A Visual Assessment was performed to assess the potential for visual impacts from Phase II of the Proposed Action, as well as cumulative impacts from Phase I and II of the Proposed Action based upon the proposed changes to aboveground infrastructure.

The Visual Assessment is based on the guidance contained within the NYSDEC Visual Impact Assessment Methodology "Assessing and Mitigating Visual Impacts," (DEP-00-2).

Aside from Mirschel Park, a local park adjacent to the transmission upgrade route, there are no other statewide or local scenic or aesthetic resources identified immediately adjacent to the substation and transmission components of Phase II of the Proposed Action. Since the distribution feeders and distribution bypass will be located underground, this work does not require a Visual Assessment.

## Hempstead Substation Upgrade

The Hempstead Substation is located north of West Columbia Street and west of Morell Street in the Village of Hempstead, Nassau County, New York. The Substation Property is bounded to the west and north by the Long Island Rail Road Hempstead Train Station and associated parking area. The Hempstead Transit Center is located immediately south of the Substation Property, on the south side of West Columbia Street. A four-story residential apartment building and an associated parking area are located immediately east of the Substation Property, on the east side of Morrell Street. In addition, a single-family residence is located immediately northeast of the Substation Property, on the east side of Morrell Street. With the presence of the Long Island Rail Road Hempstead Train Station, Hempstead Transit Center and the existing substation facility, the immediate area includes significant industrial type infrastructure.

The existing substation equipment (including Phase I equipment) occupies a footprint that generally encompasses the entirety of the Substation Property's 0.45 -acre lot. During Phase I, new substation equipment was installed in the southern portion of the Substation Property, which was previously undeveloped. With the exception of one lightning mast with a height of 50 feet, and one substation take-off structure (a metal-framed structure which supports the transmission line that is connected to other substation equipment) measuring approximately 42 feet in height, the maximum height of the Phase I substation equipment is 17 feet. The lightning mast and take-off structure that were installed are of a similar height to the existing distribution poles located outside of the Substation Property. Although the Phase I portion of the Substation Property was previously undeveloped, those changes were consistent with the existing visual character of the Substation Property and its immediate surrounding area.

The Phase II replacements of certain existing equipment in the northern portion of the Substation Property similarly will not change existing conditions. With the exception of
three lightning masts with heights of 50 feet, and one take-off structure measuring approximately 42 feet in height, the maximum height of the Phase II substation equipment is also 17 feet. The lightning masts and take-off structure that will be installed are of a similar height to the existing distribution poles located outside of the Substation Property. Existing substation equipment located in the Phase II portion of the substation property that is planned for removal has a maximum height of approximately 21.5 feet.

As Phase I and Phase II consist of the installation of aboveground substation equipment, cumulative visual impacts were evaluated for the substation. Cumulatively, the location of the Phase I and Phase II substation equipment will not significantly change the views from the four-story apartment building or the single-family residence located to the east of the substation. Furthermore, this equipment is consistent with the other existing industrial infrastructure of the immediate area. Thus, the location of the substation equipment installed as part of Phase I and Phase II of the Proposed Action will not result in a significant adverse impact.

The existing six-foot chain link fence with wooden privacy screening around the Substation Property will be replaced with a new six-foot chain link fence with Permahedge screening, which will reduce the visibility of the substation equipment from surrounding sidewalks and roadways.

## 69 kV Aboveground Transmission Circuit and Pole Upgrades

Phase II will include upgrading existing aboveground 23 kV transmission circuit to a 69 kV transmission circuit, which will require the replacement of 28 transmission poles over a distance of approximately 3,340 linear feet. Of these poles, 26 existing wood poles will be replaced with taller wood poles, and two existing wood poles will be replaced with taller steel poles, as described below. No aboveground transmission circuit and associated pole upgrades were completed during Phase I; therefore, aboveground visual impacts were only evaluated for Phase II and no cumulative visual impact evaluation is required here.

