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1.0 INTRODUCTION

Central Hudson Gas & Electric Corporation (“CHG&E” or “Central Hudson” or the “Applicant”) is proposing to rebuild portions of the double-circuit 69kV electrical transmission lines, known as the WH 1 & WH 2 Transmission Lines, (hereafter, “WH-1/2 Lines”). The WH-1/2 Lines run westerly from the Honk Falls Substation in the Town of Wawarsing, Ulster County for a distance of 9.01 miles to the Ulster/Sullivan Country Line, where the franchise line of Central Hudson meets the franchise line of New York State Electric and Gas (NYSEG) near structure 30933-30934. From this point, NYSEG continues to operate the WH-1/2 Lines for an additional 4.80 miles to the West Woodbourne Substation in the Town of Fallsburg, Sullivan County.

Central Hudson also operates a 1.2 mile long Tap Line from the WH-1/2 Lines near Briggs Highway to the Greenfield Substation, just west of the Village of Ellenville. The Central Hudson WH-1/2 Lines supply the Grimley Road Substation and act as a reserve supply for the Greenfield Road Substation and Neversink Substation. The WH-1/2 Lines were originally installed in 1932, and the Greenfield Road Tap Line was installed in 1944. The Proposed Action is a rebuild of both the 9.01 mile Central Hudson-operated section of the WH 1&2 lines and the 1.2 mile Tap Line. The purpose of the rebuild is to replace the aging electric transmission infrastructure for this line with improved design, materials and storm hardening features in order to provide reliable electric service for the 69kV system in the Ellenville area.

2.0 PROJECT DESCRIPTION

2.1 Description of Proposed Work

The rebuild is designed to address several existing problems including: long term degradation of the strength of the conductors along the lines; poor condition of many of the existing H-frame wood double-pole transmission structures; the need for improved storm hardening and reliability; and the need for increased conformity to applicable electric utility safety standards for ground clearance and safety. The rebuild will involve replacement and upgrade of the transmission structures, the conductors, and the static wire. All existing wood, double-pole structures will be replaced with self-weathering steel poles, most of which will be davit arm single pole transmission structures. The replacement poles will be strung with new and upgraded conductors which allow for greater load capacity. The existing conductors will also be upgraded from the original 3/0 ACSR “Pigeon” to 795 ACSR “Tern”. The two existing 101.8 ACSR “Petrel” static wires will be upgraded to a single OPGW to provide lightning protection, as well as the capability to be used for data transfer and communications between substations.

The new structures and conductor installation will meet the current National Electric Safety Code (NESC) for conductor ground clearance. The overall purpose of the rebuild of the WH-1/2 Line and the Greenfield Tap Line is to provide infrastructure upgrade, storm hardening and increased electric transmission supply reliability in the Ellenville 69 kV area. No increase in voltage is proposed.

The existing WH 1/2 lines and the tap line are double-circuited lines with a nominal voltage rating of 69 kV, and the rebuild will be a single-circuit line with the same nominal voltage rating of 69 kV. The replacement transmission structures will be located to optimize conductor spans, while also placing the new structures out of environmentally sensitive areas to the extent practicable. Due to the nature of the terrain and requirements of applicable codes, the total number of transmission structures will remain approximately the same as currently exists. However, the use of new single pole structures vs. the existing double-pole H-frame structures will reduce the overall number of poles on the line. The number of poles will be reduced from 276 poles (constituting the existing 138 double pole structures) to approximately 167 poles (for the proposed 115 single pole structures and 26 double pole structures to be installed). The new transmission structures will be approximately 10-15 feet taller on average than the existing poles (approximately 40-75 feet vs. 38-65.5 feet) in order to meet the current NESC standards for conductor ground clearance, as discussed in the preceding paragraph. Typical structure drawings are included in Appendix A and Plan & Profile drawings are include in Appendix B.

The rebuild will include installation of at least two new transmission line switch structures near the Central Hudson/NYSEG franchise line, to provide the ability to sectionalize portions of the line for maintenance and emergency repair. A transition structure will be installed at the interface of the Central Hudson and NYSEG franchise boundary. Central Hudson has been in communication with NYSEG to assure appropriate coordination and interconnection of the rebuilt single circuit main line with the NYSEG portion, which will remain double-circuited.

The rebuild will take place along the centerline of the existing 100-foot wide Right-of-Way (ROW), and the ROW will not be widened. Ground disturbance will be predominantly within previously disturbed areas of the ROW. An existing 1,000 foot long forest road accessing the WH-1/2 Lines from NYS Route 52 will be upgraded. Additionally a second new 100-foot long (approximately) access route is proposed to be established from NYS Route 52, west of Hacienda Road. Both access routes will be used in the construction of the rebuild and periodically for future maintenance.

Construction is planned to take place in three sections, in order to allow for the complete removal and replacement of poles within each section of the project without affecting customer service. The three sections are: Honk Falls Substation to Grimley Road Substation (including Greenfield Road Tap); Grimley Road Substation to the Neversink Tap Structure; and Neversink Tap Structure to the Central Hudson/NYSEG Franchise Line at Structure 30933-30934.

