

NYISO 2023 Draft Budget Overview

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Other than the items noted in RED, this presentation is unchanged from the September 15, 2022, BPWG meeting.

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Presentation Contents

Topic	Slide #
BUDGET HIGHLIGHTS	
Timeline for 2023 Budget Cycle	4
Key Priorities and Projects for 2023	5-9
Budget Highlights	10-25
COST MANAGEMENT MEASURES	27-31
BUDGET SUMMARY INFORMATION & LINE ITEM DETAILS	
2022 Budget Overview	33
2023 Draft Budget Overview	34
2023 Line Item Details	35-47
APPENDIX	
2024 – 2027 Budget Projections	50-56
Peer Comparison	58

NYISO 2023 Draft Budget: Highlights



Timeline for 2023 Budget Cycle

September 15: NYISO presents 2023 draft budget to BPWG

September 19: BOD meeting to review high level 2023 draft budget summary

September 28: BPWG Chair to present 2023 draft budget to Management Committee

September 28: BPWG meeting

October 11: BPWG meeting

October 17: BOD meeting to review draft of 2023 budget

October 26: Management Committee to vote on 2023 budget

November 15: BOD approval of final 2023 budget



Energy and Ancillary Services Market

Markets for the Future

- Propose Market Design Concept for Balancing Intermittency (SOM)
- Complete Market Design Concept for Dynamic Reserves (SOM)
- Develop Functional Requirements for Emissions Transparency
- Refresh Study for Enhancing Fuel & Energy Security
- Complete Market Design for Long Mountain PAR Operating Protocol with ISO-NE
- Develop Functional Requirements for Ambient Adjusted Transmission Lines Rating

Improving Price Formation

Deploy Constraint Specific Transmission Shortage Pricing (SOM)

Financial Instruments for Energy Markets

Complete Software Design for Evolving Financial Transaction Capabilities



Capacity Market

Capacity Accreditation Measures

- > Deploy Improving Capacity Accreditation (SOM)
- Complete Functional Requirements for Modeling Improvements for Capacity Accreditation (SOM)

Capacity Improvements to Support Reliability

- Define Study for Demand Curve Reset
- Complete Market Design for LCR Optimizer Enhancements

Improving Market Processes

Complete Functional Requirements for CRIS Expiration Evaluation



New Resources and Technologies

Enabling New Resources and Capabilities

- ➤ Complete Market Design for Internal Controllable Lines
- Deploy Distributed Energy Resources Participation Model
- Propose Market Design Concept for FERC Order 2222 Compliance
- Complete Software Design for Hybrid Aggregation Model
- ➤ Issue Discovery for Storage as Transmission
- Issue Discovery for Engaging the Demand Side

Planning Process Enhancements

- ➤ Complete Issue Discovery for Coordinated Grid Planning Process
- Complete Market Design for Interconnection Process Enhancements



Technology Transformation and Infrastructure Investment

- Deploy Block Storage Refresh
- Complete Development for Network Manager Refresh
- > Complete Network Infrastructure Upgrade
- > Complete Application Platform Upgrade
- > Complete UPS Replacement
- Complete Building Management System Controls Upgrade
- > Complete Krey Blvd. Control Room A/V Replacement
- > Deploy Microsoft 365



Physical and Cyber Security

- > Continue to Implement Supply Chain Security Enhancements
- > Deploy Access Management Platform Upgrade
- Complete Study of Next Generation Security Architecture
- > Deploy IT Service Management Security Enhancements



Budget Highlights

In Summary:

- NYISO's draft 2023 budget totals \$190.0M, allocated across a forecast of 156.7 million MWh, for a Rate Schedule 1 charge/MWh of \$1.213. Comparatively, the 2022 budget was \$169.2M, allocated across 150.0 million MWh for a Rate Schedule 1 charge/MWh of \$1.128
- NYISO's proposed 2023 Rate Schedule 1 Revenue Requirement is an increase of \$20.8M, which is 12.3% as compared to the 2022 budget
- NYISO's projected 2023 MWh throughput is an increase of 6.7 million MWh, which is
 4.5% as compared to the 2022 budget
- The resulting Rate Schedule 1 charge/MWh is an increase of \$0.085, which is 7.5% as compared to the 2022 budget



Budget Highlights: Historical Budget Comparisons

(in millions, excluding RS1/MWh	2019	2020	2021	2022	2023	2023 vs.
charges)	Budget	Budget	Budget	Budget	Draft	2022
RS1 Rev. Requirement (in \$\$)	\$168.2	\$168.0	\$167.4	\$169.2	\$190.0	\$20.8
Budgeted MWh	<u>157.1</u>	<u>154.3</u>	<u>147.3</u>	<u>150.0</u>	<u>156.7</u>	<u>6.7</u>
RS1 Rev. Requirement (\$/MWh)	\$1.071	\$1.089	\$1.137	\$1.128	\$1.213	\$0.085
RS1 Charge/MWh - Gross (before	re rebates fr	om non-phys	ical transac	tions):		
RS1 Charge/MWh: Purchasers @ 72%	\$0.771	\$0.784	\$0.819	\$0.812	\$0.873	
RS1 Charge/MWh: Sellers @ 28%	\$0.300	\$0.305	\$0.318	\$0.316	\$0.340	
RS1 Charge/MWh - Net (after es	stimated reb	ates from no	n-physical t	ransactions)	•	
RS1 Charge/MWh: Purchasers @~68%	\$0.725	\$0.741	\$0.770	\$0.763	\$0.825	
RS1 Charge/MWh: Sellers @~26%	\$0.282	\$0.283	\$0.299	\$0.297	\$0.315	
RS1 Charge/MWh: Non- physical transactions @~6%	\$0.064	\$0.065	\$0.068	\$0.068	\$0.073	

Salaries & Benefits – 2023 Impact of 2022 Compensation Adjustments

At the beginning of 2022, in response to on-going employee retention and recruitment challenges, NYISO staff recommended retaining \$5.0M of the \$10.7M total funds remaining from the 2021 budget cycle to implement employee salary actions in this highly competitive labor market. Salary actions included:

- Immediate 3% salary adjustment for all current employees (Retroactive to January 1, 2022)
- Targeted salary adjustment and retention incentives
- Funds required to respond to issues identified through the comprehensive salary benchmarking project

The increase in 2023 salaries and benefits resulting from the 2022 retroactive 3% salary adjustment is approximately \$2.5M.

