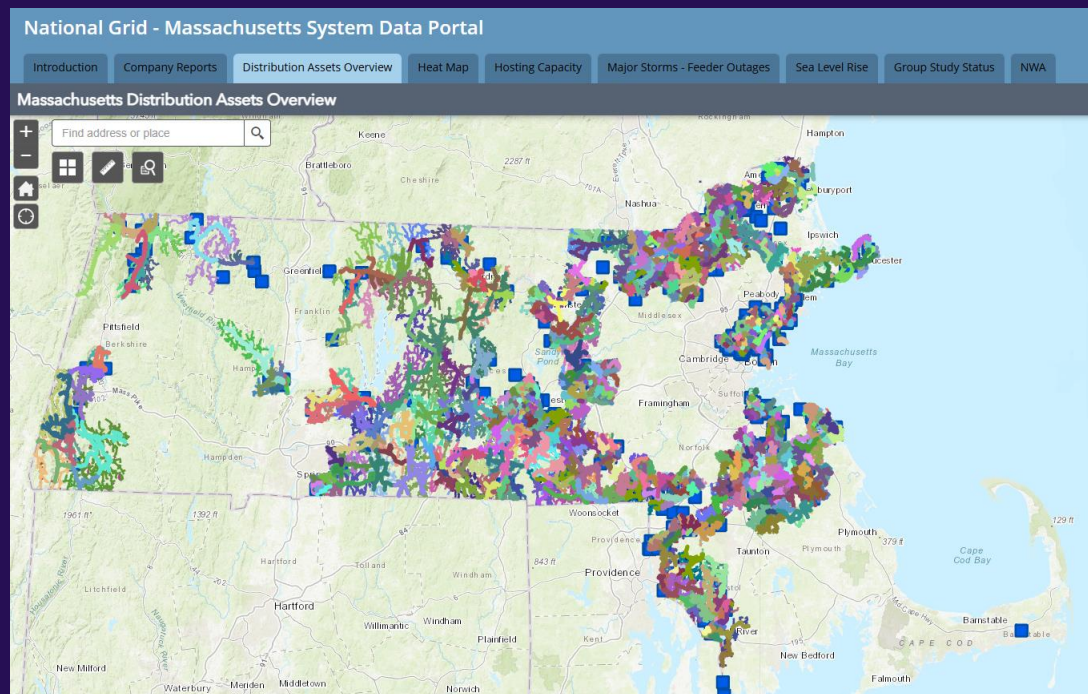


National Grid Massachusetts System Data Portal: User Guide



September 2026

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[Click Here to Access the National Grid Massachusetts System Data Portal](#)

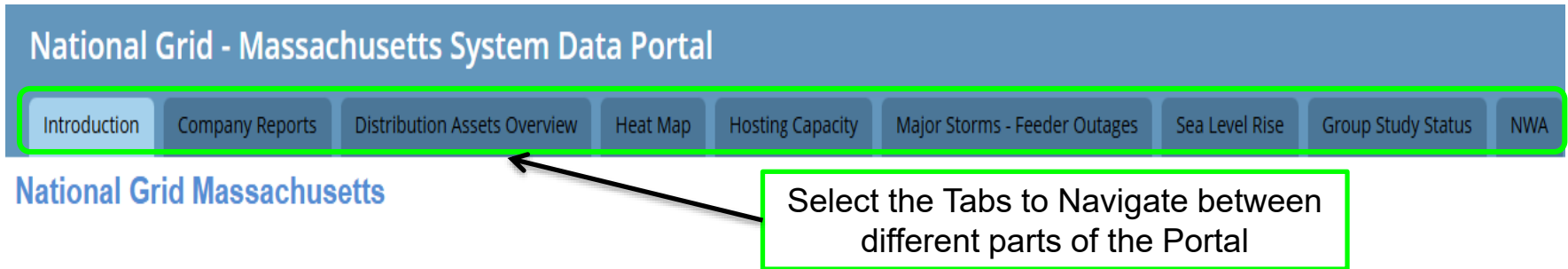
National Grid has created a collection of maps to help customers, contractors and developers identify potential project sites.

The maps provide the location and specific information for selected electric transmission lines, distribution lines, associated substations and assets within the National Grid electric service area of Massachusetts.

National Grid's electric system is dynamic. System configurations can change for a variety of reasons both planned and unplanned. National Grid will update the contents on a periodic basis so please be aware that the same location may show different information over time.

Please note that the portal and maps are not a guarantee that generators can interconnect at any particular time and place. A number of factors drive the ability and cost of interconnecting distributed generation to the electric system and actual interconnection requirements and costs will be determined following detailed studies. These studies will consider your specific project location, operating characteristics and timing. Additionally, environmental and other required permits are independent of our interconnection process and may limit the suitability of a particular site.

