

**SETTLEMENT AGREEMENT**

**BY AND AMONG**

**LS POWER GRID NEW YORK  
CORPORATION I (“LS Power”),  
a New York corporation**

**NEW YORK POWER AUTHORITY (“NYPA”),  
a New York public benefit corporation**

**AND**

**NIAGARA MOHAWK POWER  
CORPORATION (“National Grid”),  
a New York corporation**

**November 12, 2020**

## SETTLEMENT AGREEMENT

This Settlement Agreement (the “Agreement”) is made and entered into by and among LS POWER GRID NEW YORK CORPORATION I (“LS Power”), a New York corporation, NEW YORK POWER AUTHORITY (“NYPA”), a New York public benefit corporation, and NIAGARA MOHAWK POWER CORPORATION (“National Grid”), a New York corporation, (all collectively referred to herein as the “Parties”; National Grid being a “Party” and LS Power and NYPA collectively being a “Party”), dated as of November 12, 2020 (the “Effective Date”).

WHEREAS, the New York Public Service Commission (“NYPSC”) identified certain New York State public policy transmission needs in NYPSC Case No. 14-E-0454, in orders issued on December 17, 2015 and January 24, 2017, and

WHEREAS, as a result of studies and analyses conducted regarding these public policy needs by the New York Independent System Operator (“NYISO”) pursuant to Section 31.4 of the NYISO OATT, NYISO determined that these public policy needs can be addressed by certain modification and expansion work, and

WHEREAS, NYISO has established a scope of work for such modification and expansion work, designated the AC Transmission Public Policy Transmission Project Segment A (“Segment A” or the “Segment A Work”), and

WHEREAS, portions of the Segment A Work involve transmission facilities and rights of way owned and operated by National Grid, and

WHEREAS, a dispute arose between National Grid on the one hand and LS Power and NYPA on the other, as to which entity was entitled to make capital investments with respect to, and subsequently own and obtain cost recovery (including a return) on, certain portions of Segment A, and

WHEREAS, the Parties have negotiated a resolution of their dispute and entered into a Settlement Term Sheet dated as of July 24, 2020 (the “Settlement Term Sheet”) and wish to memorialize this resolution in this Agreement,

NOW, THEREFORE, in consideration of the premises and of the mutual agreements contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

## **ARTICLE 1**

### **Scope and Effective Date**

#### 1.1 Scope

This Agreement resolves all issues arising prior to the Effective Date with respect to identification of those portions of the Segment A capital investments to be made by National Grid, and those other portions of the Segment A capital investments to be made by LS Power and NYPA. This Agreement is not intended to, and does not, allocate or assign Segment A Work or any rights or obligations as between LS Power and NYPA.

#### 1.2 Effective Date

The Effective Date of this Agreement shall be the date written in the first paragraph above.

## **ARTICLE 2**

### **Capital Investments and Asset Transfer**

#### 2.1 National Grid Capital Investment

With respect to Segment A, National Grid shall make the capital investments, obtain cost recovery on, and earn any corresponding return related to the following portions of Segment A:

- (a) all work required within the existing and expanded fence-line of National Grid's Edic Substation, and
- (b) all work required to remove the existing conductor and install new 345 kV conductor on existing towers owned by National Grid (in place of the existing #30 line) for approximately 12 miles in and between the Towns of Marcy and Deerfield in Oneida County, and the Towns of Schuyler and Frankfort in Herkimer County.

#### 2.2 LS Power and NYPA Capital Investment

Except for those capital investments identified in Section 2.1 of this Agreement, all other capital investments required to interconnect and integrate Segment A into the existing New York transmission system or otherwise related to Segment A, including without limitation any other Network Upgrade Facilities or facilities on an Affected System, shall be made by LS Power and NYPA, and LS Power and NYPA shall be entitled to cost recovery, including any corresponding return thereon. For the avoidance of doubt, LS Power/NYPA's capital investment shall include work required to remove existing conductor and install new 345 kV conductor on existing towers owned by NYPA in the corridor segment identified in Section 2.1(b) above (in place of the existing #31 line).

2.3 No Acquisition of #13 Line

LS Power and NYPA shall not pursue acquisition of National Grid's #13 line between the Rotterdam Station and the dead end transmission structure immediately south of Country Walk Road in the Town of Rotterdam.

2.4 Construction of #30 Line

LS Power agrees to provide to National Grid an initial cost estimate for the work to be performed by LS Power or its designees on the #30 line. Additional arrangements relating to removal of the existing conductor and installation of new 345kV conductor on the portion of the #30 line referred to in Section 2.1(b) above, including the transfer of any temporary land rights and other rights to perform work on this facility, will be addressed in a separate agreement(s) between National Grid and LS Power. The separate agreement(s) will include (but not be limited to) the following terms, with the specific language to be negotiated between National Grid and LS Power: (a) reasonable project Quality Assurance/Quality Control program, including reasonable oversight rights for National Grid during construction, including progress reviews at defined intervals, the costs of which will be borne by National Grid; (b) following installation, the improvements will be transferred by LS Power to National Grid on an as-is, where-is basis with a release of all liability to be provided by National Grid; provided, LS Power will assign reasonable warranties provided by LS Power's construction contractor, (c) quarterly advance deposits by National Grid of amounts reasonably expected by LS Power to be incurred in the next quarter, to ensure reimbursement to LS Power for the actual costs incurred for the work; and (d) provision of reasonable documentation to National Grid supporting the actual costs of the work along with cooperation commitments to provide information, as reasonably requested, to assist National Grid in obtaining any necessary regulatory approvals including cost recovery.