The results of the 2022 Mercer benchmarking indicated that approximately \$2.5M was required in 2022 to align compensation for certain positions more closely with market levels. The 2023 annual impact of the compensation adjustments resulting from the benchmarking analysis is an increase in budgeted salaries and benefits of approximately \$5.0M.

Salaries & Benefits - Headcount & Resource Planning

NYISO has developed a staffing resource plan in support of the 2023 project commitments, as well as the NYISO's other strategic initiatives and objectives. These staffing recommendations consider optimal use of existing headcount, alignment with current and future organizational priorities, and address areas of operational risk stemming from resource constraints.

The proposed new headcount requirements specifically consider the prospect of new resources entering the NYISO's markets, staffing required to support the continued advancement of Interconnection Projects and the NYISO's System Planning processes, resources required to accomplish prioritized project deliverables, and the need to ensure NYISO is well positioned to meet new and expanding responsibilities.

The 2023 headcount proposal includes the addition of twenty positions, primarily in System & Resource Planning, Stakeholder Services, Operations, and Market Operations.

Refer to slides 14 - 17 for additional details.



Department	New for 2023	Key Contributions from Positions
StakeholderServices	2	Stakeholder Services Representative – Planning Liaison - These new positions are essential to meeting the increasing demands (450+ active projects) of the Interconnection Planning process and will respond to stakeholder feedback to improve the interconnection process and streamline planning processes to support the class year. These positions will enable the NYISO to provide more immediate, focused attention to responding to and supporting Stakeholders, MPs and prospective MPs that have proposed projects in the Interconnection Queue.
Power System Operations	2	Associate Operator – These positions are required to support succession planning to expand the number of NYISO Associate Operators. Grid Operations requires trained and qualified Operators that are ready and available to ensure continuity of staffing at the senior level in the control room.
Market Structures	1	Technology Development Engineer – This position will work with Market Design, Planning, and Operations to support project initiatives that require development of prototyping and testing methodologies, consumer impact and benefit analysis, and implementation support.
Legal	1	Attorney – This position is required to provide in-house dedicated expertise regarding employment law matters. Issues raised by the pandemic and the transition to a hybrid work model have increased the volume and complexity of Human Resource legal issues that cannot be adequately addressed on a part-time basis.
Market Operations	1	Distributed Resource Operations Analyst – This position is necessary to support the desired project load for 2023. The project portfolio currently includes the following significant initiatives: completion of the Distributed Energy Resource Participation model, Capacity Accreditation, Engaging the Demand Side and FERC Order 2222 compliance. Insufficient resources exist within the current team makeup to support these efforts.

Department	New for 2023	Key Contributions from Positions
Market Operations	1	Resource Adequacy Engineer - This position is required to meet the expanded responsibilities the NYISO will acquire to establish and sustain a Capacity Accreditation model to define resource's reliability contributions. The Capacity Accreditation process is expected to be an annual obligation to recalculate contributions based upon the annually approved IRM model, measuring resource valuation for each resource type and location. In addition, review of the model inputs, calculation methodology, and results will be required with stakeholders.
Interconnection Projects	2	Interconnection Study Project Manager - These positions will coordinate the non-technical activities associated with proposed projects. These positions would be self-funding as most of these non-technical activities provide for cost recovery through project developers. These activities include analyzing and coordinating services such as scheduling, records control, project management, data analysis, research and special management studies, performing "triage" function on incoming work assignments, assessing priority status, and determining resources needed and available.
Transmission Studies	1	Transmission Studies Engineer - This position is required to conduct power system engineering studies in compliance with NERC, NPCC, and NYSRC criteria and in support of the NPCC Area Transmission Review, the NERC Planning Assessment, STARs, and Additional Reliability Studies. Additional NERC studies include assessing the impact of geomagnetic disturbance events and the NYCA underfrequency load shedding program.
Resource Planning	1	Resource Planning Engineer – This position is required to support accelerated system changes with forward-looking activities related with resource planning to support researching, developing, absorbing, and onboarding new tools and methods and to better absorb potential additional resource planning scope needed to support other NYISO departments.

Department	New for 2023	Key Contributions from Positions
Reliability Planning	1	Reliability Planning Engineer – This position is required to provide technical expertise on how the New York electric system can operate with the majority of the resources being dispersed, inverter based, and intermittent. Expertise will include developing the characteristics these resources will need to interconnect into the system and operate on a day-to-day basis.
Economic Planning	1	Environmental & Policy Engineer – This position is required to assist the NYISO to be informed on relevant environmental engineering and policy developments driven by New York State and Federal energy policies. Environmental policies and issues impact not only long-term system planning within System & Resource Planning, but also real-time and near time operations in Grid Operations and Market Operations. In addition, environmental policies are being updated at a rapid pace and the environmental specialist will provide practical interpretations of policies as applicable to the NYISO.
Information Technology	1	Sr. Storage Administrator - This position is required to address increasing workload and will assist in managing the entire complex disk storage infrastructure that contains the data required for the NYISO's mission critical market applications, as well as all the supporting internal and external applications. This position will also be responsible for the enterprise backup platform that protects all servers, files, and database repositories.
Human Resources	1	Recruiter – Currently, NYISO has one dedicated recruiting resource. The addition of a second recruiter will allow for the expansion of recruiting strategies designed to reach passive candidates, as well as increase NYISO's ability to work with an increased number of candidates in the pursuit of filling open positions.

