



# **NYISO 2017 BUDGET OVERVIEW**

*(dollars in millions, unless otherwise noted)*

***Draft – For Discussion Only***

**Cheryl Hussey**

***Vice President & Chief Financial Officer  
New York Independent System Operator***

**Budget & Priorities Working Group  
*September 12, 2016***

## **Table of Contents**

<b><u>Topic</u></b>	<b><u>Slide #</u></b>
<b><u>HIGHLIGHTS AND SUMMARY INFORMATION:</u></b>	
➤ <b>Timeline for Budget Cycle</b>	<b>4</b>
➤ <b>Key Priorities and Projects for 2017</b>	<b>5-10</b>
➤ <b>Budget Highlights</b>	<b>11-24</b>
➤ <b>Summary of Revenue Requirement Changes</b>	<b>25</b>
➤ <b>2017 Budget Overview</b>	<b>26</b>
➤ <b>2016 Budget Overview</b>	<b>27</b>
<b><u>ADDITIONAL INFORMATION:</u></b>	
➤ <b>2017 Line Item Details</b>	<b>28-42</b>
➤ <b>Recap</b>	<b>44</b>
➤ <b>2018 &amp; 2019 Budget Projections</b>	<b>46-51</b>

# **NYISO 2017 BUDGET:** **HIGHLIGHTS & SUMMARY INFORMATION**

## **Timeline for Budget Cycle**

- **September 12:** NYISO to present draft 2017 Budget presentation to BPWG
- **September 20:** BOD meeting to review high level draft budget summary
- **September 28:** BPWG to present 2017 draft Budget to Management Committee
- **October 7:** BPWG meeting
- **October 17:** BOD C&C meeting to review draft 2017 Budget
- **October 26:** Management Committee vote on 2017 Budget
- **November 15:** BOD approval of final 2017 Budget

# **Key Priorities and Projects for 2017**

- **Security Program Enhancements focus on ensuring secure operations and proactively meeting audit and compliance needs in a timely and cost efficient manner:**

- ✓ *Compliance with NERC Critical Infrastructure Protection Program*
- ✓ *Compliance with Federal Energy Regulatory Commission Standards*

## **❖ Physical and Cyber Security Enhancements**

- ✓ *Completion of off-site Receiving and Delivery Facility*
- ✓ *Physical Security Guard Force*
- ✓ *Improvements in Access Management Capabilities*
- ✓ *Cyber Risk Information Sharing Program (CRISP)*
- ✓ *Adaptive Perimeter Defense*
- ✓ *Network Segmentation*
- ✓ *Internet Firewall Replacement*
- ✓ *Next Generation Endpoint Protection*
- ✓ *NAESB Certificate Compliance Management*
- ✓ *Enhancements to Security Monitoring and Analytics*
- ✓ *Cyber Security Controls, Monitoring and Support*
- ✓ *Security Awareness and Training Program*

# **Key Priorities and Projects for 2017 (continued)**

## **➤ System and Resource Planning focus on Reliability and Public Policy Planning Requirements:**

### **❖ Continued support of PSC-requested studies including**

- ✓ *PPR's related to AC Transmission and WNY studies*
- ✓ *Off-shore Wind Analysis*
- ✓ *Continuation of State Resource Planning Analysis*
- ✓ *Clean Power Plan Implementation Analysis*
- ✓ *Integration of the Distribution Platform*

### **❖ Develop solar photo-voltaic forecasting models for Planning and Operations**

### **❖ Interconnection Process Review**

### **❖ Public Policy Transmission Planning Process Acceleration**

### **❖ Support enhanced role for interregional planning activities**

### **❖ Support NERC Audit**

### **❖ Support the process improvement of IRM/LCR calculations.**



# **Key Priorities and Projects for 2017 (continued)**

## **➤ Reliability through Markets:**

### **❖ Fuel Assurance & Gas/Electric Coordination**

- ✓ *Performance Assurance*

### **❖ Capacity Market Enhancements**

- ✓ *Alternative Methods for Determining the Locational Capacity Requirements*
- ✓ *Treatment of Capacity Exports from Localities*
- ✓ *Elimination of Capacity Zones*
- ✓ *On Ramps and Off Ramps for Zones*
- ✓ *Demand Curve Reset & Annual Updates*
- ✓ *Reliability Must Run Cost Recovery Phase II*

### **❖ Energy Markets & Price Formation**

- ✓ *Integration of Public Policy*
- ✓ *Con Ed/PSEG Wheel*
- ✓ *Energy Storage Integration & Optimization*
- ✓ *RTC/RTD Forward Horizon coordination Improvements*
- ✓ *Model 100+KV Transmission Constraints*
- ✓ *Hybrid GT Pricing Improvements*
- ✓ *Graduated Transmission Demand Curves*
- ✓ *TCC Balance of Period*

# **Key Priorities and Projects for 2017 (continued)**

## **➤ Integration of Distributed Energy Resources:**

### **❖ REV Market & System Integration**

✓ *NYISO Pilot Framework*

### **❖ Distributed Energy Resource Integration**

✓ *Distributed Energy Resource Program Design*

✓ *Granular Pricing & Market Price Delivery*

✓ *Meter Data Policy*



# **Key Priorities and Projects for 2017 (continued)**

## **➤ Technology and Infrastructure Investment:**

### **❖ System Upgrades**

- ✓ *Reference Level Software Enhancements*
- ✓ *TOA Platform Upgrade Phase II*
- ✓ *Telephony System Upgrade*

### **❖ Information Technology Strategy**

- ✓ *Data Storage Infrastructure Redesign Phase III*
- ✓ *Backup Enhancements*
- ✓ *Application Platform Upgrade Phase IV*
- ✓ *Application Testing Improvements*
- ✓ *Database Platform Upgrade Phase II*
- ✓ *Identity and Access Management*

### **❖ Smart Grid**

- ✓ *EPG Phasor Measurement Unit Simulator*

## **Key Priorities and Projects for 2017 (continued)**

- **Upgrade of the Market Management System to efficiently support future business requirements (EMS/BMS Replacement):**
  - ✓ *Third phase of a multi-year project to upgrade both the Energy Management System (EMS) and the Business Management System (BMS), collectively, the Market Management System (MMS)*
  - ✓ *The EMS encompasses the core reliability functions used by the system operators such as load flow and contingency analysis. The BMS/MMS encompasses the day ahead and real time energy market functionality*
  - ✓ *The third phase will complete the development process by the vendor and internal NYISO development efforts. In addition, the project will begin the Factory Acceptance Testing (FAT)*

