



# RSP Project List and Asset Condition List October 2025 Update

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## *Planning Advisory Committee Meeting*

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# TABLE OF CONTENTS

|  | <b><u>Slide</u></b> |
|--|---------------------|
| <i>Highlights of the RSP Project List Update</i>     | 3                   |
| <i>October 2025 RSP Project List Update</i>          | 4 – 9               |
| <i>Status of Major Transmission Projects</i>         | 10                  |
| <i>Highlights of the Asset Condition List Update</i> | 11 – 12             |
| <i>October 2025 Asset Condition List Update</i>      | 13 – 19             |
| <i>Next Steps</i>                                    | 20                  |
| <i>Appendix</i>                                      | 21 – 27             |

# Highlights of the RSP Project List Update

- **Major cost estimate changes greater than \$5M that occurred between the June and October 2025 Project List**
  - None
- **No new projects**
- **Three upgrades have been placed in-service since the June 2025 update**
  - (NH) NH 2029 Solutions – one project
  - (MA) Greater Boston – one project
  - (ME) UME 2029 Solutions – one project
- **No cancelled projects since the June 2025 update**

# October 2025 RSP Project List Update

- No new projects



# October 2025 RSP Project List Update, cont.

- **Three upgrades have been placed in-service since the June 2025 update**

| Project ID # | Transmission System Upgrades  | Cost (in millions \$) | Primary Equipment Owner | Improvement/Need  |
|--------------|---|-----------------------|-------------------------|---|
| 1672         | Forest Ave Substation modification required to build a new 115 kV line from Sudbury Station 342 substation to Hudson substation (MA) Greater Boston - Western Suburbs                           | 8.5                   | Hudson Light and Power  | Increase the load serving capability of the Western Suburbs of Boston |
| 1878         | Install a +55/-32.2 MVAR synchronous condenser at N. Keene 115 kV Substation with a 115 kV breaker and a 13.8 kV breaker (NH) NH 2029 Solutions   | 32.4                  | Eversource              | Resolve voltage issues in the area                                    |
| 1886         | Install a +50/-25 MVAR synchronous condenser at Boggy Brook 115 kV substation, and install a new 115 kV breaker to separate Line 67 from the proposed solution elements (ME) UME 2029 Solutions | 25.9                  | Versant Power           | Resolve voltage issues in the area                                    |

# October 2025 RSP Project List Update, cont.

- **Cost Estimate Comparisons of Reliability Projects June vs. October 2025 Update**

|   | As of June 2025 Plan Update<br>(in millions \$) | As of Oct. 2025 Plan Update<br>(in millions \$) | Change in Plan Estimate<br>(in millions \$) |
|---|---|---|---|
| <b>MAJOR PROJECTS ***</b>                                   |   |   |   |
| Southeast Massachusetts/Rhode Island Reliability (SEMA/RI)  | 445   | 445   | 0   |
| Greater Boston - North, South, Central, and Western Suburbs | 1201  | 1201  | 0   |
| New Hampshire (NH) 2029 Solutions                           | 161   | 161   | 0   |
| Upper Maine (UME) 2029 Solutions                            | 151   | 151   | 0   |
| Boston 2033 Solutions                                       | 26  | 26  | 0   |
| SUBTOTAL **   | 1984  | 1984  | 0   |
| <b>OTHER PROJECTS</b>                                       | 11419   | 11419   | 0   |
| <b>NEW PROJECTS</b>   | 0   | 0   | 0   |
| TOTAL **  | <b>13403</b>                                    | <b>13404</b>                                    | <b>1</b>                                    |
| Minus 'in-service'  | -12956  | -13023  | -67   |
| <b>Aggregate estimate of active projects in the Plan **</b> | <b>447</b>                                      | <b>381</b>                                      | <b>-66</b>                                  |

