|  |
| --- |
| **MODIFICATION PROPOSAL FORM** |
| **Proposer***(Company)* | **Date of receipt***(assigned by Secretariat)* | **Type of Proposal***(delete as appropriate)* | **Modification Proposal ID***(assigned by Secretariat)* |
| **Aughinish Alumina Ltd** | **26 May 2017** | **Urgent** | **Mod\_03\_17** |
| **Contact Details for Modification Proposal Originator** |
| **Name** | **Telephone number** | **Email address** |
| **Thomas O’Sullivan** | **+353 61 604473** | **Thomas.osullivan@augh.com** |
| **Modification Proposal Title** |
| **Treatment of Transmission Losses for Trading Sites with Contiguous Autoproducers in I-SEM** |
| **Documents affected***(delete as appropriate)* | **Section(s) Affected** | **Version number of T&SC or AP used in Drafting** |
| **T&SC Part B** | **ISEM TSC F.4,** | **SEM-17-024 April 12th 2017** |
| **Explanation of Proposed Change***(mandatory by originator)* |
| **Existing Treatment of Losses in the SEM:**In the SEM a Netting Generator Unit (NGU) is used as part of the settlement calculation of the Aughinish Trading Site as a contiguous Autoproducer. The Aughinish transmission losses are applied to the net power exported from the site to give a comparable situation to a generator that is all located behind the one meter. Losses are not applied to the volume of power self-supplied on site. During our annual plant shutdown, the Trading Site is importing power. This power is assigned to the Trading Site Supplier Unit (TSSU) when consumption is greater than the MSQ of the on the site generation. See examples for a typical 1hour settlement:1. Exporting (Normal operation)

Energy payment = (MSQSK3 + MSQSK4 – NGUAughinish)\*lossAdjustment\*SMP =(80+80-45)\*0.973\*SMP = (115MWh)\*0.973\*SMP = 111.895MWh\*SMP1. Importing (Both gas turbines off)

Energy payment = (MSQSK3 + MSQSK4 – TSSUAughinish)\*lossAdjustment\*SMP =(0+0-45)\*1\*SMP = (45MWh)\*1\*SMP = -45MWh\*SMPIn this situation other variable Supplier charges applyWhilst the continuation of this fair treatment for autoproducers had been discussed and supported during the ISEM consultation process, it has come to our attention in the published TSC that the application of TLAFs in the settlement of the ISEM Balancing Market (BM) is not consistent with this methodology. Below are two examples of how the Aughinish manufacturing facility will be unfairly treated:Treatment of Losses in the I-SEM1. **Energy Settlement**

The NGU no longer exists in the current version of the ISEM TSC, hence an Autoproducers in-house consumption will be allocated to its registered TSSU at all times whether importing or exporting power. Due to individual unit settlement in the ISEM Balancing Market, the generation units and the TSSU will be settled using different TLAFs, as currently drafted in the TSC. This results in transmission losses being over recovered by the market on power not entering the transmission system.Below is an example for a typical 1hour settlement of the Aughinish Autoproducer site in the ISEMAughinish believes that the annual cost of these Imbalance charges to our manufacturing facility, despite being fully balance responsible, would be significant and probably if not corrected would exceed €500,000/annum. This is clearly an anomaly in the rules and therefore should be corrected to reflect the current treatment for settlement of Trading Sites in the SEM1. **Supplier charges**