**For additional details, please refer to August 31 BPWG presentation: EMS/BMS Project Update**

## **Budget Highlights**

- ◆ **NYISO's draft 2017 budget totals \$148.2M, allocated across a forecast of 158.3 million MWhs, for a Rate Schedule 1 charge/MWh of \$0.936. Comparatively, the 2016 budget was \$148.1M, allocated across 159.5 million MWhs for a Rate Schedule 1 charge/MWh of \$0.928**
- ◆ **NYISO's draft 2017 budget represents a 0.07% increase in revenue requirement from the 2016 budget and a 0.75% decrease in projected MWhs, for an overall Rate Schedule 1 increase of 0.86% (less than 1%)**
- ◆ **NYISO's draft 2017 budget represents the fourth consecutive year of a flat revenue requirement (excluding FERC fees) - *Refer to Budget Comparison on slide 12***
- ◆ **NYISO continues to maintain the lowest Budgeted Revenue Requirement in \$ and lowest number of Full-Time Equivalents (FTEs) of all ISOs/RTOs - *Refer to Peer Comparison on slide 13***

# Historical Budget Comparisons

					<u>% Changes</u>	
<u>(in millions, excluding RS1/MWH charges)</u>	<u>2014 Budget*</u>	<u>2015 Budget*</u>	<u>2016 Budget</u>	<u>2017 Draft</u>	<u>2017 vs. 2016</u>	<u>2017 vs. 2014</u>
RS1 Rev. Requirement – in \$\$	\$148.0	\$148.4	\$148.1	\$148.2	0.07%	0.14%
Budgeted MWH Hours	<u>167.4</u>	<u>165.8</u>	<u>159.5</u>	<u>158.3</u>	(0.75%)	(5.44%)
RS1 Rev. Requirement - \$/MWH	\$0.884	\$0.895	\$0.928	\$0.936	0.86%	5.88%
<i>* Adjusted to exclude FERC Fees from RS1 \$ and \$/MWh requirement</i>						
<b><u>RS1 Charge/MWh – Gross (before rebates from non-physical transactions):</u></b>						
<i>RS1 Charge/MWh: Purchasers @ 72%</i>	\$0.636	\$0.644	\$0.668	\$0.674		
<i>RS1 Charge/MWh: Sellers @ 28%</i>	\$0.248	\$0.251	\$0.260	\$0.262		
<b><u>RS1 Charge/MWh – Net (after estimated rebates from non-physical transactions):</u></b>						
<i>RS1 Charge/MWH: Purchasers @~ 68%</i>	\$0.601	\$0.608	\$0.631	\$0.636		
<i>RS1 Charge/MWH: Sellers @~26%</i>	\$0.230	\$0.233	\$0.241	\$0.244		
<i>RS1 Charge/MWH: Non-physical transactions @~6%</i>	\$0.053	\$0.054	\$0.056	\$0.056		

# Budget Highlights Peer Comparison

(\$ in millions)					
	<u>REVENUE REQUIREMENT *</u>			<u>OTHER INFORMATION *</u>	
ISO/ RTO	2017 Revenue Req. (in \$\$)	Estimated 2017 MWh Throughput (in millions of MWh)	2017 Revenue Req. (in \$/MWh)	Debt Outstanding at 12/31/17	Authorized FTEs at 12/31/17
MISO	\$296.0M	756.0	\$0.392/MWH	\$167.0M	939
PJM	\$287.0M	855.0	\$0.336/MWH	\$21.0M	695
ERCOT	\$223.1M	355.9	\$0.626/MWH	\$114.0M	749
ISO-NE	\$192.7M	128.4	\$1.500/MWH	\$105.8M	586
CAISO	\$173.6M	241.5	\$0.719/MWH	\$320.0M	593
NYISO	\$148.2M	158.3	\$0.936/MWH	\$116.9M	574
<i>*All amounts are DRAFT, and may be subject to change as each ISO/RTO completes its 2017 approval process</i>					

# **Budget Highlights**

## **MWh Throughput:**

- Budgeted MWh volumes for 2017 reflect a **0.75%** decrease from the 2016 budget, primarily due to the projected impact of energy efficiency initiatives and the growth of distributed behind-the-meter energy resources. (See additional details on 2017 Energy Forecast in a separate presentation posted for the 9/12/16 BPWG meeting)

## **Spending Level Increases:**

- *Professional Fees*
  - EMS/BMS System Upgrade project (offset with debt proceeds)
- *Salaries & Benefits*
  - 3% Merit Adjustment
  - Employee Health Insurance
- *Hardware and Software Maintenance*
  - Increasing inventory of software licenses
  - New hosted services
  - New IT infrastructure and software to support compliance with CIP requirements
  - Maintenance for new EMS environment in parallel with existing EMS environments



# **Budget Highlights**

**In the 2017 budget, NYISO continues to mitigate the impact of required spending level increases by proposing cost reduction, avoidance and containment measures, resulting in the fourth consecutive year (2014 – 2017) of a flat budgeted revenue requirement as follows:**

## **Spending Reduction/Avoidance/Containment Measures – Details provided on following slides:**

- *Debt Proceeds*
  - EMS/BMS System Upgrade project
- *Capital*
- *Insurance*
- *Debt Service Cost*
  - Early repayment of outstanding debt
  - Financing amendments
- *Salaries & Benefits*
  - Vacancy rate adjustment
  - No incremental headcount additions
  - Employee Health Insurance
- *External Legal Fees*
- *Hardware and Software Maintenance*
- *Professional Fees*



# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures**

### **Debt Proceeds:**

- In order to mitigate the annual cost impact on RS1 of the EMS/BMS System Upgrade, NYISO negotiated a new \$30M budget facility to fund this strategic initiative
- Absent a financing mechanism for this project, the full cost would have been included in NYISO's annual revenue requirement and charged to Market Participants via RS1. The 2017 annual impact of this treatment **would have been an increase to RS1 of \$0.091**
- By utilizing a delayed-draw term loan repayment structure similar to NYISO's existing budget facilities, the annual impact on RS1 is mitigated by spreading it out over several years. The 2017 impact on RS1 of this funding mechanism **is an increase of \$0.014.**  
**Avoided 2017 RS1 increase of \$0.077**
- EMS/BMS System Upgrade debt funding of \$14.4M is being proposed as part of the 2017 budget
  - 2017: Start of Principal and Interest payments on 2016 borrowings, interest only payments on 2017 borrowings
  - 2017-2021: Following each drawdown year 2016-2018, there will be a three-year payback period extending through the year 2021

*Refer to slides 40 and 41 for additional details*

# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures (continued)**

### **Capital:**

- Overall total capital costs have been reduced by \$1.9M from 2016 to 2017
  - *Eliminated facility improvements totaling \$0.6M*
  - *Reduced funding for new computer software and software licenses by \$1.7M, primarily driven by storage infrastructure requirements*
  
