

## **Comments of CTC Global on NESCOE's Proposed Transmission Solicitation Scope**

### **I. Introduction and Overview**

CTC Global Corporation ("CTC Global") is submitting these comments to the New England States Committee on Electricity ("NESCOE") regarding the October 16, 2024 letter to ISO New England Inc. ("ISO-NE").<sup>1</sup> The NESCOE Letter outlines the potential scope of a solicitation for transmission that could address long-standing transfer constraints between Maine and the rest of New England. As NESCOE states:

NESCOE is interested in focusing the first LTP solicitation on increasing transfer capability within the system to allow more power to flow from Maine to New Hampshire and into southern New England. Constraints on various interfaces have posed longstanding impediments to energy flow from northern New England to the south of parts of the region. The 2050 Transmission Study and other studies show that bottlenecks on the interfaces between Maine and southern New England will persist and only worsen in the future. Additional 2050 Transmission Study analysis further indicates that relocating generations south of these interfaces did not resolve the constraints. Strengthening the connections between northern and southern New England will enhance reliability and market efficiency by resolving known constraints on the transmission system. It will also position the region to integrate affordable resources more efficiently in the coming years.

To achieve the goals of the New England states, including the development of 3,000 MWs of additional generation in export-constrained Maine for regional reliability and to also meet the energy goals for Maine itself as outlined in its Maine Energy Plan: Pathway to 2040,<sup>2</sup> significant additional transmission energy capacity must be developed quickly and economically. The use of advanced conductors to double the capacity of existing lines by

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<sup>1</sup> Letter on Potential Transmission Needs for a Longer-term Transmission Planning RFP <https://nescoe.com/resource-center/ltp-rfp-letter/> ("NESCOE Letter").

<sup>2</sup> <https://www.maine.gov/energy/studies-reports-working-groups/current-studies-working-groups/energyplan2040>

either 1) reconductoring existing lines or 2) rebuilding existing lines at the *same voltage* (where structure replacement is advisable) without raising tower height or width of a right of way should be an identified element in the request for potential solutions to the solicitation needs. It should also be included in proposal evaluation and weighted in scoring to ensure that the most cost-effective and most expeditious solutions are employed.

The states have the latitude to incorporate this focus into a long-term transmission planning solicitation and ensure that needless siting delays are not triggered by additional tower height or wider rights of way where avoidable. These comments also highlight recent state support for the time and cost savings of using advanced conductors for reconductoring, line rebuilds with new structures, and new line builds. Finally, these comments provide some guidance on where advanced conductors might be utilized to quickly increase capacity to meet the objectives of the NESCOE request.

## II. Comments

### A. Advanced Conductors

Advanced conductors utilize carbon-based cores instead of steel cores to *simultaneously* double power transfer capability while reducing electric losses by up to 30% or more over legacy conductors.<sup>3</sup> Advanced conductors do this at the *same voltage* as existing lines, meaning they do not require wider rights of way or taller towers to rebuild existing circuits (structures and lines).<sup>4</sup> Because advanced conductors do not weigh more than the existing legacy conductors they replace, this doubling of capacity can occur on existing towers for wire reconductoring where structures are in good shape. In both the cases of rebuilds and reconductoring, new siting is avoided, unlike expansions of rights of way or increases in tower height, which may trigger review and delay objections in the siting process.<sup>5</sup> As a result, advanced conductor reconductoring can double line capacity

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<sup>3</sup> The U.S. Department of Energy defines “advanced conductors” as: “Conductors that increase line capacity by >1.5x (at a similar weight per foot); advanced conductors use composite core (instead of traditional steel cores) to improve efficiency and increase capacity with limited sag.” *Pathways to Commercial Liftoff, Innovative Grid Deployment*, US Dept. of Energy, April 2024 (“DOE Liftoff Report”), at p. 12.

[https://liftoff.energy.gov/wp-content/uploads/2024/04/Liftoff\\_Innovative-Grid-Deployment\\_Final\\_4.15.pdf](https://liftoff.energy.gov/wp-content/uploads/2024/04/Liftoff_Innovative-Grid-Deployment_Final_4.15.pdf)

<sup>4</sup> Line rebuilds that include both structures and lines often occur with what are known as Asset Condition projects in the New England region, *i.e.*, transmission lines that are replaced due to age and physical condition.

