

New Generator Assumptions in 2022-2023 IRM Study

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Background

- Starting 2021, the NYISO adopted a transparent process in screening new proposed generators for recommending inclusion in the IRM model.
- The process considers the following data inputs:
 - The published Gold Book (published in April)
 - Interconnection Queue (IQ)

- The most recent STAR or RNA
- Inputs from Customer Registration
- The NYISO then filters the data with following criteria, based on NYSRC's Policy 5 requirements and the NYISO experience with project development timeline
 - ✓ IQ Status ≥ 11 (executed Interconnection Agreement)
- ✓ COD Prior to June 1st of the Study Year

✓ Completed or in progress of obtaining CRIS

- ✓ Customer registration in progress or completed
- Plus new generators included in STAR or RNA with COD prior to June 1st of the Study Year
- List of new generators that satisfy the filtering criteria will be presented and ICS will provide inputs on the next steps



Step 1: The 2022 Gold Book

- 2022 Gold Book was published in April and all proposed new generators are included in Tables IV-1
- Using the information about CRIS status from Table IV-1 in the Gold Book, 123 generators (totaling 14,272.5 MW) pass the screening for either having received CRIS or being in the process of obtaining CRIS
 - Projects in Table IV-1 under the sections Completed Class Year
 Facilities Study, Completed CRIS Requests, Class Year 2021 are
 included, as well as projects in the remaining sections with CRIS or
 requested CRIS
 - Projects under section EDS 2021-01 are not included



Step 2: Interconnection Queue Information

- The Interconnection Queue ("IQ") dataset was downloaded on early May
 - Total of 389 new generation projects, among which 26 projects completed the Interconnection Agreement (Status ≥ 11) and also have COD prior to June 2023.
- For Gold Book proposed generators with Interconnection Queue positions and either completed or in progress of obtaining CRIS, 23 projects (787.5 MW) passed the screening for Interconnection Agreement ("IA") status and COD
- In additional, there are 14 projects (139.5 MW) in the Gold Book without
 Interconnection Queue positions and that have either received CRIS or in the process of obtaining CRIS



Step 3: New Units in the 2022 RNA

- The application of Inclusion Rules for the 2022 RNA was presented at the 4/26 ESPWG (https://www.nyiso.com/documents/20142/30198298/02%202022RNA%20InclusionRules.pdf)
- To capture inputs from the 2022 RNA, 4 large generators and 2 small generators are included
- Therefore, a total of 43 projects, totaling at 1419.9 MW, proceeded to additional screening for Customer Registration status (see Appendix for details)
 - 29 projects (1270.4 MW) with Interconnection Queue positions
 - 14 projects (139.5 MW) with no Interconnection Queue positions

2022 Gold Book (<u>post</u> <u>CRIS filter</u>)+IQ+RNA Input	Total Gen	Wind	Solar	Energy Storage	Hydro	Thermal	Large Gen (> 20MW)	Small Gen(≤20MW)
# of Generators	43	4	25	12	0	2	8	35
# of Summer MW	1419.9	417.5	836.1	142.3	0	14	860.4	549.5



Step 4: Customer Registration Status

- To participate in ICAP market, new generators need to register for both energy and capacity markets
- Projects that have initiated Customer Registration process, either in process or completed, will be included in the IRM Study
- 10 projects (357.8 MW) have initiated the Customer Registration process
 - Seven of these projects were already included in last year's FBC.
 - Therefore, three additional projects are recommended for inclusion for this year's Preliminary Base
 Case



Additional Considerations

- Detailed reviews were conducted on large generators and information to support the recommendation of including 2 wind projects in the 2023-2024 IRM study
- Solar projects are expected to experience further delays due to global supply chain disruptions with imported solar panels
 - Delays are being experienced by the 7 solar projects included those in last year's FBC
 - These 7 solar projects are still expected to meet the COD by June 2023
- The 14 projects with no Interconnection Queue positions are new generators connecting to the distribution system. Without these projects initiating the customer registration process, status and timing of ICAP participation beyond obtaining CRIS are unclear.
 - Distribution connected projects also have the choice of entering into Power Purchase Agreements ("PPA") with Transmission Owners and to become load modifiers
 - Two energy storage projects with no Interconnection Queue positions have not commenced ICAP participation since obtaining CRIS last year