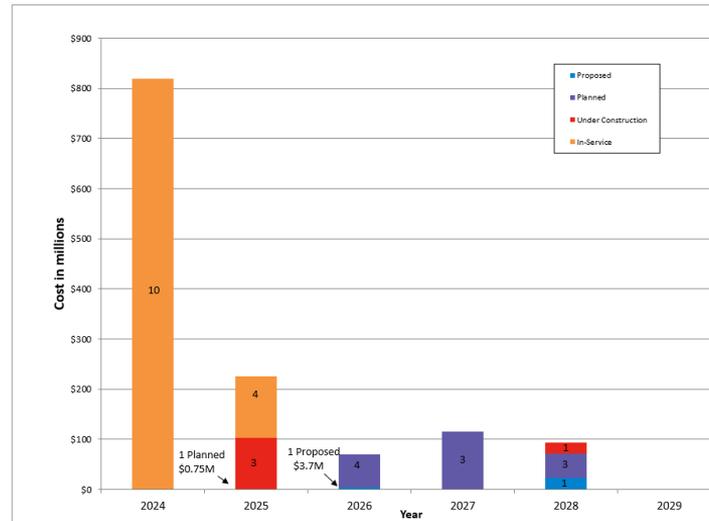
\* Transmission Owners provided all estimated costs, which may not meet the guidelines described in Planning Procedure 4, Attachment D.

\*\* May not sum exactly due to rounding.

\*\*\* The cost estimates for projects in the "Major Projects" category are moved to the "Other Projects" category once they are fully completed.

# October 2025 RSP Project List Update, cont.

- Investment of New England Transmission Reliability Projects by Status through 2029

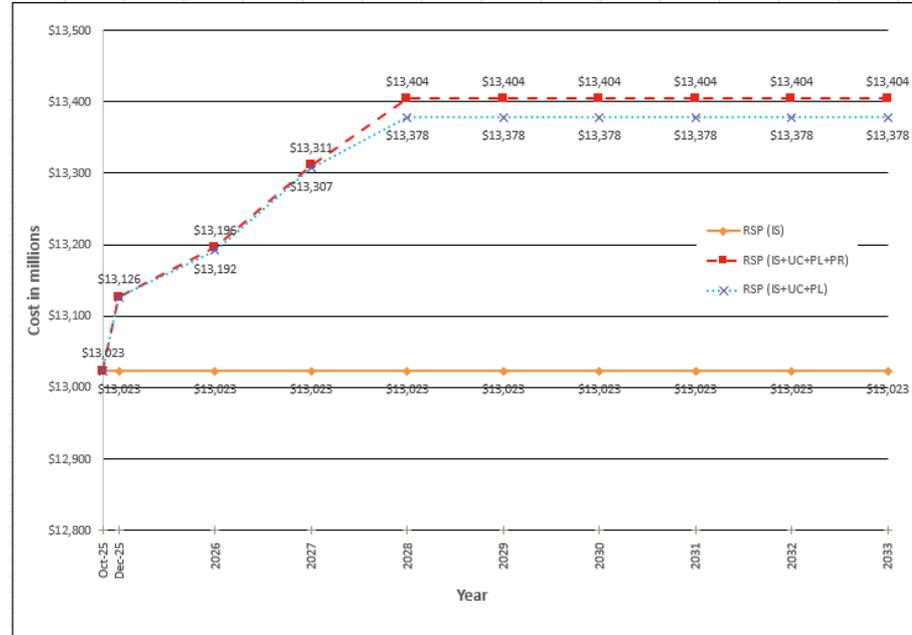


\* Numbers shown represent project quantities.

\*\* Future total \$ are shown at the end of the project. Totals do not reflect or show phasing in over time or the depreciation of prior projects. Total costs are associated with the year projects are placed in-service as reported in the Project List.

# October 2025 RSP Project List Update, cont.

- Cumulative Investment of New England Transmission Reliability Projects through 2033



\* IS – In Service, UC – Under Construction, PL – Planned, PR – Proposed

\*\* Future total \$ are shown at the end of the project. Totals do not reflect or show phasing in over time or the depreciation of prior projects. Total costs are associated with the year projects are placed in-service as reported in the Project List.