**ARTICLE 3**  
**Property Rights and Access**

3.1 No Transfer of Property Rights

Except as explicitly provided in this Agreement, nothing herein shall operate to transfer any existing real or personal property rights, or any interests therein, from one Party to the other Party.

3.2 Lease of Real Property

All real property rights, such as easements, access rights, and similar rights, agreed by the Parties to be required for LS Power and NYPA to make the Segment A capital investments described in Section 2.2 hereof, and which are under the control of National Grid, are governed by that certain Lease Agreement, dated as of October 6, 2020, by and among the Parties, as the same may be amended, supplemented or otherwise modified from time to time..

## **ARTICLE 4**

### **Cooperation and Noninterference**

#### **4.1 Cooperation**

The Parties shall cooperate in good faith and work with appropriate regulators, agencies, and authorities to develop, execute, and obtain, as necessary, regulatory approval of all documents and permissions required to effectuate this Agreement, including, if determined by NYISO to be required, an amendment or supplement to the existing Development Agreement related to the Segment A Project and/or a separate agreement covering the National Grid capital investment described in Section 2.1 above.

It is understood and agreed among the Parties that (a) nothing in this Agreement imposes on LS Power or NYPA any obligation or responsibility to provide any form of cost containment commitment with respect to the National Grid capital investments described in Section 2.1 above, and (b) nothing in this Agreement imposes on National Grid any obligation or responsibility to provide any form of cost containment commitment with respect to the LS Power/NYPA capital investment described in Section 2.2 above. Moreover, in connection with any regulatory approval process covered by the preceding paragraph: (a) National Grid will not propose, advocate for, or otherwise support the imposition on LS Power or NYPA of any form of cost containment commitment with respect to the National Grid capital investments described in Section 2.1 above, and (b) neither LS Power nor NYPA will propose, advocate for, or otherwise support the imposition on National Grid of any form of cost containment commitment with respect to the LS Power/NYPA capital investment described in Section 2.2 above. The Parties acknowledge that the obligations specified in this paragraph may be altered or terminated by a subsequent separate agreement among the Parties.

#### **4.2 Other Agreements and Filings**

(a) As soon as reasonably practicable after the Effective Date of this Agreement, the Parties shall diligently and in good faith negotiate commercially reasonable terms of any additional agreements deemed necessary in connection with this Agreement and the Segment A Work. These agreements will include, but are not necessarily limited to, an Interconnection Agreement and the agreement(s) described in Section 2.4 above

(b) The Parties shall cooperate in good faith to ensure that the agreements identified above, and all other project agreements that may be executed by the Parties, reflect the terms of this Agreement. The Parties shall also cooperate in good faith to ensure that all applicable regulatory filings and proceedings, including but not limited to, Article VII and Section 70 proceedings, as needed, before the NYPSC, and any Federal Energy Regulatory Commission proceedings relating to obtaining cost recovery and earning any corresponding return on portions of Segment A, reflect the terms of this Agreement.

## **ARTICLE 5**

### **No Precedent or Prejudice; Reservation of Rights**

#### 5.1 No Precedent or Prejudice; Reservation of Rights

(a) Each of the Parties acknowledges and agrees that this Settlement is entered into by the Parties in order to prevent delays to the schedule associated with the development and construction of Segment A, and is limited to resolving a dispute between the Parties with respect to the entity that will make the capital investment and earn any corresponding return with respect to certain portions of Segment A. This Settlement shall not constitute evidence of any Party's positions or views regarding (i) whether or to what extent National Grid would or would not have been entitled under any provision of the NYISO Tariff (including but not limited to Section 31.6.4 thereof), NYISO agreements, and/or other applicable law, regulation, or authority, to build, own and earn a return on any portion of Segment A or (ii) whether any particular facility or component associated with Segment A would or would not have constituted an "Upgrade" under Section 31.6.4 of the NYISO Tariff or any other controlling documents or provisions.

(b) This Settlement shall not represent a precedent for, nor in any way prejudice or restrict any Party's ability to pursue any future interpretation of, or legal position concerning, any provision of the NYISO Tariff (including but not limited to Section 31.6.4 thereof), the NYISO Agreements, or any other applicable agreement, document, tariff provision, regulation, law, or principle in connection with any project other than Segment A.

(c) Without limiting the generality of the foregoing, none of the Parties shall be permitted to reference or otherwise use this Settlement as a basis for arguing that any entity does or does not have the right to be assigned or otherwise build, own and earn a return on any project (or any facility or component associated with any project) other than Segment A, and each of the Parties reserves all of its rights under the NYISO Tariff and any applicable agreements, regulations, legal or regulatory precedents, laws, and principles in connection with any and all projects other than Segment A.

## **ARTICLE 6**

### **Breach and Remedies**

#### 6.1 Breach

A breach of this Agreement shall occur if any Party fails to perform, observe, or otherwise to comply with any obligation hereunder in any material respect and such failure continues for more than thirty (30) days after notice thereof is given by the non-defaulting Party to the defaulting Party; provided, however, such period shall be extended for an additional period of up to thirty (30) days if, despite using commercially reasonable efforts, the defaulting Party is unable to cure within the initial thirty (30) day period so long as such cure is diligently pursued by the defaulting Party until such default has been corrected, but in any event shall be cured within sixty (60) days of the notice from the non-defaulting Party.

## 6.2 Remedies

With the exception of Section 5.1(c) and Article 10 hereof, no provision of this Agreement shall preclude or restrict any Party from pursuing any available remedies at law or in equity or under applicable regulations, including specific performance, for violation of this Agreement, or any other matter or issue with respect to the Segment A Work.

