

**MINUTES OF THE REGULAR MEETING  
OF THE  
FINANCE COMMITTEE  
December 12, 2017**

**Table of Contents**

<b><u>Subject</u></b>	<b><u>Page No.</u></b>	<b><u>Exhibit</u></b>
<b>Introduction</b>	<b>2</b>	
<b>1. Adoption of the December 12, 2017 Proposed Meeting Agenda</b>	<b>3</b>	
<b>2. Motion to Conduct An Executive Session</b>	<b>4</b>	
<b>3. Motion to Resume Meeting in Open Session</b>	<b>5</b>	
<b>4. CONSENT AGENDA:</b>	<b>6</b>	
<b>a.</b> Approval of the Minutes of the Regular Meeting held on January 31, 2017	<b>7</b>	
<b>b.</b> Amendments to the Authority's Finance Committee Charter	<b>8</b>	<b>4b-A; 4b-A-1</b>
<b>5. DISCUSSION AGENDA:</b>	<b>9</b>	
<b>a.</b> 2018 Power Authority Budget and Filing of the 2018-2021 Approved Budget and Four-Year Financial Plan Pursuant to Regulations of the Office of the State Comptroller	<b>9</b>	<b>5a-A - 5a-D</b>
<b>b.</b> Release of Funds for Canal Corporation	<b>12</b>	
<b>6. Next Meeting</b>	<b>14</b>	
<b>Closing</b>	<b>15</b>	

Minutes of the regular meeting of the New York Power Authority's Finance Committee held at the Authority's offices at 123 Main Street, White Plains, New York at approximately 10:03 a.m.

**Members of the Finance Committee present were:**

Eugene L. Nicandri - Acting Chair  
John R. Koelmel  
Dr. Anne M. Kress

Tracy B. McKibben - Excused  
Anthony Picente, Jr. - Excused

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**Also in attendance were:**

Dennis G. Trainor	Trustee
Gil Quiniones	President and Chief Executive Officer
Justin Driscoll	Executive Vice President and General Counsel
Robert Lurie	Executive Vice President and Chief Financial Officer
Karen Delince	Vice President and Corporate Secretary
Anne Reasoner	Vice President - Budgets and Business Controls
Thomas Concadoro	Vice President and Controller
Scott Tetenman	Vice President – Finance
Christine Lally	Director - Financial Planning
Lorna Johnson	Senior Associate Corporate Secretary
Sheila Baughman	Senior Assistant Corporate Secretary

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Acting Chair Eugene Nicandri presided over the meeting. Corporate Secretary Delince kept the Minutes.

**Introduction**

***Acting Chair Eugene Nicandri welcomed committee members and the Authority's senior staff to the meeting. He said the meeting had been duly noticed as required by the Open Meetings Law and called the meeting to order pursuant to Section B(4) of the Finance Committee Charter.***

1. **Adoption of the December 12, 2017 Proposed Meeting Agenda**

Upon motion made by member John Koelmel and seconded by member Anne Kress, the agenda for the meeting was adopted.

2. **Motion to Conduct an Executive Session**

***I move that the Authority and Canal Corporation Finance Committee conduct an executive session to discuss the financial and credit history of a particular corporation.***

Upon motion made by member John Koelmel and seconded by member Anne Kress, an Executive Session was held.

3. **Motion to Resume Meeting in Open Session**

***I move to resume the meeting in Open Session.*** Upon motion made by member John Koelme and seconded by member Anne Kress, the meeting resumed in Open Session.

Acting Chair Nicandri said no votes were taken during the Executive Session.

**4. CONSENT AGENDA:**

Upon motion made by member John Koelmel and seconded by member Anne Kress, the agenda for the meeting was adopted.

a. **Approval of the Minutes**

The Minutes of the Committee's Regular Meeting held on January 31, 2017 were unanimously approved.

**b. Amendments to Authority's Finance Committee Charter**

The President and Chief Executive Officer submitted the following report:

**"SUMMARY**

The Finance Committee is requested to adopt the Authority's Finance Committee Charter as amended and set forth in Exhibits '4b-A' and '4b-A-1' of this item and to recommend its adoption to the Trustees.

**BACKGROUND & DISCUSSION**

The Authority's Finance Committee Charter was last amended on October 26, 2010. The changes to the Authority's Finance Committee Charter are proposed to conform to the Canal Corporation's Finance Committee Charter, which was adopted on January 31, 2017.

**FISCAL INFORMATION**

None.

**RECOMMENDATION**

The Executive Vice President and General Counsel recommend that the Finance Committee approve the proposed amendments and recommend its adoption to the Trustees.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below."

The following resolution was unanimously approved by the Committee members.

**RESOLVED, That the attached Authority Finance Committee Charter be adopted in the form proposed in Exhibit "4b-A;" and be it further**

**RESOLVED, That the Finance Committee recommend the adoption of the Authority's Finance Committee Charter to the Trustees.**

## 5. DISCUSSION AGENDA:

### a. **2018 Power Authority Budget and Filing of the 2018-2021 Approved Budget and Four-Year Financial Plan Pursuant to Regulations of the Office of the State Comptroller**

The President and Chief Executive Officer submitted the following report:

#### SUMMARY

The Trustees will be requested at their December 12, 2017 meeting to approve the 2018 Budget for the Power Authority, specifically including the expenditures for the (i) 2018 Operations and Maintenance ('O&M') Budget (attached as Exhibit '5a-A'), (ii) 2018 Capital Budget (attached as Exhibit '5a-B'), (iii) 2018 Energy Services Budget (attached as Exhibit '5a-C') and (iv) 2018 Canal Development Fund Budget (collectively, with Exhibits '5a-A', '5a-B', and '5a-C', the '2018 Power Authority Budgets').

The 2018 Power Authority Budgets set forth the expected expenses of the Authority and include the recommended expenditures in the following amounts:

<u>2018 Power Authority Budgets</u>	<u>(\$ million)</u>
O&M	\$ 556.5
Capital	\$ 298.8
Energy Services	\$ 194.8
Canal Development Fund	\$ 3.2

The Finance Committee is requested to recommend to the Trustees the approval of the 2018 Power Authority Budgets.

In accordance with regulations of the Office of the State Comptroller ('OSC'), the Trustees will be requested at their December 12, 2017 meeting to approve the 2018-2021 Four-Year Budget and Financial Plan attached as Exhibit '5a-D' (in the form approved, the 'Approved 2018-2021 Four-Year Budget and Financial Plan') and authorize: (i) submitting the Approved 2018-2021 Four-Year Budget and Financial Plan to OSC, (ii) posting the Approved 2018-2021 Four-Year Budget and Financial Plan on the Authority's website, and (iii) making the Approved 2018-2021 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public places throughout New York State.

The Finance Committee is requested to recommend to the Trustees the approval of the 2018-2021 Four Year Budget and Financial Plan and authorization of the: (i) submittal of the Approved 2018-2021 Four-Year Budget and Financial Plan to OSC, (ii) posting of the Approved 2018-2021 Four-Year Budget and Financial Plan on the Authority's website, and (iii) making of the Approved 2018-2021 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public places throughout New York State.

#### BACKGROUND

The Authority is committed to providing clean, low-cost and reliable energy consistent with its commitment to the environment and safety, while promoting economic development and job development, energy efficiency, renewables and innovation, for the benefit of our customers and all New Yorkers. The mission statement of the Authority is to power the economic growth and competitiveness of New York State by providing customers with low-cost, clean, reliable power and the innovative energy infrastructure and services they value.

The New York State Canal Corporation (the 'Canal Corporation') became a subsidiary of the Authority effective January 1, 2017. The 2018 Power Authority Budgets include the budget information of

the Authority and the Canal Corporation. Assumptions that were used by staff to prepare the 2018 Power Authority Budgets, and for forward periods, have been incorporated in the 2018-2021 Four-Year Budget and Financial Plan.

The 2018 Power Authority Budgets are intended to provide the Authority's operating facilities with, and support organizations by providing, the resources needed to meet the Authority's overall mission and the Authority's strategic objectives, and to fund the expenses of the Canal Corporation. Any transfers of funds from the Authority to the Canal Corporation would be subject to compliance with the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented (the 'Revenue Bond Resolution'). Canal Development Fund expenses are expected to be reimbursed to the Authority by the State Comptroller with moneys held in the New York State Canal System Development Fund.

In approving the 2018 Power Authority Budgets, the Trustees will be authorizing spending for 2018 operations, spending for capital projects, and spending for general plant purchases of \$750,000 or less. The 2018 Power Authority Budgets includes requests for 20 new positions that are pooled and funded in a cost center under the Executive Office.

In accordance with the Authority's Expenditure Authorization Procedures, the President and Chief Executive Officer may, during the course of the year, authorize an additional 1.0% in the O&M Budget, up to 15 new positions, capital projects of \$3 million or less, or an increase in spending of no more than \$1 million to a capital project previously approved by the Trustees. All other spending authorizations must be approved by the Trustees.

The OSC implemented regulations in March 2006 addressing the preparation of annual budgets and four-year financial plans by 'covered' public authorities, including the Authority. (See 2 NYCRR Part 203 ('Part 203')). These regulations, which are discussed below, establish various procedural and substantive requirements relating to the budgets and financial plans of public authorities. The 2018-2021 Four-Year Budget and Financial Plan has been prepared in accordance with these regulations.

#### DISCUSSION & FISCAL INFORMATION

Discussion and Fiscal Information are discussed in detail in the corresponding Budget report being presented at to the Authority Trustees and Canal Corporation Board of Directors at their December 12, 2017 meeting.

#### REQUESTED ACTION

It is requested that the Finance Committee recommend that the Trustees approve the 2018 Power Authority Budgets, specifically including the expenditures for the (i) 2018 Operations and Maintenance Budget, (ii) 2018 Capital Budget, (iii) 2018 Energy Services Budget and (iv) 2018 Canal Development Fund Budget, each as discussed herein.

In connection with the 2018 Capital Budget, it is requested that the Finance Committee recommend that the Trustees authorize the transfer of up to \$298.8 million from the Operating Fund to the Capital Fund, subject to compliance with the Revenue Bond Resolution.

It is requested that the Finance Committee recommend that the Trustees (1) approve the 2018-2021 Four-Year Budget and Financial Plan, and (2) authorize (i) submitting the Approved 2018-2021 Four-Year Budget and Financial Plan to the OSC in the prescribed format, (ii) posting the Approved 2018-2021 Four-Year Budget and Financial Plan on the Authority's Web site, and (iii) making the Approved 2018-2021 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public locations throughout New York State.

For the reasons stated, I recommend the approval of the above-requested actions by adoption of the resolution below.”

The following resolution was unanimously approved by the Committee members.

**RESOLVED, That the Finance Committee recommends that the Authority’s Trustees approve the 2018 Budget for the Power Authority, specifically including the expenditures for the (i) 2018 Operations and Maintenance Budget, (ii) 2018 Capital Budget, (iii) 2018 Energy Services Budget and (iv) 2018 Canal Development Fund Budget, each as discussed in the foregoing report of the President and Chief Executive Officer, are hereby approved; and be it further**

**RESOLVED, That the Finance Committee recommends that the Authority’s Trustees authorize up to \$298.8 million of monies in the Operating Fund to be withdrawn from such Fund and deposited in the Capital Fund, provided that at the time of withdrawal of such amount or portions of such amount, the monies withdrawn are not then needed for any of the purposes specified in Sections 503(1)(a)-(c) of the General Resolution Authorizing Revenue Obligations as amended and supplemented, with the satisfaction of such condition being evidenced by a certificate of the Treasurer or the Deputy Treasurer; and be it further**

**RESOLVED, That the Finance Committee recommends that the Authority’s Trustees, pursuant to 2 NYCRR Part 203, approve the attached 2018-2021 Four-Year Budget and Financial Plan, including its certification by the Chief Operating Officer, in accordance with the foregoing report of the President and Chief Executive Officer; and be it further**

**RESOLVED, That the Finance Committee recommends that the Authority’s Trustees, pursuant to 2 NYCRR Part 203, authorize the Corporate Secretary to submit the Approved 2018-2021 Four-Year Budget and Financial Plan to the Office of the State Comptroller in the prescribed format, post the Approved 2018-2021 Four-Year Budget and Financial Plan on the Authority’s website and make the Approved 2018-2021 Four-Year Budget and Financial Plan available for public inspection at not less than five convenient public places throughout New York State.**

**b. Release of Funds for Canal Corporation**

The President and Chief Executive Officer submitted the following report:

**SUMMARY**

The Trustees will be requested at their December 12, 2017 meeting to authorize the release of up to \$20.5 million in funding to the New York State Canal Corporation ('Canal Corporation') to support the operations of the Canal Corporation in calendar year 2018. The amount requested is 25% of the Canal Corporation's 2018 O&M Budget as presented to the Canal Corporation Board of Directors at this December 2017 meeting.

The Finance Committee is requested to recommend to the Trustees the authorization to release up to \$20.5 million in funding to the Canal Corporation to support the operations of the Canal Corporation in calendar year 2018.

**BACKGROUND**

The Authority has been authorized to provide financial support for the Canal Corporation. See, e.g., Public Authorities Law § 1005-b(2). However, certain expenditures associated therewith do not constitute Capital Costs or Operating Expenses ('Operating Expenses') as defined in the Authority's General Resolution Authorizing Revenue Obligations dated February 24, 1998, as amended and supplemented ('Bond Resolution'). Expenditures for the Canal Corporation's operating purposes that do not constitute Capital Costs or Operating Expenses must satisfy the requirements of the Authority's Bond Resolution relating to the release of funds from the trust estate created by the Bond Resolution for lawful corporate purposes. In addition, as set forth in the Trustees' Policy Statement dated May 24, 2011, a debt service coverage ratio of 2.0 is to be used as a reference point in considering any such release of funds.

The Bond Resolution permits the Authority to withdraw monies 'free and clear of the lien and pledge created by the [Bond] Resolution' provided that (a) such withdrawals must be for a 'lawful corporate purpose as determined by the Authority,' and (b) the Authority must determine, taking into account among other considerations anticipated future receipt of revenues or other moneys constituting part of the Trust Estate, that the funds to be so withdrawn are not needed for (i) payment of reasonable and necessary operating expenses, (ii) an Operating Fund reserve for working capital, emergency repairs or replacements, major renewals or for retirement from service, decommissioning or disposal of facilities, (iii) payment of, or accumulation of a reserve for payment of, interest and principal on senior debt or (iv) payment of interest and principal on subordinate debt.

Under the Bond Resolution, Capital Costs (which includes capital costs related to the Canal Corporation) may be paid without satisfying the provision described above.

**DISCUSSION & FISCAL INFORMATION**

The Canal Corporation became a subsidiary of the Authority effective January 1, 2017. With this authorization, the Trustees will approve the release of \$20.5 million, an amount equal to 25% of the Canal Corporation's 2018 O&M Budget as presented to the Canal Corporation Board of Directors at their December 2017 meeting. With regard to Canal Corporation's operating expenses in excess of \$20.5 million in calendar year 2018, staff is not requesting any action at this time, but will return to the Authority's Trustees to request additional releases as needed.

Staff has reviewed the effect of releasing up to an additional \$20.5 million in funding at this time on the Authority's expected financial position and reserve requirements. In accordance with the Board's Policy Statement adopted May 24, 2011, staff calculated the impact of this funding on the Authority's debt

service coverage ratio and determined it would not fall below the 2.0 reference point level. Given the current financial condition of the Authority, its estimated future revenues, operating expenses, debt service and reserve requirements, staff is of the view that it will be feasible for the Authority to release up to \$20.5 million at this time.

Staff has determined that sufficient funds are available in the Operating Fund to release up to \$20.5 million in funding to support the operation of the Canal Corporation in calendar year 2018. Staff has further determined that such Authority funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution.

The expenses associated with the operations of the Canal Corporation for calendar year 2018 are included in the 2018 Canal Corporation Budget and the 2018 Power Authority Budget that are being presented to the Canal Corporation Board of Directors and the Authority's Board of Trustees, respectively, at their December 2017 meeting.

