New York ISO
Independent System Operator

Hydro Quebec (HQ) Chateauguay Modeling Recommendation

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Installed Capacity Subcommittee #308

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Agenda

- Current Modeling Assumptions
- Updated HQ Chateauguay Modeling Recommendation
- Impact Analysis
- Control Area System Resources Market Rule Changes
- Next Steps

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Current Modeling Assumptions

- HQ currently has External Capacity Resource Interconnection Service (CRIS) to supply external installed capacity (ICAP) across the Quebec interface via Chateauguay into the New York Control Area (NYCA)
  - Currently, these rights differ on a monthly basis during the winter season (November – April)
- Historically in the installed reserve margin (IRM) study, the HQ External CRIS has been modeled as imports from HQ to Load Zone D by adding the capacity into Load Zone D and a corresponding reduction to the interface from HQ to Load Zone D
- The IRM study currently models the average seasonal External CRIS from HQ for the import as a fixed amount for each month. The table below reflects the current winter values for the HQ External CRIS (see Attachment B of the NYISO Installed Capacity Manual)

Month	Nov	Dec	Jan	Feb	Mar	Apr	Avg.
HQ External CRIS (MW)	914	0	0	0	20	914	308

- Currently in the IRM study, the 308 MW average value is added to Load Zone D for each winter month and the interface is derated by this same amount (i.e., 308 MW)
  - Earlier this year, when implementing the modeling for Champlain Hudson Power Express (CHPE), the NYSRC approved removing emergency assistance (EA) from HQ in winter above the External CRIS amounts. As a result, the interface from HQ to Load Zone D is actually reduced to 0 MW in the study for the winter months

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Updated HQ Chateauguay Modeling Recommendation

- Given that there has not been winter loss of load risk in the IRM study until this cycle, it has not been critical to model the monthly import variation from HQ in the past, however as winter reliability risks emerge, it is important to seek alignment of the winter capacity availability assumption in the IRM model with availability expectations for the NYISO ICAP market
- The NYISO recommends modeling those monthly differences and changing the modeling to utilize a curtailable contract rather than corresponding adjustments to capacity in Load Zone D and the interface limit
  - A curtailable contract would permit flows from HQ to Load Zone D up to the applicable monthly MW value of the External CRIS unless needed in HQ to avoid a loss of load event
- This update would be more representative of the actual system conditions, better reflect the winter risk, and would align with NYISO's planning study modeling practices
- The 0 MW EA assumption from HQ in winter would still be in effect as the study would only allow for the External CRIS amount to flow across the interface and nothing beyond that in winter
  - The interface limit would also reflect the wheel-through amount from HQ to ISO New England (ISO-NE) to allow for the flow of this capacity which is modeled as a firm contract that flows from HQ through New York to ISO-NE

Month	Nov	Dec	Jan	Feb	Mar	Apr
Current MWs Assumed	308	308	308	308	308	308
Recommended MWs Assumed	914	0	0	0	20	914
Delta	+606	-308	-308	-308	-288	+606

Impact Analysis

- A parametric test case was conducted to determine the potential impact of implementing the recommended modeling change for the HQ External CRIS
  - The base case used for this analysis was an earlier 2026-2027 IRM final base case (FBC) parametric study, which included some assumption updates adopted since the preliminary base case Tan45 study was approved
- The analysis identified the potential for the recommended modeling change to increase the IRM by 0.09%
- The increase is caused by the reduction of assumed MW from HQ to Load Zone D during the peak winter months when loss of load expectation (LOLE) risk is observed for the 2026-2027 IRM study
- Given that the modeling change more accurately reflects system conditions and the impact is in line with expectations, the NYISO recommends implementing this change in the 2026-2027 IRM FBC

Case	Base Case	Recommended Modeling Change Implemented	Delta
IRM	26.09%	26.18%	+0.09%
Load Zone J LCR	80.64%	80.64%	-
Load Zone K LCR	105.62%	105.62%	-
Summer Risk (%)	88.1%	87.6%	-0.05%
Winter Risk (%)	11.9%	12.4%	+0.05%

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Control Area System Resources (CASR) Proposed Market Rule Changes

- **Potential changes to the CASR participation model are currently being developed within the NYISO stakeholder process**
  - One component of the proposed changes would require that ICAP provided under the CASR participation model can not be recalled or curtailed by the External Control Area to satisfy it own Control Area Load
    - Additional information on the proposal was presented at 9/17/2025 NYISO Business Issues Committee meeting: https://www.nyiso.com/documents/20142/53795513/05%20Review%20of%20Control%20Area%20System%20Resources.pdf
- **If the proposed changes are accepted by FERC, the NYISO recommends updating imports subject to the CASR participation model from "curtailable contracts" to "firm contracts" in future IRM studies**
  - Deferring this modeling change to a future year is unlikely to lead to material changes to the IRM study results as the curtailable contracts that would be impacted by these rules are rarely curtailed in the current IRM study

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Next Steps

- Subject to NYSRC approval, the NYISO recommends implementation of the HQ Chateauguay modeling update in the 2026-2027 IRM FBC
- The NYISO will continue to monitor the status of the proposed CASR market rule changes for potential modeling assumption changes in future IRM studies

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Questions?

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Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation

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