Alliance for Climate Transition ("ACT") and Solar Energy Industries Association ("SEIA")
Docket No. 26-08-05
Response to Interrogatory CAE-42
Date of Submission: August 28, 2026
People Responsible: Tim Snyder (ACT) & Ruthie DeWit (SEIA)

Question:

CAE-42 Identify each benefit that standalone FTM storage provides to Connecticut electric ratepayers that is not fully reflected in existing wholesale market participation under the WDAT. For each benefit: (a) explain why it is not currently compensated; (b) identify who receives the benefit; and (c) explain how a bidirectional retail TOU tariff could compensate or reflect that benefit.

Response:

Benefit 1: Reduction in the electric distribution company's Regional Network Service cost allocation

ISO New England assesses Regional Network Service charges under Schedule 9 of its Open Access Transmission Tariff using a twelve-month coincident peak methodology, applied to each transmission customer's monthly peak network load.[1] Twelve hours in the year therefore determine the annual charge. A standalone FTM storage resource discharging during a monthly peak-setting hour reduces the electric distribution company's billed network load by the quantity discharged, and reduces the company's share of regional transmission cost allocation accordingly.

(a) The WDAT is a delivery service tariff. It contains no mechanism recognizing a resource's effect on the electric distribution company's transmission cost allocation, which is a retail-side cost recovered from Connecticut customers. Wholesale settlement is indifferent to whether a megawatt-hour was delivered during a peak-setting hour, so a resource optimizing dispatch against energy prices coincides with the monthly peak only incidentally. The benefit occurs under the WDAT, but sporadically rather than reliably, and the resource has no reason to pursue it.

(b) Connecticut retail customers of the electric distribution company in whose territory the resource is located, through the transmission component of their delivery rate. The

[1] *See* ISO New England Open Access Transmission Tariff, Schedule 9, https://www.iso-ne.com/static-assets/documents/100012/attachment-1-schedule-9.xlsx.

electric distribution company itself is indifferent to the reduction, because transmission costs are passed through to customers rather than borne by the company.

(c) A bidirectional retail TOU tariff could provide a credit for metered discharge during each month's peak-setting hour, calculated at or below the applicable network service rates and settled after ISO New England determines the company's monthly network load. Bounding the credit by the reduction in the company's own billed obligation, whether in full or as a share of the savings realized, keeps the revenue requirement effect neutral or favorable to other customers. Comparable treatment exists elsewhere. Commonwealth Edison recognizes negative network service peak load contribution values for net metering and community energy customers under PJM's Open Access Transmission Tariff, UGI Utilities' Pennsylvania electric tariff provides for negative peak load contribution and network service peak load values where a customer-generator is a net exporter during the relevant hours, and the Long Island Power Authority offers a peak-hour injection credit.

Benefit 2: Avoided or deferred distribution capacity investment

Distribution facilities are planned and sized to serve forecast peak loading on the circuit, substation, or transformer that serves a given area. A standalone FTM storage resource that discharges during local peak conditions reduces loading on the facilities upstream of its point of interconnection, which can defer or avoid an upgrade that would otherwise become necessary. The magnitude of the benefit depends on where the resource is located and on the condition of the specific facilities it relieves, and it can be substantial where a resource sits on a facility approaching its rating.

(a) The WDAT recovers the cost of delivery service and contains no mechanism to compensate a resource for reducing distribution loading. Wholesale market settlement is location-sensitive only at the nodal level, which does not resolve to the distribution facilities where this benefit arises, and ISO New England does not price distribution-system conditions in any of its markets. A resource optimizing against wholesale prices has no reason to discharge during a local peak that does not coincide with a regional one. Connecticut's Energy Storage Solutions program recognizes avoided or deferred distribution upgrades as a storage benefit, but eligibility is generally limited to behind-the-meter systems, with front-of-meter systems considered only for certain qualified multifamily affordable housing projects on a case-by-case basis.[2] A standalone FTM resource therefore has no available channel through which to be compensated for this value.

[2] *See* Final Decision, Docket No. 25-08-05, Annual Review of the Energy Storage Solutions Program (Dec. 17, 2025)

(b) Customers served by the affected distribution facilities receive the benefit first, in the form of service that continues to be adequate without an upgrade. All customers of the electric distribution company receive it through the revenue requirement, which is lower than it would be had an additional investment been made.

(c) A bidirectional retail TOU tariff could include a locational component providing compensation for discharge during defined conditions on identified facilities, with eligibility determined by the electric distribution company's assessment of where distribution constraints exist and performance verified through interval metering. Connecticut's existing non-wires alternatives framework provides a basis for identifying the facilities where the value is available and for valuing it against the deferred investment. Other jurisdictions compensate this value directly. New York's Locational System Relief Value provides additional compensation to distributed resources in utility-designated areas,[3] and Massachusetts increases Clean Peak Energy Certificate production for qualifying resources on designated distribution circuits.[4]

Additional benefits warranting examination

The Joint Commenters identify three further categories of ratepayer benefit that a program design proceeding should examine.

1. Discharge at distribution voltage reduces transmission and distribution losses, which are greatest during peak loading conditions.
2. Discharge during high-priced hours reduces wholesale energy prices for all load clearing in those hours, with a corresponding effect in fuel markets, commonly referred to as Demand Reduction Induced Price Effects ("DRIPE"). DRIPE is applicable both to energy (volumetric) and capacity (demand) market impacts.
3. Discharge during peak hours displaces generation from marginal units, reducing greenhouse gas emissions and criteria pollutants.

Each of these benefits accrues to Connecticut ratepayers and none is compensated under the WDAT. The Joint Commenters do not quantify them for Connecticut on the present record, and address in response to CAE-43 the analytical work that quantification would require.

Further, the Joint Commenters note that value of some benefits that are accessible participating under the existing WDAT in the wholesale may accrue to CT ratepayers

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[3] *See* New York State Energy Research and Development Authority, *Value of Distributed Energy Resources*, https://www.nyserda.ny.gov/All-Programs/NY-Sun/Contractors/Value-of-Distributed-Energy-Resources.
[4] *See* Massachusetts Department of Energy Resources, *Clean Peak Energy Standard Notices and Updates*, https://www.mass.gov/info-details/clean-peak-energy-standard-notices-and-updates; 225 C.M.R. § 21.00 *et seq*

differently than they would under a bidirectional retail TOU tariff. Therefore, even though a resource can provide the same category of benefit through direct market participation or through a load reducer program, the value of that benefit to CT ratepayers may be different. The difference in value of these benefits under different participation mechanisms is worth further exploration.