Department	New for 2023	Key Contributions from Positions
Economic Planning	1	Power System Planning Engineer - This position will be responsible for performing a variety of techno-economic power system planning and operational studies as required in the NYISO tariff and in response to government, environmental, and market related study requirements pertaining to grid infrastructure and renewable energy target achievement.
Operations	1	Scheduling Engineer - This position will coordinate and analyze Transmission Owner and Generation Owner maintenance outage requests in order to ensure there are sufficient resources and transfer capability to meet reliability and energy market needs. This position is critical due to the volume of outage requests that need to be analyzed.
Market Design	1	Market Design Specialist – This position is required to support current and future project workload, participate in committee meetings, support new market participants and remain more fully engaged in market projects through implementation.
Capacity Market Operations	1	Engineer – This position will enable timely qualification and onboarding of resources in new participation models. Processes which analyze market outcomes, calculating market parameters and derating and capacity accreditation factors and responding to customer inquiries are all resource-specific and require significant manual workload. The volume and complexity of duration adjustment factors and derating and capacity accreditation factors with higher volume requires expanded staff engagement.
Total Included 2023 Budget	20 FTEs	

Salaries & Benefits – Merit, Equity, Promotion Compensation

Historically, salary merit adjustments have been based upon factors that include:

- National surveys showing the median percentage for merit increases across the country
- The planned budget for compensation adjustments among our RTO/ISO peers
- The imperative that the NYISO continue to offer competitive salaries to attract and retain talent and address inequities between actual compensation and market compensation levels for certain positions
- The commitment to recognition of certain individuals that achieve significant milestones in their professional development and their subsequent contributions to the success of the NYISO

In developing the 2023 budget, NYISO continued to benchmark salaries considering the factors referenced above and proposes a merit pool of 4%, equity adjustment pool of 1.5% and a promotion pool of 0.5%.

Salaries & Benefits - 2023 Benchmark Data

National surveys showing the median number for merit increases across the country: Currently the following sources have released 2023 projections:

World At Work 4.1%

The Conference Board Not yet available

Willis Towers Watson 4.1%

Korn Ferry Not yet available

SHRM 4.1%

The NYISO's RTO/ISO peers have indicated planned salary increases of **5.5**% - **7**% for 2023.

As another point of reference, the projected Cost of Living Adjustment (COLA) for 2023 is 9.0% - 10%.

Debt Service Cost

NYISO is utilizing \$5.7M of the 2021 budget surplus to make early repayments of outstanding debt, which has reduced the 2023 Rate Schedule 1 surcharge by \$.036 \$/MWh.

However, in the 2022 budget, NYISO reduced debt service utilizing funds remaining from the 2019 and 2020 budget cycles, totaling \$10.1M.

The difference in amount of early repayments assumed in the 2002 budget vs. 2023 budget results in an increase in Debt Service Cost of **\$4.4M** as compared to 2022 (\$10.1M vs. \$5.7M).

In addition, 2022 loan proceeds were \$5.0M higher than historical borrowings, increasing 2023 principal repayments by \$0.7M.

Miscellaneous Revenue - Rate Schedule 1 Carryover

In certain situations, the NYISO has included an assumption for Rate Schedule 1 carryover from the current year into the proposed budget for the upcoming year. Any Rate Schedule 1 carryover has the direct effect of reducing the budgeted revenue requirement for the upcoming year.

This carryover represents either an anticipated over-collection on Rate Schedule 1 revenues and/or anticipated under-spending vs. the approved budget for the current year.

As of August 31, 2022, the NYISO's over-collection on Rate Schedule 1 revenue is ~\$7.0M and the year-end projection is an over-collection of ~\$8.0M. As of July 31, 2022, the NYISO's budgetary underrun is \$3.8M and the year-end projection is an underrun of \$3.4M.

Given the projected level of 2022 budget surplus, NYISO is proposing a Rate Schedule 1 carryover of \$5.0M in the 2023 budget, reducing the impact of the 2023 cost increase drivers by \$.032 \$/MWh. The reasonableness of this assumption will be monitored and reassessed as 2022 progresses.

Debt Proceeds and Capital Requirements

2023 is the final year of the NYISO's five-year Budget Facility, which expires December 31, 2023.

Assuming the loan proceeds budgeted in 2022 of \$32.0M are fully utilized, there remains \$27.0M of available loan proceeds to fund 2023 capital acquisitions and software development projects.

NYISO has developed the cost estimates associated with the proposed list of 2023 capital requirements and software development projects, such that the project portfolio can be fully funded by \$27.0M in available loan proceeds. This balance mitigates 2023 budget increases driven by fluctuations in available loan proceeds.

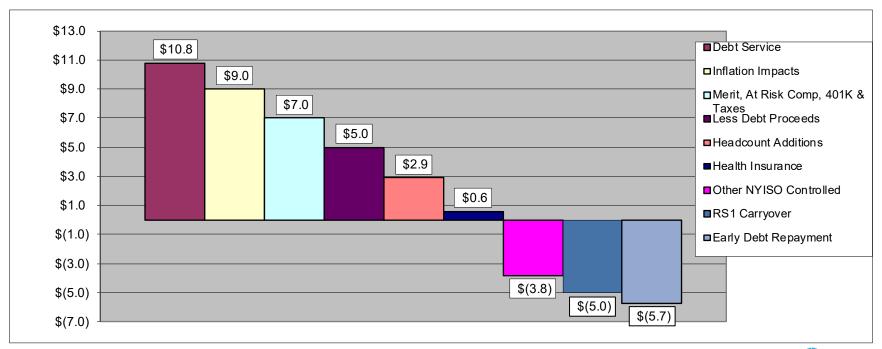


Budget Highlights: 2023 vs. 2022 Revenue Requirement Changes

2022 D. A. C. L. J. J. D	0.0	
1	0.0	
•	9.2	
Increase in Rate Schedule 1 Revenue Requirement	\$	20.8
Spending Decreases & Revenue Increases:		
Miscellaneous Revenue (Planning Studies, RS1 Carryover & Interest Income)		(5.4)
Professional Fees		(2.4)
Capital		(0.7)
Other Expenses		(0.1)
Interest Expense on Current Year Debt Proceeds		-
	\$	(8.6)
Budget Increases:		
Salaries & Benefits		17.2
Debt Service		5.1
Proceeds from Debt (Reduced from Prior Year)		5.0
Computer Services		1.2
Building Services		0.4
Insurance		0.4
Telecommunications		0.1
		29.4

