

Stakeholder Survey Results and NYISO Scoring of 2024 Proposed Market Projects

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Budget and Priorities Working Group

July 12, 2023, KCC

Agenda

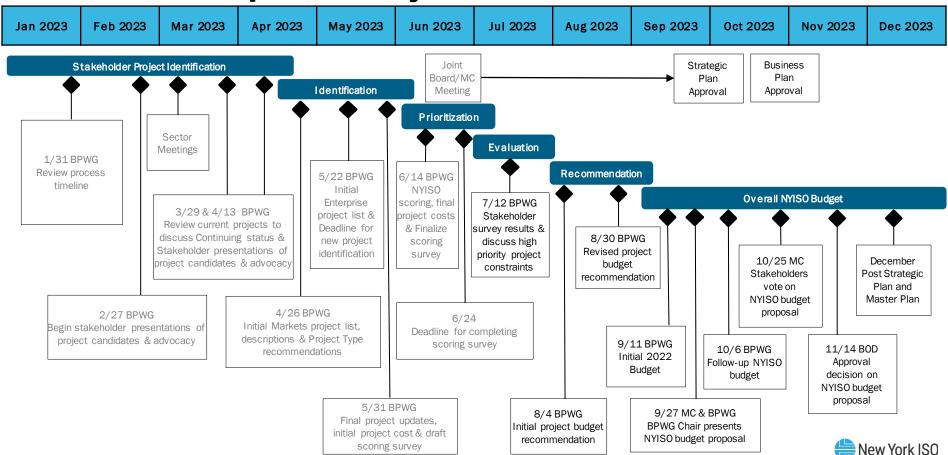
- Project Prioritization Timeline
- Stakeholder Survey
- Stakeholder Survey Comments
- High Priority Project Constraints and Options
- Historic Budgets
- Next Steps
- Appendix: (Material from June 14th BPWG)
 - Milestones and Project Prioritization Phases
 - 2024 Market Project Candidates
 - NYISO Scores & High Priority Project Constraints



Project Prioritization Timeline



2024 Proposed Project Prioritization Timeline



Stakeholder Survey



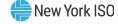
Survey Participation

			2023 Surve	у		2022 Sur	vey		2021 Sur	vey
Sector	Sub Sector	Num. Eligible Orgs.	Num. Comp.	Percent Participation	Num. Eligible Orgs.	Num. Comp.	Percent Participation	Num. Eligible Orgs.	Num. Comp.	Percent Participation
End Use Consumer	Gov. Sm. Cons. & Retail Aggr.	2	2	100%	2	2	100%	2	2	100%
"	Gov. State-wide Cons. Advocate	1	1	100%	1	1	100%	1	1	100%
п	Large Cons. Gov. Agency	1	0	0%	1	0	0%	1	0	0%
"	Large Consumer	5	5	100%	5	5	100%	5	5	100%
п	Small Consumer	5	5	100%	5	5	100%	5	5	100%
Generation Owner		23	14	61%	21	10	48%	21	9	43%
Other Supplier		31	13	42%	34	14	41%	35	13	37%
Public/Environment	Environmental	6	4	67%	6	1	17%	7	2	29%
п	Munis & Co-Ops	11	10	91%	11	10	91%	11	10	91%
II .	State Power Authorities	2	2	100%	2	2	100%	2	2	100%
Transmission Owner		4	4	100%	4	3	75%	4	4	100%
Non-Voting Entity		62	25	40%	66	23	35%	58	18	31%
Total		153	85	56%	158	76	48%	152	71	47%



Governance Weights 2023 Stakeholder Survey

Sector	Sub-Sector	Eligible Percentage	Subsector Percentage	Num. Eligible Orgs.	Num. Responses	Score Weights
End Use		20.0%		14	13	
	Gov. Sm. Cons. & Retail Aggr.		1.8%	2	2	2.0%
	Gov. State-wide Cons. Advocate		2.7%	1	1	3.0%
	Governmental Agency		2.0%	1	0	0.0%
	Large Consumer		9.0%	5	5	10.0%
	Small Consumer		4.5%	5	5	5.0%
Generation Owner		21.5%		23	14	21.5%
Other Supplier		21.5%		31	13	21.5%
Public Power / Environmental		17.0%		19	13	
	Environmental		2.0%	6	4	2.0%
	Munis & Co-Ops		7.0%	11	10	7.0%
	State Power Authorities		8.0%	2	2	8.0%
Transmission Owne	er		20.0%	4	4	20.0%



Account Name	Sector	5 Minute Transaction Scheduling	Advanced Storage Modeling and Operation	Advancing NYISO Transparency- Requested by DC Energy	Clean Hydrogen - Requested by NextEra and Constellation	Co-located Steam and Storage – Requested by Elevate Renewable Energy	Coordinated Grid Planning Process (CGPP) Continuation	Dynamic Reserves Phase 1	Eliminate Offline GT Pricing	Engaging the Demand Side	Evolving Resource Adequacy Models	Expanding Peak Hour Definition – Requested by DPS	Granular Capacity Market Priding	Improve Duct-Firing Modeling	Internal Controllable Lines	LCR Optimizer Enhancements	Long Island Reserve Constraint Pricing	Market Purchase Hub Transactions - Requested by LIPA	MDIWG Support	Mitigation Threshold Review	Operating Reserves Performance	Participation Opportunities for Small DER	Pivotal Supplier Calculation Change	Reference Level Software Cleanup	Reserving Capacity for TCC Balance-of-Period (BoP) Auctions
City of New York	End Use Consumer	0	0	0	0	0	0	20	0	20	0	10	0	0	20	0	0	0	0	0	10	0	0	0	0
NYS Energy Research & Dev. Authority (NYSERDA)	End Use Consumer	5	5	0	5	0	5	5	0	15	0	5	0	0	20	0	0	0	5	0	0	10	0	0	0
NYS Department of State Utility Intervention Unit	End Use Consumer	5	15	0	0	5	0	10	0	5	0	0	0	5	0	5	0	0	0	0	10	0	0	0	0
Nucor Steel Auburn, Inc.	End Use Consumer	0	0	0	10	0	0	10	0	35	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0
GlobalFoundries, U.S., Inc.	End Use Consumer	0	5	0	0	5	0	25	0	25	0	0	0	15	10	5	0	0	0	0	5	0	0	0	0
IBM Corporation	End Use Consumer	0	5	0	0	5	0	25	0	25	0	0	0	15	10	5	0	0	0	0	5	0	0	0	0
Alcoa, Inc.	End Use Consumer	0	5	0	0	5	0	25	0	25	0	0	0	15	10	5	0	0	0	0	5	0	0	0	0
Wegmans Food Markets	End Use Consumer	0	5	0	0	5	0	25	0	25	0	0	0	15	10	5	0	0	0	0	5	0	0	0	0
Beth Israel Health Care System	End Use Consumer	0	10	0	0	0	0	10	0	30	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
New York University	End Use Consumer	0	10	0	0	0	0	10	0	30	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
Mount Sinai Medical Center	End Use Consumer	0	10	0	0	0	0	10	0	30	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
Fordham University	End Use Consumer	0	10	0	0	0	0	10	0	30	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
Memorial Sloan Kettering Cancer Center	End Use Consumer	0	10	0	0	0	0	10	0	30	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0
Boralex, Inc.	Generation Owner	80	0	0	0	0	10	0	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	0
Calpine Energy Services LP	Generation Owner	0	0	0	0	0	0	0	0	0	15	0	0	30	0	0	0	0	0	0	0	0	0	0	0
Bluestone Wind, LLC	Generation Owner	0	70	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
East Coast Power, LLC	Generation Owner	0	0	0	0	0	0	20	0	0	5	0	0	20	0	15	0	0	0	5	25	0	0	0	0
Valcour Wind Energy, LLC	Generation Owner	0	25	0	0	0	20	0	0	0	10	0	0	0	10	0	0	0	0	0	0	0	0	0	0
GenOn Bowline, LLC	Generation Owner	0	0	0	3	3	0	2	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0
CPV Valley, LLC	Generation Owner	0	0	0	0	0	0	0	0	0	0	0	0	65	5	30	0	0	0	0	0	0	0	0	0
EDP Renewables North America LLC	Generation Owner	10	5	5	0	0	0	20	0	0	20	5	10	0	15	0	0	0	0	0	0	0	0	0	0
Invenergy Energy Management LLC	Generation Owner	5	5	0	5	5	0	0	0	0	5	0	0	5	30	0	5	0	5	0	5	0	0	0	0
Helix Ravenswood, LLC	Generation Owner	0	0	5	5	5	0	10	10	0	5	0	5	5	5	20	5	5	0	0	5	0	0	0	0
Key Capture Energy, LLC	Generation Owner	0	75	0	5	5	0	0	0	0	10	0	0	0	0	0	10	0	0	0	0	0	0	0	0
RWE Renewables Americas, LLC	Generation Owner	5	0	20	0	0	40	0	0	0	5	0	0	0	15	0	0	0	0	0	0	0	0	0	0



