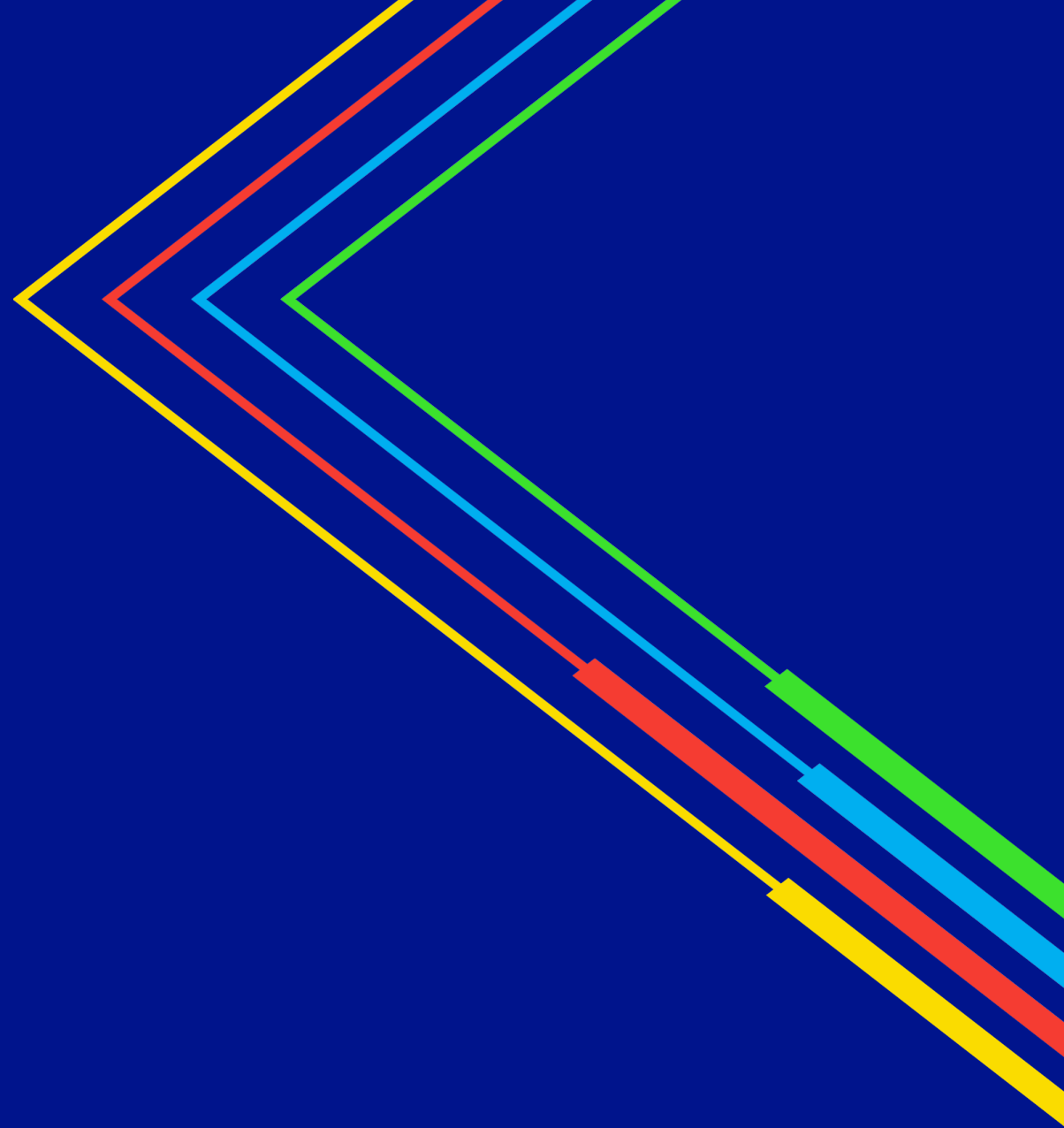


# SEMA-RI Project Updates

Planning Advisory Committee  
February 2025

national**grid**



# Background

Today's presentation to the PAC is for the National Grid SEMA-RI Group 2 project component RSP 1722.

