



House of Representatives

General Assembly

File No. 330

February Session, 2022

House Bill No. 5327

House of Representatives, April 6, 2022

The Committee on Energy and Technology reported through REP. ARCONTI of the 109th Dist., Chairperson of the Committee on the part of the House, that the bill ought to pass.

AN ACT CONCERNING ENERGY STORAGE SYSTEMS AND ELECTRIC DISTRIBUTION SYSTEM RELIABILITY.

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Subsection (c) of section 16-244e of the general statutes is
2 repealed and the following is substituted in lieu thereof (*Effective October*
3 *1, 2022*):

4 (c) (1) The Public Utilities Regulatory Authority may authorize an
5 electric distribution company to recover its prudently incurred costs
6 and investments, which shall be determined by the authority in a
7 contested case, for any energy storage system such electric distribution
8 company builds, owns or operates to enhance distribution reliability
9 through a fully reconciling component of electric rates for all customers
10 of electric distribution companies, until the electric distribution
11 company's next rate case, at which time such costs and investments shall
12 be recoverable through base distribution rates consistent with the
13 principles set forth in sections 16-19 and 16-19e.

14 (2) Prior to building any energy storage system, an electric
15 distribution company may obtain preauthorization from the authority
16 on the proposed system, which shall be conducted as a contested case
17 proceeding, and shall be completed not later than one hundred eighty
18 days after the submission of an application to the authority. In
19 reviewing the prudence of costs of a proposed system, the authority
20 shall evaluate: (A) The estimated cost of the proposed system, less the
21 projected revenues from the system; and (B) the value to customers of
22 any proposed system connected to the distribution system in front of
23 the meter, taking into consideration the proposed energy storage
24 system's potential as an infrastructure alternative that would avoid or
25 defer investment in traditional electric distribution system capacity
26 upgrades.

27 (3) For any completed energy storage system, the company shall
28 maximize the value from the system's participation in wholesale
29 electricity, capacity or other markets, as applicable, while maintaining
30 distribution system reliability. Any net revenues from such
31 participation shall be credited to ratepayers to offset the cost of the
32 completed system.

33 Sec. 2. (NEW) (*Effective from passage*) (a) The Public Utilities
34 Regulatory Authority shall direct each electric distribution company, as
35 defined in section 16-1 of the general statutes, to submit on or before
36 January 1, 2023, a proposal or proposals to the authority for a pilot
37 program for the company to build, own and operate energy storage
38 systems, as defined in section 16-1 of the general statutes, for the
39 purpose of demonstrating and investigating how energy storage
40 systems can improve resiliency of critical infrastructure and improve
41 reliability of the electric distribution system.

42 (b) The authority shall approve or modify a proposal if it concludes
43 that investment in such energy storage systems is reasonable, prudent
44 and provides value to ratepayers.

45 (c) An electric distribution company may recover its prudently
46 incurred costs made pursuant to this section through a fully reconciling

47 component of electric rates for all customers until the electric
48 distribution company's next rate case, at which time such costs and
49 investments shall be recoverable through base distribution rates
50 consistent with the principles set forth in sections 16-19 and 16-19e of
51 the general statutes.

52 (d) The provisions of this section shall not be construed to impose any
53 limitations or caps upon section 16-244e of the general statutes, as
54 amended by this act.

55 Sec. 3. (NEW) (*Effective from passage*) (a) On or before January 1, 2023,
56 the Division of Emergency Management and Homeland Security shall
57 develop an annex to the division's comprehensive plan for the civil
58 preparedness of the state to be used in disaster or emergency
59 preparedness. The division, in coordination with the electric
60 distribution companies, shall develop for inclusion in such annex to the
61 state civil preparedness plan provisions to provide emergency or
62 backup power to restore or continue the operation of critical
63 infrastructure facilities following a disaster or other emergency,
64 whether arising from severe weather, natural disaster, technological
65 hazard, man-made disaster, civil emergency aspects of resource
66 shortages, insurgency or enemy attack.

67 (b) As used in this section, "critical infrastructure facilities" includes
68 (1) critical water system infrastructure, and (2) buildings for essential
69 services, such as a building or portion of a building used or intended to
70 be used as a fire station, police station, emergency first aid station,
71 emergency operations center, emergency communications dispatch
72 center, air traffic control facility, hospital, hospice or nursing home.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>October 1, 2022</i>	16-244e(c)
Sec. 2	<i>from passage</i>	New section
Sec. 3	<i>from passage</i>	New section

ET Joint Favorable

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

OFA Fiscal Note**State Impact:** None**Municipal Impact:** None**Explanation**

The planning and regulatory provisions of the bill have no direct fiscal or ratepayer impact.

The Out Years**State Impact:** None**Municipal Impact:** None

OLR Bill Analysis**HB 5327****AN ACT CONCERNING ENERGY STORAGE SYSTEMS AND ELECTRIC DISTRIBUTION SYSTEM RELIABILITY.****SUMMARY**

This bill primarily:

1. sets more requirements for electric distribution companies (EDCs, i.e., Eversource and United Illuminating) seeking to build, own, or operate energy storage systems (see BACKGROUND);
2. requires the Public Utilities Regulatory Authority (PURA) to direct the EDCs to submit proposals for an energy storage pilot program; and
3. requires the Division of Emergency Management and Homeland Security (DEMHS) to include in its state civil preparedness plan provisions on providing emergency or backup power to critical infrastructure facilities following a disaster or other emergency.

