New York ISO
Independent System Operator

New Generator Assumptions in the IRM Study

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ICS

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Agenda

- The purpose of today's discussion is to seek input from the ICS on the proposed process for determining the inclusion of new generators in the assumptions for the IRM study
- This presentation covers:
  - Background
  - Conclusion and Proposed Process
  - Next Steps

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Background

- **According to the NRSRC Policy 5, new generators that are expected to participate in the ICAP starting June 1 of the Capability Year should be included in the IRM study**
  - Section 3.5

    "The IRM Study model base case reflects those resource and transmission changes that are received by the study input cutoff date and that will be effective on June 1 of the Capability Year to be studied."
  - Section 3.5.2

    "The IRM study base case will be updated for generating unit additions and removals consistent with the current Load and Capacity Data Report ("Gold Book"). In addition, the NYISO, pursuant to its procedures and tariffs, will identify the generating units that are eligible to participate in the NYISO's ICAP market and recommend to the NYSRC the inclusion or removal of such units in the IRM base case. The ICS may request the NYISO to provide information concerning its application of its procedures and tariffs."

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Background, cont'd

- **Historically, the new generator assumptions were part of the assumptions matrix that was reviewed and approved by ICS during the base case setup for both the preliminary base case and the final base case**
  - NYISO made inclusion recommendations based on Gold Book, Interconnection Queue and generator notifications
  - ICS inputs were also captured prior to the approval
  - New generators were listed and reviewed on an individual basis, including large and small generators
- **Stakeholders are requesting transparency in the process for determining the inclusion of new generators in the IRM Study assumptions. They have also requested improved efficiency in reviewing individual new generators due to the increasing volume of small generators entering the market**

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Conclusion and Principle

- **A formalized process for new generator assumptions in the IRM Study should be established to improve transparency and efficiency, with the following guiding principles:**
  - The process will continue to use the current Gold Book as the primary input to ensure consistency with the NYSRC Policy 5
    - The most recent RNA should also be an important input as part of the process
  - The process should establish the filtering criteria that can effectively produce a shortlist of new generator candidates for the IRM Study Capability Year
    - These criteria should be consistent with the RNA Base Case Inclusion Rules for new large and small generating facilities, as specified in Reliability Planning Process Manual Section 3.2 (see attachment for details)
    - The specific criteria should be aligned with the IRM timeline and ICAP Market participation requirements, which draws from the project status in the Class Year Study and the interconnection process, expected commercial operation date, and the customer registration process
  - Detailed review will be required for certain projects, which the NYISO proposes should be limited to large generators

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The Proposal

- **The proposed process for the inclusion of new generators in the assumptions in the IRM Study will start with the updated new generator data based on the following inputs:**
  - The Proposed Generator Additions in the current Gold Book, with Class Year Study status
  - New generating facilities included in the most recent RNA
  - The up-to-date Interconnection Queue (IQ)
  - Generator customer registration information
- **For new generators that may be considered for inclusion in the IRM Study for the study year, the NYISO proposes to apply inclusion criteria that are based on Class Year Study status from the current Gold Book, IQ status and COD, Customer Registration information, as well as input from the most recent RNA**

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The Proposal

- For new generators that may be considered for inclusion in the IRM Study for the study year, the NYISO proposes to apply inclusion criteria that are based on Class Year Study status from the current Gold Book, IQ status and COD, Customer Registration information, as well as input from the most recent RNA

New Generator Types	Class Year Study Status per recent Gold Book	IQ Status	COD	Customer Registration	Next Step	If Included in the recent RNA for same Study Year
Small Generator: ≤ 20 MW	Complete or in-progress	≥ 11	Prior to the end of Study Year	Complete or in-progress	If all satisfied, included in the IRM study	Included in the IRM Study
Large Generator > 20 MW	Complete or in-progress	≥ 11	Prior to the end of Study Year	Complete or in-progress	If all satisfied, proceed to detailed review	Proceed to detailed review

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The Proposal

- **For large generators that satisfy the criteria, the NYISO proposed to conduct the individual project detailed review to confirm status under each of the inclusion criteria**
  - Project specific information, potentially confidential, may be used during this review
- **Using the proposed criteria and the input from the recent Interconnection Queue, 2020 Gold Book, and 2020 RNA, the following eight projects are the examples that would proceed with detailed verification for this year's IRM study**
  - No small generators satisfied the criteria

Queue Pos	Owner/Developer	Project Name	Date of IR	SP (MW	WP (MW	Type/ Fue		Last Updat	Availability of Studie	FS Complete/ SGIA Tend	Proposed In-Servi	Proposed Initial-Syr	Proposed COD	Class Year Study Complted or In Progress in 2020 Gold Book	New Generators in 2020 RNA with COD before June 2023	Customer Registration Informatior
0349	Taylor Biomass Energy-Montgomery, LLC	Taylor Biomass	12/30/09	19	22.5	SW	12	12/31/17	SRIS, FS	10/15/13	08/2020	N/A	04/2021	Y	N	TBD
0387	Cassadaga Wind, LLC	Cassadaga Wind	7/19/12	126	126	W	12	5/31/20	FES, SRIS, FS	7/9/19	05/2020	05/2020	12/2020	Y	Y	TBD
0393	NRG Berrians East Development, LLC	Berrians East Replacement	10/16/12	94.2	57	D	11	4/30/20	FES, SRIS, FS	7/9/19	07/2022	10/2022	02/2023	Y	N	TBD
0396	Baron Winds, LLC	Baron Winds	11/30/12	238.4	238.4	W	11	5/31/20	FES, SRIS, FS	7/9/19	05/2020	05/2020	12/2020	Y	Y	TBD
0422	NextEra Energy Resources, LLC	Eight Point Wind Energy Center	11/7/13	101.2	101.2	W	11	8/31/20	FES, SRIS, FS	7/9/19	09/2022	09/2022	09/2022	Y	Y	TBD
0505	Ball Hill Wind Energy, LLC	Ball Hill Wind	6/2/15	100	100	W	11	4/30/20	FES, SRIS, FS	7/9/19	10/2021	07/2021	12/2021	Y	Y	TBD
0546	Atlantic Wind, LLC	Roaring Brook Wind	5/19/16	79.7	79.7	W	9, 10	9/30/20	FES, SRIS		11/2020	11/2020	12/2020	Y	Y	TBD
0678	LI Solar Generation, LLC	Calverton Solar Energy Center	10/26/17	22.9	22.9	S	9	7/31/19	SRIS		10/2020	11/2020	12/2020	Y	Y	TBD

