EVERSOURCE

Scobie Pond 345 kV Trench Replacement & Control House Expansion Project

Project Update

Planning Advisory Committee Meeting

August 20, 2025

Background Information

Scobie Pond Substation

- This project was previously presented to ISO-NE PAC on the June 15th, 2022
- This presentation is a cost update as required by the Transmission Planning Process Guide because the cost of the project has increased by more than 50%

Key Details	
Location	Londonderry NH
Operating Voltage	345 kV
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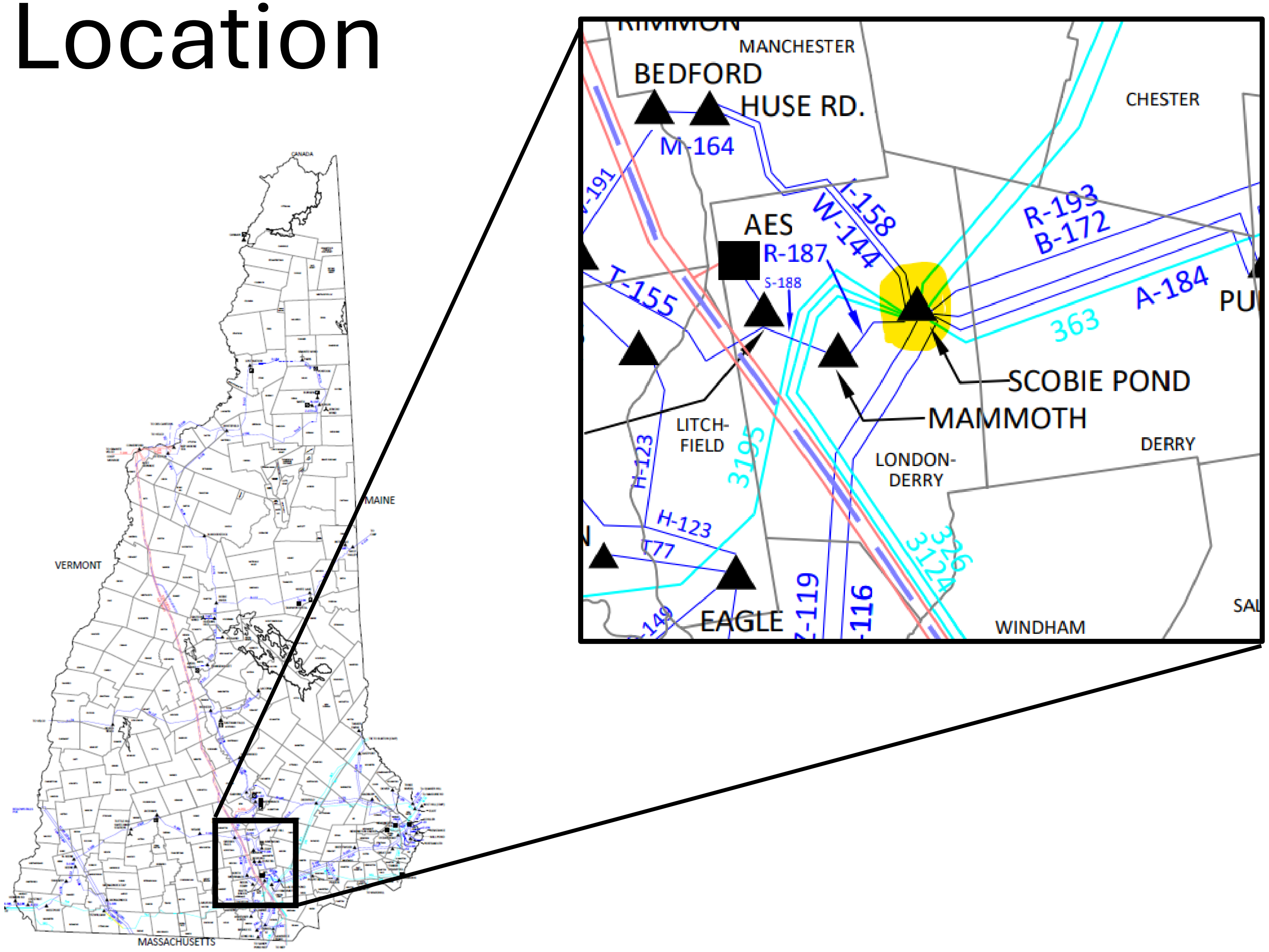
Age and Upgrade History	• Primary trench system was replaced in 2011 and 2015 • Secondary trench system was installed around 1970
Prior PAC Presentations	• June 15, 2022, ACL #349

Existing Equipment

Material	Configuration	Installed/ Replaced	Avg. age
Trench System 1	Primary trench system	2011, 2015	10 years
Trench System 2	Secondary trench system	1970	55 years
Control House	Constructed with separate areas for primary and secondary relaying	1960s	65 years