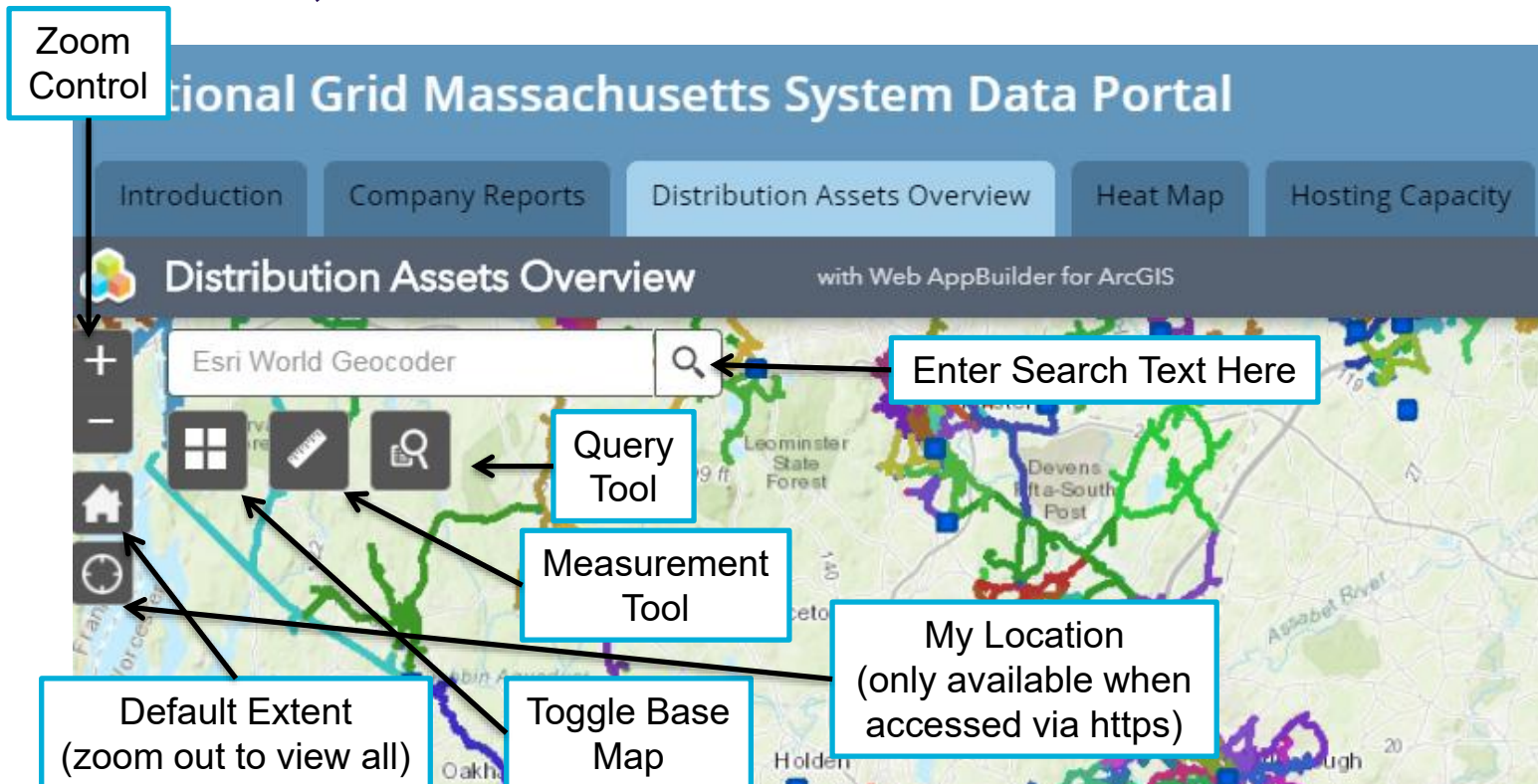
Navigation - Tabs



- The Massachusetts System Data Portal contains tabs for feeder topology (Distribution Assets Overview), Loading (Heat Map), DG/Solar Hosting Capacity,

Navigation – Map Search

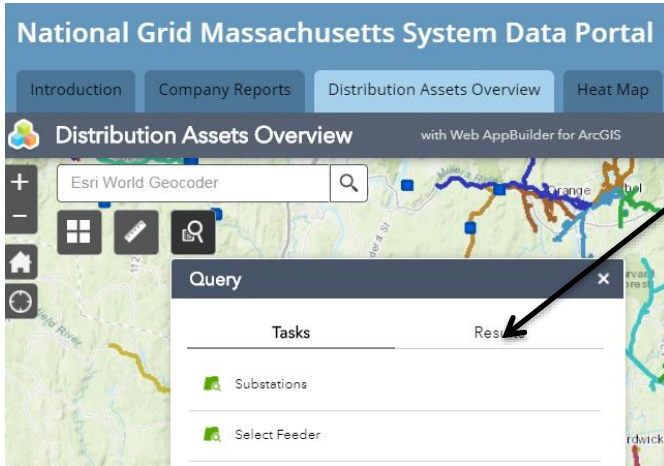
- Use the Search Text bar to find an address or place, similar to Google Maps.
- Or, use the Zoom Controls or mouse wheel to locate a specific location, feeder or substation.



