**Name of Stakeholder:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**WESM Rules**

| **Clause** | **Original Provision** | **Proposed Amendment** | **Rationale** |  **Comment /** **Proposed Revision** | **Rationale** |
| --- | --- | --- | --- | --- | --- |
| 3.6.7.2 | The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect:(a) the marginal costs of supplying energy at each node;(b) the marginal costs of supplying reserves;(c) shortage pricing when there is a shortage of supply at a node or regional level; and(d) excess pricing when there is an excess of supply at a node or regional level.Such methodology for shortage pricing and excess pricing shall be approved by the DOE and ERC. | The purpose of the automatic market pricing re-runs is to ensure that the energy and reserve prices reflect:(a) the marginal costs of supplying energy at each node; **and**(b) the marginal costs of supplying reserves~~;~~~~(c) shortage pricing when there is a shortage of supply at a node or regional level; and~~~~(d) excess pricing when there is an excess of supply at a node or regional level.~~~~Such methodology for shortage pricing and excess pricing shall be approved by the DOE and ERC~~. | Consistent with ERC directives\* that the existing pricing mechanisms during under-generation and over-generation should be maintained. Such that, these events shall be treated just like other constraint violations. \* ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017-042RC |  |  |
| 3.6.7.3 | The automatic re-run of the dispatch optimization shall use the following changes to the soft constraints that was violated:(a) In case of over-generation and under-generation, the soft constraint shall be relaxed by a value to allow the market dispatch optimization model to find a feasible price; and(b) For all other constraints that were violated, each constraint’s requirement shall be corresponding to the resulting non-zero violation variable, including a very small value to allow the market dispatch optimization model to find a feasible price. | The automatic re-run of the dispatch optimization shall **relax** ~~us~~e ~~the following changes to~~ the soft constraints that was violated **by a value**~~:~~~~(a) In case of over-generation and under-generation, the soft constraint shall be relaxed by a value to allow the market dispatch optimization model to find a feasible price; and~~~~(b) For all other constraints that were violated, each~~ ~~constraint’s~~ ~~requirement shall be~~ corresponding to the resulting non-zero violation variable, including a very small value**,** to allow the market dispatch optimization model to find a feasible price. | Consistent with ERC directives\* that the existing pricing mechanisms during under-generation and over-generation should be maintained. Such that, these events shall be treated just like other constraint violations. \* ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017-042RC |  |  |
| 3.10.5.5 | 3.10.5.5 The procedures developed for the market pricing re-runs shall be designed to produce prices reflecting supply shortages at any nodes where there was load shedding and prices reflecting excess supply where there was excess generation. | ~~3.10.5.5 The procedures developed for the market pricing re-runs shall be designed to produce prices reflecting supply shortages at any nodes where there was load shedding and prices reflecting excess supply where there was excess generation.~~ | Consistent with ERC directives\* that the existing pricing mechanisms during under-generation and over-generation should be maintained. Such that, these events shall be treated just like other constraint violations. \* ERC Decision dated 20 August 2020 (and promulgated on 29 December 2020) on ERC Case No. 2017-042RC |  |  |

**Market Manual on Constraint Violation Coefficients (CVC) and Pricing Re-runs (PR)**

| **Section** | **Original Provision** | **Proposed Amendment** | **Rationale** |  **Comment /** **Proposed Revision** | **Rationale** |
| --- | --- | --- | --- | --- | --- |
| 5.1.3. | The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect: a. the marginal costs of supplying energy at each node;b. the marginal costs of supplying reserves; c. shortage pricing when there is a shortage of supply at a node or regional level; andd. excess pricing when there is an excess of supply at a node or regional level. | The purpose of the automatic pricing re-runs is to ensure that the energy and reserve prices reflect: a. the marginal costs of supplying energy at each node; **and**b. the marginal costs of supplying reserves~~;~~ ~~c. shortage pricing when there is a shortage of supply at a node or regional level; and~~~~d. excess pricing when there is an excess of supply at a node or regional level~~. | Consistent with the proposed amendment to WESM Rules Clause 3.6.7.2. |  |  |
| 5.2.2. to 5.2.5 | 5.2.2. In case of over-generation and under-generation, the soft constraint shall be relaxed by a very small value (delta) to allow the market dispatch optimization model to find a feasible price. When the results of the market dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage price for under-generation and excess price for over-generation.5.2.3 xxx5.2.4 xxx5.2.5 xxx | ~~5.2.2. In case of over-generation and under-generation, the soft constraint shall be relaxed by a very small value (delta) to allow the market dispatch optimization model to find a feasible price. When the results of the market dispatch optimization model reflect a violation greater than delta, then the automatic pricing re-run shall reflect the shortage price for under-generation and excess price for over-generation.~~~~5.2.3~~ **5.2.2** xxx~~5.2.4~~ **5.2.3** xxx~~5.2.5~~ **5.2.4** xxx | Consistent with the proposed amendment to WESM Rules Clauses 3.6.7.3 and 3.10.5.5. |  |  |
| 5.3.1 | The corresponding constraint relaxation formulas for the constraint violation coefficients during pricing re-runs shall be as provided in Table 2 below:*(see next page)* | The corresponding constraint relaxation formulas for the constraint violation coefficients during pricing re-runs shall be as provided in Table 2 below:*(see next page)* | Consistent with the proposed amendment to WESM Rules Clauses 3.6.7.3 and 3.10.5.5. |  |  |

|  |  |
| --- | --- |
| **Provision** | **Proposed Amendment** |
|

| **Order** | **Constraint Violation Coefficient Name** | **CVC** | **Violation Variable Value** | **Delta** | **Constraint Relaxation during Pricing Re-Run** |  **Re-run Price[[1]](#footnote-1)** |
| --- | --- | --- | --- | --- | --- | --- |
| **xxx** | xxx | xxx | xxx | xxx | xxx | xxx |
| **4** | System Energy Balance Constraint | 1,300,000 | x | 0 | delta | Excess Price for over-generation |
| Shortage Price for under-generation |
| **xxx** | xxx | xxx | xxx | xxx | xxx | xxx |

 |

| **Order** | **Constraint Violation Coefficient Name** | **CVC** | **Violation Variable Value** | **Delta** | **Constraint Relaxation during Pricing Re-Run** |  **Re-run Price[[2]](#footnote-2)** |
| --- | --- | --- | --- | --- | --- | --- |
| **x** | xxx | xxx | x | x | xxx | xxx |
| **4** | System Energy Balance Constraint **(Over-generation and under-generation)** | 1,300,000 | x | ~~0~~**0.1** | **x+**delta | **EDP AND RP** ~~Excess Price for over-generation~~ |
| ~~Shortage Price for under-generation~~ |
| **x** | xxx | xxx | x | x | xxx | xxx |

 |

1. EDP refers to *nodal energy dispatch price;* and RP refers to *reserve price* [↑](#footnote-ref-1)
2. EDP refers to *nodal energy dispatch price;* and RP refers to *reserve price* [↑](#footnote-ref-2)