Account Name	Sector	5 Minute Transaction Scheduling	Advanced Storage Modelingand Operation	Advancing NYISO Transparency - Requested by DC Energy	Clean Hydrogen - Requested by NextEra and Constellation	Co-located Steam and Storage – Requested by Elevate Renewable Energy	Coordinated Grid Planning Process (CGPP) Continuation	Dynamic Reserves Phase 1	Elminate Offline GT Pricing	Engaging the Demand Side	Evolving Resource Adequacy Models	Expanding Peak Hour Definition - Requested by DPS	Granular Capacity Market Pricing	Improve Duct-Firing Modeling	Internal Controllable Lines	LCR Optimizer Enhancements	Long Island Reserve Constraint Pricing	Market Purchase Hub Transactions - Requested by IIPA	MDIWG Support	Mitigation Threshold Review	Operating Reserves Performance	Participation Opportunities for Small DER	Pivotal Supplier Calculation Change	Reference Level Software Cleanup	Reserving Capacity for TCC Balance of-Period (BoP) Auctions
Indeck Energy Services, Inc.	Generation Owner	0	0	0	0	25	0	0	0	0	0	0	0	50	0	15	0	0	0	0	0	0	0	0	0
Cypress Creek Renewables, LLC	Generation Owner	0	5	0	0	0	60	10	0	0	20	0	0	0	5	0	0	0	0	0	0	0	0	0	0
Alliance for Clean Energy New York	Non-Voting Entity	5	5	0	15	0	30	0	0	5	5	0	0	0	15	0	0	0	0	0	0	5	0	0	0
Avangrid Renewables, LLC	Non-Voting Entity	0	0	0	10	0	40	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bayonne Energy Center, LLC	Non-Voting Entity	0	0	0	0	0	0	25	25	0	0	0	0	0	0	25	0	0	0	0	0	0	0	0	0
Bloom Energy	Non-Voting Entity	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boston Energy Trading and Marketing LLC	Non-Voting Entity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Con Edison Transmission, Inc.	Non-Voting Entity	10	5	0	0	0	15	20	0	0	5	5	0	0	10	0	0	0	0	0	0	0	0	0	0
ConnectGen East LLC	Non-Voting Entity	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Consolidated Edison Energy, Inc.	Non-Voting Entity	10	0	0	0	0	0	0	0	0	0	0	0	20	0	20	0	0	0	20	10	0	0	20	0
Constellation NewEnergy, Inc.	Non-Voting Entity	0	0	0	65	0	0	0	0	0	0	10	0	0	0	0	0	15	0	0	0	0	0	0	0
Cricket Valley Energy Center, LLC	Non-Voting Entity	0	0	0	0	0	0	0	0	0	30	0	0	40	0	30	0	0	0	0	0	0	0	0	0
Customized Energy Solutions, Ltd. Enerwise Global Technologies, Inc. dba	Non-Voting Entity	5	0	0	60	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CPower	Non-Voting Entity	0	0	0	0	0	0	0	0	90	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0
Hanwha Q CELLS USA Corp.	Non-Voting Entity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Institute for Policy Integrity at NYU School of Law	Non-Voting Entity	4	8	4	1	0	12	4	2	9	6	2	7	2	3	2	2	6	7	1	4	0	1	1	0
LS Power Grid New York, LLC	Non-Voting Entity	0	10	0	0	10	10	10	0	0	0	0	0	10	0	10	0	0	0	0	10	0	0	0	0
New Leaf Energy Inc.	Non-Voting Entity	0	15	0	10	0	30	15	0	0	15	0	5	0	0	0	0	0	0	0	5	0	0	0	0
New York Battery and Energy Storage Technology Consortium	Non-Voting Entity	0	15	0	8	4	5	4	0	4	8	2	3	0	0	0	3	0	0	0	0	8	0	0	0
NRG Curtailment Solutions, Inc.	Non-Voting Entity	0	0	0	0	5	0	0	0	50	5	0	0	0	0	5	0	0	0	0	0	5	0	0	0
NuEnerGen, LLC	Non-Voting Entity	0	0	0	0	0	0	20	0	15	20	0	0	0	0	20	0	0	0	0	0	0	0	0	0
Orange & Rockland Utilities, Inc.	Non-Voting Entity	5	5	0	0	0	10	20	0	5	0	10	0	0	10	0	0	0	5	0	0	0	0	0	0
OW North America LLC	Non-Voting Entity	0	5	0	5	0	0	25	0	0	20	5	20	0	20	0	0	0	0	0	0	0	0	0	0
Richard P. Felak	Non-Voting Entity	0	10	0	0	0	10	0	0	10	10	0	10	0	0	0	0	0	10	0	0	10	0	0	0
Saracen Energy East LP	Non-Voting Entity	20	0	10	0	0	0	20	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0