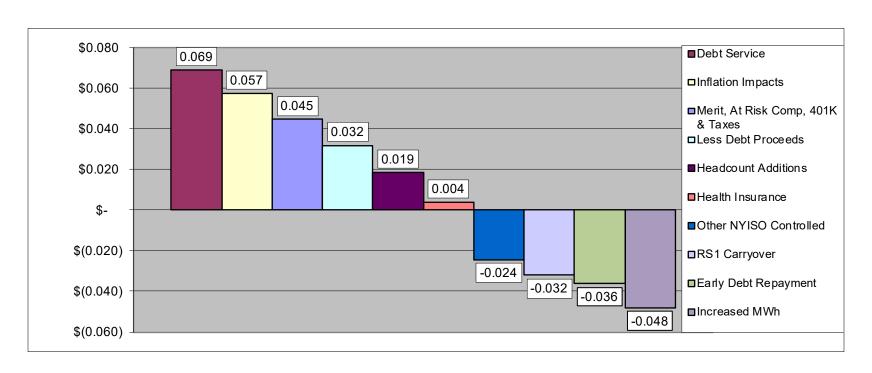


Budget Highlights: 2023 vs. 2022 Budget \$ Change Components





Budget Highlights: 2023 vs. 2022 Rate Schedule 1 Change Components



NYISO 2023 Draft **Budget:** Cost Management Measures



Salary and Benefits:

- Accelerated 2023 required pension funding of \$0.8M into 2022, reducing 2023 pension benefit cost
- Prorated dates of hire for new positions throughout 2023, reducing salary & benefit cost by \$0.6M



Professional Fees:

- > \$0.5M reduction in external support for System & Resource Planning by accelerating certain system performance improvements into 2022
- > \$0.4M reduction in external support to conduct IT system assessments through addition of Sr. Storage Administrator and delaying certain assessments by an additional year
- > \$0.3M reduction in HR external recruiting support through addition of internal recruiter
- \$0.2M reduction in Market Design consulting through leveraging of internal resources



Building Services:

- ➤ \$0.3M of reduced utility cost increases through planned competitive bid process for contract renewal
- > \$0.2M of eliminated building maintenance costs through various efficiency measures
- > \$0.1M of reduced supplies and subscriptions cost



Computer Services:

> \$0.3M of eliminated hardware and software maintenance cost by transitioning to more cost effective subscription services

<u>Meetings/Travel/Training:</u>

2023 costs held relatively flat as compared to 2022 through continued use of remote training opportunities and virtual meetings

Debt Service:

NYISO refinanced outstanding debt on the NYISO's Mortgage and Renovation Loans and Infrastructure Master Plan Mortgage, reducing interest expense by approximately \$0.7M over the remaining term of the loans



NYISO 2023 Draft Budget: Summary Information & Line Item Details



2022 Budget Overview

	2022 Budget			
(\$ in millions, except RS#1/MWh)	Enterprise	Projects	Total	
Capital	\$1.4	\$10.4	\$11.8	
Salaries & Benefits	89.4	13.3	102.7	
Professional Fees (including Legal)	18.9	11.4	30.3	
Building Services	6.0	0.0	6.0	
Computer Services	20.3	2.1	22.4	
Insurance	3.3	0.0	3.3	
Telecommunications	2.8	0.0	2.8	
Other Expenses (BOD, Travel/Training, NPCC Fees)	3.9	0.0	3.9	
Subtotal: Current Year Needs	\$146.0	\$37.2	\$183.2	
Debt Service	25.4	0.0	25.4	
Subtotal: Cash Budget	\$171.4	\$37.2	\$208.6	
Less: Miscellaneous Revenues	(7.7)	0.0	(7.7)	
Less: Proceeds from Current Year Budget Debt	(1.4)	(30.6)	(32.0)	
Add: Interest on Current Year Budget Debt	0.0	<u>0.3</u>	0.3	
Total: Rate Schedule #1 Revenue Requirement in \$\$	\$162.3	\$6.9	\$169.2	
Budgeted MWh (in millions)			150.0	
Rate Schedule #1 Revenue Requirement in \$/MWh (budget)			\$1.128	



2023 Draft Budget Overview

	2023 Draft Budget			
(\$ in millions, except RS#1/MWh)	Enterprise	Projects	Total	
Capital	\$1.9	\$9.2	\$11.1	
Salaries & Benefits	106.2	13.7	119.9	
Professional Fees (including Legal)	19.4	8.5	27.9	
Building Services	6.4	0.0	6.4	
Computer Services	23.0	0.6	23.6	
Insurance	3.7	0.0	3.7	
Telecommunications	2.9	0.0	2.9	
Other Expenses (BOD, Travel/Training, NPCC Fees)	3.8	0.0	3.8	
Subtotal: Current Year Needs	\$167.3	\$32.0	\$199.3	
Debt Service	30.5	0.0	30.5	
Subtotal: Cash Budget	\$197.8	\$32.0	\$229.8	
Less: Miscellaneous Revenues	(13.1)	0.0	(13.1)	
Less: Proceeds from Current Year Budget Debt	(1.9)	(25.1)	(27.0)	
Add: Interest on Current Year Budget Debt	0.0	<u>0.3</u>	0.3	
Total: Rate Schedule #1 Revenue Requirement in \$\$	\$182.8	\$7.2	\$190.0	
Budgeted MWh (in millions)			156.7	
Rate Schedule #1 Revenue Requirement in \$/MWh (budget)			\$1.213	



Line Item Details - Capital

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Facility Improvements	\$2.8	\$5.9	(\$3.1)
Replacement of Existing Hardware	\$8.3	4.9	3.4
Software & Software Licenses (capitalized)	=	<u>1.0</u>	<u>(1.0)</u>
Total Capital Costs	\$11.1	\$11.8	(\$0.7)

Facility Improvements:

Facility improvements included within the 2023 budget include \$1.1M to replace the Uninterruptible Power Supply (UPS) system, \$0.6M to upgrade the Krey Blvd. building management system, \$0.4 for facility repairs at Carman Rd., \$0.2M to replace UPS batteries at Carman Rd., \$0.2M to refurbish elevators at Krey Blvd., \$0.2M for Krey Blvd. mechanical room repairs, and \$0.1M for guardhouse repairs.

Replacement of Existing Hardware:

Replacement of computer hardware fluctuates from year-to-year and is driven by technology refresh schedules, planned obsolescence by technology vendors, and the specific mix of new computer requirements identified in the current year project schedule. The 2023 budget includes \$7.5M of new hardware required for proposed projects, including \$2.3M for the Network Infrastructure Upgrade, \$2.3M for the Block Storage refresh, \$2.0M for the Network Manager refresh, \$0.5M for Krey Blvd. control room A/V replacement, and \$0.3M for Windows System upgrade. The 2023 budget also includes \$0.5M for storage expansion, \$0.2M for chart recorders and \$0.1M for security enhancements.

