STATE OF MAINE
PUBLIC UTILITIES COMMISSION

MAINE PUBLIC UTILITIES COMMISSION INQUIRY INTO THE PROCESS TO IDENTIFY THE PRIORITIES FOR GRID PLAN FILINGS Docket No. 2022-00290	**JOINT COMMENTS OF ACADIA CENTER, CONSERVATION LAW FOUNDATION, MAINE CONSERVATION VOTERS, NATURAL RESOURCES COUNCIL OF MAINE, THE NATURE CONSERVANCY IN MAINE, AND THE UNION OF CONCERNED SCIENTISTS** October 3, 2022

On September 12, 2022, the Public Utilities Commission initiated a Notice of Inquiry (NOI) to "obtain input from stakeholders on the process to identify priorities to be addressed in a filing by investor-owned transmission and distribution utilities regarding a grid plan and how best to encourage participation, especially from stakeholders that do not frequently participate in Commission proceedings." The Commission requested comments be filed by October 3, 2022. The Natural Resources Council of Maine, Acadia Center, Union of Concerned Scientists, Conservation Law Foundation, Maine Conservation Voters, and The Nature Conservancy in Maine are organizations that supported passage of LD 1959, An Act Regarding Utility Accountability and Grid Planning for Maine's Clean Energy Future, Public Law 2022, Chapter 702.[1] We share a strong interest in utility planning as a vehicle for ensuring that investments in the grid serve Maine state obligations to reduce greenhouse gas (GHG) emissions and achieve the climate change and clean energy requirements of Title 38, section 576-A and section 577, subsection 1 and of Title 35-A, section 3210, as cost-effectively and equitably as possible. To

[1] Available at http://www.mainelegislature.org/legis/bills/display_ps.asp?ld=1959&PID=1456&snum=130.

that effect, we appreciate this opportunity to provide input and jointly offer the following comments for the Commission's consideration.

I. Introduction to Integrated Grid Planning and the Opportunity for Maine

The process that the Commission ultimately devises to solicit and process stakeholder feedback should be designed to advance the state's grid planning objectives. We therefore preface our responsive comments with the following review of the general objectives of integrated grid planning and the specific objectives outlined by Maine law, pursuant to LD 1959, PL 2022, Chapter 702, effective August 8, 2022.[2]

With LD 1959, Maine joins jurisdictions in both integrated and restructured electricity markets adopting new approaches to oversight in grid planning. This is owing in part to the fact that clean energy is driving a transformation of the distribution grid, which now accounts for the largest and growing share of capital expenditure for investor-owned utilities nationwide.[3] Recent and projected growth in clean energy due to falling costs and state and federal policies is also creating a need for new transmission infrastructure. Previous practices, such as least-cost resource planning to meet bulk power reliability needs or utilities' annual planning to identify incremental distribution system projects, fail to account for the electric system in its entirety and are inadequate for managing a new level of complexity imposed by variable resources and dynamic flexibility. As Maine adopts policies to meet its climate requirements—including electrifying heating and transportation end-uses and meeting new demand for electricity with

[2] Available at http://www.mainelegislature.org/legis/bills/display_ps.asp?ld=1959&PID=1456&snum=130.
[3] Thirty-two percent in 2021, according to Edison Electric Institute, Industry Capital Expenditures with Functional Detail (June 2022), at https://www.eei.org/issues-and-policy/finance-and-tax#financialdata.

renewable energy at all scales—investments in the distribution system are poised to grow sharply.

Regulatory practices like integrated grid planning allow for transparent vetting of utility expenditures and provide for meaningful engagement from the Commission, stakeholders, customers, third-party providers, and the public to help design and identify smarter, tailored, least-cost, lower-risk solutions to meet state goals in a rapidly changing sector. Further, a transparent, holistic planning process can center the voices of historically overburdened communities and deliver solutions that advance equity, improve public health, create prevailing-wage jobs, *and* achieve our climate and clean energy goals. A robust public engagement and stakeholder process also can help build support for the critical transmission and distribution investments that will be required to electrify Maine's transportation and heating sectors.