Account Name	Sector	5 Minute Transaction Scheduling	Advanced Storage Modelingand Operation	Advancing NYISO Transparency - Requested by DC Energy	Clean Hydrogen - Requested by NexEra and Constellation	Co-located Steam and Storage – Requested by Elevate Renewable Energy	Coordinated Grid Planning Process (CGPP) Continuation	Dynamic Reserves Phase 1	Eliminate Offline GT Pricing	Engaging the Demand Side	Evolving Resource Adequacy Models	Expanding Peak Hour Definition – Requested by DPS	Granular Capacity Market Pricing	Improve Duct-Firing Modeling	Internal Controllable Lines	LCR Optimizer Enhancements	Long Island Reserve Constraint Pricing	Market Purchase Hub Transactions - Requested by LIPA	MDIWG Support	Mitigation Threshold Review	Operating Reserves Performance	Participation Opportunities for Small DER	Pivotal Supplier Calculation Change	Reference Level Software Cleanup	Reserving Capacity for TCC Balance-of-Period (BoP) Auctions
Soltage, LLC	Non-Voting Entity	0	30	10	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Voltus, Inc.	Non-Voting Entity	0	0	0	0	0	0	0	0	50	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cross Sound Cable Company, LLC	Other Supplier	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	50	0	0	0	0	0	0	0	0
Eastern Generation	Other Supplier	0	0	0	0	25	0	15	15	0	0	0	0	5	5	15	0	0	0	0	0	0	0	0	0
DC Energy LLC	Other Supplier	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
Innoventive Power LLC	Other Supplier	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vitol Inc.	Other Supplier	0	25	0	0	0	25	7	0	0	0	0	6	0	0	0	0	0	0	0	6	0	0	0	0
H.Q. Energy Services (U.S.) Inc.	Other Supplier	40	0	0	0	0	0	15	0	0	0	0	0	0	15	15	0	0	0	0	0	0	0	0	0
NRG Power Marketing LLC	Other Supplier	25	0	0	0	5	0	15	0	20	15	0	0	0	0	10	0	0	0	0	0	5	0	0	0
Danske Commodities US LLC	Other Supplier	0	25	0	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	0
Castleton Commodities Merchant Tradii L.P.	ng Other Supplier	0	0	0	0	50	0	10	20	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0
Enel X North America, Inc.	Other Supplier	0	5	0	0	0	5	0	0	50	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NextEra Energy Marketing, LLC	Other Supplier	0	0	0	60	0	20	0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Energy Spectrum Inc.	Other Supplier	0	0	0	0	0	0	0	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shell Energy North America (US), L.P.	Other Supplier	0	0	10	0	0	20	25	0	0	10	0	0	0	10	0	0	0	0	0	25	0	0	0	0
Natural Resources Defense Council	Public/Environment	5	5	0	0	0	10	5	0	10	5	10	0	0	10	0	0	0	10	0	0	10	0	0	0
American Clean Power Association	Public/Environment	5	5	0	15	0	30	0	0	5	5	0	0	0	15	0	0	0	0	0	0	5	0	0	0
PACE Energy & Climate Center	Public/Environment	20	20	20	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	20	0	0	0
Environmental Adocates of New York	Public/Environment	50	0	0	0	0	0	0	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	0	0
Village of Westfield	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Plattsburgh Municipal Lighting Dept.	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Municipal Commission of Boonville	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Village of Solvay	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Lake Placid Village	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Village of Arcade	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Village of Fairport	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0



Account Name	Sector	5 Minute Transaction Scheduling	Advanced Storage Modelingand Operation	Advancing NYISO Transparency - Requested by DC Energy	Clean Hydrogen - Requested by NexEra and Constellation	Co-located Steam and Storage – Requested by Elevate Renewable Energy	Coordinated Grid Planning Process (CGPP) Continuation	Dynamic Reserves Phase1	Eliminate Offline GT Pricing	Engaging the Demand Side	Evolving Resource Adequacy Models	Expanding Peak Hour Definition – Requested by DPS	Granular Capacity Market Pricing	Improve Duct-Firing Modeling	Internal Controllable Lines	LCR Optimizer Enhancements	Long Island Reserve Constraint Pricing	Market Purchase Hub Transactions - Requested by LIPA	MDIWG Support	Mitigation Threshold Review	Operating Reserves Performance	Participation Opportunities for Small DER	Pyotal Supplier Calculation Change	Reference Level Software Cleanup	Reserving Capacity for TCC Balance-of-Period (BoP) Auctions
Bath Electric, Gas & Water Systems	Public/Environment	5	0	0	0	20	0	15	10	0	0	0	0	20	5	0	0	0	0	0	15	0	0	0	0
Village of Rockville Centre	Public/Environment	5	15	0	0	10	0	10	0	0	5	0	0	5	0	10	15	0	0	0	10	0	0	0	0
Jamestown Board of Public Utilities	Public/Environment	5	15	0	0	5	0	10	0	0	5	0	0	5	0	5	10	0	0	0	10	0	0	0	0
Long Island Power Authority	Public/Environment	10	0	0	5	5	10	10	0	0	0	0	0	5	5	0	0	50	0	0	0	0	0	0	0
New York Power Authority	Public/Environment	0	0	0	5	0	15	10	0	10	0	10	0	0	15	0	0	20	0	0	10	0	0	0	0
New York State Electric & Gas Corp.	Transmission Owner	5	10	0	0	0	10	10	0	0	0	10	5	0	10	0	0	0	5	0	0	0	0	0	0
National Grid	Transmission Owner	0	0	0	5	0	15	15	0	10	0	0	0	0	10	0	0	0	0	0	5	5	0	0	0
Central Hudson Gas & Electric Corp.	Transmission Owner	5	0	0	0	0	10	15	0	5	5	0	5	0	5	0	0	0	0	0	10	0	0	0	0
Consolidated Edison Co. of New York, Inc	Transmission Owner	5	5	0	0	0	10	20	0	5	0	10	0	0	10	0	0	0	5	0	0	0	0	0	0
																									_



Account Name	Sector	Storage as Transmission	SubAccounts for Reporting - Requested by NRG	Time Differentiated TCCs	Valuing Transm is sion Security	Winter Reliability Capacity Enhancements											
City of New York	End Use Consumer	10	0	0	10	0											
NYS Energy Research & Dev. Authority (NYSERDA)	End Use Consumer	20	0	0	0	0											
NYS Department of State Utility Intervention Unit	End Use Consumer	15	0	0	10	15											
Nucor Steel Auburn, Inc.	End Use Consumer	15	0	0	0	15											
GlobalFoundries, U.S., Inc.	End Use Consumer	0	0	0	0	5											
IBM Corporation	End Use Consumer	0	0	0	0	5											
Alcoa, Inc.	End Use Consumer	0	0	0	0	5											
Wegmans Food Markets	End Use Consumer	0	0	0	0	5											
Beth Israel Health Care System	End Use Consumer	10	0	0	25	5											
New York University	End Use Consumer	10	0	0	25	5											
Mount Sinai Medical Center	End Use Consumer	10	0	0	25	5											
Fordham University	End Use Consumer	10	0	0	25	5											
Memorial Sloan Kettering Cancer Cente		10	0	0	25	5											
Boralex, Inc.	Generation Owner	0	0	0	0	0											
Calpine Energy Services LP	Generation Owner	0	0	30	0	25											
Bluestone Wind, LLC	Generation Owner	0	0	0	0	0										\Box	
East Coast Power, LLC	Generation Owner	0	0	5	0	0											
Valcour Wind Energy, LLC	Generation Owner	25	0	0	0	0											ш
GenOn Bowline, LLC	Generation Owner	0	0	0	30	15											
CPV Valley, LLC	Generation Owner	0	0	0	0	0											
EDP Renewables North America LLC	Generation Owner	0	0	0	0	0											
Invenergy Energy Management LLC	Generation Owner	20	0	0	0	5										igspace	\longrightarrow
Helix Ravenswood, LLC	Generation Owner	0	5	5	0	5											
Key Capture Energy, LLC	Generation Owner	0	0	0	0	0											
RWE Renewables Americas, LLC	Generation Owner	15	0	0	0	0							l			1 1	



