

No tree clearing will be required along the ROW to facilitate the proposed reconductoring of the G-185N 115 kV transmission line. Tree trimming and vegetative maintenance will be performed along the ROW as necessary to facilitate construction access and installation of erosion and sedimentation controls, as described in Section 4.4.1.

4.3.6 Modify Kent County Substation

The Kent County Substation is located on Cowesett Road in Warwick, Rhode Island. As described in Section 4.3.1, the new 345 kV transmission line is proposed to be constructed from the existing West Farnum Substation in North Smithfield to the Kent County Substation. To accommodate this new 345 kV transmission line position within the Kent County Substation, the substation must be modified with various equipment upgrades and additions, including:

- Install a new 345 kV bay to include three new 345 kV circuit breakers;
- Install a third 345/115 kV 269/358/448 MVA autotransformer (the second transformer will be added in 2009 as part of a separate project);
- Install a new 115 kV bay to include two new 115 kV circuit breakers; and
- Relocate several spans of the existing G-185S and L-190 115 kV transmission lines south of the substation to accommodate the new and relocated equipment.

Figure 4-9 depicts the existing conditions and the proposed layout of the Kent County Substation. Figure 2-2, Sheet 38 of 40 depicts the relocated G-185S and L-190 line segments.

4.3.7 Equipment Additions at West Farnum Substation

The West Farnum Substation is located on Greenville Road in North Smithfield, Rhode Island. To accommodate the new 345 kV transmission line position within the West Farnum Substation, the substation must be modified with various equipment upgrades and additions, including:

- Four bays of new 345 kV Gas Insulated Switchgear (GIS) consisting of twelve circuit breakers and associated disconnects and buswork;
- A new building to house the GIS;
- A new control house for the 345 kV relay and control equipment; and
- Five new transmission line termination structures.

Figure 4-10 (Rev. 6/03/09) depicts the proposed layout of the West Farnum Substation.

4.4 Construction Practices

The proposed transmission system improvements will be constructed using conventional overhead electric power line and substation construction techniques. Hours of construction will conform to local requirements.

The transmission line work will be constructed in a progression of activities which will normally proceed as follows:

1. ROW vegetation maintenance/clearing and installation of erosion and sediment controls.
2. Access road improvements and maintenance.
3. Installation of foundations.
4. Installation of pole structures.
5. Conductor and shield wire installation.
6. Removal of old structures and/or conductor.
7. Restoration of the ROW.

Each of these transmission line construction activities is described in the following sections. Substation modification activities are described in Section 4.4.7.

National Grid will retain the services of an environmental monitor throughout the entire construction phase of the Project. The purpose of the environmental monitor will be to perform site inspections, ensure compliance with all applicable federal, state, and local permit conditions, maintain strict adherence to National Grid policies, and monitor effectiveness of and propose modifications to BMPs.

4.4.1 ROW Vegetation Maintenance/Clearing and Installation of Erosion and Sediment Controls

To facilitate construction equipment access along the majority of the ROW and at structure sites, tree trimming or other vegetative maintenance, such as mowing, may be required in select areas. This will be done to provide access to proposed structure locations to facilitate safe equipment passage, to provide safe work sites for personnel within the ROW, and to maintain safe and reliable clearances between vegetation and transmission line conductors. More information on National Grid's ROW maintenance practices is provided in Section 4.4.7 of this report.

From the vicinity of Hardig Road south to the Kent County Substation, trees within the ROW must be removed to provide adequate clearance to electrical conductors