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FOREST MANAGEMENT, LTD.

October 14, 2022

Thank you for the opportunity to submit comments relating to the New England States' Transmission Initiative. We strongly believe that efforts such as this RFI enable greater participation from stakeholders whose voices can too often be overlooked. We recognize the critical importance that a successful transmission upgrade will have for our region as we look to decarbonize our energy sector.

Wagner Forest Management was founded in 1955 to manage land in New England with an eye towards long term management of our forest resources. Almost 70 years later, we are proud to have taken that guiding philosophy and grown to one of the largest land managers in New England and eastern Canada. Over 90% of the 2+ million acres that we manage has been independently certified as sustainable managed.

For the past 15 years we have recognized that renewable energy plays an integral part in the sustainable management of the land. We have worked diligently to identify regions where energy projects can be developed in a manner that minimizes impacts to the ecosystem while providing sustainable benefits to our neighbors and people working on the land. There are currently over 275 MW of wind turbines located on land that we manage, facilitating projects that generate about 850,000 MWh of clean electricity every year. There are currently over 600 MW of solar energy in various stages of development, permitting, and construction on lands we manage. We are also intimately familiar with proposed major transmission projects in the north country over the past two decades, including MPRP, Northern Pass, and NECEC.

This introduction is a long-winded way of saying that Wagner has little relevant experience around the topic the States have identified as their primary topic – offshore wind and the associated transmission improvements. However, we feel uniquely qualified to remind your team that land based renewable generation projects are technically proven, provide robust and reliable carbon free energy, and are currently unable to expand solely because of the region's inadequate transmission infrastructure.

I believe most people who have spent any time with New England energy projects are well aware of the three areas of greatest untapped potential, but allow me to enumerate them for the record:

1. Coos County, New Hampshire – the "Coos County Loop" has been a known source of constraint for well over a decade. I am personally aware of over 300 MW wind energy projects that have had queue positions that were ultimately dropped because of transmission infrastructure limitations. We have had a solar developer drastically reduce the size of a project located on land we manage in direct response to these limitations. Perhaps most telling was a solar developer that spent two years and significant financial and technical resources to site a 100+ MW project in the region. This developer - one of the largest owners of solar projects in

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the country – told us the quoted upgrade costs were "the highest cost estimate we've ever received for this scope of an interconnection across our entire portfolio nationally. To say our eyebrows were raised during our results call would be an understatement!"

2. Wyman Dam area, Maine. While this area has become somewhat infamous because of a proposed private transmission line from a foreign country, less talked about are the domestic generation projects that have been abandoned in the area due to transmission constraints. While the few wind projects that have been built in Western Maine have brought tangible benefits to the employees, landowners, and host communities, new development in this region is largely precluded from new development because of transmission limitations. We are aware of several hundred MW of wind and solar projects that have either pulled out of the queue or never moved past feasibility studies because of the transmission limitations.
3. Aroostook and Washington Counties, Maine – this area perhaps has been the most prominent showcase for the failure of the ISO-NE queue process. The target of multiple cluster studies, it is well established that increasing transmission from roughly Haynesville, ME to Massachusetts would open up no less than 1000-2000 MW of renewable energy projects that would lower costs to the region's consumers and substantially reduce the energy sector's carbon impact. If ever there were a no-brainer of a transmission project for the region, this would be it. There already exists a 345 kV corridor, the region is largely supportive of the potential benefits renewable project development would bring to host communities, and the terrain makes the area exemplary for deployment of existing technology. Indeed, the largest problem we foresee from a new transmission line would be the rush to be first in line, as there are easily 2-3 times more projects that have already been proposed than could fit on a typical 345 kV line. With the innovative agrivoltaics work going on in the downeast blueberry fields and the northern potato fields, the opportunity for solar energy to mesh with current agricultural lands is enormous.