# October 2025 RSP Project List Update, cont.

- Reliability Project Counts and Aggregated Cost Estimates by Project Stage with Applied Accuracy Ranges\*

| Project Stage<br>(Status) | Component /<br>Project / Plan<br>Count | Estimate Range |         | Estimated<br>Costs<br>(\$millions) | Range                   |            |
|---------------------------|--|----------------|---------|------------------------------------|-------------------------|------------|
|                           |  | Minimum        | Maximum |                                    | Minimum<br>(\$millions) | Maximum    |
| Proposed                  | 2                                      | -25%           | 25% **  | 26                                 | 20                      | 33         |
| Planned                   | 11                                     | -25%           | 25%     | 231                                | 173                     | 288        |
| Under Construction        | 4                                      | -10%           | 10%     | 124                                | 112                     | 137        |
| <b>Total Plan</b>         | <b>17</b>                              |                |         | ***<br><b>381</b>                  | <b>304</b>              | <b>457</b> |
| In-Service ****           | 3                                      | -10%           | 10%     | 67                                 | 60                      | 73         |
| Cancelled                 | 0                                      | -25%           | 25%     | 0                                  | 0                       | 0          |

\* All costs are provided by Transmission Owners. The costs in the table reflect all projected in-service dates.

\*\* All estimates may not yet be at this level of accuracy; many estimates may be -25%/+50%.

\*\*\* May not add up due to rounding.

\*\*\*\* In-Service projects are those projects that went into service since the last update.

# Status of Major Transmission Projects

|  | PPA   | TCA   | Construction |
|--|---|---|--------------|
| Southeast MA/RI Reliability (SEMA/RI)                      | Approved<br>5/2017, 4/2018, 10/2023   | Submitted   | 2018 - 2027  |
| Greater Boston – North, South, Central and Western Suburbs | Approved<br>4/2015, 5/2015, 6/2016, 7/2019, 10/2020                           | Submitted   | 2010 - 2025  |
| New Hampshire (NH) 2029 Solutions                          | Approved<br>1/2022, 6/2022  | 7/16/2024   | 2023 - 2025  |
| Upper Maine (UME) 2029 Solutions                           | Approved 2/2022, 4/2024 (Versant Power)<br>Approved 5/2022, 8/2023 (Avangrid) | Submitted (Versant Power)<br><br>Not Submitted (Avangrid) | 2024 - 2028  |
| Boston 2033 Solutions                                      | Not Approved  | Not Submitted   | 2026 - 2028  |

# ASSET CONDITION LIST UPDATE



# Highlights of the Asset Condition List Update

- **Major cost estimate changes greater than \$5M that occurred between the June and October 2025 Asset Condition List**
  - (CT) UI Coastal Substation Flood Mitigation Study (ACLs 19 and 22)
    - Cost increase of \$10.1M in labor and equipment, engineering, permitting and AFUDC. The project was presented at [the September 2016 PAC](#) and the Congress 115 kV Substation Flood Mitigation (ACL 19) update was presented at [the February 2025 PAC](#)
  - (NH) Scobie Pond Station 345 kV Trench Replacement & Control House Expansion (ACL 349)
    - Cost increase of \$15.4M due to change of scope, revised construction schedule and outage coordination. The project was presented at [the August 2025 PAC](#)
  - (NH) Northern New Hampshire 115 kV Line Rebuilds - Q195 Line (ACL 387)
    - Cost increase of \$10.0M to reflect the current budget based on further engineering analysis. The project was presented at [the May 2023 PAC](#)
- **21 new projects totaling \$228.1M**
  - Details on the next few slides
- **12 upgrades have been placed in-service since the June 2025 update totaling \$442.6M**
  - Details on the next few slides
- **No cancelled projects since the June 2025 update**

