

Martha's Vineyard Electric Supply Overview

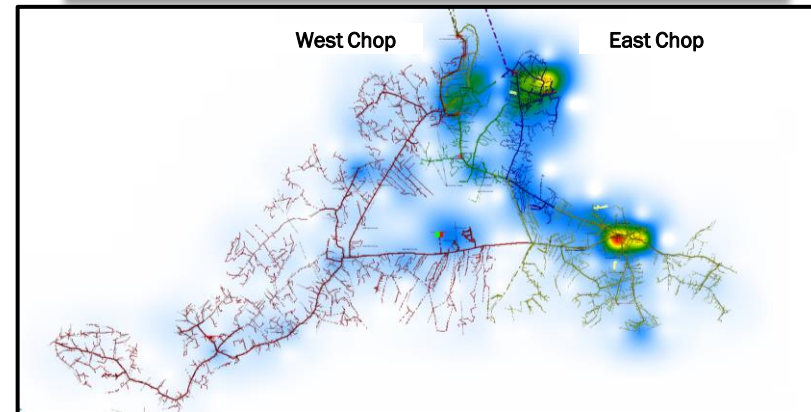
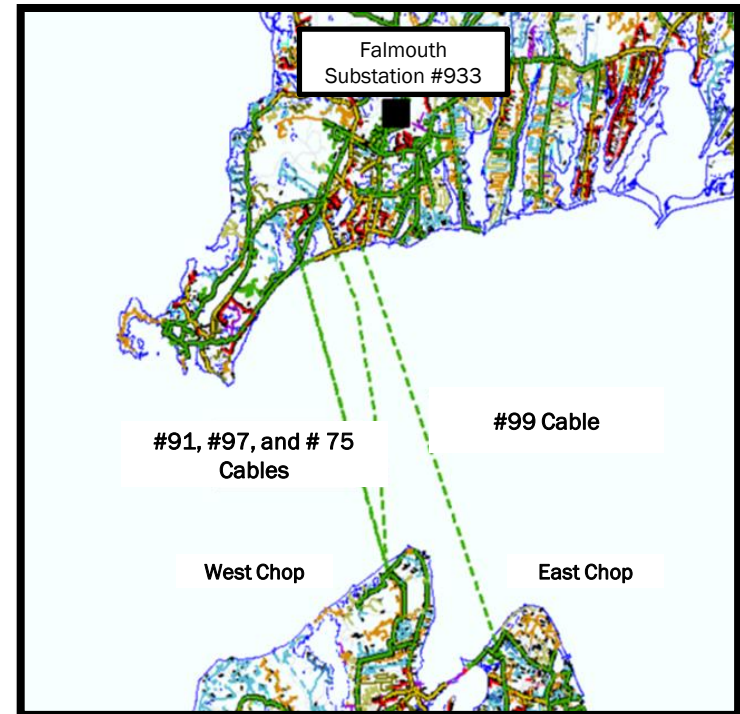
Ferries Now – MV Commission Session

03/31/23

Supply Overview

Martha's Vineyard

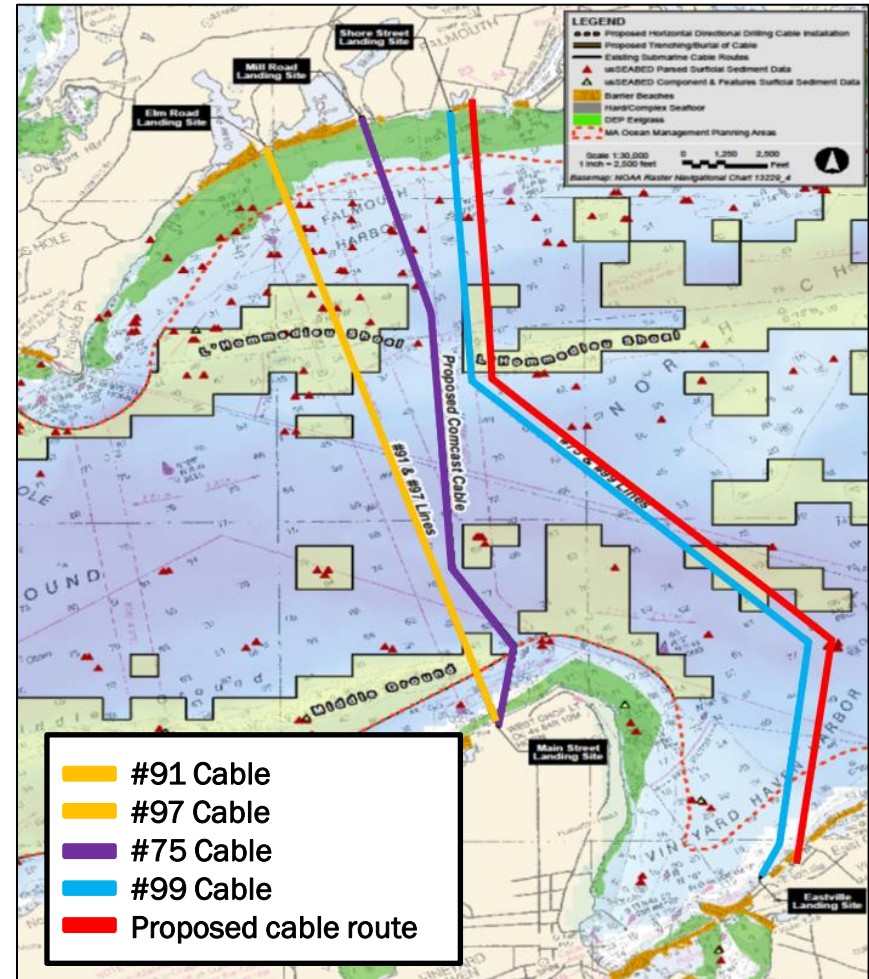
- Approximately 21,000 customers
- Historical peak load of 66 MW in 2022
- Served by four (4) 23kV submarine cables (#91, #97, #75, #99) out of Falmouth #933 Substation
- Served by a network of 23kV and lower voltage 8.32kV / 4.8 kV distribution circuits on the island
- Greater concentrations of load and customers on Eastern end of the island in Tisbury (Vineyard Haven), Oak Bluffs, and Edgartown.
- Lower load and customer density on Western end of the island, in W. Tisbury, Chilmark, and Aquinnah
- Approximately 20 MW of installed Solar DER on the island