Software and Software Licenses (capitalized):

Replacement of computer software and software licenses fluctuates from year-to-year and is driven by a change in the number of users as well as by software required as identified in the current year project schedule. Software requirements included in the 2023 budget are primarily for subscription-based services, which are not capitalized.

Line Item Details - Salaries & Benefits

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Base Salaries	\$83.4	\$70.8	\$12.6
Benefit Programs / At-Risk Compensation	30.2	26.2	4.0
Payroll Taxes	<u>6.3</u>	<u>5.7</u>	0.6
Total Salaries & Benefits	\$119.9	\$102.7	\$17.2

The 16.7% increase in Salaries & Benefits is primarily driven by:

- \$5.6M Base salaries impact of 2022 compensation adjustments (3% retro 1/1/22 & Mercer)
- \$4.1M 4.0% merit, 1.5% for compensation equity adjustments and 0.5% for promotion adjustments
- \$2.9M Impact of twenty additional FTEs in 2023 with prorated dates of hire
- \$4.2M Impact of higher base salaries and additional FTEs on at-risk compensation and 401k plan contributions
- \$0.6M 5% estimated increase in health insurance
- \$0.6M Increase for FICA and Medicare driven by higher base salaries, partially offset by;
- (\$0.8M) 2023 pension funding accelerated to 2022

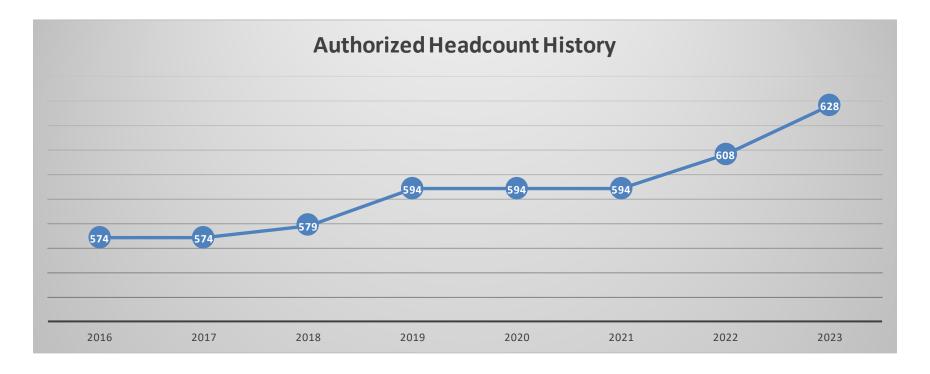
See additional details on Salaries & Benefits on the following slides

Line Item Details - Salaries & Benefits (Cont.)

Headcount Summary							
Total Authorized FTE Positions for 2022	608						
Add: New Positions for 2023	<u>20</u>	Refer to details on slides 14 - 17					
Total Authorized FTE Positions for 2023	628						
Less: Assumed Vacancies	(38)	Based on assumed vacancy rate of 6%					
Equals: Total Budgeted FTE Positions	590						

Headcount Summary By Year							
2023 2022 Chang							
Total Authorized FTE Positions	628	608	20				
Less: Assumed Vacancies	(38)	(36)	<u>(2)</u>				
Total Budgeted FTE Positions	590	572	18				

Line Item Details - Salaries & Benefits (Cont.)





Line Item Details - Professional Fees

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Product Enhancement consultants (several vendors)	\$8.5	\$11.4	(\$2.9)
External legal fees	\$5.6	\$5.1	\$0.5
Market Monitoring	\$5.0	\$5.0	\$0.0
Misc. Professional Fees (all individually < \$250K)	\$1.3	\$1.5	(\$0.2)
Security guards	\$1.8	\$1.8	\$0.0
Reliability & Economic Planning	\$1.0	\$0.7	\$0.3
Information Technology & Facilities	\$0.5	\$0.3	\$0.2
Market design & related consulting	\$0.7	\$0.9	(\$0.2)
Ranger support & enhancements	\$1.2	\$1.1	\$0.1
Employee Benefits & Recruiting	\$1.6	\$1.9	(\$0.3)
External audits and Internal Audit co-sourcing	<u>\$0.7</u>	<u>\$0.6</u>	<u>\$0.1</u>
Total Professional Fees	\$27.9	\$30.3	(\$2.4)

Product Enhancement Consultants: The budgeted decrease is primarily driven by the current mix of consulting support required by the 2023 proposed projects (See additional details on 2023 proposed product enhancements in a separate presentation posted for the 9/15/2022 BPWG meeting).

External Legal Fees - The budgeted increase is due to higher rates charged by external legal firms and increased reliance on outside counsel to support interconnection agreement negotiation and execution.

Reliability & Economic Planning - The budgeted increase is driven by software support for system modeling tools and long-term wind and solar forecasting datasets.

Employee Benefits & Recruiting - The budgeted decrease is due to a reduction in external recruiting support accomplished by 2023 proposed headcount addition to provide in-house recruiting and the elimination of funds that were budgeted in 2022 for a comprehensive compensation benchmarking project.



Line Item Details - Building Services

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Building Services	\$6.4	\$6.0	\$0.4

NYISO includes building service contracts, utilities, repairs & maintenance, and membership dues & subscriptions within this budget category.

The cost of Building Services is projected to increase by \$0.4M, primarily due to inflationary cost increases for utilities.

Line Item Details - Computer Services

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Computer Services Costs	\$23.6	\$22.4	\$1.2

NYISO includes hardware and software maintenance, software licenses (non-capitalized), computer supplies, and minor equipment purchases within this budget category. The continued addition of new hardware, software, software licenses, and technology upgrades continues to drive increases in this budget category. Inflationary cost increases are a significant driver in the 2023 Computer Services budget.

- \$1.2M Existing services with additional features or usage such as cloud hosting usage for Planning studies, DataMart and Intranet, maintenance for Network Infrastructure Upgrade hardware, support for the Video Wall upgrade, and cyber security enhancements
- \$1.1M Includes new subscriptions for Outage Management System (OMS) replacing legacy system and tools used for power transmission simulation and analysis
- \$0.7M Inflationary increase for various renewals without any service changes
- \$0.4M Additional cloud-based services
- (\$0.7M) Offset by reduced services including maintenance and support reduction after OMS migration is complete and maintenance reduction tied to hardware retirements
- (\$1.5M) Offset by reduction in maintenance, subscription, and license fees required for the 2023 project portfolio

Line Item Details - Insurance

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Insurance	\$3.7	\$3.3	\$0.4

The cost of insurance coverage is increasing by 12% in 2023 due to the economic climate and insurance industry experience, driving up the cost of premiums with no coverage changes.

