



## **New York Power Authority 2020 Green Bond Report**

### **2020 Series A & B: \$1.2 Billion Par Value Issued May 2020**

### **Green Bond Criteria: Sustainable Electric Transmission Management: Transmission Line Infrastructure Upgrades**

#### **Organizational Overview**

The New York Power Authority (“NYPA” or the “Authority”) is the largest state public power utility in the country with over 80% of power produced being clean and renewable low-cost electricity. Established in 1931, NYPA generates and delivers 25% of NY State’s electricity needs and owns 30% of statewide transmission assets. NYPA is committed to providing reliable low-cost renewable power in an eco-friendly sustainable manner. The Authority owns and operates 1,400 miles of high voltage transmission lines being the 765-kV Massena-Marcy line, the 345-kV Marcy-South line, the 345-kV Niagara-to-Edic transmission line, the 345-kV Long Island Sound Cable and the 230-kV lines. In addition, NYPA owns three large hydroelectric facilities, two large gas-fired power plants and various smaller generating assets.

#### **NYPA’s Green Bond Framework**

In December 2019, NYPA approved its 2020 Capital Budget, which comprised an estimated commitment of approximately \$3.45 billion on capital investments for its generation, transmission and other core assets and initiatives over the four-year period 2020-2023. Transmission projects represented approximately 50% of the Budget.

In planning a major debt issuance to fund its Capital Budget, NYPA developed the New York Power Authority Green Bond Framework (the “Framework”) under which it would issue green bonds and use the proceeds to finance and/or refinance, in whole or in part, existing and/or future projects that refurbish, upgrade, and modernize its power transmission system. The Framework defines eligible projects in the area of electric transmission infrastructure.

The Green Bond Framework was established to govern the use of the designated portion of bond proceeds for the construction of eligible green projects in a manner consistent with NYPA’s sustainable values and to accelerate progress toward New York State’s clean energy and climate goals, including the mandate to obtain 70% of the State’s



electricity from renewable sources. This mandate was identified in the New York State Climate Leadership and Community Protection Act of 2019 (CLCPA).

**Green Bond Issuance**

In May 2020, NYPA issued \$1.2 billion in bonds, including tax-exempt Series 2020 A Revenue Bonds totaling \$1.12 billion and Series 2020 B Revenue Bonds, totaling \$114 million, that are federally taxable but exempt from personal income taxes imposed by New York State. The 2020 A Bonds included \$791.5 million segregated bonds that were designated as “green” by certification firm Sustainalytics. NYPA’s green bond issuance represents the largest green bond transaction for any public power utility. S&P Global Ratings and Fitch Ratings both rate NYPA AA and Moody’s Investors Service rated the utility Aa2. All three agencies provide a stable outlook.

Source of Proceeds	Bond Amount
Series 2020 A Revenue Bonds (Tax-Exempt) *	\$1,120,610,000
Series 2020 B Revenue Bonds (Federally Taxable)	114,020,000
Total Bonds Issued	\$1,234,630,000

*\* Includes Green Bonds totaling \$791,520,000*

This historic \$1.2 billion issuance represented The Authority’s inaugural green bond issue and its first "certified" green bond with an independent second party sustainability opinion. It was also the largest municipal bond issued by the Authority. The issuance achieved its green certification based upon the identified projects’ use of proceeds, project evaluation process, proposed management of bond proceeds and intended reporting.

**Eligible Projects**

Environmentally beneficial, long-term transmission upgrade and modernization projects are currently underway through the State and include improvements that will directly assist in meeting the objects of the New York State Climate Leadership and Community Protection Act Chapter 106, as well as their critical importance to ensuring the overall resiliency and flexibility of the NYISO electric grid by optimizing the use of



innovative, eco-friendly technologies that contribute to the economic development of the region.

The Authority's internal process in evaluating and selecting projects was based on the four-year Capital Plan detailed in its 2020 Capital Budget. NYPA's Treasury team selected specific projects from the Plan that are specified within the Framework and that would make the largest impact on advancing its sustainability goals. The majority of the projects financed by NYPA's 2020 green bond are fully or predominantly dedicated to transmitting hydroelectric power, such as transmission line upgrades or improvements to switching facilities. Additionally, one project relates to the installation of advanced monitoring and "smart" sensing equipment. Such transmission assets dedicated to renewable energy and smart grid investments to improve resiliency and efficiency to be eligible green projects without further qualification. Specifically, NYPA defined the following projects to be the focus of investment of the green bond proceeds:

### **Project Descriptions**

1 A life extension and modernization (LEM) project at the Niagara Switchyard to replace Bays 10, 14, 16, 20, 21, 22 and 25 Breakers, MOD's, Manual Disconnects, HVIT's, Tubular Bus Aerial Cable and Autotransformer No. 1. The switchyard and majority of its installed equipment including autotransformers, oil-filled circuit breakers, disconnect switches, potheads, and other related equipment were installed in the early 1960's and are becoming increasingly prone to failures, challenging to maintain and environmental risks.