		ransmission	for Reporting - d by NRG	Differentiated TCCs	Valuing Transmission Security	oility Capacity											
Account Name	Sector	Storage as Transmission	SubAccounts for Reporting Requested by NRG	Time Differe	Valuing Tra Secu	Winter Reliability Capacity Enhancements											
	Generation Owner	0	0	0	10	0											
Cypress Cræk Renewables, LLC	Generation Owner	0	0	0	0	0											
Alliance for Clean Energy New York	Non-Voting Entity	15	0	0	0	0											
Avangrid Renewables, LLC	Non-Voting Entity	0	0	0	0	30											
Bayonne Energy Center, LLC	Non-Voting Entity	0	0	0	25	0											
Bloom Energy	Non-Voting Entity	0	0	0	0	0											
Boston Energy Trading and Marketing LLC	Non-Voting Entity	0	0	90	0	0											
Con Edison Transmission, Inc.	Non-Voting Entity	5	0	0	15	10											
ConnectGen East LLC	Non-Voting Entity	70	0	0	0	0											_
Consolidated Edison Energy, Inc.	Non-Voting Entity	0	0	0	0	0											_
Constellation NewEnergy, Inc.	Non-Voting Entity	0	0	0	0	10											
	Non-Voting Entity	0	0	0	0	0											
Customized Energy Solutions, Ltd.	Non-Voting Entity	0	0	30	0	0											
Enerwise Global Technologies, Inc. dba CPower	Non-Voting Entity	0	0	0	0	0											
Hanwha Q CELLS USA Corp.	Non-Voting Entity	100	0	0	0	0											
Institute for Policy Integrity at NYU																	
School of Law	Non-Voting Entity	8	0	0	0	4											_
LS Power Grid New York, LLC	Non-Voting Entity	0	10	0	10	10											
New Leaf Energy Inc.	Non-Voting Entity	5	0	0	0	0											
New York Battery and Energy Storage Technology Consortium	Non-Voting Entity	30	0	0	3	3											
NRG Curtailment Solutions, Inc.	Non-Voting Entity	0	30	0	0	0											
NuEnerGen, LLC	Non-Voting Entity	0	0	0	0	25											
Orange & Rockland Utilities, Inc.	Non-Voting Entity	0	0	0	15	15											
OW North America LLC	Non-Voting Entity	0	0	0	0	0			_		_						
Richard P. Felak	Non-Voting Entity	10	0	0	10	10											
Saracen Energy East LP	Non-Voting Entity	0	0	5	15	0											



Account Name	Sector	Storage as Transmission	SubAccounts for Reporting - Requested by NRG	Time Differentiated TCCs	Valuing Transmission Security	Winter Reliability Capacity Enhancements										
Soltage, LLC	Non-Voting Entity	0	0	0	0	30										
Voltus, Inc.	Non-Voting Entity	0	0	0	0	0										
Cross Sound Cable Company, LLC	Other Supplier	15	0	0	0	10										
Eastern Generation	Other Supplier	0	5	0	15	0										
DC Energy LLC	Other Supplier	0	0	30	0	0										
Innoventive Power LLC	Other Supplier	0	0	0	0	0										
Vitol Inc.	Other Supplier	0	0	25	0	6										
H.Q. Energy Services (U.S.) Inc.	Other Supplier	0	0	0	0	15										
NRG Power Marketing LLC	Other Supplier	0	30	0	0	0										
Danske Commodities US LLC	Other Supplier	0	0	0	0	0										
Castleton Commodities Merchant Tradin L.P.	Other Supplier	0	0	0	10	0										
Enel X North America, Inc.	Other Supplier	0	0	0	0	20										
NextEra Energy Marketing, LLC	Other Supplier	10	0	0	0	0										
Energy Spectrum Inc.	Other Supplier	0	0	0	0	0										
Shell Energy North America (US), L.P.	Other Supplier	0	0	0	0	0										
Natural Resources Defense Council	Public/Environment	0	0	0	10	10										
American Clean Power Association	Public/Environment	15	0	0	0	0										
PACE Energy & Climate Center	Public/Environment	0	0	0	0	0										
Environmental Adocates of New York	Public/Environment	0	0	0	0	0										
Village of Westfield	Public/Environment	0	0	0	0	10										
Plattsburgh Municipal Lighting Dept.	Public/Environment	0	0	0	0	10										
Municipal Commission of Boonville	Public/Environment	0	0	0	0	10										
Village of Solvay	Public/Environment	0	0	0	0	10										
Lake Placid Village	Public/Environment	0	0	0	0	10										
Village of Arcade	Public/Environment	0	0	0	0	10										
Village of Fairport	Public/Environment	0	0	0	0	10										



Account Name	Sector	Storage as Transmission	SubAccounts for Reporting - Requested by NRG	Time Differentiated TCCs	Valuing Transmission Security	Winter Reliability Capacity Enhancements											
	Public/Environment	0	0	0	0	10											
Village of Rockville Centre	Public/Environment	10	5	0	0	0											
Jamestown Board of Public Utilities	Public/Environment	5	5	0	5	15											
Long Island Power Authority	Public/Environment	0	0	0	0	0											
New York Power Authority	Public/Environment	0	0	0	5	0											
New York State Electric & Gas Corp.	Transmission Owner	10	0	0	5	20											
National Grid	Transmission Owner	15	0	0	5	15											
Central Hudson Gas & Electric Corp.	Transmission Owner	15	0	0	15	10									<u> </u>		
Consolidated Edison Co. of New York, Inc	Transmission Owner	0	0	0	15	15											
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Stakeholder Survey Score

Projects are ordered by Weighted Score

Product / Project	Product portfolio	Raw Score	Weighted Score	SectorCot	Count
Engaging the Demand Side	New Resource	10.4	10.6	2	33
Dynamic Reserves - Phase 1	Energy Market	8.6	10.4	4	51
Internal Controllable Lines	New Resource	5.7	6.8	4	41
Winter Reliability Capacity Enhancements	Capacity Market	5.7	6.7	3	43
Coordinated Grid Planning Process (CGPP) Continuation	Planning	6.0	6.7	3	27
Advanced Storage Modeling and Operation	New Resource	6.0	6.3	3	37
Improve Duct-Firing Modeling	Energy Market	5.8	5.5	3	27
Operating Reserves Performance	Energy Market	4.6	5.2	3	35
Storage as Transmission	New Resource	6.0	5.1	2	28
Valuing Transmission Security	Capacity Market	4.3	5.0	2	25
5 Minute Transaction Scheduling	Energy Market	4.6	4.7	2	33
Co-located Steam and Storage <u>- Requested by Elevate Renewable Energy</u>	New Resource	4.1	4.0	1	27
LCR Optimizer Enhancements	Capacity Market	3.9	3.5	1	23

Raw Score = Average of scores from each organization that completed the stakeholder survey

Weighted Score = Scores from voting members only are averaged across the sector they are in and weighted based on governance voting weights Sector Count = number of sectors where at least 25% of the sector's survey responses put points on a project and the average points across the sector was 5 or greater

Count = number of survey responses that had assigned points to the project



Stakeholder Survey Score

Projects are ordered by Weighted Score

Product / Project	Product portfolio	Raw Score	Weighted Score	Sector Cot	Count
Clean Hydrogen - Requested by NextEra and Constellation	New Resource	5.3	3.1	0	22
Market Purchase Hub Transactions - Requested by LIPA	Energy Market	1.1	2.9	0	5
Evolving Resource Adequacy Model	Capacity Market	4.5	2.7	1	31
Expanding Peak Hour Definition - Requested by DPS	Capacity Market	1.1	1.7	0	13
Time Differentiated TCCs	TCC	2.6	1.5	0	8
Advancing NYISOTransparency - Requested by DC Energy	Energy Market	1.5	1.4	0	9
Long Island Reserve Constraint Pricing	Energy Market	1.2	1.3	0	8
Eliminate Offline GT Pricing	Energy Market	1.8	1.3	1	13
Granular Capacity Market Pricing	Capacity Market	1.1	0.9	0	11
SubAccounts for Reporting- Requested by NRG	Business & Finance	1.1	0.7	0	7
MDIWG Support	New Resource	0.6	0.7	0	8
Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC	0.6	0.6	0	3

Raw Score = Average of scores from each organization that completed the stakeholder survey

Weighted Score = Scores from voting members only are averaged across the sector they are in and weighted based on governance voting weights Sector Count = number of sectors where at least 25% of the sector's survey responses put points on a project and the average points across the sector was 5 or greater