#### REQUESTED ACTION

It is requested that the Finance Committee recommend that the Trustees authorize the release of up to \$20.5 million in funding to the Canal Corporation to support the operations of the Canal Corporation in calendar year 2018.

The Finance Committee is requested to recommend that the Trustees affirm that such releases are feasible and advisable, that such funds are not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's Bond Resolution and that the release of such funds is authorized.

For the reasons stated, I recommend the approval of the above-requested actions by adoption of the resolution below."

The following resolution was unanimously approved by the Committee members.

**RESOLVED, That the Finance Committee recommends that the Authority's Trustees authorize the release of up to \$20.5 million in funding to the Canal Corporation to support operations of the Canal Corporation in calendar year 2018, as discussed in the foregoing report of the President and Chief Executive Officer; and be it further**

**RESOLVED, That the Finance Committee recommends that the Authority's Trustees affirm that the amount of up to \$20.5 million in funding as described in the foregoing report is not needed for any of the purposes specified in Section 503(1)(a)-(c) of the Authority's General Resolution Authorizing Revenue Obligations, as amended and supplemented, and that the release of such amount is feasible and advisable.**

**6. Next Meeting**

Acting Chair Nicandri said that the next regular meeting of the Finance Committee is to be determined.

**Closing**

Upon motion made by member Anne Kress and seconded by member John Koelmel, the meeting was adjourned by Acting Chair Nicandri at approximately 11:14 a.m.

*Karen Delince*

Karen Delince  
Corporate Secretary

NYPA FINANCE COMMITTEE

**EXHIBITS**

**For**

**December 12, 2017**

**Meeting Minutes**

**FINANCE COMMITTEE CHARTER**

**A. PURPOSE**

The purpose of the Finance Committee (“Committee”) is to provide guidance to the Board of Trustees and management concerning financial matters of the Authority; review proposals for the issuance of debt by the Authority; and perform such other responsibilities as the Trustees shall assign to it.

**B. MEMBERSHIP AND ORGANIZATION**

**(1) Committee Composition**

The Committee shall be comprised of not less than three independent members of the Board of Trustees. All members shall possess the necessary skills to understand the duties and functions of the Committee. Committee members and the Committee Chair shall be selected by a vote of the Board of Trustees.

**(2) Term**

Committee members shall serve for a period of five years subject to their term of office under the Public Authorities Law § 1003. Committee members may be reelected to serve for additional periods of five years subject to their term of office. A Committee member may resign his or her position on the Committee while continuing to serve as a Trustee. In the event of a vacancy on the Committee due to death, resignation or otherwise, a successor will be selected to serve in the manner and for the term described above.

**(3) Removal**

A Committee member may be removed if he or she is removed as a Trustee for cause, subject to Public Authorities Law § 2827, or is no longer eligible to serve as a Committee member.

**(4) Meetings and Quorum**

The Committee shall hold a regular meeting at least once annually and may meet more often as needed to fulfill its responsibilities. A Committee member may call a special meeting of the Committee individually, or upon the request of the Authority’s President and Chief Executive Officer, Executive Vice President and Chief Operating Officer, Executive Vice President and General Counsel, Executive Vice-President and Chief Financial Officer, Senior Vice President – Corporate Planning and Finance, or Treasurer.

An agenda shall be prepared and distributed to each Committee member prior to each such meeting and minutes shall be prepared in accordance with the New York Open Meetings Law. A majority of the total Committee composition established pursuant to section B(1) of this Charter shall constitute a quorum for the purposes of conducting the business of the Committee and receiving reports.

Any meeting of the Committee may be conducted by video conferencing.

To the extent permitted by law, the Committee may hold meetings or portions of meetings in executive session.

C. FUNCTIONS AND POWERS

The Committee shall provide guidance to the Board of Trustees and management concerning the Authority's practices relating to capital structure, debt issuances, interest rate risk management, and such other financial matters as the Board of Trustees shall assign to it.

The Committee shall review proposals for the issuance of Authority debt and the use of any related financial derivative instruments and make appropriate recommendations to the Board of Trustees.

The Committee may call upon the resources of the Authority to assist the Committee in the discharge of its responsibilities.

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# O&M 2018 - Budget by Organization (\$000's)

Exhibit A: 1 of 4

	2017	2018	INCREASE/(DECREASE)	
	<u>Budget</u>	<u>Budget</u>	<u>\$'s</u>	<u>%</u>
<b><u>Executive Offices</u></b>				
Executive Office	\$1,557.9	\$1,586.0	\$28.1	1.81%
Law	\$9,898.9	\$10,374.0	\$475.0	4.80%
Internal Audit	\$4,504.8	\$4,642.8	\$138.1	3.06%
Public & Regulatory Affairs	\$11,960.4	\$11,927.7	-\$32.7	-0.27%
Risk Management	\$5,043.5	\$5,442.4	\$399.0	7.91%
<b>Office Total</b>	<b>\$32,965.4</b>	<b>\$33,972.9</b>	<b>\$1,007.5</b>	<b>3.06%</b>

## **Commercial Operations**

Project & Business Development	\$2,806.8	\$3,459.9	\$653.1	23.27%
EVP Commercial Operations	\$1,249.9	\$943.0	-\$306.9	-24.55%
Market Issues	\$1,744.9	\$1,790.7	\$45.8	2.62%
<b>Office Total</b>	<b>\$5,801.6</b>	<b>\$6,193.6</b>	<b>\$392.0</b>	<b>6.76%</b>

## **Business Services**

EVP & CFO Business Services	\$622.0	\$646.7	\$24.7	3.98%
Budgets & Business Controls	\$2,562.4	\$2,667.4	\$105.0	4.10%
Corporate Controller	\$5,910.2	\$5,346.2	-\$564.0	-9.54%
Finance	\$694.9	\$0.0	-\$694.9	-100.00%
Financial Planning	\$985.5	\$1,243.7	\$258.3	26.21%
Treasury	\$1,388.4	\$1,923.7	\$535.3	38.55%
Strategic Management	\$1,815.0	\$2,146.8	\$331.9	18.28%
Enterprise Excellence	\$2,676.1	\$2,505.0	-\$171.1	-6.39%
Strategic Supply Management	\$9,913.7	\$6,812.5	-\$3,101.3	-31.28%
<b>Office Total</b>	<b>\$26,568.2</b>	<b>\$23,292.1</b>	<b>-\$3,276.1</b>	<b>-12.33%</b>

## **Information Technology**

	\$28,370.1	\$30,685.2	\$2,315.1	8.16%
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## **HR & Enterprise Shared Services**

SVP Enterprise Shared Services	\$1,201.4	\$1,186.7	-\$14.7	-1.22%
VP Enterprise Shared Services	\$373.3	\$475.7	\$102.3	27.41%
Human Resources	\$13,728.0	\$10,564.3	-\$3,163.7	-23.05%
Knowledge Management	\$1,619.0	\$1,096.8	-\$522.2	-32.26%
Corporate Support Services	\$10,206.7	\$9,877.4	-\$329.3	-3.23%
Fleet Management	\$1,458.5	\$1,487.8	\$29.3	2.01%
Real Estate	\$607.8	\$593.7	-\$14.1	-2.33%
Chief Diversity Officer	\$666.5	\$500.1	-\$166.4	-24.97%
<b>Office Total</b>	<b>\$29,861.3</b>	<b>\$25,782.5</b>	<b>-\$4,078.8</b>	<b>-13.66%</b>

## **Economic Development & Energy Efficiency**

Economic Development	\$228.0	\$327.5	\$99.5	43.62%
Market Services & Business Controls	\$15.0	\$15.0	\$0.0	0.00%
Business & Market Development	\$236.6	\$0.0	-\$236.6	-100.00%
Energy Efficiency	\$500.0	\$300.0	-\$200.0	-40.00%
<b>Office Total</b>	<b>\$979.6</b>	<b>\$642.5</b>	<b>-\$337.1</b>	<b>-34.41%</b>

## **Operations**

Operations Headquarters	\$33,371.1	\$42,648.2	\$9,277.1	27.80%
Blenheim-Gilboa	\$22,440.2	\$22,473.3	\$33.1	0.15%
500MW	\$34,468.8	\$39,959.7	\$5,490.9	15.93%
Flynn	\$7,987.7	\$8,608.4	\$620.7	7.77%
SENY	\$6,856.9	\$4,734.6	-\$2,122.2	-30.95%
SCPP	\$18,905.5	\$19,454.6	\$549.1	2.90%
Niagara	\$62,834.7	\$57,015.4	-\$5,819.3	-9.26%
St. Lawrence	\$37,387.2	\$36,108.1	-\$1,279.1	-3.42%
Small Hydros	\$11,412.8	\$7,013.4	-\$4,399.4	-38.55%
Transmission Lines	\$68,301.9	\$65,294.8	-\$3,007.1	-4.40%
Astoria Energy II O&M	\$967.3	\$1,062.1	\$94.8	9.80%
<b>Office Total</b>	<b>\$304,934.0</b>	<b>\$304,372.7</b>	<b>-\$561.4</b>	<b>-0.18%</b>

## **Recharge New York**

Research & Development	\$2,553.8	\$2,253.0	-\$300.8	-11.78%
	\$8,924.0	\$8,704.4	-\$219.6	-2.46%

## **Eliminations & Adjustments**

	\$34,251.4	\$38,603.2	\$4,351.8	12.71%
Astoria Energy II Lease	\$28,206.0	\$28,764.0	\$558.0	1.98%

## **Total NYPA**

	\$503,415.6	\$503,266.2	-\$149.4	-0.03%
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## **Canals**

	\$84,300.0	\$82,000.0	-\$2,300.0	-2.73%
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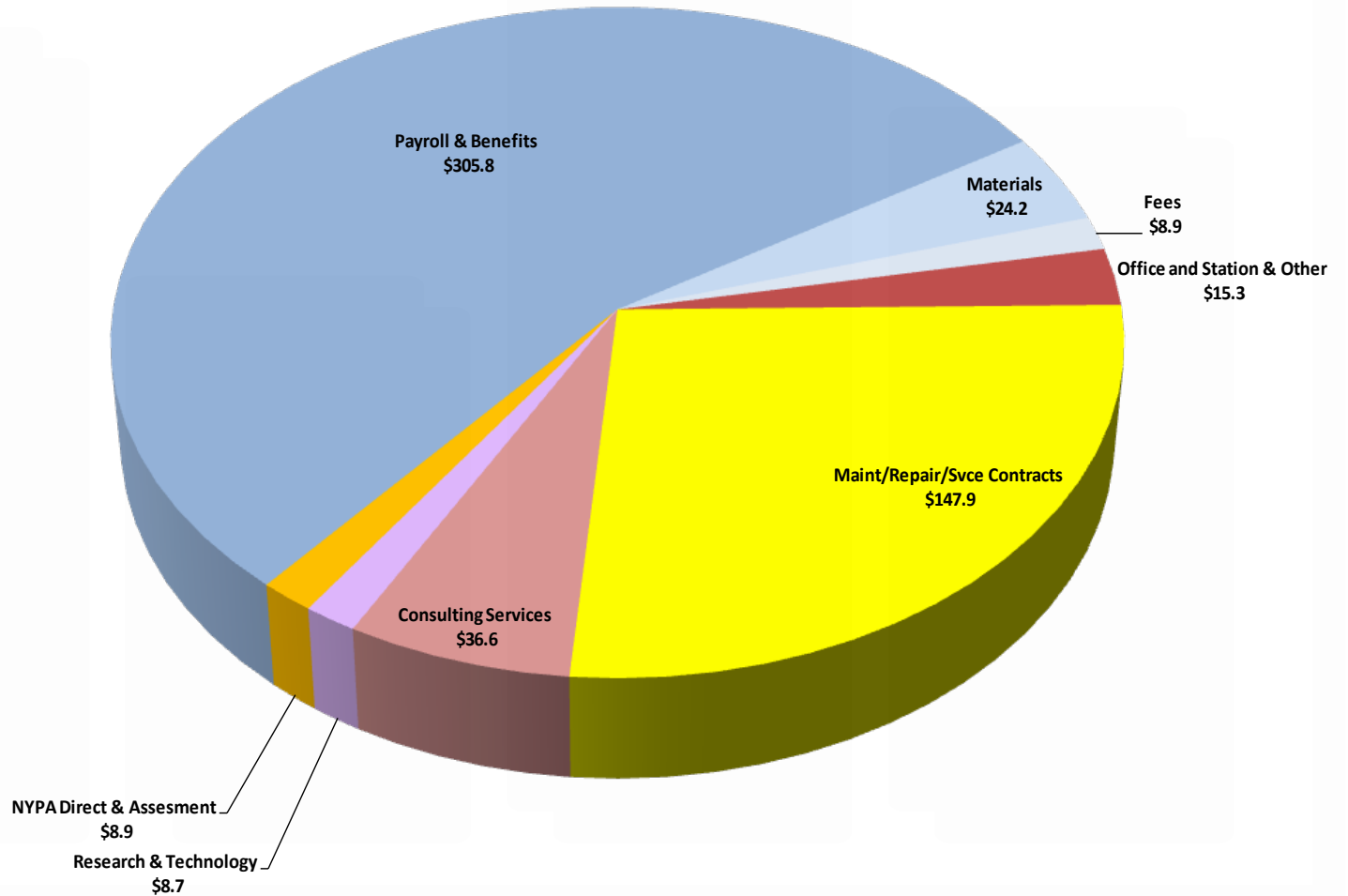
## **Grand Total**

	\$587,715.6	\$585,266.2	-\$2,449.4	-0.42%
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**O&M: 2018 Budget By Cost Element (\$millions)**

Exhibit A: 2 of 4

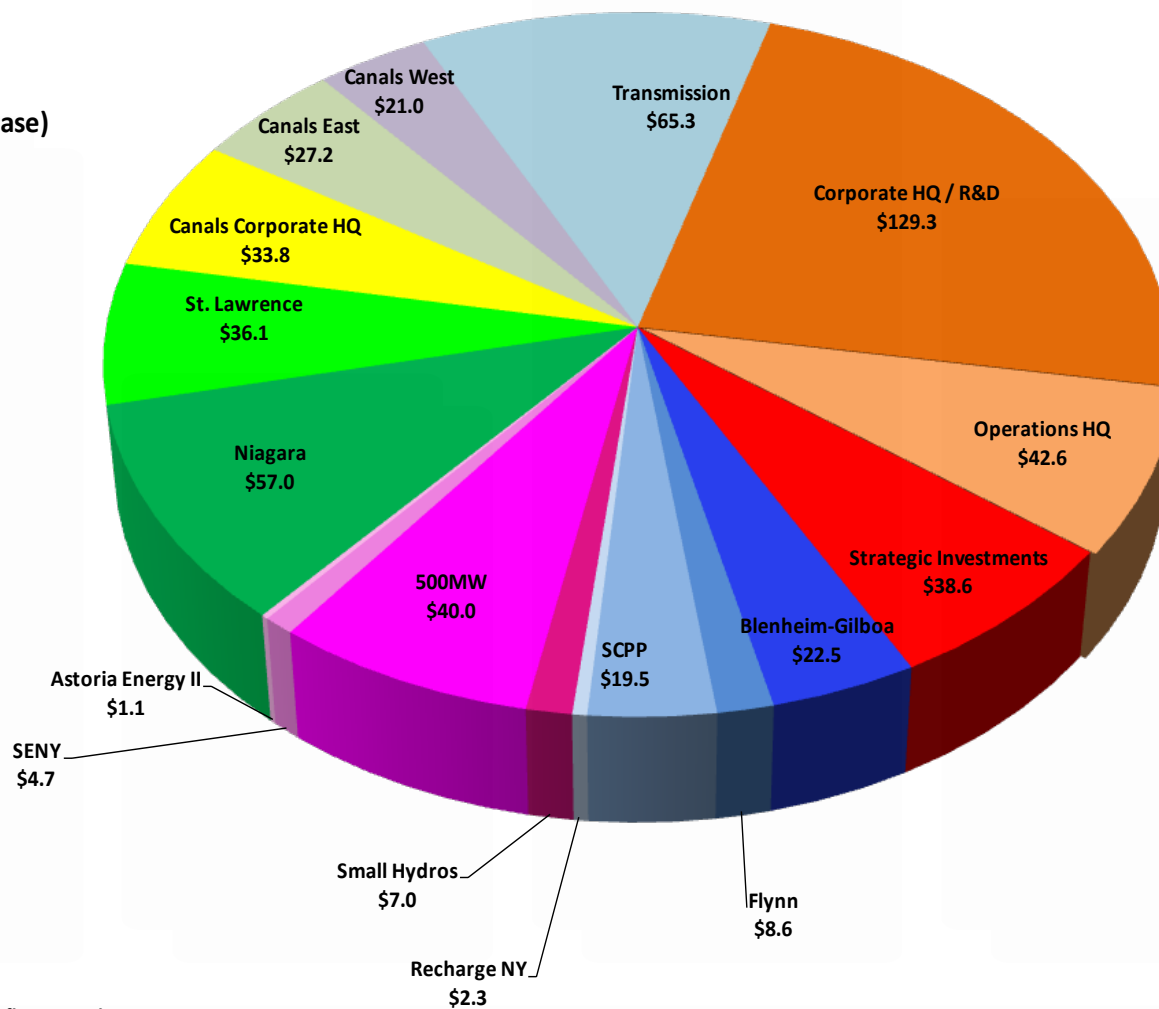
**\$556.5 M**  
**(excludes AE II Lease)**