Eversource Working to Improve Reliability

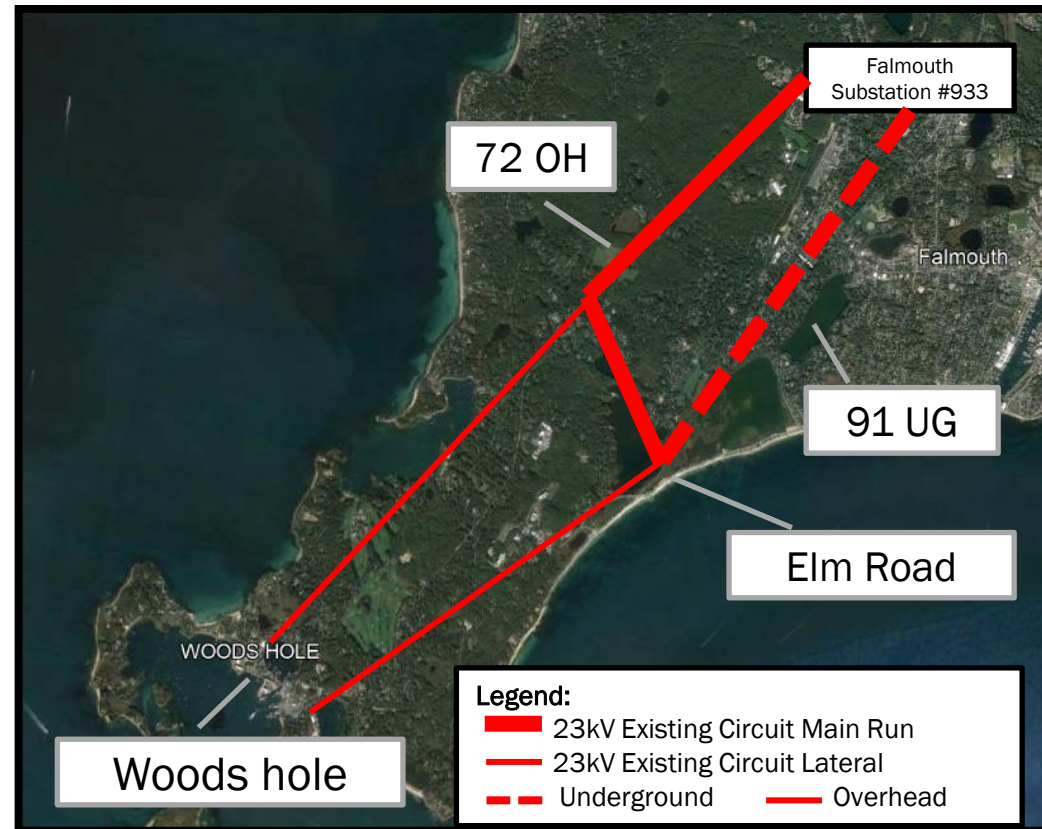
Distribution Cable Project – 23kV

- Increase reliability for Martha's Vineyard residents
- New underground conduit and manhole system
- Installation of new (fifth) submarine cable
- Replacement of an existing limiting #91 Cable
- *Permits retirement of existing five (5) 2.5 MW diesels by May 2025*
- **Projected in-service date:** First quarter 2025



Enablement of Ferry Electrification Falmouth Terminal

- 91: 23kV circuit reconfiguration at Elm Road after new 91B cable is in place (2025)
- 91 or 72: 23kV lateral upgrades from Elm Road to Woods hole (multiple sections)
- 91 or 72: Alternate option is for underground 23kV supply from Elm Road to Wood hole (capacity and reliability improvement)
- Woods Hole:
 - Upgrades existing small conductor to large conductor (~0.6 miles)
 - Additional equipment such as reclosers and switches
 - Distribution service transformer installation (padmount)



Enablement of Ferry Electrification Vineyard Haven Terminal

Options:

- Existing 4.8kV circuit will require conversion and upgrade to 23kV

Vineyard Haven Center:

- ~0.7 miles of 4kV conversion
- ~0.7 miles of 23kV upgrade on W. Spring St
- ~0.7 miles of 23kV upgrade Greenwood Ave (alternate supply tie required for reliability)
- Distribution service transformer installation (padmount)

