

An AVANGRID Company

# **RELIABILITY UPGRADES** Forest Avenue Substation, Portland

# CONTACT

Project Information Line: **888.267.0831** Refer to: **Forest Avenue Substation** Website: **cmpco.com** > **Reliable Service** 

#### **PROJECT OVERVIEW**

Central Maine Power Company (CMP), 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 Portland, that have aged and/or have condition or capacity issues in need of attention.

As part of CMP's Substation Modernization Plan, the Forest Avenue Substation, located at 14 Marginal Way, needs improvement so we can continue to provide safe, reliable and stable service to meet our customers' energy needs.

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.

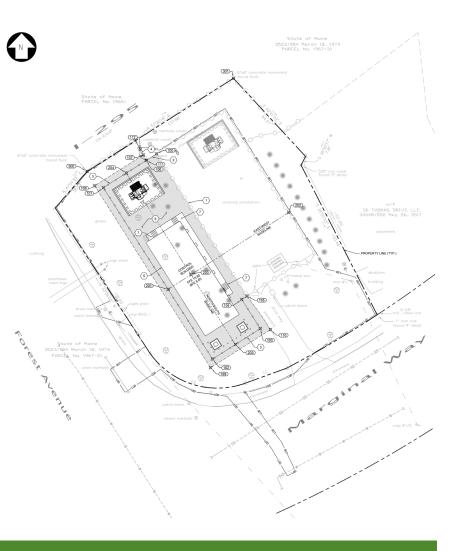
## **PROJECT NEED**

Forest Avenue Substation has aged, and the addition of new components along with the replacement of older ones will enhance functionality plus meet updated AVANGRID and National Electrical Safety Code (NESC) standards.

## **PROJECT SCOPE**

CMP plans to expand the existing yard by approximately 10,000 square feet, more than double its current footprint of approximately 9,000 square feet, to accommodate the improvements. We'll access the property from our existing driveway on Marginal Way. The modernized substation will be outfitted with new infrastructure that includes two 34.5/12kV transformers 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.

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.





*Forest Avenue side of the gated entrance to the current Portland, Maine CMP substation site.* 



Marginal Way side of the gated entrance to the current Portland, Maine CMP substation site.

# **PROJECT LOCATION**

The Forest Avenue Substation is on a corner lot at a heavily traveled intersection that connects Forest Avenue, Marginal Way and Interstate 295. Popular Deering Park is across Forest Avenue and numerous retail and commercial businesses are on Marginal Way.

For safety, the area around the substation construction zone will be fenced and signs will be placed to alert people to stay clear.

CMP will preserve the existing landscape to the best extent possible. The row of pine trees along the eastern boundary will remain, and if they are impacted by grading they will be replaced. Three trees in the center of the lot will be removed, but several new red maple trees will be planted based on recommendations from Portland's City Arborist.

## **PROJECT FEATURES**

- Removal of existing transformer (34/12kV 12/22MVA) and foundation, and oil containment system.
- Removal of existing 34kV and 12kV switchgear buildings and associated foundations.
- Installation of two new transformers (34/12kV 13.4/22.4 MVA w/ Load Tap Changers) and foundations, isolation barriers around the transformers, and a site wide oil containment system.
- Installation of two new station service transformers providing low voltage power to the site for site lighting as well as power and lighting to the building.
- Installation of new site lighting.
- Construction of a new control house and foundation.

## WORK HOURS

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

#### **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.

## **PROJECT FACTS**

Municipality:	Portland
County:	Cumberland
Permitting Required:	Local Municipal Permit

#### ESTIMATED TIMETABLE (subject to change)

Construction Start:	March	2022
Estimated Completion/ In-Service Date:	Septembe	r 2023