Count = number of survey responses that had assigned points to the project



Stakeholder Survey Score

Projects are ordered by Weighted Score

Product / Project	Product portfolio	Raw Score	Weighted Score	Sector Cot	Count
Participation Opportunities for Small DER	New Resource	1.3	0.6	0	12
Mitigation Threshold Review	Energy Market	0.3	0.1	0	3
Pivotal Supplier Calculation Change	Capacity Market	0.0	0.0	0	1
Reference Level Software Cleanup	Energy Market	0.2	0.0	0	2

Raw Score = Average of scores from each organization that completed the stakeholder survey

Weighted Score = Scores from voting members only are averaged across the sector they are in and weighted based on governance voting weights Sector Count = number of sectors where at least 25% of the sector's survey responses put points on a project and the average points across the sector was 5 or greater

Count = number of survey responses that had assigned points to the project



Stakeholder Survey Comments



Project	Organization	Comment
5 Minute Transaction Scheduling	Long Island Power Authority	NY State should not overlook the extensive potential for HQ to provide emission-free balancing services to supplement NY's indigenous balancing resources.
Advanced Storage Modeling and Operation	NYS Energy Research & Dev. Authority (NYSERDA)	This project is very complex thus requires sufficient time and attention to have rules fully developed. Additionally, both Projects 2 & 25 relate to storage in the same product area and 2024 deliverable, i.e., MDCP. UIU believes developing these projects concurrently can provide a comprehensive view of how to incorporate this multi-faceted technology.
Co-located Steam and Storage – Requested by Elevate Renewable Energy	NYS Department of State Utility	UIU recommends this project description be expanded to include colocated storage with any existing low operating hours resource to maximize value of interconnection and system flexibility.
Coordinated Grid Planning Process (CGPP) Continuation	NYS Department of State Utility Intervention Unit	UIU does not understand why this project is included in the scoring category. This should be done regardless of overall score. Also, given the relative low budget, the Market Design and Integration Working Group Support project could be combined with this effort.
Engaging the Demand Side	Helix Ravenswood, LLC	We support continued enhancements to DER and SCR program but feel other efforts should be pursued at this time.
Engaging the Demand Side	Enerwise Global Technologies, Inc. dba CPower	Failure to prioritize this project, given the high cost of DER, could mean the loss of most SCR capacity in 2025 due to Capacity Accreditation eroding value.

Project	Organization	Comment
	Natural Resources Defense	This project should be completed as part of the 2023 Modeling Improvements for Capacity Accreditation project. Correlated mechanical outages of fossil resources has been a major source of reliability issues throughout the country and was an issue in NYISO during winter storm Elliot. By not addressing this issue before the marginal accreditation rules go into effect, NYISO will be falling short of its commitment to stakeholders/FERC and implementing marginal accreditation in a way that
Evolving Resource Adequacy Model	Council	inappropriately preferences fossil generation.
Expanding Peak Hour Definition – Requested by DPS	Nucor Steel Auburn, Inc.	The proposal would weaken incentives for large loads to actively manage usage during peak periods contrary to what the system needs
Improve Duct-Firing Modeling	NYS Department of State Utility Intervention Unit	UIU recommends the project description be expanded to any resource type that uses a static registration ramp rate; goal should be technology neutral and to more accurately reflect response/ramp rate curves to ensure proper reserve accounting and real time pricing.
Internal Controllable Lines	Natural Resources Defense Council	This should have been a continuing project that did not require votes from stakeholders.
MDIWG Support	NYS Department of State Utility Intervention Unit	This is an existing activity with a very low budget, should not be a scored project, and could be merged with CGPP.
Operating Reserves Performance	NYS Department of State Utility Intervention Unit	This project is necessary to measure performance and ensure proper compensation for delivered capability.

Project	Organization	Comment
Storage as Transmission	NYS Department of State Utility Intervention Unit	Both Projects 2 & 25 relate to storage in the same product area (albeit one in markets and one related more to planning) and same 2024 deliverable, i.e., MDCP. UIU believes developing these projects concurrently can provide a more comprehensive view of how to incorporate this multi-faceted technology.
Winter Reliability Capacity Enhancements	NYS Department of State Utility Intervention Unit	This is an important project for understanding how resource performance is impacted by adverse winter weather.
Winter Reliability Capacity Enhancements	Calpine Energy Services LP	NYISO should consider as part of the scope the need to shape the load requirement to align with the seasonal needs, such that seasonal coincident peak load is determined for Summer, and separately for Winter.
Additional Comments	American Clean Power Association	The votes herein are being submitted by Mark Reeder, consultant for ACE NY, on behalf of American Clean Power
		Engaging the demand side and improved peak period pricing are crucial going forward. Averaging peak load hours for cost allocation purposes as suggested in project #11 is basically at odds with those objectives, and NYISO successfully addressed basic concerns in this area through peak
Additional Comments	Nucor Steel Auburn, Inc.	measurement changes (July-August weekdays)



Project	Organization	Comment
	Natural Resources Defense Council	According to a recent report by Brattle, Real Reliability: The Value of Virtual Power (May 20223), by 2030, commercially available residential load flexibility technologies can perform as reliably as conventional resources and contribute to resource adequacy at a similar scale at roughly 40% - 60% of the cost of alternative options (i.e., gas and batteries). NYISO needs to prioritize efforts that enable these residential load flexibility technologies to rapidly scale so that they meaningful contribute to the electric sector over the next decade. Doing so is essential for ensuring a reliable, affordable, and equitable clean energy transition. Relatedly, NYISO should be prioritizing planning and market rule enhancements that minimize the scope and scale of the DEFR buildout that will be needed to achieve Climate Act targets, given the uncertainty about the commercial availability and cost of DEFRs.
Recommendations for future enhancements to the Project Prioritization Process	Calpine Energy Services LP	Revisit BTM:NG participation model; Carbon pricing that aligns with NY cap and trade program
	Invenergy Energy Management LLC	Invenergy believes NYISO should establish rules that enable projects previously prioritized that have not been completed but still are necessary to be designated continuing projects rather than having to be reprioritized for future years.



Project	Organization	Comment
Recommendations for future enhancements to the Project Prioritization Process	New York Power Authority	Logistically we spend a lot of time renumbering and updating project descriptions as changes are made so we can communicate updates to our internal team. This is especially difficult/manual working from charts in multi-page PDFs and having to copy PDF text to Word or dealing with Word formatting. Any chance you could also provide updated lists in XLS and descriptions. DOC's with as little formatting as possible to ease Stakeholders' manipulation/updating?
Recommendations for future enhancements to the Project Prioritization Process	Valcour Wind Energy, LLC	NYISO could consider consolidating related projects so similar themes and topics are not necessarily competing against each other.



