PRESERVE

RURAL MAINE

Committee on Energy, Utilities and Technology
c/o Legislative Information Office
100 State House Station
Augusta, ME 04333

February 20, 2024

Re: LD 2055, *Resolve, to Require the Public Utilities Commission to Initiate a Feasibility Study to Evaluate Transmission Technologies and Siting Locations for Any Future Electric Transmission Line Proposed Pursuant to the Northern Maine Renewable Energy Development Program*

Dear Senator Lawrence, Representative Zeigler, and Members of the Committee:
Thank you for the opportunity to present testimony. My name is Tanya Blanchard, and I am testifying on behalf of Preserve Rural Maine. Our mission is to preserve the communities, cultures, and environmental integrity of rural Maine. The siting of energy infrastructure has long-lasting impact on the people and the ecological health of our state, therefore, I am testifying in support of LD 2205, *Resolve, to Require the Public Utilities Commission to Initiate a Feasibility Study to Evaluate Transmission Technologies and Siting Locations for Any Future Electric Transmission Line Proposed Pursuant to the Northern Maine Renewable Energy Development Program,* **with amendments.**

LD 2205 proposes a feasibility study to determine the best technology and siting locations for the Northern Maine Renewable Energy Development Program. We agree that a feasibility study should take place prior to the Public Utilities Commission (PUC) issuing a new request for proposals for development and construction of the transmission line. However, we do not feel that the feasibility study should be focused only on the Northern Maine Renewable Energy Development Program, but also on all projected energy needs of the state.

Maine's energy goals have been accelerated to 100% renewable energy by 2040. While the Northern Maine Renewable Energy Development Program would meet a portion of that energy goal, it is only one part of the much larger target. While a feasibility study for this project is important, studying the technology and siting requirements for this one slice of the state's energy goals focuses on too narrow of a project. Forecasts for energy needs in Maine show that we will need at least double, if not triple, current generation and transmission capacity. A feasibility study should be initiated with the entirety of the state and our future energy needs in mind. The Maine renewable energy goals include no allowance for other New England states, yet as demonstrated by the recent failed first RFP contract negotiation, the Maine PUC intends for Maine to be a net exporter of renewable energy. The projected renewable electric demand for Massachusetts alone is 5 times that of Maine. This additional load on the

transmission infrastructure must be planned for now to prevent costly rework to Maine ratepayers, unnecessary environmental damage, and impact to private property owners.

The bill includes the creation of a project team. While we agree that the PUC should consult with others on this matter, the skillset of the project team needs to be defined. We can look to New Hampshire for an example of this type of project team. Prior to a NHPUC RFP, New Hampshire's Site Evaluation Committee evaluates site selection and the impacts the proposed electric infrastructure may have on the state (see attachments 1 and 2). The committee selects the site or route relative to the statutory defined criteria, not the PUC after the RFP process. This allows the PUC to operate within its historically defined statutory guidelines which do not direct the PUC to consider Socio-Economic issues. Rather than establishing a new or expanded government office, this committee's membership consists of existing commissioners of relevant departments plus members of the public. We support a project team like that of New Hampshire's or similar and would like to see the skillset defined further in the bill.

We have already seen one failed procurement for the proposed construction of an aerial transmission line solution. Performing a study which evaluates the same project routes and aerial configuration without adequately considering alternative technology and sites is a waste of taxpayer money. We have seen recent and past winter storms (i.e. Ice Storm of 1998) that have caused significant damage to the transmission infrastructure, including 345kV systems, which provide electricity to the people of Maine during their most vulnerable time of year (see attachment 3). With the state's push (Efficiency Maine) for ratepayers to convert to electric heat pump systems combined with the increased severity of winter weather events, the reliability of the primary transmission infrastructure is of greater importance than in the past. The PUC has a statutory obligation to ensure reliability of the transmission infrastructure in order to protect ratepayers who are becoming increasingly more dependent on electricity due to state subsidized climate initiative programs. As a result of this winter's storm damage, Governor Mills announced $4.4 million to increase the resilience of Maine's grid. A part of that work is to move electrical infrastructure underground (see attachment 4). As we've seen, above ground transmission lines are at risk of damage from severe weather events. If the state is spending money to move existing lines underground, it only makes sense to bury new low maintenance cost critical transmission lines, saving Maine the expense of building them above ground and then moving them to underground at a future date. Therefore, this feasibility study should provide equal consideration of both buried and aerial transmission solutions.

The problem of transmission line siting is shared by many states. Federal regulations have addressed one way to alleviate that problem. According to federal code 23 CFR 645.205, it is in the public interest for utility facilities to be accommodated on the right-of-way of a Federal-aid or direct Federal highway project (attachment 5).

