Jennifer Brooks Hutchinson
Acting Assistant General Counsel and Director

October 20, 2020

VIA ELECTRONIC MAIL

Luly E. Massaro, Commission Clerk
Rhode Island Public Utilities Commission
89 Jefferson Boulevard
Warwick, RI 02888

RE: Docket 4770 – Electric Earnings Sharing Mechanism
Earnings Report - Twelve Months Ended December 31, 2019
Responses to PUC Data Request – Set 3

Dear Ms. Massaro:

On behalf of National Grid,[1] I have enclosed an electronic version of the Company's responses to the Public Utilities Commission's Third Set of Data Requests in the above-referenced matter.[2]

In this transmittal, the Company is providing its responses to PUC 3-10, 3-11, and PUC 3-25.

The Company's response to PUC 3-14, 3-16, 3-18 and 3-20 are pending.

Thank you for your attention to this transmittal. If you have any questions regarding this filing, please contact me at 401-784-7288.

Very truly yours,

Jennifer Brooks Hutchinson

Enclosure

cc: Docket 4770 Service List
John Bell, Division
Christy Hetherington, Esq.
Leo Wold, Esq.

[1] The Narragansett Electric Company d/b/a National Grid (National Grid or the Company).

[2] Per Commission counsel's update on October 2, 2020, concerning the COVID-19 emergency period, the Company is submitting an electronic version of this filing. The Company will provide the Commission Clerk with five (5) hard copies and, if needed, additional hard copies of the enclosures upon request.

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Certificate of Service

I hereby certify that a copy of the cover letter and any materials accompanying this certificate was electronically transmitted to the individuals listed below.

Joanne M. Scanlon

October 20, 2020
Date

National Grid Docket No. 4770 (Rate Application) & Docket No. 4780 (PST)
Combined Service list updated 8/12/2020

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PUC 3-10

Request:

Referring to PUC 1-2, page 3,

a. Please explain the Company's asset classification rules used for accounting purposes.
b. Please provide a copy of the asset classification rules and/or instruction manual (if any) used for classifying assets.
c. Are the referenced asset classification rules required by FERC accounting regulations or by any other mandates that must be followed by the Company under all circumstances?
d. Does the Company have the ability and/or discretion to classify an asset as a transmission facility if the circumstances warrant, even though the voltage is lower than what the asset classification rules used for accounting purposes would typically require? If so, please explain the criteria used to make the determination.

Response:

a. The Company's asset classification rules are used as a framework to describe past practices of the classification of New England electric assets as either transmission or distribution, classification of transmission assets as either Pooled Transmission Facilities ("PTF") or non-PTF, and to establish appropriate classification rules that will be used on a going forward basis.

b. Please see Attachment PUC 3-10 for a copy of the asset classification rules.

c. The referenced asset classification rules are not strict rules but rather are used as a guide to determine the appropriate classification. They are based on the historic asset classification guidelines of the applicable legacy companies, accounting regulations set out in FERC's Uniform System of Accounts, the seven-factor test laid out in FERC Order No. 888, and the utility restructuring settlements of the 1990s.

d. Yes, the Company has the discretion to re-classify an asset from distribution to transmission under appropriate circumstances and subject to the criteria listed in PUC 3-10c. For new assets and asset replacements, the asset classification rules presented in Attachment PUC 3-10 are intended to remain consistent with historical regulatory precedents applied to transmission and distribution assets owned by National Grid's predecessors, the former Easter Utilities Associations ("EUA") and New England Electric System ("NEES") companies. The former NEES companies classified substation assets owned by its MECo. (Massachusetts Electric Company) and NECo.

Prepared by or under the supervision: Michael Artuso

(Narragansett Electric Company) distribution affiliates, differently from the equivalent assets owned by New England Power ("NEP") (Formerly EUA) based on NEP's role as the FERC jurisdictional provider of transmission services to its distribution affiliates.

