

2020 RNA Inclusion Rules

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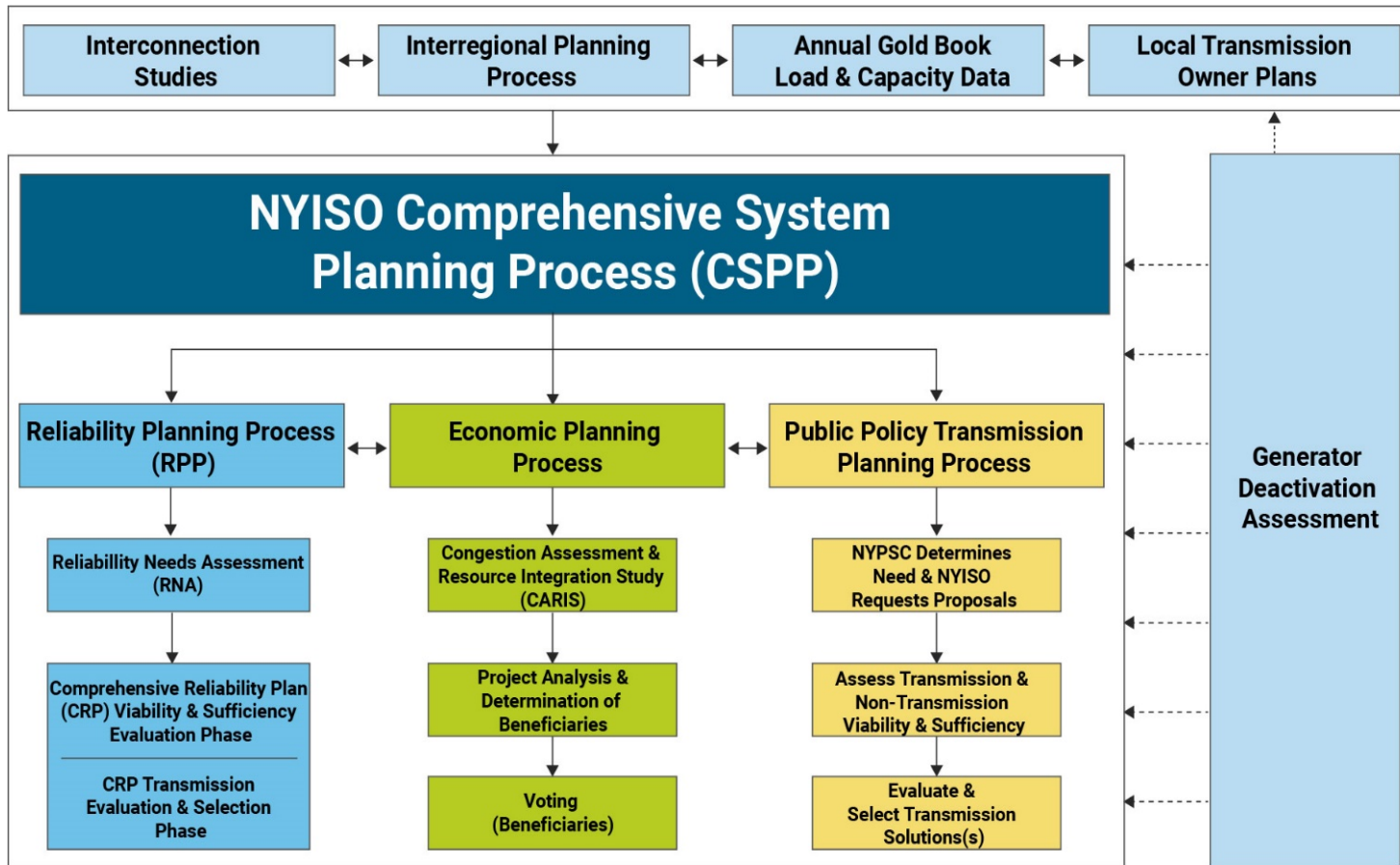
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TPAS/ESPG