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Next Steps

- NYISO plans to revise the proposed process for new generator assumptions based on input and comments from the ICS
- NYISO will work with the NYSRC to finalize the proposed process with the following details:
  - Specific filtering conditions and criteria
  - Timeline for process execution, e.g. input data extraction and detailed review
  - Data format for processing
- NYISO plans to implement the formalized process for the treatment of new generators in IRM Study assumptions for the 2022-2023 IRM study
- NYISO intends to continue improving the process for future IRM cycles based on updated analysis and lesson learned

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Questions?

Appendix

RNA Base Cases Inclusion Rules

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Reliability Planning Process Manual

-- Section 3.2

	Project Types	Inclusion Category A Project shall be included if:	Inclusion Category B Considerations for inclusion of project:
Generation	**Large Generating Facility** (as defined in OATT Attachment X)	a) All major project components (plant, fuel supply and delivery, system upgrades) under construction, and b) Class Year Interconnection Facilities Study complete, and c) Interconnection Agreement executed or accepted by FERC if filed unexecuted, and d) Making reasonable progress against the milestones in the Interconnection Agreement	Any Large Generating Facility that is either a member in the currently active Class Year, or has an executed Class Year Interconnection Facilities Study Agreement for the next Class Year, or has completed a Class Year Interconnection Facilities Study, or has an executed Interconnection Agreement or, if unexecuted, filed with FERC, may be included if significant progress has been made in regard to one or more of the following factors: a) Construction status of major project components (plant, fuel supply and delivery, system upgrades) b) Project financing / commitment (*e.g.*, status of an executed contract with a credit-worthy entity or equivalent financial security / closing, or of an award of a contract in response to a federal, state or local procurement process) c) Federal, state, and local permits and regulatory approvals for major project components
	Small Generating Facility (as defined in OATT Attachment Z)	a) Commercial Operation Date before the summer capability period of year 2 of the Study Period, and b) Facilities Study complete (if applicable), and c) Interconnection Agreement executed or accepted by FERC if filed unexecuted (if applicable), and d) Making reasonable progress against the milestones in the Interconnection Agreement	N/A

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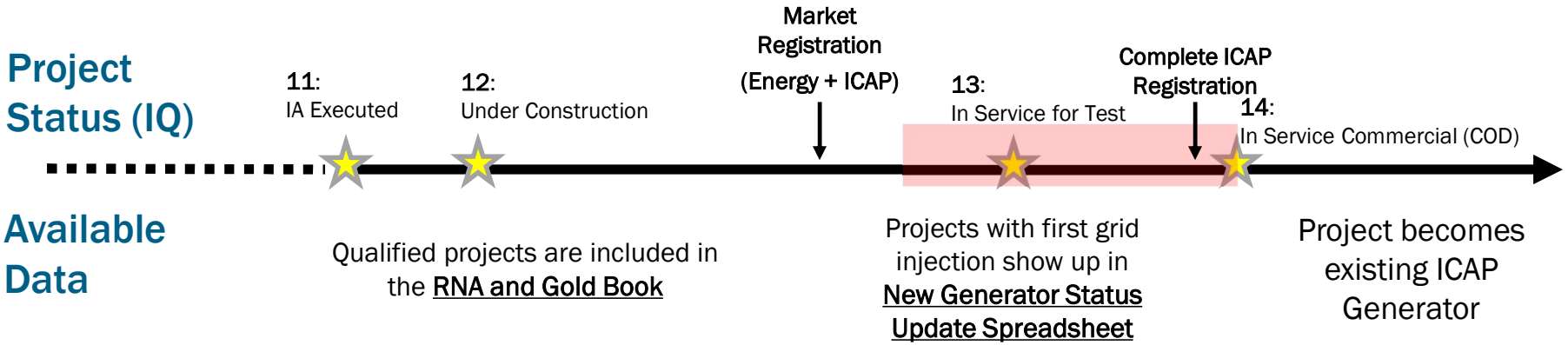
Generator Proceeds to ICAP Participation

- **To participate in the ICAP Market, a generator needs to:**
  - Have CRIS obtained through Class Year Study
  - Have executed the Interconnection Agreement and completed the construction
  - Have registered in the ICAP market, with all the technical requirements fulfilled (e.g., metering, DMNC test, etc.)



- **The process for determining the addition of new generators in the IRM Study assumptions aims to capture the projects that may be reasonably expected to participate in the ICAP market before the end of the Capability Year in the IRM Study**

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