New England Electric Transmission-Distribution

Classification of Assets Rules Document

Department approvals:

Name	Role	Approval (Y/N)	Date
Sharon Partridge	VP US Financial Controller		
Patrick Tarmey	Senior Counsel – FERC Regulatory	Y	4/20/17
James Holodak	VP Regulatory Strategy & Integrated Analytics		
Carol Sedewitz	VP Electric Asset Management	Y	4/17/17
John Gavin	VP Electric Systems Engineering	Y	4/18/17

Version 1 – 9/1/2016 – Initial rollout
Version 2 – 4/12/2017 – Updated with shared asset details and other minor word changes
Version 3 – 4/17/2017 – Updated exceptions in section A.9

Next review of document: 9/1/17

Classification Rules for New England Transmission and Distribution Electric Assets
Issue Date September 1, 2016; Last updated April 17, 2017

This document is the work product of a Process Excellence (PEx) Team charged with the responsibilities to:

- investigate past historic practices for the:
  - classification of New England electric assets as either transmission or distribution plant, and
  - classification of transmission assets as either Pool Transmission Facilities (PTF) or Non-PTF.
- establish appropriate classification rules that will be used on a going-forward basis.

This document incorporates inputs from:

- Transmission Planning and Asset Management – New England
- Distribution Planning and Asset Management – New England
- Substation Engineering and Design
- Transmission Line Engineering
- Regulatory
- Legal
- Plant Accounting

A. General points:

1. These rules apply only to National Grid's operations in New England.
2. FERC provides general guidance for classifying assets as either transmission or distribution in its Uniform System of Accounts. Included in 'PART 101—UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR PUBLIC UTILITIES AND LICENSEES SUBJECT TO THE PROVISIONS OF THE FEDERAL POWER ACT - General Instructions - Electric Plant Instructions', dated August 1, 2016, is the following statement:

> 14. Transmission and Distribution Plant.
>
> For the purpose of this system of accounts:
>
> A. Transmission system means:
> (1) All land, conversion structures, and equipment employed at a primary source of supply (i.e., generating station, or point of receipt in the case of purchased power) to change the voltage or frequency of electricity for the purpose of its more efficient or convenient transmission;
> (2) All land, structures, lines, switching and conversion stations, high tension apparatus, and their control and protective equipment between a generating or receiving point and the entrance to a distribution center or wholesale point*; [National Grid Note: This instruction would apply to NEP-owned Massachusetts substations which change electricity from transmission to distribution voltage because NEP is a wholesale transmission provider and the entrance or wholesale point for NEP's transmission service is at the low side of a NEP-owned step-down transformer.]* and
> (3) All lines and equipment whose primary purpose is to augment, integrate or tie together the sources of power supply.
> B. Distribution system means all land, structures, conversion equipment, lines, line transformers, and other facilities employed between the primary source of supply (i.e., generating station, or point of receipt in the case of purchased power) and of delivery to customers, which are not includible in transmission system, as defined in paragraph A, whether or not such land, structures, and facilities are operated as part of a transmission system or as part of a distribution system.

NOTE: Stations which change electricity from transmission to distribution voltage shall be classified as distribution stations. *[National Grid Note: This instruction would apply to ownership of substations by National Grid distribution affiliates MECO and NECO.]*

C. Where poles or towers support both transmission and distribution conductors, the poles, towers, anchors, guys, and rights of way shall be classified as transmission system. The conductors, crossarms, braces, grounds, tiewire, insulators, etc., shall be classified as transmission or distribution facilities, according to the purpose for which used.

D. Where underground conduit contains both transmission and distribution conductors, the underground conduit and right of way shall be classified as distribution system. The conductors shall be classified as transmission or distribution facilities according to the purpose for which used.

E. Land (other than rights of way) and structures used jointly for transmission and distribution purposes shall be classified as transmission or distribution according to the major use thereof.

