New York ISO
Independent System Operator

Buyer-Side Mitigation (BSM) Renewables Exemption Study

Draft Study Results

Ethan D. Avallone

Technical Specialist, Capacity Market Design

ICAPWG/MIWG

May 5, 2021

Purpose

- We are here today to review draft BSM Renewables Exemption Study results.

New York ISO

Background

Date	Working Group	Discussion Points and Links to Materials
June 2, 2020	ICAPWG/MIWG	Preliminary Identification of Candidate Intermittent Renewable Technologies https://www.nyiso.com/documents/20142/6474763/5_9_2019_Reserves_for_Resource_Flexibility_FINAL.pdf/f5b74852-2b18-9233-a8fa-bfc488ed1238
December 7, 2020	ICAPWG/MIWG	Review Total Cost Estimates https://www.nyiso.com/documents/20142/17450815/December_7_2020_BSM_Renewable_Study_ICAPWG_FINAL%20(002).pdf/5c9d4577-9133-0a36-1f57-0d5b1a57bac0
January 28, 2021	ICAPWG/MIWG	Review Draft Study Methodology https://www.nyiso.com/documents/20142/18803752/BSM_Renewables_Exemption_Study_Methodology_1.28.2021_FINAL.pdf/519285e1-35ef-93c9-5fb5-7390c52f0a02

New York ISO

Candidate Study Technologies

Technology	NYISO Zones			
	G	H	I	J
Ground Mounted Solar PV Project Size: 1 - 10 MW	✓	✓	✓	✓
Ground Mounted Solar PV Project Size: 10 - 50 MW	✓	✓	✓	✓
Ground Mounted Solar PV Project Size: Greater 50 MW	✓	-	-	-
Wind Onshore 2 - 4 MW WTG* Size Project Size: 2 - 50 MW	✓	-	-	-
Wind Onshore 2 - 4 MW WTG* Size Project Size: 50 - 200 MW	✓	-	-	-
Wind Offshore 6 - 12.5 MW WTG* Size Project Size: up to 400 MW	-	-	-	✓
Wind Offshore 6 - 12.5 MW WTG* Size Project Size: 400 - 800 MW	-	-	-	✓
Run of River Hydro Project Size: 1 - 10 MW	✓	-	-	-
Landfill Gas (LFG) Project Size: 2 - 10 MW	✓	✓	✓	✓

* Note: WTG = Wind Turbine Generator

New York ISO

Tariff Requirements

- **In each ICAP Demand Curve Reset Filing Year, the ISO must conduct a periodic review to determine the technology types that should be Exempt Renewable Technologies (MST 23.4.5.7.13.2.1)**
  - The ISO will determine, for each Mitigated Capacity Zone, which candidate intermittent renewable technologies have (a) high development costs and (b) a low capacity factor, such that considering (a) and (b) there is limited or no incentive and ability to develop the candidate intermittent renewable technology in order to artificially suppress capacity prices (MST 23.4.5.7.13.2.2)
  - The ISO's periodic review shall provide for: (a) the ISO's preliminary identification of candidate intermittent renewable technologies for stakeholder review and comment (MST 23.4.5.7.13.2.3), which was accomplished with the June 2, 2020 presentation to stakeholders.
  - The ISO will then issue a draft list of recommended Exempt Renewable Technologies, and the basis for the recommendation, for stakeholder and Market Monitoring Unit review (MST 23.4.5.7.13.2.3).
    - This presentation will occur after FERC acceptance of the 2021 to 2025 ICAP Demand Curves and annual update methodology.
  - After FERC acceptance of the ICAP Demand Curves and annual update methodology, the NYISO has 60 days to file with FERC the results of its Exempt Renewable Technology periodic review and determination (23.4.5.7.13.2.4).

New York ISO

Study Purpose

- **The Net Present Value (NPV) of the revenues and costs associated with each Candidate Technology are analyzed to determine if the projected cost of new entry is greater than the sum of the estimated revenues to the resource and the expected cost savings to a Load Serving Entity (LSE) financing the project.[1]**
  - Candidate technologies are intermittent, renewable, and commercially viable in the wholesale market. These technologies may have high development costs and low capacity factors such that they have limited or no incentive and ability to artificially suppress capacity prices.