## **ARTICLE 7** **Public Statements**

### 7.1 Public Statements

No public statement, press release, or other voluntary publication regarding the Settlement or this Agreement shall be made or issued without the prior consent of the other Party, which shall not be unreasonably withheld.

## **ARTICLE 8** **Representations, Warranties, and Covenants**

### 8.1 General

LS Power, NYPA, and National Grid each make the following representations, warranties, and covenants, which are effective as to each of them individually, as applicable, during the full time this Agreement is effective. The term “Individual Party” in this Section refers to each of LS Power, NYPA, and National Grid individually.

### 8.2 Good Standing

The Individual Party is duly organized, validly existing and in good standing under the laws of the state in which it is organized, formed, or incorporated, as applicable. The Individual Party is qualified to do business in the State of New York. The Individual Party has the corporate power and authority to own its properties, to carry on its business as now being conducted and to enter into this Agreement and carry out the transactions contemplated hereby and to perform and carry out covenants and obligations on its part under and pursuant to this Agreement.

### 8.3 Authority

The Individual Party has the right, power, and authority to enter into this Agreement, to become a Party hereto, and to perform its obligations hereunder. This Agreement is a legal, valid, and binding obligation of the Individual Party, enforceable against the Individual Party in accordance with its terms, except as the enforceability thereof may be limited by applicable bankruptcy, insolvency, reorganization, or other similar laws affecting creditors' rights generally.

8.4 No Conflict

The execution, delivery, and performance of this Agreement does not violate or conflict with the organizational or formation documents, or bylaws or operating agreement, of the Individual Party, or any judgment, license, permit, order, material agreement or instrument applicable to or binding upon the Individual Party or any of its assets.

8.5 Consent and Approval

The Individual Party has sought or obtained, or, in accordance with this Agreement shall seek or obtain, such consent, approval, authorization, order, or acceptance by any governmental authority in connection with the execution, delivery and performance of this Agreement, and it shall provide to any governmental authority notice of any actions under this Agreement that are required by applicable laws and regulations.

8.6 Compliance with All Applicable Laws and Regulations

The Individual Party shall comply with all applicable laws and regulations, including all approvals, authorizations, orders, and permits issued by any governmental authority; all applicable reliability requirements, and all applicable Transmission Owner technical standards in the performance of its obligations under this Agreement.

**ARTICLE 9**

**Dispute Resolution**

9.1 Submission

In the event any Party asserts a claim that arises out of or in connection with the Settlement or this Agreement or its performance (a “Dispute”), such Party shall provide the other Parties with written notice of the Dispute (“Notice of Dispute”). Such Dispute shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Parties. In the event the designated representatives are unable to resolve the Dispute through unassisted or assisted negotiations within thirty (30) calendar days of the other Parties’ receipt of the Notice of Dispute, such Dispute may, upon mutual agreement of the Parties, be submitted to arbitration and resolved in accordance with the arbitration procedures set forth below. In the event the Parties do not agree to submit such Dispute to arbitration, each Party may exercise whatever rights and remedies it may have in equity or at law or under relevant regulations consistent with the terms of this Agreement.

9.2 Arbitration Procedures

Any arbitration initiated under this Agreement shall be conducted before a single neutral arbitrator appointed by the Parties. If the Parties fail to agree upon a single arbitrator within ten (10) calendar days of the submission of the Dispute to arbitration, within (10) additional calendar days thereafter National Grid shall choose one arbitrator and LS Power and NYPA will



jointly choose one arbitrator who shall sit on a three-member arbitration panel, the third member of which shall be jointly selected by the two members chosen by the Parties. In each case, the arbitrator(s) shall be knowledgeable in electric utility matters, including electric transmission and bulk power issues, and shall not have any current or past substantial business or financial relationships with any party to the arbitration (except prior arbitration). The arbitrator(s) shall provide each of the Parties an opportunity to be heard and, except as otherwise provided herein, shall conduct the arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("Arbitration Rules"); provided, however, in the event of a conflict between the Arbitration Rules and the terms of this Article 9, the terms of this Article 9 shall prevail.

### 9.3 Arbitration Decisions

Unless otherwise agreed by the Parties, the arbitrator(s) shall render a decision within ninety (90) calendar days of appointment and shall notify the Parties in writing of such decision and the reasons therefor. The arbitrator(s) shall be authorized only to interpret and apply the provisions of this Agreement and shall have no power to modify or change any provision of this Agreement in any manner. The decision of the arbitrator(s) shall be final and binding upon the Parties, and judgment on the award may be entered in any court having jurisdiction. The decision of the arbitrator(s) may be appealed solely on the grounds that the conduct of the arbitrator(s), or the decision itself, violated the standards set forth in the Federal Arbitration Act or the Administrative Dispute Resolution Act.

## **ARTICLE 10**

### **Survival**

#### 10.1 Survival

The rights and obligations of the Parties in this Agreement shall survive the termination, expiration, or cancellation of this Agreement to the extent necessary to provide for the determination and enforcement of said obligations arising from acts or events that occurred while this Agreement was in effect.

## **ARTICLE 11**

### **Miscellaneous**

#### 11.1 Notices

Each Party shall designate a project manager, authorized to receive and provide all notices that are required or that may be sent under the terms of this Agreement. Notice by National Grid to the designated project manager constitutes notice to both LS Power and NYPA, and notice from the designated LS Power and NYPA project manager to National Grid constitutes notice from both LS Power and NYPA. Only notice provided to the designated project manager of each Party shall constitute notice that is required or that may be sent under the terms of this

Agreement. Any notice or request made to or by any Party regarding this Agreement shall be made to the Parties, as indicated below.