As part of the rebuild, minor modifications, primarily affecting equipment such as circuit switches and breakers, will be made at the Honk Falls, Grimley Road, Greenfield and Neversink Substations. These modifications are required to accommodate the reconfiguration of the line from double-circuit to single circuit, provide for ability to sectionalize the line, and remove substation equipment no longer required. There will be no new substation structures added and no increase to the footprint or alteration of the fence line of the existing substations. All existing substations connected to this line will continue to operate at their current voltage levels.

2.2 Part 102 Summary

CHG&E has prepared this report in accordance with the requirements of 16 NYCRR Part 102 of the Public Service Law (PSL). In accordance with Part 102 of the Public Service Law (PSL), a transmission facility is defined as items of an electric plant not subject to the NYS Public Service Commission's jurisdiction under Article VII of the PSL used to convey electric energy at 65 kV or higher voltages for distances of one mile or longer including: towers, poles, and appurtenant fixtures; wire, cable and devices; conduit, tunnel conductors, and devices. The WH-1/2 Lines Rebuild Project is not subject to Article VII regulations since the WH-1/2 Lines have, and will continue to, operate at a voltage of less than 100 kV. Since the WH-1/2 Lines are greater than 65 kV and exceed one mile in length, this work is subject to review under Part 102. Representative photographs of the existing lines and ROW are included in Appendix D.

No review pursuant to Part 102.4 (advantage-disadvantage analysis) is provided herein because the proposed Project will not traverse any national parks; state parks; national wildlife refuges or preserves; native American reservations or military bases; national or state landmarks; historic landmarks; national monuments or trails; wild or scenic rivers; national or state register listed historic sites; central business districts in cities or villages; densely developed residential areas; or any classes of areas described in Part 102.3(a). This report does address areas identified under Part 102.3(b).

3.0 ENVIRONMENTAL RESOURCES EVALUATION

A review of the proposed Project was conducted in accordance with the criteria specified in Part 102, Section 102.3(b). Existing environmental, cultural, and community resources within and adjacent to the Project Site are described below, along with the impacts anticipated to result from Project construction and operation.

3.1 Land Use and Zoning

Land use surrounding the Project Site is dominated by undeveloped forestland, with scattered agricultural land, low-density residential development and public utilities also present.

As previously stated, the WH-1/2 Lines do not traverse any of the following Part 102-specified priority land uses:

1. National and state parks, preserves, reservations, landmarks, and monuments formally so designated and acquired for their natural, scenic or cultural value by appropriate state and federal agencies.
2. Historic sites formally so designated by national or state agencies but without acquisition of rights or ownership sufficient for the purpose of preservation.
3. Central business districts in cities and villages.
4. Developed and partly developed residential areas with an existing or proposed density of one or more dwelling units per acre, as shown on approved subdivision maps, occupying a minimum contiguous area of 20 acres, all or a portion of which would be traversed by the proposed transmission facility ROW.

None of these classes of priority areas specified by Part 102.3 (a) (1), (2), (3) or (4) are affected by the proposed Project. Therefore, the advantage-disadvantage analysis required by section 102.4 is neither applicable to, or required for, this Project.

In addition, Part 102.3(b) lists the following Classes of Areas, which, if applicable, must be addressed in the report, without the analysis required by Part 102.4:

1. Areas of outstanding natural or scenic value which are preserved by non-profit private agencies but which have not been formally so designated by national or state agencies.
2. Areas of outstanding cultural value (e.g., attractive pastoral scenes, locations of noteworthy architectural and/or social import both within and outside specific sites that lend attractiveness to a neighborhood or community) that have not been formally designated by a government or private authority.
3. Existing local (city, town, village and county) parks and open space areas that have been formally established by government or private authorities.
4. Public and semi-public facilities such as cemeteries, educational, correctional and medical facilities and military installations.
5. Existing light industrial and commercial areas (e.g., industrial parks, shopping centers, office building complexes).

6. Partially developed residential areas where the subdivision will have an eventual population density of one or more dwelling units per acre, as shown on approved subdivision maps, comprising a minimum contiguous area of 20 acres or a portion of which is traversed by the proposed transmission facility right-of-way.
7. Areas of outstanding cultural value (e.g., attractive pastoral scenes, locations of noteworthy architectural and/or social import both within and outside specific sites that lend attractiveness to a neighborhood or community) that have not been formally designated by governmental or private authority.
8. Residential areas with less population density than those specified in preceding categories.
9. Planned and zoned undeveloped light industrial, commercial and residential areas.
10. Managed woodlands (e.g., commercial and other productive forests).
11. Agricultural districts established in accordance with article 25-AA of the Agriculture and Markets Law, and other farmlands.
12. Existing and planned heavy industrial areas.
13. Woods and open lands other than those included within areas specified in any priority area above. Partially developed residential areas.

Applying the above standards to the proposed Project, land uses that will be affected by the proposed Project include the following:

1. Zoned residential areas (described in Section 3.1)
2. An agricultural district established in accordance with Chapter 25-AA of the Agriculture and Markets Law and other farmlands (described in Section 3.5)
3. Woods and open lands (described in relevant Sections 3.2 – 3.4)

The proposed Project will be subject to Chapter 112 – Zoning of the Town Code of Wawarsing. The rebuild of the WH-1/2 Lines is considered an allowed use subject to Site Plan Review from the Town of Wawarsing Planning Board. The existing WH-1/2 Lines are primarily located within the RU Rural Zone, with small portions (the western end) located in RS-1 Residential Settlement and (the eastern end) located in the RMH Residential Manufactured Home and NS Neighborhood Settlement Zones.

