MODIFICATION PROPOSAL FORM

Proposer *(Company)*	Date of receipt *(assigned by Secretariat)*	Type of Proposal *(delete as appropriate)*	Modification Proposal ID *(assigned by Secretariat)*
SEMO	28th January 2021	Standard	Mod_03_21

Contact Details for Modification Proposal Originator		
Name	**Telephone number**	**Email address**
Katia Compagnoni		

Modification Proposal Title
Splitting CEADSU variable

Documents affected *(delete as appropriate)*	Section(s) Affected	Version number of T&SC or AP used in Drafting
T&SC Part A/Part B/Part C Appendices Part A/Part B Glossary Part A/Part B/Part C Agreed Procedures Part A/Part B	H.14.1	V23

Explanation of Proposed Change *(mandatory by originator)*

A new variable to calculate the Demand Side Unit Energy Adjustment Payment or Charge (CEADSU) has been introduced in the Market Systems following approval on Mod_17_19. During Vendor implementation it was noted that the variable needed to be split into 3 separate components (one for Day Ahead volumes, one for Intraday and one for Imbalance) due mainly to different VAT rates to be applied. The end result is unaffected with the original variable split into three sub-variables that are added up.

The functionality is rarely used and was not called upon until the high price event on November 26th 2020 where it emerged that the three sub-variables where included in the Settlement Documents while the original CEADSU variable wasn't. This creates an inconsistency that might cause difficulties to Participants replicating and shadowing the settlement in those events. The issue was raised by affected DSU Member at the December Meeting 102 and this Modification seeks to clarify the Trading and Settlement Code accordingly. There is no requirement for Market Systems or output reports to be updated; this Modification simply seeks to align the Legal Drafting of the Code to the implementation for full clarity.

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

H.14.1   Settlement of Ex-ante Market

H.14.1.1 Until the date that is the Mod_17_19 Deployment Date, the following paragraph shall apply:

The Market Operator shall calculate the Demand Side Unit Energy Adjustment Payment or Charge ($CEADSU_{v\gamma}$) for each Trading Site

Supplier Unit, v, which is associated with a Demand Side Unit, u, which is associated with a Capacity Market Unit, Ω, in each

Imbalance Settlement Period, γ, as follows:

$If\ QCNET_{\Omega\gamma} = 0, then\ CEADSU_{v\gamma} = 0,$

$Else\ if\ for\ all\ Trades, x, and\ all\ positions, k, in\ the\ ranked\ set, PTDA_{xuh}$
$\qquad\qquad \le PSTR_m, and\ PTID_{xuh}\ \le PSTR_m, and\ PTB_{u\gamma k}$
$\qquad\qquad \le PSTR_m, then\ CEADSU_{v\gamma} = 0,$

$Else$

$$
\begin{aligned}
\cancel{CEADSU_{v\gamma}} \\
= \sum_{x\ \in PTDA_{xvh} > PSTR_m} \left(-qTDA_{xvh} \times Min(DTDA_x, DISP)\right. \\
\left. \times \left(PTDA_{xvh} - PIMB_\gamma\right)\right) \\
+ \sum_{x\ \in PTID_{xvh} > PSTR_m} \left(-qTID_{xvh} \times Min(DTID_x, DISP)\right. \\
\left. \times \left(PTID_{xvh} - PIMB_\gamma\right)\right) \\
- \left(QMLF_{v\gamma} - QEX_{v\gamma} \right. \\
+ \left(\sum_{x\ \in PTDA_{xvh} > PSTR_m} (qTDA_{xvh} \times Min(DTDA_x, DISP)) \right. \\
\left.\left. + \sum_{x\ \in PTID_{xvh} > PSTR_m} (qTID_{xvh}) \times Min(DTID_x, DISP)\right)\right) \times PIMB_\gamma
\end{aligned}
$$

~~where:~~

(a) ~~QMLF_{v\gamma} is the Loss-Adjusted Metered Quantity for Supplier Unit, v, in Imbalance Settlement Period, γ;~~