<sup>5</sup> Siting objections can result in transmission project delays or project cancellation. Visual impacts from raising tower heights can be a significant issue. See *e.g.*, [https://www.laconiadailysun.com/news/local/northern-pass-decision-restores-faith/article\\_57c913b2-82cb-5a8f-b297-81115cecd23.html](https://www.laconiadailysun.com/news/local/northern-pass-decision-restores-faith/article_57c913b2-82cb-5a8f-b297-81115cecd23.html) “The project includes transmission towers of up to 110 feet in height. People fear views will be harmed and property values will be reduced.”

instead of seven to ten years and improve efficiency in as little as 12-24 months. Rebuilding can be done at the same height structure replacement pace.

In addition, because carbon core does not sag because of high temperatures – a limiting factor of steel core conductors – advanced conductors like ACCC® mitigate the risk of wildfire ignition and other vegetation contacts and withstand damage from intense wildfire heat far better than traditional steel conductors.<sup>6</sup> They can also transfer significant amounts of additional power under various N-1, N-1-1, etc. contingency cases with emergency ratings that can be utilized not for hours but *over a year*, further improving power system reliability by increasing the options available to system operators to flow power to load.

These attributes also make advanced conductors the best choice for *new line builds* where shorter structures and narrower rights of way than a higher voltage would require may be used to move the same amount of power, reducing siting risk from objections to view shed impacts and environmental concerns.

While sometimes erroneously described as “new”, this technology is widely deployed globally. CTC Global’s ACCC is the most widely deployed advanced conductor, with over 120,000 miles in use worldwide over the last two decades, including in projects across 30 US states.<sup>7</sup>

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<sup>6</sup> ACCC® also has the same blowout characteristics of steel core lines. While lighter, there is less sag in the installation and less conductor to move laterally. ACCC® also has the same ice performance as steel core lines while being rating to carry significantly more weight. Where even greater ice performance is needed, CTC Global has lines that further increase ice-carrying capability for extremely icy environments. Because they are not re-tensioned for sag and do not corrode near salt water, ACCC® lines have a longer projected lifespan than steel core conductors.

<sup>7</sup> CTC Global is the world’s leading manufacturer of advanced conductors. A U.S. company with five global factories, CTC has deployed over 10 times the number of advanced conductors of all other advanced conductor manufacturers combined.

## High-Capacity, Energy-Efficient ACCC® Conductor Case Study

AEP Energized Reconductor Project Example

**Description:** 240 circuit miles, 345 kV line, double bundle

**Project:** replace 1,440 miles of ACSR conductor with ACCC

### Objectives

- Improve reliability (less sag and corrosion)
- Increased capacity to serve growth (2X ACSR)
- Improve grid resiliency using composite core
- Retain existing structures – to reduce costs
- Eliminate down time with live line reconductoring

### Additional Benefits Received by AEP

- Project completed eight months ahead of schedule
- Reduced line losses by 30%
  - Saving \$15 million/yr. (300,000 MWh at \$50)
  - Reducing CO2 emissions by ~200,000 metric tons per year (= 42,000 cars off the road)
  - Freeing up ~34 MW of generation capacity



*This project won EEI Transmission Project of the Year - 2016*

### ACCC Conductor Summary

- Over 175,000 km of ACCC Conductor currently in service in 67 countries
- Over 1,325 projects completed or in the queue
- 35 authorized ACCC conductor manufacturing partners, worldwide
- 11 authorized ACCC hardware manufacturers
- Outstanding engineering, installation support & product warrantee

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This case study from an installation in AEP's service territory shows the impact of 345kV line reconductoring. This work was done with lines in service, and the system's increased efficiency was equivalent to adding another 34 MW generator. The project also doubled the amount of energy the lines could carry at the 345kV voltage level. The project won EEI's Project of the Year in 2016.



As an example of the resilience benefits of advanced conductors, this image shows an ACCC® line with a large object thrown into it during an EF-5 tornado with peak winds of 210 mph in Oklahoma in 2013. While the aluminum wrap was damaged, the line remained intact, allowing for a faster repair and return to service.