If to National Grid:

National Grid USA  
Attn: David Lodemore  
40 Sylvan Road  
Waltham, MA 02451  
Phone: 781-907-3704  
Email: [David.Lodemore@nationalgrid.com](mailto:David.Lodemore@nationalgrid.com)

If to LS Power:

LS Power Grid New York Corporation I  
Attn: Casey Brandt  
16150 Main Circle Dr., Ste. 310  
Chesterfield, MO 63017  
Phone: 636-532-2200  
Email: [cbrandt@lspower.com](mailto:cbrandt@lspower.com)

If to NYPA:

New York Power Authority  
Attn: Glenn D. Haake  
30 South Pearl Street, 10th Floor  
Albany, NY 12207  
Phone: 518-433-6720  
Email: [Glenn.Haake@nypa.gov](mailto:Glenn.Haake@nypa.gov)

## 11.2 Entire Agreement

(a) Except as described below in Section 11.2(b), and except with respect to information contained in the Settlement Term Sheet concerning the real property lease referenced in Section 3.2 above, this Agreement constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Agreement. There are no other agreements, representations, warranties, or covenants that constitute any part of the consideration for, or any condition to, either Party's compliance with its obligation under this Agreement.

(b) Notwithstanding the foregoing, this Agreement is in addition to, and does not supersede or limit the Parties' rights and responsibilities under, any agreement(s) duly entered into by and among the Parties and/or the Parties and the NYISO. For the avoidance of doubt, this provision does not supersede or negate the Parties' obligations set forth in Section 4 above,

including the obligation to amend or supplement, if determined to be required by NYISO, the existing NYISO Development Agreement related to Segment A.

11.3 Successors and Assigns

This Agreement (and any portion thereof) may not be assigned by (a) National Grid without the prior written consent of LS Power and NYPA or (b) LS Power or NYPA without the prior written consent of National Grid, it being understood that no such prior written consent may be unreasonably withheld, conditioned or delayed. The Party requesting the other Party's consent to an assignment of this Agreement shall reimburse such other Party for the documented, reasonable "out of pocket" costs and expenses such other Party incurs in connection with that consent, without regard to whether such consent is provided. When assignable, this Agreement shall be binding upon, shall inure to the benefit of, and may be performed by, the successors and assignees of the Parties, except that no assignment, pledge or other transfer of this Agreement by either Party shall operate to release the assignor, pledgor, or transferor from any of its obligations under this Agreement unless the other Party (or its permitted successors or assigns) consents in writing to the assignment, pledge or other transfer and expressly releases the assignor, pledgor, or transferor from its obligations thereunder.

11.4 Disclaimer

Except as provided in this Agreement, the Parties make no other representations, warranties, covenants, guarantees, agreements or promises regarding the subject matter of this Agreement.

11.5 Amendment

The Parties may by mutual agreement amend this Agreement by a written instrument duly executed by all of the Parties.

11.6 No Third Party Beneficiaries

This Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their permitted successors and assigns.

11.7 Waiver

The failure of a Party to this Agreement to insist, on any occasion, upon strict performance of any provision of this Agreement shall not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party. Any waiver at any time by any Party of its rights with respect to this Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, or duty of this Agreement. Any waiver of this Agreement shall, if requested, be provided in writing.

#### 11.8 Rules of Interpretation

This Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural number and vice versa, except with respect to the definitions of “Party” and “Individual Party”; (2) reference to any person includes such person’s successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any laws, regulations, and rules means such laws, regulations, and rules as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article or Section means such Article or Section of this Agreement, as the case may be; (6) “hereunder”, “hereof”, “herein”, “hereto” and words of similar import shall be deemed references to this Agreement as a whole and not to any particular Article or other provision hereof or thereof; (7) “including” (and with correlative meaning “include”) means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time “from” means “from and including”, “to” means “to but excluding” and “through” means “through and including.”

#### 11.9 Severability

Each provision of this Agreement shall be considered severable and if, for any reason, any provision is determined by a court or regulatory authority of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions of this Agreement shall continue in full force and effect and shall in no way be affected, impaired, or invalidated, and such invalid, void, or unenforceable provision should be replaced with a valid and enforceable provision or provisions that otherwise give effect to the original intent of the invalid, void, or unenforceable provision.

#### 11.10 Multiple Counterparts

This Agreement may be executed in two or more counterparts, each of which is deemed an original, but all constitute one and the same instrument.

#### 11.11 Relationship of Parties

This Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between or among the Parties (either collectively or individually with LS Power or NYPA) or to impose any partnership obligation or partnership liability between or among the Parties. No Party shall have any right, power, or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or otherwise bind, the other Party.

11.12            Headings

The descriptive headings of the various Articles and Sections of this Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Agreement.

11.13            Governing Law

This Agreement shall be governed, as applicable, by the substantive law of the State of New York, without regard to any conflicts of laws provisions thereof.

11.14            Jurisdiction and Venue

Any legal action or judicial proceeding regarding a Dispute arising out of or relating to the Settlement or this Agreement or any performance by either Party pursuant thereto shall be brought in, and fully and finally resolved in, either, as applicable, the courts of the State of New York situated in Albany County, New York or the United States District Court of the Northern District of New York situated in Albany, New York.

*[Signature page follows.]*

**IN WITNESS WHEREFORE**, the Parties have executed this Agreement in duplicate originals, each of which shall constitute an original Agreement between the Parties.

