

Summary of National Grid and Eversource EV Program Proposals DPU Dockets <u>21-90</u> and <u>21-91</u> Prepared by Green Energy Consumers Alliance

"Make Ready" broadly refers to utility programs that help pay for the utility-side infrastructure costs of installing EV charging stations. Infrastructure includes upgrades to the distribution network, transformers, wires in the ground, and the necessary trenching to put them there.

In the past, the DPU has approved Eversource and National Grid EV Make-Ready Programs for \$40 million and \$25 million, respectively, focusing on installation of make-ready infrastructure to support public, multi-unit dwelling, and workplace charging, with additional support for charging equipment in Environmental Justice communities. Hundreds of charging stations have been installed in Massachusetts using these programs.

The DPU has also approved fleet advisory services for public transit, school buses, and government fleets, as well as demand response programs for residential chargers to minimize the impact of EV charging on the grid.

The new proposals from National Grid and Eversource increase investments to \$278 million and \$191 million respectively to expand existing incentives and fill in the gaps for EV charging segments that still face significant barriers to EV adoption. There's lots of overlap between the utilities to make the programs consistent for customers across Massachusetts.

Number of EV Make Ready Charging Ports to be Installed through 2025:

	Eversource	National Grid
Public L2	3350 ports	2500 ports
Workplace L2	2760 ports	4700 ports
DCFC	27 MW	32 MW
Pole-mounted L2	0	200 ports
L1	0	500 ports
Fleet	0	600 ports (~30% DCFC, ~70% L2)
Residential L2 (1-4 unit properties)	16,000 ports	20,225 ports



Residential L2 (5+ unit	2170 ports enabled	3,800 ports (2200 installed,
properties)		1600 enabled)

Budget comparison for Eversource and National Grid

	Eversource	National Grid
Public/Workplace	\$109.1 million	\$ 96.77 million
Make Ready	\$85 million	\$72.85 million
EVSE rebates	\$17.2 million	\$18.62 million
Pole-mounted EVSE	\$0	\$1.58 million
DCFC hubs	\$5.6 million	\$0.5 million
Networking rebates	\$0	\$1.38 million
Program management	\$0	\$1.84 million
Residential	\$52.7 million	\$64.08 million
Make Ready	\$32.9 million	\$4186 million
EVSE rebates	\$9.2 million	\$10.41 million
Networking incentive	\$1 million	\$0 – networked EVSE not
		required
Low	\$6.2 million (includes	\$3.97 million
income/Environmental	turnkey service)	
justice		
Site plans for 20+ unit	\$1.2 million	\$1.2 million
buildings		
Program management	\$2.1 million (based on	N/A
	vendor)	
Fleet	\$2 million	\$98.23 million
Make ready	\$0	\$17.81 million
EVSE rebates	\$0	\$8.47 million
Electric school bus rebates	\$0	\$52.5 million
Fleet assessment	\$2 million	\$3.25 million
Utility-side system	\$0	\$15 million
expansion		
Marketing/management	\$0	\$1.2 million
Other	\$28.2 million	\$18.68 million
Equity carshare	\$5 million	N/A
Workforce development	\$1.2 million	\$1.51 million
and electrician training		
Marketing	\$10.1 million	*budget distributed among
		segments



Off-peak rebate expansion	\$0	\$3.84 million
Staffing	\$9.6 million	\$9.17 million
IT and back-office system	\$0.3 million	\$1.78 million
costs		
Program evaluation	\$2 million	\$2.39 million
TOTAL	\$191.9 million	\$277.76 million

Overlap between Eversource and National Grid: What's been expanded?

- Incentives for public/workplace charging
 - Eversource = \$109 million to install 3350 public L2 charging ports, 2760 workplace L2 ports, and 27 MW of DCFC
 - National Grid= \$97 million to install 2500 public L2 ports, 4700 workplace L2 ports, 32 MW of DCFC, and 500 Level 1 (L1) ports on a case-by-case basis
- Support for fleet electrification
 - Eversource = \$2 million to pilot fleet advisory services and install charging infrastructure
 - National Grid = \$98 million to expand fleet advisory services, support charging infrastructure, and provide rebates for electric school buses

Overlap between Eversource and National Grid: What's new?