- The 2017 RS1 impact of these spending reductions is a **decrease of \$.012**

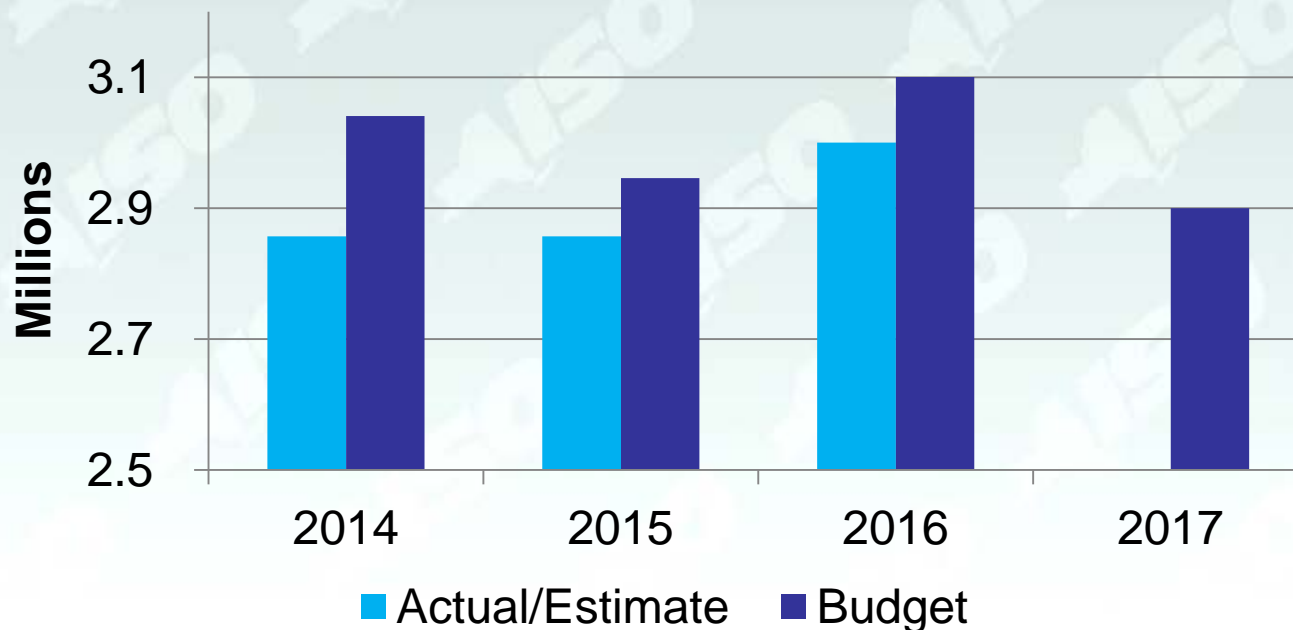
# Budget Highlights

## Spending Reduction/Avoidance/Containment Measures (continued)

### Insurance:

- In recent years NYISO has expanded its insurance coverage while, at the same time, negotiating savings resulting in a reduction of \$0.2M. The 2017 impact to RS1 is a **reduction of \$0.001**. The following chart provides historical cost trends from 2014 to 2017.

### Historical Insurance Cost Comparison



# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures (continued)**

### **Debt Service Cost:**

- In 2016, after consultation with Market Participants, NYISO utilized the 2015 budget underspend and RS1 overcollection, totaling \$8.3M, to make early repayments on outstanding debt. This action has reduced 2017 debt service costs (principal and interest), such that, these costs are consistent with 2016 levels. These early principal repayments have **avoided an increase to the 2017 RS1 totaling \$0.052**
- In 2016 NYISO amended and extended its (2014 – 2017) \$100M budget facility, which is used to finance capital purchases and software development costs. These revisions extended the loan term by one year to 12/31/2018 and added \$25M in loan proceeds for 2018
- At the same time the term of NYISO's \$50M Revolving Credit Facility was extended by one year to 12/31/2018

# Budget Highlights

## *Spending Reduction/Avoidance/Containment Measures (continued)*

### *Debt Service Cost (continued):*

- The new \$30M EMS/BMS financing, amended and extended (2014 – 2018) \$125M budget facility, and extended \$50M Revolving Credit Facility include the **same favorable terms** as the original (2014 – 2017) facilities that were negotiated in 2013, inclusive of the same **favorable interest rates**
- In order to fix the interest rate on a portion of the 2018 budget facility loan, NYISO entered into an interest rate swap averaging 1.30%, to lock the all-in interest cost at an average of 2.25% over the life of the loan. This action **mitigates the risk to NYISO's budget of future interest rate increases through the year 2021**

# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures (continued)**

**Salaries & Benefits:** The 2017 increase of \$1.3M has been partially mitigated by the following actions:

- Total authorized FTE positions for 2017 are being held at 2016 levels, with four new positions being sourced from existing open positions within the organization. The 2017 estimated **avoided increase to RS1 is \$0.004**
- NYISO's assumed vacancy rate is being increased from 4% (23 FTEs) to 5% (29 FTEs), which more closely reflects actual experience over the past two years. The 2015 average actual vacancy rate was ~6% and the 2016 year-to-date average is ~7.5%. The 2017 impact of this change is **a reduction to RS1 of \$0.006**
- Employee health insurance plan design changes have reduced a projected premium increase of ~ 9% to ~ 5%, avoiding \$0.3M in additional employee benefit cost and an **avoided increase to RS1 of \$.002**
- Due to the projected 2017 impact of interest rates, actuarial assumptions, level of benefit payments, and funded status; NYISO continues to maintain a reduced level of budgeted pension funding, **avoiding additional employee benefit increases**. However, these factors are evaluated each year to determine funding requirements, therefore, it cannot be assumed that this reduction will be carried forward to future years