# October 2025 Asset Condition List Update

- **21 New Projects**

| Project ID # | Transmission System Upgrades   | Cost (in millions \$) | Primary Equipment Owner |
|--------------|--|-----------------------|-------------------------|
| 485          | Scobie Pond 115 kV Substation Relay Upgrades (New Hampshire)   | 6.2                   | Eversource              |
| 486          | Orchard Substation – 115 kV Circuit Breaker Asset Condition Replacement (Massachusetts)  | 5.5                   | Eversource              |
| 487          | NERC CIP-014 Physical Security Upgrades - CT Round 3/Site 4 (Connecticut)  | 2.1                   | Eversource              |
| 488          | New Hampshire Asset Condition Structure Replacements – Line T198 (New Hampshire)   | 24.4                  | Eversource              |
| 489          | New Hampshire Asset Condition Structure Replacements – Line S153 (New Hampshire)   | 6.0                   | Eversource              |
| 490          | S-171, S-171S, and T-172S Hartford Ave-Ridgewood-Drumrock 115 kV Structure Replacement and Lightning Mitigation (Rhode Island) | 15.2                  | Rhode Island Energy     |
| 491          | Line 1759 Asset Condition Structure Replacement and Copperweld Retirement Project (Connecticut)                                | 18.2                  | Eversource              |

# October 2025 Asset Condition List Update, cont.

- **21 New Projects**

| Project ID # | Transmission System Upgrades  | Cost (in millions \$) | Primary Equipment Owner     |
|--------------|---|-----------------------|-----------------------------|
| 492          | NERC CIP-014 – Physical Security Upgrades – Round 3 / Site 5 (Connecticut)      | 2.1                   | Eversource                  |
| 493          | New Hampshire Asset Condition Structure Replacements - Line 373 (New Hampshire) | 9.3                   | Eversource                  |
| 494          | New Hampshire Asset Condition Structure Replacements - Line 385 (New Hampshire) | 16.5                  | Eversource                  |
| 495          | New Hampshire Asset Condition Structure Replacements - Line 391 (New Hampshire) | 25.8                  | Eversource                  |
| 496          | CMP Asset Condition Structure Replacements – Line S63 (Maine)                   | 5.9                   | Central Maine Power Company |
| 497          | CMP Asset Condition Structure Replacements – Line S200 (Maine)                  | 6.0                   | Central Maine Power Company |
| 498          | CMP Asset Condition Structure Replacements – Line S207 (Maine)                  | 11.8                  | Central Maine Power Company |

# October 2025 Asset Condition List Update, cont.

- **21 New Projects**

| Project ID # | Transmission System Upgrades                                    | Cost (in millions \$) | Primary Equipment Owner     |
|--------------|---|-----------------------|-----------------------------|
| 499          | CMP Asset Condition Structure Replacements – Line S374 (Maine)  | 11.2                  | Central Maine Power Company |
| 500          | CMP Asset Condition Structure Replacements – Line S375 (Maine)  | 11.0                  | Central Maine Power Company |
| 501          | CMP Asset Condition Structure Replacements – Line S377 (Maine)  | 5.6                   | Central Maine Power Company |
| 502          | CMP Asset Condition Structure Replacements – Line S385 (Maine)  | 11.9                  | Central Maine Power Company |
| 503          | CMP Asset Condition Structure Replacements – Line S391 (Maine)  | 7.7                   | Central Maine Power Company |
| 504          | CMP Asset Condition Structure Replacements – Line S392 (Maine)  | 7.2                   | MEPCO                       |
| 505          | CMP Asset Condition Structure Replacements – Line S3038 (Maine) | 18.6                  | Central Maine Power Company |