Project Location



Project Needs and Drivers

Equipment Concerns

Overview/Need	
Primary Concerns	
Secondary Trench Systems	• Installed around 1970 • Intended to be light duty and not intended to be driven over except in specified locations • Existing concrete covers show signs of cracking, covers often break when removed and can no longer be used resulting in uncovered sections until repair/replacement can be made • Existing cable trench side walls and boxes are deteriorating and cannot support trench covers • Secondary cabling compromised in exposed trench sections, failing concrete walls and covers presents risk to the installed cables and personnel
Secondary Concerns	
Control House	• Through many years of upgrades, cable trays have become congested and does not currently meet NPCC Directory 4 requirements • Some secondary control equipment (such as DC panelboards) pre-dates control house construction, is obsolete and no longer supported by manufacturer

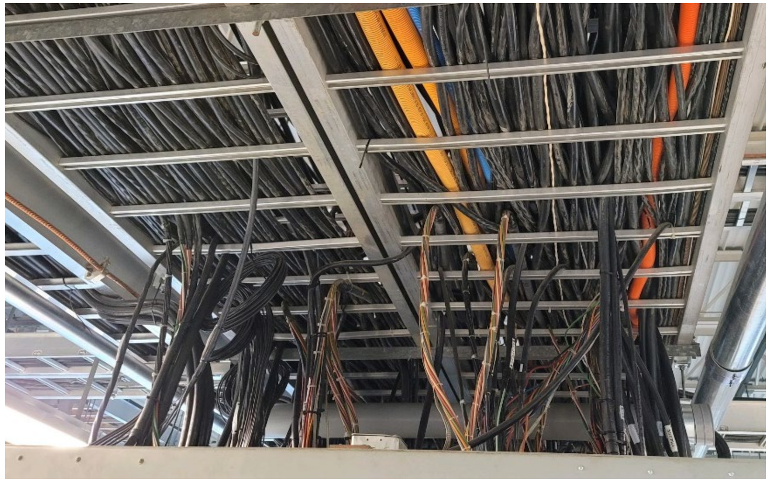
Project Needs (Cont.) – Trench System Photos


Covers In Need of Replacement
Depicted by “X”

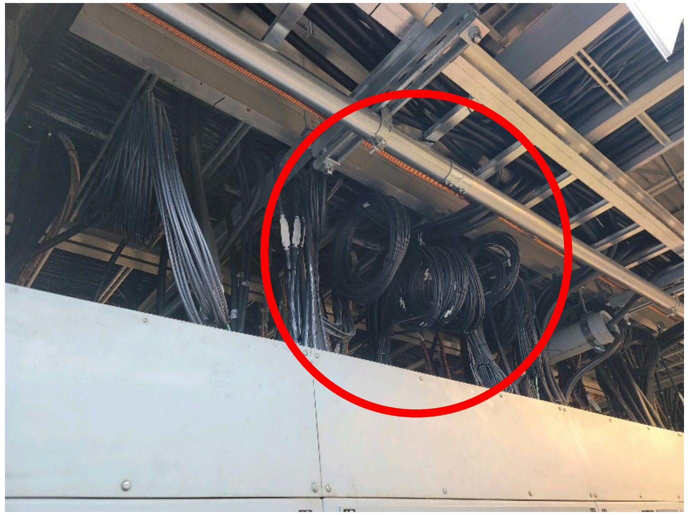

Cracking of Concrete Cover


Left Sidewall Collapsing Into
Trench and Braced with 2’x4’s

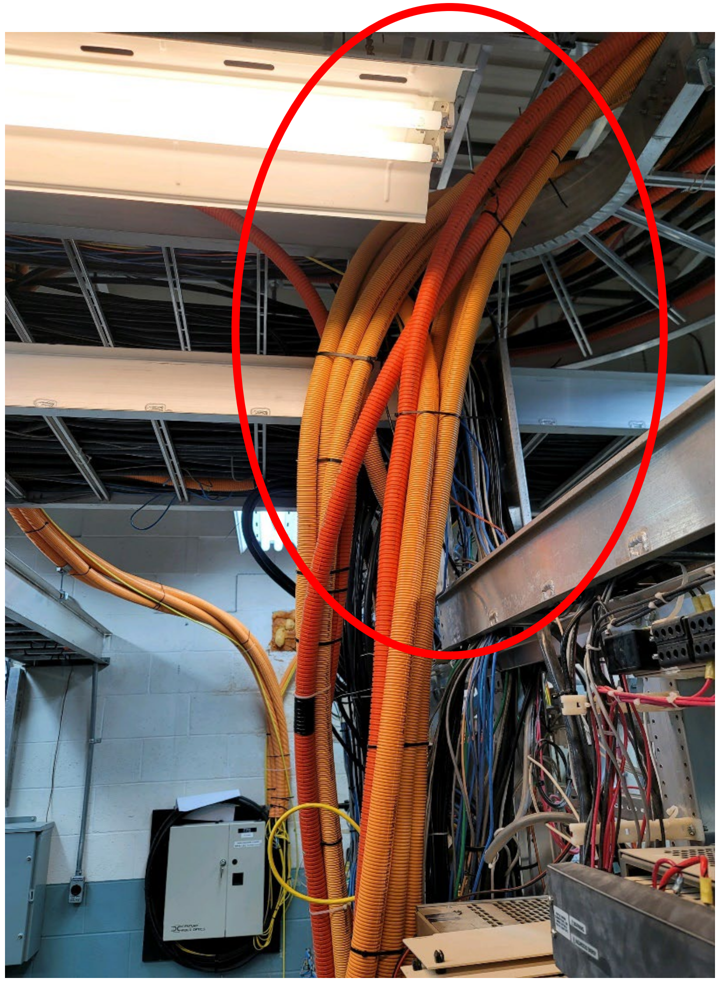
Project Needs (Cont.) – Control House Photos



