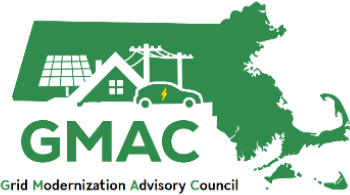


ELECTRIC SECTOR MODERNIZATION PLANS



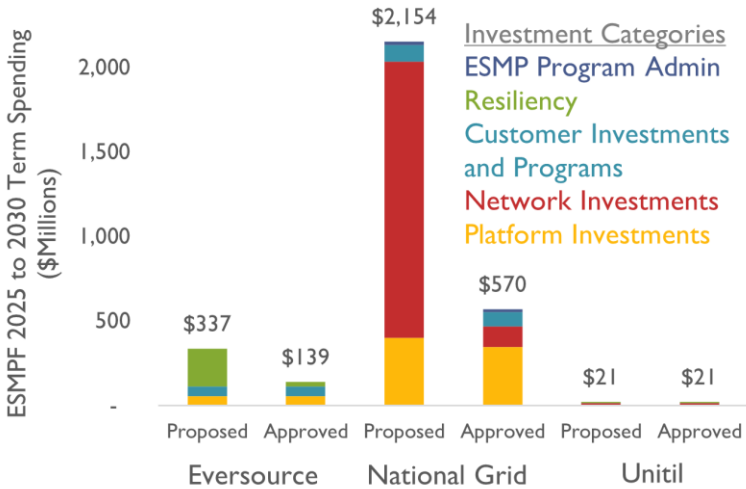
SEPTEMBER 2025 BIENNIAL REPORT SUMMARY

BIENNIAL REPORT OVERVIEW AND BACKGROUND

The Electric Distribution Companies (EDCs) are required to submit two reports per year on their ESMP investments. The purpose of these biannual reports is to allow the Department of Public Utilities (DPU) and stakeholders to monitor each Company’s plans and progress toward achieving statutory objectives during ESMP implementation.¹ The September Biannual Reports, submitted annually on September 30th, provide a forward-looking view of planned ESMP investments.

As shown in Figure 1, the Companies initially proposed over \$2.5 billion of investments for the 2025-2030 ESMP term, which started on July 1, 2025, and ends June 30, 2030. National Grid proposed significantly higher ESMP investments partly because they chose to categorize network investments as ESMP rather than non-ESMP. Eversource, on the other hand, requested recovery of comparable network investments in their most recent rate case, and thus proposed less ESMP spending.

Figure 1. EDC proposed versus DPU approved ESMPF spending during 2025-2030 ESMP term



Data source: Compliance filings filed on June 30th, 2025, in Dockets 24-10/11/12 and responses to DPU Common 13-2, filed January 15th, 2025, in Dockets 24-10/11/12.

The DPU approved 30 percent of the proposed investments, or \$730 million (M), for cost recovery through the ESMP Factor (ESMPF). The ESMPF is a reconciling charge on customer bills which recovers ESMP investments between rate cases. The differences between proposed and approved spending are driven by the DPU’s decisions on which investments warrant ESMPF cost recovery.

The magnitude of ESMPF investments in each category varies by EDC. These differences are partially due to the priorities that each EDC gave in their ESMPs and differences in each Company’s approved spending in rate cases and other proceedings outside of the ESMP. The Biannual Reports only discuss investments approved by the Department for recovery through the ESMPF.

¹ DPU Memorandum, September 9, 2025, page 2.

SEPTEMBER 2025 REPORT CONTENT

The September 2025 Biannual Reports contain five major sections: (I) Introduction, (II) ESMP Investments, (III) Integrated Energy Planning, (IV) Load Forecast, and (V) Outside Funding. The reports provide updates of ESMP activities conducted by the EDCs and stakeholders in 2025 (e.g., Community Engagement Stakeholder Advisory Group (CESAG), Climate Vulnerability Risk Assessments (CVAs), and Integrated Energy Planning (IEP) working group). The EDCs provide an Excel summary of anticipated 2025 and 2026 ESMP investments as Appendix A.

2025-2026 PLANNED ESMP INVESTMENTS

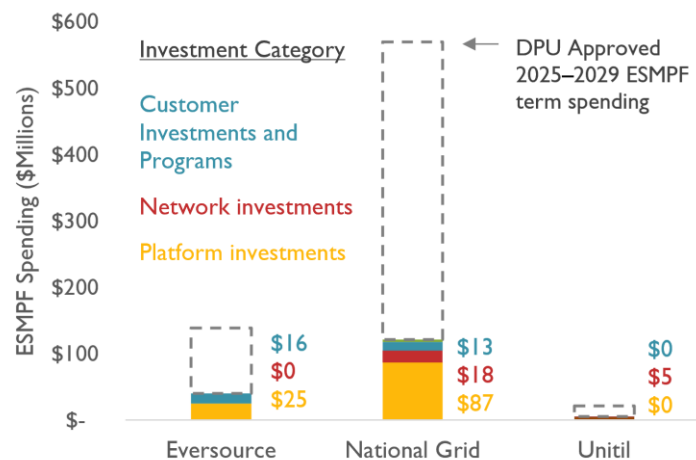
The EDCs provide estimates of their planned ESMP investments in the second half of 2025 and all of 2026. National Grid expects to spend approximately \$121 million through 2026, while Eversource and Unitil project spending \$40.7 and \$5.7 million, respectively. This represents 21%, 29%, and 27%, respectively, of each EDCs approved term spending (Figure 2).