Summary of the New Statutory Provisions. In brief, LD 1959 requires an iterative process every five years to develop a 10-year integrated plan "designed to improve system reliability and resiliency and enable the cost-effective achievement of the greenhouse gas reduction obligations and climate policies pursuant to Title 38, section 576-A and section 577, subsection 1." The integrated plan must incorporate distribution, transmission, and supply- and demand-side considerations to achieve state policy objectives. Maine's investor-owned utilities are charged with developing plans, but the Commission is directed to lead a process at the front and back ends for stakeholder and public input to shape the Commission's order and to review plans developed by the utilities.

At the front end, the Commission is charged with holding technical conferences or stakeholder workshops to identify "priorities, assumptions, goals, methods and tools" to be reflected in the Commission's planning order. In addition to these publicly vetted details, the

statute specifies a series of minimum components for the utilities to include in their plans, including an assessment of the environmental, equity, and environmental justice impacts of the grid plans.[4] The plans are also required to incorporate any related analyses conducted as part of Efficiency Maine Trust's programs and planning, the state's Climate Action Plan, and other relevant information, data, reports, and analyses conducted or commissioned by other state and quasi-independent agencies.[5]

The Commission is charged with opening a proceeding for the first planning cycle by November 1, 2022. At the conclusion of the front-end stakeholder process, the Commission issues its planning order specifying plan requirements, after which the utilities have 18 months to file their plans. Once submitted, the Commission will then hold a 60-day public comment period and may order the utilities to revise the filing to address any deficiencies. All related data, information, and tools used by the utilities in developing plans must be made accessible to interested parties, and the Commission may use all related filings and input in rate cases and other proceedings. The statute requires the Commission to submit an assessment of staffing and resources necessary to comply with these integrated grid planning provisions to the joint Energy, Utilities and Technology Committee by December 1, 2022.

---

[4] Plans must also include for example: a baseline assessment of supply; a system assessment including with relation to the regional grid; forecasts of load, end-use electrification, distributed energy resources (DER), and energy efficiency; planning scenarios to reflect uncertainty with respect to the rate of DER deployment and end-use electrification; analysis of circuit-level hosting capacity with locational benefits of incremental DER; analysis of load management technologies; and near-term investments and operations to set a course toward the longer-term objectives.

[5] Data and analyses might include, though not be limited to, those updated and pertaining to the following studies: Beneficial Electrification: Barriers and Opportunities in Maine, Efficiency Maine Trust, January 2020, at https://www.efficiencymaine.com/beneficial-electrification-study/; Maine Won't Wait, Maine Climate Council, Volume 3: Maine Emissions Analysis Consolidated Energy Sectors, updated November 9, 2020, at http://climatecouncil.maine.gov/reports; State of Maine Renewable Energy Market Assessment, Governors Energy Office, February 2021, at https://www.maine.gov/energy/studies-reports-working-groups/current-studies-working-groups/renewable-energy-market-assessment; Maine Energy Storage Market Assessment, Governors Energy Office, March 2022, at https://www.maine.gov/energy/studies-reports-working-groups/current-studies-working-groups/energy-storage-assessment.

The Opportunity for Maine. These provisions present a critical opportunity to reduce costs and increase benefits by aligning utilities' operational and near-term planning with the state's strategic objectives and the public interest. By balancing necessary investments against ratepayer costs transparently and holistically outside ad hoc rider requests and rate cases, grid planning can help instill public confidence in the regulatory process. Robust public engagement can provide a forum for communities, consumers, and third-party providers to participate in identifying and designing least-cost solutions to grid needs that put Maine people at the center of our efforts to transform the power sector. In turn, integrated grid plans that have public support can help guide decisions on competitive clean energy procurements and long-distance transmission infrastructure.

The grid planning process required by this law also provides an opportunity for the Commission to better coordinate and simplify its work. In Maine, integrated grid planning builds on the Commission's existing activities and statutory obligations in directly related areas of electric sector policy, including:

- Technical review of utility proposals to identify **non-wires alternatives (NWA)** for maintaining reliability at lower cost to ratepayers, pursuant to PL 2019, Chapter 298.
- **Distribution system roadmaps** to support grid modernization for Central Maine Power (CMP) and Versant Power (Versant) developed by consultant Electric Power Engineers in Docket No. 2021-00039.
- Commitments from CMP and Versant to adopt **advanced rate designs** by 2024 and 2025 respectively to support decarbonization pursuant to settlements in Docket No. 2021-00325.