Overfull Cable Trays



Overlapping Cable Trays with Spare Cables Left Hanging



Draping Communications Cables Due to Existing Tray Overfill

Project Scope

Original Scope

- Replace and install new secondary trench system (~1,500 ft)
  - Includes new wiring and conduit as needed
- Expand current control house by ~1,300 sq ft to accommodate new dedicated secondary cable trays, cabinets and controls
  - Replace obsolete secondary DC panelboards and relocate other existing equipment to dedicated secondary cabinets
- Project will bring Scobie Pond into full compliance with NPCC Directory #4 separation standards
- **Original In-service Date: Q2 2025**
- **Original PTF Cost Estimate: $19.652M**

Modified Scope

- All major components of original scope retained
  - Numerous modifications to design details due to material/equipment procurement challenges and field conditions
  - Multiple changes to outage schedules drove changes to construction plans and sequencing
- Added scope
  - Line 326 Remedial Action Scheme (RAS) removed
  - Additional relaying added to support new Browns River Capacitor Bank project

Project Cost Update

Scobie Pond 345 kV Trench Replacement & Control House Expansion Project		
Item	**$M**	**Explanation**
2022 As-Presented PTF Costs	**$19.652**	
Engineering for Scope Changes	$0.550	• 115 kV station T120 relay replacement costs • 326 Line remedial access scheme (RAS) and Special Protection Systems (SPS) P&C and implementation costs • Installation changes at Scobie Pond caused by NextEra Browns River system additions
Market Conditions	$7.281	• Initial cost estimate had considered the substation civil contractor details, but had not fully considered the complexity of the substation electrical requirements • The test contractor initial scope and bid was inadequate for the project magnitude and duration • Materials were unavailable in time to support original construction schedule • The Digital Fault Recorder (DFR) manufacturer could not meet production schedule with the planned design components and the Remote Terminal Unit (RTU) manufacturing schedule impacts resulted in field assembly
Field Conditions	$4.625	• Additional Lead Commissioning Engineer (LCE) support required to manage day-to-day work required to support outage sequence design, field conditions not found on drawings, construction crew oversight, test crew oversight, and commission installations • Delayed and extended construction and test vendor work needed due to multiple outage sequencing and duration changes, as well as engineering updates for field clarifications • Added security requirements for contractor access to support construction
Outage Constraints	$2.992	• Significant outage coordination to account for other transmission projects in New Hampshire and Maine has resulted in numerous outage plan adjustments and constrained outage durations • Additional impacts to schedule for project delays and weather impacts
Estimated PTF Cost Increase	**$15.448**	
2025 Estimated Total PTF Cost	**$35.100**	

Lessons Learned

Challenge 1	**Potential for outage variability through project sequence**
Lessons Learned	The outage plan has had frequent updates throughout this project's lifecycle. The plan has adapted to accommodate both system conditions and coordination with other projects in New Hampshire and Maine. The outage plan should have better considered the risks and cost impacts of changes to the schedule.
Challenge 2	**Estimate wasn't accurate with current market conditions**
Lessons Learned	Review estimating basis with full project team to identify any potential areas that may require additional funds. Confirm project risks and contingencies in estimate with project team for the proposed project schedule.
Challenge 3	**Constructability review did not fully consider risk of project schedule and outages changes**
Lessons Learned	Project coordination with other projects in New Hampshire and Maine could have been better anticipated at project funding. Internal constructability review process has been expanded to consider these factors.
Challenge 4	**Construction and materials procurement impacts to design**
Lessons Learned	Design changes to address issues uncovered during procurement and construction could have been better coordinated with engineering disciplines. Internal processes and controls have been improved.

Feedback & Next Steps

Planned Schedule	
Start of Major Construction	Q3 2022
Project in Service	Q1 2026 (*Originally, Q2 2025*)

Comment Submission	
Comment Deadline	Sept 4, 2025
ISO-NE Contact Email Address	pacmatters@iso-ne.com
Transmission Owner Contact Name	Dave Burnham
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Questions