High Priority Project Constraints and Options



High Priority Constraints - Stakeholder Scores

New Resource Team

 Resource constraints start to show up after including Clean Hydrogen

Energy Market Team

 Resource constraints start to show up after including Operating Reserves Performance

Capacity Market Team

 Resource constraints start to show up after including Valuing Transmission Security



Score Comparison

Projects are ordered by Weighted Score

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Product / Project	Product portfolio	NYISO Score (1-100)	NYISO Rank	Weighted Score
Engaging the Demand Side	New Resource	50	18	10.6
Dynamic Reserves - Phase 1	Energy Market	72	1	10.4
Internal Controllable Lines	New Resource	60	8	6.8
Winter Reliability Capacity Enhancements	Capacity Market	58	9	6.7
Coordinated Grid Planning Process (CGPP) Continuation	Planning	62	3	6.7
Advanced Storage Modeling and Operation	New Resource	56	13	6.3
Improve Duct-Firing Modeling	Energy Market	58	9	5.5
Operating Reserves Performance	Energy Market	62	3	5.2
Storage as Transmission	New Resource	48	22	5.1
Valuing Transmission Security	Capacity Market	62	3	5.0
5 Minute Transaction Scheduling	Energy Market	50	18	4.7
Co-located Steam and Storage- Requested by Elevate Renewable Energy	New Resource	62	3	4.0
LCR Optimizer Enhancements	Capacity Market	66	2	3.5



Score Comparison

Projects are ordered by Weighted Score

Product / Project	Product portfolio	NYISO Score (1-100)	NYISO Rank	Weighted Score
Clean Hydrogen - Requested by NextEra and Constellation	New Resource	58	9	3.1
Market Purchase Hub Transactions - Requested by LIPA	Energy Market	52	16	2.9
Evolving Resource Adequacy Model	Capacity Market	50	18	2.7
Expanding Peak Hour Definition - Requested by DPS	Capacity Market	46	23	1.7
Time Differentiated TCCs	TCC	44	24	1.5
Advancing NYISOTransparency - Requested by DC Energy	Energy Market	40	26	1.4
Long Island Reserve Constraint Pricing	Energy Market	50	18	1.3
Eliminate Offline GT Pricing	Energy Market	52	16	1.3
Granular Capacity Market Pricing	Capacity Market	54	15	0.9
SubAccounts for Reporting- Requested by NRG	Business & Finance	62	3	0.7
MDIWG Support	New Resource	56	13	0.7
Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC	34	28	0.6



Score Comparison

Projects are ordered by Weighted Score

Product / Project	Product portfolio	NYISO Score (1-100)	NYISO Rank	Weighted Score
Participation Opportunities for Small DER	New Resource	58	9	0.6
Mitigation Threshold Review	Energy Market	42	25	0.1
Pivotal Supplier Calculation Change	Capacity Market	38	27	0.0
Reference Level Software Cleanup	Energy Market	32	29	0.0



Potential Options being considered by the NYISO to Resolve Constraints

- Utilize consulting to extent possible
- Remove projects from consideration that had high NYISO score and lower stakeholder score
- Adjust proposed project commitments to reduce scope allowing for work on more projects at the same time
- Increase NYISO staff to support more projects
 - The NYISO will also be reallocating staff to support additional high appeal projects
- Options being discussed to resolve resource constraints need to be assessed for their impact on the overall NYISO budget



Historic Budgets



2024 Proposed Projects Compared to Historic Approved Budgets

	Estimated Cost (in millions)					
Project Budget*	Labor	Capital	Prof. Serv.	Total	Mandatory	Continuing
2024 Proposed Projects	21.54	12.27	17.69	51.50	6.73	4.25
2023 Approved	13.74	9.72	8.51	31.98	5.58	10.37
2022 Approved	13.36	12.48	11.35	37.20	11.56	1.18
2021 Approved	11.58	5.92	9.02	26.52	7.58	14.15
2020 Approved	13.57	5.73	12.40	31.69	10.48	10.74



Markets & Enterprise Budget Breakdown

	Markets Estimated Cost (in millions)					
Project Budget*	Labor	Capital	Prof. Serv.	Total	Mandatory	Continuing
2024 Proposed Projects	10.53	0.05	10.53	21.11	6.44	4.25
2023 Approved	7.02	0.00	4.34	11.36	5.58	1.22
2022 Approved	7.79	0.10	7.52	15.41	11.56	1.18
2021 Approved	6.45	0.10	5.54	12.09	5.80	4.58
2020 Approved	6.89	0.27	5.85	13.01	10.10	0.77

Enterprise Estimated Cost (in millions)						
Project Budget*	Labor	Capital	Prof. Serv.	Total	Mandatory	Continuing
2024 Proposed Projects	11.01	12.22	7.16	30.38	0.29	0.00
2023 Approved	6.72	9.72	4.18	20.62	0.00	9.15
2022 Approved	5.57	12.38	3.83	21.79	0.00	15.77
2021 Approved	5.13	5.82	3.49	14.44	1.77	9.57
2020 Approved	6.67	5.46	6.55	18.68	9.97	10.74

Note: The NYISO did not have separate Market and Enterprise categories prior to 2020



Next Steps



Next Steps

- Review the NYISO's initial project budget recommendation at the August 4th BPWG meeting
- Review the NYISO's revised project budget recommendation at the August 30th BPWG meeting
- Contact Kevin Pytel or Member Relations for any Project Prioritization related issues
 - Send email to Kevin Pytel at <u>kpytel@nyiso.com</u> or call his cell at (518) 428-9528 for assistance



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



Questions?



Appendix

(Material from June 14th BPWG)



Milestones and Project Prioritization Phases



Milestone Definitions

Milestone	Definition
Issue Discovery	NYISO has facilitated education session(s) for stakeholder knowledge development of problem/issue, conducted stakeholder solicitation of potential solutions to address problem/issue, and summarized findings at a working group meeting for potential ranking and future project identification.
Study Defined	The scope of work for the study has been presented to stakeholders, including a discussion on the necessary input(s), assumption(s) and objective(s) of the study.
Study Complete	Scope of work to be performed has been completed; results and recommendations have been presented to the appropriate Business Owners and stakeholders.
Market Design Concept Proposed	NYISO has initiated or furthered discussions with stakeholders that explore potential concepts to address opportunities for market efficiency or administration improvements.
Market Design Complete	NYISO has developed with stakeholders a market design such that the proposal can be presented for a vote at the BIC, OC, or MC to define further action on the proposal.
Functional Requirements	NYISO has completed documentation of the functional requirements and the Business Owner has approved.
Architectural Design	The architectural design document is complete and software development is ready to begin.
Projects with the follow	ing Milestones will generally be proposed as Continuing in future years, subject to Stakeholder input
Software Design	The software design document is complete and software development is ready to begin.
Development Complete	Development has been completed, packaged and approved by the Supervisor.
Deployment	Required software changes to support commitment have been integrated into the production environment.



Project Prioritization Process

Phase	Description
Stakeholder Project Identification	Stakeholders may present project ideas at stakeholder meetings, sector meetings, get feedback and refine their proposal during this phase before the NYISO provides a comprehensive list of candidate projects for consideration.
Identification	The NYISO develops a Markets and Enterprise project candidate lists from regulatory obligations, strategic initiatives, State of the Market recommendations, infrastructure enhancements, product plans and stakeholder proposals. These are presented and further refined with stakeholder input during this phase.
Prioritization	This phase involves a stakeholder survey and the NYISO prioritization of projects. The stakeholder survey will facilitate an assessment of the relative priority of the topic within the portfolio and is used to determine stakeholder appeal. The NYISO prioritization incorporates the stakeholder appeal into objective criteria that reflects strategic alignment, expected outcomes, risks, and ability to execute in development of a priority score for each Market project.
Evaluation	This phase involves performing a feasibility assessment based on detailed cost and labor estimates, dependencies, priority scores, and stakeholder feedback.
Recommendation	This phase involves proposing a feasible set of project deliverables and related budget requirements. The proposal is refined as needed based on stakeholder feedback.



