

Committee on Energy, Utilities, and Technology
Public Hearing LD 2205
February 20, 2024

Senator Lawrence, Representative Zeigler, and Members of the Committee on Energy, Utilities, and Technology:

My name is Eric Rolfson, I live in Albion I, and I am here to testify in support of LD 2205—assuming underground HVDC lines along highways and existing rights of way also will be explored.¹

First, it is heartening to see bipartisan sponsors for this critical bill. It speaks to how reasonable it is to fully study this complex issue before implementing solutions.

Second, I commend the broad scope of the study, requiring experts to advise the PUC on economic, environmental, and public health concerns. Only an independent study addressing these challenges from multiple viewpoints will produce recommendations and solutions that are fair to all.

Third, the sponsors of this bill were wise to require a cost-benefit analysis and to consider community input prior to issuing a new RFP.²

None of us -- the PUC, Legislators, contractors, lobbyists, attorneys, nor private citizens -- has the broad collective experience and expertise to arrive at the best possible solution for Mainers without independent input.

¹ From p. 22 of NextGen Highways Study for Minnesota: "The reason to start with a focus on buried HVDC transmission is simple: it is a transmission technology that can be and is being sited within existing transportation ROW.... Proposed projects in the US and Europe provide clear examples of transmission developers combining buried HVDC transmission technology with existing transportation rights-of-way." <https://rayweb.wpenginepowered.com/wp-content/uploads/2022/04/NexGen-Highways-Analysis-Report-4.6.22-v7.pdf>

² As Maine's OPA asked FERC on Jan. 31, 2024: ""Are there less expensive alternatives to large transmission replacement projects? ... "Do [the utilities] have processes for maximizing the timing of replacements or the evaluation of non-transmission or hybrid alternatives?" <https://www.utilitydive.com/news/eversource-national-grid-iso-new-england-ferc-asset-condition-transmission-maine/706393/>

Many of us want this and future clean-energy projects to succeed, but if they are rushed, they are destined to fail -- as did the Northern Pass project in NH after ten years of community resistance.³

It would be wise, therefore, to study how other states have successfully implemented clean energy transmission lines, including:

- the Twin States Clean Energy Link in New Hampshire⁴
<https://www.twinstatescleanenergylink.com/>
- the New England Clean Power Link in Vermont⁵
<http://www.necplink.com>
- The Champlain Hudson Power Express in New York⁶, and
<https://chpexpress.com/project-overview/>
- The NextGen Highways study for Minnesota.
<https://rayweb.wpenginepowered.com/wp-content/uploads/2022/04/NexGen-Highways-Analysis-Report-4.6.22-v7.pdf>

That study found that due to new technologies and price decreases over the past decade, buried HVDC transmission is cost-competitive with traditional overhead AC transmission projects -- and that considerations such as grid reliability, grid and climate resilience, and an accelerated permitting timeline are reasons to explore this option thoroughly.⁷ A proposal outline that NextGen Highways has offered for Maine's consideration is attached to this testimony.

Finally, while a transfer to clean energy is an existential reality, we need to consider evolving technologies, the unfairness of running roughshod over less-wealthy

³ <https://www.nhpr.org/environment/2015-09-03/meet-the-cable-that-made-burying-52-miles-of-northern-pass-possible>

⁴ The Twin States Clean Energy Link in New Hampshire: 1200MW, 211 miles (75 miles buried HVDC, remainder above ground in existing corridors).

⁵ New England Clean Power Link in Vermont; 1000MW HVDC, 154 miles buried (100 miles in Lake Champlain (3' below lake bottom), 54 miles along existing rights of way).

⁶ Champlain Hudson Power Express (CHPE) in New York; 1250MW HVDC, 339 miles - 40% (135 mi) underground, 60% (204 mi) overhead.

⁷ <https://rayweb.wpenginepowered.com/wp-content/uploads/2022/04/NexGen-Highways-Analysis-Report-4.6.22-v7.pdf> P.66

communities, falling prices for underground lines and, as weather patterns change, the safety issues inherent with above-ground, high-voltage transmission.⁸

As American journalist, essayist, cultural critic, and scholar H.L. Mencken observed, "For every complex problem, there is an answer that is clear, simple, and wrong."

Let's not rush to go there.

Respectfully submitted,
Eric Rolfson
eric.rolfson@icloud.com

⁸ As Representative Sean Casten, Democrat from Illinois, said in a VOLTS podcast last Tuesday: "Ultimately I agree with 'Build, Build, Build' but we have to build the right way."
https://www.volts.wtf/p/the-democrats-new-consensus-bill?utm_campaign=email-half-post&r=15etjr&utm_source=substack&utm_medium=email

And, as reported in journalist Ted Koppel's 2016 book Lights Out, the vulnerability of the United States' Power Grid is increasingly seen as the number one National Security issue.
<https://www.penguinrandomhouse.com/books/246944/lights-out-by-ted-koppel/>



Feasibility Study for Siting and Building Electric Transmission Infrastructure in Maine Interstate and Highway Rights-of-Way

Outline of Considerations

Request for NextGen Highways to Initiate Study

- Letter from Governor, or
- Letter from Legislative Committee Chairs, or
- Letter from DOT Secretary

Work Group Convening

Convene group of interested stakeholders to review and comment on proposed Study and provide input during regular updates of the Study process. Stakeholders may include:

- Governor's office
- Legislature
- Dept. of Transportation
- Utilities
- Transmission and Renewable Developers
- NGOs

Study Outline

- Executive Summary
- Background
- Transmission Needs in Maine (identified state-wide projects)

- ISO-NE engagement on transmission needs summary
- Statutory and Agency Policy Analysis
 - Key findings from state law
 - DOT Utility Accommodation Policy review and findings
 - Interviews w ~10 DOT officials, utilities and transmission developers
- Technical Feasibility Analysis
 - DOT Utility Accommodation Policy review and findings
 - DOT and Utility experience with siting transmission in ROW
 - Construction/Maintenance/Engineering assessment (identification of Best Practices)
 - Interviews w ~10 DOT officials, utilities and transmission developers
 - GIS analysis
- Findings & Recommendations

Budget and Funding

Approximately \$ 50,000 to complete the analysis and study.

Potential funders: State of Maine; Clean Energy/Decarbonization NGOs in Maine; others.

About NextGen Highways

The NextGen Highways is a collaborative initiative promoting the use of highways and other existing rights-of-way as infrastructure corridors where electric and communications infrastructure are strategically and safely co-located in existing highway right-of-way. Learn more at <http://NextGenHighways.org>