3. For new assets and asset replacements, the rules presented in this document are intended to remain consistent with historical regulatory precedents as codified by the restructuring settlements of the former NEES and EUA companies in the late 1990s.
4. There are historic reasons for the differences in asset classification:
    a. By state
    b. Between transmission and distribution assets owned by National Grid's predecessors, the former EUA and NEES companies.
        (1) The former NEES companies classified substation assets owned by its MECo (Massachusetts Electric Company) and NECo (Narragansett Electric Company) distribution affiliates, differently from the equivalent assets owned by NEP (Formerly EUA) based on NEP's (New England Power) role as the FERC jurisdictional provider of transmission services to its distribution affiliates.
        (2) Nantucket Electric follows the same rules as MECo.
5. When replacing existing assets on a one-for-one (replacement of specific individual pieces of equipment due to damage or failure, such as a circuit breaker) or functional basis (e.g., replacing a transformer to increase its rating from 10 MVA to 20 MVA capability or replacing all insulators of a specific type based on asset condition), the existing designation of the assets as transmission or distribution and PTF or Non-PTF will remain unchanged unless there is a system re-configuration that dictates a change in functional classification.
6. These rules are intended to ensure consistent treatment, in line with the FERC Uniform System of Accounts, in the classification of "shared assets" for new substation construction, including, but not limited to, land, site preparation, fencing, control house, yard lighting, station service transformer, battery/charger system, etc. that support both T/D pieces of equipment.
7. Assets that affect/support the PTF system and that are identifiable as serving a PTF function—classified as "other facilities" in the OATT—which are being installed/modified should be classified as PTF. This applies to such things as CIP physical security projects.
8. When building a new substation in Massachusetts, it must be determined which National Grid operating company, NEP or MECo, will own the substation. Ownership of the new substation will be based on which company, NEP or MECo, owns the transmission line that will interconnect the new substation to the transmission system.
9. There are exceptions to any set of rules and unique or unusual configurations may arise that will require a special determination concerning the classification of National Grid's assets. To ensure appropriate classification of assets consistent with regulatory intent, these situations should be addressed at the appropriate senior

management level. Currently known major exceptions are listed below and special rules apply:

A. EUA Substations (Appendix A)
B. MECo Transmission Lines (Appendix B)
C. Sub-Transmission Lines
D. BITS (Block Island Transmission System) – Details TBD

10. Formal accountability is assigned to the New England Transmission Planning and Asset Management department to ensure that PTF and Non-PTF designations of assets are appropriate and that National Grid's PTF catalogs are updated annually and reported to ISO New England in accordance with operating agreements with the ISO.

B. Lines Ownership Classification Rules and PTF Determination

1. NEP, MECo and NECo all own transmission lines.
2. Lines are generally defined as 'transmission' if they are rated 69 KV and higher, except for:

    a. The Narragansett-owned #63 69 KV RI circuit between Jepson and Gate II substations which was defined as a distribution circuit by EUA.
    b. Sub-Transmission lines, which operate at voltages less than 69 kV; Transmission Planning & Asset Management manage the list of Sub-Transmission lines.
        - Both MECo and NECo own lower voltage (less than 69 KV) line assets booked as 'transmission' assets based on historic installations but these assets now serve a 'primary distribution function'.
        - NEP owns transmission lines that are rated less than 69 KV based on historic hydro power water rights agreements or purchase of assets from other utilities, including the former Boston Edison Company (now part of EverSource).

3. Where poles or towers support both transmission and distribution conductors, the poles, towers, anchors, guys, and rights of way shall be classified as transmission system. The conductors, crossarms, braces, grounds, tiewire, insulators, etc., shall be classified as transmission or distribution facilities, according to the purpose for which used.
4. Where underground conduit contains both transmission and distribution conductors, the underground conduit and right of way shall be classified as distribution system. The conductors shall be classified as transmission or distribution facilities according to the purpose for which used.
5. All new Massachusetts transmission lines will be owned by NEP.
6. All new radial taps into a substation are to be their own PowerPlant 'major location' and not included in the main line 'major location'. Ownership will be determined by which company - NEP/MECo/NECo – owns the existing transmission line.
7. The ISO-NE PTF Catalog, updated yearly, identifies all PTF transmission lines currently in service.

