivered Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				13. QABUNDELuoiγ is the Undelivered Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				14. QAOBIASuoiγ is the Biased Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				15. QABBIASuoiγ is the Biased Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				16. QABCURLLFuoiγ is the Loss-Adjusted Curtailment Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.8.1;
				17. QAOOPOLFuoiγ is the Loss-Adjusted Offer Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				18. QABBPOLFuoiγ is the Loss-Adjusted Bid Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				19. is a summation over all Bid Offer Acceptances, o; and
				20. is a summation over all Bands, i.

**Original F.11.4.2 drafting as set out in proposal form in Appendix 1 (Change Tracked);**

F.11.4.2 The Market Operator shall calculate the Make-Whole Payment Revenue (CREVMWPuk) for each Generator Unit, u, for each Contiguous Operating Period, k, in each Billing Period, b, as follows:

where:

* + - * 1. is a summation over all Imbalance Settlement Periods, γ, within the Contiguous Operating Period, k;
				2. PBOuoiγ is the Bid Offer Price for each Accepted Bid Quantity and Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				3. QAOLFuoiγ is the Loss-Adjusted Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				4. QABLFuoiγ is the Loss-Adjusted Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				5. CAOOPOuγ is the Offer Price Only Accepted Offer Payment or Offer Price Only Accepted Offer Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				6. CABBPOuγ is the Bid Price Only Accepted Bid Payment or Bid Price Only Accepted Bid Charge, γ;
				7. CCURLuγ is the Curtailment Payment or Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				8. PIMBγ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);
				9. QAOTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				10. QABTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				11. QABNFLFuoiγ is the Loss-Adjusted Non-Firm Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.5;
				12. QAOUNDELuoiγ is the Undelivered Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				13. QABUNDELuoiγ is the Undelivered Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				14. QAOBIASuoiγ is the Biased Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				15. QABBIASuoiγ is the Biased Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				16. QABCURLLFuoiγ is the Loss-Adjusted Curtailment Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.8.1;
				17. QAOOPOLFuoiγ is the Loss-Adjusted Offer Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				18. QABBPOLFuoiγ is the Loss-Adjusted Bid Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				19. is a summation over all Bid Offer Acceptances, o; and
				20. is a summation over all Bands, i.

# LEGAL REVIEW

N/A

# IMPLEMENTATION TIMESCALE

It is proposed that this Modification is implemented as the Modifications Committee have recommended it for Approval.

It is proposed that this decision is effective on a Settlement Day basis from the first Settlement Day of the next Billing Week following the date of the Regulatory Authorities decision.

This is the most practical approach as detailed in section 5 ‘System Impacts’. This is in the context of the Make Whole Payment mechanism operating as a Billing Period sum and also of the significance of the issue.

The aim is to make the change effective as early as possible and capture any dates that are affected prior to delivery of the associated system change via resettlement as opposed to aligning the implementation date to the associated system change as is the case with some other system impacting rule changes.

# Appendix 1: Mod\_34\_18 removal of make whole payments for biased quantities and negative imbalance revenue and small clarifications to determination of start up costs incurred and saved