The Town Planning Board conducted Lead Agency circulation in June 2015 and is serving as Lead Agency under the State Environmental Quality Review Act (SEQRA). A copy of the Full Environmental Assessment Form (“EAF”) can be provided upon request. The Town of Wawarsing Planning Board duly advertised and held a public hearing for the Project on September 15, 2015, which was subsequently concluded at the same meeting. Further proceedings on the review are scheduled for the October 20, 2015 meeting.

3.2 Hydrology and Water Resources

The Project Site is located in the Rondout Watershed (USGS Hydrologic Unit 02020007). This watershed drains into the Hudson River, which ultimately drains into the Atlantic Ocean. The West Branch of the Beer Kill, is a major tributary of Rondout Creek, and the dominant hydrologic feature in the vicinity of the Project Site. The Beer Kill runs in a generally south-east direction, and receives drainage from most wetlands and tributary streams within the Project Site. Several unnamed tributaries bisect the Project Site and drain into either the West Branch of the Beer Kill to the south, the Beer Kill to the north, or directly to Rondout Creek to the northeast. The West Branch of the Beer Kill flows east and drains the main branch of the Beer Kill within approximately 100 feet of the Project Site. The Beer Kill flows southeast approximately 1.4 miles until its confluence with Sandburg Creek, which then drains into Rondout Creek approximately 3.6 miles northeast of the Project Site. Rondout Creek subsequently flows northeast until its confluence with Wallkill River, which then drains into the Hudson River. The Project Site is located approximately 6 miles south of Rondout Reservoir, which is the collection point for the New York City Delaware water supply network.

The majority of surface hydrology on the Study Area is generated by precipitation and surface water run-off from adjacent land. Total annual precipitation (from 2004 to 2014) averages 60.37 inches in nearby, Mohonk Lake, NY (NOAA, 2014). Small farm ponds/open water areas are also scattered throughout the Study Area. Generally, they are found in open field settings, adjacent to houses and barns, or within wetlands.

3.2.1 Jurisdiction Wetland Mapping

In accordance with the Section 404 of the Clean Water Act, the U. S. Army Corps of Engineers (“USACE”) has regulatory jurisdiction over Waters of the United States. As defined by the Corps, Waters of the United States include all lakes, ponds, streams (intermittent and perennial), and wetlands. Jurisdictional wetlands are defined as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (EPA, 2001). Such areas are indicated by the presence of three criteria: hydrophytic vegetation, hydric soils, and evidence of wetland hydrology during the growing season (Environmental Laboratory, 1987). However, as a result of the *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers* Supreme Court case (No. 99-1178; January 9, 2001), it has been determined that the USACE does not have jurisdictional authority over waters that are “nonnavigable, isolated, and intrastate” (EPA, 2001). The jurisdictional status of all on-site waters can only be determined following official documentation provided by the USACE, which typically includes a field visit.

More recently, the Supreme Court decided *U.S. v. Rapanos*, (547 U.S., June 19, 2006), in which it held in two consolidated cases (*Rapanos* and *Carabell*) that the USACE misinterpreted the Clean Water Act in determining its jurisdiction over wetland protection. On June 5, 2007 the Environmental Protection Agency (“EPA”) and the Department of Army (DOA) issued Clean Water Act jurisdiction guidance following the Supreme Court’s decision in *Rapanos* and *Carabell*. A summary of this guidance is as follows:

The agencies will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and
- Wetlands that directly abut such tributaries.

The agencies will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and
- Wetlands adjacent to, but that do not directly abut, a relatively permanent non-navigable tributary.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and
- Significant nexus includes consideration of hydrologic and ecologic factors.

Section 10 of the Rivers and Harbor Act (33 U.S.C. 401 et seq.) requires a permit from the USACE to construct any structure in or over any navigable water of the United States, as well as any proposed action that would alter or disturb

(such as excavation/dredging or deposition of materials) these waters. If the proposed structure or activity affects the course, location, condition, or capacity of the navigable water, even if the proposed activity is outside the boundaries of the water body, a permit from the USACE is required.

Review of NWI mapping indicates a total of eight (8) federally-mapped wetlands and nine (9) streams located within and/or adjacent to the Project site (Figure 3). The NWI maps indicate that palustrine emergent and scrub-shrub wetlands (PEM, PSS, and PEM/SS) are the most prevalent on-site, followed by forested wetlands and ponds (PFO and PUBH).

3.2.2 Wetlands and Surface Waters

The Freshwater Wetlands Act (Article 24 and Title 23 of Article 71 of the Environmental Conservation Law) gives the New York State Department of Environmental Conservation (NYSDEC) jurisdiction over state-protected wetlands and adjacent areas (100-foot upland buffer). The Freshwater Wetlands Act requires the NYSDEC to map all state-regulated wetlands (typically over 12.4 acres in size) to allow landowners and other interested parties a means to determine where state jurisdictional wetlands exist. Each of these wetlands has been assigned a classification of I (highest rank) through IV (lowest rank) based on a list of criteria for each class identified in NYSDEC rules and regulations. Characteristics considered include ecological associations, special features, hydrological and pollution control features, cover type, distribution, and location (NYSDEC, 2015). Review of NYSDEC mapping indicates that there are only three wetlands intersecting the Project Site that are regulated under Article 24 of the Environmental Conservation Law. The state-regulated wetlands are identified in Table 1 and Figure 3.

