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| **MODIFICATION PROPOSAL FORM** | | | | | |
| **Proposer** | **Date of receipt** | | **Type of Proposal** | | **Modification Proposal ID** |
| **ElectroRoute Energy Trading Limited** | **20 November 2014** | | **Standard** | | **Mod\_12\_14** |
| **Contact Details for Modification Proposal Originator** | | | | | |
| **Name** | | **Telephone number** | | **Email address** | |
| **Eamonn O’Donoghue**  **Ronan Doherty** | | **+353 (0) 1 687 7122** | | [**ronan.doherty@electroroute.com**](mailto:ronan.doherty@electroroute.com)  [**eamonn.odonoghue@electroroute.com**](mailto:eamonn.odonoghue@electroroute.com) | |
| **Modification Proposal Title** | | | | | |
| **Amendment to Make Whole Mechanism to remove Settlement Periods of simultaneous import and export flows** | | | | | |
| **Documents affected**  *(delete as appropriate)* | | **Section(s) Affected** | | **Version number of T&SC or AP used in Drafting** | |
| **T&SC** | | **T&SC 4.140-4.140A (new)** | | **T&SC 16.0** | |
| **Explanation of Proposed Change**  *(mandatory by originator)* | | | | | |
| The purpose of this modification is to amend the code so that Interconnector Units no longer receive Make Whole Payments for half hour trading periods where both import and export trades have been nominated. | | | | | |
| **Legal Drafting Change**  *(Clearly show proposed code change using* ***tracked*** *changes, if proposer fails to identify changes, please indicate best estimate of potential changes)* | | | | | |
| 4.140 The Market Operator shall procure that Make Whole Payments shall be calculated on a Billing Period basis for each Generator Unit u that is not an Interconnector Unit in Billing Period b, as follows:    Where:   1. MWPub is the Make Whole Payment for Generator Unit u in Billing Period b; 2. MOPuh is the Market Offer Price of Generator Unit u in Trading Period h; 3. SMPh is the System Marginal Price for Trading Period h; 4. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Generator Unit u in Trading Period h; 5. TPD is the Trading Period Duration; 6. MNLCLFuh is the Loss-Adjusted Market No Load Cost for Generator Unit u in Trading Period h; 7. MSQCCLFuh is the Loss-Adjusted Market Schedule Quantity Cost Correction for Generator Unit u in Trading Period h; 8. MSUCLFuh is the Loss-Adjusted Market Start Up Cost for Generator Unit u in Trading Period h; 9. the summation is over all Trading Periods h in Billing Period b excluding any Trading Periods h in which the Generator Unit is Under Test.   4.140A  The Market Operator shall procure that Make Whole Payments shall be calculated on a Billing Period basis for each Interconnector Unit u in Billing Period b, as follows:  Step 1: For each Interconnector Unit u the Make Whole Eligibility Indicator MWEIuh) for each Trading Period shall be calculated as set out below:  If MSQuhm ≥0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the EA1 MSP Software Run m and  If MSQuhm ≥0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the EA2 MSP Software Run m and  If MSQuhm ≥0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the WD1 MSP Software Run m  then  MWEIuh = 1  else  If MSQuhm ≤0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the EA1 MSP Software Run m and  If MSQuhm ≤0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the EA2 MSP Software Run m and  If MSQuhm ≤0 where MSQuhm is the Interconnector Unit Market Schedule Quantity calculated by the WD1 MSP Software Run m  then  MWEIuh = 1  else  MWEIuh = 0  Step 2:    Where:   1. MWPub is the Make Whole Payment for Interconnector Unit u in Billing Period b; 2. MOPuh is the Market Offer Price of Interconnector Unit u in Trading Period h; 3. SMPh is the System Marginal Price for Trading Period h; 4. MSQLFuh is the Loss-Adjusted Market Schedule Quantity for Interconnector Unit u in Trading Period h; 5. TPD is the Trading Period Duration; 6. MSQCCLFuh is the Loss-Adjusted Market Schedule Quantity Cost Correction for Interconnector Unit u in Trading Period h; 7. MWEIuh is the Make Whole Eligibility Indicator for Interconnector Unit u in Trading Period h; 8. the summation is over all Trading Periods h in Billing Period b excluding any Trading Periods h in which the Interconnector Unit is Under Test.” | | | | | |
| **Modification Proposal Justification**  *(Clearly state the reason for the Modification)* | | | | | |
| **Background and Justification**  The current design of the SEM does not treat imports from and exports to the neighbouring GB market equally. The Regulatory Authorities have been aware of the issues that this disjoint raises for some time, and indeed the proposer of the current modification presented on these topics to the Regulatory Authorities last year. Given the island of Ireland’s significant potential as an exporter of electricity and the importance of cross-border trade at a European level the proposer welcomes renewed attention on this important topic and would hope to see positive steps emerge towards improving the efficiency of the international energy import/export arrangements.  The essential problem for exporters from the SEM market is that the core market design dictates that the participant is locked ahead of time into a fixed flow volume, whilst simultaneously having no control over its costs due to the ex-post uplift mechanism. The Make Whole Payment mechanism in the T&SC was designed to address this failing and ensure that efficient cross border trade in both directions is possible.  On 14 November 2014 the Regulatory Authorities raised two T&SC modifications aimed at reducing total Make Whole Payments (MWPs), justified on the basis that the MWP costs have increased by €2-3m per annum over the last two years, and the consequent effect that this has had on the Imperfections Charge to the market (which including other contributing factors totalled roughly €180 million in the same period). The modifications that the Regulatory Authorities proposed address this recent increase in imperfection charges by reducing or removing Make Whole Payments to Interconnector Users.  The proposer believes that the impact of the Regulatory Authorities’ modification proposals, if enacted, would be to radically reduce exports from SEM into GB.  Whilst the issues are complex and multi-faceted, the key aspects are broadly outlined below:   * Make-whole payments are inextricably linked to export flows from the SEM to the GB market. A recent increase in Make Whole Payments relates to an increase in export trade activity from the SEM market. * With the SEM and GB market converging in price over the coming years, export trades will become an increasingly important and permanent aspect of the SEM market. The proposer estimates there may be around €500 million of export trades between now and the go-live of the I-SEM market. Given the scale of this figure, its value to the SEM, its value to the Irish economy and the role interconnector export has in reducing undue wind curtailment, it is vitally important that the SEM has the most appropriate mechanism with respect to export trades.      * The unconstrained market schedule is rarely an accurate reflection of Dispatch Quantities (DQs) for any given unit in the SEM. For example at any time an out-of-merit generator may be dispatched at above its Market Schedule Quantity (MSQ) if the System Operator chooses. If remunerated at only System Marginal Price the example generator will not recover its costs, but this shortfall is recognised by the T&SC and the generator receives constraint payments from SEMO in order to make it whole.   For Interconnector Units, Make Whole Payments fulfil an equivalent role: namely to prevent the Interconnector Unit from being compelled to flow at an uneconomic price. This is because Interconnector units are the only units in the SEM to have their volumes fixed in the ex-ante time frame. As such export purchases from the SEM market are exposed to significant ex-post price risk. For example an interconnector trader can bid in to export at a price of €50/MWh and be dispatched, fixing its volume in the ex-ante time frame. At times, the same volume could eventually be charged €250/MWh ex-post (or more depending on the outcome of the uplift mechanism). This represents a price far in excess of what the interconnector user stated that it would be willing to pay. Make Whole Payments have a simple but vital role in correcting this over charge.   * A change to the constraint payment mechanism within the T&SC with regards to generators would be considered momentous, and similarly any change in the Make Whole Payment principle should be understood to represent a targeted intervention discriminating against interconnector units in the SEM compared to generator units. As well as being out of step with national and European legislation and guidelines encouraging cross-border trade, this is also directly contrary to the stated Code Objective: “*to ensure no undue discrimination between persons who are parties to the Code*” (see T&SC 1.3.6). * The relevant disjoint in the market design relates to the price signals the SEM gives to import trades and export trades respectively. Assuming that import trades and export trades are executed from different ex-ante gates, at present the respective price signal can be simplified as follows: * Import Trade Price Signal based on : SMP + CPGP * Export Trade Price Signal based on: Bid Price + CPGP     Both price signals are undoubtedly valid in of themselves, with the export price signal closer to pure “social welfare maximising” market principles. However, the discrepancy in price signals can at times result in import and export flows being rationally dispatched in different ex-ante gates in the same half hour period. This netted flow and its interaction with the Make Whole Payment mechanism gives rise to the concerns expressed by the Regulatory authorities Mod\_09\_14.  The proposer strongly opposes the discriminatory removal of Make Whole Payments for a single class of generator units. However, the proposer does agree with the regulators there is no need for netted import/export volumes across the interconnector to be eligible for Make Whole Payments. Such netted volumes are in a class of issues which includes the “flow-based” versus “flow-based-intuitive” debate in Continental Europe at present.  The proposer believes there are two clear ways of eliminating the disjoint in the market without unduly hampering efficient cross border trading or discriminating against any particular class of market participant:   1. **Remove settlement periods of simultaneous import and export flow from the Make Whole Payment mechanism**   This allows interconnector unit to simply arrange trades by deciding what periods of the day they wish to import and export. The Make Whole Payment mechanism would no longer be exposed to payments where import and export volumes are scheduled simultaneously in the same period. The proposer believes that this represents the most practical fix to the issue. This approach is the subject of this modification proposal.   1. **Elimination of the disjointed import/export price signal by moving all interconnector units to a pay as bid principle in the SEM**   Alternatively the issue could be resolved by moving all interconnector units to a “pay as bid / paid as bid” mechanism in the SEM. This will eliminate the disjointed price signal and ensure that there is only one dominant trade direction in each half hour period. A “pay as bid / paid as bid” mechanism will remove the significant ex-post price risk interconnector units face and will effectively remove them from the Make Whole mechanism entirely. At current market prices this approach would likely result in a positive contribution to the imperfection charges pot. This approach is subject to a separate alternative modification by the proposer entitled “*Pay-As-Bid / Paid-as-bid for Interconnector Units*”.  **Working Group**  It appears that attention has only been paid to these topics in recent times due to the increase in export flows and the introduction of the intra-day market whereby the Regulatory Authorities have observed an increased in payments from the Make Whole mechanism. However, given the importance of the area and the volume of trade (€500M) in this direction over the next three years it is important to clarify and if necessary rectify the market design in this regard. Given the significantly distorting effects of the Regulatory Authorities’ proposed modifications (Mod\_09\_14, Mod\_10\_14) on cross-border trade, the proposer suggests that a working group be established to review this preferred modification proposal and the complete suite of related issues before arriving at a final recommendation. | | | | | |
| **Code Objectives Furthered**  *(State the Code Objectives the Proposal furthers, see Section 1.3 of T&SC for Code Objectives)* | | | | | |
| * 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; * to ensure no undue discrimination between persons who are parties to the Code; * 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. | | | | | |
| **Implication of not implementing the Modification Proposal**  *(State the possible outcomes should the Modification Proposal not be implemented)* | | | | | |
| * Market will continue as is with netted import/export volumes from interconnector units entering the Make Whole Payment mechanism | | | | | |
| **Working Group**  *(State if Working Group considered necessary to develop proposal)* | | | **Impacts**  *(Indicate the impacts on systems, resources, processes and/or procedures)* | | |
| Working group considered necessary | | | Suggest impact similar to Regulatory Authorities’ Mod\_09\_14 – Basic amendment of Make Whole mechanism algebra -  €61K | | |
| ***Please return this form to Secretariat by email to*** [***modifications@sem-o.com***](mailto:modifications@sem-o.com) | | | | | |