**O&M: 2018 Budget By Facility (\$millions)**

Exhibit A: 3 of 4

**\$556.5 M**  
**(excludes AEII Lease)**



\* Astoria does not reflect annual Lease payments

# O & M: Headcount 2018

---

<b>Headquarters</b>	<b><u>2018 Request</u></b>
* Executive Offices	167
Commercial Operations	52
Business Services	201
Human Resources & Enterprise Shared Services	120
Information Technology	120
Economic Development & Energy Efficiency	<u>176</u>
<b>Headquarters Total</b>	<b>836</b>
<b>Operations</b>	
Operations HQ	346
Transmission/Clark	135
Blenheim-Gilboa	104
500MW	63
Small Clean Power Plants	1
R.M. Flynn	22
Niagara	243
St. Lawrence	<u>195</u>
<b>Operations Total</b>	<b>1,109</b>
<b>NYPA Total</b>	<b>1,945</b>
<b>Canals Total</b>	<b>482</b>
<b>Grand Total</b>	<b>2,427</b>

\* Includes 20 funded new position requests

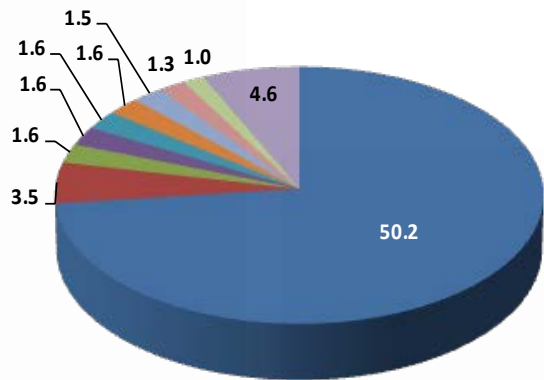
## ***2018 Capital Budget Request (\$000's)***

*Exhibit B: 1 of 3*

	<b>2018 CAPITAL BUDGET</b>
<i>TRANSMISSION</i>	<i>97,817</i>
<b><i>OPERATIONS</i></b>	
<i>NIAGARA</i>	<i>68,616</i>
<i>ST. LAWRENCE</i>	<i>21,345</i>
<i>BLLENHEIM- GILBOA</i>	<i>6,829</i>
<i>500 MW</i>	<i>11,055</i>
<i>SCPP</i>	<i>1,447</i>
<i>FLYNN</i>	<i>37</i>
<i>SMALL HYDRO PLANTS</i>	<i>1,507</i>
<b><i>SUB-TOTAL OPERATIONS</i></b>	<b><i>208,653</i></b>
<b><i>OPERATIONS HEADQUARTERS</i></b>	<b><i>50,169</i></b>
<b><i>CANALS</i></b>	<b><i>40,000</i></b>
<b><i>TOTAL CAPITAL</i></b>	<b><i>298,822</i></b>

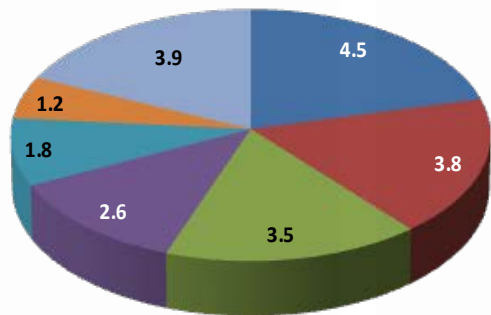
# Capital Plan: 2018 Major Initiatives

Niagara 2018  
(\$ millions)  
Total \$68.6 million



- LEWISTON PUMP GENERATING PLANT (LPGP) LEM
- RMNPP LIFE EXTENSION & MODERNIZATION LEM
- NIAGARA REPLACE VESSELS JOINCAIR/BREAKER
- GANTRY CRANE INSPECTIONS-PARAPET BUSSES
- REPLACEMENT UNDERGROUND FUEL STOR. TANKS
- BSNY CHILLER REPLACEMENT / UPGRADE
- NIAGARA SCADA SYSTEM UPGRADE
- NIA RMNPP TRASH RACK REPLACEMENT
- RELICENSING COMPLIANCE AND IMPLEMENTATION
- All Other Niagara Projects

St. Lawrence 2018  
(\$ millions)  
Total \$21.3 million



- NEW FACILITIES FORT OFFICE OF PARKS
- WATER BALL REPLACEMENT
- ROTOR MODIFICATION-STRESS REDISTRIBUTION
- STL CONTROL ROOM RE-DESIGN
- STL STATION SERVICE UPGRADE
- RELICENSING COMPLIANCE AND IMPLEMENTATION
- All Other St. Lawrence Projects

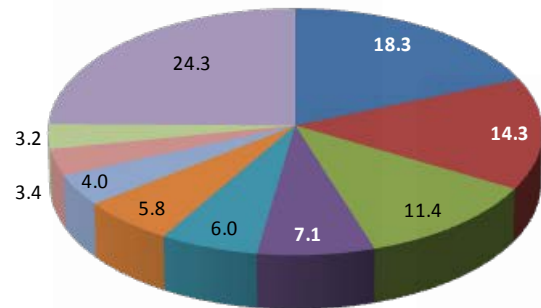
# Capital Plan: 2018 Major Initiatives

Exhibit B: 3 of 3

## Transmission 2018

(\$ millions)

Total \$97.8 million

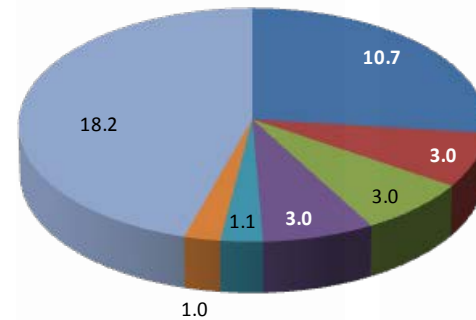


- TRANSMISSION LEM PROJECTS
- NIAGARA TRANSMISSION LEM
- ENERGY CONTROL CENTER REDUNDANCY
- SENSOR DEPLOYMENT
- NEW VISITOR CENTER
- 345 KV MA1 AND MA2 LINE UPGRADE
- NEW LEAK DETECTION SYSTEM FOR 345KV
- ASTORIA ANNEX - REPLACEMENT OF SHUNT REACTORS
- STL MA1 AND MA2 STRUCTURE REPLACEMENTS PHASE II
- All Other Transmission Projects

## Canals 2018

(\$ millions)

Total \$40.0 million



- LOCK O-7 REHAB
- DERUYTER RESERVOIR DAM REHABILITATION
- VESSEL REPLACEMENT/ADDITION PROGRAM
- LOCK O-2 PUMPOUT 17-19
- LOCK 35 PUMPOUT
- ALBION WASTE WEIR REHABILITATION
- All Other Projects Less than \$1.0 Million

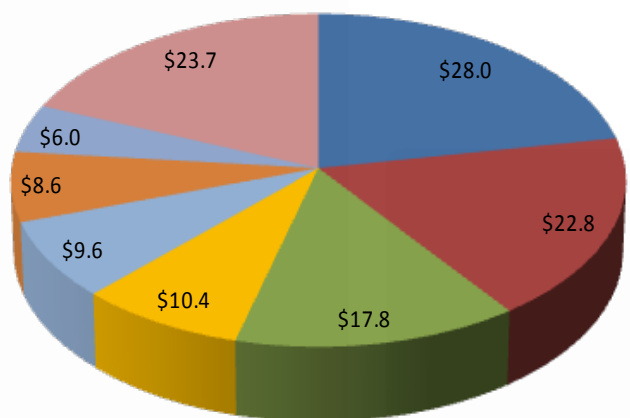
## Energy Services 2018 Budget (\$000's)

Exhibit C: 1 of 2

<b><i>ENERGY EFFICIENCY &amp; TECHNOLOGY</i></b>	<b>2018</b>
<b><u>LONG TERM AGREEMENTS</u></b>	
SENY GOVERNMENTAL SERVICES PROGRAM	126,885
<b>SUB-TOTAL LONG TERM AGREEMENTS</b>	<b>126,885</b>
<b><u>OTHER NYPA FUNDED PROGRAMS</u></b>	
ENERGY EFFICIENCY PROGRAM	65,405
MEUA VEHICLES PROGRAM	500
<b>SUB-TOTAL OTHER NYPA FUNDED PROGRAMS</b>	<b>65,905</b>
<b><u>POCR PROGRAMS</u></b>	
POCR REBATE PROGRAM	500
POCR - OTHER	1,509
<b>SUB-TOTAL POCR</b>	<b>2,009</b>
<b>TOTAL ENERGY EFFICIENCY:</b>	<b>194,799</b>

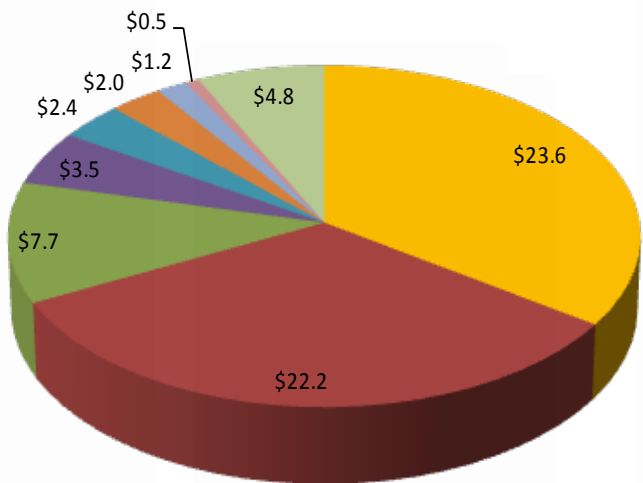
# 2018 Energy Services Programs

**Long Term Agreement Program**  
(\$ millions)  
**Total \$126.9 million**



- NYC DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
- NYC HEALTH & HOSPITALS
- NYC-TRANSIT AUTHORITY
- PORT AUTHORITY
- CITY UNIVESRITY OF NY (CUNY)
- LIRR/METRO NORTH/MTA
- WESTCHESTER COUNTY/YONKERS JOINT WWP
- All Other Projects

**Other Energy Services Programs**  
(\$ millions)  
**Total \$67.9 million**



- NYS DEPARTMENT OF CORRECTIONS DOCCS
- SUNY CAMPUS
- OFFICE OF GENERAL SERVICES (OGS)
- EMPIRE STATE PLAZA
- CITY AND TOWNS
- POCR
- NYS DEC
- MUNICIPAL VEHICLES
- All Other Projects

# 2018-2021

## Approved Budget and Financial Plan

Background and Mission Statement.....	1
NYPA's Relationship with New York State Government .....	2
Budget Process .....	2
NYPA's Four-Year Projected Income Statements.....	3
2018 Budget – Sources and Uses.....	4
NYPA's Multiyear Statement of Cash Flows.....	5
Budget Assumptions.....	6
Self-Assessment of Budgetary Risks.....	13
Revised Forecast of 2017 Budget .....	19
Reconciliation of 2017 Budget and 2017 Revised Forecast.....	19
Statement of 2016 Financial Performance .....	20
Employee Data.....	21
Gap-Closing Initiatives .....	21
Material Non-Recurring Resources.....	21
Shift in Material Resources .....	21
Debt Service .....	21
Capital Commitments and Sources of Funding.....	25
Certificate of Assumptions and Method of Estimation.....	26

In compliance with 2 NYCRR Part 203



**NY Power  
Authority**

## **Background and Mission of the Power Authority of the State of New York**

The mission of the Power Authority of the State of New York ("NYPA" or the "Authority") is to power the economic growth and competitiveness of New York State by providing customers with low-cost, clean, reliable power and the innovative energy infrastructure and services they value. The Authority's financial performance goals are to have the resources necessary to achieve its mission, to maximize opportunities to serve its customers better and to preserve its strong credit rating.

The Authority generates, transmits, purchases and sells electric power and energy as authorized by law. The Authority's customers include municipal and rural electric cooperatives located throughout New York State, investor-owned utilities, high load factor industries, commercial/industrial and not-for-profit businesses, and various public corporations located in Southeastern New York within the metropolitan area of New York City ("SENY governmental customers") and certain neighboring states.

To provide electric service, the Authority owns and operates five major generating facilities, eleven small gas-fired electric generating facilities, and four small hydroelectric facilities in addition to a number of transmission lines, including major 765-kV and 345-kV transmission facilities. The Authority's five major generating facilities consist of two large hydroelectric facilities ("Niagara" and "St. Lawrence-FDR"), a large pumped-storage hydroelectric facility ("Blenheim-Gilboa"), the combined cycle electric generating plant located in Queens, New York (the "500-MW plant") and the Richard M. Flynn combined cycle plant located on Long Island ("Flynn").

To maintain its position as a low cost provider of power in a changing environment, the Authority has undertaken and continues to carry out a multifaceted program, including: (a) the upgrade and relicensing of the Niagara and St. Lawrence-FDR projects; (b) long-term supplemental electricity supply agreements with the SENY governmental customers; (c) construction and operation of the 500-MW plant combined-cycle electric generating plant located at the Authority's Poletti plant site; (d) a long-term electricity supply contract with Astoria Generating LLC for the purchase of the output of a 550-MW power plant in Astoria, Queens ("Astoria Energy II"); (e) a firm transmission capacity purchase agreement with Hudson Transmission Partners, LLC ("HTP") for a portion of the output of the 660 MW, seven mile, underground and underwater transmission line connecting into the PJM ISO; (f) refinancing outstanding bonds to lower the overall cost of debt; and (g) implementation of an enterprise-wide and energy/fuel risk management program. As a component of NYPA's strategic plan, efforts to modernize NYPA's generation and transmission infrastructure are being developed to increase flexibility and resiliency, and to serve customers' needs in an increasingly dynamic energy marketplace.

The Authority provides customers with wide-ranging on-site energy solutions including energy data analytics, planning, operations and the development of capital projects such as energy efficiency, distributed generation, advanced technologies and renewables. The Authority also has responsibility for implementation of the Governor's Executive Order No. 88, known as "BuildSmart NY" (to improve energy efficiency at State owned and managed buildings), the Five Cities Energy Efficiency Implementation Plans (for the cities of Albany, Buffalo, Rochester, Syracuse and Yonkers to reduce overall energy costs and consumption, strength the reliability of energy infrastructure, create jobs in local clean energy industries and contribute to a cleaner environment), and the K-Solar program (to reduce schools' energy costs through the use of solar power). From January 2013 through September 30, 2017, NYPA has provided approximately \$418 million in financing for energy efficiency projects covered by Executive Order 88. Overall financing from January 2013 through September 30, 2017 for energy efficiency projects for all customers (including EO88 facilities) amounts to \$917.7 million.