- Incentives for residential charging
 - Make Ready previously only supported incentives for charging infrastructure at multi-unit dwellings (apartments & condos); now expanding to single-unit homes and support for hardware
- EVSE (charging station) rebates for Level 2 (L2) and DC fast charging (DCFC) in residential & public/workplace segments
 - Residential- \$300 per charging unit. Residential customers will be required to enroll in a managed charging program to receive the incentives (2 options for National Grid, 1 option for Eversource)
 - National Grid customers are required to participate in a managed charging program (either off-peak rebate or demand response program) to receive EVSE incentive.
 - Eversource customers are required to participate in their demand response program, as Eversource does not offer an off-peak rebate.
 - Incentive dollars in the public segment may be used to support proprietary (ie Tesla) charging ports in the National Grid proposal



- Residential Make Ready: offerings vary by size (1 unit, 2-4 unit, 5+ units) and EJ criteria for both utilities
 - 1-unit installation rebate = \$700 (+ \$300 for charging unit, as mentioned above)
 - o 2-4 unit installation rebate = \$1400
 - "Turn-key" service for EJ communities to install EVSE at home- the utility will find the electrician and recommend a charging unit so that the consumer doesn't have to
 - 5+ unit installation rebate = 100% of actual costs on utility-side, 100% of average cost per port on customer-side (not to exceed actual costs); 50% of hardware costs (for Environmental Justice Communities, incentive is bumped up to 100% of average cost of hardware)
 - Site planning services available for 20+ unit properties to help with scaling up charging solutions
 - EJ communities receive higher incentives in each segment. For example, eligible for incentive up to \$1,700 for 1-unit building & \$2,700 for 2-4 unit buildings

Fleet segment

- Eversource is spending much less than National Grid (\$2mil vs \$98 mil).
 Eversource's fleet program focuses on a few fleet assessment and support through Make Ready investments.
- National Grid already has experience providing fleet assessment services, so they propose to scale up their program, as well as offer rebates on electric school buses and expansion of Make Ready investments.
 - As much as \$52 million of National Grid's fleet budget is to deliver rebates for electric school buses

• DCFC demand charge pilot

- A barrier to DCFC is that the stations are not financially viable at low utilization because demand charges (related to how much power is consumed by a customer) are high. But at high utilization, a per-kilowatthour rate does not reflect the cost to the system.
- The solution proposed is a special DCFC rate that varies according to load factor of a DCFC station. This is intended to be revenue-neutral rate (rather than a demand charge holiday).

DCFC hubs in El communities

o at least 4-5 hubs to be installed by Eversource, 10 sites for National Grid



- Grid has pledged that if no vendor in EJ communities want to host a DCFC site, they'll own and operate the stations for a few years)
- Workforce development and electrician training initiatives
 - Proposed by both Eversource and National Grid to benefit workers and to make sure there's a knowledgeable set of electricians with expertise in EV charging projects
- Site planning support
 - some sites (workplaces, multi-unit residences) will want to install some charging now but be prepared to upgrade to more in the future. Site planning will help these properties create a smart and cost-effective plan

Key differences between the National Grid and Eversource proposals:

- National Grid is starting a pole-mounted charger pilot program 10 municipalities to deploy 200 ports on National Grid-owned poles over 4 years
 - Target at least 5 EJ communities
 - National Grid will own the chargers then give the municipality the option to buy them
- National Grid is co-locating energy storage at 5 DCFC sites where the cost of upgrading distribution infrastructure would otherwise be cost prohibitive
- National Grid is offering 300 E-bus rebates (\$175k each)
 - Goal to focus deployment in EJ communities, where private electric car ownership will be slower
 - Eversource has \$3mil allocated for medium/heavy duty fleet electrification, but only to support EVSE/charging and not the purchase price of the vehicles themselves
- National Grid already operates an off-peak charging rebate program for 11,000 customers; program is expanding to include the participation of 1000 fleet vehicles and medium-and-heavy-duty vehicles.
 - A "flexible charging service" to help customers automatically respond to price signals will be made available
 - Eversource has no plan to offer an off-peak charging program (but they do offer a demand response program to prevent EV charging from coinciding with peak electricity usage times)
- Eversource is doing a car-share pilot program (\$2 mil)
 - To support charging infrastructure (Make Ready) but also to offer operational and financial support to ensure program success



- Networking fees for smart chargers at multi-unit dwellings have been identified as a barrier to EV adoption
 - Eversource is offering a networking incentive for large multi-unit dwellings (\$120/port for 4 years)
 - National Grid is waiving the requirement for networked chargers (both aim to address networking fees as a barrier) for large 5+ unit residences