The US Department of Transportation Federal Highway Administration issued a document providing clarification of highway right-of-way (ROW) to aid supporting

utilization of the ROW which includes electrical transmission and distribution projects, so long as the project "does not adversely affect highway or traffic safety, or otherwise impair the highway or its aesthetic quality, and does not conflict with the provisions of Federal, State or local laws or regulations." (attachment 6). What better use of land that has already been disturbed, than to bury transmission lines? Since the roadway infrastructure is already in place to move equipment to and from construction locations and no forest clearing would be required, the construction schedule can be accelerated. Existing DOT historic geotechnical subsoil data is on file and can be used to avoid the uncertainty of below grade bedrock interferences and allow a buried transmission corridor to co-exist in the previous construction backfilled side slopes of the interstate roadway. A buried energy transmission corridor will satisfy the export energy demands by providing a scalable high energy density transmission solution requiring a very small amount of land. All these characteristics justify the feasibility study include an evaluation of buried electric high voltage transmission along highway ROWs.

Maine can't afford to build a project for the Northern Maine Renewable Energy Development Program the wrong way or in the wrong place. It is imperative that this is done right, therefore we support a properly executed feasibility study and this bill with the proposed amendments.

We welcome opportunities to work with the sponsor and engage with the committee to develop amendments that will ensure the best possible outcome for Maine.

Attachment 1: New Hampshire Site Evaluation Committee Declaration of Purpose

TITLE XII
PUBLIC SAFETY AND WELFARE

CHAPTER 162-H
ENERGY FACILITY EVALUATION, SITING, CONSTRUCTION AND OPERATION

Section 162-H:1

162-H:1 Declaration of Purpose. – The legislature recognizes that the selection of sites for energy facilities may have significant impacts on and benefits to the following: the welfare of the population, private property, the location and growth of industry, the overall economic growth of the state, the environment of the state, historic sites, aesthetics, air and water quality, the use of natural resources, and public health and safety. Accordingly, the legislature finds that it is in the public interest to maintain a balance among those potential significant impacts and benefits in decisions about the siting, construction, and operation of energy facilities in New Hampshire; that undue delay in the construction of new energy facilities be avoided; that full and timely consideration of environmental consequences be provided; that all entities planning to construct facilities in the state be required to provide full and complete disclosure to the public of such plans; and that the state ensure that the construction and operation of energy facilities is treated as a significant aspect of land-use planning in which all environmental, economic, and technical issues are resolved in an integrated fashion. In furtherance of these objectives, the legislature hereby establishes a procedure for the review, approval, monitoring, and enforcement of compliance in the planning, siting, construction, and operation of energy facilities.

Source. 1991, 295:1. 1998, 264:1. 2009, 65:1, eff. Aug. 8, 2009. 2014, 217:1, eff. July 1, 2014.

Attachment 2: New Hampshire Site Evaluation Committee Members

TITLE XII
PUBLIC SAFETY AND WELFARE

CHAPTER 162-H
ENERGY FACILITY EVALUATION, SITING, CONSTRUCTION AND OPERATION

Section 162-H:3

162-H:3 Site Evaluation Committee Established. –

I. There is hereby established a committee to be known as the New Hampshire site evaluation committee consisting of 9 members, as follows:

(a) The commissioners of the public utilities commission, the chairperson of which shall be the chairperson of the committee;

(b) The commissioner of the department of environmental services, who shall be the vice-chairperson of the committee, the commissioner may appoint a designee, but such designee shall not serve as vice-chairperson;

(c) The commissioner of the department of business and economic affairs or designee;

(d) The commissioner of the department of transportation, or designee;

(e) The commissioner of the department of natural and cultural resources, the director of the division of historical resources, or designee; and

(f) Two members of the public, appointed by the governor, with the consent of the council, in accordance with RSA 162-H:4-b, III.

II. All members, including those who sit for a member recused under paragraph VI, shall refrain from ex parte communications regarding any matter pending before the committee. This prohibition shall extend to those who sit on any subcommittee formed under RSA 162-H:4-a.

III. Five members of the committee shall constitute a quorum for the purpose of conducting the committee's business.

IV. The committee shall be administratively attached to the department of energy pursuant to RSA 21-G:10.

V. The chairperson shall serve as the chief executive of the committee and may:

(a) Delegate to other members the duties of presiding officer, as appropriate.

(b) Perform administrative actions for the committee, as may a presiding officer.