- RSP 1720 – Separate N12/M13 DCT & reconductor N12 & M13 between Somerset and Bell Rock.
- RSP 1721 – Reconfigure Bell Rock to breaker and half station, and upgrade to BPS standards. Split M13 line at Bell Rock and make Bell Rock ready to terminate 114 line. Install new breaker in series with N12/D21 tie breaker, upgrade D21 line switch and install 37.5 MVAR capacitor.
- **RSP 1722 - Extend Line 114 - Dartmouth town line (Eversource- NGRID border) to Bell Rock (~4.2 miles)**

# Background

**SEMA/RI Project PAC Presentations: October 2012 (Needs Assessment), February 2014 (Needs Assessment), November 2015 (Scope of Work), October 2022 (Cost Update)**

**SEMA/RI Project RC Presentations: April 2018 (PPA), June 2019 (Groups 1, 3, 4 TCA), September 2021 (Cost Update), September 2022 (Cost Update), October 2023 (Group 2 TCA), November 2023 (Group 2 TCA)**

# National Grid SEMA-RI Project Cost Estimates

|             | State | Primary Equipment Owner | Projected In-Service Month/Year | Project  | Original Estimated PTF Costs (March 2017) | Oct-23 Estimated PTF Costs | Feb-25 Estimated PTF Costs |
|-------------|-------|-------------------------|---------------------------------|--|---|----------------------------|----------------------------|
| 1720        | MA    | National Grid, USA      | 3/2027                          | Separate N12/M13 DCT & reconductor N12 & M13 between Somerset and Bell Rock (~3.5 miles)   | \$39,000,000                              | \$101,120,000              | \$101,120,000              |
| 1721        | MA    | National Grid, USA      | 8/2023 <sup>1</sup>             | Reconfigure Bell Rock to breaker and a half station, and upgrade to BPS standards, split M13 line at Bell Rock and terminate 114 line at Bell Rock. Install new breaker in series with N12/D21 tie breaker, upgrade D21 line switch and install 37.5 MVAR capacitor. | \$30,800,000                              | *\$36,180,000              | *\$36,180,000              |
| 1722        | MA    | National Grid, USA      | 12/2026 <sup>2</sup>            | Extend Line 114 - Dartmouth town line (Eversource- NGRID border) to Bell Rock (~4.2 miles)   | \$12,300,000                              | \$13,944,000               | \$22,620,000               |
| Total Costs |       |                         |                                 |  | \$82,100,000                              | \$151,250,000              | \$159,920,000              |

<sup>1</sup> Actual in-service date and PTF costs

<sup>2</sup> Projected in-service date changed from 12/2025 to 12/2026 due to permitting delays