8. PTF is a defined by Section II. 49 and the Attachment F Implementation Rule in the ISO-NE Tariff. Transmission Line Engineering's reference document is *Pool Transmission Facilities.*

C. Rhode Island Substation Ownership Classification Rules

1. Narragansett Electric owns all assets
    a. required by RI State laws
    b. only exception is NEP owning 90% of the 115 KV Manchester St ring bus by special RI law

2. When replacing existing assets on a one-for-one or functional basis, the existing designation of the assets as transmission or distribution and PTF or Non-PTF will remain unchanged unless there is a system re-configuration that dictates a change in functional classification. Any classification change must be explicitly approved through the project approval and sanctioning process.

3. For new substations:
    a. Any NECo substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated at 69 KV or higher is defined as a 'transmission' substation
    b. Any NECo substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated below 69 KV is defined as a 'distribution' substation
    c. For any NECo substation that contains assets operating below 69kV and at 69kV and above:
        i. equipment rated at 69 KV or higher will be booked as 'transmission' assets
        ii. equipment rated at below 69 KV will be booked as 'distribution' assets
        iii. all power transformers with all terminals operating at 69 KV or higher will be booked as a NECo 'transmission asset'
        iv. all power transformers with all terminals operating below 69 KV will be booked as a NECo 'distribution asset'
        v. all 2 winding step-down transformers with 1 terminal operating below 69 KV will be booked as a NECo 'distribution' asset
        vi. all 3 winding step-down transformers with 2 terminals operating at or above 69 KV will be booked as a NECo 'transmission asset'
        vii. all 3 winding step-down transformers with 2 terminals operating below 69 KV will be booked as a NECo 'distribution asset'
    d. Shared assets for new substation construction will be classified as:
        i. Transmission or Distribution based on whichever business segment has greater major equipment investment; typically, shared assets are classified as:
            1. **NECo-owned Distribution for construction with :**
                a. 2-Winding Transformers with 1 winding < 69kV
                b. 3-Winding Transformer with 2 windings < 69kV
            2. **NECo-owned Transmission for construction with :**
                a. 3- Winding Transformer with 2 windings >= 69kV
        ii. Note that power transformer ownership is currently typically used as a basis for "major equipment investment" due to its relatively high

cost/value, which often tips the scale of "major equipment investment" to the owner of the power transformer. However, major equipment investment in a new substation can be dictated by investment in assets other than power transformers.

D. Massachusetts Substation Ownership Classification Rules

1. Classification depends on whether the substation is a former EUA or NEES substation. A list of former EUA substations with transmission assets is maintained by both the Transmission and Distribution Planning and Asset Management.
2. Existing substations:
    a. When replacing existing assets on a one-for-one or functional basis, the existing company ownership, designation of the assets as transmission or distribution, and the PTF or Non-PTF classification will remain unchanged unless there is a system re-configuration that dictates a change in functional classification. Any classification change must be explicitly approved through the project approval and sanctioning process.
    b. If all substation equipment is owned by MECO, (former EUA substations and a few former NEES substations) - all 2 winding step-down transformers with a terminal operating below 69 KV are booked as MECo distribution asset. Existing transformer ownership should be verified via PowerPlan's Continual Property Records.
    c. If all substation equipment is solely owned by NEP, all 2 winding step-down transformers with a terminal operating at 69 KV or greater are booked as NEP transmission.
    d. There will be no transfer of asset ownership between MECo and NEP due to any asset replacement program.
    e. All capital projects connected to a MECo transmission line will be MECo assets.