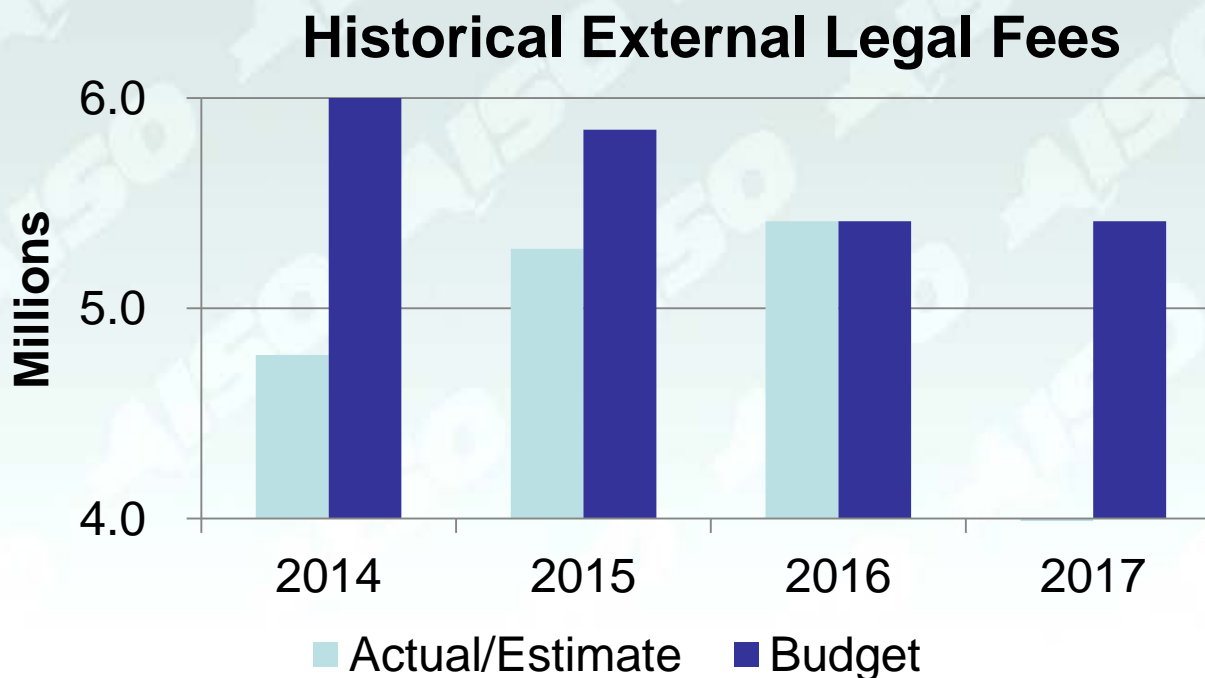


# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures (continued)**

### **External Legal:**

- Over the past several years, NYISO has implemented measures and developed internal staff to enable reduced reliance on outside counsel as much as possible. As a result, actual costs for external legal counsel have been reduced significantly from historical levels. While the use of outside counsel may vary due to increases in litigation and legal support required for new initiatives, NYISO is proposing to **hold flat** the 2017 budget for external legal. The following chart provides historical cost trends from 2014 to 2017.





# **Budget Highlights**

## **Spending Reduction/Avoidance/Containment Measures (continued)**

**Computer Services:** The 2017 increase of \$0.3M has been partially mitigated by the following actions:

- Budgeted cost reductions of \$1.0M assumed to be realized in 2017 by:
  - Further optimization of software maintenance contracts and software utilization
  - Reductions in service levels in hardware maintenance contracts for non production systems
- In addition, a multi-year phased approach to NYISO's laptop replacement project will avoid \$0.5M in additional computer supply costs for 2017
- The 2017 impact to RS1 is an **avoided increase of \$0.009**

## **Professional Fees:**

- NYISO has assumed 2017 budgeted cost reductions for project related consulting support of \$0.8M. These reductions are in anticipation of continued favorable contract negotiations and resource optimization efforts
- The 2017 impact to RS1 is an **avoided increase of \$0.005**

# Summary of Spending Reduction/Avoidance RS1 Impacts

## Spending Reduction Measures

✓ <i>Budgeted Capital reduction</i>	<i>\$0.012</i>
✓ <i>Increase to budgeted vacancy rate</i>	<i>\$0.006</i>
✓ <i>Budgeted Insurance reduction</i>	<i>\$0.001</i>

## Spending Avoidance Measures

✓ <i>EMS/BMS System Upgrade project financing</i>	<i>\$0.077</i>
✓ <i>Early repayment of outstanding debt</i>	<i>\$0.052</i>
✓ <i>Anticipated savings – Computer Services</i>	<i>\$0.009</i>
✓ <i>Anticipated savings – Project Consulting</i>	<i>\$0.005</i>
✓ <i>Internal sourcing of additional FTE positions</i>	<i>\$0.004</i>
✓ <i>Employee benefit plan design changes</i>	<u><i>\$0.002</i></u>

<u><b>Total impact to 2017 proposed RS1</b></u>	<u><b>\$0.168</b></u>
---	-----------------------

## Summary of Revenue Requirement Changes

<b>2017 Rate Schedule 1 Revenue Requirement</b>	<b>\$148.2</b>
<b>2016 Rate Schedule 1 Revenue Requirement</b>	<b><u>\$148.1</u></b>
<b>Increase in Rate Schedule 1 Revenue Requirement</b>	<b>\$0.1</b>
♦ <b><u>Spending Reductions/Avoidance/Containment</u></b>	
Debt Proceeds	(7.1)*
Capital	(1.9)
Miscellaneous Revenue	(0.6)
Insurance	(0.2)
Prior Year Debt Service Cost	(0.1)
External Legal Fees	<u>0</u>
	(\$9.9)
♦ <b><u>Budget Increases</u></b>	
Professional Fees	7.7*
Salaries and Benefits	1.3
Current Year Debt Interest Expense	0.3*
Computer Services	0.3
BOD Fees, Meetings/Travel	0.2*
Building Services	0.1
Telecommunications	<u>0.1</u>
	<b>\$10.0</b>

*\*Primarily driven by the EMS/BMS System Upgrade project*

## **2017 Budget Overview**

	<u>2017 Draft Budget</u>		
<i>(\$ in millions, except RS#1/MWH)</i>	<u>Enterprise</u>	<u>Projects</u>	<u>Total</u>
Capital	\$2.8	\$6.8	\$9.6
Salaries & Benefits	73.8	15.1	88.9
Professional Fees (including Legal)	18.3	13.5	31.8
Building Services	6.3	-	6.3
Computer Services	15.2	0.6	15.8
Insurance	2.9	-	2.9
Telecommunications	3.1	-	3.1
Other Expenses (BOD, Travel/Training, NPCC Fees)	<u>3.8</u>	<u>0.3</u>	<u>4.1</u>
<b>Subtotal: Current Year Needs</b>	<b>\$126.2</b>	<b>\$36.3</b>	<b>\$162.5</b>
Debt Service	<u>27.2</u>	-	<u>27.2</u>
<b>Subtotal: Cash Budget</b>	<b>\$153.4</b>	<b>\$36.3</b>	<b>\$189.7</b>
Less: Miscellaneous Revenues	(3.0)	-	(3.0)
Less: Proceeds from Current Year Budget Debt	(2.8)	(36.3)	(39.1)
Add: Interest on Current Year Budget Debt	-	<u>0.6</u>	<u>0.6</u>
<b>Total: Rate Schedule #1 Revenue Requirement in \$\$</b>	<b>\$147.6</b>	<b>\$0.6</b>	<b>\$148.2</b>
<b>Budgeted MWH Hours (<i>in millions</i>)</b>			<b>158.3</b>
<b>Rate Schedule #1 Revenue Requirement in \$/MWH (<i>budget</i>)</b>			<b>\$0.936</b>