Candidate Technology will be Exempt Renewable Technology if:

Projected Cost of New Entry > (Estimated value of revenues associated with the production and sale of renewable energy and capacity + Expected cost savings to Load due to reduction in ICAP prices)

[1]The 2016 BSM Renewables Exemption Study filing is included in FERC Docket No. ER16-1404 and at the following link: https://nyisoviewer.etariff.biz/ViewerDocLibrary//Filing/Filing1131/Attachments/Filing_1131.zip

Study Results

Candidate Technology Results

- **Solar, land-based wind, offshore wind, and run-of-river hydro are identified as Exempt Renewable Technology from BSM.**
  - The estimated revenue to the candidate technology and cost savings to load were below zero for each of these candidate technologies.
- **Landfill gas is not identified as Exempt Renewable Technology.**
  - The estimated revenue to the candidate technology and cost savings to load were above zero for this candidate technology in NYC.
- **Intermittent technologies that are not identified as Exempt Renewable Technology are able to request an individual exemption evaluation.**

Candidate Technology	Result
Solar	Exempt
Land-based Wind	Exempt
Offshore Wind	Exempt
Run-of-River Hydro	Exempt
Landfill Gas	Not Exempt

New York ISO

NPV of Plant Cash Flow and Cost Savings

- The NPV of plant cash flow and cost savings to load is negative for solar, land-based wind, offshore wind, and run-of-river hydro.

Locality (Load Zone)	Candidate Technology	NPV of Plant Cash Flows and Cost Savings to Load
G-J (G)	Solar	$ (49,160,615)
G-J (H)	Solar	$ (19,135,912)
G-J (I)	Solar	$ (19,092,292)
NYC (J)	Solar	$ (9,399,212)
G-J (G)	Land-based Wind (PTC)	$ (44,619,252)
G-J (G)	Land-based Wind (ITC)	$ (33,512,420)
NYC (J)	Offshore Wind	$ (849,717,597)
G-J (G)	Run-of-River Hydro	$ (44,453,943)
G-J (G)	Landfill Gas	$ (3,251,665)
G-J (H)	Landfill Gas	$ (4,090,710)
G-J (I)	Landfill Gas	$ (4,015,960)
NYC (J)	Landfill Gas	$ 13,028,678

New York ISO

Study Feedback

Feedback

- The NYISO has considered stakeholder feedback on the study methodology.*

Feedback	Result
Offshore wind should include cost estimates for units greater than 800 MW	The study filing will use results for 800 MW offshore wind resources. A sensitivity for 1200 MW is included in the study.
The NYISO should assume at least 10 years for the return to the historical LOE instead of 5 years.	The study filing will use 5 years. A sensitivity has been included for 10 years.
Study assumptions look at history, but should forecast future market conditions, including IRM/ LCRs.	This is a potential future enhancement. As the study results are expected to be closer in the future, this modeling may be appropriate to consider in future iterations of the study.
The wind and solar energy production factors seem low.	Wind and solar shapes that are consistent with those utilized in the NYISO's CARIS studies were scaled up until the energy production factors of these resources were equal to the Sargent & Lundy estimates.

*Study assumptions are detailed in the study spreadsheet posted with today's meeting materials.

New York ISO

Feedback (continued)

- The NYISO has considered stakeholder feedback on the study methodology.*

Feedback	Result
Some resources may have a non-zero impact to the Unforced Capacity Reserve Margin (URM), and therefore it is appropriate to discount capacity market savings using a URM impact.	This is a potential future enhancement. As the study results are expected to be closer in the future, this modeling may be appropriate to consider in future iterations of the study.
Financial parameters should be tied to merchant companies, not utilities.	The study filing will use utility financial parameters. REC payments are relatively consistent and predictable, meaning that financing should be closer to a utility than a private developer.
REC should be included as a cost for Load.	The REC cost is included as a cost for Load in the study.
Offshore wind should not be assumed to be subject to NYC property tax.	Federal lease cost, instead of a property tax expense assumption, was applied to offshore wind.
In general, property tax values seem high.	The study uses property tax estimates from Sargent & Lundy. A sensitivity has been included assuming zero property tax, except for offshore wind, as the property tax was already removed for this technology as noted above.

*Study assumptions are detailed in the study spreadsheet posted with today's meeting materials.