**Niagara Mohawk Power Corporation**

By: Brian Gemmill

Title: VP Transmission Asset Management, Planning & Delivery

Date: November 12, 2020

**LS Power Grid New York Corporation I**

By: [Signature]

Title: Senior Vice President

Date: November 12, 2020

**New York Power Authority**

By: [Signature]  
Sarah Salati (Nov 17, 2020 17:18 EST)

Title: EVP & Chief Commercial Officer

Date: Nov 17, 2020

This document has been reviewed and does not contain Critical Energy/Electric Infrastructure Information (CEII). 12/1/2020

**nationalgrid**  
**Long: US Sanction Paper**

Title:	NYS PSC AC Proceeding Project	Sanction Paper #:	USSC-13-211 V5
Project #:	C040947, C040965, C084708, C084709, C084722, C085574, C084710, C084720, C086313, C086312	Sanction Type:	Sanction
Operating Company:	Niagara Mohawk Power Corporation	Date of Request:	11/23/2020
Author:	Schlegel, Jennifer	Sponsor(s):	Gemmell, Brian VP Trnsmsn Asset Mgmt Plan & Del Sedewitz, Carol A. VP Electric Asset Mgmt & Planning
Utility Service:	Electricity T&D	Project Manager:	Schlegel, Jennifer

**Executive Summary**

This paper requests Sanction of C040947, C040965, C084708, C084709, C084722, C085574, C084710, C084720, C086313, C086312 in the amount of [REDACTED] M with a tolerance of [REDACTED] or the purposes of full implementation.

This sanction amount is \$ [REDACTED] M broken down into:

- [REDACTED] Capex
- [REDACTED] Opex
- [REDACTED] Removal

With a CIAC/Reimbursement of \$ [REDACTED]  
With a Salvage Value of [REDACTED] M

**Project Summary**

This paper supports additions, upgrades, and removals of existing National Grid facilities necessary to implement the selected Segment A and Segment B Projects in the FERC 1000 AC Proceeding also know as the Energy Highway Initiative (EHI). The projects selected were LS Power for Segment A (Marcy-New Scotland Upgrade Project) and Transco Segment B (New York Energy Solution).

**Background**

In August 2014, the NYISO commenced its first Public Policy Process cycle through the public solicitation of potential transmission needs. Proposals that were determined to be viable were submitted to the NYPSC for review. The NYPSC issued an order in December 2015 finding that the need for certain upgrades across the Central East and Upstate New York (UPNY)/Southeast New York (SENY) portions of the AC transmission system referred to as Public Policy Transmission Needs (PPTNs) should proceed, however, the total AC Transmission PPTN project would be split into two segments referred to as Segment A: Edic/Marcy to New Scotland; Princetown to Rotterdam and Segment B: Knickerbocker to Pleasant Valley.

The NYISO issued a solicitation in February 2016 for solutions to the AC Transmission Needs. Developers submitted sixteen projects, of these, the NYISO determined that seven Segment A proposals and six Segment B proposals were viable and sufficient to address the AC Transmission Needs. The NYISO then issued the AC Transmission Viability and Sufficiency Assessment in October 2016 and filed it with the NYPSC for its consideration and action. After review, the NYPSC issued an order in January 2017 confirming the AC Transmission Needs and ordered that the NYISO should evaluate and select transmission solutions.

Pursuant to Section 31.4.11.2 of the Open Access Transmission Tariff (OATT), NYISO staff then submitted the draft AC Transmission Report in June 2018 to the Board for its review and action. The report recommended NAT/NYPA's Segment A Project T027 and their Segment B Project T029 as the more efficient or cost-effective solutions.

The NYISO Board, in a December 2018 meeting, agreed with the draft AC Transmission Report recommendation that NAT/NYPA's Project T027 is the more efficient or cost-effective transmission solution for Segment A. However, based on additional studies and analyses, the Board concluded that the more efficient or cost-effective transmission solution for Segment B is National Grid/Transco's Project T019, rather than NAT/NYPA's Project T029. Accordingly, the Board directed NYISO staff to revise the draft AC Transmission Report.

NYISO staff reviewed the revised AC Transmission Report in February 2019 with stakeholders and developers, and the Marketing Monitoring Unit (MMU) reviewed its evaluation of the report.

The NYISO Board of Directors issued in April 2019 the Approval of AC Transmission Public Policy Transmission Planning Report and Selection of Public Policy Transmission Projects that formally approved NAT/NYPA's Project T027 for Segment A and National Grid/Transco's Project T019 for Segment B.

Most recently, National Grid reached settlement with LS Power to clarify that the upgrades at Edic Substation and reconductoring on the existing Porter-Rotterdam Line 30 will be National Grid capital investments. These will be recovered through FERC Rates.