To achieve its goal of promoting clean energy and efficiency, NYPA implements energy services for the benefit of its power supply customers and for various other public entities throughout the State. Under these programs, the Authority finances the installation of energy saving measures and equipment, which are owned by the customers and public entities upon their installation and which focus primarily on the reduction of the demand for electricity and the efficient use of energy. These programs provide funding for, among other things, high efficiency lighting technology conversions; high efficiency heating, ventilating and air conditioning systems and controls; boiler conversions; replacement of inefficient refrigerators with energy efficient units in public housing projects; distributed generation technologies and clean energy technologies; renewable energy and installation of non-electric energy saving measures. The Authority has authorized, as of September 30, 2017, the expenditure of an aggregate of \$5.1 billion on these programs.

Effective January 1, 2017, the New York State Canal Corporation (the "Canal Corporation") became a subsidiary of the Authority, and the Authority assumed certain powers and duties relating to the Canal

System (as defined below) to be exercised through the Canal Corporation. The Canal Corporation is responsible for a 524-mile canal system consisting of the Erie, Champlain, Oswego, and Cayuga-Seneca canals (the "Canal System"). See "(c) Canal Corporation" for more information.

#### **(a) NYPA's Relationship with New York State Government**

The Authority is a corporate municipal instrumentality and political subdivision of the State of New York (the "State") created in 1931 by Title 1 of Article 5 of the Public Authorities Law, Chapter 43-A of the Consolidated Laws of the State, as amended from time to time (the "Act"), to help provide a continuous and adequate supply of dependable electric power and energy to the people of the State.

The Authority's operations are overseen by a Board of Trustees. NYPA's Trustees are appointed by the Governor of the State, with the advice and consent of the State Senate. The Authority is a fiscally independent public corporation that does not receive State funds, tax revenues or credits. NYPA generally finances construction of new projects through a combination of internally generated funds and the sale of bonds and notes to investors, and pays related debt service with revenues from the generation and transmission of electricity. Income of the Authority and properties acquired by it for its projects are exempt from taxation.

#### **(b) Budget Process**

NYPA operates in a capital intensive industry where operating revenues and expenses are significant and highly variable due to the volatility of electricity prices and fuel costs. NYPA's operations are not only subject to electric and fuel cost volatility, but changing water flows have a direct effect on hydroelectric generation levels. This 2018-2021 Proposed Budget and Financial Plan ("Four-Year Plan") relies on data and projections developed through the following timeframe:

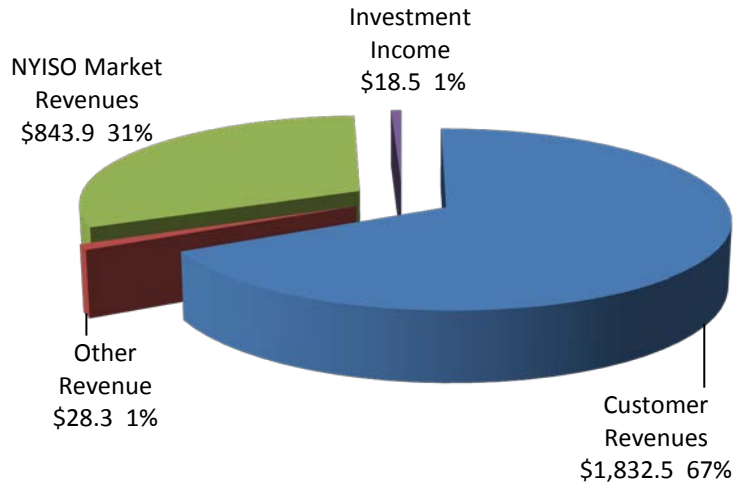
- During July – October 2017, developed preliminary forecasts of electric prices (both energy and capacity) and fuel expenses; NYPA customer power and energy use; NYPA customer rates; generation levels at NYPA power projects reflecting scheduled outages; and purchased energy & power requirements and sources.
- During July – October 2017, developed preliminary operations & maintenance and capital expense targets.
- November 2017 – posted 2018-2021 Proposed Budget and Financial Plan for public inspection at five convenient locations and on NYPA's internet website.
- During October – November 2017, updated and finalized all forecasts and cost estimates.
- During November – December 2017, integrated above data to produce Final 2018-2021 Budget and Financial Plan.
- Seek authorization of NYPA's Trustees to approve the 2018-2021 Budget and Financial Plan at their meeting currently scheduled for December 12, 2017 and submit the information to the State Comptroller's Office; and make the document available for public inspection at five convenient locations and on NYPA's internet website.

## **NYPA's Four-Year Projected Income Statements**

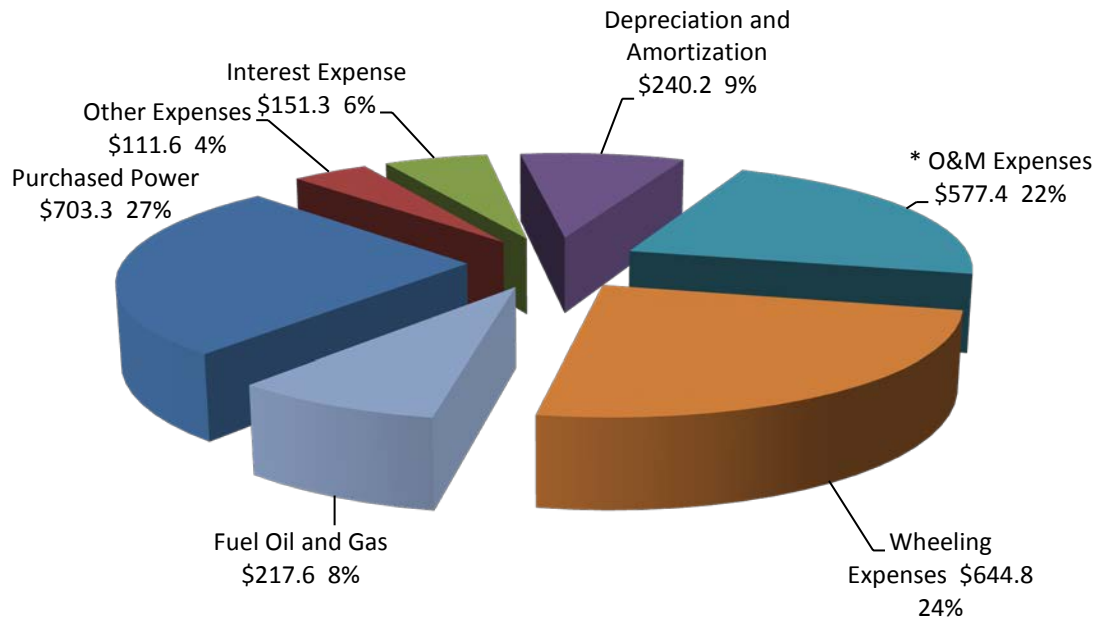
*(in Millions)*

	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
<b><u>Operating Income:</u></b>				
Customer Revenues	\$1,832.5	\$1,826.7	\$1,825.5	\$1,846.9
NYISO Market Revenues	\$843.9	\$843.2	\$875.8	\$911.3
Other Revenue	<u>\$28.3</u>	<u>\$44.5</u>	<u>\$48.4</u>	<u>\$50.0</u>
<b>Total Operating Income</b>	\$2,704.7	\$2,714.4	\$2,749.7	\$2,808.2
<b><u>Operating Expenses:</u></b>				
Purchased Power	\$703.3	\$700.3	\$706.9	\$719.5
Fuel	\$217.6	\$206.6	\$214.9	\$216.1
Wheeling Expenses	\$644.8	\$644.9	\$644.9	\$645.0
O&M Expenses	\$588.4	\$612.4	\$610.1	\$613.2
Other Expenses	\$111.6	\$113.8	\$114.6	\$117.1
Depreciation and Amortization	\$240.2	\$243.1	\$246.0	\$249.0
Allocation to Capital	<u>(\$11.0)</u>	<u>(\$17.8)</u>	<u>(\$15.9)</u>	<u>(\$15.1)</u>
<b>Total Operating Expenses</b>	\$2,495.0	\$2,503.3	\$2,521.6	\$2,544.8
<b>NET OPERATING INCOME</b>	<b>\$209.8</b>	<b>\$211.1</b>	<b>\$228.2</b>	<b>\$263.4</b>
<b><u>Other Income:</u></b>				
Investment Income	\$18.5	\$26.4	\$30.3	\$35.2
Other Income	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
<b>Total Other Income</b>	\$18.5	\$26.4	\$30.3	\$35.2
<b><u>Non-Operating Expenses:</u></b>				
Interest Expense	\$151.3	\$152.6	\$153.7	\$154.3
Contributions to State	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
<b>Total Non-Operating Expenses</b>	\$151.3	\$152.6	\$153.7	\$154.3
<b>NET INCOME</b>	<b>\$76.9</b>	<b>\$84.9</b>	<b>\$104.7</b>	<b>\$144.3</b>

**2018 Budget – Sources**  
(in Millions)



**2018 Budget – Uses**  
(in Millions)



\* Reflects NYPA's Base O&M Expenses plus Administrative Expenses less the Allocation to Capital.

**NYPA's Statement of Cash Flows**

*(in Millions)*

**Revenue Receipts :**

	<b><u>2016</u></b>	<b><u>2017</u></b>	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
Sale of Power, Use of Transmission Lines						
Wheeling Charges and other receipts	\$2,355.9	\$2,519.3	\$2,660.3	\$2,679.8	\$2,719.6	\$2,783.0
Earnings on Investments and Time Deposits	<u>\$14.5</u>	<u>\$24.6</u>	<u>\$22.8</u>	<u>\$29.6</u>	<u>\$34.4</u>	<u>\$39.8</u>
<b>Total Revenues</b>	<b>\$2,370.4</b>	<b>\$2,543.9</b>	<b>\$2,683.1</b>	<b>\$2,709.4</b>	<b>\$2,754.0</b>	<b>\$2,822.8</b>

**Expenses:**

Operation and Maintenance, including Transmission of Electricity by others, Purchased Power and Fuel Purchases						
	<b>(\$2,142.6)</b>	<b>(\$2,075.7)</b>	<b>(\$2,353.4)</b>	<b>(\$2,361.1)</b>	<b>(\$2,381.7)</b>	<b>(\$2,406.0)</b>

**Debt Service :**

Interest on Bonds and Notes	(\$54.8)	(\$53.9)	(\$60.1)	(\$63.1)	(\$66.5)	(\$69.4)
Bonds and Notes Retired	<u>(\$141.9)</u>	<u>(\$58.1)</u>	<u>(\$33.6)</u>	<u>(\$36.2)</u>	<u>(\$38.8)</u>	<u>(\$31.8)</u>
<b>Total Debt Service</b>	<b>(\$196.7)</b>	<b>(\$111.9)</b>	<b>(\$93.7)</b>	<b>(\$99.3)</b>	<b>(\$105.3)</b>	<b>(\$101.2)</b>

<b>Total Requirements</b>	<b>(\$2,339.3)</b>	<b>(\$2,187.6)</b>	<b>(\$2,447.1)</b>	<b>(\$2,460.4)</b>	<b>(\$2,487.0)</b>	<b>(\$2,507.2)</b>
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<b>Net Operations</b>	<b>\$31.1</b>	<b>\$356.3</b>	<b>\$236.0</b>	<b>\$249.0</b>	<b>\$267.0</b>	<b>\$315.6</b>
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**Capital Receipts :**

Sale of Bonds, Promissory Notes & Commercial Paper	\$109.5	\$275.5	\$133.9	\$418.3	\$284.1	\$452.8
Less : Repayments	(\$159.8)	(\$90.7)	\$0.0	(\$50.2)	(\$83.9)	(\$158.8)
Earnings on Construction Funds	\$0.1	\$0.2	\$0.2	\$0.3	\$0.4	\$0.3
Energy Efficiency Receipts	\$143.0	\$231.7	\$171.3	\$220.2	\$253.7	\$193.8
Temporary Asset Transfer Return from NYS	\$21.0	\$43.0	\$43.0	\$43.0	\$43.0	\$43.0
Other	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
<b>Total Capital Receipts</b>	<b>\$113.8</b>	<b>\$459.7</b>	<b>\$348.4</b>	<b>\$631.6</b>	<b>\$497.3</b>	<b>\$531.1</b>

**Capital Additions & Refunds :**

Additions to Electric Plant in Service and Construction Work in Progress, and Other costs	(\$408.9)	(\$467.3)	(\$493.6)	(\$679.1)	(\$657.3)	(\$646.7)
Construction Funds - Net Transfer	<u>\$0.0</u>	<u>(\$0.2)</u>	<u>(\$0.2)</u>	<u>(\$0.3)</u>	<u>(\$0.4)</u>	<u>(\$0.3)</u>
<b>Total Capital Additions &amp; Refunds</b>	<b>(\$408.9)</b>	<b>(\$467.5)</b>	<b>(\$493.8)</b>	<b>(\$679.4)</b>	<b>(\$657.7)</b>	<b>(\$647.0)</b>

<b>Net Capital</b>	<b>(\$295.1)</b>	<b>(\$7.8)</b>	<b>(\$145.4)</b>	<b>(\$47.8)</b>	<b>(\$160.4)</b>	<b>(\$115.9)</b>
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<b>Net Increase/(Decrease)</b>	<b>(\$264.0)</b>	<b>\$348.5</b>	<b>\$90.6</b>	<b>\$201.2</b>	<b>\$106.6</b>	<b>\$199.7</b>
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### **(c) Budget Assumptions**

#### **NYISO Revenue and Expenses**

Based on scheduled customer power needs and available electricity generated by NYPA's operating assets, the Authority buys and sells capacity and energy through markets operated by the New York Independent System Operator ("NYISO"). Various NYISO purchased power charges in combination with generation related fuel expenses comprise a significant portion of NYPA's operating expenses. A significant amount of the Authority's revenues result from sales of the Authority's generation into the NYISO market for which the energy revenues are projected based on available forward price curves while the capacity revenues are estimated using the NYISO demand curve methodology.

#### **Customer and Project Revenue**

The customers served by the Authority and the rates paid by such customers vary with the NYPA facilities designated to serve such loads. These customers are served under contracts and tariffs approved by the Trustees.

#### **St. Lawrence-FDR and Niagara Customers**

Power and energy from the St. Lawrence-FDR and Niagara hydroelectric facilities are sold under contract to municipal electric systems, rural electric cooperatives, industrial and other business customers, certain public bodies, investor-owned utilities, and out-of-state customers, with the balance sold into the NYISO market.

The charges for firm and/or firm peaking power and associated energy sold by the Authority, as applicable, to the fifty-one municipal electric systems and rural electric cooperatives in New York State; two public transportation agencies; three investor-owned utilities for the benefit of rural and domestic customers; and seven out-of-state public customers have been established on the basis of the cost to serve these loads. This Four-Year Plan models Trustee-approved rate increases for customers as well as prospective rate increases.

Niagara's expansion and replacement power industrial customers and St. Lawrence-FDR's industrial customers are allocated over 35% of the firm contract demand of the plants. Sale of expansion and replacement power historically had been handled on a sale-for-resale basis through National Grid and New York State Electric and Gas. However, the direct sale of low cost hydro power to these customers commenced July 1, 2013. As a result, NYPA is now the load-serving entity for these transactions.