New York ISO

Offshore Wind Lease Cost

- **A 2.0% of capital costs value was used by Sargent & Lundy in setting the Property Tax Expense for offshore wind.**
  - Federal lease expenses were not included in this value.
- **It is likely only the interconnection for offshore wind would be subject to NYC property tax, and it is certain that these units have a Federal lease expense.**
  - Thus, the property tax expense was removed for offshore wind, and substituted for an estimate of the federal lease cost

New York ISO

Excluded Costs

- **Excluded Costs:**
  - Site leasing costs (except for offshore wind), since these are case specific.
  - Costs of system facilities upgrades, which vary by project to project, and are location specific.
- **Excluding these costs makes the analysis more conservative**
  - Including these costs would increase the estimated costs of new entry and, therefore, decrease expected NPV of a project.
    - A project that that has limited or no incentive and ability to artificially suppress capacity prices without these costs would have even less incentive and ability to artificially suppress capacity prices with the costs.

New York ISO

Study Inputs

Study Inputs - Overview

- **Study assumptions are discussed in the following slides.**
  - A more detailed look at the study inputs is available in Appendix I of this presentation.
  - Links to various data sources are provided on the “assumptions” sheet in the study file posted with today’s meeting materials.

New York ISO

ICAP Market Slope Inputs

- **The most up to date ICAP inputs are included in the study, including:**
  - ICAP prices May 2018 to April 2021
  - Updated DCR slope values, based on the FERC's April 9, 2021 Order (shown at right)

Parameter - Summer 2021	NYCA (Zone C)	G-J (Rockland)	NYC (Zone J)	Long Island (Zone K)
Load Forecast	32,333.1	15,411.3	11,199.0	5,248.6
Locational Capacity Requirement	120.7%	87.6%	80.3%	102.9%
ICAP Reference Point	$7.81	$ 13.28	$ 21.28	$ 17.60
ICAP/UCAP Derating Factor	8.77%	3.61%	2.69%	4.91%
Zero Crossing Point	112%	115%	118%	118%
Slope	-0.002004	-0.007059	-0.013884	-0.020024

Parameter - Winter 2021/2022	NYCA (Zone C)	G-J (Rockland)	NYC (Zone J)	Long Island (Zone K)
Load Forecast	32,333.1	15,411.3	11,199.0	5,248.6
Locational Capacity Requirement	120.7%	87.6%	80.3%	102.9%
ICAP Reference Point	$7.81	$ 13.28	$ 21.28	$ 17.60
ICAP/UCAP Derating Factor*	6.61%	2.85%	2.70%	5.91%
Zero Crossing Point	112%	115%	118%	118%
Slope	-0.001911	-0.006948	-0.013886	-0.020455

*From winter 2020/2021

Zones Studied and Capacity Factors

- Construction of candidate technologies was considered for mitigated capacity zones, as these areas are subject to buyer-side mitigation.
- Capacity market factors were set according to default ICAP manual values, publically available documentation, and aggregated actual NYISO data.

Candidate Technology	Zone(s)	Capacity Factor	
		Summer	Winter
Offshore Wind	J	30.00%	50.00%
Land-Based Wind	G	16.00%	34.00%
Solar	GHIJ	46.00%	2.00%
ROR Hydro	G	48.44%	60.27%
Landfill Gas	GHIJ	65.13%	60.97%

New York ISO

Energy Market Revenue

- **Energy Market MW production was estimated based on:**
  - CARIS production shapes.
    - This was done for the solar, land-based wind, and offshore wind candidate technologies.
    - Note that production shapes for solar, land-based wind, and offshore wind were scaled up to be consistent with S&L estimates, as noted on slide 12.
  - Resource production data
    - This was done for the run-of-river hydro and landfill gas candidate technologies.
- **Energy market revenues were estimated using this MW data and the hourly average of the energy market Real-Time time-weighted integrated LBMPs from September 1, 2017 to August 31, 2020 (the study period from the most recent DCR).**

New York ISO

Revenues and Costs

- Revenue to the candidate technologies in the form of capacity, energy market payments, tax credits, and Renewable Energy Credits (RECs) were included in the analysis.
- Costs to construct the candidate technologies, fixed operations and maintenance (O&M) costs, as well as taxes were considered.