Table 1. Mapped State Regulated Wetlands within the Project Site¹

Wetland	Class ²	Total Size (Acres)	Size Mapped Within Study Area (Acres)	Size Delineated Within Study Area (Acres)
GR-25	II	21.0	1.21	0.68
WD-1	II	13.89	0.02	0.29
E-16	III	32.23	1.20	0.0 ³

¹ Refer to Figure 3 for a map of state regulated wetlands.

² The NYS classification system consists of four separate classes that rank wetlands according to their functions and values (Class I having the highest rank, descending through Class IV).

³ NYSDEC Freshwater Wetland E-16 was not physically identified within the ROW at its mapped location. For additional information see Wetland Delineation Report (EDR, 2014)

All streams of the state are assigned a class and standard by the NYSDEC according to their existing or expected best usage. A classification of AA or A indicates that the waterway is used as a source of drinking water, Class B waters

are best used for swimming and other contact recreation, Class C and D water uses include fishing and non-contact recreation (NYSDEC, 2015). Waters classified as A, B, or C may also have a standard assigned indicating that they may support trout (T) or trout spawning (TS). Under Article 15 of the Environmental Conservation Law (Protection of Waters), the NYSDEC has regulatory jurisdiction over any activity that disturbs the bed or banks of protected streams, including small lakes and ponds with a surface area of 10 acres or less located within the course of a protected stream. Protected streams include any stream, or particular portion of a stream, that has been assigned any of the following classes and standards: AA, AA(T), AA(TS), A, A(T), A(TS), B, B(T), B(TS), C(T) or C(TS) (6 NYCRR Part 701). NYSDEC classifications of unprotected watercourses include Class C and Class D streams.

Based on available NYSDEC stream classification mapping, nine streams within the Project Site include Class B, B(T), and C waters. These streams generally occur within well-defined valleys and have substrates composed of bedrock, boulders, cobbles, gravel and silt. Of these nine streams, eight are protected streams and tributaries, including the West Branch of the Beer Kill, the Beer Kill, and six unnamed tributaries (see Table 2). These streams, along with all other perennial and intermittent streams within and adjacent to the Project Site, are also protected by the USACE under Section 404 of the Clean Water Act.

Table 2. Mapped NYSDEC Streams within and Adjacent to the Project Site

Name	Class	Status
West Branch of the Beer Kill	B(T)	Protected
Unnamed tributary to the West Branch of the Beer Kill	B(T)	Protected
Unnamed tributary to the West Branch of the Beer Kill	B(T)	Protected
Unnamed tributary to the West Branch of the Beer Kill	B(T)	Protected
Unnamed tributary to the West Branch of the Beer Kill	B(T)	Protected
Beer Kill	B(T)	Protected
Unnamed tributary to Beer Kill	B(T)	Protected
Rondout Creek	C	Unprotected
Unnamed tributary to Rondout Creek	B	Protected

3.2.3 Delineated Wetlands

On behalf of CHG&E, Environmental Design & Research, Landscape Architecture, Engineering & Environmental Services, D.P.C. (“EDR”) identified and delineated 24 wetlands and 16 streams that are likely under federal jurisdiction, including three NYSDEC-mapped wetlands within the Project Site during the summer and fall of 2014 (EDR, 2015).

The determination of wetland boundaries was made according to the three-parameter methodology described in the USACE Wetland Delineation Manual (Environmental Laboratory, 1987). Information pertaining to individual on-site wetlands and streams is presented in the Project Wetland Delineation Report (EDR, 2014).

Of the 24 wetlands identified along the ROW, the Project will avoid impacts to 9 of these (B, C, F, H, I, N, Q, CC and DD). Construction activities will result in temporary disturbance (i.e., vehicle access, pole removal, pole installation, etc.) at 12 wetlands (D, E, L, O, U, X, Y, J, P, V, Z, AA). The Project will result in permanent impacts to 3 wetlands (R, S and W) to improve access for both construction and long-term maintenance of the WH-1/2 Lines /ROW. Table 3 provides a summary of wetland impacts.

Table 3. Summary of Impacts to Wetland Resources

Field ID	NYSDEC Wetland ID	Stream Present	Structure Span	Wetland Type	Proposed Structures Located within Wetlands	Potential Impacts	Square Footage of Permanent Impact	P&P Sheet No.
B	GR-25	Yes	WH 122 – WH 123	PEM		Avoid, No Impact		11/12
C	--	--	WH 120 – WH 122	PSS/PFO		Avoid, No Impact		11
D	--	--	WH 119 – WH 121	PEM/PSS/PFO		Matting		11
E	--	Yes	WH 112 – WH 113	PEM/PFO		Matting		11
F	--	--	WH 111 – WH 112	PEM/PFO		Avoid, No Impact		11
H	--	--	WH 105 – WH 106	PEM/PSS/PFO/OW		Avoid, No Impact		10
I	--	--	WH 96 – WH 97	PSS		Avoid, No Impact		9
J	--	--	WH 94 – WH 96	PSS/PFO	1	Matting		9
L	--	Yes	WH 98 – WH 100	PEM/PFO		Matting		10
N	--	--	WH 86 – WH 87	PEM		Avoid, No Impact		8
O	WD-1	Yes	WH 84 – WH 85	PEM/PFO		Matting		8
P	--	--	WH 81 – WH 83	PEM/PFO	1	Matting		8
Q	--	--	WH 124 – WH 125	PEM		Avoid, No Impact		13
R	--	--	WH 33 – WH 34	PEM		Permanent Fill/Crossing	2,100	4
S	--	--	WH 33 – WH 34	PEM/PFO		Permanent Fill/Crossing	240	4