Project Type

Project Type	Description
Mandatory	Projects that are key to support Strategic Initiatives, FERC Orders, maintain reliable operations, or sustain the operation of the NYISO business. These projects will be included in the budget
Continuing	Approved in a prior year and have progressed to either Software Design, Development Complete, or Deployment. Additional projects may be classified as Continuing based on stakeholder feedback. These projects will be included in the budget
Future	Consensus from stakeholder discussions of this projects priority relative to other projects has resulted in these projects NOT being prioritized and initiated in the coming budget year. Resources, time constraints, stakeholder feedback, and other project dependencies have been taken into consideration
Prioritize	Projects to be prioritized and included in the budget based on a feasibility assessment taking into consideration resources, time constraints, stakeholder feedback, priority score, and other project dependencies. Market projects are included in the stakeholder survey



Project Category

Project Category	Description
Enterprise	Includes internal-facing technology and back office support projects that have no market rule changes. This list includes projects that may be noticeable to Market Participants. These projects are NOT included in the stakeholder survey
Market	Projects associated with market rule(s) including market design and study projects as well as any project implementing market rule changes. These projects are included in the stakeholder survey unless they are Mandatory, Continuing, or Future



Project Scoring

Project Scoring	Description
NYISO Only	Enterprise projects that are not Mandatory, Continuing, or Future types are scored by the NYISO Only during the Prioritization phase. These projects are included in the budget based on a feasibility assessment taking into consideration resources, time constraints, priority score and other project dependencies.
Stakeholder Scored	Market projects that are not Mandatory, Continuing, or Future are included in the stakeholder survey and scored by the NYISO during the Prioritization phase. These projects are included in the budget based on a feasibility assessment taking into consideration resources, time constraints, stakeholder feedback, priority score, and other project dependencies.



2024 Market Project Candidates



Estir	nated	Cost (ii	n millions	3)

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
1	5 Minute Transaction Scheduling	Energy Market	Prioritize	Market Design Concept Proposed		0.18	0.00	0.00	0.18
2	Advanced Storage Modeling and Operation	New Resource	Prioritize	Market Design Concept Proposed		0.36	0.00	0.40	0.76
3	Advancing NYISO Transparency - Requested by DC Energy	Energy Market	Prioritize	Deployment		0.23	0.00	0.42	0.65
4	Clean Hydrogen - Requested by NextEra and Constellation	New Resource	Prioritize	Market Design Concept Proposed		0.20	0.00	0.05	0.25
5	Co-located Steam and Storage – Requested by Elevate Renewable Energy	New Resource	Prioritize	Development Complete		0.11	0.00	0.00	0.11
6	Coordinated Grid Planning Process (CGPP) Continuation	Planning	Prioritize	Study Defined		0.07	0.00	0.30	0.37
7	Dynamic Reserves - Phase 1	Energy Market	Prioritize	Functional Requirements	Market Design Complete	0.31	0.00	0.70	1.01



Estimated	Cost (in	millions)

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
8	Eliminate Offline GT Pricing	Energy Market	Prioritize	Deployment		0.23	0.00	0.00	0.23
9	Engaging the Demand Side	New Resource	Prioritize	Market Design Concept Proposed	Issue Discovery	0.19	0.00	0.30	0.49
10	Evolving Resource Adequacy Model	Capacity Market	Prioritize	Study Complete		0.24	0.00	0.50	0.74
11	Expanding Peak Hour Definition - Requested by DPS	Capacity Market	Prioritize	Market Design Complete		0.13	0.00	0.00	0.13
12	Granular Capacity Market Pricing	Capacity Market	Prioritize	Issue Discovery		0.22	0.00	0.40	0.62
13	Improve Duct-Firing Modeling	Energy Market	Prioritize	Functional Requirements		0.20	0.00	0.60	0.80
14	Internal Controllable Lines	New Resource	Prioritize	Functional Requirements	Market Design Complete	0.39	0.00	0.20	0.59



Estimate	d Cost (ir	millions)

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
15	LCR Optimizer Enhancements	Capacity Market	Prioritize	Deployment	Market Design Complete	0.13	0.00	0.10	0.23
16	Long Island Reserve Constraint Pricing	Energy Market	Prioritize	Market Design Concept Proposed		0.11	0.00	0.10	0.21
17	Market Purchase Hub Transactions - Requested by LIPA	Energy Market	Prioritize	Market Design Concept Proposed		0.08	0.00	0.20	0.28
18	MDIWG Support	New Resource	Prioritize	Issue Discovery		0.04	0.00	0.00	0.04
19	Mitigation Threshold Review	Energy Market	Prioritize	Market Design Concept Proposed		0.03	0.00	0.00	0.03
20	Operating Reserves Performance	Energy Market	Prioritize	Market Design Complete		0.17	0.00	0.10	0.27
21	Participation Opportunities for Small DER	New Resource	Prioritize	Market Design Concept Proposed		0.12	0.00	0.25	0.37



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Estimated	COST (II	1 111111101157

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
22	Pivotal Supplier Calculation Change	Capacity Market	Prioritize	Market Design Concept Proposed		0.06	0.00	0.00	0.06
23	Reference Level Software Cleanup	Energy Market	Prioritize	Deployment		0.27	0.00	0.05	0.32
24	Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC	Prioritize	Software Design		0.22	0.00	0.00	0.22
25	Storage as Transmission	New Resource	Prioritize	Market Design Concept Proposed	Issue Discovery	0.17	0.00	0.00	0.17
26	SubAccounts for Reporting - Requested by NRG	Business & Finance	Prioritize	Market Design Complete		0.06	0.00	0.00	0.06
27	Project Removed (Do Not Score) – Removal decided during 6/14 BPWG due to scope already being included in ICL Supply Side Mitigation for Controllable Lines	Capacity Market	Prioritize	Market Design Complete		0.09	0.00	0.00	0.09
28	Time Differentiated TCCs	TCC	Prioritize	Market Design Complete		0.25	0.00	0.15	0.40



						Esti	Estimated Cost (in millions)			
Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total	
29	Valuing Transmission Security	Capacity Market	Prioritize	Issue Discovery		0.24	0.00	0.30	0.54	
30	Winter Reliability Capacity Enhancements	Capacity Market	Prioritize	Issue Discovery		0.19	0.00	0.30	0.49	



Mandatory 2024 Market Projects

Estima	ted C	net (in	millio	ne)

Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
31	Ambient Adjusted Transmission Lines Rating	Energy Market	Mandatory	Development Complete	Functional Requirements	0.36	0.00	1.00	1.36
32	CRIS Expiration Evaluation	Capacity Market	Mandatory	Development Complete	Functional Requirements	0.24	0.00	0.25	0.49
33	Demand Curve Reset	Capacity Market	Mandatory	Study Complete	Study Defined	0.41	0.00	1.50	1.91
34	FERC Order 2222 Compliance	New Resource	Mandatory	Functional Requirements	Market Design Concept Proposed	1.01	0.00	0.35	1.36
35	Integrating Champlain Hudson Power Express (CHPE)	New Resource	Mandatory	Study Complete		0.11	0.00	0.00	0.11
36	Interconnection Process Enhancements	Planning	Mandatory	Deployment	Market Design Complete	0.22	0.05	0.25	0.52
37	Modeling Improvements for Capacity Accreditation	Capacity Market	Mandatory	Deployment	Functional Requirements	0.35	0.00	0.10	0.45



Continuing 2024 Market Projects

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Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
38	Balancing Intermittency	Energy Market	Continuing	Market Design Complete	Market Design Concept Proposed	0.30	0.00	0.77	1.07
39	Emissions Transparency - Requested by Stakeholders	Energy Market	Continuing	Deployment	Functional Requirements	0.20	0.00	0.00	0.20
40	Evolving Financial Transaction Capabilities - Bilateral Transactions	Energy Market	Continuing	Deployment	Software Design	0.34	0.00	0.00	0.34
41	Hybrid Aggregation Model	New Resource	Continuing	Deployment	Software Design	1.65	0.00	1.00	2.65



Future 2024 Market Projects

Estimated	Coot (ii	n millione\
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Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
42	Capacity Transfer Rights for Internal Transmission Upgrades	Capacity Market	Future						
43	Dynamic Reserves - Phase 2	Energy Market	Future						
44	Eliminate Fees for CTS Transactions with PJM	Energy Market	Future						
45	Locational Marginal Pricing of Capacity	Capacity Market	Future						
46	Long Island PAR Optimization and Financial Rights	Energy Market	Future						