Line Item Details - Telecommunications

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Telecommunications	\$2.9	\$2.8	\$0.1

The 2023 Telecommunications budget is projected to increase by \$0.1M primarily due to cost of new substation and transmission operator connectivity.

Line Item Details - Other Expenses

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Travel, Meetings, Training Costs	\$1.3	\$1.4	(\$0.1)
BOD Fees and Expenses	\$2.2	\$2.2	\$ -
NPCC Fees	<u>\$0.3</u>	<u>\$0.3</u>	<u>\$ -</u>
Total Other Expenses	\$3.8	\$3.9	(\$0.1)

Other Expenses are budgeted to decrease by \$0.1M to more closely align travel, meetings, and training costs with projected 2022 levels.

Line Item Details - Debt Service

	Annual Principal and Interest Repayments ** (\$ in millions)										
Debt Facility & Repayment Period	Borrowings	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2005 KCC Bldg Mortgage & Renov. (20 yrs)	\$24.8M	\$2.1	\$2.0	\$2.0	\$1.9	\$2.0	\$2.0	\$2.0	\$1.6	\$0.9	\$0.1
Infrastructure Master Plan Mortgage (19 yrs)	\$45.0M	\$4.2	\$4.1	\$3.9	\$3.8	\$3.2	\$3.4	\$3.3	\$3.2	\$3.1	\$3.0
2015 Budget Loan (3 yrs)	\$25.0M	\$1.0	\$ -	\$ -	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
2016 Budget Loan (3 yrs)	\$25.0M	\$12.9	\$4.2	\$ -	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
2017 Budget Loan (3 yrs)	\$24.7M	\$9.0	\$16.9	\$ -	\$ -	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
2018 Budget Loan (3 yrs)	\$25.3M	\$0.3	\$9.0	\$8.8	\$8.5	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
2016-2019 EMS/BMS System Upgrade	\$30.0M	\$6.1	\$11.6	\$5.6	\$5.6	\$-	\$-	\$ -	\$ -	\$ -	\$ -
2019 Budget Loan (3 yrs)	\$26.0M	\$ -	\$0.3	\$9.4	\$17.6	\$-	\$ -	\$ -	\$ -	\$ -	\$ -
2020 Budget Loan (3 yrs)	\$26.6M.	\$ -	\$ -	\$0.4	\$9.6	\$14.9	\$3.0	\$ -	\$ -	\$ -	\$ -
2021 Budget Loan (3 yrs)	\$28.4M	\$ -	\$ -	\$-	\$0.3	\$10.2	\$9.9	\$9.6	\$ -	\$ -	\$ -
2022 Budget Loan (3 yrs)	\$32.0M Est.	\$ -	\$ -	\$-	\$-	\$0.5	\$11.5	\$11.2	\$10.8	\$ -	\$ -
2023 Budget Loan (3 yrs)	\$27.0M Est.	\$ -	\$ -	\$ -	\$ -	\$-	\$0.4	\$9.8	\$9.5	\$9.2	\$ -
2024 Budget Loan (3 yrs)	\$37.0M Est.	\$ -	\$ -	\$-	\$-	\$-	\$ -	\$0.5	\$13.4	\$13.0	\$12.6
2025 Budget Loan (3 yrs)	\$33.0M Est.	\$ -	\$ -	\$-	\$-	\$-	\$ -	\$ -	\$0.4	\$11.8	\$11.5
2026 Budget Loan (3 yrs)	\$32.0M Est.	\$-	\$ -	\$ -	\$-	\$-	\$ -	\$ -	\$ -	\$0.4	\$11.5
2027 Budget Loan (3 yrs)	\$34.0M Est.	\$ -	\$ -	\$ -	\$-	\$-	\$ -	\$ -	\$ -	\$ -	\$0.4
Bank Fees	n/a	<u>\$0.4</u>	<u>\$0.7</u>	<u>\$0.7</u>	<u>\$0.5</u>	<u>\$0.5</u>	<u>\$0.6</u>	<u>\$0.6</u>	<u>\$0.6</u>	<u>\$0.6</u>	<u>\$0.6</u>
Total Debt Service Payments		\$36.0	\$48.8	\$30.8	\$47.8	\$31.3	\$30.8	\$37.0	**	**	**

Approximately \$27M - \$32M is expected to be borrowed on average each year during 2019 – 2023, representing the annual cost of implementing Projects, technology enhancements, and facility improvements. **Totals are not shown in 2025, 2026 and 2027 as the annual principal and interest repayments on the Budget Loan are not known at this time.**

Line Item Details - Debt Service (Cont.)

Principal Balance Outstanding at December 31 (\$ in millions)										
Debt Facility	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
2005 KCC Bidg Mortgage & Renov.	\$11.9	\$10.6	\$9.2	\$7.6	\$6.0	\$4.3	\$2.5	\$0.9	\$0.1	\$ -
Infrastructure Master Plan Mortgage	\$33.3	\$30.7	\$28.0	\$25.2	\$22.6	\$20.0	\$17.3	\$14.7	\$12.0	\$9.4
2016 Budget Loan	\$4.2	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2017 Budget Loan	\$16.5	\$ -	\$-	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2018 Budget Loan	\$25.3	\$16.9	\$8.4	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2016-2019 EMS/BMS System Upgrade	\$18.6	\$10.9	\$5.6	\$-	\$-	\$-	\$-	\$-	\$-	\$-
2019 Budget Loan	\$ -	\$26.0	\$17.3	\$ -	\$ -	\$ -	\$ -	\$-	\$ -	\$ -
2020 Budget Loan	\$ -	\$ -	\$26.6	\$17.6	\$3.0	\$ -	\$ -	\$-	\$ -	\$ -
2021 Budget Loan	\$ -	\$ -	\$ -	\$28.4	\$18.9	\$9.5	\$ -	\$ -	\$ -	\$ -
2022 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$32.0	\$21.3	\$10.7	\$-	\$ -	\$ -
2023 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$27.0	\$18.0	\$9.0	\$ -	\$ -
2024 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$37.0	\$24.7	\$12.3	\$0.0
2025 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$33.0	\$22.0	\$11.0
2026 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$32.0	\$21.3
2027 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$0.0	\$34.0
Total Principal Outstanding	\$109.8	\$95.1	\$95.1	\$78.8	\$82.5	\$82.1	\$85.5	**	**	**

^{**} Totals are not shown in 2025, 2026 and 2027 as the principal balance outstanding on the 2025, 2026 and 2027 Budget Loans are not known at this time.