Legislation enacted in March 2011, effective July 2012, created a new economic development power program, the ReCharge New York Power Program ("RNYPP"), to replace two other economic development programs: the Power for Jobs ("PFJ") and Energy Cost Savings Benefits ("ECSB") programs. RNYPP is a permanent power program administered by the Authority and the Economic Development Power Allocation Board ("EDPAB"). The RNYPP utilizes 455 MW of hydropower from the Authority's Niagara and St. Lawrence-FDR projects combined with up to 455 MW of other power procured by the Authority from other sources. The 455 MW of hydropower was, until August 1, 2011, provided to residential and domestic customers of three upstate utilities. The 910 MW of power is available for allocations to eligible new and existing businesses and not-for-profit corporations under contracts of up to seven years. PFJ and ECSB program customers that applied for, but were not awarded RNYPP allocations, were eligible for certain transitional electricity discounts. This transitional electricity discounts program provided for declining levels of discounts through June 30, 2016 when the program terminated. As of June 30, 2017, approximately \$10 million of such discounts have been paid with approximately an additional \$3 million in payments remaining to be made. The RNYPP legislation also authorizes the Authority, as deemed feasible and advisable by the Trustees, to provide annual funding of \$100 million for the first three years following withdrawal of the hydropower from the rural and domestic customers, then \$70 million for the fourth year, \$50 million for the fifth year, and \$30 million each year thereafter, for the purpose of funding a residential consumer discount program for those customers that had previously received this hydropower. Revenues earned from the sale of unused RNYPP power into the wholesale market may be used to offset the cost of these residential discounts. The Authority's Trustees have authorized the release of a total \$474 million through December 2017 in support this residential discount program. The Authority supplemented the market revenues used to fund the residential discount program with internal funds, totaling cumulatively \$99 million from August 2011 through June 30, 2017.

In June, 2016 the Authority made an agreement for the sale of 245 MW of firm hydroelectric power and energy from the St. Lawrence-FDR project to the Aluminum Company of America ("ALCOA") at its West Plant facilities. This contract with the ALCOA for an aggregate of 245 MW has been executed effective

October 1, 2015 through March 31, 2019, replacing prior long-term contracts with ALCOA. The contract provides for rate adjustments based upon a formula containing various indices, and has provisions for price adjustments based on the price of aluminum on the London Metal Exchange. The contract has job compliance provisions based on employment commitments. In response to certain economic factors surrounding the aluminum smelting industry, and in response to ALCOA's announcement that it would curtail smelting operations at its Massena plant, the Authority's Trustees in December 2015 approved execution of this Agreement with ALCOA to replace prior power sales contracts that totaled 478 MW.

The Authority estimates that the total costs associated with the relicensing of the St. Lawrence-FDR Project in 2003 for a period of 50 years will be approximately \$210 million, of which approximately \$195.3 million has already been spent as of June 30, 2017. These total costs could increase in the future as a result of authorities reserved by FERC in the license for the St. Lawrence-FDR Project issued in 2003. The Authority is collecting in its rates for the sale of St. Lawrence-FDR power amounts necessary to fund such relicensing costs.

Chapter 545 of the laws of 2014 enacted the "Northern New York Power Proceeds Act" ("NNYPPA"). The NNYPPA authorizes the Authority, as deemed feasible and advisable by the Trustees, to deposit net earnings from the sale of unallocated St. Lawrence County Economic Development Power ("SLCEDP") by the Authority in the wholesale energy market into an account known as the Northern New York Economic Development Fund ("NNY Fund") administered by the Authority, and to make awards to eligible applicants that propose eligible projects that satisfy applicable criteria. The NNYPPA established a five-member allocation board appointed by the Governor to review applications seeking NNYED Fund benefits and to make recommendations to the Authority concerning benefits awards.

SLCEDP consists of up to 20 MW of hydropower from the Authority's St. Lawrence-FDR Power Project which the Authority has made available for sale to the Town of Massena Electric Department ("MED") for MED to sub-allocate for economic development purposes in accordance with a contract between the parties entered into in 2012 (the "Authority-MED Contract"). The NNYPPA defines "net earnings" as the aggregate excess of revenues received by the Authority from the sale of energy associated with SLCEDP sold by the Authority in the wholesale energy market over what revenues would have been received had such energy been sold to MED on a firm basis under the terms of the Authority-MED Contract. For the first 5 years after enactment, the amount of SLCEDP the Authority could use to generate net earnings may not exceed the lesser of 20 MW or the amount of SLCEDP that has not been allocated by the Authority pursuant to the Authority-MED contract. Thereafter, the amount of SLCEDP that the Authority could use for such purpose may not exceed the lesser of 10 MW or the amount of SLCEDP that has not been allocated. The Authority's estimates of payments from the Authority to the NNY Fund have been incorporated into this Four-Year Plan.

The Western New York Power Proceeds Act ("WNYPPA"), which was enacted on March 30, 2012, authorizes the Authority to deposit net earnings from the sale of unused Expansion Power and Replacement Power from the Authority's Niagara project into the Western New York Economic Development Fund ("WNY Fund") as deemed feasible and advisable by the Authority's Trustees. "Net earnings" are defined as any excess revenue earned from such power sold into the wholesale market over the revenue that would have been received had the power been sold at the Expansion Power and Replacement Power rates. Proceeds from the WNY Fund may be used to support eligible projects undertaken within a 30-mile radius of the Niagara project that qualify under the applicable criteria. The WNYPPA established a five member allocation board appointed by the Governor. The Authority's estimates of payments from the Authority to the WNY Fund have been incorporated into this Four-Year Plan.

#### SENY Governmental Customers

Various municipalities, school districts and public agencies in New York City and Westchester County are served by the Authority's combined cycle 500-MW plant, the four small hydroelectric plants, the contracted output of the Astoria Energy II plant, and capacity and energy purchased by the Authority in the NYISO markets. Sales into the NYISO of energy generated by these resources and grandfathered transmission rights offset the cost of the energy purchased. A set amount of capacity from the Blenheim-Gilboa project is also dedicated to serving a portion of this customer class.

In 2005, the Authority and its major New York City governmental customers entered into long-term supplemental electricity supply agreements ("2005 LTA"). Under the 2005 LTA, the NYC governmental customers agreed to purchase their electricity from the Authority through December 31, 2017, with the NYC governmental customers having the right to terminate service from the Authority at any time on three years' notice and, under certain limited conditions, on one year's notice, provided that they compensate the Authority for any above-market costs associated with certain resources used to supply these customers. The

Authority has been in discussions with the NYC governmental customers in connection with the renewal of these Agreements. No assurance can be made that such contracts will be renewed or what their terms may be upon such renewal, if any. For purposes of the Four-Year Plan, it is assumed that the SENY governmental customers will continue to be served and rates for these customers will be set on the basis of the cost to serve these loads.

Under the 2005 LTA, the Authority modifies rates annually through a formal rate proceeding if there is a change in fixed costs to serve the New York City governmental customers. Generally, changes in variable costs, which include fuel and purchased power, are captured through annual contractual pricing adjustment mechanisms. For 2016 and 2017, the NYC Governmental Customers chose an ECA with market-risk hedging pricing option, actual cost variations in variable costs are passed through to the customers.

The Authority entered into new supplemental electricity supply agreements ("2007 Supplemental Agreements") with more than one-hundred governmental customers in Westchester County, resulting in the Westchester governmental customers remaining full requirements customers of NYPA. The Westchester County customers can terminate the contract upon one year's notice, effective no sooner than the January 1<sup>st</sup> following such notice. The Authority may modify the rates charged the customer pursuant to a specified procedure; an energy charge adjustment mechanism is applicable to all variable costs; the customer is committed to pay for any supply resources secured for it by the Authority under a collaborative process; and NYPA will continue to make available financing for energy efficiency projects and initiatives, with costs thereof to be recovered from the customer.

#### Blenheim-Gilboa Customers

The Authority had a contract for the sale of 50 MW of firm capacity from the Blenheim-Gilboa plant to the Long Island Power Authority ("LIPA") which expired in April of 2015. The Authority additionally has an active contract for the sale of 250 MW of firm capacity to the Authority's New York City governmental customers which will end in December of 2017, the rates for which are reset periodically on the basis of cost. The remainder of the plant's capacity is used to meet the requirements of some of the Authority's other business and governmental customers and/or sold in the NYISO market.

#### Small Clean Power Plants ("SCPPs")

In the summer of 2001, the Authority placed in operation ten 44-MW natural-gas-fueled SCPPs in New York City and one on Long Island, to address a potential local reliability deficiency in the New York City metropolitan area and its potential impact on statewide reliability. The plant at the Vernon location is assumed to be operating during the forecast period pursuant to the terms of an agreement entered into at the time of construction.

For the Four-Year Plan, it is assumed that the capacity of the SCPPs may be used by the Authority to meet its customers' capacity requirements, sold to other users via bilateral arrangements or sold into the NYISO capacity auction. NYPA sells the energy produced by the SCPPs into the NYISO energy market.

#### Flynn

The Flynn project is a combined-cycle facility with a net dependable capability of 162.7 MW. The entire output of the plant had previously been sold to LIPA, however LIPA terminated the Flynn contract on April 30, 2014. The Flynn project now operates as a merchant plant, with capacity and energy output sold into the NYISO market. The forecast is for Flynn to operate as a merchant plant for the next four years.

#### Transmission Projects

The Authority owns approximately 1,400 circuit miles of high voltage transmission lines, the major lines being the 765-kV Massena-Marcy line, the 345-kV Marcy-South line, the 345-kV Niagara-to-Edic line, and the 345-kV Long Island Sound Cable.

Since the formation of the NYISO in November 1999, cost recovery for the Authority's provision of transmission service over its facilities has been governed by the NYISO tariff which included an annual transmission revenue requirement ("TRR") for NYPA of \$165.4 million. NYPA receives cost recovery through the NYISO tariff mechanism known as the NYPA Transmission Adjustment Charge ("NTAC"), which recovers transmission costs on a statewide basis after accounting for NYPA's revenues received from pre-existing customer transmission service contracts, a Transmission Service Charge assessed on customers in NYPA's upstate load zone, and other sources.

In July 2012, the Authority filed for its first TRR increase with FERC. The Authority's filing resulted in an uncontested settlement approved by FERC for a new, \$175.5 million TRR applicable to the Authority,

effective August 1, 2012. The increased TRR is necessary to cover increased operating and maintenance expenses of NYPA's bulk transmission system, as well as to make necessary capital improvements.

In January 2016, the Authority filed for a transmission revenue requirement formula rate with FERC. In March 2016, FERC accepted the filing and made it effective April 1, 2016, as requested, subject to hearing and settlement judge procedures. The Authority requested a formula rate to more efficiently recover its increased capital expenditures needed to maintain the reliability of its transmission system. The Authority filed an unopposed Offer of Settlement on September 30, 2016 that fully resolves the issues raised by interested parties in settlement negotiations concerning the formula rate. Separately, the annual TRR under the formula of \$190.0 million initially made effective April 1 was updated on July 1, 2016 to \$198.2 million pursuant to the formula rate annual update process. As of July, 2017, The Transmission Revenue Requirement for 2017 is \$212.2 million, including the revenue requirement for the Marcy South Series Compensation project. Annual updates commensurate with projected costs are assumed to continue throughout the forecast period.

The Authority is moving forward with its plans to replace a major section of the Moses Adirondack Line, one of the Authority's backbone transmission facilities. The replacement project covers 78 miles of 230 kV transmission line from Massena to the town of Croghan in Lewis County. In July 2017, the Authority received authorization under the NYISO tariff to include the costs of this replacement project in its NTAC mechanism for cost recovery of the Authority's transmission system costs, which means that the costs will be allocated to all ratepayers in the State. The Authority estimates a project cost of \$440 million. The Authority anticipates that the Moses Adirondack line will support the transmission of growing levels of renewable generation located in upstate New York and Canada, such as wind and hydroelectricity, and assist in meeting the State's renewable energy goals. The rebuilt line is also expected to enhance grid reliability by supporting the NYISO's black start plan. Construction is expected to take four years and begin in 2019.

#### Hudson Transmission Project

In 2011, the Trustees authorized Authority staff to enter into an agreement with Hudson Transmission Partners, LLC ("HTP") for the purchase of capacity to meet the long-term requirements of the Authority's NYC Governmental Customers and to improve the transmission infrastructure serving New York City through the transmission rights associated with HTP's transmission line (the "Line") extending from Bergen County, New Jersey in the PJM Interconnection, LLC (PJM) transmission system, to Consolidated Edison Company of New York, Inc.'s ("Con Edison") West 49th Street substation in the NYISO. Specifically, the Authority executed a Firm Transmission Capacity Purchase Agreement ("FTCPA") with HTP which would have entitled the Authority to 75% of the Line's 660 MW capacity, or 495 MW, for 20 years. The Authority's capacity payment obligations under the FTCPA began upon the Line's commencement of commercial operation, which occurred on June 3, 2013. Also upon commercial operation, the FTCPA obligates the Authority to reimburse HTP for the cost of interconnection and transmission upgrades in New York and New Jersey associated with the Line and to pay for all remaining upgrade costs as they are incurred. Such interconnection and transmission upgrades have been completed. As of June 30, 2017, the Authority paid approximately \$336 million of such costs related to the interconnection and transmission upgrades. The Authority's obligations under the FTCPA also include payment of the Regional Transmission Enhancement Plan ("RTEP") charges allocated to HTP in accordance with the PJM tariff. Such RTEP costs are significant and are discussed below.

It is estimated that the revenues derived from the Authority's rights under the FTCPA will not be sufficient to fully cover the Authority's costs under the FTCPA during the 20-year term of the FTCPA. In September 2017, the Authority estimated that its under-recovery of costs for the Line could be in the range of approximately \$76 million to \$94 million per year over the next five years. The under-recovery estimates were based on projections of the capacity payment obligations, the costs of interconnection and transmission upgrades, RTEP charges, and energy and capacity revenues.

PJM's RTEP cost allocation methodology for certain upgrades, such as the Bergen-Linden Corridor ("BLC") project built by Public Service Electric & Gas Company ("PSE&G") in New Jersey, is being challenged at FERC in numerous proceedings by Con Edison, the Authority, HTP and other parties on the grounds that PJM has disproportionately allocated the costs of those projects to those parties. In a separate FERC proceeding, the Authority challenged the RTEP share of the BLC project costs allocated to HTP that were made effective May 1, 2017 as a result of Con Edison's termination of its PJM transmission rights. The cost allocations shifted approximately \$533 million in RTEP charges for the BLC project that had previously been allocated to Con Edison to HTP. Such costs are in addition to the \$111 million in RTEP charges for the BLC project that had previously been allocated to HTP. RTEP costs relating to the BLC project would be paid

over a number of years after construction commenced in 2017. Phase I of the BLC project was completed in June 2016, Phase II was completed in the spring of 2017 and Phase III is scheduled to be completed in 2018.

From June 2013 through June 2017, the Authority has paid approximately \$60 million in RTEP charges for the Line, including the BLC project. The Authority estimates that an additional \$29 million in RTEP charges will be billed from July through December 2017 based on the current cost allocations. For 2017, RTEP charges are expected to total approximately \$47 million.

On March 31, 2017, the Authority and HTP executed an amendment to the FTCPA. In exchange for the Authority extending the cure period for HTP to replace underwater cables that have been subject to failure and which have resulted in the Line being out of service, under the amended FTCPA the Authority will receive: (1) rights to direct HTP to take necessary actions to withdraw, cancel or terminate the 320 MW of Firm Transmission Withdrawal Rights ("FTWRs"), which form the basis for the RTEP cost allocations to HTP, to eliminate future RTEP costs; (2) rights to direct HTP to later reapply for and reacquire these FTWRs on the Authority's behalf; (3) guarantee that if PJM RTEP assessments cannot be eliminated despite HTP's efforts to withdraw, cancel or terminate the FTWRs, that HTP will cancel its interconnection service agreement ("ISA") to physically disconnect the Line from the PJM transmission system, causing termination of all RTEP allocations; (4) based upon RTEP costs already paid, an immediate \$40 million increase in the size of the tracking account that is used to offset the cost to purchase the Line at the end of the FTCPA term, at the Authority's option, and (5) shared rights to direct power on the Line in the opposite direction of its current flow should market conditions present revenue opportunities for selling capacity and energy from New York to New Jersey. Contingent upon the successful satisfactory reduction or complete elimination of the Authority's obligation for RTEP charges, and HTP's completion of the cable replacement (or demonstration that it is in the process of completing the cable replacement), the Authority will increase the portion leased by the Authority from 75% to 87.12% of the Line's capacity, bringing the total capacity of the line leased from 495 MW to 575 MW at a monthly capacity charge rate that represents a decrease in the unit price (on a \$/MW-month basis) paid to HTP in the original FTCPA. The Authority estimates that increasing the leased portion of the line to 87.12% will increase its capacity payments by approximately \$6 million to \$9 million per year over the term of the FTCPA.