## **2016 Budget Overview**

	<u>2016 Budget</u>		
<i>(\$ in millions, except RS#1/MWH)</i>	<u>Enterprise</u>	<u>Projects</u>	<u>Total</u>
Capital	\$3.9	\$7.6	\$11.5
Salaries & Benefits	73.8	13.8	87.6
Professional Fees (including Legal)	17.6	6.5	24.1
Building Services	6.2	-	6.2
Computer Services	15.1	0.4	15.5
Insurance	3.1	-	3.1
Telecommunications	3.0	-	3.0
Other Expenses (BOD, Travel/Training, NPCC Fees)	<u>3.9</u>	<u>-</u>	<u>3.9</u>
<b>Subtotal: Current Year Needs</b>	<b>\$126.6</b>	<b>\$28.3</b>	<b>\$154.9</b>
Debt Service	<u>27.3</u>	<u>-</u>	<u>27.3</u>
<b>Subtotal: Cash Budget</b>	<b>\$153.9</b>	<b>\$28.3</b>	<b>\$182.2</b>
Less: Miscellaneous Revenues	(2.4)	-	(2.4)
Less: Proceeds from Current Year Budget Debt	(4.0)	(28.0)	(32.0)
Add: Interest on Current Year Budget Debt	-	<u>0.3</u>	<u>0.3</u>
<b>Total: Rate Schedule #1 Revenue Requirement in \$\$</b>	<b>\$147.5</b>	<b>\$0.6</b>	<b>\$148.1</b>
<b>Budgeted MWH Hours (<i>in millions</i>)</b>			<b>159.5</b>
<b>Rate Schedule #1 Revenue Requirement in \$/MWH (<i>budget</i>)</b>			<b>\$0.928</b>

# **NYISO 2017 BUDGET:** **DETAILED LINE ITEM INFORMATION**

# Line Item Details - CAPITAL

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
Facility Improvements	\$1.7	\$2.3	(\$0.6)
Replacement of Existing Hardware	5.8	5.4	0.4
Software & Software Licenses (capitalized)	<u>2.1</u>	<u>3.8</u>	<u>(1.7)</u>
<b>Total Capital Costs</b>	<b>\$9.6</b>	<b>\$11.5</b>	<b>(\$1.9)</b>

## Facility Improvements:

Facility improvements included within the 2017 budget include \$1.2M for the final phases of construction and configuration of the receiving and delivery facility and \$0.5M for various capital renewal and replacement initiatives, including electrical modifications, replacement of chilled water system pipes, and recaulking and sealing of building exterior.

## 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 2017 budget includes \$4.7M in new hardware required for proposed projects including, \$3.0M for Storage Infrastructure Redesign Phase III, \$0.8M for Backup Enhancements, \$0.6M for the EMS/BMS Replacement and \$0.3M for Database and Application Platform Upgrades. The 2017 budget also includes \$1.1M for new hardware primarily required to support various Security Enhancement Initiatives.

## 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. The 2017 budget includes \$2.1M in new software required for proposed projects including, \$0.7M for Backup Enhancements, \$0.6M for the EMS/BMS System Upgrade, \$0.3M for the Software AG upgrade, \$0.2M for the EPG PMU Simulator, and \$0.2M for the Application Platform Upgrade Phase IV.



## Line Item Details – SALARIES & BENEFITS

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
Base Salaries	\$61.2	\$60.4	\$0.8
Benefit Programs / At-Risk Compensation	22.8	22.3	0.5
Payroll Taxes	<u>4.9</u>	<u>4.9</u>	<u>0.0</u>
<b>Total Salaries &amp; Benefits</b>	<b>\$88.9</b>	<b>\$87.6</b>	<b>\$1.3</b>

*The 1.5% increase in Salaries & Benefits is primarily driven by:*

- *\$1.5M reflecting an average 3% merit increase for NYISO employee compensation*
- *\$0.5M reflecting an increase in Benefit Programs, primarily driven by a projected increase in the cost of employee medical insurance benefits – projected premium increases of ~ 5%. 2017 plan design changes have reduced this increase from an original projection of ~ 9%*
- *Partially offset by ~\$0.7M budget reduction from increasing the assumed vacancies from 4% (23 FTEs) to 5% (29 FTEs) to more closely align with actual experience. The vacancy rate has consistently been between 6% - 7.5% in 2015 and 2016*

*See additional details on Salaries & Benefits on the following slides*

# Line Item Details – SALARIES & BENEFITS

<u>HEADCOUNT SUMMARY:</u>		
Total Authorized FTE Positions for 2016	574	
Add: New Positions for 2017	<u>0</u>	Although there are no incremental authorized positions in 2017, 4 new positions are being created and sourced internally – See details on next slide
Total Authorized FTE Positions for 2017	574	
Less: Assumed Vacancies	<u>(29)</u>	Based on assumed vacancy rate of 5%
<b>Equals: Total Budgeted FTE Positions</b>	<b>545</b>	

<u>HEADCOUNT SUMMARY BY YEAR:</u>			
	<u>2016</u>	<u>2015</u>	<u>Change</u>
Total Authorized FTE Positions	574	574	-
Less: Assumed Vacancies	<u>(29)</u>	<u>(23)</u>	<u>(6)</u>
<b>Total Budgeted FTE Positions</b>	<b>545</b>	<b>551</b>	<b>(6)</b>

# Line Item Details – SALARIES & BENEFITS

<u>Department</u>	<u>New for 2017</u>	<u>Key Contributions from Positions</u>
System & Resource Planning	1	<b>Interconnection Project Coordinator</b> - This position will assist with the continuous upward trend in interconnection requests due to changes from the PSC REV, CES, and Public Policy as well as ensure compliance with strict tariff deadlines associated with these requests. Additionally, FERC's final interregional order requires the NYISO to coordinate with neighboring regions to determine the most efficient and cost effective solutions for mutual transmission needs.
Information Technology	2	<p><b>Associate Security Operations Analyst</b> - This position will focus on security operations, which will include substantial vulnerability scanning for every new project or purchase that includes a CIP asset. This position will perform other important security operations functions, including all event monitoring.</p> <p><b>Server and Middleware Technical Engineer</b> - This position will be part of the team responsible for supporting all Unix/Linux servers, enterprise storage systems, and middleware technologies across all NYISO environments. The number of Linux-based assets is expected to grow significantly in 2017/18 as new servers are on-boarded to support the EMS/BMS Replacement project.</p>
Market Design	1	<b>Market Design Specialist</b> - This position will be the lead expert in the design, modification, and implementation of market rules for the participation of distributed energy resources within the NYISO markets. Lead the research and design of new, revised and enhanced market rules, procedures and functionality through collaborative processes with internal NYISO groups and collaborated negotiations with NYISO stakeholders.
Open Positions	(4)	The NYISO continually reviews all open positions and proposes to redefine 4 positions in order to accommodate these new requests, resulting in no headcount increase for 2017.
Total Impact on Budgeted Positions	0	