- Maine's current **Net Energy Billing** program and the process underway to develop a successor program.
- Amendments to the **Intervenor Funding Rule** (Chapter 840) to support public participation by under-represented voices in Commission proceedings, pursuant to Docket 2022-00180.
- An **expanded mandate** that adds reducing greenhouse gas emissions to the Commission's basic purpose of ensuring safe and adequate service at just and reasonable rates and requires the Commission to facilitate those reductions in greenhouse gas emissions (PL 2021 Chapter 279).
- Maine's **Renewable Portfolio Standard** of 80% by 2030 and 100% by 2050 and the Commission's competitive procurement of renewable energy, pursuant to PL 2019, Chapter 477.

Grid planning in Maine may be designed and implemented as an organizing framework to streamline the Commission's work, while getting useful information into the public record, to help staff in these and other related areas.

To summarize, the process should be designed to achieve the following objectives:

- Ensure that utilities' short-term incremental expenditures align with long-term investments and Maine's climate and clean energy goals.
- Provide for transparent vetting of utility investments and operations to reduce costs to ratepayers.
- Develop grid plans that are responsive to the needs of Maine people, including the goals of communities and populations that have been historically impacted or marginalized by energy policies and energy infrastructure.

- Develop the strategic underpinning to guide the clean energy transition and help inform related energy sector decision-making in Maine, e.g., related to transmission, clean energy procurement, and demand-side flexibility, etc.
- Build public trust in regulatory institutions and grid planning outcomes.
- Help organize the work of the Commission to enhance its effectiveness.

II. Responses to Commission Inquiries

In the following sections, we address issues raised in the six questions put forth by the Commission in the Notice of Inquiry.

1. What type of process should the Commission utilize to identify priorities, assumptions, goals, methods and tools that will assist the utility in developing a grid plan?

The Commission should establish a transparent, robust, and accessible process that includes diverse perspectives to help "identify priorities, assumptions, goals, methods and tools" for the Commission to incorporate into the planning guidance it issues to the utilities. Robust stakeholder input and participation can lead to better decision-making and greater buy-in of the end results and will be essential to a successful planning process.

In part, the Commission alludes to an answer to its first question in its second question: working groups, technical conferences, opportunity for public comment, and professional facilitation are some of the ways the Commission can provide for robust participation to help inform the planning order it issues to the utilities. Work in other jurisdictions across the country offers useful examples of how different models for stakeholder engagement can be used to improve outcomes in grid planning:

Hawaii

Hawaii's Integrated Grid Planning (IGP) proceeding includes three main forums for stakeholder input, whose functions and composition may provide useful insights for Maine's Commission as it devises its own stakeholder process. These include a Stakeholder Council to provide feedback; a Technical Advisory Panel to vet tools and assumptions; and ad-hoc working groups.[6] These are standing bodies, utilized throughout the proceeding to ensure ongoing collaboration and dialogue.[7] Their functions and composition may provide useful insights for Maine's Commission as it devises its own stakeholder process.

Hawaii's 20-member Stakeholder Council meets quarterly to provide a forum for updates and feedback throughout the planning process and to identify priority issues for ad-hoc working groups to explore in more detail. Stakeholder Council participants include city and county representatives; community delegates; consumer advocates; representatives for demand response, electric vehicles, energy storage, and energy efficiency industries; solar developers; generators; industrial customers; state planning agencies; and environmental organizations, among others. The Stakeholder Council is facilitated by the utility, but the Commission sets strong guidance and protocols for participation, e.g., the utility is required to come to meetings with specific questions for feedback and at the

[6] Hawaii Electric, Integrated Grid Planning Stakeholder and Community Engagement landing page, on September 1, 2022, at https://www.hawaiianelectric.com/clean-energy-hawaii/integrated-grid-planning/stakeholder-and-community-engagement.