3. For new substations:
    a. Classification depends on whether the substation is to be connected to a MECo or NEP transmission line. The list of MECo owned transmission lines is maintained by Transmission Planning and Asset Management with the support of Transmission Line Engineering.
    b. Connected to MECo transmission line:
        i. Any new substation will be a MECo facility.
        ii. Any substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated at 69 KV or higher is defined as a 'transmission' substation.
        iii. Any substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated below 69 KV is defined as a 'distribution' substation.
        iv. For any substation that contains both transmission and distribution assets based on the voltage rating of equipment:
            1. equipment rated to operate at 69 KV or higher will be booked as 'transmission' assets;
            2. equipment rated at below 69 KV will be booked as 'distribution' assets;

3. all power transformers with all terminals operating at 69 KV or higher will be booked as MECo 'transmission' assets ;
4. all power transformers with all terminals operating below 69 KV will be booked as MECo 'distribution' assets ;
5. all 2 winding step-down transformers with 1 terminal operating below 69 KV will be booked as MECo 'distribution' assets;
6. all 3 winding step-down transformers with 2 terminals operating at or above 69 KV will be booked as MECo 'transmission assets';
7. all 3 winding step-down transformers with 2 terminals operating below 69 KV will be booked as MECo 'distribution assets'.

v. Shared assets for new substation construction will be classified as:
   1. Transmission or Distribution based on whichever business segment has greater major equipment investment. Typically, shared assets are classified as:
      a. **MECo-owned Distribution for construction with :**
         i. 2-Winding Transformer with 1 winding < 69kV
         ii. 3-Winding Transformer with 2 windings < 69kV
      b. **MECo-owned Transmission for construction with :**
         i. 3- Winding Transformer with 2 windings >= 69kV
   2. Note that power transformer ownership is currently typically used as a basis for "major equipment investment" due to its relatively high cost/value, which often tips the scale of "major equipment investment" to the owner of the power transformer. However, major equipment investment in a new substation can be dictated by investment in assets other than power transformers.

c. <u>Connected to NEP transmission line:</u>
   i. Any new substation may have both NEP and MECo assets.
   ii. Any substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated at 69 KV or higher is defined as NEP transmission.
   iii. Any substation where all primary equipment (including circuit breakers and transformers but excluding auxiliary equipment) is operated below 69 KV is defined as MECo distribution.
   iv. For any substation that contains both transmission and distribution assets based on the voltage rating of equipment:
      1. equipment rated to operate at 69 KV or higher will be booked as NEP 'transmission' assets;
      2. equipment rated at below 69 KV will be booked as MECo 'distribution' assets;
      3. all power transformers with two terminals operating at 69 KV or higher will be booked as NEP 'transmission' asset;
      4. all power transformers with all terminals operating below 69 KV will be booked as MECo 'distribution' assets;
      5. all 2 winding step-down transformers with a terminal operating at 69 KV or higher will be booked as NEP 'transmission' assets unless MECo decides to own the transformer in which case it will be booked as a MECo 'distribution' asset;

6. all 3 winding step-down transformers with at least 1 terminal operating 69 KV or above will be booked as NEP 'transmission' assets.

v. Shared assets for new substation construction will be classified as:
   1. Transmission or Distribution based on whichever business segment has greater major equipment investment.
   2. Typically, shared assets are NEP-owned Transmission except in cases where MECo decides to own the power transformer, in which case shared assets would be MECo-owned Distribution. See where this applies in the Classification Decision Table as noted by note (7).
   3. Note that power transformer ownership is currently typically used as a basis for "major equipment investment" due to its relatively high cost/value, which often tips the scale of "major equipment investment" to the owner of the power transformer. However, major equipment investment in a new substation can be dictated by investment in assets other than power transformers.