# **Line Item Details – SALARIES & BENEFITS**

## **Merit Adjustments:**

- NYISO's 2017 draft budget includes an average salary increase to employee compensation of 3.0%, (inclusive of merit and promotion adjustments) which was established based upon a number of factors that include:
  - National surveys<sup>1</sup> show the median number for merit increase across the country to be 3.0% and promotion/equity increases at 1.0-1.5% for 2017
  - Among our ISO peers, the planned budget for compensation adjustments in 2017 ranges between 3.0% - 4.0%
  - It is imperative that the NYISO offer competitive salaries in order to attract and retain talent in our current environment
    - ✓ Increased competition for talent with tightening labor market (increase in job openings and low unemployment rate of 4.9% as June 2016<sup>2</sup>)
    - ✓ Costs (direct and indirect) of employee turnover can be significant

1 – WorldatWork, The Conference Board, ERI Economic Research Institute and Korn Ferry Hay Group

2 – Bureau of Labor Statistics (BLS)

# Line Item Details – PROFESSIONAL FEES

(\$ in millions)	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
Product Enhancement consultants ( <i>several vendors</i> )	\$13.5	\$6.6	\$6.9
External legal fees	\$5.4	\$5.4	\$ -
Market Monitoring	\$3.5	\$3.1	\$0.4
Misc. Professional Fees (all individually < \$500K)	\$1.7	\$2.0	(\$0.3)
Security guards	\$1.7	\$1.3	\$0.4
Reliability & Economic Planning	\$1.2	\$1.2	\$ -
Information Technology & Facilities	\$1.1	\$1.0	\$0.1
Market design & related consulting	\$0.9	\$1.0	(\$0.1)
Ranger support & enhancements	\$1.0	\$0.9	\$0.1
Employee Benefits & Recruiting	\$1.0	\$0.8	\$0.2
External audits and Internal Audit co-sourcing	\$0.8	\$0.8	\$ -
<b>Total Professional Fees</b>	<b>\$31.8</b>	<b>\$24.1</b>	<b>\$7.7</b>

**Product Enhancement Consultants:** The expected increase is due to the EMS/BMS System Upgrade (\$8.9M), partially offset by a combination of across the board cost reductions in anticipation of favorable contract negotiations and continued resource optimization efforts, impacting the mix of consulting support required to complete the 2017 project initiatives.

See details on 2017 proposed product enhancements in a separate presentation posted for the 8/31/2016 BPWG meeting.

**Market Monitoring:** The expected increase is due to new cyber-security related requirements, new deliverables consistent with objectives under the RMR and FERC Order 1000 filings, and the addition of annual meetings with each NYISO Sector.

**Security Guards:** The expected increase is due to the annual cost impact of implementing an armed guard program in Q3 2016.

## Line Item Details – BUILDING SERVICES

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Building Services</b>	<b>\$6.3</b>	<b>\$6.2</b>	<b>\$0.1</b>

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

The 2017 budget is increasing by \$0.1M as compared to 2016, primarily due to the CRISP – Security Monitoring annual membership and new subscriptions for solar forecasting services.



# Line Item Details – COMPUTER SERVICES

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Computer Services Costs</b>	<b>\$15.8</b>	<b>\$15.5</b>	<b>\$0.3</b>

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 the increases in this budget category as follows:

- ~\$1.0M increase in software maintenance primarily due to increased usage, growth, and storage on NYISO servers and maintenance required for new software agreements
- ~\$0.3 increase in PC equipment required to replace half of NYISO's unsupported laptops, which will be at end of useful life in 2017. In order to minimize budget increases, this initiative is being phased in with completion planned for 2018. However, by 2017 all NYISO corporate laptops will be out of warranty, with no guarantee of replacement part availability

The above increases are partially offset with planned reductions in the following categories:

- ~\$0.4M decrease in maintenance primarily due to planned retirements and negotiated cost reductions
  - ~\$0.4M decrease in budget for software license agreements
  - ~\$0.2M decrease in budget for computer hardware and supplies
- } Optimize utilization



## **Line Item Details – INSURANCE**

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Insurance</b>	<b>\$2.9</b>	<b>\$3.1</b>	<b>(\$0.2)</b>

Based on the continued success of policy renewal negotiations, NYISO is proposing to reduce its 2017 budget for insurance premiums by \$0.2M. The NYISO has been successful in containing insurance premium cost increases through close monitoring and favorable negotiation outcomes.

## Line Item Details - TELECOMMUNICATIONS

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Telecommunications</b>	<b>\$3.1</b>	<b>\$3.0</b>	<b>\$0.1</b>

This increase is due to vendor implementation delays and site additions for the Telephony System Upgrade.

However, as a result of this project, NYISO will recognize the following benefits in addition to future cost containment:

- Increased bandwidth and resiliency in the network interconnecting NYISO with Transmission Owner Energy Management Systems and select substations
- Retirement of a network architecture that will no longer be supported by the communications carriers
- Less telecommunication vendors to manage while maintaining necessary diversity
- Improved contract terms

## **Line Item Details – OTHER EXPENSES**

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Travel, Meetings, Training Costs</b>	<b>\$2.3</b>	<b>\$2.2</b>	<b>\$ 0.1</b>
<b>BOD Fees and Expenses</b>	<b>\$1.5</b>	<b>\$1.4</b>	<b>\$0.1</b>
<b>NPCC Fees</b>	<b><u>\$0.3</u></b>	<b><u>\$0.3</u></b>	<b><u>\$ -</u></b>
<b>Total Other Expenses</b>	<b>\$4.1</b>	<b>\$3.9</b>	<b>\$0.2</b>

### **Travel, Meetings, Training Costs:**

NYISO's travel budget is expected to increase by \$0.1M primarily due to vendor site visits for the EMS/BMS System Upgrade project.

### **BOD Fees and Expenses:**

NYISO BOD fees were increased by 10% in mid 2016 resulting in an annual 2017 increase of \$0.1M.

# Line Item Details – DEBT SERVICE

## ANNUAL PRINCIPAL AND INTEREST REPAYMENTS \*\*

(\$ in millions)