Line Item Details - Misc. Revenue

(\$ in millions)	2023 Draft	2022 Budget	\$ Change
Total Miscellaneous Revenues	(\$13.1)	(\$7.7)	\$5.4

NYISO has included an assumption for a \$5.0M Rate Schedule 1 revenue carryover from 2022 into the draft budget for 2023. The Rate Schedule 1 revenue carryover has the direct effect of reducing the budgeted revenue requirement for 2023.

Miscellaneous revenue resulting from Interconnection study work is projected to increase in 2023 by \$0.7M, partially offset by a reduction in Public Policy Planning study revenue of \$0.4M.

Interest income is projected to increase by \$0.1M in 2023 due to rising interest rates.

Appendix: 2024 - 2027 Draft Budget: Projections



Presentation Contents

Topic	Slide #
2024 - 2027 DRAFT BUDGETS Rate Schedule 1 Summary Detail Budget Projections by Category Major Assumptions 2024 Budget Summary 2025 Budget Summary 2026 Budget Summary 2027 Budget Summary	50 51 52 53 54 55 56

Rate Schedule 1 Summary

		BUDGET DRAFTS				
		2024	2025	2026	2027	
(\$ in millions, except RS#1/MWH)	2023 Draft	Projection	Projection	Projection	Projection	
Total: Rate Schedule #1 Revenue Requirement in \$\$	\$190.0	\$204.8	\$213.6	\$220.1	\$228.8	
Budgeted MWH Hours (in millions)	156.7	155.8	154.5	153.9	153.7	
Rate Schedule #1 Revenue Requirement in \$/MWH	\$1.213	\$1.315	\$1.383	\$1.430	\$1.489	

The 2024-2027 budget drafts presented above are advisory only.

Actual budgets for these years will be developed and discussed with Market Participants annually.



Budget Projections By Category

	Budget Drafts				
(\$ in millions, except RS#1/MWh)	2023 Draft	2024 Projection	2025 Projection	2026 Projection	2027 Projection
Capital	\$11.1	\$14.3	\$9.0	\$7.2	\$8.5
Salaries & Benefits	119.9	129.1	135.1	141.5	148.4
Professional Fees (including Legal)	27.9	29.9	30.9	31.6	32.9
Building Services	6.4	6.4	6.6	6.6	6.6
Computer Services	23.6	23.6	24.1	24.7	25.1
Insurance	3.7	3.9	4.1	4.3	4.5
Telecommunications	2.9	2.9	2.9	3.0	3.1
Other Expenses (BOD, Travel/Training, NPCC Fees)	<u>3.8</u>	<u>4.0</u>	<u>4.0</u>	<u>4.1</u>	4.2
Subtotal: Current Year Needs	\$199.3	\$214.1	\$216.7	\$223.0	\$233.3
Debt Service	<u>30.5</u>	<u>36.5</u>	<u>39.1</u>	<u>38.6</u>	<u>39.2</u>
Subtotal: Cash Budget	\$229.8	\$250.6	\$255.8	\$261.6	\$272.5
Less: Miscellaneous Revenues	(13.1)	(8.3)	(8.6)	(8.8)	(9.1)
Less: Proceeds from Current Year Budget Debt	(27.0)	(37.0)	(33.0)	(32.0)	(34.0)
Add: Interest on Current Year Budget Debt	0.3	<u>0.5</u>	0.4	0.4	0.4
Total: Rate Schedule #1 Revenue Requirement in \$\$	\$190.0	\$205.8	\$214.6	\$221.2	\$229.8
Budgeted MWh <i>(in millions)</i>	156.7	155.8	154.5	153.9	153.7
Rate Schedule #1 Revenue Requirement in \$/MWh (budget)	\$1.213	\$1.321	\$1.389	\$1.437	\$1.495



Major Assumptions

Cost Category	Major Assumptions for 2023 and 2024-2027
Capital	 Purchases of Hardware and Software are estimated as follows: 2023 = \$10.0M 2024 = \$11.4M 2025 = \$5.9M 2026 = \$3.7M 2027 = \$5.5M Facility Improvements are estimated as follows: 2023 = \$1.1M 2024 = \$2.9M 2025 = \$3.1M 2026 = \$3.5M 2027 = \$3.0M
Salaries & Benefits	 Total budgeted headcount is as follows: 628 FTEs for 2023, 634 FTEs for 2024, 640 FTEs for 2025, 647 FTEs for 2026, and 654 for 2027 Estimated vacancy factor is 6% in 2023 – 2027 Promotion adjustment increase of 0.5% 2023 – 2027 and equity adjustment increase of 1.5% in 2023 and 0.5% in 2024 - 2027 Average annual merit increase of 4% in 2023 and 3% in 2024 - 2027 Assumes \$0.8M pension plan funding in 2024 - 2027 and a 5% annual increase in health insurance cost in 2023 – 2027
Professional Fees (including Legal)	Assumes average annual increase of ~5% in consulting support (2024 – 2027) ranging from \$27.9M in 2023 to \$32.9M in 2027
Building Services	Assumes minor annual cost increases with budgets ranging from \$6.4M in 2023 to \$6.6M in 2027
Computer Services	Assumes an increase of \$1.2M in 2023 primarily due to new maintenance and subscription services coupled with inflationary cost increases Assumes minor cost increases in 2024 - 2027 ranging from \$23.6M to \$25.1M
Insurance	Assumes ~12% increase in 2023 and assumes 5% annual cost increases 2024 – 2027 with budgets ranging from \$3.7M in 2023 to \$4.5M in 2027
Telecommunications	Assumes ~3.5% increase in 2023 and assumes minor annual cost increases 2024 – 2027 with budgets ranging from \$2.9M in 2023 to \$3.1M in 2027
Other Expenses	Assumes annual increases with budgets ranging from \$3.8M in 2023 to \$4.2M in 2027
Misc. Revenue	 Assumes \$5.0M RS1 carryover from 2022 in 2023 budget Assumes annual revenue increase 2024 – 2027, primarily driven by Interconnection Study work with budgets ranging from \$8.3M to \$9.1M
Debt Service	 Annual borrowings (with 3-year repayment terms) to fund capital and product enhancements are anticipated to be \$27.0M for 2023, \$37.0M for 2024, \$33.0M for 2025, \$32.0M for 2026 and \$34.0M for 2027 (Assumes replacement Budget Facility effective January 1, 2024) No reductions for "early payments" on debt from potential savings on annual budget or RS1 overcollections have been included