(b) ~~QEX_{v\gamma} is the Ex-Ante Quantity for Supplier Unit, v, in Imbalance Settlement Period, γ;~~

(c) ~~PSTR_m is the Strike Price for Month, m, which contains Imbalance Settlement Period, γ.~~

(d) ~~PIMB_γ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);~~

(e) ~~qTDA_{xvh} is the Day-ahead Trade Quantity in respect of Supplier Unit v for Day-ahead Trading Period h for Trade x;~~

(f) ~~qTID_{xvh} is the Intraday Trade Quantity in respect of Supplier Unit v for Intraday Trading Period h for Trade x;~~

(g) ~~DISP is the Imbalance Settlement Period Duration;~~

(h) ~~DTDA_x is the Day-ahead Trade Duration of Trade, x;~~

(i) ~~DTID_x is the Intraday Trade Duration of Trade, x;~~

(j) ~~PTDA_{xvh} is the Day-ahead Trade Price for Trade, x, for Supplier Unit, v, within whose Day-ahead Trading Period, h, the Imbalance Settlement Period, γ, falls in whole or in part;~~

$$CEADSU_{v\gamma} = CEADSUDA_{v\gamma} + CEADSUIDT_{v\gamma} + CEADSUIMB_{v\gamma}$$

Where

(a) $CEADSUDA_{v\gamma}$ is the Day Ahead component of $CEADSU_{v\gamma}$ calculated as follows:

$$CEADSUDA_{v\gamma} = \sum_{x \in PTDA_{xvh} > PSTR_m} \left(-qTDA_{xvh} \times Min(DTDA_x, DISP) \times (PTDA_{xvh} - PIMB_\gamma)\right)$$

Where

(i) $qTDA_{xvh}$ is the Day-ahead Trade Quantity in respect of Supplier Unit v for Day-ahead Trading Period h for Trade x;

(ii) $DTDA_x$ is the Day-ahead Trade Duration of Trade, x;

(iii) $DISP$ is the Imbalance Settlement Period Duration;

(iv) $PTDA_{xvh}$ is the Day-ahead Trade Price for Trade, x, for Supplier Unit, v, within whose Day-ahead Trading Period, h, the Imbalance Settlement Period, γ, falls in whole or in part;

(v) $PIMB_\gamma$ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);

(vi) $\sum_{x \in PTDA_{xvh} > PSTR_m}$ is a summation over all Trades, x, where the price associated with that trade, $PTDA_{xvh}$, is greater than the Strike Price for month, m, $PSTR_m$

(b) $CEADSUIDT_{v\gamma}$ is the Intra Day component of $CEADSU_{v\gamma}$ calculated as follows:

$$CEADSUIDT_{v\gamma}$$

$$= \sum_{x\, \in PTID_{xvh} > PSTR_m} \left(-qTID_{xvh} \times Min(DTID_x, DISP) \right.$$
$$\left. \times \left(PTID_{xvh} - PIMB_\gamma \right) \right)$$

Where

(i) $qTID_{xvh}$ is the Intraday Trade Quantity in respect of Supplier Unit v for Intraday Trading Period h for Trade x;

(ii) $DTID_x$ is the Intraday Trade Duration of Trade, x;

(iii) $DISP$ is the Imbalance Settlement Period Duration;

(iv) $PTID_{xvh}$ is the Intraday Trade Price associated with the Intraday Trade Quantity ($qTID_{xvh}$) for Trade, x, for Supplier Unit, v, within whose Intraday Trading Period, h, the Imbalance Settlement Period, γ, falls in whole or in part;

(v) $PIMB_\gamma$ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);

(vi) $\sum_{x\, \in PTID_{xvh} > PSTR_m}$ is a summation over all Trades, x, where the price associated with that trade, $PTID_{xvh}$, is greater than the Strike Price for month, m, $PSTR_m$