## B. Authority for States to Include Project Scope and Evaluation Criteria

The New England states and ISO-NE worked cooperatively to develop the long-term transmission planning (“LTTP”) process, filing those rules with the Federal Energy Regulatory Commission earlier this year. While states are not required to utilize an RTO planning process to issue transmission RFPs, the LTTP process affords an up-front structure that can be employed by states to identify and develop policy-based transmission.<sup>8</sup>

The ISO-NE tariff sets out a non-exclusive list of evaluation criteria.<sup>9</sup> In choosing to utilize an RTO-led planning alternative, NESCOE may provide input regarding additional criteria and weighting of those criteria to ISO-NE.<sup>10</sup>

The New England states can and should request that ISO-NE solicit projects that utilize existing rights of way with advanced reconductoring or structure rebuilds with advanced conductors, where necessary for condition, at the same voltage, and further that the solicitation should evaluate projects for the use of advanced conductors in reconductoring, line rebuilds, and new transmission lines, and weight the time for implementation, minimizing of siting process risk appropriately given the need to quickly implement transmission solutions. The certainty regarding the timing of these transmission solutions are a threshold issue for resource development like offshore wind and additional onshore resources.

## C. State Support for Wider Use of Advanced Conductors in the United States, Including in Maine

A recent University of California Berkeley Study, performed in conjunction with GridLab, and recently published in the *Proceedings of the National Academy of Sciences*, found that advanced conductors could quickly address 80% of the needed interregional

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<sup>8</sup> See, e.g., J. DeLosa, T. Paradise, J. Pfeifferberger *Pathways to Coordination Proactive, State-Led Transmission Development to Reduce Costs and Achieve Goals in PJM*, October 2024 <https://www.brattle.com/wp-content/uploads/2024/10/Pathways-to-Coordination-Proactive-State-Led-Transmission-Development-to-Reduce-Costs-and-Achieve-Goals-in-PJM-1.pdf>

<sup>9</sup> Section 16.4 of Attachment K to the ISO New England Open Access Transmission Tariff, available at the following URL: [https://www.iso-ne.com/static-assets/documents/2021/07/sect\\_ii\\_att\\_k.pdf](https://www.iso-ne.com/static-assets/documents/2021/07/sect_ii_att_k.pdf) “ISO will consider several factors during the evaluation process for identification of the preliminary preferred Longer-Term Transmission Solution. These factors may include, but are not limited to, the following listed in no particular order... ”

<sup>10</sup> If the New England states elect to issue an RFP directly or an RFP with ISO-NE support along the PJM state agreement approach, they would fully control project review and the selection of one or more projects.

transfer needs.<sup>11</sup> Recognizing these attributes and the challenges of integrating new resources,<sup>12</sup> serving new loads,<sup>13</sup> improving system reliability, and reducing consumer costs over transmission planning and construction horizons that may last 10 years or longer, the National Association of Regulatory Utility Commissioners, or “NARUC”, recently passed a resolution at its November 2024 meeting.<sup>14</sup> The resolution noted the U.S. Department of Energy’s finding that the use of advanced conductors could meet the NERC 10-year peak load growth projections while further noting “the federal government, States, and industry can work together to accelerate the use of these ... technologies to affordably expand the transmission capacity needed to maintain reliability and meet growing electricity demand...” and that there are “...benefits to ratepayers of the holistic deployment of [advanced conductors]<sup>15</sup> across their systems... .”

NESCOE itself, in its June 12, 2024, rehearing request on Order No. 1920, calls for a rebuttable presumption regarding the use of advanced transmission technologies (including advanced conductors):

The final rule and the record at large in this proceeding demonstrate that alternative transmission technologies have tremendous potential to optimize and enhance the system in ways that traditional transmission solutions cannot. As such, the Commission’s requirement that transmission providers consider alternative transmission technologies “consistent with the requirement in their OATTs for other transmission solutions” should go one step further. NESCOE requests that the Commission grant rehearing and take the next step of requiring transmission providers to prioritize consideration of alternative transmission technologies when evaluating potential transmission solutions. The Commission should direct

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<sup>11</sup> Emilia Chojkiewicz, et al. *Accelerating transmission capacity expansion using advanced conductors in the existing right-of-way*, Journal of the Proceedings of the National Academy of Sciences, September 23, 2024.