# October 2025 Asset Condition List Update, cont.

- **12 Projects Placed In-Service**

| Project ID # | Transmission System Upgrades  | Cost (in millions \$) | Primary Equipment Owner     |
|--------------|---|-----------------------|-----------------------------|
| 22           | Pequonnock 115 kV Substation rebuild with a new substation adjacent to the existing one (Connecticut) | 110.4                 | United Illuminating Company |
| 99           | NPCC Directory #1 Protection Modifications - Phase 4 (Rhode Island)                                   | 5.1                   | Rhode Island Energy         |
| 250          | Copper Conductor and Shield Wire Replacement - Line 1231/1242 (Massachusetts)                         | 158.5                 | Eversource                  |
| 358          | 345 kV Structure Replacements - 3041 Line (Connecticut)   | 32.2                  | Eversource                  |
| 359          | 345 kV Structure Replacements and OPGW Installation - 362 Line (Connecticut)                          | 19.2                  | Eversource                  |
| 377          | CT Asset Condition Project - Line 376 (Connecticut)   | 9.0                   | Eversource                  |
| 409          | Laminated Wood Structure Replacement Program Phase III and OPGW - G146 (New Hampshire)                | 53.6                  | Eversource                  |
| 414          | Structure Replacements & OPGW Installations - 348 Line (Connecticut)                                  | 9.7                   | Eversource                  |

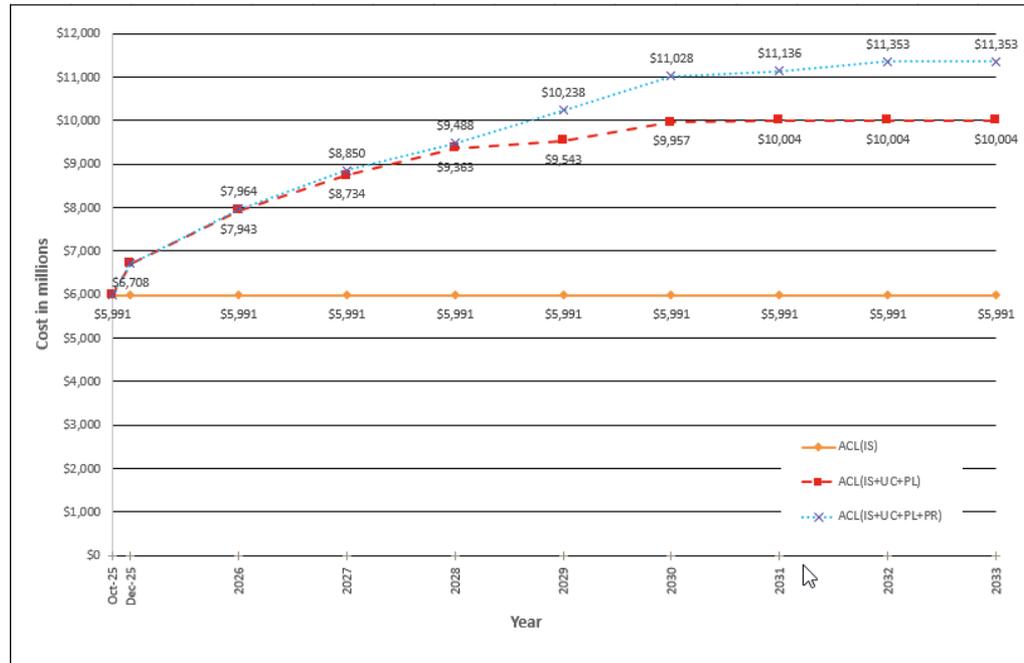
# October 2025 Asset Condition List Update, cont.

- **12 Projects Placed In-Service**

| Project ID # | Transmission System Upgrades   | Cost (in millions \$) | Primary Equipment Owner        |
|--------------|--|-----------------------|--------------------------------|
| 432          | Reconductoring East of Hurd State Park to Haddam Neck - Lines 362, 376, 1772 (Connecticut) | 14.7                  | Eversource                     |
| 445          | Campville 115 kV Substation Relay Upgrades (Connecticut)                                   | 5.1                   | Eversource                     |
| 452          | 302 345 kV Line Asset Condition Refurbishment (Massachusetts)                              | 19.4                  | National Grid, USA             |
| 456          | K19 Line Asset Condition Structure Replacement (Vermont)                                   | 5.8                   | Vermont Electric Power Company |