(c) Establish, with the consent of the committee, the budgetary requirements of the committee.

(d) Engage personnel in accordance with this chapter.

(e) Form subcommittees pursuant to RSA 162-H:4-a.

VI. If at any time a member must recuse himself or herself on a matter or is not otherwise available for good reason, such person, if a state employee, may designate a senior administrative employee or a staff attorney from his or her agency to sit on the committee. In the case of a public member, the procedure outlined in RSA 162-H:4-b, VI shall be followed.

VII. All committee members and designees shall on an annual basis complete a comprehensive intensive training program on the provisions of RSA 162-H and the administrative rules adopted thereunder with respect to reviewing and evaluating applications for a certificate of site and

facility, as well as training regarding energy infrastructure. All new committee members, and any designee to a subcommittee pursuant to RSA 162-H:4-a, II or III, shall complete the training program prior to serving on, respectively, any committee or subcommittee proceeding. The legal training shall be conducted by the department of justice and the training regarding energy infrastructure shall be conducted by the department of energy.

Source. 1991, 295:1. 1995, 310:182. 1996, 228:41. 1997, 298:25. 2002, 247:2. 2003, 319:9. 2004, 257:44. 2007, 364:4. 2009, 65:5, eff. Aug. 8, 2009. 2014, 217:6, eff. July 1, 2014. 2015, 219:2, eff. July 8, 2015. 2017, 156:61, eff. July 1, 2017. 2018, 216:1, eff. Aug. 7, 2018. 2021, 91:227, eff. July 1, 2021. 2022, 176:1-3, eff. Aug. 6, 2022.

Attachment 3: Photo of 345 kV transmission line damage from ice storm (1998)

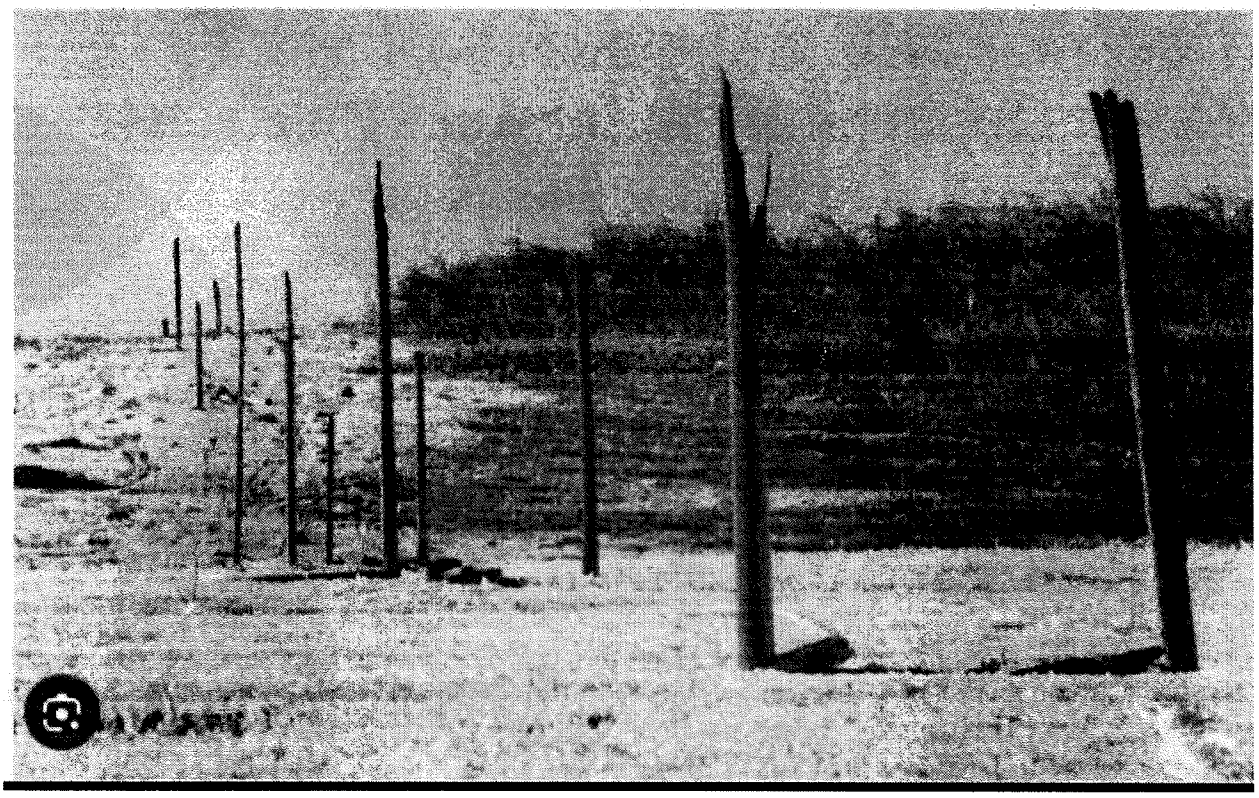

Photo: courtesy Bangor Daily News

Attachment 4: $4.4 Million Announced to Increase Grid Resilience

Governor Mills Announces $4.4 Million Grant Opportunity to Increase Electrical Grid Resilience to Extreme Storms