Field ID	NYSDEC Wetland ID	Stream Present	Structure Span	Wetland Type	Proposed Structures Located within Wetlands	Potential Impacts	Square Footage of Permanent Impact	P&P Sheet No.
U	--	Yes	WH 13 – WH 14	PEM		Matting		3
V	--	Yes	WH 77 – WH 79	PEM/PSS/PFO	1	Matting		8
W	--	--	WH 69 – WH 72	PEM/PSS/PFO		Permanent Fill/Crossing	1,350	7
X	--	--	WH 68 – WH 69	PEM/PSS/PFO		Matting		7
Y	E-16	--	WH 60 – WH 61	PEM/PFO		Matting		6
Z	--	--	WH 53 – WH 55	PSS/PFO	1	Matting		6
AA	--	Yes	WH 42 – WH 49	PEM/PSS/PFO	3	Matting		5
CC	--	--	WH 5 – WH 6	OW		Avoid, No Impact		2
DD	--	Yes (2)	WH 1 – WH 2	PEM		Avoid, No Impact		2

Of the 16 streams identified along the ROW, the Project will avoid impacts to nine of these (B, BB, DD, DD, EE, FF, L, T and U). The Project will require temporary crossing of seven streams (E, G, K, M, O, V and AA) with construction matting. No permanent crossings are proposed.

Table 4. Summary of Impacts to Stream Resources

Field ID (Stream Name)	Stream Type	NYSDEC Stream Class	Potential Impact	P&P Sheet No.
B (UT to West Branch of Beer Kill)	Perennial	B(t)	Avoid, No Crossing	11/12
E (West Branch of Beer Kill)	Perennial	B(t)	Matting	11
G	Intermittent	--	Matting	10
K	Ephemeral	--	Matting	9
L (UT to West Branch of Beer Kill)	Perennial	B(t)	Avoid, No Crossing	10
M	Intermittent	--	Matting	9
O (UT to West Branch of Beer Kill)	Perennial	B(t)	Matting	8
T (UT to Beer Kill)	Perennial	B(t)	Avoid, No Crossing	3

Field ID (Stream Name)	Stream Type	NYSDEC Stream Class	Potential Impact	P&P Sheet No.
U	Intermittent	--	Avoid, No Crossing	3
V	Intermittent	--	Matting	8
AA	Intermittent	--	Matting	5
BB (UT to West Branch of Beer Kill)	Perennial	B(t)	Avoid, No Crossing	5
DD (Rondout Creek)	Perennial	C	Avoid, No Crossing	2
DD (UT to Rondout Creek)	Perennial	B(ts)	Avoid, No Crossing	2
EE (Beer Kill)	Perennial	B(t)	Avoid, No Crossing	4
FF (West Branch Beer Kill)	Perennial	B(t)	Avoid, No Crossing	13

Potential impacts to wetlands and streams resulting from temporary disturbances (i.e., vehicle access, pole removal pole installation, etc.) will be avoided, minimized and mitigated by:

- Installing construction matting at all temporary crossings - unless suitable soil conditions exist such that no visible rutting or alteration of the hydrology of the wetland would result. In such cases, crossing the wetland may occur with rubber-tired vehicles. Should visible rutting occur, the affected access route(s) will be upgraded to include construction matting.
- Restoring disturbed areas to original grade and profile.
- Seeding disturbed areas with a native wetland seed mix.
- Mulching or covering exposed soil to limit erosion and sedimentation.
- Conforming to the NYS Standards and Specifications for Erosion and Sediment Control as outlined in the Project Stormwater Pollution Prevention Plan ("SWPPP").

Construction activities will also be monitored by CHG&E Environmental Affairs staff to ensure that environmental protection measures and SWPPP protocols are enforced.

Although long-term or permanent impacts to surface waters will generally be avoided by locating replacement poles outside the boundaries of delineated wetland and streams, and by locating access roads, laydown areas and pulling sites in upland areas, there will be minor permanent impacts to three wetlands. As previously indicated, these are required to facilitate both construction and long-term access to the ROW. The total acreage of permanent impact is less than 0.1 acre, and will not require notification to the USACE for coverage under Nationwide Permit (NWP) 12 for

utilities. This is a relatively small area, and because the impacted resources are maintained as scrub-shrub complexes on the ROW, no clearing of forested wetland will result from Project construction. For these reasons, substantial adverse impacts to wetland or stream resources are not anticipated.

3.2.4 Floodplains

A floodplain is the flat or nearly flat area adjacent to a stream or river that experiences periodic flooding. Natural functions of floodplains include temporary storage of floodwaters, attenuation of peak flows, water quality improvement, and groundwater recharge. The low-lying expanses reduce sediment and nutrient loading by slowing down the velocity of flood waters and surface runoff allowing sediment to settle and nutrients to be absorbed by floodplain vegetation.

