

February 24, 2024

Testimony in Support of LD 2205 Feasibility Study

Good afternoon Senator Lawrence, Representative Ziegler, and members of the committee on Energy, Utilities, and Technology:

My name is Brook DeLorme, and I am testifying in support of this legislation, with amendments that track to the original purpose of the bill. I live off grid, using solar as a primary energy supply, and I personally built some of the AC and DC electrical systems my husband and I use to supply our needs. I note this to reinforce that I believe in using off grid, renewable energy systems, and have taken the time to learn how they work - and their limitations - on a small scale.

This testimony focuses on the **heavy land acreage impact and demand** of renewable energy transmission and generation siting.

1. I would encourage everyone on this committee to read the Governor's Office of Policy Innovation and the Future **Report on Equity Considerations in Decision Making**, from February 25, 2022.¹ The handful of us who have been in these rooms for the **dozens of hours required** are able to participate because: we live relatively near Augusta and have flexible work schedules - indicating a comfortable socio-economic level.
2. **There are hundreds of people who would be financially, psychologically, and environmentally impacted who do not have this level of flexibility.** Siting of industrial infrastructure in disadvantaged communities is one of the issues addressed in the report. The committee's **hesitance to even recommend a feasibility study on buried lines** is one more reflection of the issues mentioned in the cited report.
3. Preserve Rural Maine (PRM), **was denied intervenor status in the RFP** docket for the Northern Maine Renewable Energy program. (The excuse for the denial was the docket was not adjudicatory, but even one of the utilities - Versant - complained that the docket should and could have been adjudicatory.²) To date, PRM has been the only organization vocally interested in defending the interests of the potentially impacted communities. Based on participation in the public hearings associated with this project, the views of the impacted

¹ [https://www.maine.gov/dep/publications/documents/GOPIF%20Report%20Pursuant%20to%20Public%20Law%202021%20Chapter%20279%20\(LD%201682\)%202-25-2022.pdf](https://www.maine.gov/dep/publications/documents/GOPIF%20Report%20Pursuant%20to%20Public%20Law%202021%20Chapter%20279%20(LD%201682)%202-25-2022.pdf)

² Docket 2021-00369 Versant letter dated December 1 2023 "Because this is a proceeding 'in which the legal rights, duties or privileges of persons are at issue,' the most appropriate process for this docket is the adjudicatory process" and "Following the adjudicatory process here would be consistent with past Commission practice and be in the best interests of customers."

communities are not represented by the Office of the Public Advocate.

4. The 2050 energy goals in Maine's statutes will require approximately 3x the amount of electricity that Maine currently uses.³ It can be expected this may also **triple the needs for transmission acreage and renewable energy generation acreage**.
5. This bill was originally put forth by Representative Cyrway in order to address constituents' concerns that **alternatives** to above ground transmission lines across private property **had not been reviewed** by either the PUC or the legislature.
6. We believe a feasibility study would identify both the **technical and statute-level challenges** that burying transmission in Maine could face, and it would specifically bring together stakeholders. These stakeholders would likely include DOT and GEO or GOPIF, one of which may be the right location to situate the study.
7. The financial incentives to rush wind energy development are significant: 30% Investment Tax Credits on projects over 1 MW in size. The King Pine project has been published as a \$2 billion investment, thus the **Investment Tax Credit could be around \$600 million** at this point in time.⁴
8. While this level of incentive might sound like a positive thing, it is also a financial manipulation that **purely benefits large foreign-owned business at the expense of small rural landowners**. With that amount of financial incentive, we can expect developers to **invest in marketing and lobbying to influence opinion**.
9. This is relevant because the transmission line and the wind generation project are linked in the RFP.
10. Several participants in various meetings have suggested we ought to wait for the CPCN stage of a project to review siting concerns. I believe if that were to have happened, the general route trajectory - across approximately **109 miles of private property and hundreds of landowners**- would not have shifted significantly.

³ <https://www.maine.gov/future/sites/maine.gov.future/files/2023-11/2023.11.21%20EWG%20Meeting%20Slides.pdf> Maine Climate Council - Energy Working Group Meeting - November 21, 2023 - the assumption being that peak demand might hit 3x, but with better efficiency, total usage is still only doubled

⁴ <https://windexchange.energy.gov/projects/tax-credits> "To receive the full production tax credit amount of 2.6 cents per kilowatt-hour or full investment tax credit of 30%, projects over 1 megawatt must satisfy apprenticeship and prevailing wage requirements. Facilities of under 1 MW are exempt from these requirements. The base credit amount for larger projects that do not meet the wage and apprenticeship requirements is 20% of the full credit amount."