<https://www.pnas.org/doi/10.1073/pnas.2411207121> This and other work have been highlighted in recent articles, See, e.g., Brad Plumer, *The U.S. Urgently Needs a Bigger Grid, Here’s a Fast Solution*, New York Times, April 9, 2024. <https://www.nytimes.com/2024/04/09/climate/electric-grid-more-power.html>

<sup>12</sup> Lawrence Berkeley National Laboratory, Grid connection backlog grows by 30% in 2023, dominated by solar, wind, and energy storage requests, April 10, 2024. <https://emp.lbl.gov/news/grid-connection-backlog-grows-30-2023-dominated-requests-solar-wind-and-energy-storage>

<sup>13</sup> Load growth without the ability to integrate new generation resources is causing significant power market price spikes. In the PJM region, a mismatch between new resources and growing load caused an additional \$12.5 billion in capacity market costs for a single annual auction. See, e.g., Ethan Howland, PJM capacity prices hit record highs, sending build signal to generators, Utility Dive, July 31, 2024.

<https://www.utilitydive.com/news/pjm-interconnection-capacity-auction-vistra-constellation/722872/>

<sup>14</sup> *Resolutions Passed by the NARUC Board of Directors at the November 10-13, 2024 NARUC Annual Meeting and Education Conference in Anaheim, California* [https://pubs.naruc.org/pub/812873F4-E348-B77F-4D75-E513FF13A86D?\\_gl=1\\*d4pke9\\*\\_ga\\*NTUxOTg3Mjk0LjE3MzEzNjUxNzM.\\*\\_ga\\_QLH1N3Q1NF\\*MTczMTk0NjQyNC4xNC4xLjE3MzE5NDY0MzEuMC4wLjA](https://pubs.naruc.org/pub/812873F4-E348-B77F-4D75-E513FF13A86D?_gl=1*d4pke9*_ga*NTUxOTg3Mjk0LjE3MzEzNjUxNzM.*_ga_QLH1N3Q1NF*MTczMTk0NjQyNC4xNC4xLjE3MzE5NDY0MzEuMC4wLjA) at pp. 9 and 10.

<sup>15</sup> The NARUC resolution uses the term “high performance conductors”.



transmission providers to incorporate procedures into their tariffs, establishing a rebuttable presumption that incorporating alternative transmission technologies as a solution to an identified Long-Term or existing Order 1000 transmission need would result in a more efficient or cost-effective transmission solution.

Incorporating a rebuttable presumption prioritizing the consideration of alternative transmission technologies would burden the transmission provider to demonstrate why alternative transmission technologies are not, on their own or as a component of a larger solution, the more efficient or cost-effective solution. ...

Prioritizing alternative transmission technologies when identifying, evaluating, and selecting transmission solutions appropriately recognizes alternative transmission technologies' unique technological value and benefits. The potential for alternative transmission technologies to be deployed quickly and at a lower cost than traditional transmission upgrades requires that transmission providers consider these modern technologies as the starting point in evaluating solutions. (citations omitted)<sup>16</sup>

Last week, the Commonwealth of Massachusetts passed new legislation requiring that for any “capital improvements or additions to the distribution or transmission system, the distribution or transmission company shall”:

conduct a cost-effectiveness and timetable analysis of multiple strategies, including, but not limited to, the deployment of advanced transmission technologies, advanced conductors, grid-enhancing technologies, or energy storage used as a distribution or transmission resource. Where advanced transmission technologies, advanced conductors, grid-enhancing technologies, or energy storage used as a distribution or transmission resource, whether in combination with or instead of capital investments, offer a more cost-effective strategy for achieving distribution or transmission goals, including, but not limited to, distributed energy resource interconnection, grid reliability, and enhanced cyber and physical security, the department, to the extent permitted under federal law, may approve the deployment of advanced transmission technologies, advanced conductors, grid-enhancing technologies or energy storage used as a distribution or transmission resource.<sup>17</sup>

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<sup>16</sup> *Request for Rehearing and Clarification of the New England States Committee on Electricity* in Docket No. RM21-17-000, (June 12, 2024) at pp. 24-25. <https://elibrary.ferc.gov/eLibrary/filedownload?fileid=B456E37B-D88D-C45C-A63F-900DE4800000> While not adopted in FERC’s Order No. 1920-A, the principals can be adhered to in state-sponsored solicitations.

