2025 DOER Canopy Working Group

https://www.mass.gov/info-details/2024-climate-act-stakeholder-sessions

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Solect Energy of Hopkinton has completed 33 solar canopy projects in Massachusetts at private and public properties. The various projects types are configured behind the meter and in front of the meter, as both customer capital purchases and as third party owned. Solect appreciates the opportunity to provide input to the Canopy Working Group.

Obstacles and **Solutions**

Obstacle. Real Estate access rights. Utility easements. Utilities have distribution lines and equipment that crosses property lines, where the utility has secured easement by the owner. Solar projects can cross or conflict with such easements or Rights of Way.

Project examples from 2024,

1. Solar parking canopy project at Framingham State parking lot, it was discovered through title search and underground scanning that Eversource owns a gas line under the parking lot and an Easement. The project was not allowed to build any part within 15 feet on either side of that easement.
2. At Dedham High School, the parking lot is partially over an MBTA property with a decommissioned rail trail not in use for 20 years. We, the Town and the MBTA could not come to an agreement to build a canopy across the parking lot. This project was abandoned.

Solution. Obligate utilities RE and T&D ROW teams to perform rapid, standardized reviews of access rights requests for Clean Energy applications; Create standard Grant of Easement templates that include financeable site control (non-revocable), so projects can safely locate the maximum new DER capacity at the parking area, making sure to not create a future problem for the EDC when they need to excavate the corridor for maintenance and improvements.

Obstacle: Local AHJ permit path can be a long, expensive, and risky process. Planning boards, conservation commissions, special review processes can take many months even years to gain approvals required to complete a building permit application. This creates risks, delays, additional costs, and leads to project abandonment. During the time of this local permitting, the development is subject to interconnection and SMART expirations.

Solution: DOER's Municipal Standard Permit initiative (to be eff. 5/2026) should help to bring a consistent review and approval process for solar canopy project applications.

Obstacle: Feasibility Engineering Costs and Durations.

Example: 480kW AC Canopy standard costs are $35,000 to include electric engineering utility applications, and site plan engineering, Geotech, structural design. Stormwater infrastructure design and other requirements increase the amount of "feasibility engineering". Time and costs associated with Local process: planning board, Conservation Commissions review is minimum of 4 months and has no time bounds for authorization. This creates clear risk for the project owner no knowing the project actual costs without investing considerable risk capital.

Solution: Grant technical feasibility funding for qualified canopy applications. DOER permit team could create a standard qualification for applicants (site control including LOI for public entities, path to ISA, Initial design, source of funding).

Obstacle: End dates for Interconnection Agreements.

Solution: Update IX Tariff or Distributed Generation Guideline, to extend the time from 1 year to a targeted date that aligns with the project schedule. Authorize extensions for cause, such as Site Access, Supply Chain delays, Local AHJ and permitting approvals.

Obstacle: End dates for SMART PSoQ.

Solution: Update SMART Tariff to extend the time from 1 year private / 2 years public to a targeted date that aligns with the project schedule. Authorize extensions for cause, such as Interconnection related delays (GS, ASO, I.S….), Site Access, Supply Chain delays, Local AHJ and permitting approvals.

Obstacle: For behind the meter projects, it's common to leverage existing electrical infrastructure, which saves money by avoiding the cost of buying new transformers, and avoiding the 6-24 months it takes for utilities to install new transformers. When the new project AC rating is larger than the transformer kVa rating, new equipment is required. This regularly prompts the project owner to opt for the smaller project that can use the existing service equipment, and foregoes impact of the larger project's potential.

Solution: Task the DPU's convened Interconnection Implementation Review Group with developing a consensus for Flexible Interconnection standards. This could potentially enable new DER projects with AC capacity larger than the existing service equipment to safely function and avoid the cost and time risk and delay of upgrading to new service equipment.

Consider having the EDCs fund new service equipment if the existing gear is of an age and remaining duty cycle to justify an equipment upgrade, versus the project owner paying for the replacement and upgrade of what is often old equipment at or nearing the end of it's useful life. If the transformer has 20% useful life remaining, and the project requires a like for like transformer upgrade, the EDC would fund 80% of the upgrade cost, and 20% to the project owner. If the new equipment needed exclusively for the project doubles the current capacity (e.g. an 80% depreciated 500 kVa transformer is replaced with a new 1MW kVa transformer), the EDC would fund 40% of the upgrade cost (80% depreciated , double the capacity necessary for the new project).

Obstacle: SMART 3.0 resets values annually. Canopy development takes 2-4 years. This creates risk for canopy project development since a project requires ISA and site control, and AHJ approvals, to apply for SMART. During that development period, SMART values will change, affecting project viability.

Solution: Could DOER grant PSoQs for canopies earlier in the process? This would provide confidence earlier in the process, and preserve the bankable SMART value for continued investment through the development process.

Respectfully submitted,

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