A. INTRODUCTION

This section assesses the possibility that hazardous materials may be found in soil or groundwater on-site and evaluates the potential impacts associated with the installation of power lines along the Direct Route Alternative alternative. To identify potential sources of hazardous materials, a limited Phase I Environmental Site Assessment (ESA) was performed in August 2007. The scope of the limited Phase I ESA included an environmental database search of categories that are consistent with current industry standards, including ASTM E1527-05 (though search radii for off-site properties were modified given the extent of the study area and its location). The hazardous materials study included the following: a review of available records and historical maps and aerial photographs to determine previous on-site and adjacent land uses, a site reconnaissance and general characterization from public rights-of-way, evaluation of regulatory compliance, and a determination of the need for further investigations to identify and quantify potential contamination and related liabilities. Some areas of the corridor were inaccessible from the public rights-of-way at the time of the site inspection.

B. EXISTING CONDITIONS

Results of the limited Phase I ESA are summarized in Table F-1 provided in Appendix F. The "Village underground option" being considered for the western end of the route is summarized in Table F-2 provided in Appendix F. At the time of the site visit, the project site consisted of an approximately 8.5 mile long corridor of mixed-use land along public rights-of-way. The project site comprises a combination of agricultural land, residential dwellings, the Sag Harbor Landfill at the eastern end of the Direct Route Alternative, and commercial facilities including dry cleaners, automotive repair facilities, and gasoline filling stations. In addition, LIPA substations are present at both ends of the subject site (the Southampton and Bridgehampton Substations). The woodland area north-adjacent to the Bridgehampton Substation is designated as part of an active shooting range/area where shells and casings were observed on the ground.

Historic aerial photographs from 1955, 1966, 1978, 1984, and 1996 were reviewed to determine historic on-site and surrounding area usage. The photographs indicated that in 1955, the Direct Route Alternative corridor was primarily agricultural and residential in nature; some commercial properties were present at the western end of the Direct Route Alternative. The Sag Harbor Landfill was present in 1955. Increasingly more commercial facilities were present in the later photographs, including automotive repair facilities and gasoline filling stations.

Historic Sanborn Fire Insurance Maps were reviewed to determine historic on-site and surrounding area usage. Maps were available for a portion of Southampton from 1895, 1902, 1909, 1926, 1932, 1945, and 1964. Maps were available for a portion of Bridgehampton for 1920, 1931, and 1947. Therefore, only a portion of the route was identified on the available maps. The maps indicated that these portions of the Direct Route Alternative corridor were primarily agricultural and residential in nature. A coal yard at the western end of the Direct

Route Alternative was present as early as 1931. A company producing fertilizer also appeared in 1931 at the western end of the Direct Route Alternative. By 1926, more commercial properties were present at the western end of the Direct Route Alternative, including automotive repair facilities and gasoline filling stations.

A review of regulatory records indicated that the Direct Route Alternative corridor (i.e., the area within 100 feet of the proposed line) contains numerous Hazardous Waste Generators / Transporters, Hazardous Material Spills, underground storage tanks (USTs), and Petroleum Bulk Storage Sites, which are summarized in Table F-1, provided in Appendix F. The complete Toxics Targeting Environmental Report, which included a database search within ½ mile of the proposed line, is included in Appendix F. The ESA identified the following potential classes/sources of contaminated materials at various sites within 100 feet of the Direct Route Alternative corridor:

- *Volatile organic compounds (VOCs)*. There are two principal types of VOCs: aromatic compounds and chlorinated compounds. Aromatic compounds include benzene, toluene, ethylbenzene, and xylene (BTEX) and methyl tertiary butyl ether (MTBE), which are found in petroleum products, especially gasoline. Chlorinated compounds include tetrachloroethene (also known as perchloroethylene, or "perc") and tricholoroethene, which are common ingredients in solvents, degreasers, and cleansers, and in chemicals commonly used in dry cleaners. VOCs present the greatest potential for contamination, since they can generate vapors, as well as contaminate soil and groundwater. Former or current gasoline tanks are the most likely sources for VOC contamination.
- *Semivolatile organic compounds (SVOCs)*. The most common SVOCs in urban areas are polycyclic aromatic hydrocarbons (PAHs), which are constituents of partially combusted coal or petroleum-derived products, such as coal ash and fuel oil. PAHs are commonly found in urban fill material, which likely underlies the more developed urban areas. In addition, petroleum-related SVOCs could be present, associated with numerous tanks currently or formerly located in the corridor.
- *Polychlorinated biphenyls (PCBs)*. Commonly used as a dielectric fluid in transformers, some underground high-voltage electric pipelines, and hydraulically operated machinery (e.g., hydraulic lifts), PCBs were also used in manufacturing and industrial applications (e.g., plastic manufacturing). Releases from these operations could have affected the subsurface.
- *Metals*. Metals contamination is frequently associated with smelters, platers, foundries, and metalworks, and found as components in paint, ink, petroleum products, and coal ash. These metals tend not to migrate far in soil and, therefore, they are of greatest concern at the site where they are generated. Metals at levels above natural background levels are frequently present in fill material in urban areas. Remnant ammunition and casings in the shooting areas at the Bridgehampton Substation property may contribute to subsurface metal contamination.
- *Pesticides, herbicides, and rodenticides*. These are commonly used to control pests/rodents, insects, and vegetation. A significant portion of the subject property has a history of agricultural use, which is likely to have used such chemicals. They can also be used inside and around buildings.
- *Fuel oil and gasoline storage tanks*. Numerous residences and businesses within and adjacent to the corridor currently have, or once had, aboveground storage tanks (ASTs) or