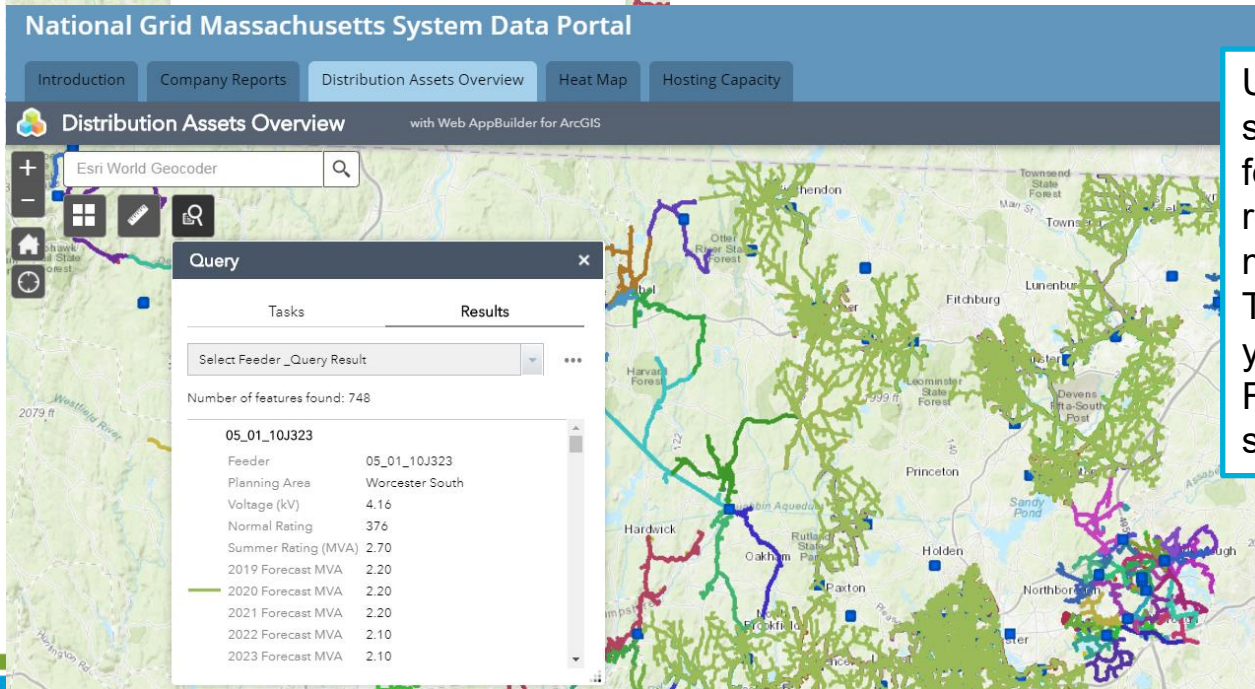
Query Tool

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Select Feeders by Substation Name
or by Feeder Number



Using the Feeder Number search method, searching for a specific feeder or region (i.e. 05_01) zooms map to search results. The feeder is highlighted yellow by this method. Feeder information is also shown.

Tab - Introduction

National Grid - Massachusetts System Data Portal

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Major Storms - Feeder Outages

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NWA

National Grid Massachusetts

System Data Portal

National Grid has created a collection of maps to help customers, contractors and developers identify potential project sites. Each map provides the location and specific information for selected electric distribution lines and associated substations within the National Grid MA electric service area. National Grid's electric system is dynamic. System configurations can change for a variety of reasons both planned and unplanned. National Grid will update the contents on a periodic basis so be aware that the same location may show different information over time.

Please note that the portal and maps are not a guarantee that generators can interconnect at any particular time and place. A number of factors drive the ability and cost of interconnecting distributed generation to the electric system and actual interconnection requirements and costs will be determined following detailed studies. These studies will consider your specific project location, operating characteristics and timing. Additionally, environmental and other required permits are independent of interconnection process and may limit the suitability of a particular site.

For questions about the System Data Portal, and to find more information about interconnecting Distributed Generation, please see the following website: [MA Distributed Generation](#).

Help Guide and Terms of Use

To help enable the use of the portal, National Grid has provided a user guide in PDF. This can be accessed here: [Massachusetts System Data Portal User Guide](#)

For the most refreshed view of the portal, please clear your internet browser cache periodically.

Additionally, please review the [National Grid Massachusetts System Data Portal Terms of Use](#) prior to using the portal.

Participating in Opportunities

For vendors, developers, and third-party solution providers seeking to participate in National Grid's Non-Wires Alternative (NWA) and other project and partnership opportunities, you will need to be enrolled in National Grid's Ariba vendor system.

Please contact National Grid at Non-WiresAlternativeSolutions@nationalgrid.com to request access to National Grid's Ariba system.

Once enrolled, please use the following link to access National Grid's Ariba system: <http://nationalgrid.sourcing.ariba.com/>

Contact Us

For Inquiries related to this Portal, please contact IMAP@nationalgrid.com with the subject line: **MA System Data Portal**

- Provides an overview of the Portal, with FAQs and a link to this Help Guide

Tab - Company Reports

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National Grid - Massachusetts System Data Portal

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Filed Company Reports

[National Grid - Distribution Planning Criteria](#)

[National Grid Massachusetts - Planning Study Flowchart](#)

[National Grid - 2018 Annual Reliability Report](#)

[National Grid - 2019 Annual Reliability Report](#)

[National Grid - 2020 Annual Reliability Report](#)

[National Grid - 2021 Annual Reliability Report](#)

[National Grid - 2022 Annual Reliability Report](#)

[National Grid - 2023 Annual Reliability Report](#)