According to the Federal Emergency Management Agency (“FEMA”), a 100-year floodplain is defined as the area that will be inundated by the flood event having a one percent chance of being equaled or exceeded in any given year. No portion of the Project Site occurs within a FEMA designated 100-year floodplain, and field review confirmed the lack of floodplain characteristics on-site.

3.3 Vegetative/Ecological Communities

Vegetative communities within the Project Site were inventoried and mapped based on interpretation of aerial photography and field verification (Figure 4). Additionally, written requests for documentation of unique or significant ecological communities were sent to the New York Natural Heritage Program (“NHP”) on July 11, 2014. The agency response, dated September 3, 2014, indicated that there are no records of significant ecological communities on or adjacent to the Project Site (see Appendix C).

The acreage of vegetative communities occurring on the Project Site (see Figure 4) is provided in Table 5. All of the major plant communities found on site are common to New York State. As indicated in Table 5, successional old field and shrubland (totaling 110 acres) is the dominant community type.

Table 5. Ecological communities on the WH-1/2 ROW

Type	Current Acreage	After Project Completion	Change (+/-)
Roads, buildings, and other paved or impervious surfaces	9.1	10.2	+ 1.1
Forested	16.5	3.65	- 2.9

Successional Old Field / Shrubland	110.2	112.35	+ 2.15
Agriculture	2.5	2.5	
Surface water features	1.0	1.1	
Wetlands	17.5	17.4	-0.1
Non - vegetated	2.0	2.0	

The existing ROW will be maintained and cleared by the Applicant in accordance with their New York Public Service Commission (“PSC”) approved Long Range Vegetation Management Plan. As part of this plan, and in accordance with PSC requirements, the Applicant performs routine clearing on the ROW as well as clearing/removal of danger trees along the edge of the ROW. The only proposed tree clearing which is not conducted as part of the Long Range Vegetation Management Plan, will be the clearing associated with the two proposed off-ROW access roads off of NYS Route 52. The total area of clearing at these locations is approximately 2.9 acres. At both of these locations, the clearing will be scheduled to be conducted during the winter cutting period to avoid impacts to potential sensitive bat habitat (described below).

Impacts to vegetation have been minimized by utilizing an existing cleared ROW and siting proposed Project components at existing pole/structure sites to the extent practicable. Additional discussion of impacts to agricultural land is included in Section 3.5.

3.3.1 Invasive Species

An invasive species is an organism that has been purposefully or accidentally introduced outside its original geographic range, and is able to proliferate and aggressively alter its new environment, potentially causing harm to the economy, environment, or human health. Invasive plant species spread in a number of different ways. Dispersal mechanisms include wind, water, wildlife, vegetative reproduction, and human activity. Populations of invasive species typically establish most readily in places where the ground has been disturbed, where the soil is exposed, and in closer proximity to heavily populated areas.

EDR performed invasive species evaluations along the WH-1/2 Lines ROW in conjunction with the wetland and ecological field assessments conducted in August and September 2014. Specific invasive species assessed included those listed on the official NYSDEC listing of *Prohibited and Regulated Invasive Species (NYSDEC 2014)*. Invasive species field data sheets were created by EDR personnel and used in the field to document the presence of invasive species and their relative abundance within the Project Site. Given that the vast majority of the transmission line is remote, populations of invasive species were found to be scarce and only scattered individuals were encountered. The

presence of invasive species was generally limited to one area along the ROW which contained a moderate abundance of multiflora rose (*Rosa multiflora*). This area was located in a section of the ROW directly south of the ROW crossing of County Route 53, Briggs Highway. Populations were clustered and appeared to be contained entirely within the transmission line ROW.

While invasive species are not prevalent on the ROW, the Project will utilize an Invasive Species Control Plan (“ISCP”). The proposed ISCP is based on the Environmental Energy Alliance of New York’s (“EEANY”) *Best Management Practice for Preventing the Transportation of Invasive Plant Species* (EEANY, 2012) and is intended to minimize the spread of invasive species within NYSDEC regulated areas. The ISCP will be implemented for the duration of construction activities. In addition, CHG&E and its contractors will comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and ECL Section 9-1303 and any quarantine orders issued thereunder. Control measures will include:

- Contractor/Employee Training
- Construction Materials Inspection
- Minimize Ground Disturbance
- Clearing, Erosion Control, and Disposal Practices
- Construction Equipment Sanitation
- Restoration with Native Seed Mixes

3.4 Rare, Threatened and Endangered Species

Information regarding occurrence of rare, threatened, and endangered species and significant natural communities on the Project Site was solicited from the NHP and the U.S. Fish and Wildlife Service (“USFWS”). Agency correspondence is included in Appendix C.

3.4.1 State-Listed Species

Written requests for information regarding listed species and unique or significant natural communities were sent to the NHP on July 11, 2014. The agency provided a response letter, which is included in Appendix C. According to the NHP, the following threatened species have been documented in the vicinity of the Project Site.

- Timber Rattlesnake (*Crotalus horridus*)
- Bald Eagle (*Haliaeetus leucocephalus*)

- Button-Bush Dodder (*Cuscuta cephalanthi*)

However, no impacts to state or federally-listed threatened or endangered species are anticipated from the proposed Project, as discussed for each species below.