Locality (Load Zone)	Candidate Technology	Size (MW)	Installed Project Capital Costs	Fixed O&M	Net E&AS Revenue - Year 1	REC Revenue - Year 1	Summer ICAP Revenue - Year 1	Winter ICAP Revenue - Year 1
G-J (G)	Solar	100	$1,361/kW	$4,746,500/yr	$4,158,493/yr	$3,286,261/yr	$1,534,480/yr	$8,100/yr
G-J (H)	Solar	20	$1,885/kW	$1,227,000/yr	$848,422/yr	$657,252/yr	$321,236/yr	$1,647/yr
G-J (I)	Solar	20	$1,885/kW	$1,227,000/yr	$852,968/yr	$657,252/yr	$321,236/yr	$1,647/yr
NYC (J)	Solar	20	$2,204/kW	$1,406,000/yr	$934,908/yr	$657,252/yr	$771,361/yr	$11,099/yr
G-J (G)	Land-based Wind (PTC)	100	$1,577/kW	$7,140,000/yr	$11,845,473/yr	$8,802,486/yr	$554,063/yr	$92,340/yr
G-J (G)	Land-based Wind (ITC)	100	$1,577/kW	$7,140,000/yr	$11,845,473/yr	$8,802,486/yr	$554,063/yr	$92,340/yr
NYC (J)	Offshore Wind	800	$4,277/kW	$114,630,983/yr	$102,567,565/yr	$79,281,504/yr	$15,508,106/yr	$120,000/yr
G-J (G)	Run-of-River Hydro	5	$8,077/kW	$1,729,000/yr	$400,433/yr	$289,358/yr	$85,264/yr	$12,077/yr
G-J (G)	Landfill Gas	10	$2,305/kW	$1,157,000/yr	$1,640,797/yr	$1,267,420/yr	$35,307/yr	$4,133/yr
G-J (H)	Landfill Gas	10	$2,408/kW	$1,181,000/yr	$1,667,932/yr	$1,267,420/yr	$35,307/yr	$4,133/yr
G-J (I)	Landfill Gas	10	$2,408/kW	$1,181,000/yr	$1,675,742/yr	$1,267,420/yr	$35,307/yr	$4,133/yr
NYC (J)	Landfill Gas	10	$2,718/kW	$1,253,000/yr	$1,788,783/yr	$1,267,420/yr	$84,610/yr	$27,780/yr

Study Duration Inputs

- **The capacity price effect longevity is used to indicate how long capacity prices would remain depressed by entry of the candidate technologies before rising again in response to resource exit.**
  - This concept is also known as the return to the historical level of excess (LOE) conditions. A value of 5 years was used for the study.
- **The amortization period is the number of years over which the investment is analyzed, and is tied to the length of the REC contract.**
  - This time period is 25 years for offshore wind, and 20 years for all other technologies.

New York ISO

Financial Inputs

- Two depreciation types are available in the analysis: Straight Line and Modified Accelerated Cost Recovery System (MACRS) Depreciation.
  - MACRS depreciation is assumed for the study, as it is the most advantageous to the resource.
- Inflation and tax rate inputs from the most recent Demand Curve Reset are included as assumptions.
- Utility annual reports informed the Return on Equity, Cost of Debt, and percent of debt/ equity used in the study.

New York ISO

Tariff Revisions

Tariff Revisions

- **Tariff revisions are posted with today's meeting materials.**
  - MST Attachment H, section 23.2.1 Definitions
    - Revise the definition of Exempt Renewable Technology to add the newly exempt technology.
  - MST 23.4.5.7.13.1.1 (i)
    - Minor revision to include "Hydro" in the reference to "a Limited Control Run-of-River Hydro Resource."

New York ISO

Timeline

Next Steps

- **Early May**
  - Stakeholders should provide any written feedback on the Study to the NYISO by emailing Debbie Eckels (deckels@nyiso.com) by May 14th. The NYISO will post this feedback to the ICAPWG materials page on the NYISO website. Stakeholders submitting feedback should indicate if they do not want their written feedback posted.
- **On or before June 8, 2021**
  - The NYISO will file with the Commission the results of its Exempt Renewable Technology periodic review and determination.