# Cost Increase Drivers

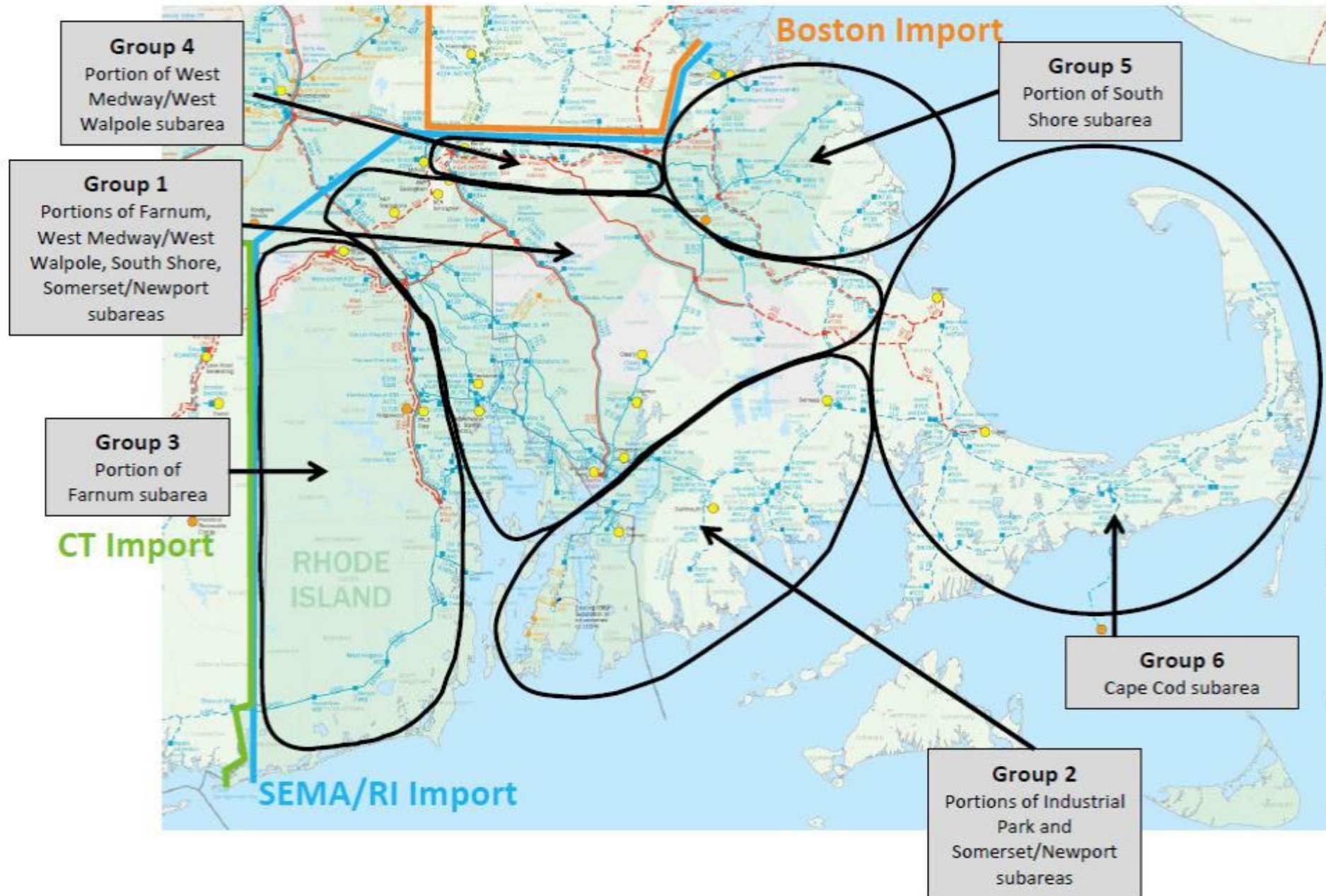
- **RSP 1722 – Line 114 Extension**

- The primary drivers of project cost increases are schedule delays and post-pandemic inflationary pressures.
  - Environmental permitting and licensing of the project began in 2018.
  - At the request of ISO-NE, the project was paused in 2020 while ISO-NE performed its SEMA/RI 2029 Needs Assessment Update to confirm the continued need for the project.
  - After ISO-NE confirmed the continuing need for the project, permitting and licensing activities were resumed.
  - The original project estimate was prepared in 2021 and the Massachusetts Energy Facilities Siting Board (MAEFSB) Petition was filed in December 2021.
  - Final approval from the MAEFSB is still pending but is expected within the next several months.
  - Since the time of the original project estimate, the costs of materials, labor, equipment and consumables have increased with post-pandemic market and supply chain conditions.
  - The extended schedule has also led to increased overheads, project administrative costs, and AFUDC costs.

# Cost Increase Drivers

|                                     | November 2023 Estimate, \$M | February 2025 Estimate, \$M | Net \$M Variance | Variance Comments   |
|-------------------------------------|-----------------------------|-----------------------------|------------------|---|
| Material                            | 1.720                       | 3.824                       | 2.104            | Schedule delays and post-pandemic market and supply chain conditions have caused material cost increases. |
| Labor & Equipment                   | 3.540                       | 7.315                       | 3.775            | Schedule delays and post-pandemic market conditions have caused labor & equipment cost increases.         |
| Right of Way                        | 0.000                       | 0.000                       | 0.000            |   |
| Engineering/Permitting<br>/Indirect | 5.297                       | 6.066                       | 0.769            | Extended schedule has resulted in increased overheads and project administrative costs.                   |
| Escalation                          | 0.547                       | 2.190                       | 1.643            | Extended schedule and post-pandemic market conditions have led to additional escalation.                  |
| AFUDC                               | 0.381                       | 2.301                       | 1.920            | Extended schedule has led to additional AFUDC.  |
| Contingency                         | 2.459                       | 0.920                       | -1.539           | Advancement of design, permitting, and construction planning has allowed for Contingency reduction.       |
| Total                               | 13.944                      | 22.616                      | 8.672            |   |

## Appendix – SEMA/RI Area Map



## Appendix – ISO-NE EMS Area Map