Timber Rattlesnake

EDR and CHG&E met with the NYSDEC on September 29, 2014 to understand if there were known timber rattlesnake den sites or critical areas of concern on or near the WH-1/2 Lines ROW, and whether mitigation measures would need to be implemented during construction. Per this meeting (see Meeting Minutes in Appendix C), there is a known historic timber rattlesnake den located within 0.5 mile of the ROW. However, this den was filled in 1979 and is no longer considered active. Therefore no active den sites or critical areas are known along the WH-1/2 Lines ROW, thus no adverse impacts to critical timber rattlesnake habitat is anticipated.

Bald Eagle

According to the NYSDEC, there is one bald eagle nest located near the WH-1/2 Lines ROW. The nest is located near Honk Lake, approximately 0.5 miles east of the ROW. This nest is considered to be generally inactive (see Meeting Minutes in Appendix C). For this reason, and since the work will be primarily located on a previously cleared ROW, adverse impacts to bald eagle habitat are not anticipated.

Button-Bush Dodder

Buttonbush dodder is typically found in wet to moist areas that are exposed to sun or partial sun. Associated ecological communities include deep emergent marsh, highbush blueberry bog thicket, pine barrens shrub swamp, and shrub swamp (NYNHP, 2015a). Buttonbush dodder was not observed within the WH-1/2 Lines ROW area during the ecological assessments conducted in August and September 2014. Additionally, there are limited ecological communities within the ROW which would be considered suitable for the buttonbush dodder since the majority of shrub/scrub wetlands on the ROW are shallow systems with limited deep water fringe habitat. Impacts to shrub-scrub wetlands will be avoided by using construction matting for temporary crossings. No impacts are proposed within the one deep emergent marsh (Wetland B) located near the Ulster/Sullivan County line that could potentially provide habitat for this species. For these reasons, no adverse impacts to buttonbush dodder are anticipated.

3.4.2 Federally-Listed Species

In addition, a web-based review of the USFWS Information, Planning, and Conservation (“IPaC”) decision support system indicates the possible presence of the following species in the vicinity of the proposed Project:

- Dwarf wedgemussel (*Alasmidonta heterodon*)
- Northern wild monkshood (*Aconitum noveboracense*)
- Indiana bat (*Myotis sodalis*)
- Northern long-eared bat (*Myotis septentrionalis*)
- Bog turtle (*Clemmys muhlenbergii*)

However, based on an assessment of habitat on the Project Site, and proposed construction activities, no impacts to these federally-listed threatened or endangered species are anticipated from the proposed Project. The basis for this conclusion for each federally-listed species identified by the USFWS IPaC is presented below:

Dwarf Wedgemussel

Dwarf wedgemussels live embedded in the fine sediment that has accumulated between cobbles in slow to moderate current and relatively shallow water (40 cm or 16 inches) in small cool water streams and similar habitat in larger rivers (NYNHP, 2015b). The substrate can be muddy sand, sand, or gravel, but there is typically little silt deposition (Moser, 1993). The nearest known populations of this species are in the upper portions of the Delaware and Neversink Rivers.

Adverse impacts to dwarf wedgemussel habitat are not anticipated as a result of the Project since the WH-1/2 Lines ROW is located outside the watershed of the Delaware and Neversink Rivers, in an area that drains to the east toward Rondout Creek. In addition, major streams along the ROW which exhibit suitable habitat conditions (as described above) will not be impacted.

Northern Wild Monkshood

Northern monkshood is an upright herbaceous perennial, with alternate palmately dissected leaves. Over much of its range, the characteristic habitat for northern monkshood is shaded to partially shaded cliffs and talus slopes. There are only five viable populations in New York State, located in Delaware, Ulster, and Sullivan Counties. In New York State, northern monkshood occurs in semi-shaded seepage springs at high elevation headwaters and in downstream crevices along stream banks. The most common habitat factor seems to be a cold soil environment, either from active and continuous cold air drainage or cold groundwater flow from nearby bedrock (Read & Hale, 1983). The NYNHP (2015c) indicates that all extant New York occurrences of northern monkshood have been found on sandstone-derived rocky or sandy soils, at elevations ranging between 400 and 1,000 meters amsl (i.e., between 1,312 and 3,280 feet amsl), typically along streams shaded by beech, sugar maple, yellow birch, and/or eastern hemlock.

While there are streams in the vicinity of the WH-1/2 Lines ROW which exhibit these characteristics (semi-shaded, crevices along stream banks, cold water), they are situated well below 1,300 feet amsl and are not considered suitable

for northern monkshood. Further, no impacts to the bed or banks of these streams is proposed as part of the WH-1/2 Lines rebuild. As such, adverse impacts to northern monkshood are not anticipated.

Indiana Bat and Northern Long-eared Bat

The USFWS lists the Indiana bat as endangered and the northern long-eared bat as threatened. Neither of these species were identified in the vicinity of the site by NHP correspondence. The Indiana bat is a state-listed and federally-listed endangered species. Indiana bats hibernate in caves and roost in hardwood forests throughout most of their range in the summer months. With the onset of White Nose Syndrome, the Indiana bat has become critically threatened (USFWS, 2012). Human encroachment into old growth and hardwood forests has had further adverse effects on local populations.

