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## **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)