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## Project Description

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In November 2019, facility studies for Q556 Segment A and Q543 Segment B were initiated by National Grid. The studies resulted in conceptual scope and estimates for system upgrades requested by the developers to implement EHI along with additional upgrades necessary to address thermal constraints and over-dutied equipment related to expected increases in available fault current

A high-level overview of the Segment A upgrades to existing National Grid facilities is as follows:

- Edic Substation - Expansion with the addition of a new breaker-and-a-half Bay (new Bay 6) to accommodate two new 345 kV lines
- Rotterdam Substation- Replace overdutied breakers and retire 230 kV yard
- New Scotland Substation- Extending bus and install new breakers to accommodate two new 345 kv lines
- Leeds and Reynolds Road Substations - Replace over dutied breakers
- Porter Substation - Retire Lines 30 and 31
- Eastover Substation - Relay and Telecomm Upgrades
- Reconductoring 1.4 miles of the Wolf Road-Menands #10 Line
- Design Reviews for the new transmission line interconnection points

A high-level overview of the Segment B upgrades to existing National Grid facilities is as follows:

- Schodack Substation - Installation of two new breakers and associated work
- Blue Stores Substation- Installation of new breakers, control building, and switches
- Buckley Corners - Installation of wave trap
- Greenbush, Valkin, Hudson, New Scotland, Leeds, Athens, and Alps Substations - Relay and Telecomm Upgrades
- Fort Orange Tap- Remove from Greenbush-Hudson #15 Line and Connect to Schodack-Falls Park #14 Line



- Design Reviews for the new transmission line interconnection points

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### Summary of Benefits

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These upgrades will support projects that will benefit New York State’s electric consumers by enabling the delivery of environmentally desirable power required to meet state energy goals, relieving uneconomic congestion, and replacing aging infrastructure while enhancing New York State’s already high standard of system reliability.

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### Business and Customer Issues

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NYISO has required in-service date of December 31, 2023. All National Grid upgrades and interim mitigation measures are required to support that in service date. The system upgrades proposed in the project will support local load growth and will avoid certain investments in existing National Grid infrastructure.

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### Drivers:

NYISO requirement for Segment A (Central East) is to provide a minimum 350 MW increase to the Central East interface transfer capability, while the proposed solutions to Segment B (UPNY/SENY) must provide a minimum 900 MW increase to the UPNY/SENY interface transfer capability. These must be in service by December 2023

### Alternatives - N/A

Number	Title
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### Related Projects, Scoring and Budget

#### Summary of Projects

<i>Project Number</i>	<i>Project Type</i> (Elec only)	<i>Project Title</i>	<i>Estimate Amount(\$M)</i>
C084708	T-Line	EHI Segment A Line	
C084709	T-Sub	EHI Segment A Substation	
C084722	T-Line	EHI Segment B TLine	
C084710	T-Sub	EHI Segment B Substations	
C040947	T-Line	New Leeds-PV 345 kV Line- Line Work	
C040965	T-Sub	New Leeds-PV 345 kVline - Sub Work	
Total:			

<i>Project Number</i>	<i>Project Type</i> (Elec only)	<i>Project Title</i>	<i>Estimate Amount(\$M)</i>
C085574	D-Sub	EHI Segment B D-Stations	
C084720	D-Line	EHI Segment B-Dline	
Total:			

<i>Project Number</i>	<i>Project Type</i> (Elec only)	<i>Project Title</i>	<i>Estimate Amount(\$M)</i>
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C086312	T-Sub	EHI Edic Upgrades- FERC		
C086313	T-Line	Reconductoring 30 line for EHI-FERC		
				Total:

Associated Projects - N/A

Prior Sanctioning History

<i>Date</i>	<i>Governance Body</i>	<i>Sanctioned Amount</i>	<i>Potential Project Investment</i>	<i>Sanction Type</i>	<i>Sanction Paper</i>	<i>Potential Investment Tolerance</i>
6/26/2017	USSC			Partial	USSC-13-211 V4	
4/8/2015	USSC			Partial	USSC-13-211 V3	
1/14/2015	USSC			Partial	USSC-13-211 V2	
4/24/2013	USSC			Partial	USSC-13-211	
10/12/2011	USSC			Partial	USSC-11-005	

Prior potential investment amounts were based on the potential that National Grid was selected as the developer and would execute all of Segment A and B Projects [REDACTED]. For the current sanction, National Grid is not acting as the developer for either Segment.

**Key Milestones**

<i>Milestone</i>	<i>Date (Month / Year)</i>
Partial Sanction	October, 2011
Partial Sanction	April, 2013
Partial Sanction	January, 2015
Partial Sanction	April, 2015
Partial Sanction	June, 2017
Gate C - Approval to Begin Engineering & Design	September, 2020
Sanction	November, 2020
Gate C1 - Approval to Progress to Field Execution	December, 2020
Construction Start	January, 2021
Construction Complete - CC	July, 2026
Gate D - Approval to Progress to Closeout	January, 2027
Project Closure Sanction	April, 2028

Next Planned Sanction

<i>Date (Month/Year)</i>	<i>Purpose of Sanction Review</i>
April, 2028	Closure

Category

Category

- Mandatory
- Policy-Driven
- Justified NPV

Reference to Mandate, Policy, or NPV

NYPSC initiated a public policy proceeding to address persistent Transmission congestion between update and downstate.

Asset Management Risk Score: 49

**PRIMARY RISK SCORE DRIVER**

- Reliability
- Environment
- Health & Safety
- Not Policy Driven

Complexity Level: 33

- High Complexity
- Medium Complexity
- Low Complexity
- N/A

**Process Hazard Assessment**

A Process Hazard Assessment (PHA) is required for this project:  Yes  No

**Current Planning Horizon**

Transmission

	Prior Yrs	Current Planning Horizon						Total
		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
\$M								
CapEx								
OpEx								
Removal								
Total								
Distribution								

	Prior Yrs	Current Planning Horizon						Total
		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
\$M								
CapEx								
OpEx								
Removal								
Total								

FY22-31 NY FERC BP20

	Prior Yrs	Current Planning Horizon						Total
		FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	
\$M								
CapEx								
OpEx								
Removal								
Total								

