

# Enabling Increased Distributed Generation in the Greater Marion Area

## Background

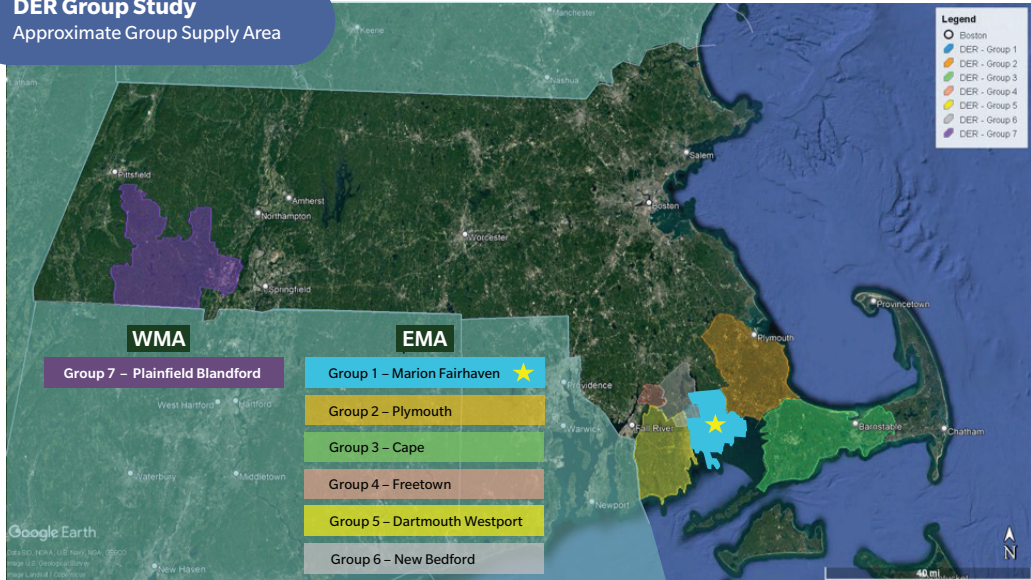
Over the past several years, there has been a dramatic increase in the number of distributed generation facilities (DGF), primarily solar and battery storage, seeking interconnections to the electric grid in Southeastern and Western Massachusetts. These important clean energy resources are needed to help Massachusetts achieve its net-zero carbon emissions goal by 2050.

The electric power system (EPS) in these regions has provided reliable service to the customers it currently serves but substations that are already congested cannot safely and reliably accommodate an incremental 348 megawatts of new distributed generation (DG). Significant upgrades are needed to enable these resources to come online and export at full capacity. Historically, the cost to enhance the electric system’s capacity to support new generation was fully funded by the generator requesting to interconnect under a cause-causation policy. The grid enhancements needed are significant and have proven

cost prohibitive for the generators. As a result, several ready-to-go DGFs have been stalled.

Recognizing the need to address this problem, the Massachusetts Department of Public Utilities (DPU) is investigating an alternative approach for planning and funding these system upgrades called the Provisional System Planning Program. This program would allow the cost of EPS upgrades needed to interconnect DGFs to be shared by the interconnecting DGF and all customers of the electric distribution company. Electric customers would pay the initial capital investment costs through a charge on their electric bills. Each DG facility that connects to the system would pay a portion of the costs. Costs collected from the DG facilities will be credited back to electric customers on their bills. In addition to enabling new clean energy resources, these system upgrades will also provide improved electric system reliability and resiliency for customers.

### DER Group Study Approximate Group Supply Area



Eversource has conducted extensive system planning studies in seven affected areas where electric system upgrades are needed to support the interconnection of 348 MW of new distributed generation facilities.

# Enabling Increased Distributed Generation in the **Greater Marion Area** (cont.)

## Eversource’s Proposed Capital Investment Project

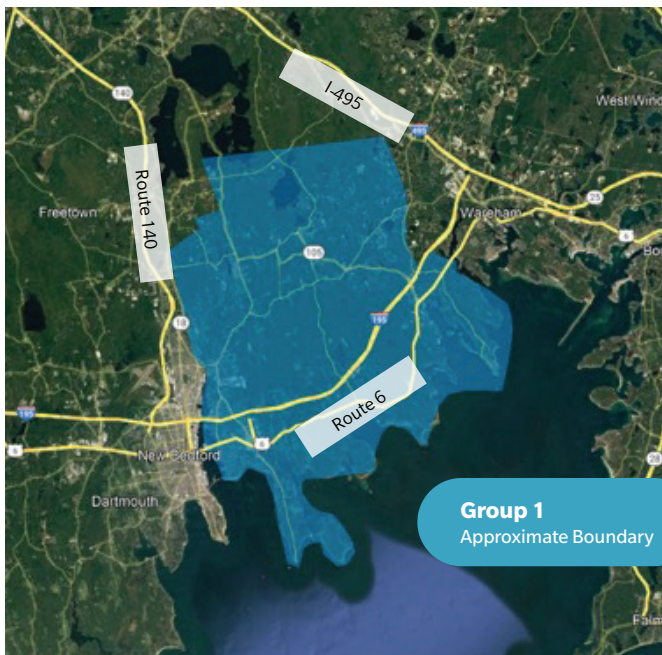
The greater Marion area is one region that needs electric system enhancements to enable DGs to interconnect. After an extensive series of steady-state and dynamic system studies, engineering and design activities and cost estimation, Eversource recently filed a proposal with the DPU to fund a capital investment project (CIP) that would benefit DGF interconnections in and around Marion, Fairhaven, Acushnet, Mattapoisett, and Rochester, MA.

The CIP proposal includes upgrades to distribution lines and substations located in Fairhaven, Acushnet, Marion and Rochester, totaling approximately \$119 million in distribution substation and distribution line infrastructure improvements. The cost allocation proposal stipulates that \$54 million be paid by the DG facilities on a pro-rata basis and the remainder be borne by Eversource customers. A typical residential customer using an average of 514 kWh per month would experience a monthly bill increase of \$0.24.



## Benefits of Eversource’s Proposal:

If approved by the DPU, the CIP will enable interconnection of the 49 MW of new ground-mounted DG seeking in the Provisional Program in the greater Marion area, representing a total of 17 projects that could otherwise face significant hurdles. It will also improve overall reliability for customers in the region, while adding capacity to support 91 MW of additional ground-DG in the future as well as 11 MW of roof-top solar DG.



**Group 1**  
Approximate Boundary

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This map shows the area where Eversource proposes upgrading four of its distribution substations and associated distribution lines to increase the ability to interconnect more DG.