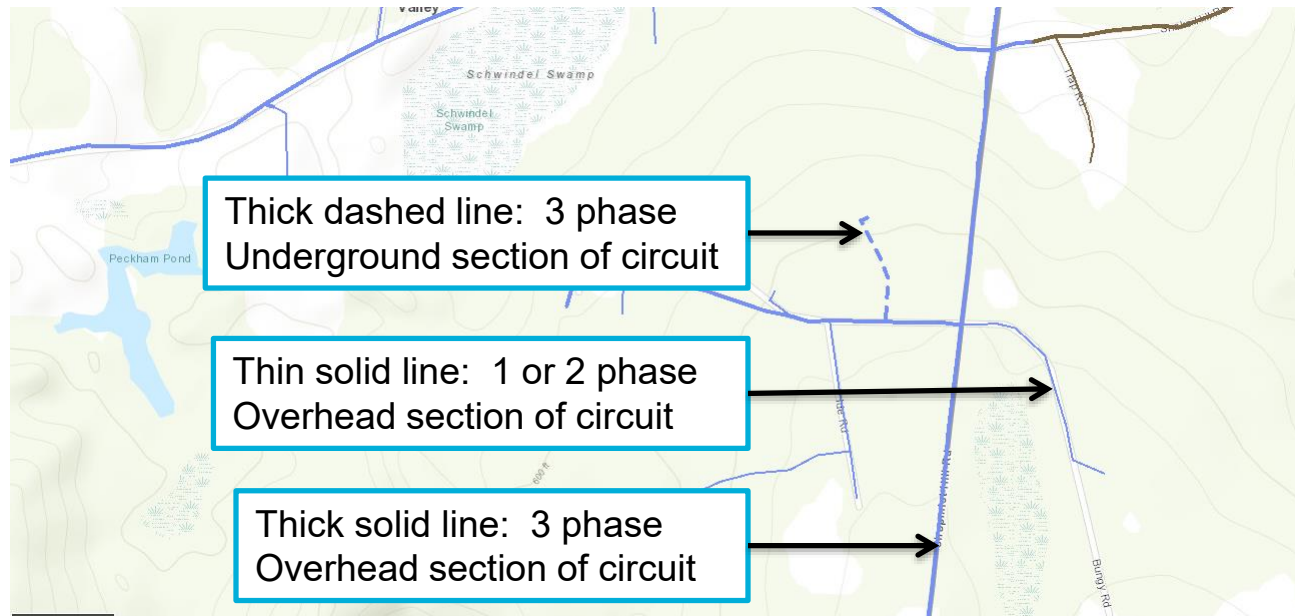
[National Grid - 2024 Annual Reliability Report](#)

[National Grid - 2025 Annual Reliability Report](#)

[National Grid - 2026 Annual Reliability Report](#)

Location of links for various Regulatory Filings and Company Reports

- A flowchart for National Grid's Distribution Planning Process
- The Planning Criteria National Grid uses for its system.
- The ARR (Annual Reliability Report) Filings