|  |
| --- |
| **MODIFICATION PROPOSAL FORM** |
| **Proposer***(Company)* | **Date of receipt***(assigned by Secretariat)* | **Type of Proposal***(delete as appropriate)* | **Modification Proposal ID***(assigned by Secretariat)* |
| **SEMO** | **28 November 2018** | **Standard** | **Mod\_34\_18** |
| **Contact Details for Modification Proposal Originator** |
| **Name** | **Telephone number** | **Email address** |
| **Martin Kerin** |  | **Martin.Kerin@EirGrid.com** |
| **Modification Proposal Title** |
| **Removal of Make-Whole Payments for biased quantities and negative imbalance revenue, and small clarifications to determination of Start Up Costs incurred and saved.** |
| **Documents affected***(delete as appropriate)* | **Section(s) Affected** | **Version number of T&SC or AP used in Drafting** |
| **T&SC Part B** | **F.11.2, F.11.4.** | **Version 20** |
| **Explanation of Proposed Change***(mandatory by originator)* |
| An issue has come to light in the Fixed Cost Payment or Charge where some participants are being made whole for their negative imbalance revenue, including when the unit has no balancing market related costs (variable or fixed), which is not the intention for the Make Whole Payment mechanism from the SEMC Detailed Design (see Energy Trading Arrangements – Markets Decision SEM-15-065, in particular the executive summary on Form of Offers and Bids, sections 5.4, 5.5 and 8.4 on mentions of fixed or start-up costs). The Make-Whole Payment mechanism (detailed in F.11.4) is designed to calculate the difference between the Make-Whole Payment Operating Cost and Revenue for a contiguous period of operation. Where this is greater than zero, indicating that the costs exceeded the revenue for the period, this difference is included as a payment in the fixed cost payment or charge (CFC) calculation.The current algebra for calculating the Make-Whole Payment Revenue for use in this mechanism includes (inter alia) Imbalance, Premium and Discount charges which is resulting in all negative imbalance revenue items being included where these occur. As a result the Make Whole Payment mechanism is at times incorrectly insulating Generators from negative imbalance revenues where the intended operation of this mechanism is only to ensure the appropriate recovery of costs where this has not already occurred via payments for balancing market quantities.This effect is proposed to be removed through changing the equation for calculating a unit’s balancing market revenue for the Make-Whole Payment to explicitly reference balancing market quantities only, rather than all imbalance revenues. This is done by removing the Premium, Discount and Imbalance Charges and replacing them with the product of the imbalance volume and appropriate rate (greater of bid and imbalance price for accepted offers and lesser of bid and imbalance price for accepted bids).Another change which is proposed entails having Biased Quantities, Trade Opposite TSO quantities, and Non-Firm quantities, taken away from the balancing quantities included in calculating Make-Whole Payment Operating Costs in order to align the operational costs to be on the same basis as the revenue calculation for the make-whole payment. This is necessary if the proposal to address the issue with the revenue calculation described above is implemented because otherwise these items would be removed from the revenue calculation and still included in the cost calculation which would distort the resulting Make-Whole Payment where these volumes have occurred. This is because they would be applied when determining the volume for consideration in calculating costs but be removed from the equivalent volume against which revenues are calculated.We also propose a minor structural change to paragraphs F.11.2.2 and F.11.2.4 which contains logic on the determination of Start Up Cost and Recoverable Start Up Cost respectively. Both of these paragraphs currently take the form ‘*a variable shall be a given value if (i); (ii) or (iii); (iv)’*. While it is relatively clear from the text that the intended interpretation is that the variable shall have the given value if any of (i), (ii) or (iii) apply and shall have a value of zero if none of (i), (ii) or (iii) apply as detailed in (iv) the structure of this drafting could cause confusion. Since this structure as currently written could potentially be misconstrued to mean that the variable will have the given value if (i) and (ii) or (iii) and (iv) or otherwise misinterpreted. We propose a change here so that the structure better represents the intended interpretation and is less likely to be misinterpreted i.e. this becomes ’*variable shall be a given value if (i); (ii) or (iii). If not (i), (ii) or (iii) then the value shall be zero’.* This drafting approach is more in line with universal legal drafting conventions for this type of construct. |
| **Legal Drafting Change***(Clearly show proposed code change using* ***tracked*** *changes, if proposer fails to identify changes, please indicate best estimate of potential changes)* |
| 1.
2.
3.
4.
5.
6. 1.
	2.
	3.
	4.
	5.
	6.
	7.
	8.
	9.
	10.
	11. 1.
		2. Determination of No Load Costs and Start Up Costs Payable and Recoverable
			1. In each of the following circumstances the Start Up Costs (CSUuγ) payable for each Generator Unit, u, in each Imbalance Settlement Period, γ, shall have a value of zero for each Imbalance Settlement Period, γ, falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends, as follows:
				1. 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 F.3.3;
				2. 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
				3. When the Metered Quantity (QMuγ) for the Generator Unit, u, has a value of zero for all Imbalance Settlement Periods, γ, falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends.
			2. In all circumstances not listed in paragraphs F.11.2.1, for any Bid Offer Acceptance, o, within the Period of Physical Operation which is associated with a Synchronise Dispatch Instruction and for which Complex Bid Offer Data is to be used in accordance with section F.3.3:
				1. CSUuγ for the first Imbalance Settlement Period, γ, within the Period of Physical Operation shall have a value equal to the value of the Start 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:

The Final Physical Notification Quantity (qFPNuγ(t)) for the Generator Unit, u, has a value of zero for all times within the Period of Physical Operation;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; orThe 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), CSUuγ for the first Imbalance Settlement Period, γ, within the Period of Physical Operation shall have a value of zero.* + - * 1. CSUuγ shall have a value of zero for each other Imbalance Settlement Period, γ, falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends.
			1. The Market Operator shall determine all No Load Costs (CNLuγ) payable for each Generator Unit, u, in each Imbalance Settlement Period, γ, as follows:
				1. CNLuγ shall have a value of zero for each Imbalance Settlement Period, γ, falling wholly within the Period of Physical Operation or in which the Period of Physical Operation starts or ends, where:

The Final Physical Notification Quantity (qFPNuγ(t)) for the Generator Unit, u, has a non-zero value for any time within that Imbalance Settlement Period; andThe Metered Quantity (QMuγ) for the Generator Unit, u, has a value of zero for that Imbalance Settlement Period, γ.* + - * 1. In all circumstances not listed in paragraph F.11.2.3(a):

Where, in accordance with section F.3.3, Complex Bid Offer Data is to be used in respect of the first Bid Offer Acceptance, o, in an Imbalance Settlement Period, γ, falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends, CNLuγ shall have a value equal to the No Load Cost submitted in accordance with Chapter D (Balancing Market Data Submission) for the Generator Unit as part of the applicable Complex Bid Offer Data, multiplied by the Imbalance Settlement Period Duration (DISP); andWhere, in accordance with section F.3.3, Simple Bid Offer Data is to be used in respect of the first Bid Offer Acceptance, o, in an Imbalance Settlement Period, γ, falling wholly within the Period of Physical Operation, or in which the Period of Physical Operation starts or ends, CNLuγ shall have a value of zero.* + - 1. The Market Operator shall determine the Recoverable Start Up Costs (CSURuγ) for each Generator Unit, u, in each Imbalance Settlement Period, γ, within the Period of Market Operation as follows:
				1. CSURuγ for the first Imbalance Settlement Period, γ, within the Period of Market Operation shall have a value equal to value of the Start Cost submitted in accordance with Chapter D (Balancing Market Data Submission) relating to the Warmth State at the start time of the Period of Market Operation submitted for the Generator Unit as part of the most recently submitted valid Complex Bid Offer Data as at the Bid Offer Acceptance Time in respect of the first Bid Offer Acceptance, o, for which Complex Bid Offer Data is to be used in accordance with section F.3.3, in that Imbalance Settlement Period, γ, if:

The Dispatch Quantity (qDuoγ(t)) for the final Bid Offer Acceptance, o, in Imbalance Settlement Period, γ, for the Generator Unit, u, has a value of zero for all times within the Period of Market Operation;For the first Period of Market Operation in the Billing Period only, 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; orThe start of the Period of Market Operation and the end of the previous Period of Market Operation are within the same Period of Physical Operation.In all circumstances not listed in paragraph F.11.2.4(a)(i) to (iii), and for the first Period of Market Operation in the Billing Period only if 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, CSURuγ for the first Imbalance Settlement Period, γ, within the Period of Market Operation shall have a value of zero.* + - * 1. CSURuγ shall have a value of zero for each other Imbalance Settlement Period, γ, falling wholly within the Period of Market Operation, or in which the Period of Market Operation starts or ends.
		1. Calculation of Fixed Costs Payments and Charges
			1. The Market Operator shall calculate the Make-Whole Payment Operating Cost (COCMWPuk) for each Generator Unit, u, for each Contiguous Operating Period, k, in each Billing Period, b, as follows:

where:* + - * 1. CNLuγ is the No Load Cost for Generator Unit, u, in Imbalance Settlement Period, γ;
				2. CSUuγ is the Start Up Cost for Generator Unit, u, in Imbalance Settlement Period, γ;
				3. is a summation over all Bid Offer Acceptances, o;
				4. is a summation over all Bands, i;
				5. is a summation over all Imbalance Settlement Periods, γ, in the Contiguous Operating Period, k;
				6. PBOuoiγ is the Bid Offer Price for each Accepted Bid Quantity and Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				7. QAOLFuoiγ is the Loss-Adjusted Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				8. QABLFuoiγ is the Loss-Adjusted Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				9. QAOUNDELuoiγ is the Undelivered Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				10. QABUNDELuoiγ is the Undelivered Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				11. QAOTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				12. QABTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				13. QABNFLFuoiγ is the Loss-Adjusted Non-Firm Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.5;
				14. QAOBIASuoiγ is the Biased Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7; and
				15. QABBIASuoiγ is the Biased Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7.
			1. The Market Operator shall calculate the Make-Whole Payment Revenue (CREVMWPuk) for each Generator Unit, u, for each Contiguous Operating Period, k, in each Billing Period, b, as follows:

where:* + - * 1. is a summation over all Imbalance Settlement Periods, γ, within the Contiguous Operating Period, k;
				2. PBOuoiγ is the Bid Offer Price for each Accepted Bid Quantity and Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				3. QAOLFuoiγ is the Loss-Adjusted Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				4. QABLFuoiγ is the Loss-Adjusted Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ;
				5. CAOOPOuγ is the Offer Price Only Accepted Offer Payment or Offer Price Only Accepted Offer Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				6. CABBPOuγ is the Bid Price Only Accepted Bid Payment or Bid Price Only Accepted Bid Charge, γ;
				7. CCURLuγ is the Curtailment Payment or Charge for Generator Unit, u, in Imbalance Settlement Period, γ;
				8. PIMBγ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);
				9. QAOTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				10. QABTOTSOLFuoiγ is the Loss-Adjusted Trade Opposite TSO Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.4;
				11. QABNFLFuoiγ is the Loss-Adjusted Non-Firm Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.5;
				12. QAOUNDELuoiγ is the Undelivered Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				13. QABUNDELuoiγ is the Undelivered Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.6;
				14. QAOBIASuoiγ is the Biased Accepted Offer Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				15. QABBIASuoiγ is the Biased Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.6.7;
				16. QABCURLLFuoiγ is the Loss-Adjusted Curtailment Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.8.1;
				17. QAOOPOLFuoiγ is the Loss-Adjusted Offer Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				18. QABBPOLFuoiγ is the Loss-Adjusted Bid Price Only Accepted Bid Quantity for Generator Unit, u, for Bid Offer Acceptance, o, for Band, i, in Imbalance Settlement Period, γ, calculated in accordance with section F.7.1;
				19. is a summation over all Bid Offer Acceptances, o; and
				20. is a summation over all Bands, i.
			1. The Market Operator shall calculate the Make-Whole Payment (CMWPuk) for each Generator Unit, u, for each Contiguous Operating Period, k, in each Billing Period, b, as follows:

where:* + - * 1. COCMWPuk is the Make-Whole Payment Operating Cost for Generator Unit, u, in Contiguous Operating Period, k; and
				2. CREVMWPuk is the Make-Whole Payment Revenue for Generator Unit, u, in Contiguous Operating Period, k.
			1. The Market Operator shall calculate the Fixed Cost Payment or Charge (CFCub) for each Generator Unit, u, in each Billing Period, b, as follows:

where:* + - * 1. is a summation over all Contiguous Operating Periods, k, within the Billing Period, b;
				2. is a summation over all Imbalance Settlement Periods, γ, within the Billing Period, b;
				3. CMWPuk is the Make-Whole Payment for Generator Unit, u, in Contiguous Operating Period, k;
				4. CNLRuγ is the Recoverable No Load Cost for Generator Unit, u, in Imbalance Settlement Period, γ; and
				5. CSURuγ is the Recoverable Start Up Cost for Generator Unit, u, in Imbalance Settlement Period, γ.
 |
| **Modification Proposal Justification***(Clearly state the reason for the Modification)* |
| The intention of the make-whole payment element of Fixed Cost Payments or Charges (CFC) is to recover fixed costs that have not been recovered through market revenues. There is an issue where some participants are being made whole for their negative imbalance revenue, including when the unit has no balancing market related costs (variable or fixed), which is not the intention. This is due to the structure of the equations in section F.11.4, in particular F.11.4.2 and how it relates to F.11.4.3. Even if a participant has no balancing market operating costs, and no revenues from balancing market actions, they can still have a negative imbalance revenue which is included in their Make-Whole Payment Revenue (CREVMWP), creating a negative number. When the negative number is included in the Make-Whole Payment (CMWP) again a Make-Whole Payment Operating Cost (COCMWP) of zero, the negative number is after the minus sign, making it a positive number, and therefore as an amount to be made whole. Clearly it is not the intention of the market design to make a unit whole for their imbalance costs, but rather only to make them whole for their operating costs.The proposed approach intends to focus the make-whole payment on the differences between the cost of the balancing action and the revenue for that balancing action only, excluding any imbalances which are unrelated to balancing actions which occurred on the unit. This strengthens a principle in fixed cost recovery that the make-whole payment is based solely on the costs and the revenues of the balancing quantities. It does this by removing the Imbalance Component (CIMB) Premium Component (CPREMIUM) and Discount Component (CDISCOUNT) from the revenue part of the calculation, and replacing it with an explicit calculation of the revenue the balancing quantity would receive at the better of the Imbalance Price or Bid Offer Price.The CIMB component contained all imbalance revenues including those not related to the balancing quantity, and CPREMIUM and CDISCOUNT component are adjustment payments to the balancing actions within the CIMB component if the most beneficial price for the unit to be net settled at is the Bid Offer Price. Therefore all three components need to be changed to explicitly reference the net impact they would have on the balancing quantity only. The CAOOPO, CABBPO and CCURL components are not changed as they only explicitly reference the balancing quantities already.A benefit of this approach is that the costs to the unit from imbalances do not get recovered, ending the issue that has been seen thus far where units without any balancing market costs get a make-whole payment to recover their negative imbalance revenues. A disbenefit of this approach is that if a unit is paid for an imbalance, this does not count as meeting their fixed costs, which is correct if you strictly interpret the principle that only costs and revenues related directly to the balancing quantity are to be recovered, but could also be seen as potentially a unit being overpaid (against the principles in the SEM-15-065 Energy Trading Arrangements – Markets decision from the SEMC) as they have imbalance revenue which could have met their fixed costs which would be retained in addition to make-whole payments.Another change which is proposed that is less principled and more about aligning two components to have the same reference is also proposed. This entails including the Biased, Trade Opposite TSO, and Non-Firm quantities in the calculation of the operating costs for the make-whole payment. At the moment, a unit would not be paid either the Imbalance Settlement Price or Bid Offer Price for their biased quantities, but the operating costs considers it still as a part of their costs, meaning that the costs and the revenues are not on the same basis. This increases the operating costs over what is considered in the revenues, and therefore increases the chances of a unit being overpaid for their make-whole payments. Therefore it is proposed to have biased quantities taken away from the balancing quantities considered for operational costs, as these biased quantities should be covered through ex-ante market revenue for biased incs or just do not have an operational cost associated with them for biased decs.Similarly for Trade Opposite TSO and Non-Firm quantities, while these are quantities of Bid Offer Acceptances that the participant has met and did not have ex-ante market revenue to cover so the costs could be seen as incurred under the BM, the reason why they exist in the premium/discount is because the SEMC decided they should be settled differently (where applicable, i.e. Non-Firm is actively settled differently while Trade Opposite TSO is not currently active), where it is just settled at the Imbalance Price. However if they are considered under the revenue element, but not under the costs element, then it acts as negating the effect of having that treatment in the main energy settlement: they can be made-whole for it because their revenue would be less advantageous than their costs, leading to a similar situation as when units with a negative CIMB are being made-whole despite the units not having fixed costs to recover. Therefore it is also proposed to have these quantities taken away from the balancing quantities in operational costs.The structural changes to F.11.2.2 and F.11.2.4 are intended to add clarity and ensure that the interpretation of these paragraphs is not unclear as described in the explanation section. |
| **Code Objectives Furthered***(State the Code Objectives the Proposal furthers, see Section 1.3 of T&SC for Code Objectives)* |
| * to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;
* to promote competition in the Single Electricity Market;
* 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 objectives are furthered if this proposal is implemented by ensuring that Generators are not inappropriately insulated from negative imbalance revenues via an unintended nuance of the Make-Whole Payment mechanism. This in turn will ensure that balancing market signals for Generators to be balance responsible are not inappropriately dulled due to diminished exposure to negative imbalance revenues, and Dispatch Balancing Costs are not inappropriately elevated, thus promoting competition, benefiting consumers and furthering the financially secure operation of the SEM. |
| **Implication of not implementing the Modification Proposal***(State the possible outcomes should the Modification Proposal not be implemented)* |
| Fixed Costs would not reflect the market design principles, in such a way that it would result in much higher costs. This would have an effect of increasing Imperfections Charges, where these additional costs would need to be passed on to suppliers. It would also distort the signals for participants to minimise their imbalances, as negative imbalance revenues could be made-whole. In addition, the potential confusion in the interpretation of F.11.2.2 and F.11.2.4 would remain. |
| **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 Marker Code, Grid Code, Exchange Rules etc.)* |
| N/A | This modification would also require changes in the settlement systems which calculate the make-whole payment, a change request would need to be raised with the vendor for this.The intention of this proposal is to request that the rules change be made effective from the time of the approval decision rather than from the time of the system change. This would mean that until the system change has been implemented, the make-whole payments calculated would not reflect the modified rules, instead reflecting the current version of the rules, and therefore resettlement would be required to align the amounts paid with the modified rules for the affected periods after the approval date.We believe that this is the appropriate approach given that the raising if this modification will inform participants of an unintended means by which to insulate themselves from the important fundamental market signal of negative imbalance charges. This approach ensures that while in the short term settlement may not accurately reflect this signal, through resettlement the signal will ultimately be preserved.For the absence of doubt, it is not intended to request that this modified approach be enacted retroactively for dates prior to the approval of this modification proposal.With this request it would also be easiest from an implementation point of view if the approval date was stated in such a way that there is one last whole Billing Period (week from Sunday to Sunday) with the current approach and the next whole Billing Period has the modified approach applied to it, rather than having a Billing Period which has two approaches applying within it. |
| ***Please return this form to Secretariat by email to*** *modifications@sem-o.com* |