The amended FTCPA allows the Authority to seek to manage its RTEP exposure in two ways. First, the Authority can request HTP to relinquish its 320 MW of FTWRs associated with the Line. The Authority started this process which resulted in PJM's July 2017 FERC filing made at HTP's request to revise the ISA in order to relinquish HTP's FTWRs. This proceeding is still ongoing at FERC. Second, if the RTEP assessments cannot be eliminated despite HTP's efforts to terminate the FTWRs, the Authority retains the ability to direct HTP to cancel its interconnection agreement and physically disconnect the Line from the PJM transmission system. However, this option is considered less desirable because physical disconnection would eliminate the ability to make energy transactions over the Line when the cable replacement is completed. Lease payments would continue from the Authority to HTP in the event of a physical disconnection directed by the Authority.

### **Purchased Power Expenses**

Capacity, energy and ancillary service purchases made on behalf of customers (except for those made through previously approved purchased power agreements) are assumed to be transacted at the market clearing price in the wholesale market. For purposes of developing the Four-Year Plan, projected energy rates are based on available forward price curves while the capacity rates are estimated using the NYISO demand curve methodology.

### **Fuel Expenses**

Fossil-fuel purchases in the Four-Year Plan are based on expected net generation levels determined through the use of an economic dispatch model for the Authority's plants and on available forward fuel price curves. Fuel expenses also include the costs associated with emission credit requirements under the Regional Greenhouse Gas Initiative ("RGGI"). RGGI requires the Authority to buy emission credits for its fossil-fuel plants, and the Authority also purchases such credits for the contracted Astoria Energy II plant. The projections for RGGI costs are based on projected emission rates and forecasted consumption of natural gas and oil, with such costs recovered either through specific customer contract pass-through provisions or from the wholesale market.

**Wheeling Expenses**

Wheeling (i.e., the transmission and/or delivery of power and energy to customers over the lines of a third party) expenses are based on contractual and/or tariff rates of the service provider, and are recovered through pass-through provisions in customer contracts.

**Strategic Initiatives**

The Authority is pursuing several initiatives, which are in varying stages of implementation. These initiatives include, but are not limited to:

- Customer Solutions – to develop innovative, cost-effective and resilient energy solutions that enable customers to achieve their energy goals in new ways;
- Asset Management – to strengthen investment planning through enhanced use of technology, data, people and processes;
- Smart Generation and Transmission – to deploy advanced technologies that ensure that grid operations become increasingly intelligent;
- Workforce Planning – to identify and acquire the skills that NYPA will need to succeed, through internal training, succession planning, employee retention and external recruiting;
- Knowledge Management – to promote enhanced sharing of information and knowledge as part of day-to-day operations;
- Process Excellence – to enhance processes in order to optimize resources and costs, manage risk, and reduce environmental impact.

The Four-Year Plan reflects costs and revenues with respect to these initiatives.

**Canal Corporation**

Effective January 1, 2017, the Canal Corporation became a subsidiary of the Authority, and the Authority assumed certain powers and duties relating to the Canal System to be exercised through the Canal Corporation.

The Canal Corporation's operations and maintenance expenses and capital costs are expected to be funded primarily by transfers of funds from the Authority, except for certain canal-related costs eligible for reimbursement from the New York State Canal System Development Fund (Canal Development Fund). The Canal Development Fund consists of all revenues received from the operation of the Canal System and certain other monies made available to the Fund. Monies of the Canal Development Fund, following appropriation by the Legislature, are available to the Authority and may be expended by the Authority or the Canal Corporation for the purposes specified in State Finance Law 92-u (5). Eligible Canal-related expenses are expected to be reimbursed to the Authority by the State Comptroller with available Canal Development Fund monies.

Given the age of the Canal System, the Authority expects that significant maintenance and capital investments will be required to assure the Canal System's continuing operation. The Authority's budget and financial plan for 2018-2021 includes Canal-related operating expenditures ranging from \$79 million to \$85 million per year and capital expenditures of approximately \$40 million per year. The Authority will continue to evaluate the condition of the Canal System and expects to allocate additional funding if deemed necessary through its annual budgeting process.

**Investment Income**

Investment of the Authority's funds is administered in accordance with the applicable provisions of the Bond Resolution and with the Authority's investment guidelines. These guidelines comply with the New York State Comptroller's investment guidelines for public authorities and were adopted pursuant to Section 2925 of the New York Public Authorities Law.

The Authority's investments are restricted to (a) collateralized certificates of deposit, (b) direct obligations of or obligations guaranteed by the United States of America or the State of New York, (c) obligations issued or guaranteed by certain specified federal agencies and any agency controlled by or supervised by and acting as an instrumentality of the United States government, and (d) obligations of any state or any political subdivision thereof or any agency, instrumentality or local government unit of any such state or political subdivision which is rated in any of the three highest long-term rating categories, or the highest short-term rating category, by nationally recognized rating agencies. The Authority's investments in the debt securities of Federal National Mortgage Association and Federal Home Loan Bank, Federal Farm Credit Bank and

Federal Home Loan Mortgage Corp. were rated Aaa by Moody's Investors Services, AAA by Fitch Ratings, and AA+ by Standard & Poor's. All of the Authority's investments in U.S. debt instruments are issued or explicitly guaranteed by the U.S. Government.

## Operations and Maintenance Expenses

NYPA's O&M plan by cost element for 2018-2021 is as follows:

<b>Operations and Maintenance Forecast by Cost Element</b>				
	<i>(in Millions)</i>			
	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
<b><u>Payroll</u></b>				
Regular Pay	\$ 212.4	\$ 216.1	\$ 219.9	\$ 223.8
Overtime	\$ 10.3	\$ 10.5	\$ 10.7	\$ 10.9
Other Payroll	<u>\$ 5.3</u>	<u>\$ 5.4</u>	<u>\$ 5.4</u>	<u>\$ 5.5</u>
<b>Total Payroll</b>	<b>\$ 228.1</b>	<b>\$ 232.0</b>	<b>\$ 236.1</b>	<b>\$ 240.2</b>
<b><u>Benefits</u></b>				
Employee Benefits	\$ 42.4	\$ 43.0	\$ 43.7	\$ 44.4
Pension	\$ 41.7	\$ 42.4	\$ 43.1	\$ 43.9
OPEB	\$ 39.8	\$ 40.6	\$ 41.0	\$ 41.5
FICA	<u>\$ 16.4</u>	<u>\$ 16.6</u>	<u>\$ 16.9</u>	<u>\$ 17.2</u>
<b>Total Benefits</b>	<b>\$ 140.2</b>	<b>\$ 142.7</b>	<b>\$ 144.8</b>	<b>\$ 147.0</b>
<b>Materials/Supplies</b>	<b>\$ 24.4</b>	<b>\$ 24.8</b>	<b>\$ 25.2</b>	<b>\$ 25.6</b>
<b>Fees</b>	<b>\$ 9.1</b>	<b>\$ 9.3</b>	<b>\$ 9.5</b>	<b>\$ 9.7</b>
<b>Office &amp; Station</b>	<b>\$ 20.4</b>	<b>\$ 20.8</b>	<b>\$ 21.2</b>	<b>\$ 21.5</b>
<b>Maintenance Repair &amp; Service Contracts</b>	<b>\$ 151.1</b>	<b>\$ 167.5</b>	<b>\$ 157.7</b>	<b>\$ 153.2</b>
<b>Consultants</b>	<b>\$ 37.7</b>	<b>\$ 38.3</b>	<b>\$ 38.9</b>	<b>\$ 39.5</b>
<b>Charges to:</b>				
Outside Agencies	\$ (8.3)	\$ (8.6)	\$ (8.8)	\$ (8.9)
Capital Programs	<u>\$ (51.7)</u>	<u>\$ (52.5)</u>	<u>\$ (53.4)</u>	<u>\$ (54.2)</u>
<b>Total Charges</b>	<b>\$ (60.0)</b>	<b>\$ (61.1)</b>	<b>\$ (62.1)</b>	<b>\$ (63.1)</b>
<b>Research &amp; Development</b>	<b>\$ 8.7</b>	<b>\$ 8.9</b>	<b>\$ 9.1</b>	<b>\$ 9.2</b>
<b>Subtotal</b>	<b>\$ 559.7</b>	<b>\$ 583.1</b>	<b>\$ 580.3</b>	<b>\$ 582.8</b>
Astoria Energy II	<b>\$ 28.8</b>	<b>\$ 29.3</b>	<b>\$ 29.8</b>	<b>\$ 30.3</b>
<b>TOTAL NYPA O&amp;M</b>	<b>\$ 588.4</b>	<b>\$ 612.4</b>	<b>\$ 610.1</b>	<b>\$ 613.2</b>

## Depreciation and Amortization Expenses

Depreciation of capital assets is generally provided on a straight-line basis over the estimated lives of the various classes of capital assets. The related depreciation provisions at December 31, 2016 expressed as a percentage of average depreciable capital assets was 2.62%. NYPA has recently reached uncontested settlement in its filing at FERC of the depreciation rates on its transmission and general plant assets. The new depreciation rates were implemented effective March 1, 2017.

**Other Expenses**

The Other Expenses category largely reflects various accruals and other miscellaneous expenses (e.g., payments to the NNY Fund and WNY Fund), some of which require Trustee authorization on a case-by-case basis.

**(d) Self – Assessment of Budgetary Risks**

Set forth below is a summary of certain of the risks associated with the Authority's assets and operations. The following discussion of risks is intended only as a summary and does not purport to identify all of the risk factors that may affect the Authority's assets and operations. Any one or more of the factors discussed and others could adversely affect the Authority's operations, assets, revenues and expenses to an extent that cannot be determined at this time.

**Regulatory Risks**

On August 1, 2016, the New York Public Service Commission ("PSC") issued an order establishing a Clean Energy Standard ("CES") to implement the clean energy goals of the State Energy Plan. Pursuant to the CES Order, load serving entities identified in the order are required to purchase "Zero Emission Credits" ("ZECs") from the New York State Energy Research Development Authority to support the preservation of existing at risk zero emissions nuclear generation. The Authority is not subject to NYPSC jurisdiction for purposes of the CES Order but has assumed an obligation to purchase ZECs consistent with the terms of the CES Order and intends to seek recovery of such costs from the Authority's customers. On January 31, 2017, the Authority's Trustees authorized (a) participation in the NYPSC's ZEC program and (b) execution of an agreement with NYSERDA to purchase ZECs associated with the Authority's applicable share of energy sales. The Authority and NYSERDA executed an agreement covering a two year period from April 1, 2017 to March 31, 2019 under which the Authority committed to purchase ZECs in a quantity based on its proportional load in the New York control area. The Authority estimates that it will incur ZEC Purchase Obligation costs under the CES Order of approximately \$255 million in aggregate over the 2017-2020 period, of which approximately \$34 million is not expected to be recovered under customer contracts that predate the adoption of the CES Order.

The Regional Greenhouse Gas Initiative (the "RGGI") is a cooperative effort by Northeastern and Mid-Atlantic states, including New York, to reduce carbon dioxide emission levels. Participating states have established a regional carbon dioxide emissions cap from the power sector (fossil fuel-fired power plants 25MW or greater). The emissions cap reduces by 2.5% annually until 2020. Central to this initiative is the implementation of a multi-state cap-and-trade program with a market-based emissions trading system. The program requires electricity generators to hold carbon dioxide allowances in a compliance account in a quantity that matches their total emissions of carbon dioxide for the compliance period. The Authority's Flynn plant, the SCPPs, and 500-MW Plant are subject to the RGGI requirements, as is the Astoria Energy II plant. The Authority has participated in program auctions to acquire carbon dioxide allowances, which the Authority acquires to cover operation of its fossil-fueled power plants and the Astoria Energy II plant, and expects to recover RGGI costs through its power sales revenues. Beginning 2014, the number of allowances offered in the auction by RGGI cap and trade program was reduced (from allowances covering 165 million tons of carbon dioxide emissions in 2013 to 91 million tons in 2014 to 84.3 million tons in 2017), and will decline by 2.5% each year through 2020. The Authority is monitoring federal legislation and proposed programs that would impact RGGI.

On August 3, 2015, the United States Environmental Protection Agency (the "EPA") released its final Clean Power Plan ("CPP") Rule for existing power plants [Clean Air Act 111(d)]. The objective is to reduce by 2030 carbon pollution (carbon dioxide emissions) nationwide from the power sector (plants in operation before December 31, 2012) by 32% from 2005 levels. Under the EPA's regulations for existing sources, states (including New York) will have to submit implementation plans to the EPA, and be compliant with carbon dioxide reduction starting in 2022, with the state's final goal to be met in 2030. The CPP Rule was stayed by the U.S. Supreme Court on February 9, 2016 pending disposition of petitions for review before the U.S. Court of Appeals for the District of Columbia Circuit. The D.C. Circuit Court of Appeals, en banc, heard oral arguments on September 27, 2016, but has not issued a decision (and is not obligated to do so). The EPA's motion to suspend cases challenging the CPP Rule was granted by the D.C. Circuit Court to give the current EPA administration time to review the rule. The Authority continues to monitor developments in this area.

During 2011, the EPA issued a series of rulings to establish the Cross-State Air Pollution Rule ("CSAPR"). The CSAPR establishes emission allowance budgets for sulfur dioxide and nitrogen oxides for eastern states, including New York, and requires power plants in those states to hold allowances to cover their

emissions. Certain trading of allowances is authorized under the CSAPR. The Authority continues to operate its fossil-fueled plants within the allocated allowances and anticipates that operation of its fossil-fueled plants will not be impacted by CSAPR.

Congressional and regulatory action for the increased regulation of air, water and contaminants is periodically considered, and there are potential legislative and regulatory proposals which may affect the electric utility industry, including the Authority, in the future. The impact on the Authority's operations of any such proposals is not presently predictable or quantifiable.

The Authority has flexible rate-setting authority for many of its power sales agreements with customers; however, due to FERC's jurisdiction over the Authority's transmission revenue requirement ("TRR"), the Authority's transmission cost recovery must adhere to FERC standards. In 2017, the Authority filed for a formula rate annual TRR consistent with those principles, which resulted in the current \$204.9 million TRR. The formula rate annual TRR is incorporated into the NYISO Open Access Transmission Tariff ("OATT"). This Four-Year Plan assumes full recovery of eligible future costs under the provisions of the NYISO OATT.

### **Legislative and Political Risks**

A series of legislative enactments have called for the Authority to subsidize business customers and the State's general fund. Legislation enacted into law, as part of the 2000-2001 State budget, as amended up to the present time, has authorized the Authority as deemed feasible and advisable by the trustees, to make a series of voluntary contributions into the State treasury in connection with the PFJ program and for other purposes as well. Cumulatively through December 31, 2012, the Authority has made voluntary contributions to the State totaling \$475 million in connection with the ended PFJ Program and \$763 million unrelated to the PFJ program. The PFJ program was replaced by the RNYPP beginning July 1, 2012 with the enacting legislation authorizing transitional electricity discounts through June 30, 2016 for those PFJ and ECSB customers applying for but not receiving RNYPP allocations. For the forecast period, the Authority estimates these transitional payments at \$1.7 million for 2017 and \$1.7 million for 2018.