E. Substation Asset PTF Determination

1. The determination of whether a substation asset – circuit breaker, disconnect switch or transformer – is PTF is determined by terms defined in Section II.49 –Definition of PTF of the *ISO-NE Open Access Transmission Tariff (OATT).* Refer to *Attachment 1 to Appendix A to Attachment F Implementation Rule* for examples of what equipment is considered PTF under various substation configurations.

2. Substation Engineering presents similar information in its document *Allocation of Costs on Projects Involving PTF*.

New England Substation Asset Transmission vs Distribution Ownership Classification Decision Table

		Equipment to be Classified (1) (2)					
	Substation Fed from Transmission System (>69 KV)	**Major Equipment =/> 69 KV (3)**	**Major Equipment < 69 KV (4)**	**2–winding Transformer With 1 winding < 69 KV**	**3-winding Transformer with 2 windings >= 69 KV**	**3-winding Transformer with 2 windings < 69 KV**	**Shared Assets (5) (6)**
Adding assets to or modifying assets at an existing substation in both MA and RI		As a general rule, classification of assets being installed to replace assets on a one-for-one basis will be classified as the asset being replaced. Review Plant Accounting records to determine actual Plant Accounting for the asset in question. Should the replacement/construction activities include an expansion of existing facilities, it is necessary to verify that the re-configuration activities do not change the classification of assets. If uncertain of classification, consult with Transmission Planning and Asset Management –New England (TP&AM-NE).					
New substation--Massachusetts	MECo Owned Transmission Line	MECo-owned: Transmission	MECo-owned: Distribution	MECo-owned: Distribution	MECo-owned: Transmission (8)	MECo-owned: Distribution	**MECo-owned Distribution for construction with :** • 2-Winding Transformers with 1 winding < 69kV • 3-Winding Transformer with 2 windings < 69kV **MECo-Owned Transmission for construction with :** • 3- Winding Transformer with 2 windings >= 69kV
	NEP Owned Transmission Line	NEP-owned: Transmission	MECo-owned: Distribution	NEP-owned Transmission (7)	NEP-owned: Transmission	NEP-owned: Transmission (7)	**NEP-owned Transmission**
New substation—Rhode Island	NECo Owned Transmission Line – Only Option	NECo-owned: Transmission	NECo-owned: Distribution	NECo-owned: Distribution	NECo-owned: Transmission (8)	NECo-owned: Distribution	**NECo-owned Distribution for construction with :** • 2-Winding Transformers with 1 winding < 69kV • 3-Winding Transformer with 2 windings < 69kV **NECo-Owned Transmission for construction with :** • 3- Winding Transformer with 2 windings >= 69kV

Notes (continued on next page):

1. This table presents general guidelines for determining the classification of substation assets as either transmission or distribution.
2. If one has questions on the proper classification of an asset, they should ask Transmission Planning & Asset Management for guidance.

New England Substation Asset Transmission vs Distribution Ownership Classification Decision Table

3. The term 'Major Equipment =/> 69 KV' includes all substation equipment operating at a primary voltage of 69 KV or higher and/or is used in support of the primary voltage rated equipment that is capable of conducting significant current flow, including circuit breakers or circuit switchers, and their associated dis-connect switches.
4. The term 'Major Equipment < 69 KV' includes all substation equipment operating at distribution system voltage that is less than 69 KV and/or is used in support of the distribution voltage rated equipment that is used to serve MECo and NECo retail customers.
5. "Shared Assets" for new substation construction includes, but is not limited to, land, site preparation, fencing, control house, yard lighting, station service transformer, battery/charger system, etc. that support both T & D pieces of equipment simultaneously. Classification of Shared Assets fall under ownership of the operating company that has the most major equipment investment.
6. If source line voltage is less than 69 kV, then the new substation is classified as a distribution substation unless special approval is provided through the project sanctioning process and senior management approval.
7. NEP-owned transmission asset UNLESS MECo decides to own the transformer as MECo-owned distribution asset under terms of the NEP Wholesale transmission tariff.
8. This is to account for the fact that a 3-winding Transformer with 2 windings >= 69 kV could be classified as PTF; PTF is only captured by the Transmission businesses of the NE Operating companies.

