



**CENTRAL MAINE
POWER**

An AVANGRID Company

RELIABILITY UPGRADES Dunstan Substation, Scarborough

CONTACT

Project Information Line: **888.267.0831**

Refer to: **Dunstan Street Substation**

Website: **cmpco.com > Reliable Service**

PROJECT OVERVIEW

Central Maine Power Company, in conjunction with its parent company AVANGRID, is undertaking a multi-year effort to upgrade or replace 10 distribution substations throughout its service territory, including one in Scarborough, that have aged and/or have condition or capacity issues in need of attention.

As part of CMP's Substation Modernization Plan, a new 34kV distribution substation will be built at 35 Broadturn Road in Scarborough to replace an existing substation in a residential neighborhood at 645 U.S. Route 1. Like the existing substation, it will connect to the same transmission line (Section 193).

CMP and AVANGRID's significant investment in communities large and small is part of our commitment to provide safe, reliable service to our customers.

CMP is working with communities and reaching out to neighbors to ensure that all improvements are performed safely and with minimal disruptions to their daily lives, the community, and the environment.

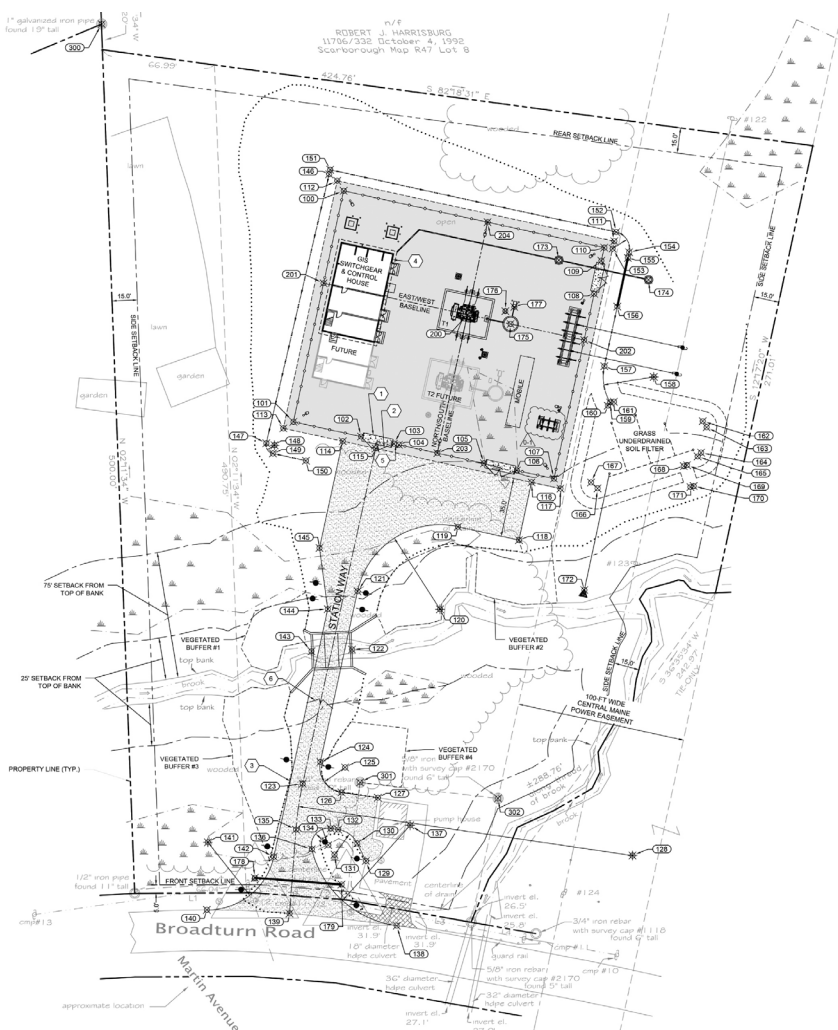
PROJECT NEED

The existing electric distribution substation on U.S. Route 1 is nearing its capacity to support the associated 34.5kV transmission line's load with its breakers, and many of its components are supported by wood foundations or poles that require maintenance. Additionally, its yard is too small to accommodate the construction and installation of new substation equipment that's required for modern day operation plus meet AVANGRID and National Electrical Safety Code (NESC) standards.

The new, larger substation on a portion of a 3.75-acre vacant lot adjacent to the Scarborough Sanitary District will allow CMP to respond to the area's energy needs and provide us with space to expand when warranted.

PROJECT SCOPE

The modernized substation will be outfitted with new infrastructure that includes a 34.5/22.24 MVA transformer on concrete foundations, two station service transformers on concrete foundations, and oil containment system, and site lighting. Upgraded substation operations technology will be installed in a new, locked control house, as well as enhanced remote substation monitoring capabilities and connections to CMP's control center.





645 U.S. Route 1, Scarborough, Maine old CMP substation.



35 Broadturn Road in Scarborough, Maine new CMP substation site location.

All components will be situated behind security fencing that will be monitored by CMP. For security reasons, the substation will be visible through the fence. A substation manager periodically will be on site for routine maintenance and inspections.

Once the new substation is completed and on-line, the existing substation will be demolished, and grass will be planted on the site.

All components will be situated behind security fencing that will be monitored by CMP. Lights installed around the facility will turn on if they're activated by movement, thus alerting CMP's control center, or when emergency crews are working at the location. For security reasons, the substation will be visible through the fence.

Vegetation that does not block visibility will be planted to support a small wetland near the road and to beautify the property. While some trees need to be cleared for the substation, new trees or shrubs will be placed along the perimeter to minimize the view for neighbors.

CMP will access the property by a driveway currently used by the Scarborough Sanitation District. A gate will cross the portion of the drive leading to the substation. Adequate space will be available for vehicle turn arounds and snow piles.

WORK HOURS

No work will be done in the dark. Construction noise will be present. CMP follows local noise ordinances.

PROJECT FEATURES

The following components will be constructed and installed at the new Dunstan location:

- New 115/22.4 MVA power transformer.
- 34kV structure with new switches, bus, insulators, voltage transformers, line and transformer breakers and foundation.
- 12kV structure with new switches, bus, insulators, and voltage transformers.
- New control house with improved substation operations technology on a foundation.

PROJECT FACTS

Municipality:	Scarborough
County:	Cumberland
Permitting Required:	U.S. Army Corps of Engineers, Maine Department of Environmental Protection, and Local Municipal Permit

ESTIMATED TIMETABLE *(subject to change)*

Construction Start:	June 2020
Estimated Completion/ In-Service Date:	April 2021

BENEFITS TO THE REGION

- An improved substation that reliably and safely meets customers' electricity needs.
- Capacity to provide electricity for economic development and growth.
- Increased tax revenue.