The Phase II aboveground transmission circuit and pole upgrades will be completed between the Hempstead Substation and existing Pole \#33, located near the intersection of Atlantic Avenue and Hilton Avenue, where a 69 kV transmission circuit currently exists. The heights of the 28 poles along the transmission route will be increasing between 10 and 30 feet. Specifically, the poles will increase from heights ranging from 40 and 70 feet to heights ranging from 60 to 80 feet. The potential for visual impacts associated with the Phase II overhead transmission circuit and associated pole replacements were evaluated based on the guidance contained in the NYSDEC Visual Impact Assessment Policy. The potential for visual impacts was assessed by preparing and evaluating visual renderings depicting current and future views at ten locations along the route. The visual rendering locations were selected to demonstrate publicly accessible viewpoints, representative of
various areas along the transmission route (see the Visual Rendering Location Map provided in Appendix A for locations of the visual renderings).

Figure 1, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions taken from the corner of Hilton Avenue and Atlantic Avenue, facing southeast. Several multi-family buildings are present along the north and south sides of Atlantic Avenue in this area. The height increases and materials for poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. Although Phase II will result in new poles being installed that are up to 30 feet taller in height than former poles in this area, transmission/distribution infrastructure already exists in the surrounding area and the height increases do not significantly alter visual conditions when compared to the existing conditions.

Figure 2, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions on Atlantic Avenue, looking southeast from the sidewalk located north of Mirschel Park. There are several multi-family buildings located along Atlantic Avenue in this area, as well as community facilities and a local public park. The height increases and materials for poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. Although Phase II will result in new poles being installed that are up to 30 feet taller in height than former poles in this area, transmission/distribution infrastructure already exists in this medium density residential area and the height increases do not significantly alter visual conditions when compared to the existing conditions.

Figure 3, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions taken from within Mirschel Park looking northwest towards Atlantic Avenue. There are several multi-family buildings located along Atlantic Avenue in this area. In addition, Mirschel Park, a local park improved with a playground, swings, tennis courts, picnic tables and playing fields, is located on the south side of Atlantic Avenue, approximately 100 feet west of Terrace Avenue. The height increases and materials for poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. Although Phase II will result in replacement poles being installed that are up to 30 feet taller in height than former poles in this area, these poles do not significantly alter visual conditions when compared to the existing conditions. As shown in Figure 3, the pole height increases are visible from Mirschel Park. However, existing transmission poles are currently visible from Mirschel Park and the presence of taller poles will not interfere with the public's use or enjoyment of the park.

Figure 4, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions on Atlantic Avenue, looking northwest from the intersection of Atlantic Avenue and Terrace Avenue. This area consists of several multi-family buildings, and a church which is located on the northwest corner of this intersection. The height increases and materials for the poles to be replaced in this area are shown in Table 1.1, provided in

Attachment A. Although Phase II will result in new poles being installed that are up to 30 feet taller in height than former poles in this area, transmission/distribution infrastructure already exists in this medium density residential area and the height increases do not significantly alter visual conditions when compared to the existing conditions.

Figure 5, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions on North Franklin Street, looking southeast from the intersection of North Franklin Street and Atlantic Avenue. As shown in the figures, this area consists of a mixture of commercial uses, auto repair facilities, open parking lots and institutional buildings. The height increases and materials for poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. The material of the existing and proposed poles remains the same for poles in this area (wood), with the exception of Pole \#14, located on the southeastern corner of the Bedell Street and North Franklin Street, and Pole \#18, located at the corner of Atlantic Avenue and North Franklin Avenue. These two wood poles will be replaced with steel poles. With transmission infrastructure already present in this area, the height increases and material changes for poles in this area do not significantly alter visual conditions when compared to the existing conditions.

Figure 6, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions on Bedell Street, located just west of North Franklin Street, facing east. This area consists of a mix of commercial uses, auto repair facilities, open paved parking lots and institutional buildings. The height increases and materials for poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. The material of the existing and proposed poles remains the same for poles in this area (wood), with the exception of Pole \#14. Pole \#14, located on the southeastern corner of the Bedell Street and North Franklin Street, will be replaced with a steel pole. Pole alignments currently exist on both sides of Bedell Street in this area, with transmission poles on the north side and distribution poles on the south side. The height increases and material changes for poles in this area do not significantly alter visual conditions when compared to the existing conditions.