11. Yes, LS Power was revising their route with comments from residents, but they were attempting to **not** shift the proposed route **into any new towns**.⁵ Thus, it would still have been across approximately 109 miles and hundreds of parcels of private property.
12. Reviewing siting concerns at the CPCN stage is not a realistic time to consider whether a transmission line should be above or below ground. This sort of consideration needs to happen prior to RFP development, as **part of a comprehensive renewable energy siting plan**.
13. Renewable energy generation of wind or solar appears to require about **4.5 to 6 acres per MW** in direct cleared land in our state.⁶
14. The King Pine wind farm project size is 175,000 acres⁷ (4500 cleared), and around 175 turbines.
15. Maine current peak demand is 5126 MW⁸. Three times is ~15,000 MW required capacity. To supply that using either **solar or onshore wind would require 75,000 cleared acres** at around 5 acres per MW. That number does not include clearing for transmission corridors.
16. If Maine is going to sell off a percentage of transmission and generation in order to fund development, that **75k cleared acres could become 150k cleared acres**, or more.
17. I am aware that ISO-NE is an interconnected grid, and that electricity generated in one state is not actually or necessarily used in that state. **Five of the New England states have energy goals that align with Maine's goals⁹, but they do not have the open land area** to support the physically massive acreages required for renewable energy generation.
18. Maine currently makes up **approximately 10% of the ISO-NE grid** demand.¹⁰ It is unknown what percentage of the remainder of the ISO-NE grid transition to renewable energy and 2050 goals will be supplied by generation projects built in and across Maine.

⁵ Based on personal conversations, and collaborative awareness building across towns.

⁶ Conversations with commercial solar developers; King Pine's stated clearing needs for ~175 turbines

⁷ <https://www.utilitydive.com/news/ls-power-longroad-maine-puc-transmission-line-wind-farm/635096/>

⁸ <https://www.eia.gov/electricity/state/maine/>

⁹⁹ <https://www.maine.gov/future/sites/maine.gov.future/files/2023-11/2023.11.21%20EWG%20Meeting%20Slides.pdf> Maine Climate Council - Energy Working Group Meeting - November 21, 2023

¹⁰ *ibid*

19. It is for these reasons that it is in the **fair interest of the average Mainer to present a clear plan for the amount of acreage intended to be cleared**, and the amount of transmission over the next 35 years.
20. FERC order 1000, issued July 21, **2011**, was intended to accomplish a couple of things: facilitate interregional transmission plans, consider public policy requirements at the same time as reliability, and **enhance competitive bidding**, among other items.¹¹ The intention of the competitive bidding was, of course, to try to get better pricing for ratepayers.
21. On December 15 **2023**, a FERC filing called “Supplemental Comments of Developers Advocating Transmission Advancements” described a study over the period of time since FERC order 1000 was initiated, and indicated that **competed transmission projects were actually 12-19% higher in cost to the ratepayer**, not the lower price that had been assumed.¹²
22. One of the reasons competitive bidding may not be more price effective in our state include the fact that **joint use is not explicitly permitted by statute for new entrants to the market**. This means that LS Power could not bid and assume they would have the right to joint use of corridors or existing public utilities equipment. Of course, while LS Power was the lowest-price bidder, **we are all now explicitly aware that they were unable to hold to that price** due to changes in the financing and interest rate landscape, as well as unwillingness to assume project risks for which the other bidders might have included as an assumed cost.
23. Chair Bartlett of the PUC stated that the **PUC presumes it has statutory authority to rebid the Northern Maine Renewable Energy project as before**. If the legislature does nothing there is no obligation on the PUC to change the RFP process. The PUC is currently only weighting cost, in the simplest sense of the word, and it appears did not prioritize bids that included more existing corridor. The LS Power bid **almost certainly** included significantly less **(30-50% less) existing corridor or easements** than the MEPCO bid.¹³
24. Finally, the RFP terms for generation and transmission must be matched. The prior RFP had a 20 year term for generation and a 30 year term for transmission. **What happens if the wind turbines go out of service life and the people of Maine are still obligated to pay for a transmission line?**

¹¹ <https://www.powermag.com/ferc-rule-1000-what-does-it-mean/>

¹² Document Accession #: 20231215-5048
https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20231215-5048

¹³ All statements in item 20 based on personal research or personal conversations