



Testimony of Chris Glynn, EDP Renewables North America

**In Support of L.D. 1963, An Act Regarding the Future of Renewable Energy Transmission in Northern Maine**

Committee on Energy, Utilities, and Technology  
January 11, 2024

Good afternoon Senator Lawrence, Representative Zeigler, and members of the Joint Standing Committee on Energy, Utilities, and Technology. My name is Chris Glynn—I'm from Rumford, currently a South Portland resident, and speaking today on behalf of EDP Renewables North America (EDPR). I lead our Government Affairs efforts in New England, New York, and Canada.

EDPR encourages this committee, and this legislature, to pass **L.D. 1963, An Act Regarding the Future of Renewable Energy Transmission in Northern Maine**, albeit with the hope of some made to the language contained in the regarding transmission technology.

EDPR is the fourth-largest owner and operator of wind energy in the United States and around the world, with 59 operating wind farms and 10 solar parks across North America. EDPR started initial development efforts in Maine in the County about 20 years ago—signing leases with landowners and testing wind speeds. Since then, we have developed a top-notch project, the Number Nine Wind Farm. It's a mature, advanced-stage project that's been waiting for the infrastructure to support getting its power to market.

We supported Senate President Jackson's legislation in 2021 to establish the Northern Maine Renewable Energy Development Program, and we remain eager to help Maine tap into its valuable wind energy resources, among the best in the eastern United States.

The case for developing generation and transmission assets in Northern Maine remains strong, with winter peaking-wind generation being an ideal fit to help insulate Maine ratepayers from the fluctuations in natural gas prices during cold weather snaps and polar vortex events.

We know firsthand how difficult these procurement processes can be, and we support any effort to improve the next RFP to ensure the success of the northern Maine program as it was envisioned.

We have no question that two elements of this amendment will strengthen the prospects for success in the future—allowing for direct collaboration between the Governor's Energy Office and the PUC to seek partnerships with states or other off-takers; and to develop the RFP in coordination with those states.

What I would like to share with the Committee today is some additional context, and perhaps concern, regarding the change in language from procuring a "345 kilovolt double circuit transmission line" to the "infrastructure necessary" to deliver megawatts out of northern Maine.



In my reading, this language grants the PUC the flexibility to examine proposals utilizing alternative transmission technologies and award those bids in this procurement, rather than limiting proposals to 345kv double-circuit lines. Likely with the intent of lessening the financial impact on ratepayers, this is an understandable and worthy undertaking.

But in practice, changing this language grants the Commission the flexibility to procure what would ultimately be less flexible transmission technology.

The only other viable transmission technology that could transport 1,200 MW over the distances called for in the Northern Maine Program is a direct current (DC) line. Can EDPR and other developers transmit energy from our projects over a DC transmission line? Yes. But there are drawbacks to utilizing a DC line for this Program as it was envisioned.

- DC lines are not bi-directional. Power will flow from project sites in the County to our grid, but that's it. In the future, this line would not be able to be utilized to connect the ISO-NE grid to the NMISA grid.
  - A 345kv double circuit line could be a part of that solution.
- DC lines cannot be tapped at any midpoint. Nowhere between the two endpoints of the line could any additional generation interconnect.
  - A 345kv double-circuit line can be tapped at a midpoint.
- Perhaps most crucially, DC technology currently faces global supply chain issues that are not expected to be alleviated. There are only three producers of the DC components needed for a transmission line like this—GE, Siemens Gamesa, and ABB. These companies are at capacity fulfilling contracts for offshore wind procurements in Europe and Asia, all of which utilize DC cables at great scale. If this RFP closed tomorrow, it is highly unlikely a DC supplier could assist a developer in meeting their obligations for this procurement before 2032. That will likely stretch to 2033 or beyond as the RFP only takes shape this year. Costs and delivery timeline are simply unknowable that far into the future.
  - 345kv double circuit lines are standard alternating current (AC) technology that is not facing the same supply chain issues.

Outside of a 345kv double-circuit line or a DC line, any other proposals put forth with lower voltage transmission solutions would drastically reduce the number of megawatts coming online, and that is clearly not the goal of this Program.

Short of leaving this portion of the original legislation unchanged, I understand the Commission generally prefers “technology agnostic” language that would result from the amendment. If the Committee adopts this language, at a minimum, I’d suggest additional guardrails are incorporated to ensure any proposals put forth by a developer show the Commission their ability to deliver the components of their proposal, the pricing of those components, and a timeline for their delivery, with the goal of commercial operation before the end of the decade.

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The goal here is to improve the RFP process to ensure the next version of this procurement is successful. There are other things the Commission and this Committee should also consider in the near term to in the RFP and legislative process to remove some of the risk involved, and EDPR will offer that feedback in any PUC proceeding or opine on it before this Committee anytime. For example, awarding multiple generation projects put forth by multiple developers would be one way de-risk the Program; giving greater consideration to mature projects with demonstrated site control, for both RFPs, would be another.

Adding the GEO into the process and increasing collaboration with other states earlier in the process are absolutely positive outcomes. I would just caution this Committee on whether changing the approach on the transmission technology is worth injecting additional risk into the procurement process.

Thank you. I'd be happy to answer any questions here today, take questions back to my colleagues, and make myself available for the work session.

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