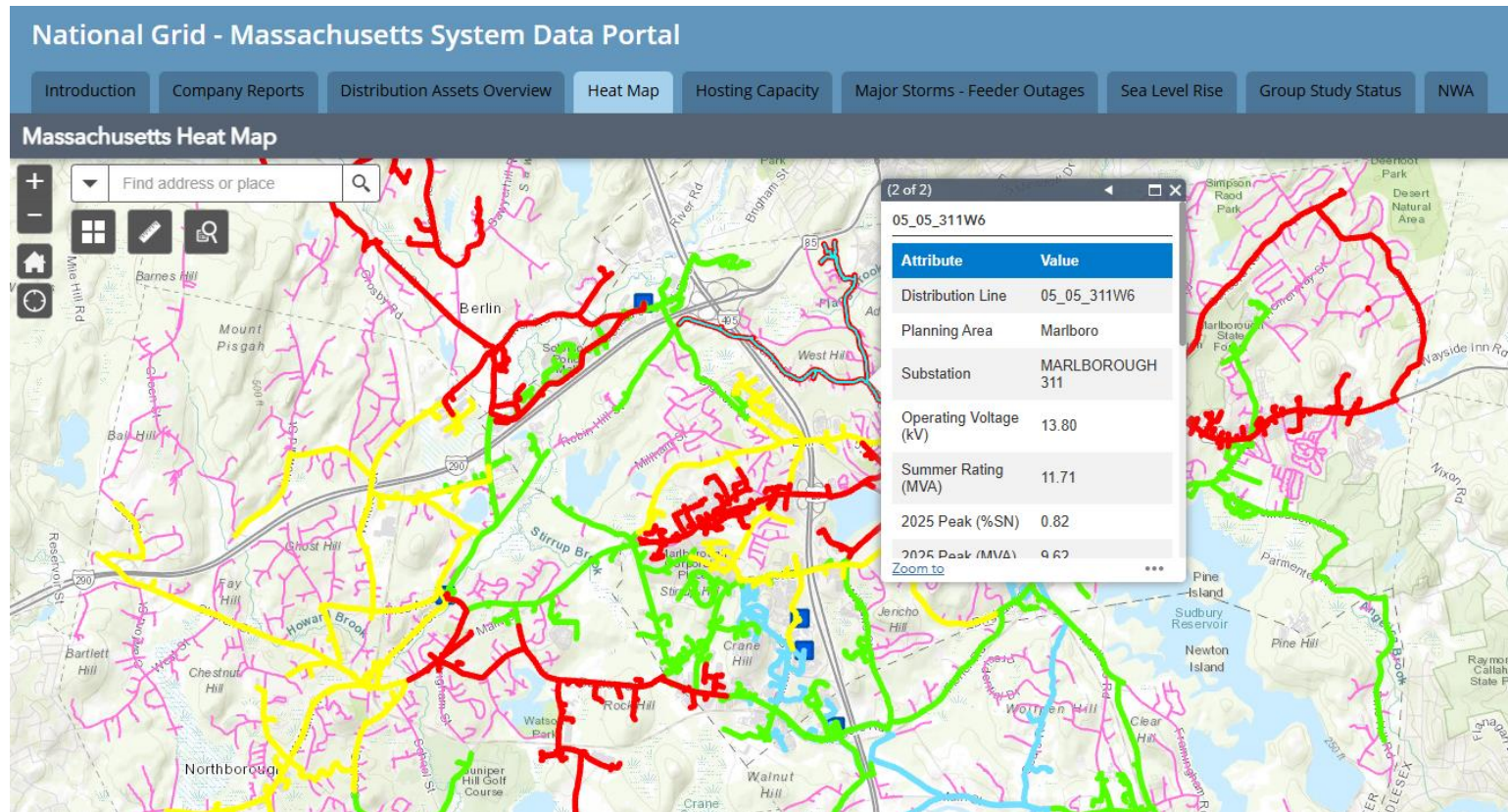


- The Distribution Assets Overview tab shows National Grid electric distribution assets, which includes circuits (feeders) by phase.
- Circuit types are coded by line thickness and dash style.

Tab - Heat Map

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- The Heat Map shows National Grid electric distribution assets, similar to the Distribution Assets Overview tab. Circuits are color coded by the Percent Loading of the Distribution Line (Feeder). Feeder selection will display a variety of operating attributes and data.

Data Popup - Heat Map

05_01_201W1

Attribute	Value
Distribution Line	05_01_201W1
Planning Area	Ayer Clinton
Substation	AYER 201
Operating Voltage (kV)	13.80
Summer Rating (MVA)	12.29
2025 Peak (%SN)	0.65
2025 Peak (MVA)	7.94
2025 Peak + reserved load capacity (%SN)	0.68
2025 Peak + reserved load capacity	8.39
2026 Forecast (MVA)	8.40
2027 Forecast (MVA)	8.23
2028 Forecast (MVA)	7.96
2029 Forecast (MVA)	8.13
2030 Forecast (MVA)	8.37
2035 Forecast (MVA)	10.15