<sup>17</sup> Massachusetts Senate Bill 2967, signed into law by Gov. Healy on November 21, 2024, <https://malegislature.gov/Bills/193/S2967.pdf>

The New England states are not alone in this effort to utilize advanced conductors to quickly and cost-effectively materially improve the capabilities of their transmission and distribution systems. Other states have also recently taken steps to remove barriers<sup>18</sup> or create new incentives for advanced conductor use.

For example, California recently passed legislation requiring utilities to look at all distribution and transmission lines for replacement with advanced conductors. California SB 1006<sup>19</sup> requires transmission and distribution utilities on or before January 1, 2026, and at least every four years thereafter to:

- complete an evaluation of both transmission lines and distribution lines
- determine which can be reconducted with advanced conductors to "cost-effectively achieve one or more" of the following:
  - (A) Increase transmission or distribution capacity.
  - (B) Reduce transmission or distribution system congestion.
  - (C) Reduce curtailment of renewable and zero-carbon resources.
  - (D) Increase reliability.
  - (E) Reduce the risk of igniting wildfire.
  - (F) Increase capacity to connect new renewable energy and zero-carbon resources.
  - (G) Reduce line losses.
  - (H) Increase the ability to energize new customers or serve increased customer load quickly.

The final plans will be submitted to the California Public Utilities Commission and made publicly available. The CPUC will request that the California ISO consider the plans as part of the ISO planning process.

Last year, Montana's legislature unanimously voted to include advanced conductors meeting the statute's definitions in utility rates.<sup>20</sup>

At the federal level, the U.S. Department of Energy has highlighted the role that advanced conductors can play in quickly and cost-effectively building out the nation's

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<sup>18</sup> GridLab produced a report on removing barriers to advanced conductors in April of 2024. See M. O'Boyle et al., *Supporting Advanced Conductor Deployment: Barriers and Policy Solutions*, A companion report to "The 2035 Report: Reconductoring with advanced conductors can accelerate the rapid transmission expansion required for a clean grid" <https://www.2035report.com/wp-content/uploads/2024/05/5.3-Reconductoring-policy-report.pdf>

<sup>19</sup> [https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=202320240SB1006](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=202320240SB1006)

<sup>20</sup> Montana House Bill No. 729, AN ACT PROVIDING FOR ADVANCED CONDUCTOR COST-EFFECTIVENESS CRITERIA; ALLOWING ADVANCED CONDUCTOR RATE BASING; PROVIDING A DEFINITION; AMENDING SECTION 69-3-702, MCA; AND PROVIDING AN IMMEDIATE EFFECTIVE DATE. [https://archive.legmt.gov/bills/2023/HB0799/HB0729\\_2.pdf](https://archive.legmt.gov/bills/2023/HB0799/HB0729_2.pdf)



transmission system,<sup>21</sup> while Maine’s Senator Angus King has specifically called out the need for advanced conductors in Senate energy hearings.<sup>22</sup>

#### D. High-Level Analysis of Existing Lines and Rights of Way that May Benefit from Advanced Conductors in this Solicitation

Using advanced conductor upgrades to enhance North-South transfer capability could enhance constructability and reduce adverse impacts. Analysis of transmission segments in Maine, New Hampshire, and northeast Massachusetts associated with North-South capability upgrades demonstrates that advanced conductors can facilitate transmission expansion and minimize impacts on host communities and the environment.

As a starting point, this analysis considers upgrade “Roadmaps” associated with North-South transfers in ISO-NE’s 2050 Transmission Study to serve a 51GW load in 2050:

- **AC Roadmap:** This roadmap consists of new 345kV lines from the Surowiec substation in Pownal, Maine, to the Timber Swamp substation in Hampton, New Hampshire, and another 345 kV line from Timber Swamp to the Ward Hill substation in Haverhill, Massachusetts. An additional 345 kV partially overhead/partially underground line would also be required from Ward Hill to the Wakefield Junction substation in Wakefield, Massachusetts, continuing to the Mystic substation in Everett, Massachusetts. A third AC cable (in addition to two existing AC cables) from the Stoughton 345 kV substation in Stoughton, Massachusetts, to the K Street substation in Boston, Massachusetts, would be required to help resolve import issues in the southern and western portions of the Boston sub-region. A 57 GW winter peak would require a second 345 kV Timber Swamp-Ward Hill line and the above-mentioned new lines. ISO-NE acknowledges that this option is “limited in its flexibility due to constrained rights-of-way along much of the path since lines connecting Maine to Massachusetts should be overhead in order to have enough capacity” and that loss of all lines in a right-of-way would need to be evaluated as a severe contingency.
- **Minimization of New Lines Roadmap:** This roadmap maximizes rebuilding of existing lines and would still require the new 345 kV partially overhead/partially underground Ward Hill-Wakefield Junction-Mystic line and the third Stoughton to K St AC cable mentioned in roadmap #1. This roadmap would not be able to meet a 57

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<sup>21</sup> See generally, DOE Liftoff Report.