[7] Hawaii Public Utilities Commission, Docket No. 2018-01265, Order No. 35569 Instituting a Proceeding to Investigate Integrated Grid Planning.

next meeting must explicitly demonstrate how feedback led to changes in its planning work.

Hawaii's model also includes a Technical Advisory Panel, which comprises industry expert volunteers who provide independent peer review of the grid planning process, methodologies, tools, and the results of modeling and other technical analyses. In response to input from the Technical Advisory Panel, for example, the Commission required the utility to change its assumptions related to DER forecasts, load and peak forecasts, energy efficiency resource costs, and its reliability planning criteria, and the utility made significant changes to its Grid Needs Assessments. Hawaii also uses ad-hoc working groups composed of subject matter experts to assist in specific aspects of grid planning, including developing forecast assumptions, system and customer data solutions, and market-based procurement processes.

Oregon

Oregon has an approach that may help illuminate options for Maine on broad public engagement. In addition to technical working groups, utilities are required to develop a community engagement plan.[8] As part of this and prior to filing its distribution system plan, a utility must host at least four public workshops where community members are invited to share relevant needs, challenges, and opportunities. The utility documents this input and its responses. Additionally, the utility is required to collaborate with community-based organizations and environmental justice communities, to ensure that

[8] Order 20-485, at https://apps.puc.state.or.us/orders/2020ords/20-485.pdf.

community needs, especially with respect to energy burden, customer choice, and resiliency, inform utility forecasting and methods to identify distribution system investments, including customer-sited non-wires solutions. In the case of Portland General Electric, the company hired community-based organizations to recruit for and convene a series of community workshops, develop educational materials, and conduct research for the utility's distribution plan.

Michigan

Michigan recently updated its integrated resource plan filing requirements to include recommendations that utilities undertake a minimum of two public workshops within 12 months prior of filing their grid plans.[9] The purpose of these workshops is to give participants an opportunity to get informed and provide input on "assumptions, scenarios, and sensitivities" underpinning the plan development. The utilities are required to submit outreach reports in their filing, including documentation of outreach efforts to vulnerable communities and a discussion of how public outreach influenced the utility's plan.

Examples from these and other jurisdictions underscore that stakeholder councils, technical advisory panels, and working groups are all useful tools and serve distinct roles. These bodies should be coupled with direct community engagement to inform plans and project development. Whether agency-led, utility-led, or third-party facilitated, approaches to stakeholder and community engagement require clear protocols and strong guidance from the Commission to the utilities, including requirements that utilities justify their work in response to

[9] Revised Integrated Resource Plan Filing Requirements, Michigan Public Service Commission, June 30, 2022, pp 4-5, at https://mi-psc.force.com/sfc/servlet.shepherd/version/download/0688y000003OYZ2AAO.

stakeholder input. Independent analysis of utility inputs and assumptions by technical experts is also extremely important to uncovering least-cost solutions, a point described in more detail below.

We encourage the Commission to consider establishing a council of broadly representative stakeholders, akin to Hawaii's Stakeholder Council described above or the Maine Utility Regulatory Reform and Decarbonization Initiative that convened in 2020-2021.[10] We recommend that there be explicit representation for historically marginalized communities, including but not limited to Wabanaki tribal representation and representation from environmental justice organizations and/or environmental justice communities. Other members would represent the renewable energy industry, energy efficiency industry, the load management industry, Maine commercial and industrial customers, low- and medium-income customers, consumer advocates, environmental advocates, municipal government, Efficiency Maine Trust, Office of the Public Advocate, possibly the Non-Wires Alternatives Coordinator, the Governor's Energy Office, the Public Utilities Commission, and the utilities. The selection, terms, and conditions of membership should be designed thoughtfully to support balance and representation, and we would welcome the opportunity to provide input on those details.