April 6, 2020, KCC

2020 RNA Background

- **The 2020-2021 Reliability Planning Process (RPP) starts with the 2020 Reliability Needs Assessment (2020 RNA) followed by the Comprehensive Reliability Plan (CRP)**
 - 2020 RNA Study Period: year 1 (y1) = 2021 through year 10 (y10) = 2030
- **Reliability evaluations consist of resource adequacy and transmission security evaluations of the New York Bulk Power Transmission Facilities over a ten-year* Study Period**
 - Subject to change due to the NYISO-proposed Short Term Reliability Process, filed with FERC on Feb. 27, 2020
- **The RPP is part of the Comprehensive System Planning Process (CSPP) and is performed pursuant to the Attachment Y of the NYISO OATT; see Section 31.2.**
 - Additional implementation details, including recently updated RNA Base Case inclusion rules, are captured in the RPP Manual #26
- **2020 RNA will be based on the information from the Gold Book 2020, the 2020 FERC 715 filing (power flow cases and auxiliary files), historical data, and market participant data**
- **Reliability evaluations: transmission security and resource adequacy**



2020 RNA Base Case and the Inclusion Rules Application

2020 RNA Base Case Development Background

- **Based on the RNA Base Case, the NYISO identifies Reliability Needs of the New York State Bulk Power Transmission Facilities (BPTFs) in accordance with applicable Reliability Criteria (*i.e.*, NERC, NPCC, and NYSRC)**
- **2020 RNA Base Case:**
 - For the transmission security evaluations, the NYISO uses the 2020 FERC Form 715 filing and the information from the 2020 Gold Book as a starting point for developing the base case system models with the application of the inclusion rules.
 - For the resource adequacy evaluation, the models are developed starting with prior resource adequacy models, and are updated with information from the 2020 Gold Book and historical data, with the application of the inclusion rules. Information on modeling of neighboring systems is based on the input received from the NPCC CP-8 working group.
- **An updated Manual 26 was approved on December, 2019, with certain changes related with the inclusion rules**
 - The inclusion rules are used as guidelines to determine what proposed projects will be included in the RNA Base Case, and also how to treat generator deactivations

2020 RNA: Inclusion Rules Application

- **Proposed generation and transmission to be included:**
 - next slide contains a list of projects
- **Generation deactivations: all plant deactivations listed in the 2020 Gold Book Section IV will be out of service**
- **Proposed Local Transmission Owner Plans (LTP) to be included:**
 - All BPTF LTPs listed in the 2020 GB Section VII as firm, with consideration for the in-service date
 - All non-BPTF LTPs listed by the Transmission Owner as firm
- **Existing transmission facilities modeled out-of-service include:**
 - Con Edison's B3402 and C3403 345 kV cables for the entire study period
 - Moses-St. Lawrence L33P through winter 2022

Proposed Projects Included in the 2020 RNA Base Case

also included in the 2018-2019 RPP Base Cases				
Project Types	Queue #	Project Name	SP MW	Interconnection Status
Large Gens	387	Cassadaga Wind	126.5	CY17
	396	Baron Winds	238.4	CY17
	422	Eight Point Wind Energy Center	101.8	CY17
	505	Ball Hill Wind	100.0	CY17
	546	Roaring Brook Wind	79.7	CY19
	678	Calverton Solar Energy Center	22.9	CY19
Regulated Transmission Solutions	Q545A	Empire State Line	n/a	completed TIP Facility Study (Western NY PPTPP)
	556	Segment A Double Circuit		TIP Facility Study in progress (AC PPTPP)
	543	Segment B Knickerbocker-Pleasant Valley 345 kV		TIP Facility Study in progress (AC PPTPP)
	430	Cedar Rapids Transmission Upgrade		CY17
System Deliverability Upgrades (SDUs)		Leeds-Hurley SDU	n/a	SDU triggered for construction in CY11

Acronyms:

CYxx: (Interconnection) Class Year (Facilities Studies) + last 2 digits of the year