February 9, 2024

Federal funds through the Bipartisan Infrastructure Law will spur investments in grid infrastructure and technology to better withstand effects of extreme storms and ensure reliable electricity for Maine people and businesses

Governor Janet Mills today announced the availability of $4.4 million in Federal funds through the Bipartisan Infrastructure Law (BIL) to increase the resilience of Maine's electrical grid to the effects of extreme storms.

The funds will be administered by the Governor's Energy Office (GEO) through the Maine Grid Resilience Program which will support resilience projects such as weatherizing critical technology and equipment, moving electrical infrastructure underground, and improving vegetation and utility pole management, among others.

The funds come after a series of severe winter storms in December and January caused significant devastation to communities, several millions of dollars in infrastructure damage, and left hundreds of thousands of Mainers without power for several days across the state.

"Losing power is not only an inconvenience; it can threaten the health and safety of Maine people," **said Governor Janet Mills**. "We know we can expect more severe storms in the future, which means that we need to take act now to strengthen our electrical grid, and that's exactly what the Grid Resilience Program will do. With these investments through the Bipartisan Infrastructure Law, we can improve our electrical grid, reduce the frequency and duration of power outages in the future, and better protect the health, safety, and welfare of Maine people."

"An investment in our electrical grid not only helps to keep the lights on, but also protects the health and safety of Maine people," **said the Maine Congressional Delegation**. "This grant, funded through the Bipartisan Infrastructure Law, will help support and modernize the Maine Grid Resilience Program's projects to help reduce the number of power outages in the future. By making smart investments today, we can protect our grid for tomorrow."

"With the frequency and severity of storms expected to increase as a result of climate change, it's imperative that we make smart investments in our electrical grid to mitigate and reduce future impacts," **said Dan Burgess, Director of the Governor's Energy Office**. "Through this

program, our goal is to empower Maine households, businesses, and communities to be resilient to future disruptive events."

"Extreme winds and storms have left hundreds of thousands of Mainers without power this winter season," **said Maria Robinson, Director, Grid Deployment Office, U.S. Department of Energy**. "The Grid Deployment Office is proud to be partnering with the state of Maine to deploy this historic funding to strengthen and modernize Maine's electric grid and mitigate the impact of server storms because every community across the state deserves reliable, affordable electricity for their homes and businesses."

"The time could not be more urgent to invest in our state's electrical grid," **said Senator Mark Lawrence and Representative Paige Zeigler, co-chairs of the Maine Legislature's Joint Standing Committee on Energy, Utilities and Technology**. "The investments made through the Grid Resilience Program will help Maine prepare for and respond to future extreme storms and other climate change impacts."

GEO was awarded these funds from the U.S. Department of Energy through the BIL. The office anticipates receiving another $6.6 million in future BIL funding for additional grid resilience projects in forthcoming years.

Eligible entities include electric utilities, electricity generators, storage operators, and others. In addition to supporting grid resilience, the program aims to support Maine's climate and clean energy goals and further expand Maine's clean energy economy, which is the fastest growing in New England.

Attachment 5: Federal Policy 23 CFR 645.205

https://www.ecfr.gov/current/title-23/section-645.205

§ 645.205 Policy.

(a) Pursuant to the provisions of 23 CFR 1.23, it is in the public interest for utility facilities to be accommodated on the right-of-way of a Federal-aid or direct Federal highway project when such use and occupancy of the highway right-of-way do not adversely affect highway or traffic safety, or otherwise impair the highway or its aesthetic quality, and do not conflict with the provisions of Federal, State or local laws or regulations.

(b) Since by tradition and practice highway and utility facilities frequently coexist within common right-of-way or along the same transportation corridors, it is essential in such situations that these public service facilities be compatibly designed and operated. In the design of new highway facilities consideration should be given to utility service needs of the area traversed if such service is to be provided from utility facilities on or near the highway. Similarly the potential impact on the highway and its users should be considered in the design and location of utility facilities on or along highway right-of-way. Efficient, effective and safe joint highway and utility development of transportation corridors is important along high speed and high volume roads, such as major arterials and freeways, particularly those approaching metropolitan areas where space is increasingly limited. Joint highway and utility planning and development efforts are encouraged on Federal-aid highway projects.