<u>Debt Facility &amp; Repayment Period</u>	<u>Borrowings</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
2005 KCC Bldg Mortgage & Renov. (20 yrs)	\$24.8M	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.1	\$2.0	\$2.0	\$2.0
Infrastructure Master Plan Mortgage (19 yrs)	\$45.0M	\$1.2	\$3.0	\$4.5	\$4.4	\$4.3	\$4.2	\$4.1	\$4.0	\$3.9
2010 Budget Loan (3 yrs)	\$30.0M	\$9.9	\$ -	\$ -	\$-	\$-	\$-	\$-	\$-	\$-
2011 Budget Loan (3 yrs)	\$25.0M	\$8.6	\$8.5	\$ -	\$-	\$-	\$-	\$-	\$-	\$-
2012 Budget Loan (3 yrs)	\$25.8M	\$9.8	\$14.1	\$3.0	\$-	\$-	\$-	\$-	\$-	\$-
2013 Budget Loan (3 yrs)	\$24.2M	\$0.3	\$8.8	\$13.5	\$3.0	\$-	\$-	\$-	\$-	\$-
2014 Budget Loan (3 yrs)	\$25.0M	\$-	\$0.2	\$8.1	\$16.8	\$0.7	\$-	\$-	\$-	\$-
2015 Budget Loan (3 yrs)	\$25.0M	\$-	\$-	\$0.3	\$8.7	\$8.6	\$8.4	\$-	\$-	\$-
2016 Budget Loan (3 yrs)	\$25.0M Est.	\$-	\$-	\$-	\$0.3	\$9.0	\$8.7	\$8.4	\$-	\$-
2017 Budget Loan (3 yrs)	\$24.7M Est.	\$-	\$-	\$-	\$-	\$0.4	\$9.1	\$8.9	\$8.1	\$-
2018 Budget Loan (3 yrs)	\$25.3M Est.	\$-	\$-	\$-	\$-	\$-	\$0.3	\$8.9	\$8.8	\$8.6
2016-2018 EMS/BMS System Upgrade	\$30.0M Est.	\$ -	\$ -	\$ -	\$-	\$2.2	\$7.4	\$10.7	\$8.6	\$3.5
Bank Fees	n/a	<u>\$1.0</u>	<u>\$0.8</u>	<u>\$0.5</u>	<u>\$0.5</u>	<u>\$0.5</u>	<u>\$0.6</u>	<u>\$0.6</u>	<u>\$0.5</u>	<u>\$0.5</u>
<b>Total Debt Service Payments</b>		<b>\$32.9</b>	<b>\$37.5</b>	<b>\$32.0</b>	<b>\$35.8</b>	<b>\$27.8</b>	<b>\$40.8</b>	<b>**</b>	<b>**</b>	<b>**</b>

\*\* Note: Totals after 2018 are not presented as additional Budget Loans after 2018 are not factored into this table.

\$25M is expected to be borrowed annually during 2016 – 2018, representing the annual cost of implementing Projects (in addition to EMS/BMS Replacement), technology enhancements, and facility improvements.

# Line Item Details – DEBT SERVICE (cont'd)

## PRINCIPAL BALANCE OUTSTANDING AT DECEMBER 31, (\$ in millions)

<u>Debt Facility</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>
2005 KCC Bldg Mortgage & Renov.	\$17.7	\$16.7	\$15.7	\$14.5	\$13.2	\$12.0	\$10.7	\$9.2	\$7.7
Infrastructure Master Plan Mortgage	\$38.7	\$43.9	\$41.2	\$38.6	\$35.9	\$33.3	\$30.7	\$28.0	\$25.4
2011 Budget Loan	\$8.3	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2012 Budget Loan	\$16.7	\$2.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2013 Budget Loan	\$24.2	\$16.1	\$2.9	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2014 Budget Loan	\$ -	\$25.0	\$16.7	\$0.7	\$ -	\$ -	\$ -	\$ -	\$ -
2015 Budget Loan	\$ -	\$ -	\$ 25.0	\$16.7	\$8.3	\$ -	\$ -	\$ -	\$ -
2016 Budget Loan	\$ -	\$ -	\$ -	\$25.0	\$16.7	\$8.3	\$ -	\$ -	\$ -
2017 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$24.7	\$16.7	\$8.3	\$ -	\$ -
2018 Budget Loan	\$ -	\$ -	\$ -	\$ -	\$ -	\$25.3	\$16.7	\$8.3	\$ -
2016-2018 EMS/BMS System Upgrade	\$ -	\$ -	\$ -	\$5.6	\$18.1	\$21.5	\$11.5	\$3.3	\$ -
<b>Total Principal Outstanding</b>	<b>\$105.6</b>	<b>\$104.6</b>	<b>\$101.5</b>	<b>\$101.1</b>	<b>\$116.9</b>	<b>\$117.1</b>	<b>**</b>	<b>**</b>	<b>**</b>

\*\* Note: Totals after 2018 are not presented as additional Budget Loans after 2018 are not factored into this table.

## Line Item Details – MISC. REVENUE

<i>(\$ in millions)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>\$ Change</u>
<b>Total Miscellaneous Revenues</b>	<b>\$3.0</b>	<b>\$2.4</b>	<b>\$0.6</b>

This increase is due to anticipated additional reimbursable internal labor supporting System & Resource Planning studies for Interconnection and Public Policy.



# **NYISO 2017 Budget: Recap**

# 2017 Budget Overview Recap

<i>(in millions, excluding RS#1/MWh charges)</i>	<u>2017 Draft</u>	<u>2016 Budget</u>	<u>2017 vs. 2016</u>
<b>RS#1 Revenue Requirement – in \$\$</b>	\$148.2	\$148.1	\$0.1
<b>Budgeted MWh Hours</b>	<u>158.3</u>	<u>159.5</u>	<u>(1.2)</u>
<b>RS#1 Revenue Requirement - \$/MWh</b>	\$0.936	\$0.928	\$0.008
<b><u>RS1 Charge/MWh – Gross (before rebates from non-physical transactions):</u></b>			
<b>RS#1 Charge/MWh: Purchasers @ 72%</b>	\$0.674	\$0.668	\$0.006
<b>RS#1 Charge/MWh: Sellers @ 28%</b>	\$0.262	\$0.260	\$0.002
<b><u>RS1 Charge/MWh – Net (after estimated rebates from non-physical transactions):</u></b>			
<b>RS#1 Charge/MWh: Purchasers @ ~68%</b>	\$0.636	\$0.631	\$0.005
<b>RS#1 Charge/MWh: Sellers @ ~26%</b>	\$0.244	\$0.241	\$0.003
<b>RS#1 Charge/MWh: Non-physical transactions @ ~6%</b>	\$0.056	\$0.056	\$0.000



# 2018-2019 BUDGET PROJECTIONS

**Draft – For Discussion Only**

# **Table of Contents**

<b><u>Topic</u></b>	<b><u>Page #</u></b>
<b><u>2018-2019 DRAFT BUDGETS:</u></b>	
➤ <b>Rate Schedule 1 Summary</b>	<b>47</b>
➤ <b>Detail Budget Projections by Cost Category</b>	<b>48</b>
➤ <b>Major Assumptions</b>	<b>49</b>
➤ <b>2018 Budget Summary</b>	<b>50</b>
➤ <b>2019 Budget Summary</b>	<b>51</b>

# Rate Schedule 1 Summary

	BUDGET DRAFTS		
<i>(\$ in millions, except RS#1/MWH)</i>	2017 Draft	2018 Projection	2019 Projection
<b>Total: Rate Schedule #1 Revenue Requirement in \$\$</b>	<b>\$148.2</b>	<b>\$166.9</b>	<b>\$177.0</b>
<b>Budgeted MWH Hours <i>(in millions)</i></b>	<b>158.3</b>	<b>157.6</b>	<b>156.8</b>
<b>Rate Schedule #1 Revenue Requirement in \$/MWH</b>	<b>\$0.936</b>	<b>\$1.059</b>	<b>\$1.129</b>