The group would meet regularly, i.e., quarterly or biannually, to be updated by utilities on the status of the plans and planning process, and to assist in identifying "priorities, assumptions, goals, methods and tools" and related questions and concerns to be addressed at the level of the technical working groups. The stakeholder council would be a standing body that would meet during but also outside the period of stakeholder input triggered at 5-year intervals as prescribed

[10] The Maine Utility Regulatory Reform and Decarbonization Initiative, convened by the Great Plains Institute and the Natural Conservancy, information available at https://www.betterenergy.org/wp-content/uploads/2021/04/MURRDI-Stakeholder-Process-Summary.pdf.

by the planning provisions, and in doing so offer a means of oversight and transparency with respect not just to plan development but also implementation. The council would also help to recognize and respond to challenges as they arise and delegate issues for deeper technical review and analysis to the working group-level on an ongoing basis. The Commission should designate a central, leadership role for itself in this type of organization to ensure that it supports the Commission's work across dockets.

After internalizing feedback to this Notice of Inquiry, we recommend that the Commission issue a draft proposal on the stakeholder engagement model it intends to use, on which to solicit another round of feedback from stakeholders. The straw proposal would cover three tiers of engagement discussed across our responses herein: stakeholder council, technical working groups, and broad public outreach.

> ***2. The Commission expects to convene working groups and/or hold technical conferences, as well as to provide opportunities for written comments and submissions but may use a facilitator. Please comment on this aspect of the process.***

Our response to question two builds on the discussion of models for stakeholder engagement provided in response to question one above.

We recommend that the Commission use a professional facilitator with significant relevant experience to support the stakeholder engagement process. Doing so would help guarantee that Maine takes this opportunity to set a strong precedent for robust, inclusive stakeholder input, and lays a durable foundation for tapping stakeholder perspectives and expertise on an ongoing basis over the course of plan implementation and subsequent planning cycles. An impartial third-party facilitator can help work around staff resource constraints at the Commission, help establish trust among parties, and build credibility. Importantly, using a

professional facilitator may also free up Commission staff to participate more fully in the process and take advantage of the opportunity to get into the public record information that will serve the Commission's work in other areas. The Commission should, however, retain a central leadership role in determining the workshop formats, content, goals, and setting the tone, to ensure that the process is providing the Commission with the information, perspectives, and authority it needs to achieve planning objectives.

We recommend that the stakeholder process take the form of a series of half-day public workshops oriented around particular topics, with one or more public comment periods to capture feedback concerning the workshops. The Commission would identify topics as those relevant for determining the content of the integrated grid planning guidance it will issue to the utilities, including for instance the "priorities, assumptions, goals, methods and tools" necessary for the utilities to develop decarbonization plans. Policy and technical research and analysis could be developed in advance of the workshops to help educate, inform, and steer the stakeholder discussion. Subject matter experts could introduce latest best practices on a topic and/or discussion would be informed by surveys or data requests issued to utilities, the results of which would be circulated well in advance of related workshops to provide adequate time for stakeholders to review. Expert facilitation would be geared toward identifying "priorities, assumptions, goals, methods and tools" related to the specific statutory requirements and with clear guidance from the Commission to support the development of its planning directive. We recommend professional facilitation and related expenses be included in the Commission's needs assessment to the Joint Committee on Energy, Utilities and Technology due December 1, 2022.[11]

[11] Costs for professional facilitation in grid planning vary substantially based on specific programmatic details, e.g., number and length of meetings, in-person vs. virtual, products, and types of expertise required. Some organizations, such as the Lawrence Berkeley National Lab and the Regulatory Assistance Project, can provide

To a large extent, the quality of engagement will depend on the participation of technical experts that do not work for the utilities to help vet the information the utilities put forth and provide a technical counterweight. This could take the form of a consultant hired by the Commission or other state agencies. It could also include other stakeholders that the Commission does not need to pay for.

One source of expertise that the Commission should leverage is the NWA Coordinator, the consultant DNV. Through its work evaluating utility proposals since its selection for the role in December 2019, DNV has become well acquainted with the distribution system planning practices of Maine's utilities, and that significant experience should be put to use here. Especially given the degree to which grid planning encompasses the identification of NWAs and the future need to align these two planning processes in Maine, as they are aligned in other states, we encourage the Commission to ensure the participation of the NWA Coordinator in the stakeholder forum, in a way that respects any confidentiality and legal constraints pertaining to the consultant's work under the NWA statute. We recommend the Commission work with the Office of Public Advocate to develop a clear role for the NWA Coordinator in this first planning iteration and build on lessons learned over the course of the first two years implementing Maine's NWA statute.