**Notes on completing Modification Proposal Form:**

1. **If a person submits a Modification Proposal on behalf of another person, that person who proposes the material of the change should be identified on the Modification Proposal Form as the Modification Proposal Originator.**
2. **Any person raising a Modification Proposal shall ensure that their proposal is clear and substantiated with the appropriate detail including the way in which it furthers the Code Objectives to enable it to be fully considered by the Modifications Committee.**
3. **Each Modification Proposal will include a draft text of the proposed Modification to the Code unless, if raising a Provisional Modification Proposal whereby legal drafting text is not imperative.**
4. **For the purposes of this Modification Proposal Form, the following terms shall have the following meanings:**

**Agreed Procedure(s): means the detailed procedures to be followed by Parties in performing their obligations and functions under the Code as listed in Appendix D “List of Agreed Procedures”.**

**T&SC / Code: means the Trading and Settlement Code for the Single Electricity Market**

**Modification Proposal: means the proposal to modify the Code as set out in the attached form**

**Derivative Work: means any text or work which incorporates or contains all or part of the Modification Proposal or any adaptation, abridgement, expansion or other modification of the Modification Proposal**

**The terms “Market Operator”, “Modifications Committee” and “Regulatory Authorities” shall have the meanings assigned to those terms in the Code.**

**In consideration for the right to submit, and have the Modification Proposal assessed in accordance with the terms of Section 2 of the Code (and Agreed Procedure 12), which I have read and understand, I agree as follows:**

**1. I hereby grant a worldwide, perpetual, royalty-free, non-exclusive licence:**

* 1. **to the Market Operator and the Regulatory Authorities to publish and/or distribute the Modification Proposal for free and unrestricted access;**
  2. **to the Regulatory Authorities, the Modifications Committee and each member of the Modifications Committee to amend, adapt, combine, abridge, expand or otherwise modify the Modification Proposal at their sole discretion for the purpose of developing the Modification Proposal in accordance with the Code;**
  3. **to the Market Operator and the Regulatory Authorities to incorporate the Modification Proposal into the Code;**

**1.4 to all Parties to the Code and the Regulatory Authorities to use, reproduce and distribute the Modification Proposal, whether as part of the Code or otherwise, for any purpose arising out of or in connection with the Code.**

**2. The licences set out in clause 1 shall equally apply to any Derivative Works.**

**3. I hereby waive in favour of the Parties to the Code and the Regulatory Authorities any and all moral rights I may have arising out of or in connection with the Modification Proposal or any Derivative Works.**

**4. I hereby warrant that, except where expressly indicated otherwise, I am the owner of the copyright and any other intellectual property and proprietary rights in the Modification Proposal and, where not the owner, I have the requisite permissions to grant the rights set out in this form.**

**5. I hereby acknowledge that the Modification Proposal may be rejected by the Modifications Committee and/or the Regulatory Authorities and that there is no guarantee that my Modification Proposal will be incorporated into the Code.**