(c) $CEADSUIMB_{v\gamma}$ is the Imbalance component of $CEADSU_{v\gamma}$ calculated as follows:

$$CEADSUIMB_{v\gamma}$$

$$= -\left(QMLF_{v\gamma} - QEX_{v\gamma} \right.$$

$$+ \left(\sum_{x\, \in PTDA_{xvh} > PSTR_m} (qTDA_{xvh} \times Min(DTDA_x, DISP)\,) \right.$$

$$\left. \left. + \sum_{x\, \in PTID_{xvh} > PSTR_m} (qTID_{xvh}\,) \times Min(DTID_x, DISP) \right) \right) \times PIMB_\gamma$$

Where

(i) $QMLF_{v\gamma}$ is the Loss-Adjusted Metered Quantity for Supplier Unit, v, in Imbalance Settlement Period, γ;

(ii) $QEX_{v\gamma}$ is the Ex-Ante Quantity for Supplier Unit, v, in Imbalance Settlement Period, γ;

(iii) $qTDA_{xvh}$ is the Day-ahead Trade Quantity in respect of Supplier Unit v for Day-ahead Trading Period h for Trade x;

(iv) $DTDA_x$ is the Day-ahead Trade Duration of Trade, x;

(v) $qTID_{xvh}$ is the Intraday Trade Quantity in respect of Supplier Unit v for Intraday Trading Period h for Trade x;

(vi) $DTID_x$ is the Intraday Trade Duration of Trade, x;

(vii) $DISP$ is the Imbalance Settlement Period Duration;

(viii) $PIMB_\gamma$ is the Imbalance Settlement Price in Imbalance Settlement Period, γ, calculated in accordance with Chapter E (Imbalance Pricing);

(ix) $\sum_{x \, \in PTDA_{xvh} > PSTR_m}$ is a summation over all Trades, x, where the price associated with that trade, $PTDA_{xvh}$, is greater than the Strike Price for month, m, $PSTR_m$

(x) $\sum_{x \, \in PTID_{xvh} > PSTR_m}$ is a summation over all Trades, x, where the price associated with that trade, $PTID_{xvh}$, is greater than the Strike Price for month, m, $PSTR_m$

H.14.1.2 The total Demand Side Unit Energy Adjustment Payment or Charge (CEADSU$_{vd}$) for Trading Site Supplier Unit v, which is associated with a Demand Side Unit u, for Settlement Day d shall be calculated by the Market Operator as follows:

$$CEADSU_{vd} = \sum_{\gamma \, in \, d} CEADSU_{v\gamma}$$

Modification Proposal Justification
(Clearly state the reason for the Modification)
This Modification seeks to clarify the correct steps used in the calculation of CEADSU variable as published in the Settlement Documents therefore removing an inconsistency between the Code and the published Invoice in case of high price events which trigger this functionality.

Code Objectives Furthered
(State the Code Objectives the Proposal furthers, see Section 1.3 of Part A and/or Section A.2.1.4 of Part B of the T&SC for Code Objectives)
This Modification has been raised to fulfil mainly the following obligation: *(e)   to provide transparency in the operation of the Single Electricity Market;* As it remove an inconsistency between the T&SC Legal Drafting and the published Settlement Document and clarifies the calculation in the T&SC for the benefit of affected Participants

Implication of not implementing the Modification Proposal
(State the possible outcomes should the Modification Proposal not be implemented)
If this Modification is not implemented there would still be an inconsistency between the T&SC and the Settlement Documents which would create confusion to Participant's trying to shadow settle the calculations of CEADSU in cases of high price events.

Working Group *(State if Working Group considered necessary to develop proposal)*	Impacts *(Indicate the impacts on systems, resources, processes and/or procedures; also indicate impacts on any other Market Code such as Capacity Market Code, Grid Code, Exchange Rules etc.)*
No	N/A

Please return this form to Secretariat by email to balancingmodifications@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:

    1.1 to the Market Operator and the Regulatory Authorities to publish and/or distribute the Modification Proposal for free and unrestricted access;

    1.2 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;

    1.3 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.