2 A project to extend the file of the Moses-Adirondack lines (MA-1 and MA-2) by rebuilding the lines at 345 kV on double-circuit steel monopoles with 1033 ACSR conductor. These lines were built by the Department of Defense in 1942 to transmit power from hydro generating facilities at Taylorville on the Beaver River just north of the Adirondack Substation to Alcoa in Massena. In the early 1950s, the Authority purchased the two 115kv lines and later upgraded the lines to 230kV during the construction of the St. Lawrence – F.D.R. Power Project in the late 1950s. The lines were also extended from Alcoa to Barnhart Island (North Extension) and from Taylorville to the new Adirondack Substation (South Extension).

3 New 345kV double circuit line ~86mi from existing Edic (E) to existing New Scotland (NS) station -2 new 345 kV lines ~5 miles single-circuit looping the existing 345 kV E to NS #14 line to new Rotterdam (R) 345kV station. R 230kV station to be retired - 2 new 345/115 kV transformers connecting R 115kV yard to the new 345kV yard -rebuild



~6 miles of the R to NS 345 kV Tline to -Remove R to NS 115kV Tline -New Princetown 345kV yard -Terminal upgrades E and Marcy -Decom. Porter and R 230kV lines.

4 Part of NYPA's Smart Generation & Transmission (Smart G&T) Strategic Initiative, focus is on the installation of smart sensors to improve the transmission grid by continuously monitoring assets. Sensors are planned to be installed on transformers, breakers, battery banks, exciters, reactors, regulators, cables, and capacitors, for increased reliability and enhanced decision-making.

5 A project to perform life extension and modernization (LEM) actions at the Plattsburgh, Sarana and Willis substations in northern NY. This program is a multiyear project aimed at maintaining availability, increasing reliability and ensuring regulatory compliance. This project will replace the substations' circuit breakers, disconnect switches, instrument transformers, station service equipment, relaying and provide an updated control rooms.

6 The STL Robert Moses Breaker and Relay Replacement Program is a multiyear program with the goal of selectively upgrading components of NYPA's existing transmission system. The switchyard 115kV busses support Alcoa (MAL4, 5, 6), Alcoa East (MAE1,2; previously MRG 1,2), Med Grasse River (MED4, 5), and Reynolds (MAE3, previously MR3) transmission line operations. The 230kV busses support Massena (MMS1, 2), Ontario Hydro's St. Lawrence Transformer Station (L33P, L34P), (MA1, 2) and Willis (MW1, 2) transmission line operations. To ensure continued reliability and regulatory compliance the following equipment is scheduled to be replaced: Bay 1500 & 1400 Breakers and Relays and Capacitor Bank Installation. Transmission Life Extension and Modernization (T-LEM) is a multiyear program that will upgrade NYPA's existing transmission system to maintain availability, increase reliability, and ensure regulatory compliance. The project at Massena Substation includes the replacement or upgrade of 765kV SF6 Breakers, CCVTs, VTs along with 13.8kV switchgear, station service equipment and insulators and all pieces of equipment that have reached their end of life, require excessive costs to maintain and pose reliability threats to the system.

7 PV-20 is a single circuit 115kV transmission line running from Plattsburgh substation to Cumberland Head substation. It is approximately 7.5 miles long. The submarine cable portion consists of four (4) original 500 kcmil cables installed in 1958 (one spare), and three (3) additional 1000 kcmil cables installed in 1970.

8 The Marcy Switchyard (located at Clark Energy Center) Life Extension and Modernization Program is a multiyear program with the goal of selectively upgrading components of NYPA's existing transmission system. The Clark Energy Center 765 kV



busses support Massena (MSU1) and auto transformers 1, 2 and spare 1-2X which in turn service the Marcy 345 kV yard. The Clark Energy Center 345 kV yard supports the Marcy FACT system, and Coopers Corner (UCC2-41 and New Scotland (UNS-18) transmission line operations. The Marcy 345 kV Switchyard has been in service over 30 years and a majority of the original equipment is still in service. The following equipment will be replaced as part of the Marcy Switchyard LEM Program to ensure continued reliability and regulatory compliance: 765kV Breakers 7402, 7414, & 7302 and 345kV Circuit Breakers 3308 & 3302.