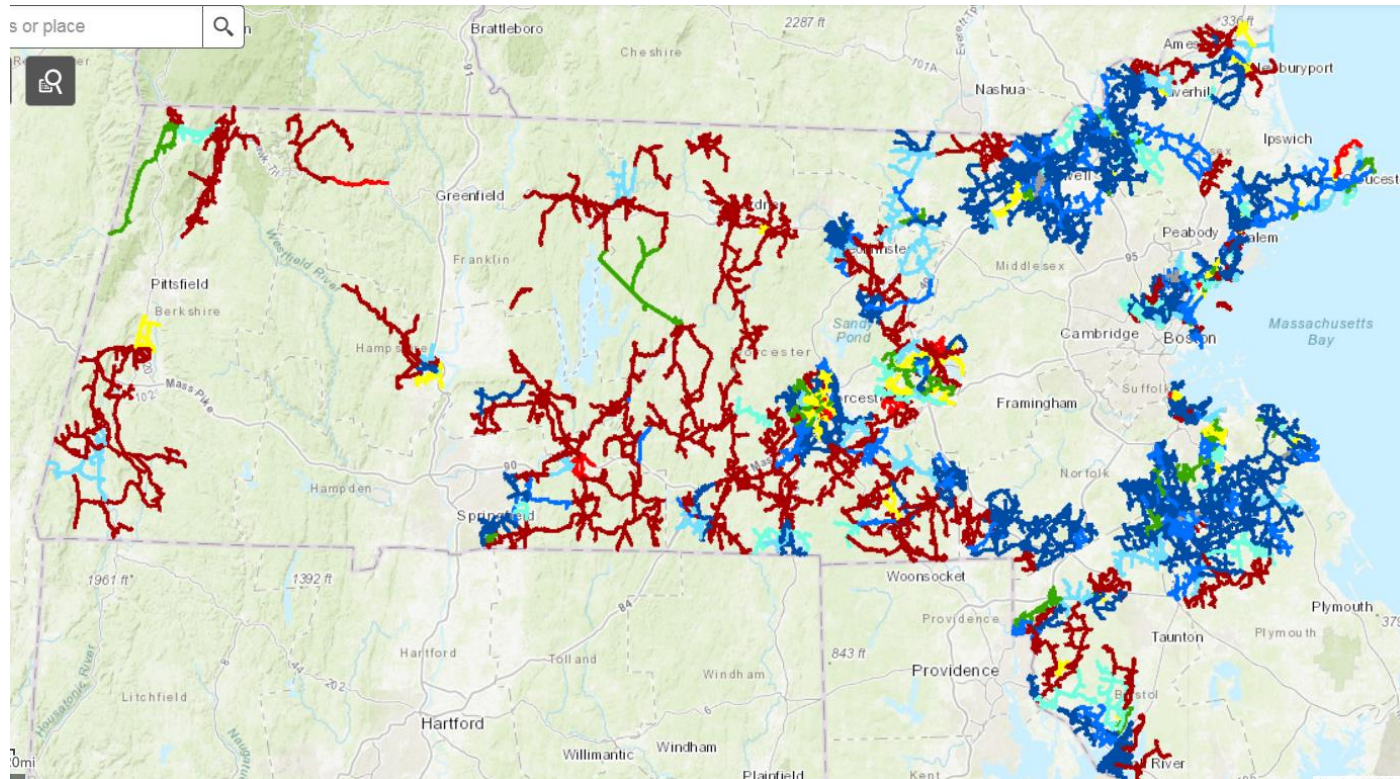
Key Data Points and Description

Attribute	Description
Summer Rating (MVA)	Feeder summer normal rating.
2025 Peak (%SN)	Observed 2025 summer peak as a percentage of summer normal.
2025 Peak (MVA)	Observed 2025 feeder summer peak in MVA.
2025 Peak Plus Reserved Load Capacity, (% SN)	2025 summer peak plus reserved load in queue, as a percentage of summer normal.
2025 Peak Plus Reserved Load Capacity	2025 summer peak plus reserved load in queue in MVA.
2026 Forecast (MVA)	Forecasted 2026 summer peak in MVA, accounting for large-customer load, reconfiguration, projects, interconnected load, and DG. Future values may increase or decrease due to these variables.

Tab - Hosting Capacity

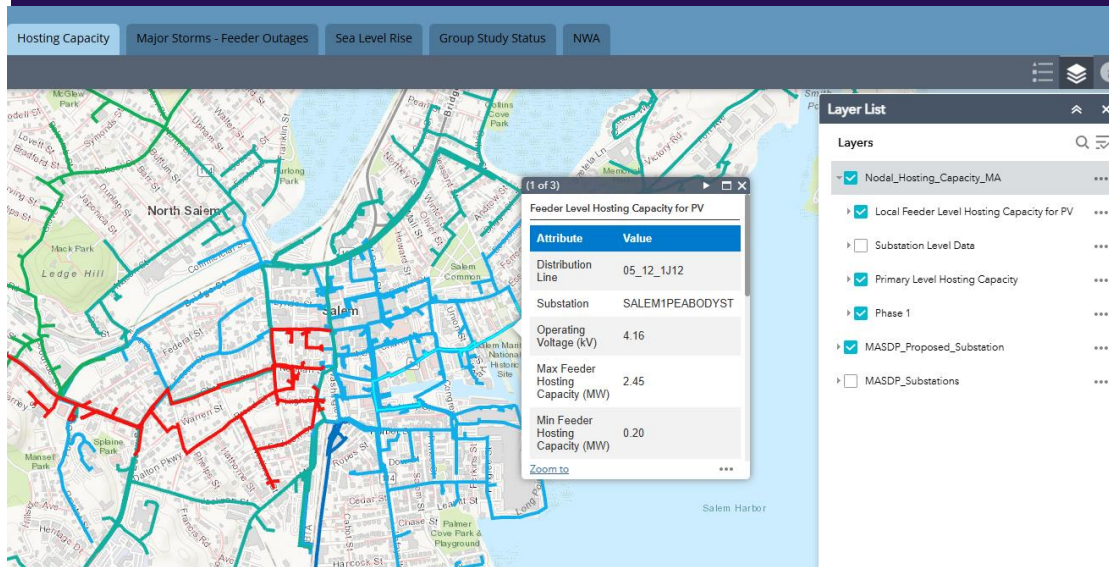
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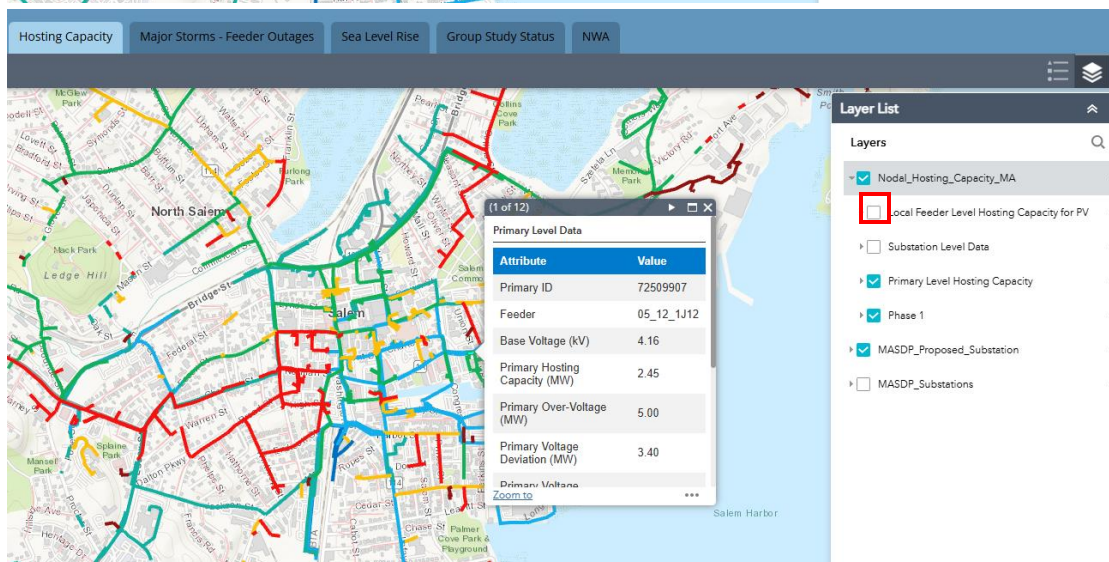


- The Hosting Capacity Map shows the current available Solar MW capacity of distribution lines. It is updated monthly with changes in connected DG, pending DG and line attributes such as LPC Lite availability and CIP fee.

