



124th MAINE LEGISLATURE

SECOND REGULAR SESSION-2010

Legislative Document

No. 1535

H.P. 1079

House of Representatives, December 21, 2009

An Act To Create a Smart Grid Policy in the State

(EMERGENCY)

Approved for introduction by a majority of the Legislative Council pursuant to Joint Rule 203.

Received by the Clerk of the House on December 17, 2009. Referred to the Committee on Utilities and Energy pursuant to Joint Rule 308.2 and ordered printed pursuant to Joint Rule 401.

Millicent M. Mac Jailand

MILLICENT M. MacFARLAND Clerk

Presented by Representative HINCK of Portland.

Cosponsored by Representative RUSSELL of Portland and

Representatives: BERRY of Bowdoinham, FITTS of Pittsfield, FLETCHER of Winslow, SIROIS of Turner, Senators: GOODALL of Sagadahoc, HOBBINS of York, MILLS of Somerset.

Emergency preamble. Whereas, acts and resolves of the Legislature do not 1 2 become effective until 90 days after adjournment unless enacted as emergencies; and Whereas, the State currently lacks a unified state policy on smart grid energy 3 4 infrastructure but faces critical decisions regarding the implementation of smart grid 5 technology and the creation of such a unified smart grid policy; and Whereas, the cost of electricity to consumers in the State is high compared with 6 7 costs in similar markets elsewhere and impedes economic development in the State; and 8 Whereas, the State has recognized the consequences of climate change and has 9 committed to policies to reduce emissions of greenhouse gases; and 10 Whereas, the State's electric grid and long-term infrastructure investment are vital 11 to continued security and economic development, and a smart grid will deliver electricity from suppliers to consumers using modern technology to increase reliability, save energy, 12 13 reduce costs and enable greater consumer choice; and 14 Whereas, it is vital that a unified smart grid policy be developed to ensure that all ratepayers and the State as a whole are afforded the benefits of smart grid infrastructure; 15 and 16 17 Whereas, in the judgment of the Legislature, these facts create an emergency within the meaning of the Constitution of Maine and require the following legislation as 18 immediately necessary for the preservation of the public peace, health and safety; now, 19 20 therefore, 21 Be it enacted by the People of the State of Maine as follows: 22 Sec. 1. 35-A MRSA §3143 is enacted to read: 23 §3143. Declaration of policy on smart grid infrastructure 24 1. Definitions. As used in this section, unless the context otherwise indicates, the following terms have the following meanings. 25 26 "Smart grid" means an electric system that provides or supports smart grid functions. 27 28 "Smart grid functions" means those functions that advance the policy of the 29 United States as specified in the federal Energy Independence and Security Act of 30 2007, Public Law 110-140, Section 1301, including functions that enable consumers to access information about and to manage and adjust their electricity consumption or 31 to generate and store electricity and functions specified in Section 1306(d) of that 32 33 Act. 34 2. Legislative findings. The Legislature finds that: 35 A. The cost of electricity to consumers in this State is high in comparison to costs in similar markets and impedes economic development; 36

 B. The State has recognized the consequences of climate change and has committed to policies to reduce emissions of greenhouse gases;
 C. The State's electric grid and long-term infrastructure investment are vital to

continued security and economic development, and a smart grid will deliver electricity from suppliers to consumers using modern technology to increase reliability, save energy, reduce costs and enable greater consumer choice;

D. The State currently lacks a unified state policy on smart grid infrastructure but faces critical decisions regarding the implementation of a smart grid, and the commission and the Legislature will play central roles in making those decisions; and

E. It is vital that a smart grid policy be developed in order to ensure that all ratepayers and the State as a whole are afforded the benefits of smart grid infrastructure.

3. Policy; creation of a smart grid. In order to improve the overall efficiency of the electric system, better manage energy consumption, reduce greenhouse gas emissions and control consumer costs, it is the policy of the State to promote, in a manner consistent with applicable industry standards for reliability, safety and security, a rapid increase in the availability and use of smart grid functions through:

- 18 A. Increased use of digital information and control technology to improve the
 19 reliability, security and efficiency of the electric system;
 - B. Deployment and integration into the electric system of renewable capacity resources, as defined in section 3210-C, subsection 1, paragraph E, that are interconnected to the electric grid at a voltage level less than 69 kilovolts;
 - C. Deployment and integration into the electric system of demand response technologies, demand-side resources and energy-efficiency resources;
 - D. Deployment of smart grid technologies, including real-time, automated, interactive technologies that optimize the physical operation of energy-consuming appliances and devices, for purposes of metering, communications concerning grid operation and status and distribution system operations;
 - E. Deployment and integration into the electric system of advanced electric storage and peak-reduction technologies, including plug-in electric and hybrid electric vehicles;
- F. Provision to consumers of timely energy consumption information and control
 options; and
- 34 <u>G. Identification and elimination of barriers to adoption of the technologies,</u>
 35 <u>practices and services listed in paragraphs A to F.</u>

