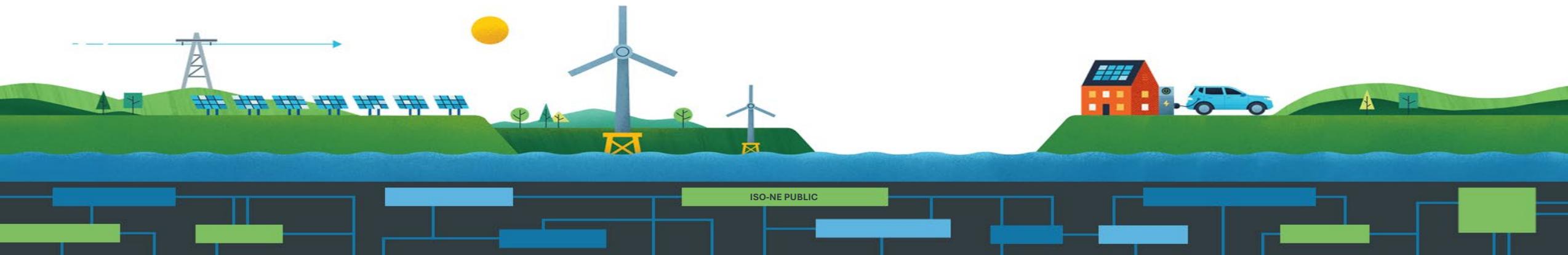# Pay-for-Performance Revisions: Treatment of External Transactions

Proposed Revisions to PFP Treatment of External Transactions

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# Pay for Performance Revisions: Treatment of External Transactions

Proposed Effective Date: October 1, 2026

- The External Market Monitor (EMM) and the Internal Market Monitor (IMM) have highlighted a possible improvement to the efficiency of the Forward Capacity Market in its treatment of external transactions. Stakeholders have also expressed interest in this topic

- ISO-NE proposes changes to the Pay-for-Performance (PFP) treatment of external transactions to improve market efficiency

- Today's discussion focuses on the review of this area for improvement and introduces the proposed change
  - During a Capacity Scarcity Condition (CSC), ISO-NE proposes to charge at the Performance Payment Rate (PPR) for exports that are backed by ISO-NE's system, but not by a specific generator

- In addition, today's discussion provides ISO-NE's initial thinking regarding the potential removal of system-backed exports from the numerator of the Balancing Ratio (BR) during a CSC

Background
Exports are a component of PFP Settlements

- There are two types of External Transaction Sales (Exports) that are relevant to this project

    1. Exports that are associated with the energy and reserves that a generator provides to the ISO-NE system, submitted in accordance with III.1.10.7(f)

    2. Exports that are **not** associated with a specific generator in the ISO-NE system

        - For convenience, these exports will be referred as "system-backed exports"
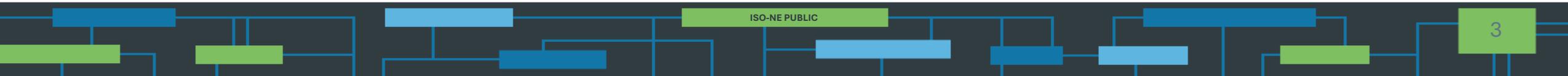
Background (cont.)
Exports are a component of PFP Settlements

- Under current rules: Exports reduce the Actual Capacity Provided (ACP) of two kinds of resources, *but not below 0*
  - For generator capacity Resources associated with an export: ACP = Energy + Reserves – Exports
    - This reduction of ACP is provided in III.13.7.2.2(a), last sentence
    - If exports exceed a generator's energy and reserves, then those exports are effectively backed by the ISO-NE system but do not receive a PFP charge
  - For import capacity resources, ACP is proportional to Net Energy Delivered, *i.e.,* to Imports – Exports
    - If exports exceed imports, the excess exports do not receive a PFP charge

- As shown in the next slide, this floor at 0 creates a market inefficiency

Rationale for Change

In theory, two market participants could coordinate their external transactions scheduling to receive PFP credits without improving reliability

- There is an opportunity for increased efficiency by removing a method in which market participants could receive PFP credits without contributing to system reliability

- For example, during a CSC, assume:
  - Participant A has 0 CSO, schedules 0MWh of imports, 1MWh of exports, and *does not* receive PFP charges
  - Participant B has 0 CSO, schedules 1MWh of imports, 0MWh of exports, and *does* receive PFP credits

- These two transactions collectively result in no power flowing, but do not net in settlement because they are submitted by different market participants
  - The market participants could transact outside the ISO-NE system to share the PFP credits
  - To the best of the ISO's knowledge, no participant has engaged in this market inefficiency

- This market inefficiency affects resources that are charged to pay for this PFP credit

Proposed Solution

Charging system-backed exports the PPR during a CSC improves market efficiency

- To resolve the market inefficiency, the ISO proposes to *charge system-backed exports the PPR during a Capacity Scarcity Condition*
  - *System-backed exports*: Exports that are either 1) associated with a generator, but exceed the generator's energy and reserves provided, or 2) not associated with a generator

- Going back to the previous example, under this proposal
  - Participant A, who schedules a 1MWh *net* export, is charged 1MWh x PPR
  - Participant B, who schedules a 1MWh *net* import, is credited 1MWh x PPR
  - Collectively, the two transactions result in $0 net revenue, which resolves the inefficiency

Proposed Solution (cont.)