Tab - Hosting Capacity



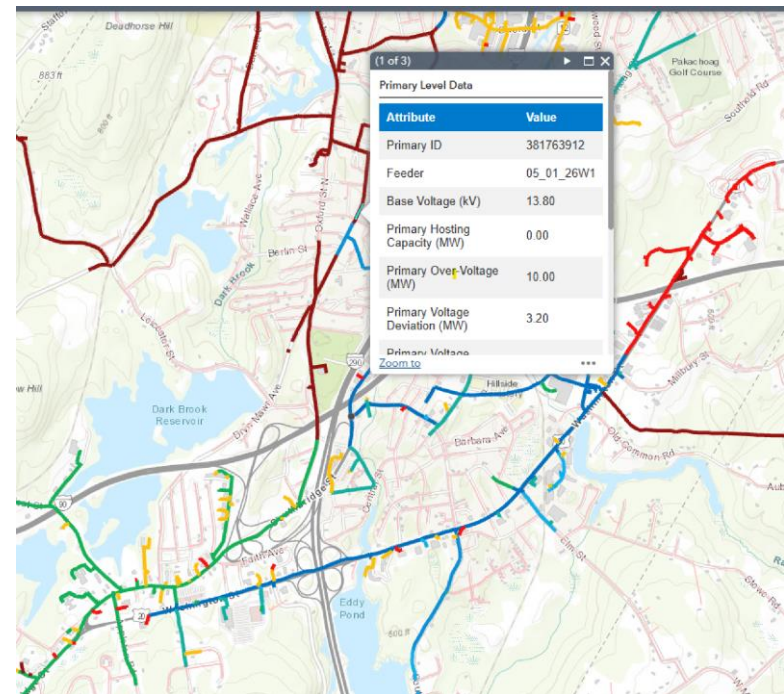
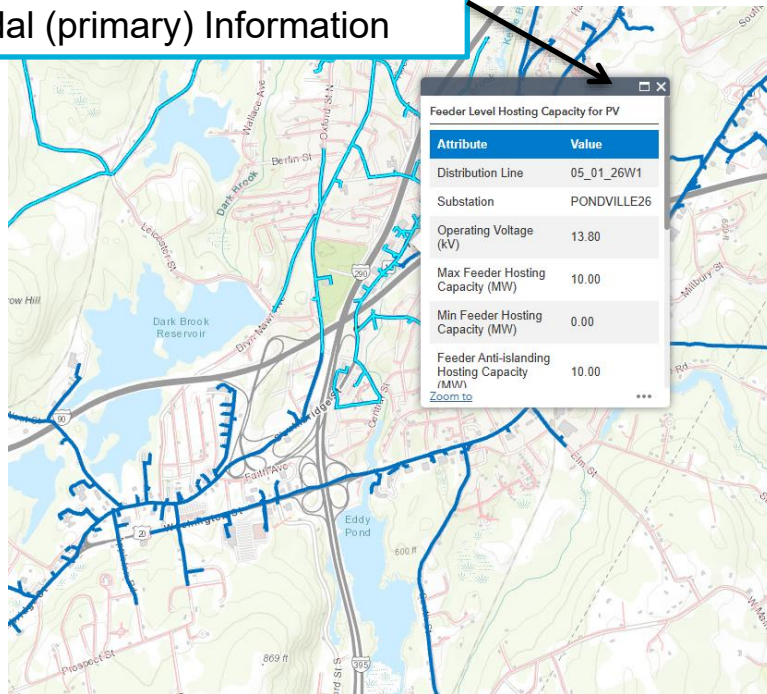
The MA Hosting Capacity Tab now has two different layers. Upon opening the map, the feeder level hosting capacity is displayed with the feeder level data.



The second layer is the nodal level hosting capacity. To display this Layer users will need to uncheck the 'Local Feeder Level Hosting Capacity.' This provides higher granularity of hosting capacity data for each 3 phase segment.

Tab - Hosting Capacity

Click on the arrow to access nodal (primary) Information



- The Hosting Capacity Map popup gives feeder level information such as Hosting Capacity, connected and pending DG, as well as ASO status and substation information
- The Nodal level data popup contains the specific hosting capacity limitations by criteria violation.

Feeder Level Data Popup Definitions

Feeder Level Hosting Capacity for PV

Attribute	Value
Distribution Line	05_01_26W2
Substation	PONDVILLE26
Operating Voltage (kV)	13.80
Max Feeder Hosting Capacity (MW)	10.00
Min Feeder Hosting Capacity (MW)	0.00
Feeder Anti-Islanding Hosting Capacity (MW)	10.00
Total Nameplate Interconnected DG excluding BESS (MW)	3.18
Total Nameplate Pending excluding BESS (MW)	0.60
CIP Fee	No CIP Fee
LPC-Lite Eligible	No
Ongoing ASO	N
Potential ASO	No
FERC designated Feeder	Yes

Attribute	Description
Max Feeder Hosting Capacity (MW)	Maximum DG hosting capacity available anywhere on the feeder.
Min Feeder Hosting Capacity (MW)	Lowest three-phase hosting capacity found on the feeder.
Feeder Anti-Islanding Hosting Capacity (MW)	Hosting capacity limit driven by anti-islanding and reverse power flow constraints.
Total Nameplate Interconnected DG Excluding BESS (MW)	Total interconnected DG on the feeder, excluding energy storage systems.
Total Nameplate Pending DG Excluding BESS (MW)	Total pending DG on the feeder, excluding energy storage systems.
CIP Fee	Dollar-per-kW fee applicable to the export power of DG sites within the CIP area. Interconnection Tariff : servlet.FileDownload
LPC Light Eligible	Indicates whether the feeder qualifies for the LPC Light program. For more information visit this site: Flex IX National Grid
Ongoing ASO	Indicates whether the feeder is currently in an Affected System Operator (ASO) study.
Potential ASO	Indicates whether the feeder may require an ASO study in the near future.
FERC Designated Feeder	Indicates whether the feeder is subject to tracking or requirements associated with FERC and ISO-NE DER participation programs.