**Totals**

Capex								
Opex								

Removal

Total



**Resources, Operations, & Procurement**

**RESOURCE SOURCING**

Engineering & design Resources to be provided	<input checked="" type="checkbox"/> Internal	<input checked="" type="checkbox"/> Contractor
Construction/Implementation Resources to be provided	<input checked="" type="checkbox"/> Internal	<input checked="" type="checkbox"/> Contractor

**RESOURCE DELIVERY**

Availability of internal resources to delivery project:	<input type="radio"/> Red	<input checked="" type="radio"/> Amber	<input type="radio"/> Green
Availability of external resources to delivery project:	<input type="radio"/> Red	<input checked="" type="radio"/> Amber	<input type="radio"/> Green

**OPERATIONAL IMPACT**

Outage impact on network system	<input type="radio"/> Red	<input checked="" type="radio"/> Amber	<input type="radio"/> Green
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**PROCUREMENT IMPACT**

Procurement impact on network system:	<input type="radio"/> Red	<input checked="" type="radio"/> Amber	<input type="radio"/> Green
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**Key Issues**

NYISO In-service Required Date 12/31/23 for Certain Required Upgrades

FERC 1000 Visibility Aspects

Developers will be requiring extensive resources for their project.

**Net Zero**

Contribution to National Grid's 2050 80% emissions reduction target:	<input type="radio"/> Neutral	<input checked="" type="radio"/> Positive	<input type="radio"/> Negative
Impact on adaptability of network for future climate change:	<input type="radio"/> Neutral	<input checked="" type="radio"/> Positive	<input type="radio"/> Negative
Qualifies for Green Financing:	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A

**List References**

New York State Public Service Commission; 13-E-0488, In the Matter of Alternating Current transmission Projects -Comparative Proceeding

Case 19-T-0684 Transco Article VII Proceedings

Case 19-T-0549 LS Power/New York Power Authority Article VII Proceedings

**Safety, Environmental and Project Planning Issues**

Environmental

Segment A and B have Article VII Certificate and EM&CP Requirements for portions of the projects

Project Planning Project planning is organized to support developer outage sequences.

## Permitting

<i>Permit Name</i>	<i>Probability Required</i>	<i>Duration to Acquire Permit</i>	<i>Status</i>	<i>Estimated Completion Date</i>
Article VII-Segment A	Certain	1 year	In Progress	November, 2020
Article VII - Segment B	Certain	1 year	In Progress	February, 2021

## Investment Recovery and Customer Impact

### Investment Recovery

A portion of these projects are subject to a contribution in aid of construction (CIAC) and will have no rate impact on customers. These are funding projects C084708, C084709, C084722, C085574, C084710, and C084720. Investment recovery will be through standard rate recovery mechanisms approved by appropriate regulatory agencies for funding projects C040947 and C040965. Investment recovery will be through FERC rates for funding projects C086313 and C086312.

### Customer Impact

This project results in an indicative first full year revenue requirement when the asset is placed in service equal to approximately \$█M.

## Execution Risk Appraisal

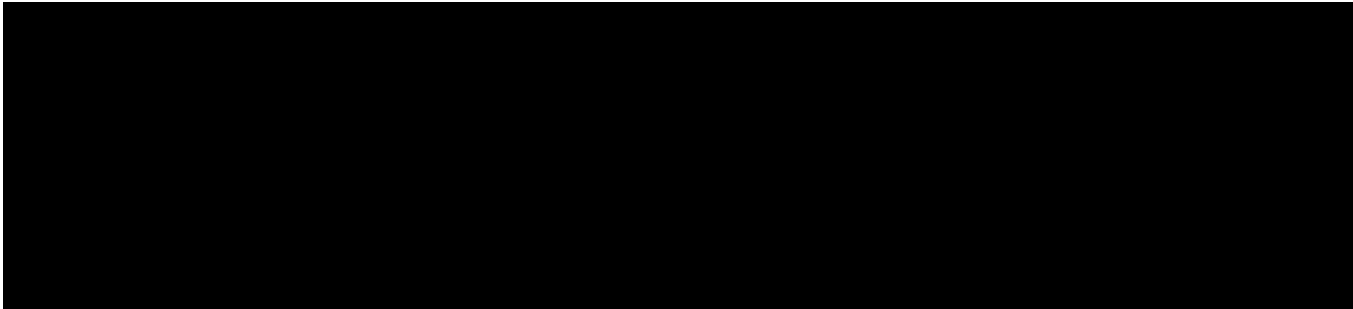
Risk Breakdown Structure Category	Qualitative Assessment / Risk Response Strategy					Risk Score
	Risk ID + Title	IF Statement	THEN Statement	Risk Response Strategy		
4. Permitting	R7 - Permitting/Article VII/SWPPP	Additional or Delay in Permitting	Construction could get delayed	Accept	Due diligence prior to const.	20
17. Unknown Unknowns	R4 - Unknown/Unknowns	Unknown condition or situation impacts project	Add Cost and Construction Delays	Accept	Deal with issues as the arise	20
12. Materials	R9 - Material delays (Long lead precast item)	Delay in material/long lead items, Material Delivery	Delay in project	Transfer	Transfer to GC	16
11. Construction	R22 - Poor Soils, can not be reused as backfill	Additional import of material	Add cost and schedule	Accept	React	16
10. Line Outages	R3 - NRA's and Outages based on permissions from the Control	Issues with outages	Construction Schedule will get delayed	Reduce	Coordinate with NYISO and developers, work in off months	15

	Center.				
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Due to the COVID-19 pandemic, the Company's ability to deliver this project may be at risk. The project within this paper as well as the entire jurisdictional portfolio will continue to be evaluated each month through the Company's current control procedures and, if necessary, special actions will be taken to reevaluate their viability for the current fiscal year.

