**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; and  d. 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 xxx  5.2.4 xxx  5.2.5 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)