Appendix A – EUA Substations

EUA Substations List List managed by Transmission Planning & Asset Management
Substation Name
Hathaway No. 106
Somerset Station
Bates St. No. 115
Bell Rock
Swansea No. 11
Bridgewater No. 16
Mill St. No. 912
Dupont No. 91
Belmont No. 98
Stoughton No. 913
Auburn St. No. 21
North Abington No. 99
Water St. No. 910*
Phillips Lane No. 95
Scituate No. 915
Sykes Road No. 28
Dighton No. 19
East Bridgewater No. 797
Ames St No. 911
Parkview No. 94
Plymouth St No. 93
Norwell No. 96

* Not to be confused with Water St. No. 31

Appendix B – MECo Transmission Lines

MECo-owned Transmission Lines List – List managed by Transmission Engineering	
Circuit ID	Long Name
191	Auburn Street to NSTAR
1113	Tap off WMECO 1113 Line to Five Corners Substation
1134	Tap off WMECO 1134 Line to Five Corners Substation
1819	Florence Junction to Midway
398-537	Tap to East Holbrook off Eversource Mainline
451-536	Tap to East Holbrook off Eversource Mainline
A94	Parkview to Auburn Street
C2	Auburn Street to Dupont
C3	Auburn Street to Phillips Lane
C3	Tap to Plymouth Street
C3-99	Plymouth to North Abington
C3E	Phillips Lane to Norwell
D911	Ames Street to Dupont
E20	Auburn Street to Bridgewater
F19	Auburn Street to Bridgewater
G18	Dupont to Bridgewater
H1	Hanover to Water Street
J136S	Tap to Litchfield Street
L1	East Bridgewater to E20 Line
M1	East Bridgewater to Middleboro Electric (Str 96)
S1	Belmont to Belmont Street Tap (Tap off F19)
S8	Bridgewater to Somerset
S8	Tap to Rayhman (TMLP Municipal)
S9	Auburn Street to Phillips Lane
S9	Tap to Plymouth Street
S9E	Phillips Lane to Scituate
S9E	Tap to Norwell
U173	Carpenter Hill to Snow Street
U2	Park View to Belmont Street
U2	Tap to Stoughton
U6	Bridgewater to Somerset
U6	Tap to Rayhman (TMLP Municipal)
V5	Bridgewater to Somerset
W123	Carpenter Hill to Snow Street

Highlight Indicates Partially owned by MECo - Contact Transmission Line Engineering for detailed ownership details

W123	Tap to Millenium Power
A53	Wachusett to Cooks Pond
A53	Tap to Bullard Street (Holden Municipal)
A53	Tap to Chaffins Substation (Holden Municipal)
B54	Wachusett to Cooks Pond
B54	Tap to Bullard Street (Holden Municipal)
B54	Tap to Chaffins Substation (Holden Municipal)
O42	Tap to James River Paper

PUC 3-11

Request:

Please identify all attributes of the BITS (if any) that support classifying the cable as a distribution facility used for transmission rather than a transmission facility (other than the fact that the voltage is 34.5 kV).

Response:

Other than the Company's asset classification rules that support classifying BITS as distribution based on its voltage, in Attachment 2 of the FERC approved Local Service Agreements (TSA-NEP-83 and TSA-NEP-86, current versions of which were provided with the Company's response to PUC 3-3 as Attachments PUC 3-3-5 and PUC 3-3-6, respectively), the BITS Surcharge is defined as:

> "The IFA Facilities Credit shall equal the monthly integrated facilities credit for **Customer-owned distribution facilities** received by the Transmission Customer for the BITS facilities pursuant to Schedule Ill-B of New England Power Company's FERC Electric Tariff No. 1" [emphasis added]

Additionally, BITS assets were classified as distribution to avoid double recovery through transmission rates consistent with New England Power Company's FERC approved tariffs. If the BITS assets were classified as transmission, then NECO's IFA revenue requirement would include the costs associated with the BITS assets and also include the BITS Surcharge, resulting in double recovery.