PLATFORM INVESTMENTS

Platform investments comprise the largest category of planned ESMP investments for all EDCs, both from 2025 and 2026 and in the entire 2025-2030 ESMP term. These include investments to leverage data and digitalization to improve the utilities' ability to optimize infrastructure and respond to customer needs, such as DERMS and advanced distribution management system (ADMS) implementation. This category also includes investments in cybersecurity and communication. Highlights include:

- **National Grid** plans to invest roughly \$20.5 M in the implementation of network and critical infrastructure solutions (NCIS). Comprised of six initiatives to modernize the company's telecommunications infrastructure and operational capabilities, NCIS will create the foundation for advanced grid capabilities such as AMS, DERMS, and AMI systems.
- **National Grid** plans to invest nearly \$19 M in 2025 and 2026 in planning for and installing new communication towers and antennas as part of a field area network (FAN) that will enable control of customer distributed energy resources (DERs) through ADMS.
- **National Grid, Eversource, and Unitil** plan to continue implementation of DERMS platforms. National Grid will spend approximately \$17.4 M on DERMS implementation. In 2025, the company expects to finalize the DERMS vendor and start to develop its internal processes. In 2026, the company plans to finalize program staffing, expand its flexible interconnection and bridge-to-wires offerings and work with stakeholders to develop a flexible interconnection EV offering. Eversource expects to deploy DERMS in its western Massachusetts control room by the end of 2025. Between 2025 and the first quarter of 2027, the company will upgrade its enhanced Energy Control Systems

Figure 2. 2025-2026 EDC planned ESMPF spending by category compared to DPU-approved term spending



Note: Not visible in figure: \$3M National Grid planned ESMP admin costs and \$0.5M Unitil planned resiliency costs

(eECS) and distribution management system (DMS) tools in Eastern Massachusetts, which is necessary to implement the most recent DERMS software. In 2026, the company will begin planning for the integration of aggregator (i.e., “edge”) DERMS with grid DERMS. During the October GMAC meeting, Eversource stated that it plans to complete this integration in 2027.

CUSTOMER INVESTMENTS AND PROGRAMS

Customer investments and programs generally include projects that improve EDC system planning and facilitate greater DER integration. In 2025 and 2026, all three EDCs plan to invest in FERC 2222 implementation, integrated energy planning tools, and the implementation of the Grid Services Compensation Fund. These are discussed in greater detail below. Notable investments include:

- **Eversource** initially proposed to deploy a 2 MW / 3 MWh energy storage system in Southampton but decided not to move forwards with the project because the preliminary cost estimate was significantly higher than planned. Instead, the company is planning to spend \$2.3 M to deploy advanced inverters and a 1 MW / 2 MWh mobile battery at its Springfield PV site to enable dynamic control and visibility of the asset and voltage and power management.
- **National Grid** plans to invest approximately \$2.8 M in 2025-2026 to improve the DER interconnection and electric connection processes, including real-time interconnection tracking.

FERC 2222 Implementation

FERC 2222 allows for DERs to participate in the wholesale energy market. The EDCs have been coordinating with ISO-NE and out-of-state EDCs to comply with FERC 2222 requirements. In 2025 and 2026, Eversource and Unitol plan to invest \$4.1M and \$50k, respectively, in software improvements to facilitate DER participation in wholesale energy markets. National Grid doesn’t include FERC 2222-specific costs in its planned ESMP spending.

Grid Services Programs

Each EDC is planning on implementing grid services programs in 2025 and 2026. These programs will be funded by the Grid Services Compensation Fund (GSCF), which provides compensation to customers who allow their DERs to be dispatched to provide local grid services. Eversource, National Grid, and Unitol plan to spend \$2.5 million, \$6.5 million, and \$0.2 million on their grid services programs.

Eversource plans to use enhanced demand response programs to target substation-level load reductions in Eastern Massachusetts and mitigate costs that would otherwise result from summer substation overloading. This is an example of a “bridge-to-wires” solution because it reduces operation and maintenance expenses due to substation overloading.

National Grid conducted market-based and programmatic non-wire alternative programs in summer 2025. The programs aimed to address local grid needs at five locations and to collect data to inform

MassCEC commissioned a study to derive the value of grid services provided by DERs. The EDCs will use the study results to inform the compensation levels offered in their new grid services programs.

The report describes two types of grid services provided by DERs: (1) deferral of infrastructure investments through reducing local peak demand and (2): temporarily relieving grid constraints until necessary infrastructure investments can be built (“bridge-to-wires”).

future grid services programs. National Grid will report on these programs in its 2026 March biannual report. The company is also planning on implementing an enhanced demand response program called ConnectedSolutions+ which is based on the current ConnectedSolutions framework.