Recommended for Inclusion

Q. Position	Project Name	Fuel	Zone	SP (MW)	WP (MW)	Status	Proposed COD	Recommendation
0422	Eight Point Wind Energy Center	Wind	С	101.8	101.8	IA Completed	2022-09	Included For PBC
531	Number 3 Wind Energy	Wind	E	103.9	103.9	IA Completed	2022-10	Included For PBC
579	Bluestone Wind	Wind	E	111.8	111.8	IA Completed	2022-10	Included For PBC
	King's Plaza Energy LLC	Natural Gas	J	6	6	IA In Progress	N/A	Already included in the IRM
0638	Pattersonville	Solar	F	20	20	IA Cpmpleted	2022-12	Already included in the IRM
0682	Grissom Solar	Solar	F	20	20	IA Cpmpleted	2022-6	Already included in the IRM
0730	Darby Solar	Solar	F	20	20	IA Cpmpleted	2022-12	Already included in the IRM
0735	ELP Stillwater Solar	Solar	F	20	20	IA Cpmpleted	2022-9	Already included in the IRM
0748	Regan Solar	Solar	F	20	20	IA Cpmpleted	2022-6	Already included in the IRM
0768	Janis Solar	Solar	С	20	20	IA Cpmpleted	2022-4	Already included in the IRM
0775	Puckett Solar	Solar	С	20	20	IA Cpmpleted	2022-4	Already included in the IRM



Next Steps

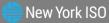
- Once the recommendations are accepted by the ICS, include the recommended new generators in the 2023-2024 IRM Preliminary Base Case
- Repeat the new generator screening process in September to update the new generator assumptions for the 2023-2024 IRM Final Base Case



Questions?



Appendix



29 New Generators listed in the Gold Book with Interconnection Queue positions

Queue Pos.	Project Name	SP (MW)	WP (MW)	Type/ Fuel	Zone	Status	Note
0422	Eight Point Wind Energy Center	101.8	101.8	Wind	С	IA Completed	
0505	Ball Hill Wind	100	100	Wind	Α	IA Completed	
0531	Number 3 Wind Energy	103.9	103.9	Wind	Е	IA Completed	
0579	Bluestone Wind	111.8	111.8	Wind	Е	IA Completed	
0545	Sky High Solar	20	20	Solar	С	IA Completed	
0564	Rock District Solar	20	20	Solar	F	IA Completed	
0565	Tayandenega Solar	20	20	Solar	F	IA Completed	
0570	Albany County 1	20	20	Solar	F	IA Completed	
0572	Greene County 1	20	20	Solar	G	IA Completed	
0573	Greene County 2	10	10	Solar	G	IA Completed	
0584	Dog Corners Solar	20	20	Solar	С	IA Completed	
0586	Watkins Rd Solar	20	20	Solar	Е	IA Completed	
0598	Albany County 2	20	20	Solar	F	IA Completed	
0666	Martin Rd Solar	20	20	Solar	Α	IA Completed	
0667	Bakerstand Solar	20	20	Solar	Α	IA Completed	
0670	Skyline Solar	20	20	Solar	Е	IA Completed	



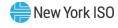
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Queue Pos.	Project Name	SP (MW)	WP (MW)	Type/ Fuel	Zone	Status	Note
0638	Pattersonville	20	20	Solar	F	IA Completed	Included last year
0682	Grissom Solar	20	20	Solar	F	IA Completed	Included last year
0730	Darby Solar	20	20	Solar	F	IA Completed	Included last year
0735	ELP Stillwater Solar	20	20	Solar	F	IA Completed	Included last year
0748	Regan Solar	20	20	Solar	F	IA Completed	Included last year
0768	Janis Solar	20	20	Solar	С	IA Completed	Included last year
0775	Puckett Solar	20	20	Solar	С	IA Completed	Included last year
0721	Excelsior Energy Center	280	280	Solar	Α	IA in Progress	Include by RNA Inclusion Rule
0618	High River Solar	90	90	Solar	F	IA in Progress	Include by RNA Inclusion Rule
0619	East Point Solar	50	50	Solar	F	IA in Progress	Include by RNA Inclusion Rule
0734	ELP Ticonderoga Solar	20	20	Solar	F	IA in Progress	Include by RNA Inclusion Rule
0678	Calverton Solar Energy Center	22.9	22.9	Solar	K	IA in Progress	Include by RNA Inclusion Rule
0759	KCE NY 6	20	20	Energy Storage	Α	IA in Progress	Include by RNA Inclusion Rule



14 New Generators listed in the Gold Book without Interconnection Queue positions

Station Unit	Zone	CRIS (MW)	Unit Type
Spring Creek Tower	J	8	Diesel
Eagle Energy Storage	J	20	Energy Storage
Groundvault Energy Storage	J	12.5	Energy Storage
Stillwell Energy Storage	J	10	Energy Storage
Cleancar Energy Storage	J	15	Energy Storage
Hannacroix Solar	G	3.2	Solar
Monsey 44-6	G	5	Energy Storage
Monsey 44-2	G	5	Energy Storage
Monsey 44-3	G	5	Energy Storage
Cuddebackville Battery	G	10	Energy Storage
Yonkers Grid	J	20	Energy Storage
King's Plaza	J	6	Natural Gas
Port Jefferson Energy Storage	K	9.9	Energy Storage
Suffork County Energy Storage	K	9.9	Energy Storage



Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

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