(c) The manner is which utilities cross or otherwise occupy the right-of-way of a direct Federal or Federal-aid highway project can materially affect the highway, its safe operation, aesthetic quality, and maintenance. Therefore, it is necessary that such use and occupancy, where authorized, be regulated by transportation departments in a manner which preserves the operational safety and the functional and aesthetic quality of the highway facility. This subpart shall not be construed to alter the basic legal authority of utilities to install their facilities on public highways pursuant to law or franchise and reasonable regulation by transportation departments with respect to location and manner of installation.

(d) When utilities cross or otherwise occupy the right-of-way of a direct Federal or Federal-aid highway project on Federal lands, and when the right-of-way grant is for highway purposes only, the utility must also obtain and comply with the terms of a right-of-way or other occupancy permit for the Federal agency having jurisdiction over the underlying land.

[50 FR 20354, May 15, 1985, as amended at 53 FR 2833, Feb. 2, 1988]

Attachment 6: Use of Highway ROW for Electric Transmission Projects

https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/alternative_uses_guidance.cfm

Memorandum

U.S. Department of Transportation
Federal Highway Administration

Subject: State DOTs Leveraging Alternative Uses of the Highway Right-of-Way Guidance

From:
Stephanie Pollack
Acting Administrator

To:
Directors of Field Services
Division Administrators
Division Directors

Date: April 27, 2021

Reply to: HEPR-40

PURPOSE

The purpose of this guidance document is to provide clarification to FHWA Division Offices who work with State departments of transportation (State DOTs) on certain uses of the highway right-of-way (ROW) that can be leveraged by State DOTs for pressing public needs relating to climate change, equitable communications access, and energy reliability. This guidance document supports the consistent utilization of the ROW for renewable energy generation, electrical transmission and distribution projects, broadband projects, vegetation management, inductive charging in travel lanes, alternative fueling facilities, and other appropriate uses as identified herein. FHWA Division Offices should share this memo with their State DOTs for their consideration for these alternate uses of highway ROW.

These uses of the highway ROW, including the development of renewable energy projects, enable breakthrough transportation technology related to electrification and connected and autonomous vehicles. These uses of the highway ROW also better utilize the full value and productivity of the existing asset while also reducing or eliminating the ongoing maintenance

expenses for State DOTs. For example, State DOTs may create new revenue opportunities through participation in public-private-partnerships to develop renewable energy projects and negotiating agreements that include land lease or land license payments and power purchase agreements that reduce the States' energy costs, both actual and over the life cycle of the renewable energy project.

This guidance document first addresses renewable energy generation facilities, such as solar arrays and wind turbines, and alternative fueling facilities (e.g., electric vehicle (EV) charging within the highway ROW). The lands State DOTs manage can be suitable locations for renewable energy and alternative fueling applications. Such projects can:

- Better leverage the full value and productivity of existing highway ROW assets;
- Reduce greenhouse gas and other pollutant emissions;
- Promote energy security by diversifying energy generation and delivery methods;
- Foster the creation of a local green job market that enhances the viability of the Nation's renewable energy industry;
- Create a potential revenue source for State DOTs to develop projects and negotiate agreements that include land lease or land license payments and power purchase agreements; and
- Reduce or eliminate ongoing maintenance expenses for State DOTs.

Additionally, this guidance document provides relevant information on the use of certain vegetation management practices within the highway ROW to address climate change.

In considering requests pertaining to these ROW uses, FHWA Division Offices are encouraged to develop programmatic approaches, where appropriate, to processing such requests under the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act.

Coordination with State Departments

Division offices of the Federal Highway Administration should collaborate as frequently as practicable with State departments of transportation in reviewing utility accommodation policies under section 645.205 of title 23, Code of Federal Regulations. Division offices should foster an enhanced consideration of right-of-way and utility accommodation interests as part of the transportation planning process.

Additionally, FHWA Division Offices should encourage State DOTs to consider practices that can further broadband deployment initiatives, such as resource sharing. Best practices include minimizing repeated excavation of the roadway, coordinating with broadband utilities during highway construction, and integrating trenchless technologies into construction practices, as appropriate.

RENEWABLE ENERGY, ALTERNATIVE FUELING FACILITIES, ELECTRICAL TRANSMISSION AND DISTRIBUTION, AND BROADBAND PROJECTS