

STATE OF MAINE

IN THE YEAR OF OUR LORD

TWO THOUSAND TWENTY-THREE

H.P. 599 - L.D. 952

Resolve, to Create a 21st-Century Electric Grid

Sec. 1. Distribution system operator for the State. Resolved: That, by January 1, 2024, the Governor's Energy Office, referred to in this resolve as "the office," shall issue a request for proposals and select a 3rd-party consultant, referred to in this resolve as "the consultant," that meets the requirements of section 5, to conduct a 2-part study regarding the establishment of a distribution system operator. For the purposes of this resolve, "distribution system operator," or "DSO," means an entity designed to serve the following roles for the State:

1. Oversee integrated system planning for all electric grids in the State, including coordinating energy planning efforts across state agencies;
2. Operate all electric grids in the State to ensure optimum operations, efficiency, equity, affordability, reliability and customer service;
3. Administer an open and transparent market for distributed energy resources; and
4. Facilitate the achievement of the greenhouse gas reduction obligations and climate policies pursuant to the Maine Revised Statutes, Title 38, section 576-A and section 577, subsection 1.

The office shall ensure meaningful opportunities for stakeholder engagement to inform the consultant's work at appropriate times during each part of the study.

Sec. 2. DSO initial study. Resolved: That the consultant selected by the office shall conduct an initial study to evaluate whether a DSO could be designed to achieve the following objectives:

1. A demonstrable reduction in electricity costs for customers;
2. Improved electric system reliability and performance in the State; and
3. Accelerated achievement of the State's climate goals and growth of distributed energy resources.

The consultant's initial study under this section must include a conclusion regarding whether a DSO can be designed to achieve the objectives identified in this section. The consultant shall provide its initial study to the office for review.

Sec. 3. DSO study part 2. Resolved: That, if the consultant's initial study concludes that a DSO can be designed to achieve the objectives set out in section 2 and the office agrees with that conclusion after review and evaluation of the initial study, the office shall authorize the consultant to proceed with the 2nd part of the study in accordance with this section.

1. The consultant, in conducting part 2 of the study, shall develop a DSO design proposal and identify the scope and characteristics of the DSO, which may include:

A. Acting as the primary interface between the New England independent system operator, referred to in this resolve as "ISO-NE," and electricity transmission grids in the State;

B. Operating an open market for distributed energy resources, modeled on ISO-NE's wholesale power market, to provide market incentives, including, pricing that includes a valuation of system and societal benefits as well as the commodity value of the electricity for new renewable distributed energy resources, including, but not limited to, solar, wind, biomass, electricity storage and microgrids;

C. Conducting statewide integrated distribution system planning that:

(1) Includes review and approval of integrated distribution system designs for all transmission and distribution utilities to optimize operation, meet electric grid modernization goals, optimize interconnections and provide the basis for revenue requirements related to recovery of investments in system upgrades; and

(2) Incorporates nonwires alternatives, load management and energy efficiency programs, along with traditional investments in infrastructure to ensure reliability and efficient integration of distributed energy resources;

D. Informing distributed energy resource market participants regarding locational capacity mapping;

E. Scheduling and controlling energy storage system discharge within the distribution grids, including vehicle-to-grid systems;

F. Acquiring and sharing real-time data used to operate earnings adjustment mechanisms for investor-owned transmission and distribution utilities;

G. Optimizing operations, infrastructure growth, demand management and energy efficiency programs for all transmission and distribution utilities using real-time data; and

H. Providing a detailed delineation of functions and responsibilities of the DSO, transmission and distribution utilities and government and quasi-governmental agencies, including regulatory, planning, ownership and market administration functions.

The DSO design may not include the acquisition or ownership of any transmission and distribution utility assets.

Sec. 4. Final report and analysis. Resolved: That, if a design proposal is developed in accordance with section 3, the office shall evaluate the proposal and prepare a final report and recommendation including the following elements:

1. Identification of the costs and benefits of creating the DSO, including the staffing and budget needed for operation of the DSO;
2. A description of the DSO's role in accelerating the achievement of the State's climate goals and growth of distributed energy resources;
3. Identification of potential improvements in electric system reliability and performance that the DSO would bring to the State;
4. An evaluation of whether and how the DSO would affect equity in energy access and affordability throughout the State;
5. The office's recommendations regarding whether the State should establish the DSO; and
6. If the office recommends that the State establish the DSO:
 - A. Identification of the state agency within which the DSO might best be established;
 - B. Suggested changes to electric rate-making policy and regulations that may be necessary to implement the DSO;
 - C. A description of the regulatory authority, if any, that should be provided to the DSO; and
 - D. A description of the steps necessary to establish the DSO, including legislation for its implementation.

Sec. 5. Consultant qualifications. Resolved: That the consultant with which the office contracts under section 1 must be an expert in the development of new energy markets with experience in the management of energy programs designed to increase distributed energy resources and to accelerate the transition to beneficial electrification. The consultant or members of the consultant team must demonstrate:

1. Experience in energy system transformation through projects involving the integration of grid design and regulation, using systems thinking and stakeholder engagement;
2. Experience in alternative regulatory frameworks, such as performance-based regulation, retail and wholesale market design that provide equitable programs for a low-carbon electric grid;
3. A comprehensive understanding of integration issues related to distributed energy resources, energy storage and electric vehicles, demand-side management and advanced price signals;
4. Through references from at least 3 jurisdictions, experience in policy and structure redesign work performed for jurisdictions of a similar size to the State; and
5. Through case studies of prior work, experience in the development of clean technology in ways that integrate stakeholder perspectives in regulatory and policy proceedings.

Sec. 6. Funding. Resolved: That the office shall seek to fund the initial study under section 2 and part 2 of the study under section 3 with federal funds. The office shall pursue all federal funding opportunities that the office determines could be used to fund the study. For any portions of the study that cannot be funded through federal funds, the office shall

submit a request to the Public Utilities Commission for the amounts necessary to fully fund the study. The office may request from the commission up to \$200,000 to fund the initial study and up to \$100,000 to fund part 2 of the study under section 3. Notwithstanding the Maine Revised Statutes, Title 35-A, section 117, subsection 3 and to the extent that funds are available, the commission shall distribute the requested funds to the office from the Public Utilities Commission Reimbursement Fund established by Title 35-A, section 117.

Sec. 7. Report. Resolved: That, if the consultant does not conclude that a DSO can be designed to achieve the objectives in section 2, the office shall present the initial study to the joint standing committee of the Legislature having jurisdiction over energy matters within 60 days of the completion of the consultant's initial study.

If the office authorizes part 2 of the study in accordance with section 3, by January 1, 2025, the office shall present the initial study developed by the consultant in accordance with section 2, part 2 of the study and the office's final report and recommendation in accordance with section 4 to the joint standing committee of the Legislature having jurisdiction over energy matters. The committee may report out a bill to the 132nd Legislature in 2025 related to the subject matter of the report.