# October 2025 Asset Condition List Update, cont.

- Cumulative Investment of New England Asset Condition Projects through 2033

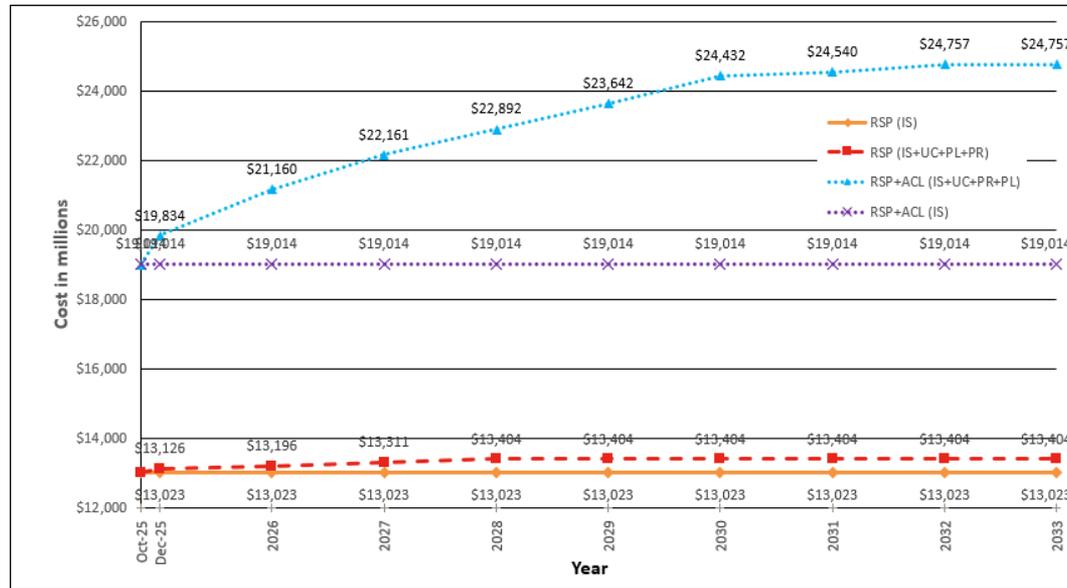


\* IS – In Service, UC – Under Construction, PL – Planned, PR – Proposed

\*\* Future total \$ are shown at the end of the project. Totals do not reflect or show phasing in over time or the depreciation of prior projects. Total costs are associated with the year projects are placed in-service as reported in the Project List.

# October 2025 Asset Condition List Update, cont.

- Cumulative Investment of New England Transmission Reliability and Asset Condition Projects through 2033



\* IS – In Service, UC – Under Construction, PL – Planned, PR – Proposed

\*\* Future total \$ are shown at the end of the project. Totals do not reflect or show phasing in over time or the depreciation of prior projects. Total costs are associated with the year projects are placed in-service as reported in the Project List.

# Next Steps

- Please provide comments related to the project lists to [pacmatters@iso-ne.com](mailto:pacmatters@iso-ne.com) by November 7, 2025
- The final version of the RSP Project list, Asset Condition list, and the presentation will be posted on the [RSP Project List and the Asset Condition List](#) website, along with responses to any written stakeholder feedback received, following the comment period

# Questions



# APPENDIX



# RSP Project List

- **Project List Column Definitions for**
  - Reliability Projects
  - Interconnection Projects
  - Market Efficiency Upgrades
  - Elective Projects