4. Policy goals and priorities. In developing the State's smart grid infrastructure, it
 is the goal of the State to improve electric system reliability as well as the overall
 efficiency of electric energy resources and the electric grid while reducing energy
 consumption, greenhouse gas emissions and costs to consumers, in part by offering
 consumers greater choice and information about their electricity consumption. To meet

- this goal, it is the policy of the State that all available resources be assessed, including the
 following types of resources, which are ranked in order of priority from highest to lowest:
- 3 <u>A. Energy efficiency;</u>

4

5

6

7

- B. Demand management, including but not limited to establishment of time-of-use tariffs and performance-based rates;
- <u>C.</u> Renewable resources, as defined in section 3210, subsection 2, paragraph C, located in the State;
- 8 D. Renewable resources, as defined in section 3210, subsection 2, paragraph C,
 9 located outside of the State;
- 10E. Resources, other than those listed in paragraphs C and D, that are located in the11State and are interconnected to the electric grid at a voltage level of less than 6912kilovolts; and
- F. Transmission lines for which a certificate of public convenience and necessity is
 required under section 3132, su (section 2).

5. Commission review of upgrades and investments. In any proceeding commenced after the effective date of this subsection in which the commission reviews a transmission and distribution utility's electric transmission or distribution system investments or upgrades, the commission shall ensure that the transmission and distribution utility has appropriately and adequately considered the deployment of technologies that support smart grid functions in a manner consistent with the policies and goals of this section.

6. Compliance with safety, security and reliability standards. In implementing the policies specified in this section, the commission and other agencies and instrumentalities of the State shall ensure that applicable regional, national and international grid safety, security and reliability standards are met. The commission and other agencies and instrumentalities of the State shall seek to cause standards that promote cost-effective technologies and practices supporting smart grid functions to be integrated into national and international grid safety, security and reliability standards.

29 7. Cost recovery. The commission shall, upon petition, permit a transmission and 30 distribution utility to adjust its rates to recover the utility's prudently incurred incremental 31 costs associated with creating a smart grid or otherwise taking reasonable actions 32 consistent with the policies of this section, to the extent that the costs are not already 33 reflected in the utility's rates and the adjustment does not result in rates that are unjust or 34 unreasonable. A grant by a utility in an amount approved by the commission to the 35 University of Maine System for smart grid research and development is deemed to be a 36 prudently incurred incremental cost associated with creating a smart grid.

8. Report. The commission, as part of its annual report on electric industry
 restructuring pursuant to section 3217, shall include a report on the progress of the State
 in achieving the purposes of this section. The commission may include in its report any
 recommendations for changes to law to promote the purposes of this section.

Sec. 2. Examination of creation of reliability utility. The Public Utilities Commission shall undertake an examination of the need for and feasibility of creating or designating a smart grid company in each transmission and distribution utility service territory to facilitate a rapid increase in the use of smart grid functions as defined in the Maine Revised Statutes, Title 35-A, section 3143. For purposes of this section, a smart grid company is a company that is jointly owned as follows: the majority ownership of the company is held by an entity, such as GridSolar, L.L.C., that has a strong interest in aggressively pursuing the purposes of this section and the minority ownership of the company is held by the transmission and distribution utility in whose service territory the company will provide services. If the commission determines that creating or designating such companies is feasible and an appropriate means of achieving the purposes of this section, the commission shall develop recommendations for how to create or designate such companies; otherwise the commission shall recommend alternative means of facilitating a rapid increase in the use of smart grid functions. The commission shall report its findings and recommendations to the joint standing committee of the Legislature having jurisdiction over utilities and energy matters no later than January 15, 2011. The joint standing committee may report out legislation regarding the subject matter of the commission's report to the First Regular Session of the 125th Legislature. Notwithstanding Title 35-A, section 3211-A, subsection 5, the commission may use up to \$100,000 of the funds in the conservation program fund to pay for its costs in undertaking the examination required under this section.

1

2

3

4 5

6

7

8

9

10

11 12

13 14

15 16

17

18

19

20 21

22

23

24

25

26

27

28

29

30

31

32

33

Emergency clause. In view of the emergency cited in the preamble, this legislation takes effect when approved.

SUMMARY

This bill establishes a state policy on smart grid infrastructure including employment of a smart grid to improve power reliability as well as the overall efficiency of the power resource and delivery system while reducing energy consumption, greenhouse gas emissions and costs to consumers, in part by offering consumers greater choice and information about their electricity consumption. The state policy ensures that deployment of a smart grid is done in a manner that is consistent with applicable safety, security and reliability standards. The bill includes legislative findings regarding the high cost of electricity to consumers, the need for smart grid electric infrastructure, the lack of a state policy on smart grid infrastructure and the need for such a policy.

The bill allows transmission and distribution utilities to recover reasonable costs associated with creating a smart grid. It also directs the Public Utilities Commission to examine the need for and feasibility of creating or designating a special entity in each transmission and distribution utility service territory to facilitate a rapid increase in the availability and use of smart grid functions.