Future 2024 Market Projects

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Item	Project	Product Area	Project Type	2024 Proposed Deliverable	2023 Deliverable	Labor	Capital	Prof. Serv.	Total
47	M2M West PARs	Energy Market	Future						
48	More Granular Operating Reserves	Energy Market	Future						
49	Reserves for Congestion Management	Energy Market	Future						
50	Review of Real-Time Market Structure	Energy Market	Future						
51	Separating Up and Down Regulation Service	Energy Market	Future						



NYISO Scores & High Priority Project Constraints

			Strateg	Operationa Market Iss	Cost & Complex	Score (1-100)	Rank
Item	Project	Product Area	4	4	2		
7	Dynamic Reserves - Phase 1	Energy Market	9.0	8.0	2.0	72	1
15	LCR Optimizer Enhancements	Capacity Market	6.0	7.0	7.0	66	2
5	Co-located Steam and Storage – Requested by Elevate Renewable Energy	New Resource	6.0	5.0	9.0	62	3
6	Coordinated Grid Planning Process (CGPP) Continuation	Planning	6.0	6.0	7.0	62	3
20	Operating Reserves Performance	Energy Market	6.0	7.0	5.0	62	3
26	SubAccounts for Reporting - Requested by NRG	Business & Finance	7.0	7.0	3.0	62	3
29	Valuing Transmission Security	Capacity Market	7.0	7.0	3.0	62	3



			Strate	Operation Market Is	Cost Comple	Score (1-100)	Rank
Item	Project	Product Area	4	4	2		
14	Internal Controllable Lines	New Resource	7.0	6.0	4.0	60	8
4	Clean Hydrogen - Requested by NextEra and Constellation	New Resource	6.0	6.0	5.0	58	9
13	Improve Duct-Firing Modeling	Energy Market	6.0	7.0	3.0	58	9
21	Participation Opportunities for Small DER	New Resource	6.0	6.0	5.0	58	9
30	Winter Reliability Capacity Enhancements	Capacity Market	6.0	7.0	3.0	58	9
2	Advanced Storage Modeling and Operation	New Resource	5.0	7.0	4.0	56	13
18	MDIWG Support	New Resource	6.0	3.0	10.0	56	13



				Operationa Market Iss	Cost & Complex	Score (1-100)	Rank
Item	Project	Product Area	4	4	2		
12	Granular Capacity Market Pricing	Capacity Market	7.0	6.0	1.0	54	15
8	Eliminate Offline GT Pricing	Energy Market	5.0	5.0	6.0	52	16
17	Market Purchase Hub Transactions - Requested by LIPA	Energy Market	6.0	4.0	6.0	52	16
1	5 Minute Transaction Scheduling	Energy Market	6.0	5.0	3.0	50	18
9	Engaging the Demand Side	New Resource	7.0	4.0	3.0	50	18
10	Evolving Resource Adequacy Model	Capacity Market	7.0	4.0	3.0	50	18
16	Long Island Reserve Constraint Pricing	Energy Market	5.0	5.0	5.0	50	18
27	Project Removed (Do Not Score) - Removal decided during 6/14 BPWG due to scope already being included in ICL Supply Side Mitigation for Controllable Lines	Capacity Market	5.0	3.0	9.0	50	18

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		Strate	Operation Market Is	Cost o	(1-100)	Rank
Project	Product Area	4	4	2		
Storage as Transmission	New Resource	5.0	3.0	8.0	48	23
Expanding Peak Hour Definition - Requested by DPS	Capacity Market	5.0	2.0	9.0	46	24
Time Differentiated TCCs	TCC	5.0	4.0	4.0	44	25
Mitigation Threshold Review	Energy Market	3.0	3.0	9.0	42	26
Advancing NYISO Transparency - Requested by DC Energy	Energy Market	4.0	3.0	6.0	40	27
Pivotal Supplier Calculation Change	Capacity Market	3.0	3.0	7.0	38	28
Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	TCC	3.0	5.0	1.0	34	29
Reference Level Software Cleanup	Energy Market	3.0	4.0	2.0	32	30
	Storage as Transmission Expanding Peak Hour Definition - Requested by DPS Time Differentiated TCCs Mitigation Threshold Review Advancing NYISO Transparency - Requested by DC Energy Pivotal Supplier Calculation Change Reserving Capacity for TCC Balance-of-Period (BOP) Auctions	Storage as Transmission Expanding Peak Hour Definition - Requested by DPS Capacity Market Time Differentiated TCCs TCC Mitigation Threshold Review Energy Market Advancing NYISO Transparency - Requested by DC Energy Energy Market Pivotal Supplier Calculation Change Capacity Market Reserving Capacity for TCC Balance-of-Period (BOP) Auctions TCC	Project Product Area 4 Storage as Transmission New Resource 5.0 Expanding Peak Hour Definition - Requested by DPS Capacity Market 5.0 Time Differentiated TCCs TCC 5.0 Mitigation Threshold Review Energy Market 3.0 Advancing NYISO Transparency - Requested by DC Energy Energy Market 4.0 Pivotal Supplier Calculation Change Capacity Market 3.0 Reserving Capacity for TCC Balance-of-Period (BOP) Auctions TCC 3.0	Project Product Area 4 4 Storage as Transmission New Resource 5.0 3.0 Expanding Peak Hour Definition - Requested by DPS Capacity Market 5.0 2.0 Time Differentiated TCCs TCC 5.0 4.0 Mitigation Threshold Review Energy Market 3.0 3.0 Advancing NYISO Transparency - Requested by DC Energy Energy Market 4.0 3.0 Pivotal Supplier Calculation Change Capacity Market 3.0 3.0 Reserving Capacity for TCC Balance-of-Period (BOP) Auctions TCC 3.0 5.0	Project Product Area 4 4 2 Storage as Transmission New Resource 5.0 3.0 8.0 Expanding Peak Hour Definition - Requested by DPS Capacity Market 5.0 2.0 9.0 Time Differentiated TCCs TCC 5.0 4.0 4.0 Mitigation Threshold Review Energy Market 3.0 3.0 9.0 Advancing NYISO Transparency - Requested by DC Energy Energy Market 4.0 3.0 6.0 Pivotal Supplier Calculation Change Capacity Market 3.0 3.0 7.0 Reserving Capacity for TCC Balance-of-Period (BOP) Auctions TCC 3.0 5.0 1.0	Project Product Area 4 4 2 Storage as Transmission New Resource 5.0 3.0 8.0 48 Expanding Peak Hour Definition - Requested by DPS Capacity Market 5.0 2.0 9.0 46 Time Differentiated TCCs TCC 5.0 4.0 4.0 44 Mitigation Threshold Review Energy Market 3.0 3.0 9.0 42 Advancing NYISO Transparency - Requested by DC Energy Energy Market 4.0 3.0 6.0 40 Pivotal Supplier Calculation Change Capacity Market 3.0 3.0 7.0 38 Reserving Capacity for TCC Balance-of-Period (BOP) Auctions TCC 3.0 5.0 1.0 34



High Priority Project Constraints

- New Resource Team
 - Resource constraints start to show up after including Advanced Storage Modeling and Operation
- Energy Market Team
 - Resource constraints start to show up after including Improve Duct-Firing Modeling
- Capacity Market Team
 - Resource constraints start to show up after including Winter Reliability Capacity Enhancements
- The NYISO is continuing to evaluate these resource constraints and looks forward to more insights from the Stakeholder Survey