## **Governance**

For the duration of NYPA's Green Bonds issuance program, NYPA will monitor and track (i) its use of proceeds (project type, capacity and location) for each green bond issued, (ii) the current allocated and outstanding amounts and contractual maturity dates and (iii) that the use of proceeds of the Green Bonds are in alignment with NYPA's Green Bond Framework.

## **Management of Proceeds**

Upon receipt of the green bond proceeds, NYPA transferred approximately \$353 million into the Operating Fund to reimburse expenditures for the identified green projects that occurred from June 2017 to May 11, 2020.

The Authority deposited the remaining proceeds of its green bonds in separate accounts and manages the allocation process using its existing internal tracking system until proceeds are allocated to the spending requirements identified. Pending allocation, proceeds are held in liquid instruments including cash, money market funds and/or government securities as permitted by the company's investment policy. This is in line with market practice.



**ANDREW M. CUOMO**  
Governor

**JOHN R. KOELMEL**  
Chairman

**GIL C. QUINIONES**  
President and Chief Executive  
Officer

**Use of Proceeds, 5/12/20 to 12/31/20**

Project	Amount (\$)
<b>1 Transmission LEM (NIA)</b>	
Capital O/H	1,847,826.28
Payroll	3,633,956.43
Contractor/Consulting	13,905,412.46
<b>Total</b>	<b>19,387,195.17</b>
<b>2 MA1 &amp; MA2 Transmission Smartpath</b>	
Capital O/H	5,047,074.93
Payroll	2,528,899.78
Contractor/Consulting	104,490,330.32
<b>Total \$</b>	<b>107,019,230.10</b>
<b>3 Marcy to Scotland</b>	
Capital O/H	4,274.61
Payroll	157,967.73
Contractor/Consulting	1,608,065.29
<b>Total \$</b>	<b>1,770,307.63</b>
<b>4 Sensor Deployment Transmission</b>	
Capital O/H	906,908.67
Payroll	1,183,291.29
Contractor/Consulting	7,051,920.64
<b>Total \$</b>	<b>9,142,120.60</b>
<b>5 TLEM STL Remote Substations</b>	
Capital O/H	382,607.89
Payroll	2,637,139.86
Contractor/Consulting	1,761,652.78
<b>Total \$</b>	<b>4,781,400.53</b>
<b>6 Breaker &amp; Relay Replacement</b>	
Capital O/H	273,987.87
Payroll	3,007,184.57
Contractor/Consulting	234,897.80
<b>Total \$</b>	<b>3,516,070.24</b>
<b>7 PV20 Cable Replacement</b>	
Capital O/H	125,652.59
Payroll	13,503.72
Contractor/Consulting	380,542.43
<b>Total \$</b>	<b>519,698.74</b>
<b>8 Transmission LEM (CEC)</b>	
Capital O/H	125,993.97
Payroll	1,068,032.40
Contractor/Consulting	441,612.08
<b>Total \$</b>	<b>1,635,638.45</b>
<b>GRAND TOTAL</b>	<b>\$ 147,771,661.46</b>



**NY Power  
Authority**

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## **Reporting**

In accordance with our pre-issuance Green Bond Framework, this report is being posted to the Electronic Municipal Market Access (EMMA) website of the Municipal Securities Rulemaking Board, accessible at [www.emma.msrb.org](http://www.emma.msrb.org) along with other of the Authority's fiscal year ending December 31, 2020 filings. Fiscal year-end filings include the Authority's audited financial statements. These are published annually and available on NYPA's website ([www.nypa.gov](http://www.nypa.gov)).

The Authority received a second-party Opinion (from Sustainalytics) on its bond issuance in May 2020 and expects a second party Assurance Letter, also from Sustainalytics, on its assertion of the use of funds and adherence to The Framework, in April 2021.

New York Power Authority shall disclose allocation and impact information such as allocated amounts, project location, and project capacity, as well as broader reporting about its alignment to State environmental objectives. Reporting is considered to be one of the core components of the green bond market and NYPA prioritizes these actions.