Prepared by or under the supervision: Michael Artuso

PUC 3-16

Request:

Does New England Power Company own any facilities in any state that has voltage of 34.5 kV which are treated as a transmission facilities for purposes of calculating the revenue requirement under NEP's Electric Tariff No. 1? If so, please identify.

Response:

Yes, New England Power Company does own facilities in other states with a voltage of 34.5kV or less that are treated as transmission facilities in the calculation of the Transmission Revenue Requirement. Please see Attachment PUC 3-15-2 for a list of such facilities that meet this criterion; however, these assets are not subject to TSA-NEP-83 or TSA-NEP-86, which defines the BITS surcharge. TSA-NEP-83 and TSA-NEP-86 are the tariffs by which the BITS assets are included in the calculation of the transmission revenue requirement through the BITS surcharge. Absent such tariff language applicable to similar assets in another state, it would not be appropriate to include those other assets in the transmission Revenue Requirement.

Furthermore, as referenced in PUC 3-10, classification of these assets is governed, in part, by historic asset classification of the applicable legacy company and a determination of majority share of investment for shared transmission and distribution substations.

PUC 3-25

Request:

An article published in the Block Island Times in February 2020 indicated that National Grid's "sea2shore cable" is now exposed at or near a beach. See: https://www.blockislandtimes.com/article/wind-farm-cables-be-lengthened-reburial/56598 It is the Commission's understanding that the Company is now undergoing a process to replace a portion of the cable. In the article, a comment is attributed to National Grid: "National Grid has stated to the paper in the past that the cost of reinstalling a section of its sea2shore cable might be shared by mainland and island ratepayers."

a. Please provide a status update regarding this cable replacement/repair project; and
b. To the extent any portion of the cable must be replaced and/or repaired, please provide the Company's current estimate of the cost and indicate the extent to which the cost is expected to be capitalized (leading to an increase in the size of the gross plant used to calculate the distribution carrying charge) or be treated as operation & maintenance expense.

Response:

a. The Company has completed the engineering, design, environmental permitting, procurement, and contracting required to support the submarine cable landfall reconstruction to address the surf zone cable exposure at Crescent Beach. Two contractors will be participating on the execution of this work; a civil contractor and an electrical contractor. The new submarine cable is ordered and is currently in fabrication.

   The civil contractor has initiated the mobilization to Block Island and is planning to start construction by mid-November 2020. The electrical contractor will start mobilization in March 2021, and all construction activities are expected to be completed by May 15, 2021.

   The final scope of work consists of installing a new submarine cable in a 1,700-foot-High Density Polyethylene (HDPE) conduit installed via Horizontal Directional Drill (HDD) methods and installing new land cable in an approximately 50-foot long duct bank from the existing manhole to a new manhole location north of the existing manhole in the Crescent Beach north parking lot.

   The existing direct buried submarine cable will be exposed near the HDD exit point, and the new armored cable and existing armored cable will be spliced together on a suitable

repair vessel. Once the repair splice is completed, the repair splice will be over-boarded to the ocean floor. Supplemental protection will be installed over the splice and exposed cable via articulated concrete mattresses or other means acceptable to the Permit agencies.

On land, the new submarine cable will be spliced to the new land cable at a new manhole and to the existing land cable inside the existing manhole.

Once the new facilities are in service, it is planned to remove the existing submarine cable that is no longer being used.

b. The current cost estimate for the cable reconstruction is $31.3 million. The breakdown is as follows:

- Capex: $30.677 million
- Opex: $0.011 million
- Removal: $0.607 million