The ISO is <u>not</u> proposing to charge generator-backed exports

- Generator-backed exports reduce the generator's Actual Capacity Provided, and thus reduce the PFP credits or increase the PFP charges of that generator

- In this case, the combination of the generator and its associated exports is neither alleviating nor worsening the CSC
  – Note that if an export is associated with a generator, but exceeds the generator's energy and reserves, then the excess portion of that export is backed by the ISO-NE system, and will receive a PFP charge under this proposal

- The proposal achieves two goals:
  1. Eliminate the market inefficiency identified by the EMM and the IMM
  2. Ensure that resources do not bear the cost that net exporters impose on the ISO-NE system during a CSC

Proposed Solution – Detailed Design

Charge system-backed export the PPR during a CSC

- The ISO proposes to create a new PFP charge quantity: system-backed exports (SBE). Such quantity would be charged the Performance Payment Rate (PPR)

- SBE would be calculated as follows:
  - If a generator provides less energy and reserves to the ISO-NE system than its scheduled exports, then the exports in excess would be a system-backed export. In formulas,
    - $SBE_{generator\ resource}$ = min (Energy Quantity + Reserve Provided – Exports$_{Gen}$, 0) x PPR

  - If a participant submits exports (not associated with a generator) in excess of imports, then the excess exports would be a system-backed export. In formulas,
    - $SBE_{Participant}$ = min (Imports – Exports$_{Non\ Gen}$, 0) x PPR

- For example:
  - Generator A has 0 Capacity Supply Obligation (CSO). It schedules 10 MW of exports, provides 9MWh of energy and reserves → Generator A is charged 1 MWh x PPR
  - Participant B has 0 CSO in import capacity resources. It schedules 0 MW of imports and 1 MWh exports. → Participant B is charged 1 MWh x PPR

Proposed Solution – Detailed Design (cont.)

The ISO does <u>not</u> propose changes to calculation of stopped losses

- Under today's rules, a resource's capacity performance charges are limited through the stop-loss mechanism (III.13.7.3)

- The ISO does *not* propose changes to calculation of stopped losses
  - Specifically, SBE charges would not be included in the negative capacity payments that are limited by the monthly or annual capacity stop-loss mechanism

- Excluding SBE charges from the calculation of stopped losses achieves two objectives:
  - Ensures the proposed solution works as intended
    - Otherwise, a resource with 0 CSO, and therefore a stop loss limit of $0, would effectively not be charged for exports during a CSC
  - "Beneficiary pays" principle: CSO resources are only responsible for the stopped losses of other CSO resources who have been charged for negative performance scores during a CSC

Proposed Solution – Detailed Design (cont.)

The ISO does not propose changes to ACP calculation, or External Transaction scheduling

- **ACP Calculation:**
  - The ISO does *not* propose to change how the Actual Capacity Provided of any resource is calculated

- **External Transaction scheduling:**
  - Under the proposed changes, exports may prefer to be curtailed during a CSC, rather than be charged the PPR
  - The ISO does *not* propose to change the scheduling process for exports
  - Next month, the ISO will present additional information on the existing process for curtailing exports during a CSC
    - Please submit specific questions to Jasleen Singh (jsingh@iso-ne.com) by March 23rd, 2026

Potential Additional Change

Currently, system-backed exports are included in load in the capacity Balancing Ratio

- The Capacity Balancing Ratio (BR) is defined as: (load + reserve requirements)/ (Total Capacity Supply Obligation)
  - Where load = Total Actual Capacity Provided – Designated Reserves

- Currently, system-backed exports are included in the Capacity Balancing Ratio as load

- The ISO's initial thinking is to remove a participant's system-backed exports from the BR
  - This change aligns with the treatment of generator-backed exports, which reduce the BR by lowering the generator's Actual Capacity Provided
  - This change results in a conceptually simpler settlement, because it reduces charges and reduces balancing fund credits

Conclusion

- The ISO proposes to charge system-backed exports the PPR to improve market efficiency

- The ISO may propose to subtract system-backed exports from the numerator of the Balancing Ratio

- In April, the ISO will discuss:
  - Follow-ups from today's meeting
  - The curtailment process for exports
  - Tariff redlines

Stakeholder Schedule

Stakeholder Committee and Date	Scheduled Project Milestone
Markets Committee **March 10-12, 2026**	Summary of opportunity for improvement-and proposed design
Markets Committee **April 14-16, 2026**	Additional details on design and initial review of proposed Tariff language and any stakeholder amendments
Markets Committee **May 12-13, 2026**	Additional review of proposed Tariff language, stakeholder amendments, and vote
Participants Committee **June 16-18, 2026**	Vote

Questions

Acronyms Used in this Presentation

- EMM = External Market Monitor

- IMM = Internal Market Monitor

- PFP = Pay-for-Performance

- CSC = Capacity Scarcity Condition

- BR = Capacity Balancing Ratio

- ACP = Actual Capacity Provided

- SBE = System-backed Exports

- PPR = Performance Payment Rate

- CSO = Capacity Supply Obligation