<sup>22</sup> See United States Senate Committee on Energy and Natural Resources, March 21, 2024, at time stamp 1:43:30. <https://www.energy.senate.gov/hearings/2024/3/full-committee-hearing-to-consider-ferc-nominations>

GW peak load. ISO-NE did not identify additional lines that would be needed to meet a 57 GW peak load but noted that additional lines “began to converge on the same solutions as other roadmaps as more lines were added.”

These roadmaps would also require hundreds to over a thousand miles of transmission rebuilds.

Utilizing advanced conductors could reduce the complexity, cost and impacts of new transmission needed to increase North-South transfer capability. A review of transmission segments associated with the North-South/Boston Import ‘Roadmaps’ from the 2050 Transmission Study illustrates the potential benefits of utilizing advanced conductors. In existing rights of way already containing multiple lines, utilizing advanced conductors could avoid the complexity, costs, and adverse impacts of reconfiguring existing lines to accommodate new transmission. Examples include:

- 1) Surowiec to South Gorham, where the existing right of way contains four 115kV lines, one 345kV line, and two sub-transmission lines in certain sections.
- 2) South Gorham to Maguire Road, where a relatively narrow right of way contains two 115kV lines and one 345kV line.
- 3) Maguire Road to Eliot Switching Station, where the right of way contains two 115kV lines, one 345kV line, and in certain segments, additional sub-transmission.
- 4) Eliot Switching Station to Newington Pond, where the right of way contains one 345kV line and one 115kV line, both of which share structures to cross the Piscataqua River and Spinney Creek.
- 5) Newington Pond to Timber Swamp, where transmission traverses dense commercial areas and three neighborhoods in Newington and Portland, crosses Rt. 4, Rt. 1, and I-95 twice.
- 6) Ward Hill to Tewksbury, where transmission crosses the Merrimack River twice, Routes 213, 113, and 133, I-93, I-495 (twice), and dense commercial and residential areas, including Methuen, a designated Environmental Justice community.<sup>23</sup>

Utilization of advanced conductors could reduce adverse environmental impacts by minimizing the need to undertake extensive construction activities or expand rights of way in ecologically sensitive locations. Examples include:

- 7) Newington Pond to Timber Swamp, where the right of way traverses wetlands on the City of Portsmouth Land south of I-95, the Packer Bog, the Chen Sau Conservation Area, and the Eaton Parcel.

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<sup>23</sup> See: <https://www.mass.gov/info-details/environmental-justice-populations-in-massachusetts>

- 8) Timber Swamp to Seabrook, where a narrow right of way crosses the Hampton Salt Marsh Conservation Area for approximately two miles.
- 9) Seabrook to Ward Hill, where the right of way crosses the Burrows-Brookside Sanctuary, Woodsom Farm Park, Amesbury Town Forest, the Merrimack River, the Crane Pond Wildlife Management Area, Upper Parker River Wildlife Management Area, and the Mazurenko Farm Conservation Area.
- 10) Tewksbury to Wakefield Junction, where the right of way traverses Cedar Swamp and multiple wetlands.

### III. Conclusion

CTC Global appreciates the opportunity to provide this input on the NESCOE Letter. Advanced conductors can increase the viability and decrease the impacts of constructing transmission to achieve the desired objectives of the New England state's initial Longer-Term Transmission Planning procurement. The approaches discussed above provide a model for efficiently upgrading the New England transmission system, doubling capacity and improving efficiency without triggering new siting review for taller structures or expanded rights of way. It also sets out considerations that can minimize the siting risks for new transmission facilities. The NESCOE member states can utilize their request and specifications for how needs are described and solutions are evaluated to ensure that optimal solutions can be identified, constructed, and on-line in the shortest possible amount of time providing the near term certainty needed for new resource projects to move forward and realize the goals of the New England states.