

Market Rule Amendment Proposal Form

Part 1 - Market Rule Information

Identification No.:	MR-00495-R00
Subject:	Adding De-Rates to the Real-Time Lost Cost Economic Operating Point
Title:	Adding De-Rates to the Real-Time Lost Cost Economic Operating Point
Nature of Proposal:	☐ Alteration ☐ Deletion ☒ Addition
Chapter:	7
Appendix:	7.8 – Economic Operating Point
Sections:	3.4
Sub-sections proposed for amending:	
Current Market Rules Baseline:	55.1

Part 2 - Proposal History

Version	Reason for Issuing	Version Date
1.0	Draft for Stakeholder review	August 19, 2026

Approved Amendment Publication Date:

Approved Amendment Effective Date:

Part 3 - Explanation for Proposed Amendment

Provide a brief description that includes some or all of the following points:

- The reason for the proposed amendment and the impact on the *IESO-administered markets* if the amendment is not made.
- Alternative solutions considered.
- The proposed amendment, how the amendment addresses the above reason and impact of the proposed amendment on the *IESO-administered markets*.

Summary

Background

Discussion

Part 4 - Proposed Amendment

Appendix 7.8 – Economic Operating Point

3. Real-Time Market Lost Cost Economic Operating Point

3.4 Constraints

- 3.4.1 The constraints described in this section 3.4 shall apply to the objective functions used for the RT LC EOP calculation.

Scheduling Variable Bounds

- 3.4.2 No RT LC EOP shall be negative, nor shall any RT LC EOP exceed the *offer* or *bid* quantity for *energy* or the *offer* quantity for *operating reserve*. For all intervals $i \in I$:

$0 \leq ESDL_{i,b,j} \leq QDL_{i,b,j}$	for all $b \in B^{DL}, j \in J_{i,b}^E$;
$0 \leq ES10SDL_{i,b,j} \leq Q10SDL_{i,b,j}$	for all $b \in B^{DL}, j \in J_{i,b}^{10S}$;
$0 \leq ES10NDL_{i,b,j} \leq Q10NDL_{i,b,j}$	for all $b \in B^{DL}, j \in J_{i,b}^{10N}$;
$0 \leq ES30RDL_{i,b,j} \leq Q30RDL_{i,b,j}$	for all $b \in B^{DL}, j \in J_{i,b}^{30R}$;
$0 \leq ESDG_{i,b,k} \leq QDG_{i,b,k}$	for all $b \in B^{DG}, k \in K_{i,b}^E$;
$0 \leq ES10SDG_{i,b,k} \leq Q10SDG_{i,b,k}$	for all $b \in B^{DG}, k \in K_{i,b}^{10S}$;
$0 \leq ES10NDG_{i,b,k} \leq Q10NDG_{i,b,k}$	for all $b \in B^{DG}, k \in K_{i,b}^{10N}$;
$0 \leq ES30RDG_{i,b,k} \leq Q30RDG_{i,b,k}$	for all $b \in B^{DG}, k \in K_{i,b}^{30R}$;
$0 \leq ESDX_{i,d,j} \leq QXL_{t,d,j}$	for all $d \in DX, j \in J_{t,d}^E$;
$0 \leq ES10NXL_{i,d,j} \leq Q10NXL_{t,d,j}$	for all $d \in DX, j \in J_{t,d}^{10N}$;
$0 \leq ES30RXL_{i,d,j} \leq Q30RXL_{t,d,j}$	for all $d \in DX, j \in J_{t,d}^{30R}$;
$0 \leq ESIG_{i,d,k} \leq QIG_{t,d,k}$	for all $d \in DI, k \in K_{t,d}^E$;
$0 \leq ES10NIG_{i,d,k} \leq Q10NIG_{t,d,k}$	for all $d \in DI, k \in K_{t,d}^{10N}$;
$0 \leq ES30RIG_{i,d,k} \leq Q30RIG_{t,d,k}$	for all $d \in DI, k \in K_{t,d}^{30R}$;

3.4.3 Subject to section 3.4.4, the RT LC EOP for a *non-quick start resource* shall be greater than or equal to its *minimum loading point* for interval $i \in I$ and bus $b \in B^{NQS}$:

$$\sum_{k \in K_{i,b}^E} ESDG_{i,b,k} \geq MinQDG_b$$

3.4.4 The RT LC EOP for a *non-quick start resource* shall be equal to its *real-time schedule* when it is scheduled below its *minimum loading point* for interval $i \in I$ and bus $b \in B^{NQS}$:

If $\sum_{k \in K_{i,b}^E} ASDG_{i,b,k} < MinQDG_b$ for $b \in B^{NQS}$ then:

$$\sum_{k \in K_{i,b}^E} ESDG_{i,b,k} = ASDG_{i,b}$$

3.4.4A For a dispatchable generation resource, its RT LC EOP shall not exceed the maximum available capacity for the resource for the interval $i \in I$ and bus $b \in B^{DG}$:

$$AdjMaxDG_{i,b} = \left\{ \begin{array}{ll} \min \left(\sum_{k \in K_{i,b}^E} QDG_{i,b,k}, Derate_{i,b} \right) & \text{if } b \in B^{VG} \\ \min \left(\sum_{k \in K_{i,b}^E} QDG_{i,b,k}, Derate_{i,b} \right) & \text{otherwise} \end{array} \right\}$$

$$\sum_{k \in K_{i,b}^E} ESDG_{i,b,k} + \sum_{k \in K_{i,b}^{10S}} ES10SDG_{i,b,k} + \sum_{k \in K_{i,b}^{10N}} ES10NDG_{i,b,k} + \sum_{k \in K_{i,b}^{30R}} ES30RDG_{i,b,k} \leq AdjMaxDG_{i,b}$$