Integrated Energy Planning (IEP)

Eversource plans to invest \$3.3M in 2025 and 2026² to develop an integrated energy planning tool which will be used to identify areas suitable for electrification. Unitil and National Grid plan to invest about \$1.5M.³ Unitil is conducting a case study of the cost effectiveness of electrifying its York Avenue gas distribution system, which serves 47 customers in Fitchburg, Massachusetts. Unitil plans to complete the case study by the March 2026 ESMP Biannual report.

NETWORK INVESTMENTS

National Grid defines network investments as targeted infrastructure improvements that directly enable electrification and enhance system resiliency while maintaining reliability. Key highlights in this investment category include:

- **National Grid** plans to spend over \$12M on its expanded conservation voltage reduction (CVR) and volt/var optimization (VVO) initiative, including infrastructure upgrades at six substations. It also plans to spend approximately \$2.1M in 2025 and 2026 on early-phase activities (e.g., permitting, cost analysis) for EV highway charging stations in Bridgewater, Charlton, and Westborough.
- **Eversource** did not propose any network investments in its ESMP and has no planned investments in 2025 and 2026.
- **Unitil** plans to spend roughly \$4.6M to continue its VVO efforts, including enabling VVO at seven substations between 2025 and 2029.

RESILIENCE INVESTMENTS

Resilience investments are investments which increase the resiliency of the grid which can be measured as reductions to outages during storm events. **National Grid** is carrying out resilience investments as part of its core business rather than in the ESMP. **Eversource** is reviewing how to spend its approved resiliency budget considering the DPU's approved \$25M of the proposed \$223M. **Unitil** is conducting GIS and cost-benefit analysis in 2025 and planning to begin implementation in 2026.

FORECASTING UPDATES

Each EDC provided narrative updates to their load forecast approach in Section IV Forecast. Each IOU provided substantive narrative updates to their EV and building electrification forecasts. For example, National Grid updated its medium- and heavy-duty EV forecast through updated charging load profiles, geographical distribution, and mapping to feeders. Additionally, Eversource updated their baseload, solar PV and step load forecast while National Grid updated their baseload, PV, and storage forecasts.

² Eversource is budgeting only \$2M in IEP capabilities in 2026, per p. 15 of its Biannual Report.

³ National Grid categorizes its IEP investments as network investments.

APPENDIX A. 2025-2026 PLANNED ESMP INVESTMENTS

	Investment Type	Projects	Spending (\$M)
Eversource (\$41 M)	Customer Investments and Programs		15.50
	Customer Programs and Enabling Technology	FERC 2222 Implementation, Enable Grid Services / NWA	6.60
	Integrated Energy Planning	Integrated Energy Planning and Advance Forecasting Tools	5.80
	VVO	Advanced Inverters	3.10
	Platform investments		25.20
	DERMS	DERMS Phase II	25.20
National Grid (\$121M)	Customer Investments and Programs		13.08
	All-Electric New Construction Demonstration	All-Electric New Construction Demonstration	0.16
	Customer Programs and Enabling Technology	Clean Energy 2.0, Customer category incremental FTEs, ConnectNow: E2E Load Connection Management Portal & DER Customer Experience Enhancements, Flexible Connections for EVs	4.67
	Grid Services Compensation Fund	Grid Services Compensation Fund	6.50
	Income-Eligible Battery VPP Offering	Income-Eligible Battery VPP Offering	0.83
	Metering & billing systems	DER Markets Settlement Engine	0.92
	ESMP Program Administration		3.08
	ESMP Program Admin	Additional staffing, Federal low-interest loan application, Stakeholder Engagement	3.08
	Network Investments		17.85
	Distribution Programs	Early Fault detection, Expanded CVR and VVO	14.20
	Integrated electric and gas planning	Integrated electric and gas planning	1.52
	Substation and feeder projects	Highway EV Charging Stations (Bridgewater, Charlton, and Westborough)	2.13
	Platform Investments		87.13
	Asset Planning, Management & Work Execution Digital Products	Future Plan Digital Products, Future Work Prep & Execution Digital Products	2.70
	Communications	NCIS - Data Networks, Telecom/Tier 3 Base (Grid Mod)	39.42
	Cybersecurity	Device Management, Network Convergence, Penetration Testing, Security Orchestration Automation & Response	10.15
	Data management platforms	Grid Asset Data Enhancements, Intelligent Data Capture, Transactional Digital Twins	0.00
	Network Management platforms	DERMS, Future Network Operations Digital Products, IJJA	32.30
	Platform investments FTE	Control Center incremental FTEs, Forecasting studies and FTEs, Platform investments incremental FTE	2.55
	Unitil (\$5.71M)	Customer Investments and Programs	
FERC 2222		FERC Order 2222 Implementation	0.05
Grid Services Compensation Fund, VPPs in EJCs, Building to Grid		Enable Grid Services	0.20
ESMP Program Administration		0.00	
Network Investments		4.59	
Distribution Program		VVO	4.59
Platform Investments		0.37	
ADMS/DERMS		Network Management (i.e. ADMS/DERMS)	0.34
Automation		Automation	0.03
Cyber Security		Cyber Security	0.00
Resiliency		0.50	
Targeted Resiliency	Targeted Resiliency	0.50	