Figure 7, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions along North Franklin Street, looking northeast. This area of North Franklin Street consists of a mix of commercial uses, auto repair facilities, open parking lots and institutional buildings. North Franklin Street is a heavily trafficked four-lane roadway that runs north to south. The height increases and materials of poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. The material of the existing and proposed poles remains the same for poles in this area (wood), with the exception of Pole \#14, located on the southeastern corner of the Bedell Street and North Franklin Street, and Pole \#18, located at the corner of Atlantic Avenue and North Franklin Street. These two wood poles will be replaced with steel poles. In addition, with the exception of one pole in this area, which is being relocated approximately 18 feet south of its existing location, these poles will be installed within ten feet of their former locations. Although

Phase II will result in replacement poles being installed that are up to 25 feet taller in height than former poles in this area, these poles do not significantly alter visual conditions when compared to the existing conditions. The use of reduced-diameter steel poles at the corner of Atlantic Avenue and North Franklin Street, and at the corner of Bedell Street and North Franklin Street are not anticipated to significantly alter visual conditions as the steel poles are similar in height to the replacement wood poles and are visually consistent with the character of the area, where existing infrastructure currently exists. Furthermore, these steel poles will be similar in material and color to existing traffic signal poles present in the area.

Figure 8, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions along Bedell Street, looking east. This area of Bedell Street consists of a mix of commercial uses, auto repair facilities, and open parking lots. The height increases and materials of poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. Although Phase II will result in new poles being installed that are up to 30 feet taller in height than former poles in this area, transmission/distribution infrastructure already exists in this medium density residential area and the height increases do not significantly alter visual conditions when compared to the existing conditions.

Figure 9, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions along Bedell Street, immediately west of the Long Island Rail Road Hempstead Train Station parking lot, looking west-southwest. This area of Bedell Street consists of a mix of commercial uses and open parking lots. The height increases and materials of poles to be replaced in this area are shown in Table 1.1, provided in Attachment A. Although Phase II will result in new poles being installed that are up to 30 feet taller in height than former poles in this area, transmission/distribution infrastructure already exists in this medium density residential area and the height increases do not significantly alter visual conditions when compared to the existing conditions.

Figure 10, provided in Appendix A, depicts existing conditions and simulated proposed Phase II conditions at Pole \#2 and Pole \#3 located on Morell Street. These figures depict views from outside the four-story apartment building located at the southeast corner of the West Columbia Street and Morell Street intersection. The area shown in these figures includes the presence of industrial type infrastructure with the nearby Long Island Rail Road Hempstead Train Station and the existing substation facility. The height increases and material of poles to be replaced in this area are listed in Table 1.1, provided in Attachment A. Although Phase II will result in replacement poles being installed that are up to 25 feet taller in height than former poles in this area, these poles are being installed within 10 feet of their former locations and do not significantly alter visual conditions when compared to the existing conditions.

## Distribution Feeders and Distribution Pole Upgrades

Phase I aboveground distribution work included the installation of two 45-foot poles in connection with the upgraded distribution feeders, and the replacement of 186 distribution poles ranging from 35 to 40 feet in height with new 45 -foot poles, at the same relative locations. The distribution pole installations were visually consistent with the former poles and did not create a significant visual impact.

Phase II aboveground distribution work includes the in-kind replacement (replacement of poles 10 feet taller or less, and within 10 feet of their original locations or within the existing overhead alignment) of 76 distribution poles, ranging in heights from 40 to 45 feet, the installation of five new distribution poles ranging in heights from 40 to 45 feet, the inkind replacement of one distribution pole that is 65 feet in height and the replacement of one 30 -foot distribution pole with a 45 foot distribution pole. The in-kind pole replacements will be installed within 10 feet of their original location and will consist of new poles that are 10 feet taller or less than the original pole locations, and therefore will not result in any visual impact. The five new 40 to 45 -foot distribution poles being installed, as well as the 30 -foot pole being replaced with a 45 -foot pole, are all located in-line with the other poles and will therefore not result in any visual impacts. As such, Phase II distribution pole replacements and installations will not result in any visual impact.

Cumulatively, the Phase I and Phase II distribution pole upgrades will not result in any visual impact as the vast majority of these poles are proposed as in-kind replacements that are located within existing distribution pole alignments and are similar in height to nearby utility poles. Additionally, any new pole installations are also similar in height to nearby utility poles and are located in-line with existing utility poles. As such, the distribution pole replacements will not result in significant adverse visual impacts.