Given the holistic scope of the planning exercise, the Commission may determine that multiple modeling tools are needed to capture transmission, distribution, supply-side, and demand-side factors. For instance, outputs from supply-side resource modeling may be used as inputs to a distribution system model, where sensitivities pertaining to forecasts of end-use

facilitation services free of charge with federal or foundation funding. Others, like GridWorks, which serves the Western U.S., and RMI, which has a national reach, provide services at substantially lower cost with foundation funding.

electrification, energy efficiency, and distributed energy resources, as per the statutory requirements, and presumably developed and/or approved by Efficiency Maine Trust, would be analyzed by utilities. Whatever the Commission's determination about what tools and analyses are required, the utilities' modeling should not be the only modeling considered. Other states (e.g., MN, MI) have utilized independent analyses using the same tools and methods identified through the stakeholder process and prescribed by the Commission to provide a counterpoint for the work developed by the utilities, challenge utility assumptions, unpack biases of the modeling, and develop alternative low-cost investment plans.

For example, the Energy Resources Division (the state energy office) in the Minnesota Department of Commerce conducts its own modeling to evaluate the economic and rate impacts of utility plans and alternative plans using different assumptions. Also in Minnesota, and underscoring the value of having multiple parties challenging the utility's work at the technical level, a coalition of clean energy organizations contracted with the Energy Futures Groups to conduct runs in the same model used by Xcel Energy. Their analysis identified a less risky, lower-cost, and lower-emission alternative to investing in a new natural gas combined cycle plant,[12] and ultimately, Xcel withdrew this and other new gas builds from its final plan approved by the Minnesota PUC in February 2022.[13] A coalition of public interest groups in Michigan also hired the Energy Futures Group to conduct similar modeling to challenge Detroit Edison's

[12] *Coal plant retirements, renewable energy investments, and no new gas in final Xcel Energy plan*, Fresh Energy, February 8, 2022, at https://fresh-energy.org/no-new-gas-xcel-energy-long-term-plan.
[13] *Minnesota Public Utilities Commission Approves Xcel Energy's Resource Plan – Prioritizing Low Costs to Consumers, and Environmental and Community Protections*, Minnesota Public Utilities Commission Press Release February 8, 2022, at https://mn.gov/puc/about-us/news/archives/#/detail/appId/1/id/518158.

integrated resource plan (IRP) and its assumptions related to the treatment of distributed solar, accelerating coal retirements, and presenting alternatives to building new gas plants.[14]

For distribution system modeling, it may not be feasible to conduct independent modeling runs due to the data intensity and complexity of these platforms. In this case, having independent technical experts such as DNV at the table with capacity to access and thoroughly probe utilities' work will be important. Again, this could take the form of a consultant hired by the Commission or other state agencies but could also include other stakeholders that the Commission does not need to pay for. Critical, too, is that interested parties be given full, transparent, and timely access to related information, data, assumptions, and tools to evaluate utility plans and conduct their own analyses.

To help elevate the level of technical engagement by the Commission for grid planning, but also non-wires alternatives and other technical areas of grid modernization, we recommend that the Commission hire engineering and economic expertise in-house. New technical staff, as well as contracted technical expertise, if the Commission determines it to be necessary, should be included in the Commission's needs assessment to the Joint Committee on Energy, Utilities and Technology in December.

3. What steps should the Commission take to encourage participation by stakeholders, especially those stakeholders that do not frequently participate in Commission proceedings?