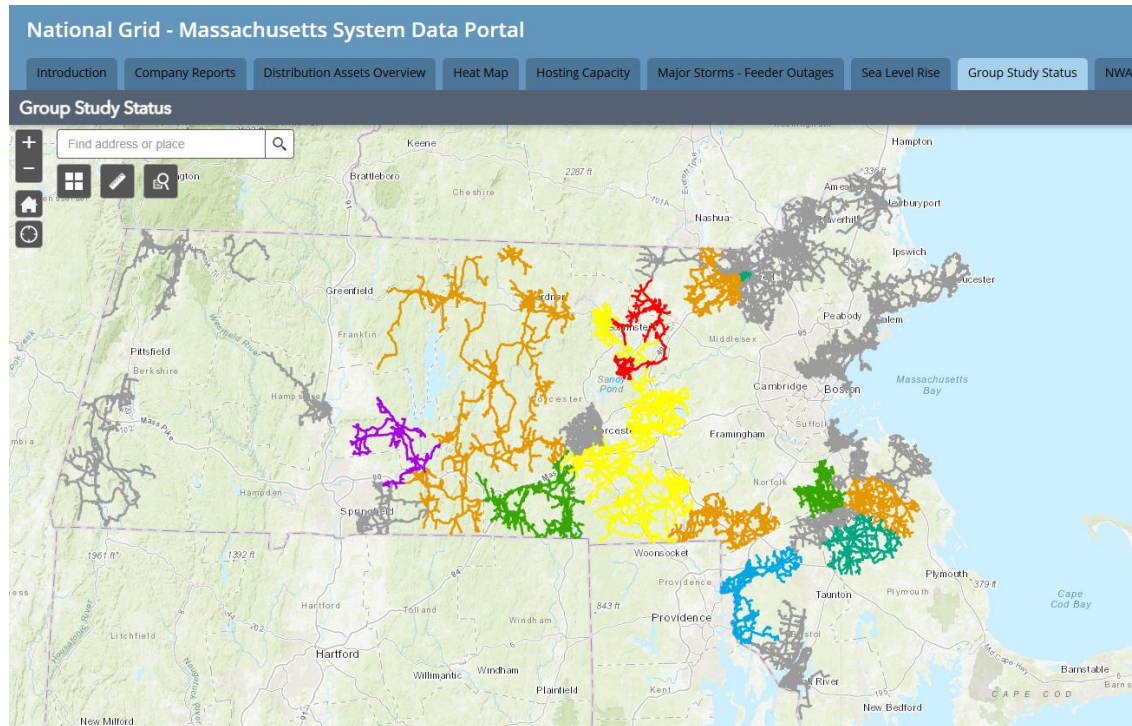
Primary (Nodal) Level Data Popup Definitions

Primary Level Data

Attribute	Value
Primary ID	381770603
Feeder	05_01_26W1
Base Voltage (kV)	13.80
Primary Hosting Capacity (MW)	3.70
Primary Over-Voltage (MW)	10.00
Primary Voltage Deviation (MW)	3.70
Primary Voltage Regulator Deviation (MW)	10.00
Thermal from Generation (MW)	10.00
Anti-Islanding (MW)	10.00
Flicker Value (MW)	20.00
Feeder Rating (MW)	11.76
Substation/Bank Rating (MVA)	23.70

Attribute	Description
Primary Feeder Hosting Capacity (MW)	Maximum DG hosting capacity available on this line segment.
Primary Over-Voltage (MW)	The hosting capacity limits due to ANSI High Voltage Violations.
Primary Voltage Deviation (MW)	The Hosting Capacity limits due to instantaneous voltage deviation criteria violation on any segment of line induced by the generator cycling on and off.
Primary Voltage Regulator Deviation (MW)	The Hosting Capacity limits due to instantaneous voltage deviation criteria violation on all regulators induced by the generator cycling on and off.
Thermal from Generation (MW)	The Hosting Capacity limits due to line or device overloads caused by reverse power flow.
Anti-Islanding (MW)	Hosting capacity limit driven by anti-islanding and reverse power flow constraints.
Flicker Value (MW)	Hosting capacity limit driven by voltage fluctuations that exceed allowable flicker limits related to power quality.
Feeder Rating (MW)	The thermal rating of the Feeder at the substation unrelated to hosting capacity.
Substation/Bank Rating (MVA)	The thermal rating of the substation transformer/ transformer bank upstream of the feeder unrelated to hosting capacity.

Tab – Group Study Status



- The information presented in this map shows the feeder level Group Study status. This data is being provided for informational purposes only and is not intended to be a substitute for the established interconnection application process, nor is it meant to supersede any information provided directly to applicants within a Group. Data for this display is updated on a monthly basis.