TIP: Transmission Interconnection Process

AC PPTPP: Alternative Current Public Policy Transmission Planning Process

DEC's Peaker Rule Impacts on the 2020 RNA Base Case

DEC Peaker Rule Background

- New York State Department of Environmental Conservation (DEC) adopted a regulation to limit nitrogen oxides (NO_x) emissions from simple-cycle combustion turbines (“Peaking Units”) (referred to as the “Peaker Rule”)
- The Peaker Rule required all impacted plant owners to file compliance plans by March 2, 2020
- NYISO is considering generators’ compliance plans in the development of the 2020 Reliability Needs Assessment Base Case

Status Change due to DEC's Peaker Rule, Zone G

Units	Nameplate MW	2023 OS	2023 non-OS	2024 OS	2024 non-OS	2025 OS	2025 non-OS
		May 2023 - September 2023	October 2023 - April 2024	May 2024 - September 2024	October 2024 - April 2025	May 2025 - September 2025	October 2025 - April 2026
Coxsackie GT	22	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
South Cairo	22	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Unavailable Capacity		43	43	43	43	43	43
Impacted Capacity	43	OS - Ozone Season: May 1st - September 30th					

Notes:

1. The service pattern in the last two columns repeats in subsequent years of the RNA Study Period
2. Other Compliance Plans were submitted in addition to what is shown on this table. The table lists the compliance plans that resulted in a change of status.

Status Change due to DEC's Peaker Rule, Zone J

Units	Nameplate MW	2023 OS	2023 non-OS	2024 OS	2024 non-OS	2025 OS	2025 non-OS
		May 2023 - September 2023	October 2023 - April 2024	May 2024 - September 2024	October 2024 - April 2025	May 2025 - September 2025	October 2025 - April 2026
Astoria GT1	16	In Service	In Service	In Service	In Service	Out of Service	In Service
Gowanus 1&4	320	Out of Service	In Service	Out of Service	In Service	Out of Service	In Service
Gowanus 2&3	320	In Service	In Service	In Service	In Service	Out of Service	In Service
Narrows 1&2	352	In Service	In Service	In Service	In Service	Out of Service	In Service
Ravenswood GTs	369	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Arthur Kill GT1	20	In Service	In Service	In Service	In Service	Out of Service	Out of Service
Astoria GTs	558	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Con Ed 59th St	17	In Service	In Service	In Service	In Service	Out of Service	Out of Service
Con Ed 74th St	37	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Con Ed Hudson Ave	49	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Unavailable Capacity		1,333	1,013	1,333	1,013	2,058	1,050
Available Capacity		725	1,045	725	1,045	0	1,008
Impacted Capacity	2,058	OS - Ozone Season: May 1st - September 30th					

Notes:

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Status Change due to DEC's Peaker Rule, Zone K

Units	Nameplate MW	2023 OS	2023 non-OS	2024 OS	2024 non-OS	2025 OS	2025 non-OS
		May 2023 - September 2023	October 2023 - April 2024	May 2024 - September 2024	October 2024 - April 2025	May 2025 - September 2025	October 2025 - April 2026
Glenwood GT1	16	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Northport GT	16	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Port Jefferson GT1	16	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
West Babylon GT4	52	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service	Out of Service
Unavailable Capacity		100	100	100	100	100	100
Impacted Capacity	100	OS - Ozone Season: May 1st - September 30th					

Notes:

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2. Other Compliance Plans were submitted in addition to what is shown on this table. The table lists the compliance plans that resulted in a change of status.

Next Steps on RNA

Next Steps

- **April and May ESPWG/TPAS – major assumptions updates, as applicable**
- **June 19 ESPWG/TPAS: present preliminary (“1st pass”) RNA results**
 - June 29 ESPWG and/or July 6 TPAS: Transmission Owners and NYISO’s presentations of projects status updates, relevant to mitigating the identified 1st pass Reliability Needs, if any
- **July 6, 2020: lock down assumptions for final (“2nd pass”) RNA**
- **August 3, August 22, September 4 ESPWG/TPAS: review draft RNA reports**
 - Sept 4 ESPWG/TPAS: recommendation for approval of the 2020 RNA
- **October OC/MC: Market Monitoring Unit review and OC and MC votes**
- **November: NYISO’s Board of Directors approval**

Questions?

We are here to help. Let us know if we can add anything.

The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policy makers, stakeholders and investors in the power system



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