Climate change is forcing a radical transformation of the power grid, and ratepayers are being asked to invest in decarbonization and change the way they think about and value energy

[14] *DTE resource plan ignores dynamic modeling, undervalues solar, stakeholders complain*, Utility Dive, August 27, 2019, available at https://www.utilitydive.com/news/dte-resource-plan-ignores-dynamic-modeling-undervalues-solar-stakeholders/561750/; *Forging Ahead on DTE's Energy Future*, Union of Concerned Scientists, April 13, 2020, at https://blog.ucsusa.org/james-gignac/dtes-energy-future/.

services. Public discourse has become more sophisticated, but more needs to be done to deepen public understanding of these complex issues, encourage participation, and bring new voices to the table. The Commission should seek to encourage participation by stakeholders that do not frequently participate in Commission proceedings, especially those representative of environmental justice communities. Procedurally, this might mean holding meetings virtually and in-person and doing targeted outreach to impacted, underserved, or historically disadvantaged communities. It also may mean for example:

- Developing communications materials in plain language to help stakeholders understand how issues impact their lives.
- Notifying the public of events and deadlines outside of the Case Management System.
- Making consultant reports and other relevant documents available outside of the Case Management System.
- Developing plain-language guides to help the public understand the Commission's processes and how to participate and provide useful comments.[15]
- Undertaking or contracting for technical policy research and analysis in a timely manner to steer plan development and inform stakeholder discussion.
- Offering adequate time to provide comments and making use of rolling deadlines.
- Establishing robust, transparent procedural guidelines for incorporating and reflecting stakeholder comments in Commission orders.

[15] For an example, see Bureau of Ocean Energy Management, *Tips to Provide Helpful Comments*, available at https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/BOEM-Renewable-Energy-How-To-Comment.pdf.

- Widely promoting intervenor funding opportunities as a vehicle to encourage participation by individuals and organizations in grid planning, making eligibility conditions and application procedures easy and accessible, and using grid planning as a test case for intervenor funding.
- Setting goals related to outreach and participation and evaluating outcomes for the purpose of making iterative improvements to outreach efforts.

Although utilities often organize public outreach, as the examples of Oregon and Michigan provided above illustrate, and although utilities should have an incentive to improve customer relationships and be responsive to customer concerns, Maine's investor-owned utilities may be poorly positioned to host productive community conversations due to low levels of customer satisfaction and lack of demonstrated experience addressing equity concerns. As an alternative to obligating the utilities to conduct public outreach, we recommend the Commission organize the outreach itself according to rigorous and transparent protocols of procedural justice and accountability.

We recommend the Commission host a series of workshops in key locations within the two utilities' territories according to protocols designed to ensure meaningful and inclusive participation, mutual education, and transparency, and identify priorities, especially related to energy burden, customer choice, and resiliency for instance, to improve plan outcomes. Locations could be chosen to represent a range of relevant issues for Maine, including areas facing congestion, expected to need significant infrastructure upgrades, and/or identified as environmental justice, frontline, underserved, or vulnerable by Maine's Department of Environmental Protection.

According to statute, Maine's utilities are required to file with their integrated grid plans, "an assessment of the environmental, equity, and environmental justice impacts of grid plans." The purpose of this public outreach would be to both center equity and environmental justice concerns in the grid planning process and lay the groundwork for these assessments. As such, the workshops should be held early enough in the planning process to influence the development of the plans. The Commission should commit to coordinating with community groups and environmental justice communities in organizing the workshops, potentially contracting community-based organizations for assistance in recruiting and facilitating participation. The Commission should document its efforts and report and synthesize findings, to be incorporated into the grid plan proceedings and the specifications that the Commission will issue to utilities regarding their assessments of environmental, equity, and environmental justice impacts. Utilities should be required to participate substantively in the workshops and related outreach and show concretely how their grid plans changed as a result of the public input.

4. Please comment on how the priorities detailed in the Act should be identified, analyzed, and discussed by the stakeholders including how the Commission should formally establish the priorities from the feedback it receives from stakeholders?

Protocols for public outreach and community engagement, described under question three above, should be designed to help identify community goals and priorities and explain in plain language how integrated grid planning impacts communities. This will require a sound understanding of how the technical issues related to grid planning intersect with people's lives, e.g., customer choice, resiliency, price stability, energy burden, air quality, etc., to help steer discussions and distill priorities. The Commission and utilities alike should be prepared to

support this translation work of channeling people's needs and frustrations toward utility sector solutions.