In the past, the Authority has, from time to time, made voluntary contributions or payments to the State or as otherwise authorized by legislation. Such payments were authorized by legislation and have been conditional upon the Trustees' determination that such payments are "feasible and advisable". This Four-Year Plan assumes no such voluntary contributions during the 2018-2021 forecast period. The Trustees' decision as to whether and to what extent such payments are feasible and advisable will be made based on the exercise of their fiduciary responsibilities and in light of the requirements of the Authority's Bond Resolution, other legal requirements, and all the facts and circumstances known to them at the time of the decision. In May 2011, the Authority's Trustees adopted a policy statement which relates to, among other things, voluntary contributions, transfers, or other payments to the State by the Authority after that date. The policy statement provides, among other things, that in deciding whether to make contributions, transfers, or payments, the Authority shall use as a reference the maintenance of a debt service coverage ratio of at least 2.0, in addition to making other determinations required by the General Resolution.

In addition to the authorization for the voluntary contributions, the Authority was authorized by budget legislation enacted in February 2009 to make certain temporary asset transfers to the State of funds in reserves. Pursuant to the terms of a Memorandum of Understanding dated February 2009 ("MOU") between the State, acting by and through the Director of the Budget of the State, and the Authority, the Authority agreed to transfer \$215 million associated with its Spent Nuclear Fuel Reserves by the end of State Fiscal Year 2008-2009. The Spent Nuclear Fuel Reserves are funds that had been set aside for payment to the federal government sometime in the future when the federal government accepts the spent nuclear fuel for permanent storage. The MOU provides for the return of these funds to the Authority, subject to appropriation by the State Legislature and other conditions, at the earlier of the Authority's payment obligation related to the transfer and disposal of the spent nuclear fuel or September 30, 2017. Further, the MOU provided for the Authority to transfer during State Fiscal Year 2009-2010 approximately \$103 million of funds set aside for future construction projects, which amounts would be returned to the Authority, subject to appropriation by the State Legislature and other conditions, at the earlier of when required for operating, capital or debt service obligations of the Authority or September 30, 2014. Both temporary transfers were authorized by the Authority's Trustees and made in 2009. On April 24, 2014, the Authority and the State executed an Amendment to the MOU that became effective on July 29, 2014 and provides that the State shall, subject to appropriation by the State Legislature, return the \$103 million over 5 State fiscal years. As of June 30, 2017, the Authority has received an aggregate of \$60 million. The remaining installments provided for by the Amendment to the MOU are \$21 million for State Fiscal Year 2017-2018, and \$22 million

for State Fiscal Year 2018-2019. The Authority and the State executed a second Amendment to the MOU, dated as of June 30, 2017, that provides for the return to the Authority of the \$215 million in the following amounts: \$22 million for State Fiscal Year 2017-2018, \$21 million for State Fiscal Year 2018-2019, \$43 million for State Fiscal Year 2019-2020, \$43 million for State Fiscal Year 2020-2021, \$43 million for State Fiscal Year 2021-2022, and \$43 million for State Fiscal Year 2022-2023. The obligation of the State to return the moneys transferred by the Authority to the State is subject to annual appropriation by the State Legislature.

Section 1011 of the Power Authority Act ("Act") constitutes a pledge of the State to holders of Authority obligations not to limit or alter the rights vested in the Authority by the Act until such obligations together with the interest thereon are fully met and discharged or unless adequate provision is made by law for the protection of the holders thereof. Several bills have been introduced into the State Legislature, some of which propose to limit or restrict the powers, rights and exemption from regulation which the Authority currently possesses under the Act and other applicable law, or otherwise would affect the Authority's financial condition or its ability to conduct its business, activities, or operations, in the manner presently conducted or contemplated by the Authority. It is not possible to predict whether any of such bills or other bills of a similar type which may be introduced in the future will be enacted. In addition, from time to time, legislation is enacted into New York law which purports to impose financial and other obligations on the Authority, either individually or along with other public authorities or governmental entities. The applicability of such provisions to the Authority would depend upon, among other things, the nature of the obligations imposed and the applicability of the pledge of the State set forth in Section 1011 of the Act to such provisions. There can be no assurance that the Authority will be immune from the financial obligations imposed by any such provision.

Actions taken by the State Legislature or the Executive Branch to cause greater voluntary contributions or other obligation upon the Authority and which attempt to constrain the discretion of or bypass the Authority's Trustees could negatively affect net income and possibly harm the Authority's credit ratings.

#### **Hydroelectric Generation Risk**

The Authority's net income is highly dependent upon generation levels at its Niagara and St. Lawrence-FDR Projects. The generation levels themselves are a function of the hydrological conditions prevailing on the Great Lakes, primarily, Lake Erie (Niagara Project) and Lake Ontario (St. Lawrence-FDR Project). Long-term generation level at the two hydroelectric projects is about 20.2 terawatt-hours ("TWH") annually. The Authority's hydroelectric generation forecast is 22.8 TWH in 2018, 23.2 TWH in 2019, 23.3 TWH in 2020, and 23.8 TWH in 2021. However, these generation amounts are forecasted values, and hydrological conditions can vary considerably from year to year.

The Authority conducted high and low hydroelectric generation sensitivities for 2018-2021 that estimated the potential net income that could result over a reasonable range of hydroelectric generation occurrences. The effects on estimated net income, assuming all other factors remain unchanged, were as follows:

<u><b>Low Generation</b></u>			<u><b>High Generation</b></u>		
	Net Hydroelectric <u>Generation</u>	NYPA Net Income Change <u>(in Millions)</u>		Net Hydroelectric <u>Generation</u>	NYPA Net Income Change <u>(in Millions)</u>
2018	20.4 TWH	(\$52.6)		23.9 TWH	\$23.9
2019	20.7 TWH	(\$51.2)		24.3 TWH	\$23.4
2020	20.9 TWH	(\$49.9)		24.4 TWH	\$22.9
2021	21.3 TWH	(\$51.3)		24.9 TWH	\$23.7

## **Electric Price and Fuel Risk**

Through its participation in the NYISO and other commodity markets, NYPA is subject to electric energy price, fuel price and electric capacity price risks that impact the revenue and purchased power streams of its facilities and customer market areas. Such volatility can potentially have detrimental effects on NYPA's financial condition. To mitigate downside effects, many of NYPA's customer contracts provide for the complete or partial pass-through of these costs. To moderate cost impacts to its customers, NYPA, at times, hedges market risks via the use of financial instruments and physical contracts. Hedges are transacted by NYPA to mitigate the cost of energy or related products needed to meet customer needs; to mitigate risk related to the price of energy and related products sold by NYPA; to mitigate risk related to electric margins (electric sales versus fuel use) where NYPA owns generation or other capacity; and mitigation of geographic cost differentials of energy procured or sold for transmission or transportation to an ultimate location. Commodities to be hedged include, but are not limited to, natural gas, natural gas basis, electric energy, electric capacity and congestion costs associated with the transmission of electricity.

On July 21, 2010, President Obama signed into law the Dodd-Frank Wall Street Reform and Consumer Protection Act ("DF Act") which addresses, among other things, interest rate and energy related commodity swap transactions of the type in which the Authority engages ("Swaps"). The requirements and processes are set forth in regulations promulgated by the Commodities Futures Trading Commission ("CFTC"). Pursuant to CFTC rules, the Authority, as a public entity and electric utility which uses swaps solely to manage its risk, is exempted from posting collateral beyond that of any existing credit support annexes in support of its open over-the-counter ("OTC") hedge positions. These CFTC rules are not anticipated to have significant impact on the Authority's liquidity and/or future risk mitigation activities. CFTC DF Act rules are still being promulgated, and Authority will continue to monitor their potential impact on the Authority's liquidity and/or future risk mitigation activities.

## **Other Business Risks**

### Industry Transformation

Transformative technologies and customer empowerment are creating uncertainty for the Authority and the electric utility industry that can produce new business opportunities or reduced demand for electric energy. Through its Strategic Planning and Risk Management processes, the Authority regularly evaluates its mission, objectives, and customer needs and seeks to appropriately position the Authority to effectively meet the challenges of the transforming electric industry through implementation of initiatives such as a long-term asset management strategy and a suite of customer solutions including new/modified product offerings. The impact on the Authority's operations of any such industry transformation is not presently predictable or quantifiable.

### Workforce

Like many other industries, the power and utility sector is realizing increased competition for and a general shortage of talent in high skilled areas. This trend is expected to continue and be further impacted by transformations in the industry where new technologies are being developed and deployed. The Authority recognizes the uncertainty with being able to attract and retain the skills and competencies needed to meet stated objectives and regularly evaluates and positions its recruiting, talent development and benefits programs accordingly, through its workforce planning strategic initiative and other ongoing efforts.

### Physical and Cyber Security

The Federal Government recognizes the electric utility industry as critical infrastructure for the United States and works closely with the industry to ensure awareness of ongoing threats and that appropriate protections are in place against both physical and cyber-attacks. The Authority constantly assesses the nature of the Physical and Cyber Security risks and adjusts its resources to best anticipate and respond to any threats. With over 1,400 circuit-miles of high voltage transmission lines and 16 power generation facilities across New York State, the Authority recognizes the critical nature of its assets. Investments to harden both physical and cyber assets and their related infrastructure are continually needed to minimize potential adverse impacts to the bulk electric system, detect and deter sabotage attempts, and protect the Authority and customer information.

### Catastrophic Natural Events

A catastrophic natural event such as severe weather, flooding or earthquake can negatively affect the operability of Authority assets and the bulk electric system. The Authority regularly evaluates the resiliency of its assets. In addition, the Authority has implemented disaster planning programs relating to Emergency Management, Disaster Recovery and Business Continuity. These plans are based on the specific, unique natural threats at each of its generation facilities. The Authority regularly conducts drills and exercises in

order to ensure advance preparation for these types of events. The Authority maintains close working relationships with local first responders and government agencies to ensure its ongoing preparedness.

#### Canal Corporation

The Authority has identified key risk areas relating to the Canal Corporation and continues to employ and assess risk mitigation options across multiple enterprise risk fronts in an effort to manage or reduce potential exposures. As more actual experience, information and data becomes available, the Authority will adjust and allocate resources accordingly.

#### Critical Infrastructure Failure

As a generation and transmission business the Authority is exposed to potential critical infrastructure failure that may lead to service disruption, injury and/or degradation of system reliability impacting financial results. The Authority engages in several activities in an effort to mitigate these risks such as the purchase of insurance, redundancy of major equipment, capital investments, and a robust operational maintenance program.

#### Occupational Health and Workforce Safety

As a generation and transmission business the Authority is exposed to a variety of health and safety risks. The health and safety of NYPA's workforce, customers, contractors and the citizens of New York is of the highest priority to the Authority. The Authority has put in place multiple levels of controls, policies, procedures, and training programs in support of reducing and/or eliminating health and safety incidents.

### **Litigation Risk**

#### St. Regis Litigation

In 1982 and again in 1989, several groups of Mohawk Indians, including a Canadian Mohawk tribe, filed lawsuits (the St. Regis litigation) against the State, the Governor of the State, St. Lawrence and Franklin counties, the St. Lawrence Seaway Development Corporation, the Authority and others, claiming ownership to certain lands in St. Lawrence and Franklin counties and to Barnhart, Long Sault and Croil islands. These islands are within the boundary of the Authority's St. Lawrence-FDR Project and Barnhart Island is the location of significant Project facilities. Settlement discussions were held periodically between 1992 and 1998. In 1998, the Federal government intervened on behalf of all Mohawk plaintiffs.

The parties agreed to a land claim settlement, dated February 1, 2005, which if implemented would have included, among other things, the payment by the Authority of \$2 million a year for 35 years to the tribal plaintiffs and the provision of up to 9 MW of low cost Authority power for use on the reservation. The legislation required to effectuate the settlement was never enacted and the litigation continued.

In 2013, all claims against the Authority were dismissed and the lawsuit against the Authority was concluded. On May 28, 2014, the State of New York, the St. Regis Mohawk Tribe, St. Lawrence County and the Authority executed a Memorandum of Understanding ("St. Regis MOU") that outlined a framework for the possible settlement of all the St. Regis land claims. In the St. Regis MOU, the Authority endorses a negotiated settlement that, among other terms and conditions, would require the Authority to pay the Tribe \$2 million a year for 35 years and provide up to 9 MW of its hydropower at preference power rates to serve the needs of the Tribe's Reservation. The St. Regis MOU would require an Act of Congress to forever extinguish all Mohawk land claims prior to such a settlement becoming effective.

Any settlement agreement, including the terms endorsed in the St. Regis MOU, would in the first instance need to be negotiated and agreed upon by all parties to the St. Regis litigation, including parties that did not execute the St. Regis MOU, such as the two other Mohawk groups, the federal government and Franklin County. In addition, before any settlement becomes effective and the Authority is obligated to make any payments contemplated by the St. Regis MOU, federal and state legislation must be enacted which approves the settlement and extinguishes all Mohawk land claims.

#### Tropical Storm Irene

In August 2012, the County of Schoharie, eight towns and villages therein, and one school district (the "Municipalities") initiated a lawsuit in Schoharie County Supreme Court against the Authority involving the heavy rains and widespread flooding resulting from Tropical Storm Irene's passage through the Northeast in August 2011. The Municipalities essentially alleged that they sustained property damage and lost tax revenues resulting from lowered assessed valuation of taxable real property due to the Authority's negligence in its operations at the Blenheim-Gilboa pumped-storage hydroelectric facility located on the Schoharie Creek in Schoharie County, New York. The Municipalities' complaint seeks judgment "in an

amount to be determined at trial with respect to each [of the ten plaintiffs] in the sum of at least \$5,000,000, plus punitive damages in the sum of at least \$5,000,000" as well as attorney fees. As of October 31, 2014, all of the Municipalities have discontinued their lawsuits against the Authority.

In February 2012, a private landowner filed a similar lawsuit in Schoharie County Supreme Court on behalf of a park campground and makes nearly the same allegations made by the Municipalities with the plaintiff seeking at least \$5 million in damages, at least \$5 million in punitive damages, as well as attorney's fees. In December 2012, the Authority was served with a third lawsuit by five plaintiffs arising out of Tropical Storm Irene and the Authority's operation of its Blenheim-Gilboa Pumped Storage Project. The five plaintiffs include three individual landowners owning properties located in Schoharie, NY and Central Bridge, NY and claiming damages in the aggregate amount of \$1.55 million, and two corporations also owning properties in Schoharie, NY and claiming damages in the aggregate amount of \$1.05 million. On October 27, 2014, the Court granted the Authority's motion to change the place of trial. The Court directed the Clerk of Court to transfer the proceedings to Albany County.

In August 2016, the Authority made a summary judgment motion seeking to dismiss the two remaining actions in their entirety. On January 11, 2017, in a decision and order, the Court granted the Authority's motion for summary judgment and dismissed both complaints in their entirety. Plaintiffs did not appeal the Court's January 11, 2017 order. This matter is considered closed.

#### Long Island Sound Cable Project

In January 2014, one of the Long Island Sound Cable Project underwater cables was severely impacted by an anchor and /or anchor chain dropped by one or more vessels, causing the entire electrical circuit to fail and the circuit to trip. As a result of the impact to the cable, dielectric fluid was released into Long Island Sound. The Authority incurred approximately \$34 million in costs arising out of this incident and has recovered approximately \$18 million through insurance coverage. The Authority believes that it will be able to recover the full amount of its damages through legal proceedings, insurance coverage and contractual obligations.

#### Miscellaneous

In addition to the matters described above, other actions or claims against the Authority are pending for the taking of property in connection with its projects, for negligence, for personal injury (including asbestos-related injuries), in contract, and for environmental, employment and other matters. All of such other actions or claims will, in the opinion of the Authority, be disposed of within the amounts of the Authority's insurance coverage, where applicable, or the amount which the Authority has available therefore and without any material adverse effect on the business of the Authority.