To respond to specific questions on "Changes and Upgrades to the Regional Electric Transmission System Needed to Integrate Renewable Energy Resources"

1. The need to build the transmission improvements identified above have been well established. The ISO-NE queue graveyard is littered with the corpses of well intentioned projects that could not shoulder the full cost of upgrades required under the current system – I would be happy to enumerate these offline, if needed. Perhaps the single most effective tool the IIJA gave was for the DOE to serve as the "anchor tenant" for new lines, potentially allowing us to finally leapfrog the participant funding crisis we now experience. As you are likely aware, under current rules, the first project is required to pay all of the upgrade costs of the transmission upgrades. Most significantly, there is a "chicken and egg" problem of very high deposit costs required to move forward in the ISO-NE process, tens of millions of dollars needing to be spent by a developer before they can obtain permits and other milestones that would typically be necessary to justify such a

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large cash outflow. One need only review the ISO-NE queue (with participants shuffling to the back of the line to avoid being the entity on the hook for upgrade costs and deposits) to see the need for an entity like DOE or the States to guarantee that the upgrade costs will eventually be paid back by the operating projects.

2. At this point numerous studies and RFPs have shown that the cheapest energy New England can buy is from a land-based wind or solar project (again, I assume you already have well documented the public results from RFPs, but let me know if you need references). Ratepayers would be among the biggest beneficiaries of additional transmission deployment. Using the current allocation formulae may be the simplest path forward - ratepayers routinely fund reliability based upgrades. There is a similar process for ratepayers to fund economic-based upgrades, but this process has not been invoked to the best of my knowledge. The rationale at this point seems fairly straightforward – if servicing loans for new transmission lines will add $0.005 per kWh, but the savings in energy costs will be $0.01, then ratepayers will be saving money as soon as construction is completed.
3. We remain highly concerned about building only HVDC transmission lines. It is our understanding that HVDC dramatically limits the ability of projects to utilize the transmission infrastructure. We have investigated these issues in the past, finding that HVDC discriminates against smaller projects because the interconnection is either technically or financially infeasible. For areas like Coos County NH that just need an upsized connection to existing AC infrastructure, we support solutions that involve AC interconnections. Many of New England's projects are mid-sized (20-50 MW). To connect more of these projects, we believe AC buildout is necessary. We do recognize that in some situations HVDC may be more appropriate, when considering both costs and electrical efficiency. In situations like Aroostook County, there may be clear reasons to build an HVDC line directly to a load center like central Massachusetts. In these situations, however, we strongly advocate for a limited number of collection points where smaller projects would be able to interconnect at a more reasonable cost.
4. We believe that several new land-based transmission lines should be prioritized. Currently, new land based renewable resources remain the single cheapest source of new electricity in the region. In the longer term, we view diversification as a critical source of diversification – both for energy security and reliability purposes. Over the past year we have seen all too well what happens when we become overreliant on a single generation type (natural gas). Any disturbance in the supply of the resource will have an outsized influence on ratepayer costs. We commend the States' support for offshore wind, and firmly hope that it will become the largest source of new energy installations in the coming decade. However, we ask that the States exercise extreme caution before relying on it as the exclusive source of new generation. At the risk of repeating myself, land-based solar and wind have proven their viability, and pose little financial or technical risk. Perhaps most importantly, we know that they can be deployed quickly in a geographically diverse manner. By

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increasing the technological and geographic diversity of our generators, we will be inherently increasing the reliability of the grid.

5. No opinion
6. See our answers above. In particular, I wish to highlight our concern that HVDC without a small network of access points creates very clear winners and losers. We have been assured that even if an HVDC runs through an unaffiliated project, that project would be unable to connect to the HVDC line. Failing to create opportunities for mid-sized generating facilities to interconnect (particularly over a broader geographic region) severely limits the amount of generation that can be connected. Unlike many regions which have become dominated by one or two multi-national behemoths, New England is blessed with a wide variety of owner-operators both large and small. This has encouraged companies to work with local communities and has fostered the renewable energy transition by increasing local acceptance and making sure the benefits are shared in a more just manner. As one example, the Record Hill Wind project in Roxbury Maine is located on land Wagner manages. This project provides local residents with free electricity – a tangible benefit that directly connects the community with the wind turbines they see every day. At 50 MW, projects such as these cannot viably directly connect to an HVDC line – even if the line were running right next to the project. We believe an AC collection system that leads to a main transmission hub more justly spreads both the impact and benefits to a wider community, and allows a series of smaller regional owners with a vested interest in our region to be able to participate in our energy future.
7. Interregional transmission seems like it will be essential to our clean energy future, enabling the country to utilize our geographical diversity to more effectively manage risk. However, this seems like a situation where trying to do everything perfectly will prevent us from moving forward on the near term good we could be doing. I am sure everyone working in this industry can think of examples where a well intentioned committee which expanded its breadth so that it could produce a more optimal solution, only to find that scope creep led to the ultimate demise of the project. Interregional connection matters should be considered through a later and separate effort, lest we miss the opportunities before us today.
8. We have seen too many instances where threat of eminent domain is detrimental to local support. In all but the rarest of circumstances we firmly believe that transmission should be hosted by willing landowners who are paid a fair market rate for the use of their land. We have also seen the failure of multi-billion projects because they have not been amendable to relatively inexpensive local considerations. For better or for worse, the major transmission corridors are pretty well known at this point – host communities should be approached early, and their needs and concerns should be respected.
9. We hope the offshore wind revolution is upon us. However, we again stress the need to maintain a geographic and resource diversity by not neglecting the thousands of MW of onshore resources ready to get built. We believe that these