# RSP Project List – Column Definitions

- **Part Number (Part #)**
  - The Part #'s designate the 'need' category of the project\*
    - Part 1: these projects are Reliability Upgrades
      - 1a Planned (must be the preferred solution to solve the needs and if required, have I.3.9 approval) or Under Construction
      - 1b Proposed (is supported by a Solutions Study or a Competitive Solution Process)
    - Part 2: these projects are Generator Interconnection Upgrades
      - 2a Planned (I.3.9 approval with Interconnection Agreement including FCM related transmission upgrades to meet the Capacity Capability Interconnection Standard), or Under Construction
      - 2b Proposed (at a minimum, a completed System Impact Study and I.3.9 approval but no Interconnection Agreement)
    - Part 3: these projects are Market Efficiency Upgrades
      - 3a Planned (must be the preferred solution to solve the needs and have I.3.9 approval) or Under Construction
      - 3b Proposed (is supported by a Competitive Solution Process)
    - Part 4: these projects may be promoted by any entity electing to support the cost of transmission changes. The entity sponsoring the changes will have their own justification for their actions
      - 4a Planned (I.3.9 approval with Interconnection Agreement) or Under Construction
      - 4b Proposed (I.3.9 approval but without Interconnection Agreement)

\* Original categories are not changed when a project is placed 'In-Service' or 'Cancelled'.

# RSP Project List – Column Definitions, cont.

- **Project ID**
  - The Project ID is generated by ISO-NE System Planning
- **Primary Equipment Owner**
  - The company listed here is the responsible equipment owner/provider designated to design and implement the project
- **Other Equipment Owner**
  - For projects that involve multiple Transmission Owners, the company listed here is also a responsible equipment owner/provider designated to design and implement the project
- **Projected Month/Year of In-Service**
  - The month/year entered is the date the project is expected to be placed in service
- **Major Project**
  - Name is given to a project that consists of smaller subprojects
- **Project/Project Component**
  - The month/year entered is the date the project is expected to be placed in service
  - A brief, high-level description of the project is entered her
    - Includes major pieces of substation equipment and/or types of line work to be performed

# RSP Project List – Column Definitions, cont.

- **Status**
  - In Service
    - The project has been placed in operation
  - Under Construction
    - The project has received necessary approvals and a significant level of engineering or construction is underway
  - Planned
    - A regulated transmission solution upgrade that has been approved by the ISO pursuant to Section I.3.9 of the Tariff if required, or
    - An interconnection related transmission upgrade that has been approved by the ISO pursuant to Section I.3.9 of the Tariff with Interconnection Agreement
  - Proposed
    - A regulated transmission solution that has been selected by the ISO in response to a Needs Assessment and communicated to PAC, or
    - An interconnection related transmission upgrade that has been approved by the ISO pursuant to Section I.3.9 of the Tariff, but without Interconnection Agreement
  - Cancelled
    - Project has been cancelled

\* On December 10, 2019, FERC accepted Tariff changes that removed the 'Concept' category.

# RSP Project List – Column Definitions, cont.

- **PPA Approval (Review of Market Participant’s Proposed Plans)**
  - A date in this column signifies when the project received approval pursuant to Section I.3.9 of the ISO-New England Tariff. This approval indicates that the project will have no adverse impact on the stability, reliability, or operating characteristics of the system.
    - A ‘no’ indicates that an approval is required, but has not been received yet
    - An ‘NR’ indicates that an I.3.9 approval is not required
- **TCA Approval (Transmission Cost Allocation)**
  - A date in this column signifies when the project PTF costs were reviewed and approved. This approval indicates that it has been agreed whether, and by how much, the scope of the project and associated costs exceed regional needs
    - An ‘NR’ indicates that a TCA approval is not applicable because the project has been cancelled, has no/minimal PTF cost, or is associated with the interconnection of a resource or Elective Transmission Upgrade
- **Estimated Costs**
  - The PTF project cost estimate presented here should be the best estimate available. It is understood that the estimate accuracy may vary dependent on the maturity of the project. Accuracy tolerances for these estimates are targeted as follows:
    - Proposed Project that has been reviewed and approved to proceed by ISO-NE (+50%/-25%)
    - I.3.9-Approved Project (+/-25%), and
    - TCA-Approved Project (+/-10%)
  - An “NR” indicates that the project cost is not eligible for regionalization