More generally and on an ongoing basis, priorities would be identified through the stakeholder council described above in response to question one, and through feedback between the stakeholder council and working groups. The priorities for technical discussion in this initial planning iteration should be determined in part by the need to clarify and contextualize the requisite components of the grid plans as enumerated in statute (Section 8, subsection 4). For example:

- What data, assumptions, methods, and tools should utilities use to develop forecasts of end-use electrification, energy efficiency, and distributed energy resources?
- What analysis and parameters should utilities use for the planning scenarios?
- What additional modeling is required given the holistic scope of the planning exercise?
- What is the appropriate level of complexity to require for the hosting capacity analyses at this stage?
- What are best practices in load management and grid flexibility to reduce costs and address equity concerns in the clean energy transition?
- How can grid planning be implemented to strengthen Maine's non-wires alternatives process and how can the two planning processes be synchronized and streamlined?
- How should requirements be sequenced to build momentum for implementation, ensuring that the first planning iteration is achievable while building a foundation for future

complexity that takes into account near-term needs, existing data/system/infrastructure limitations, and plans to overcome those limitations?[16]

- How can grid planning absorb existing momentum in related areas of work at the Commission, notably grid modernization, non-wires alternatives, and DER interconnection, where recommendations for near-term action are available and need not be delayed?

5. Should the meetings all take place in Hallowell at the Commission's offices, or should the Commission hold meetings around the State or offer remote participation by stakeholders?

The Commission and/or the utilities should hold virtual and in-person meetings in Augusta as well as in targeted locations to improve rates of participation generally and by disadvantaged or underserved communities specifically. See response to question three above regarding ways to improve participation by stakeholders that do not typically participate in Commission proceedings.

6. Please comment on how the Commission can best incorporate into this process the work already completed in the Commission's Grid Modernization case in Docket 2021-00039?

The grid modernization roadmaps developed by consultant Electric Power Engineers (EPE) and related work from Docket 2021-00039 should be taken as a starting point for the necessary institutional changes, business and operational practices, and investments that will be required of Maine's utilities. The scope of this effort was incremental relative to the horizon of

[16] A scheduling of requirements referred to as the "walk-jog-run" model. See: De Martini, et al., More Than Smart, *Planning for More Distributed Energy Resources on the Grid: A Summary for Policy-Makers on the Walk-Jog-Run Model* (2018), at https://gridworks.org/wp-content/uploads/2018/01/plug-and-play-report_online_v2.pdf.

the 10-year plan to put the state on track to meet 2030 and 2050 greenhouse gas reduction, clean energy, and beneficial electrification targets. For many of the recommendations, implementation should not wait for the integrated grid plans to be approved.

III. Conclusion

The urgent demands of addressing climate change, the pressure of high energy costs, and the rapidly changing local and global energy landscapes require a reimagining of how we plan, build, and operate our electric grid. New England's Independent System Operator projects that the regional grid will need to double in size over the course of the next two decades to update aging infrastructure while expanding to accommodate increased renewable energy and growing demand from electric vehicles and heating. Integrated grid planning offers Maine an opportunity to participate in and implement this transformation more proactively and more judiciously by making the current planning and operational practices of our utilities more transparent in order to find opportunities to reduce unnecessary spending and save ratepayers money. Robust stakeholder engagement, independent modeling, and a common understanding of technical issues are essential components to that work.

The stakes are high for this first planning cycle, and we want it to be successful. We urge the Commission to consider our recommendations as it develops its plans and approach for this important planning process. -We appreciate the opportunity to provide our input at this juncture and look forward to supporting the effort as it gets underway this fall.

Respectfully submitted,

Rebecca Schultz
Senior Advocate for Climate & Clean Energy
Natural Resources Council of Maine

Oliver Tully
Director, Utility Innovation and Reform
Acadia Center

Steve Clemmer
Director of Energy Research & Analysis
Union of Concerned Scientists

Phelps Turner
Senior Attorney
Conservation Law Foundation

Kathleen Meil
Director of Policy and Partnerships
Maine Conservation Voters

Rob Wood
Director of Gov't Relations and Climate Policy
The Nature Conservancy in Maine