**(e) Revised Forecast of 2017 Budget**  
(in Millions)

	Original Budget <u>2017</u>	Forecast <u>2017</u>	Variance Better/(Worse) <u>2017</u>
<b><u>Operating Revenues:</u></b>			
Customer Revenues	\$1,925.4	\$1,770.3	(\$155.1)
NYISO Market Revenues	\$827.4	\$773.7	(\$53.7)
Other Revenue	\$23.0	\$23.6	\$0.7
<b>Total Operating Revenues</b>	<b>\$2,775.7</b>	<b>\$2,567.7</b>	<b>(\$208.0)</b>
<b><u>Operating Expenses:</u></b>			
Purchased Power	\$729.2	\$545.9	\$183.4
Fuel - Oil and Gas	\$226.6	\$173.9	\$52.7
Wheeling Expenses	\$642.3	\$614.9	\$27.4
O&M Expenses	\$570.7	\$550.7	\$20.0
Other Expenses	\$143.5	\$124.0	\$19.5
Depreciation and Amortization	\$260.7	\$245.6	\$15.2
Asset Impairment Charge	<u>\$0.0</u>	<u>\$73.3</u>	<u>(\$73.3)</u>
<b>Total Operating Expenses</b>	<b>\$2,573.0</b>	<b>\$2,328.3</b>	<b>\$244.8</b>
<b>NET OPERATING INCOME</b>	<b>\$202.7</b>	<b>\$239.4</b>	<b>\$36.7</b>
<b><u>Other Income:</u></b>			
Investment Income	\$22.1	\$30.0	\$7.9
Other Income	<u>(\$3.5)</u>	<u>(\$1.1)</u>	<u>\$2.5</u>
<b>Total Other Income</b>	<b>\$18.6</b>	<b>\$29.0</b>	<b>\$10.4</b>
<b><u>Non-Operating Expenses:</u></b>			
Interest & Other Expenses	\$144.2	\$141.5	\$2.7
Contributions to State	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
<b>Total Non-Operating Expenses</b>	<b>\$144.2</b>	<b>\$141.5</b>	<b>\$2.7</b>
<b>NET INCOME</b>	<b>\$77.1</b>	<b>\$126.8</b>	<b>\$49.8</b>

**(f) Reconciliation of 2017 Budget and 2017 Revised Forecast**

The 2017 year-end net income projection is \$126.8 million, which is \$49.8 million above budget. This positive variance is primarily a result of higher hydro generation. LBMP and UCAP prices are generally lower than budget but largely offset by favorable hedging, particularly at the hydro facilities. In addition, an unbudgeted asset impairment charge of \$73.3 million reflects the write-down of equipment at the 500 MW plant.

**(g) Statement of 2016 Financial Performance**

**New York Power Authority  
Net Income – Actual vs. Budgeted  
For the Year ended December 31, 2016  
(in millions)**

	<b>Actual</b>	<b>Budget</b>	<b>Variance Favorable/ (Unfavorable)</b>
<b><u>Operating Revenues:</u></b>			
Customer	\$1,701	\$1,869	(\$168)
NYISO Market Revenues	<u>\$720</u>	<u>\$840</u>	<u>(\$120)</u>
<b>Total Operating Revenues</b>	<b>\$2,421</b>	<b>\$2,709</b>	<b>(\$288)</b>
<b><u>Operating Expenses:</u></b>			
Purchased Power	\$514	\$706	\$192
Fuel	\$152	\$222	\$70
Wheeling	\$609	\$629	\$20
O&M Expenses	\$447	\$476	\$29
Other Expenses	\$187	\$195	\$8
Depreciation and Amortization	\$231	\$229	(\$2)
Allocation to Capital	<u>(\$15)</u>	<u>(\$17)</u>	<u>(\$2)</u>
<b>Total Operating Expenses</b>	<b>\$2,125</b>	<b>\$2,440</b>	<b>\$315</b>
<b>NET OPERATING INCOME</b>	<b>\$296</b>	<b>\$269</b>	<b>\$27</b>
<b><u>Other Income:</u></b>			
Investment Income	\$25	\$28	(\$3)
Other income	<u>\$0</u>	<u>\$3</u>	<u>(\$3)</u>
<b>Total Other Income</b>	<b>\$25</b>	<b>\$31</b>	<b>(\$6)</b>
<b><u>Non-Operating Expenses:</u></b>			
Contribution to New York State	\$91	\$90	(\$1)
Canal Corp. Funding	\$62	\$0	(\$62)
Interest and Other Expenses	<u>\$146</u>	<u>\$159</u>	<u>\$13</u>
<b>Total Non-Operating Expenses</b>	<b>\$299</b>	<b>\$249</b>	<b>(\$50)</b>
<b>NET INCOME</b>	<b>\$22</b>	<b>\$51</b>	<b>(\$29)</b>

Net Income for the year ended December 31, 2016 was \$22 million, which was \$29 million lower than budget of \$51 million. This negative variance is primarily the result of unbudgeted expenses related to the reimbursement of Canal Corporation expenditures under a funding agreement with the New York State Thruway Authority pursuant to 2016 State Budget legislation. Operating income reflected lower operating expense including lower purchased power, fuel and O&M expense, substantially offset by lower operating revenues.

**(h) Employee Data – number of employees, full-time, FTEs and functional classification**

	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
	<b><u>Request</u></b>			
Headquarters	823	823	823	823
Power Generation	904	904	904	904
Transmission	195	195	195	195
R&D	23	23	23	23
Strategic Additions *	20	20	20	20
Canal Corp	<u>482</u>	<u>482</u>	<u>482</u>	<u>482</u>
<b>TOTAL</b>	<b>2,447</b>	<b>2,447</b>	<b>2,447</b>	<b>2,447</b>

\* Funded positions to support strategic growth areas

**(i) Gap-Closing Initiatives – revenue enhancement or cost-reduction initiatives**

As the Authority is projecting positive net income for the 2018-2021 period, there are no planned gap-closing programs.

**(j) Material Non-Recurring Resources – source and amount**

Except as discussed elsewhere in this report, there are no material non-recurring resources expected in the 2018-2021 period.

**(k) Shift in Material Resources**

There are no anticipated shifts in material resources from one year to another.

**(l) Debt Service**

**New York Power Authority  
Projected Debt Outstanding (FYE)  
(in thousands)**

	<b><u>2018</u></b>	<b><u>2019</u></b>	<b><u>2020</u></b>	<b><u>2021</u></b>
Revenue Bonds	\$912,800	\$1,041,703	\$1,004,288	\$1,127,178
Adjustable Rate Tender Notes	\$0	\$0	\$0	\$0
Subordinated Note	\$44,255	\$42,875	\$41,460	\$40,015
Commercial Paper Notes	\$552,716	\$605,000	\$605,000	\$600,000
<b><u>Grand Total</u></b>	<b><u>\$1,509,771</u></b>	<b><u>\$1,689,578</u></b>	<b><u>\$1,650,748</u></b>	<b><u>\$1,767,193</u></b>

**New York Power Authority**  
**Debt Service as Percentage of Pledged Revenues**  
*(Debt Service in thousands)*

	2018		2019		2020		2021	
	<u>Debt Service</u>	<u>% of Rev.</u>	<u>Debt Service</u>	<u>% of Rev.</u>	<u>Debt Service</u>	<u>% of Rev.</u>	<u>Debt Service</u>	<u>% of Rev.</u>
Revenue Bonds	\$80,833	2.97%	\$85,456	3.12%	\$89,967	3.24%	\$84,656	2.98%
Adjustable Rate Tender Notes	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%
Subordinated Debt	\$2,999	0.11%	\$2,996	0.11%	\$3,000	0.11%	\$2,996	0.11%
Commercial Paper Notes	\$9,866	0.36%	\$10,822	0.39%	\$12,324	0.44%	\$18,575	0.65%
<b><u>Grand Total Debt Service</u></b>	<b><u>\$93,698</u></b>	<b><u>3.44%</u></b>	<b><u>\$99,274</u></b>	<b><u>3.62%</u></b>	<b><u>\$105,291</u></b>	<b><u>3.79%</u></b>	<b><u>\$106,228</u></b>	<b><u>3.74%</u></b>

**New York Power Authority**  
**Planned Use of Debt Issuances**  
*(in thousands)*

<u>TYPE</u>	<u>Amount</u>	<u>Assumed Interest Rate</u>	<u>Project / Description</u>
<b><u>Period January 1, 2018 – December 31, 2018</u></b>			
Tax Exempt Commercial Paper	\$13,853	1.75%	Energy Efficiency Program
Taxable Commercial Paper	\$11,735	2.27%	Energy Efficiency Program
Total Issued 2018	<u>\$25,588</u>		
<b><u>Period January 1, 2019 – December 31, 2019</u></b>			
Tax Exempt Commercial Paper	\$38,132	2.00%	Energy Efficiency Program
Taxable Commercial Paper	\$14,152	2.45%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$101,924	3.43%	Transmission
Taxable Revenue Bonds	\$61,794	3.72%	Robert Moses Power Plant/Lewiston Pump Generating Plant
Total Issued 2019	<u>\$216,002</u>		

**Period January 1, 2020 –  
December 31, 2020**

Tax Exempt Commercial Paper	\$0	2.21%	Energy Efficiency Program
Taxable Commercial Paper	\$4,980	2.61%	Energy Efficiency Program
Total Issued 2020	<u>\$4,980</u>		

**Period January 1, 2021 –  
December 31, 2021**

Tax Exempt Commercial Paper	\$0	2.36%	Energy Efficiency Program
Taxable Commercial Paper	\$1,910	2.76%	Energy Efficiency Program
Tax Exempt Revenue Bonds	\$101,236	3.43%	Transmission
Taxable Revenue Bonds	\$52,194	3.72%	Robert Moses Power Plant/Lewiston Pump Generating Plant
Total Issued 2021	<u>\$155,340</u>		

**Note: The full faith and credit of the Authority are pledged for the payment of bonds and notes in accordance with their terms and provisions of their respective resolutions. The Authority has no taxing power and its obligations are not debts of the State or any political subdivision of the State other than the Authority. The Authority's debt does not constitute a pledge of the faith and credit of the State or of any political subdivision thereof, other than the Authority.**

### **Scheduled Debt Service Payments**

#### **Outstanding (Issued) Debt**

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2018	\$33,620,000	\$50,929,044	\$84,549,044
2019	\$36,195,000	\$49,366,017	\$85,561,017
2020	\$38,830,000	\$48,278,111	\$87,108,111
2021	\$30,005,000	\$47,566,626	\$77,571,626

#### **Proposed Debt**

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2018	-	\$9,148,774	\$9,148,774
2019	-	\$13,713,082	\$13,713,082
2020	-	\$18,182,808	\$18,182,808
2021	\$6,785,484	\$21,870,398	\$28,655,882

#### **Total Debt**

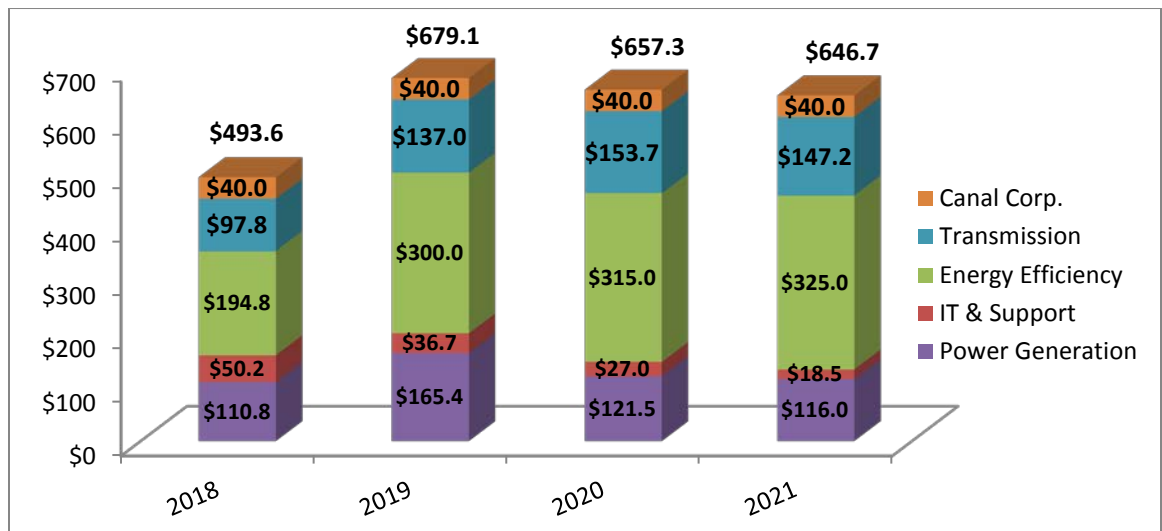
	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2018	\$33,620,000	\$60,077,818	\$93,697,818
2019	\$36,195,000	\$63,079,099	\$99,274,099
2020	\$38,830,000	\$66,460,919	\$105,290,919
2021	\$36,790,484	\$69,437,025	\$106,227,508

### **Capital Commitments and Sources of Funding**

The Authority's commitments for various capital improvements are approximately \$2.5 billion over the financial period 2018 - 2021. The Authority anticipates that these improvements will be funded using existing construction funds, internally-generated funds and additional borrowings. Such additional borrowings are expected to be accomplished through the issuance of additional commercial paper notes and/or the issuance of long-term fixed rate debt. Projected capital commitments during this period include those listed in the table below.

<b>(In thousands)</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
Transmission Life Extension & Modernization (LEM)	\$ 40,538	\$ 50,322	\$ 48,801	\$ 34,079
Moses Adirondack Line Replacement	\$ 5,758	\$ 66,000	\$ 88,000	\$ 88,000
Energy Control Center Redundancy	\$ 11,432	\$ 793	\$ -	\$ -
St. Lawrence New Security & Warehouse Facility	\$ 65	\$ 8,453	\$ 16,064	\$ 3,020
St. Lawrence Structure Replacement	\$ 3,158	\$ 3,009	\$ 2,954	\$ -
Transmission Communication Backbone	\$ 10,761	\$ 8,200	\$ 1,900	\$ 13,560
St. Lawrence Transmission Breaker & Relay Program	\$ 6,988	\$ 5,941	\$ 7,249	\$ 6,576
Robert Moses Niagara Power Project Life Extension & Modernization Program	\$ 50,198	\$ 51,228	\$ 35,388	\$ 45,655
Canal Corp	\$ 40,000	\$ 40,000	\$ 40,000	\$ 40,000
Lewiston Pump Generating Plant (LPGP) LEM	\$ 50,198	\$ 51,228	\$ 35,388	\$ 45,655
Total Energy Efficiency	\$ 194,799	\$ 300,000	\$ 315,000	\$ 325,000
Other	\$ 79,718	\$ 93,970	\$ 66,536	\$ 45,127
<b>GRAND TOTAL</b>	<b>\$ 493,614</b>	<b>\$ 679,144</b>	<b>\$ 657,280</b>	<b>\$ 646,671</b>

**2018-2021 Capital Commitments by Function**  
(in millions)




**Certification of Assumptions and Method of Estimation for  
Budget and Financial Plan 2018-2021 in accordance with the  
Comptroller's Regulation § 203.9 Certification**

December 12, 2017

To the Board of Trustees  
Power Authority of the State of New York

To the best of my knowledge and belief after reasonable inquiry, I, the undersigned, certify that the "Authority's Method of Estimation for Budget and Financial Plan 2018-2021" is based on reasonable assumptions and methods of estimation and that the regulations enumerated in Part 203, "Budget and Financial Plan Format, Supporting Documentation and Monitoring - Public Authorities" have been satisfied.

 12/12/17  
\_\_\_\_\_  
Joseph Kessler  
Chief Operating Officer

 12/12/17  
\_\_\_\_\_  
Robert Lurie  
Chief Financial Officer

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**NY Power  
Authority**