*The 2018-2019 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

	<b><u>BUDGET DRAFTS</u></b>		
<i>(\$ in millions, except RS#1/MWH)</i>	<b><u>2017 Draft</u></b>	<b><u>2018 Projection</u></b>	<b><u>2019 Projection</u></b>
Capital	\$9.6	\$10.6	\$9.9
Salaries & Benefits	88.9	91.9	94.7
Professional Fees (including Legal)	31.8	29.0	26.2
Building Services	6.3	6.3	6.3
Computer Services	15.8	16.6	17.5
Insurance	2.9	3.0	3.2
Telecommunications	3.1	2.8	2.8
Other Expenses (BOD, Travel/Training, NPCC Fees)	<u>4.1</u>	<u>3.9</u>	<u>3.8</u>
<b>Subtotal: Current Year Needs</b>	<b>\$162.5</b>	<b>\$164.1</b>	<b>164.4</b>
Debt Service	<u>27.2</u>	<u>40.3</u>	<u>43.4</u>
<b>Subtotal: Cash Budget</b>	<b>\$189.7</b>	<b>\$204.4</b>	<b>\$207.8</b>
Less: Miscellaneous Revenues	(3.0)	(3.0)	(3.0)
Less: Proceeds from Current Year Budget Debt	(39.1)	(35.0)	(28.3)
Add: Interest on Current Year Budget Debt	<u>0.6</u>	<u>0.5</u>	<u>0.5</u>
<b>Total: Rate Schedule #1 Revenue Requirement in \$\$</b>	<b>\$148.2</b>	<b>\$166.9</b>	<b>\$177.0</b>
<b>Budgeted MWH Hours (<i>in millions</i>)</b>	<b>158.3</b>	<b>157.6</b>	<b>156.8</b>
<b>Rate Schedule #1 Revenue Requirement in \$/MWH (<i>budget</i>)</b>	<b>\$0.936</b>	<b>\$1.059</b>	<b>\$1.129</b>



# Major Assumptions

<u>Cost Category</u>	<u>Major Assumptions for 2018 and 2019</u>
Capital	<ul style="list-style-type: none"> <li>➤ Purchases of Hardware and Software are estimated as follows: 2018 = \$8.5M (includes \$0.6M for EMS/BMS System Upgrade project) 2019 = \$7.8M</li> <li>➤ Facility Improvements are estimated as follows: \$2.1M for 2018 and 2019</li> </ul>
Salaries & Benefits	<ul style="list-style-type: none"> <li>➤ Total budgeted headcount as follows: 574 FTEs for 2018 and 2019 (no increase from 2017)</li> <li>➤ Estimated vacancy factor is ~5% in 2018 and 2019</li> <li>➤ Average annual salary increase of 3.0% in 2018 and 2019</li> <li>➤ 5% annual increase in medical insurance costs in 2018 and 2019</li> </ul>
Professional Fees (including Legal)	<ul style="list-style-type: none"> <li>➤ Assumes Professional Fees will decrease in 2018 and 2019 due to reductions in consultancy support for the EMS/BMS system Upgrade project</li> </ul>
Building Services	<ul style="list-style-type: none"> <li>➤ Assumes Building Services remains flat to the 2017 budget at \$6.3M for 2018 and 2019</li> </ul>
Computer Services	<ul style="list-style-type: none"> <li>➤ Assumes Computer Services increases 5% each year for 2018 and 2019 due to maintenance costs associated with additional hardware and software acquisitions</li> </ul>
Insurance	<ul style="list-style-type: none"> <li>➤ Assumes a 5% annual increase in 2018 and 2019 based on expected premium increases</li> </ul>
Telecommunications	<ul style="list-style-type: none"> <li>➤ Assumes Telecommunication service costs remain flat, exclusive of additional costs incurred in 2017 related to completion of the Telecommunications Redesign project</li> </ul>
Other Expenses (BOD, Travel/Trng, NPCC Fees)	<ul style="list-style-type: none"> <li>➤ Assumes no annual increase in Board of Directors' fees</li> <li>➤ Assumes no increase in NPCC Fees</li> <li>➤ Assumes Travel and Training remains flat to the 2017 budget, exclusive of EMS/BMS related travel in 2017 and 2018</li> </ul>
Debt Service	<ul style="list-style-type: none"> <li>➤ Annual borrowings (with 3-year repayment terms) to fund capital and product enhancements are anticipated to be ~\$35.0M for 2018 and ~\$28.3M for 2019</li> <li>➤ Interest rates for most borrowings expected to be between 2.0% – 4.0%</li> <li>➤ No reductions for “early payments” on debt from potential savings on annual budget or RS1 overcollections have been included</li> </ul>

# **2018 Budget Summary**

## **In Summary:**

- NYISO's draft 2018 advisory budget totals \$166.9M, allocated across a forecast of 157.6 million MWhs, for a Rate Schedule 1 charge/MWh of \$1.059. Comparatively, the 2017 draft budget totals \$148.2M, allocated across a forecast of 158.3 million MWhs, for a Rate Schedule 1 charge/MWh of \$0.936

## **Primary Drivers:**

- The primary drivers of a \$18.7M increase in the RS1 revenue requirement from 2017 to 2018 are as follows:
  - \$13.1M increase in debt service cost - In 2017 debt service was reduced by \$8.3M as NYISO utilized the 2015 budget underspend and RS1 overcollection to make additional principal payments on the outstanding balance of the 2014 budget facility. In addition, incremental debt principal and interest payments of ~\$5.0M will occur in 2018 to repay amounts borrowed in 2017 to fund the EMS/BMS System Upgrade project
  - \$3.0M increase in Salaries & Benefits driven primarily by a 3.0% annual merit compensation, 5% increase in health insurance costs and \$0.5M in pension funding
  - \$1.0M increase in Capital primarily driven by the EMS/BMS System Upgrade project and various facility improvements
  - \$0.8M increase in Computer Services due to maintenance costs associated with hardware and software additions

# **2019 Budget Summary**

## **In Summary:**

- NYISO's draft 2019 advisory budget totals \$177.0M, allocated across a forecast of 156.8 million MWhs, for a Rate Schedule 1 charge/MWh of \$1.129. Comparatively, the draft 2018 advisory budget totals \$166.9M, allocated across a forecast of 157.6 million MWhs, for a Rate Schedule 1 charge/MWh of \$1.059.

## **Primary Drivers:**

- The primary drivers of a \$10.1M increase in the RS1 revenue requirement from 2018 to 2019 are as follows:
  - \$3.1M increase in debt service primarily to repay amounts borrowed in 2017 and 2018 to fund the EMS/BMS System Upgrade project
  - \$2.8M increase in Salaries & Benefits driven primarily by 3.0% annual merit compensation and a 5% increase in health insurance costs
  - \$0.9M increase in Computer Services due to maintenance costs associated with hardware and software additions

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

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

**[www.nyiso.com](http://www.nyiso.com)**