A separate issue with the application of losses is in the assessment of supplier charges for TSSUs. It would under certain conditions levy a penalty on power produced and consumed on site. For example, if the in-house consumption matched generation (zero power exported, zero power imported) the TSC as currently drafted, would apply supplier charges on a volume equal to (QMu-QMLFu) because the TSSU loss factor is different to the generator loss factor. Below is an example of the settlement of the Aughinish Autoproducer site when no power is being exported to the market or the transmission system.The materiality, based on Aughinishs historic metered generation is low but could be material in future markets.Whilst it appears, the intention of F.4.2.13 is to address these two issues by applying a loss factor to the virtual Trading Unit. The effect is nullified because the Trading Unit has no volume in the Balancing Market. Instead, Aughinish proposes applying the appropriate published loss factors for the station node (or the weighted average if they differ for more than one generator) to the TSSU associated with the embedded generator(s) within an Autoproducer site. It is our expectation that this would correct both item 1 and item 2 above.In making this modification proposal, Aughinish is aware that the Modification Committee needs to be cognisant of the potential for gaming the system. In the absents of being able to write the NGU back into the TSC part B Aughinish recommends that some restriction should apply. In the draft below, exclusions apply if the sites MEC is not greater than its MIC and in periods where the site is not generating any power.  |
| **Legal Drafting Change***(Clearly show proposed code change using* ***tracked*** *changes, if proposer fails to identify changes, please indicate best estimate of potential changes)* |
| **Modifications to TSC** F.4.2.9 For each Supplier Unit, v, that is not a Trading Site Supplier Unit, t~~T~~he Transmission Loss Adjustment Factor (FTLAFvγ) shall be equal to 1 ~~for each Supplier Unit, v~~. F.4.2.11 For each Supplier Unit, v, that is not a Trading Site Supplier Unit, t~~T~~he Combined Loss Adjustment Factor (FCLAFvγ) for each Supplier Unit, v, in Imbalance Settlement Period, γ, shall be set equal to 1.F.4.2.13 The Market Operator shall calculate the Combined Loss Adjustment Factor (FCLAF~~u~~vγ) for each Trading Site Supplier Unit, ~~u~~v, in each Imbalance Settlement Period, γ, as follows:$$If MIC>MEC then$$$$FCLAFvy=1$$ElseIf $\sum\_{u\in s}^{}QMuy \leq 0 then$ $$FCLAFvy=1$$Else$$If\sum\_{u\in s}^{}qCRu \ne 0 then$$$$FCLAFvuy= \frac{\sum\_{u\in s }^{}FCLAFuy \*qCRu}{\sum\_{u\in s }^{}qCRu}$$Else$$FCLAFvuy= Max(\left\{FCLAFuy\right\}∀ u\in s)$$where: (a) qCRu is the Registered Capacity of Generator Unit, u; (b) FCLAFuγ is the Combined Loss Adjustment Factor for Generator Unit, u, in Imbalance Settlement Period, γ; (c) $\sum\_{u\in s}^{}qCRu $ is a summation over all Generator Units, u, ~~not including the Trading Unit,~~ in the Trading Site, s, to which the Trading Site Supplier Unit is registered; and (d) The expression $Max(\left\{FCLAFuy\right\}∀ u\in s)$ denotes the highest Combined Loss Adjustment Factor (FCLAFuγ) of each Generator Unit, u, ~~not including the Trading Unit,~~ in the Trading Site, s, to which the Trading Site Supplier Unit is registered, in Imbalance Settlement Period, γ. (e) MIC is the registered Max Import Capacity (f) MEC is the registered Max Export Capacity (g) $\sum\_{u\in s}^{}QMuy $ is a summation of metered quantity over all Generator Units, u, not including the Trading Unit, in the Trading Site, s, to which the Trading Site Supplier Unit is registered, in Imbalance Settlement Period, γ. |
| **Modification Proposal Justification***(Clearly state the reason for the Modification)* |
| 1. There are unforeseen consequences associated with the removal of Netting Generator Unit (NGU) as part of the ISEM TSC drafting.
2. The additional cost of applying losses inside the Autoproducer site boundary is likely to exceed €500,000/annum for Aughinish Alumina manufacturing facility.
3. The proposed changes only materially affect Trading Site with a contiguous Autoproducer
4. Under the current SEM, losses are not applied to the volume of power self-supplied to the host site. This should remain true in the I-SEM under the principle not to change anything, which doesn’t need changing to comply with market coupling. This does not apply to other non-Trading sites importing and exporting in the I-SEM and is an anomaly, which has arisen due to the removal of the NGU.
5. The current TSC drafting incorporates a penalty on co-generation operating within a Trading Site and its associated benefits for society, the environment and industry. It is in breach of national and European law.

This modification proposal is marked as “urgent” because this is a material inconsistency in the Code and is material under normal operation of an Autoproducer. |
| **Code Objectives Furthered***(State the Code Objectives the Proposal furthers, see Section 1.3 of T&SC for Code Objectives)* |
| 1. to facilitate the efficient discharge by the Market Operator of the obligations imposed upon it by its Market Operator Licences;

Correct application of losses on Autoproducers is critical to this objective1. to facilitate the efficient, economic and coordinated operation, administration and development of the Single Electricity Market in a financially secure manner;

Correct application of losses on Autoproducers is critical to this objective1. 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;

Correct application of losses on Autoproducers is critical to this objective1. to promote competition in the single electricity wholesale market on the island of Ireland;

Correct application of losses on Autoproducers is critical to this objective1. to provide transparency in the operation of the Single Electricity Market;

Correct application of losses on Autoproducers is critical to this objective1. to ensure no undue discrimination between persons who are parties to the Code; and

Correct application of losses on Autoproducers is critical to this objective1. 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.

Correct application of losses on Autoproducers is critical to this objective |
| **Implication of not implementing the Modification Proposal***(State the possible outcomes should the Modification Proposal not be implemented)* |
| 1. Aughinish will be penalised for losses associated with power, which never entered the Transmission system.
2. Aughinish will be charged supplier charges when no power was taken from the market
3. It is grossly unfair to charge losses for on-site consumption supplied by on-site generation. This only applies to Trading Sites and would be a penalty imposed on Trading Sites for the self-supply which would be inconsistent with the treatment of any other non-Trading Site which has on-site generation. The consequences of such could result in closure of the CHP plant
4. The TSC would be in breach of national and European law.
 |
| **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.)* |
|  |  |
| ***Please return this form to Secretariat by email to*** ***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 either Part A or Part B Appendix D “List of Agreed Procedures”. The Proposer will need to specify whether the Agreed Procedure to modify refers to Part A, Part B or both.**

**T&SC / Code: means the Trading and Settlement Code for the Single Electricity Market. The Proposer will also need to specify whether all Part A, Part B, Part C of the Code or a subset of these, are affected by the proposed Modification;**

**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 Part A or Chapter B of Part B of the Code (and Part A Agreed Procedure 12 or Part B 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.**