Current law generally allows (1) EDCs to build, own, or operate storage systems and (2) PURA to authorize an EDC to recover from ratepayers prudently incurred costs and investments related to these systems, first through a fully reconciling component of ratepayer bills, and then, at the company's next rate case, through base distribution rates. The bill limits this provision to energy storage systems that enhance distribution reliability. It also requires PURA to determine the company's prudently incurred costs and investments through a contested case.

The bill establishes a process that EDCs may use to obtain PURA's preauthorization for a proposed storage system. For completed systems,

the bill requires the company to maximize the value from the system's participation in wholesale electricity, capacity or other markets, as applicable, while maintaining distribution system reliability. Under the bill, companies must credit any net revenues the system generates through market participation to ratepayers to offset the completed system's cost.

EFFECTIVE DATE: October 1, 2022, except provisions on the pilot program and DEMHS' state civil preparedness plan are effective upon passage.

§ 1 — PREAUTHORIZATION FOR UTILITY-OWNED ENERGY STORAGE SYSTEMS

The bill establishes a process that allows EDCs to request preauthorization from PURA before building an energy storage system. The bill requires PURA to conduct a contested case proceeding and complete it within 180 days after an EDC submits an application.

When reviewing a proposed system's cost, PURA must evaluate (1) its estimated costs less its projected revenues and (2) for any proposed system connected to the distribution system in front of the meter, the system's value to customers, considering its potential as an infrastructure alternative that would avoid or defer investment in traditional electric distribution system capacity upgrades. (Systems connected "in front of the meter" are generally those that are directly connected to the distribution system rather than behind a given customer's meter. These systems typically provide services to the distribution system (e.g., ancillary services, load shifting, and voltage support).)

§ 2 — ENERGY STORAGE PILOT PROGRAM

The bill requires PURA to direct each EDC to submit one or more proposals by January 1, 2023, for a pilot program for each company to build, own, and operate energy storage systems to demonstrate and investigate how these systems can improve critical infrastructure resiliency and electric distribution system reliability. It requires PURA to approve or change an EDC's proposal if it concludes that investment

in energy storage systems under the proposal is reasonable, prudent, and provides value to ratepayers.

The bill allows EDCs to recover prudently incurred costs associated with the pilot program, first through a fully reconciling component of electric rates for all customers and then, at the company's next rate case, through base distribution rates. The pilot program does not limit or cap provisions described above generally allowing EDCs to build, own, or operate energy storage systems.

§ 3 — PLANNING FOR BACKUP POWER TO CRITICAL INFRASTRUCTURE

The bill requires DEMHS, by January 1, 2023, to develop an annex to its comprehensive plan for the civil preparedness of the state to be used in disaster or emergency preparedness (see BACKGROUND). Under the bill, DEMHS must coordinate with the EDCs to develop provisions to provide emergency or backup power to restore or continue operation at critical infrastructure facilities following a disaster or other emergency (e.g., severe weather, natural disaster, technological hazard, man-made disaster, civil emergency aspects of resource shortages, insurgency, or enemy attack).

Under the bill, "critical infrastructure facilities" include critical water system infrastructure and buildings for essential services, including buildings or parts of buildings used or intended for:

1. fire stations,
2. police stations,
3. emergency first aid stations,
4. emergency operations centers,
5. emergency communications dispatch centers,
6. air traffic control facilities,
7. hospitals,

8. hospices, or
9. nursing homes.

BACKGROUND

Energy Storage Systems Defined

By law, an “energy storage system” is any commercially available technology capable of absorbing energy, storing it for some time, and then dispatching it (e.g., a battery) and also capable of:

1. using mechanical, chemical, or thermal processes to store electricity generated at one time for use later on;
2. storing thermal energy for direct use for heating or cooling at a later time in a way that avoids the need to use electricity later on;
3. using mechanical, chemical, or thermal processes to store electricity generated from renewable energy sources for use later on; or
4. using mechanical, chemical, or thermal processes to capture or harness waste energy and store this electricity generated from mechanical processes for delivery later on (CGS § 16-1(a)(48)).

State Civil Preparedness Plan

By law, the Department of Emergency Services and Public Protection (DESPP) commissioner must prepare a comprehensive plan and program for the state’s civil preparedness and coordinate it with other state and federal civil preparedness plans. The law requires the commissioner to submit the plan to the governor. If the governor approves the plan, all state and local government agencies, civil preparedness forces in the state, and public service companies, including EDCs, must carry out the duties and functions in the approved plan and program. The law allows the commissioner to amend or modify the plan in the same way (CGS § 28-5). DEHMS is the division within DESPP that coordinates statewide emergency management and homeland security.

COMMITTEE ACTION

Energy and Technology Committee

Joint Favorable

Yea 26 Nay 0 (03/22/2022)