New York ISO

Appendix I: Assumptions

Zones Studied and Capacity Factors

Input	Candidate Technology	Study Value	Notes
Zones	Land-Based Wind	G	
	Solar	GHIJ	
	ROR Hydro	G	
	Landfill Gas	GHIJ	
Capacity Market Factor - Summer	Offshore Wind	30.00%	UCAP production factors at p. 13 (pdf page 70)
	Land-Based Wind	16.00%	Default ICAP Manual Value
	Solar	46.00%	Default ICAP Manual Value
	ROR Hydro	48.44%	Average summer '18, '19, '20
	Landfill Gas	65.13%	Average summer '18, '19, '20
Capacity Market Factor - Winter	Offshore Wind	50.00%	UCAP production factors at p. 13 (pdf page 70)
	Land-Based Wind	34.00%	Default ICAP Manual Value
	Solar	2.00%	Default ICAP Manual Value
	ROR Hydro	60.27%	Average winter '18/'19, '19/'20, '20/'21
	Landfill Gas	60.97%	Average winter '18/'19, '19/'20, '20/'21

New York ISO

Investment Incentives

Input	Candidate Technology	Study Value	Notes
ITC (Percent of investment cost)	Offshore Wind	30.00%	
	Land-Based Wind	18.00%	
	Solar	22.00%	
	ROR Hydro	0%	
	Landfill Gas	0%	
PTC	Offshore Wind	$0.00	
	Land-Based Wind	$15.00	
	Solar	$0.00	
	ROR Hydro	$13.00	
	Landfill Gas	$13.00	
PTC Horizon	Offshore Wind	N/A	
	Land-Based Wind	10	
	Solar	N/A	
	ROR Hydro	10	
	Landfill Gas	10	
REC	Offshore Wind	$ 25.14	2018 OREC Cost
	Land-Based Wind	$ 22.33	2021 Quarter 1 Tier 1 REC Cost
	Solar	$ 22.33	2021 Quarter 1 Tier 1 REC Cost
	ROR Hydro	$ 22.33	2021 Quarter 1 Tier 1 REC Cost
	Landfill Gas	$ 22.33	2021 Quarter 1 Tier 1 REC Cost

New York ISO

Study Duration Inputs

Input	Candidate Technology	Study Value	Notes
Capacity Price Effect Longevity (Return to LOE Conditions)	Offshore Wind	5	
	Land-Based Wind	5	
	Solar	5	
	ROR Hydro	5	
	Landfill Gas	5	
Amortization Period	Offshore Wind	25	
	Land-Based Wind	20	
	Solar	20	
	ROR Hydro	20	
	Landfill Gas	20	

New York ISO

Financial Inputs

Input	Candidate Technology	Study Value	Notes
Depreciation Type	Offshore Wind	MACRS	
	Land-Based Wind	MACRS	
	Solar	MACRS	
	ROR Hydro	MACRS	
	Landfill Gas	MACRS	
Offshore Wind Estimated Federal Lease Cost ($/MW)	Lease Cost	42,469,725	Note that Statoil changed its name to Equinor, as noted in a March 18, 2015 press release by the company.
	MW	2,076	
	$/MW	$ 20,457.48	
Minimum NYCA Price		$0.05	
ROE		8.90%	Regulated rates of return for ConEdison, O&R, and CH*
Inputs to Estimate Cost of Debt	Cost of Debt (ConEdison)	4.63%	Cost of long-term debt, 2020-2022 (page 132)
	Cost of Debt Year 1, 2, 3 (Orange & Rockland)	5.17%	
		5.14%	Cost of long-term debt, 2019-2021 (page 135)
		5.14%	
	Interest on long-term debt (Central Hudson)	$ 31,978,000	2020 Interest on long-term debt (page 9)
	Long-term Debt (Central Hudson)	$ 837,000,000	2020 Long-term Debt (page 88)
	Estimated Cost of Debt (Central Hudson)	3.82%	Estimated cost of long-term debt
Estimated Cost of Debt		4.53%	
Percent Debt		52%	One utility had a range of 50% to 52%, the others were 52%
Percent Equity		48%	
Inflation		2.10%	Utilized most recent DCR assumptions
Federal Tax Rate		21.00%	Utilized most recent DCR assumptions
State Tax Rate		6.50%	Utilized most recent DCR assumptions
City Tax Rate		8.85%	Utilized most recent DCR assumptions
Composite Tax Rate (NYC)		36.35%	Utilized most recent DCR assumptions
Composite Tax Rate (non-NYC)		27.50%	Utilized most recent DCR assumptions