underground storage tanks (USTs) for fuels, including heating oil and gasoline. Some of these tanks may have been removed, and others, although no longer in use, may remain buried in place or within basements. Some of the tanks are known to have leaked, and others may have leaked, though the leaks have not been discovered or documented. Some spills have been cleaned up in accordance with New York State regulations, but others are in the process of being cleaned up.

- *Historic coal yards*. Coal yards were present historically on both sides of the Long Island Rail Road. Coal contains VOCs (including BTEX) and SVOCs (including PAHs). Such materials are potentially present within the corridor adjacent to the LIRR facilities.
- *Fill materials of unknown origin*. In the past, waste materials, including coal and incinerator ash, demolition debris, and industrial wastes, were commonly used as fill material. Even fill material consisting primarily of soil may exhibit elevated levels of PAHs, metals, PCBs, and other contaminants. Such materials are potentially present throughout the corridor.
- *Asbestos*. Asbestos is a common component of building materials, especially insulation, fireproofing, tile flooring, plaster, sheetrock, ceiling tile, mastic, and roofing materials. In addition to materials within existing structures, subsurface utility lines may be coated with asbestos or encased in "transite," an asbestos-containing material (ACM). Asbestos was widely used before 1980. Because of the age of existing structures, ACMs are likely present.
- *Lead-based paint*. The use of lead-based paint was restricted by the Consumer Products Safety Commission in 1977. Lead-based paint that is released (as dust or otherwise) is potentially hazardous, especially to children. Older structures including roadways and bridges are likely to contain lead-based paint.
- *Rail Road Tracks.* Rail yards and train tracks have been known to contaminate surrounding soils with creosote, which is chemical treatment for wood used in railway construction. The Long Island Rail Road commonly sprayed herbicides along the tracks as part of their maintenance plan. Impacts from rail yards may also include spills from herbicides, solvents, diesel and other petroleum products associated with rail yard cargo loading and unloading, train car maintenance, and fueling activities.

C. POTENTIAL IMPACTS OF THE PROPOSED PROJECT

Given the history of this area, extensive contamination of the soil or the groundwater is unlikely. Nevertheless, localized pockets of contamination could exist within the Direct Route Alternative corridor. Excavation and construction activities could disturb these hazardous materials and increase pathways for human exposure. In the areas where power lines would be installed underground, the need for soil disturbance would be greater. Therefore, the potential for exposure to subsurface contaminants in these areas would also be greater. The potential for adverse impacts due to the presence of subsurface contamination would be avoided by ensuring that construction activities are performed in accordance with the following protocols:

- To minimize the potential for impacts to the community and construction workers, all excavation and construction work involving soil disturbance would be performed under a Health and Safety Plan (HASP). KeySpan, the entity that would be responsible for overseeing the construction would require contractors to have a HASP. The standard HASP would be modified, if necessary, to meet the particular situations that may be encountered by this project.
- To address the remediation of known environmental conditions that may be encountered during proposed construction and development activities, a Remedial Action Plan (RAP)

would be prepared, if necessary and appropriate. The purpose of this RAP is to present measures for managing contaminated on-site soil and groundwater and removing any potential unknown underground petroleum storage tanks in accordance with applicable federal and State regulations. Contaminated soil management includes guidelines for temporary on-site stockpiling and off-site transportation and disposal.

- If dewatering is required for construction in those areas in which contaminated soil and/or groundwater is suspected, testing would be performed to ensure compliance with proper regulatory discharge requirements. If necessary, pre-treatment would be conducted prior to the water discharge, as required by regulatory permit/approval requirements.
- Unless there are labeling or test data indicating that electrical equipment does not contain mercury or PCB, removal and disposal of that equipment, if required, would be performed in accordance with applicable federal and State regulations and guidelines.
- Prior to any construction activities required as part of the Direct Route Alternative that may disturb potential asbestos-containing materials, a comprehensive asbestos survey of such structures would be conducted that included the sampling of all suspect materials to confirm the presence or absence of asbestos. Such structures could include underground utility vaults. Based on the findings of the survey, the identified ACMs would be removed and disposed of in accordance with all federal and State regulations.
- Any demolition activities with the potential to disturb lead-based paint would be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62 - Lead Exposure in Construction).
- All material that needs to be disposed of (e.g., miscellaneous debris, tires, contaminated soil and excess fill) would be disposed of off-site in accordance with applicable federal and State requirements.

With the implementation of these protocols, no significant adverse impacts related to hazardous materials would result from demolition and/or construction activities related to the Direct Route Alternative, including the Village underground option. Following construction, there would be no further potential for significant adverse impacts. ✷