Business Plan			
<i>Business Plan Name &amp; Period (BP 19)</i>	<i>Project Included in approved Business Plan?</i>	<i>(Over) / Under Business Plan</i>	<i>Project Cost relative to approved Business Plan (\$M)</i>
FY 21-25 NY Transmission Business Plan	<input checked="" type="radio"/> Yes <input type="radio"/> No	<input checked="" type="radio"/> Over <input type="radio"/> Under <input type="radio"/> N/A	
FY 21-25 NY Distribution Business Plan	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Over <input type="radio"/> Under <input checked="" type="radio"/> N/A	
FY 22-31 NY FERC Business Plan 20	<input type="radio"/> Yes <input checked="" type="radio"/> No	<input type="radio"/> Over <input type="radio"/> Under <input checked="" type="radio"/> N/A	

If Cost > Approved



CIAC Reimbursement								
\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
CIAC/Reimbursement								

Cost Summary Table								
Transmission								
Project Number	Project Title	Project Estimate Level						
C084708	EHI Segment A Line							
Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total								
Project Number	Project Title	Project Estimate Level						
C084709	EHI Segment A Substation							
		FY	FY	FY	FY	FY	FY	

Spend	Prior Yrs	2021	2022	2023	2024	2025	2026	Total
Capex								
Opex								
Removal								
Total								

Project Number C084722      Project Title EHI Segment B TLine      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total								

Project Number C084710      Project Title EHI Segment B Substations      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total								

Project Number C040947      Project Title New Leeds-PV 345 kV Line- Line Work      Project Estimate Level NA

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total								

Project Number C040965      Project Title New Leeds-PV 345 kVline - Sub Work      Project Estimate Level NA

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Opex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Distribution

Project Number C085574      Project Title EHI Segment B D-Stations      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
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Capex	[REDACTED]							
Opex	[REDACTED]							
Removal	[REDACTED]							
Total	[REDACTED]							

Project Number C084720      Project Title EHI Segment B-Dline      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
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Capex	[REDACTED]							
Opex	[REDACTED]							
Removal	[REDACTED]							
Total	[REDACTED]							

FY22-31 NY FERC BP20

Project Number C086312      Project Title EHI Edic Upgrades- FERC      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
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Capex	[REDACTED]							
Opex	[REDACTED]							
Removal	[REDACTED]							
Total	[REDACTED]							

Project Number C086313      Project Title Reconductoring 30 line for EHI-FERC      Project Estimate Level [REDACTED]

Spend	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
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Capex	[REDACTED]							
Opex	[REDACTED]							
Removal	[REDACTED]							
Total	[REDACTED]							

Total Project Sanction

Capex	[REDACTED]							
Opex	[REDACTED]							



Removal	
Total	

**Project Costs per Business Plan**

Transmission								
\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total Cost in Bus. Plan								

**Variance**

\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total Variance								

**Project Costs per Business Plan**

Distribution								
\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex								
Opex								
Removal								
Total Cost in Bus. Plan								

**Variance**

\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Opex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Variance	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

**Project Costs per Business Plan**

FY22-31 NY FERC BP20								
\$M	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
Capex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Opex	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Removal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Cost in Bus. Plan	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

### Variance

	Prior Yrs	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	Total
\$M								
Capex								
Opex								
Removal								
Total Variance								

### Cost Assumptions

Internal estimating tools were used to develop this estimate from the Scoping Document. The estimates includes risk dollars.

### Net Present Value / Cost Benefit Analysis - N/A

### Statement of Support

<i>Department</i>	<i>Individual</i>	<i>Responsibilities</i>
Investment Planning	Longshore, Christine; Elliott, Thomas	Endorses relative to 5-year business plan or emergent work
Resource Planning	Ranalli, Michael J.; Powers, Jacqueline A.	Endorses construction resources, cost estimate, schedule, and portfolio alignment
Asset Management / Planning	Franey, Bart D.; Stablewski, Kevin T.	Endorses scope, estimate, and schedule with the company's goals, strategies, and objectives
Engineering and Design	Maglione, Nicole; Altenburger, Peter F.; Swanson, Leonard G.; Forgensi, Richard	Endorses scope, design, conformance with design standards
Project Estimation	Garza, Alvaro	Endorses cost estimate
Project Management	Spagnoletti, Nick / Gibson, Rachel	Endorses resources, cost estimate, schedule

### Reviewers

<i>Function</i>	<i>Individual</i>
Finance	Byrne, Andrew; Harju, Andrew
Regulatory	O'Shaughnessy, John E.; Godlewski, Joan E.
Jurisdictional Delegate(s)	Harbaugh, Mark A.; Hill, Terron P.
Procurement	Chevere, Diego

Control Centers (CC)

Cammarata, Daniel F.; Joyce, Raymond F.

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## Decisions

The Senior Executive Sanctioning Committee (SESC) approved this paper at a meeting held on 11/23/2020:

(a) APPROVE the investment of \$ [REDACTED] M and a tolerance of +/- [REDACTED] % for full implementation.

(b) NOTED that Schlegel, Jennifer has the approved financial delegation

DocuSigned by:  
*Margaret Smyth*  
8AAACE8F0F26F4A7...

Signature \_\_\_\_\_

11/30/2020

Date \_\_\_\_\_

Margaret Smyth  
US Chief Financial Officer  
Chair, Senior Executive Sanctioning Committee

## Appendix

N/A