In Summary

- NYISO's draft 2024 advisory budget totals \$205.8M, allocated across a forecast of 155.8 million MWh, for a Rate Schedule 1 charge/MWh of \$1.321. Comparatively, the draft 2023 budget totals \$190.0M, allocated across a forecast of 156.7 million MWh, for a Rate Schedule 1 charge/MWh of \$1.213
- NYISO's draft 2024 advisory budget represents an 8.3% increase in Revenue Requirement from the 2023 draft budget and a 0.6% decrease in projected MWh for an overall Rate Schedule 1 increase of 8.9%

- The primary drivers of a \$15.8M increase in the RS1 Revenue Requirement from 2023 to 2024 are as follows:
 - \$9.2M increase in Salaries & Benefits driven primarily by 3.0% annual merit compensation, 0.5% equity and 0.5% promotion adjustments, the addition of 6 incremental FTEs and a 5% increase in health insurance costs
 - \$6.0M increase in Debt Service primarily due to no planned early repayments of outstanding debt
 - \$4.8M decrease in Miscellaneous Revenue due to no RS1 carryover in 2024
 - \$3.2M increase in Capital requirements, partially offset by;
 - \$10.0M increase in Debt Proceeds driven by Capital and capitalized software development projects

In Summary

- NYISO's draft 2025 advisory budget totals \$214.6M, allocated across a forecast of 154.5 million MWh, for a Rate Schedule 1 charge/MWh of \$1.389. Comparatively, the draft 2024 advisory budget totals \$205.8M, allocated across a forecast of 155.8 million MWh, for a Rate Schedule 1 charge/MWh of \$1.321
- NYISO's draft 2025 advisory budget represents a 4.3% increase in Revenue Requirement from the 2024 draft advisory budget and a 0.8% decrease in projected MWh for an overall Rate Schedule 1 increase of 5.1%

- The primary drivers of a \$8.8M increase in the RS1 Revenue Requirement from 2024 to 2025 are as follows:
 - \$6.0M increase in Salaries & Benefits driven primarily by 3.0% annual merit compensation, 0.5% equity and 0.5% promotion adjustments, the addition of 6 incremental FTEs and a 5% increase in health insurance costs
 - \$4.0M decrease in Debt Proceeds driven by Capital and capitalized software development projects
 - \$2.6M increase in Debt Service primarily driven by a higher level of borrowings in 2024, partially offset by;
 - \$5.3 reduction in Capital and capitalized software development project requirements

In Summary

- NYISO's draft 2026 advisory budget totals \$221.2M, allocated across a forecast of 153.9 million MWh, for a Rate Schedule 1 charge/MWh of \$1.437. Comparatively, the draft 2025 advisory budget totals \$214.6M, allocated across a forecast of 154.5 million MWh, for a Rate Schedule 1 charge/MWh of \$1.389
- NYISO's draft 2026 advisory budget represents a 3% increase in Revenue Requirement from the 2025 draft advisory budget and a 0.4% decrease in projected MWh for an overall Rate Schedule 1 increase of 3.4%

- The primary driver of a \$6.6M increase in the RS1 revenue requirement from 2025 to 2026 is as follows:
 - \$6.4M increase in Salaries & Benefits driven primarily by 3.0% annual merit compensation, 0.5% equity and 0.5% promotion adjustments, the addition of 7 incremental FTEs and a 5% increase in health insurance costs

In Summary

- NYISO's draft 2027 advisory budget totals \$229.8M, allocated across a forecast of 153.7 million MWh, for a Rate Schedule 1 charge/MWh of \$1.495. Comparatively, the 2026 advisory budget totals \$221.2M, allocated across a forecast of 153.9 million MWh, for a Rate Schedule 1 charge/MWh of \$1.437
- NYISO's draft 2027 advisory budget represents a 3.9% increase in Revenue Requirement from the 2026 draft budget and a 0.1% decrease in projected MWh for an overall Rate Schedule 1 increase of 4.0%

- The primary drivers of a \$8.6M increase in the RS1 Revenue Requirement from 2026 to 2027 are as follows:
 - \$6.9M increase in Salaries & Benefits driven primarily by a 3.0% annual merit compensation, 0.5% equity and 0.5% promotion adjustments, the addition of 7 incremental FTEs and a 5% increase in health insurance costs

Peer Comparison



PEER COMPARISON

(\$ in Millions)							
	Revenue Requirement*			Other Information*			
ISO/RTO	2023 Revenue Req. (In \$\$)	Estimated 2023 MWh throughput (In millions of MWh)	2023 revenue req. (In \$/MWh)	Debt outstanding at 12/31/23	Authorized FTEs at 12/31/23		
MIS	\$327.2M	730.0 TWh	\$0.450	\$275.0M	1,024.0		
PJM	\$322.0M	817.0 TWh	\$0.394	\$7.9M	765.0		
ERCOT	\$240.9M	434.0 TWh	\$0.555	\$35.0M	843.0		
CAISO	NOT AVAILABLE AT THIS TIME						
ISO-NE	\$226.0M	143.0	\$1.580	\$86.7M	614.5		
SPP	NOT AVAILABLE AT THIS TIME						
NYISO	\$190.0M	156.7	\$1.213	\$82.1M	628.0		
IESO	\$158.4M	153.7	\$1.031	\$91.2M	923.0		
* All amounts are DRAFT and may be subject to change as each ISO/RTO completes its 2023 budget approval process							

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?