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resources are a cost effective source of new generation, and represent a strong complimentary resource that increases our security through diversity.

10. See above, we believe the Coos County loop and Aroostook county wind/solar represent well studied opportunities for significant and cost effective deployment in a short time frame. Obvious areas that could serve as energy hubs include:
    a. Berlin, NH
    b. Rumford, ME
    c. Wyman Dam, ME
    d. Haynesville, ME
    e. Centerville, ME
11. It seems that the primary benefit of deeper integration would be the improvement of the region's transmission network. Right now imports from Maine and New Hampshire into Massachusetts and Connecticut are relatively limited - to the point where they have become separation zones in the ISO-NE capacity market. To the extent such deeper integration allows for the further deployment of local terrestrial generation, this seems like a good idea.
12. Should further interconnection be built into Maine, it appears that constraints within the southern Maine transmission system may become binding. To the extent this is likely, undersea cables from the Bangor or Portland areas may be an attractive alternative.
13. No comment, other than our plea not to discriminate against local ownership by dedicating HVDC generation to serve only one or two global energy conglomerates.
14. The problem with consortia of developers is that there is a very strong chicken and the egg problem. Until there is a path for transmission, developers are limited in how many resources can be put into development. Until a project is far along its development cycle, there is a limit to how much money a project can put at risk in a transmission consortium. At this point we know that there is strong development interest, land availability, and public support for more renewable generation in Coos County New Hampshire, and Aroostook and Washington Counties in Maine. We have seen the utter failure of any and all attempts to fund new transmission through either a first mover program, or an ISO led consortium. Up front costs must be paid by the DOE and/or States to create an anchor for the transmission lines, costs which will be paid back by the projects that ultimately connect to these lines. It seems that we have exhausted all alternatives, and the time is necessary for the States to step in. There are ISO-NE queue positions totaling several times the new transmission capacity which had to exit the queue solely due to lack of transmission. We have seen over the past year in Maine that every spare substation bay is getting filled by new solar projects, and every MW of transmission capacity has been reserved several times over. The States understand the need for carbon free electricity, and have prioritized its development. The developer community cannot be more clear – construction of new projects is being constrained by a lack of access to reliable transmission. Quite simply, there can be no more exemplar of "if you build it, they will come."

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15. The resources we have described above have proven through multiple PUC and State led RFPs that they will provide energy at below the current wholesale cost. When they come online, all ratepayers will naturally benefit from the reduction in energy costs. The long term procurement model, including procurement of environmental benefits, has proven to be an efficient mechanism for the states to properly pay for their specific policy goals, without burdening other states.
16. Our experience has been that public-private partnerships are rarely successful, because the goals and approval processes of public entities can diverge too far from those of the private sector. However, in certain cases there are exceptions. In situations where there is a natural monopoly (the obvious example here is a transmission line) there can be enablement of large works that would otherwise go unrealized. In the case before us, the States could create the demand (guarantee a certain payment for a minimum sized transmission line bringing energy from Aroostook county to Massachusetts, for example) and spur several developers to propose alternative projects to fulfill the public's need. Alternatively, where a single entity (such as Eversource in NH) has jurisdiction and expertise, regulators and states can enact policy to spur deployment that is in the public's interest. In short, we see the role of the States to aggregate demand into a manifestation of policy (whether through RFP or firm commitment for transmission capacity) and the role of the private sector to most efficiently meet that demand, within the rules set out by regulators.
17. No comment

Thank you for giving us the opportunity to comment on this important initiative. Wagner would be happy to participate in any further listening or deliberative sessions, particularly those looking to solve the constraints facing land based renewable energy projects.

Sincerely,

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