Miscellaneous Assumptions

Net EAS Revenue Calculation	CARIS production shape data used for Land-Based Wind, Offshore Wind, and Solar.		
	Actual production shape data used for Run-of-River Hydro		
	Actual production shape data used for Landfill Gas		
	Average of 9/1/2017 to 8/31/2020 RT TWI LBMPs.		
	Land-based wind modern efficiency increase factor	1.238048752	Increases the average production factor from the NREL/ CARIS data to equal the S&L estimate, labeled as "Capacity Factor" on the "Capital Cost & O&M Assumptions" tab
	Offshore wind modern efficiency increase factor	1.051821035	Increases the average production factor from the NREL/ CARIS data to equal the S&L estimate, labeled as "Capacity Factor" on the "Capital Cost & O&M Assumptions" tab
	Solar modern efficiency increase factor	1.114378052	Increases the average production factor from the NREL/ CARIS data to equal the S&L estimate, labeled as "Capacity Factor" on the "Capital Cost & O&M Assumptions" tab

New York ISO

Appendix II: Sensitivities

Offshore Wind Sensitivity

- **Offshore wind installations are expected to be higher than 800 MW, and thus may benefit from economies of scale.**
  - This sensitivity quantifies the economies of scale that would be needed to make the NPV of plant cash flow and cost savings to load just above zero for a 1200 MW installation.
    - Fixed O&M costs ($/yr) were scaled up to 1200 MW.
    - The Installed Project Capital Cost ($) was then adjusted until the NPV of plant cash flow and cost savings to load was just above zero.
  - Results show that the Installed project capital cost would have to decline by roughly 85% as a result of economies of scale to provide a positive NPV in this context.

Unit Size (MW)	Installed Project Capital Cost ($/KW)	Economies of Scale Cost Reduction
400 MW unit	$4,600	N/A
800 MW unit	$4,277	-7%
1200 MW unit	$659	-85%

New York ISO

Return to Level of Excess (LOE) Sensitivity

- The study assumes that capacity prices decline for a number of years after the entry of a given candidate technology, and then recover, *i.e.,* return to the LOE.
  - A value of 5 years is currently assumed in the study.
- A sensitivity instead assumed a 10 year return to LOE. The results of this sensitivity are shown at right.

Locality (Load Zone)	Candidate Technology	NPV of Plant Cash Flows and Cost Savings to Load
G-J (G)	Solar	$ (27,479,005)
G-J (H)	Solar	$ (14,798,344)
G-J (I)	Solar	$ (14,754,724)
NYC (J)	Solar	$ 1,559,586
G-J (G)	Land-based Wind (PTC)	$ (20,935,796)
G-J (G)	Land-based Wind (ITC)	$ (9,817,079)
NYC (J)	Offshore Wind	$ (257,428,896)
G-J (G)	Run-of-River Hydro	$ (41,901,647)
G-J (G)	Landfill Gas	$ 2,638,706
G-J (H)	Landfill Gas	$ 1,799,275
G-J (I)	Landfill Gas	$ 1,874,411
NYC (J)	Landfill Gas	$ 28,263,658

New York ISO

Property Tax Expense Sensitivity

- The NYISO received feedback that the property tax expense for each technology seemed too high.
- A sensitivity was performed whereby the property tax expense for each technology was assumed to be $0.00.
  - This did not apply to offshore wind because, as described in the presentation, the property tax expense for offshore wind was replaced with the estimated federal lease cost.

Locality (Load Zone)	Candidate Technology	NPV of Plant Cash Flows and Cost Savings to Load
G-J (G)	Solar	$ (23,530,414)
G-J (H)	Solar	$ (12,034,164)
G-J (I)	Solar	$ (11,991,358)
NYC (J)	Solar	$ (1,578,042)
G-J (G)	Land-based Wind (PTC)	$ (13,990,348)
G-J (G)	Land-based Wind (ITC)	$ (4,425,857)
NYC (J)	Offshore Wind	$ (849,717,597)
G-J (G)	Run-of-River Hydro	$ (35,468,960)
G-J (G)	Landfill Gas	$ 1,170,761
G-J (H)	Landfill Gas	$ 530,161
G-J (I)	Landfill Gas	$ 602,621
NYC (J)	Landfill Gas	$ 18,082,404

New York ISO

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

www.nyiso.com

New York ISO