Indiana bats have not been observed above 900 feet amsl in New York State (USFWS, 2012). Potential impacts to this species must be considered for any Project in New York State that is located at or below an elevation of 900 feet amsl, and is within 40 miles of a known hibernaculum. Of particular importance are projects that involve clearing of trees greater than four inches in diameter at breast height (“DBH”) with loose or exfoliating bark, as these trees are suitable for a majority of roosting requirements by this species. In order to mitigate any potential adverse impact to this species, tree clearing at the two proposed access routes – which is expected to be minor in scope in comparison to the overall forest coverage in the immediate and surrounding area – will be scheduled to take place within the USFWS – approved winter cutting period of October 31 to March 31, when bats are hibernating. Therefore, the Project is not anticipated to result in adverse impacts to Indiana bats.

The northern long-eared bat, whose range encompasses all of New York State, is listed by the USFWS as threatened. Habitat for the summer period may include day roosts in buildings, under tree bark or shutters, or caves during the night. In the winter, hibernation sites are often in mines or caves, and this species may co-hibernate with other similar bat species. As a result of this co-habitation behavior, White Nose Syndrome has impacted this species and populations have become critically threatened. Compounding the adverse effects of this disease, human encroachment onto old growth and hardwood forests has also begun to adversely affect local populations. Foraging habitat includes forested hillsides and ridges, and small ponds or streams (USFWS, 2015). Currently, clearing of trees is generally considered to have no effect on the northern long-eared bat, provided the trees are cut within the USFWS-approved winter cutting period of October 31 to March 31. Accordingly, this Project proposes to conduct limited tree clearing within this specific cutting timeframe. Therefore, individuals of this species will not be impacted, and this Project is not anticipated to result in adverse impacts to the northern long-eared bat.

Additionally, indirect or other long-term adverse impacts to bat habitat are not anticipated since the work is primarily limited to an existing cleared ROW. The limited new clearing proposed is not anticipated to further fragment the existing forest and significant stands of forest cover will remain. . Construction of the Project is not anticipated to create an impassable barrier for bats within the area, and operations will not introduce any new potential impacts (e.g., noise or light). As such, adverse impacts to bats are not anticipated.

Bog Turtle

The USFWS lists the bog turtle as threatened, while New York State lists this species as endangered. The state heritage rank is S2, indicating that the species is imperiled or highly vulnerable to extirpation. Although historically known to be present in much of the state, extant populations of this species are concentrated in the Hudson River Valley, including Ulster and Sullivan Counties. Threats to this species include invasive plant species such as purple loosestrife and common reed; illegal collecting for the pet trade; road mortality; and loss of suitable habitat through succession to woody cover types and alteration of wetland hydrology (NYNHP, 2015d). Bog turtles are found in open early successional habitats such as wet meadows, sedge meadows, or open calcareous fens, generally dominated by sedges and sphagnum moss. Habitat for this species typically includes cool, shallow, slow-moving water, deep, soft muck soils, and tussock-forming, low-lying herbaceous vegetation. Both nesting and hibernation occur within wetland habitat, with eggs often laid inside the upper part of an unshaded tussock (Gibbs *et al.*, 2007).

While one open wet meadow that could represent potential bog turtle habitat occurs within the Project Site (Wetland B), no impact is anticipated, as this wetland is located along the western limit of the ROW and no work is proposed in this area. Additionally, the most recent correspondence from the NHP dated September 3, 2014 does not identify bog turtles as occurring in the vicinity of the Project Site. This suggests that any bog turtle populations within Ulster County are located outside the Project Site, and are unlikely to be impacted by Project-related activities.

3.5 Agricultural Land

The Project Site includes a portion of active agricultural land within Ulster County Agricultural District 3. There is approximately 2.5 acres of Agricultural District 3 on the existing ROW. Two poles within this district will be replaced. Efforts were made to keep the replacement poles in similar locations, outside of active agricultural fields, as are the existing poles. In addition, the old poles will be removed in their entirety to a depth of 48" and the cavities created by their removal will be filled. No laydown or wire pulling sites are proposed within this district. There is one wetland (Wetland I) located on the ROW within this agricultural district and impacts to this wetland will be avoided. Depending on the time of year of the construction related activities in Agricultural District 3, the Applicant will have a certified Agricultural Inspector evaluate the level of impacts post-construction. Based on this assessment, the Applicant may consider implementing a range of

restoration measures such as soil de-compaction, aeration and regrading (if needed). The disturbed area will be seeded and mulched in accordance with New York State Department of Agricultural and Markets (NYSDAM) guidance or landowner preference. Accordingly, no significant adverse impacts on agricultural lands are anticipated.

3.6 Historic Structures or Registered, Eligible or Inventoried Archaeological Sites

Consultation and correspondence with New York State Office of Parks Recreation and Historical Preservation (“NYSOPRHP”) regarding the Project’s potential effects on cultural resources is outlined below:

- On August 18, 2014, EDR submitted a New York State Historic Preservation Office (“SHPO”) Project Review Form for the Project.
- On September 19, 2014, NYSOPRHP replied via letter and indicated that a limited Phase 1 archeological survey should be conducted only in those portions of the proposed project identified as previously undisturbed.
- At the time the Project Review Form was submitted, CHG&E was considering construction of an alternative re-route of a 0.5 mile section of the existing line. That alternative is no longer being considered. However, an approximately 1500-foot long access road to the existing ROW has been proposed in the vicinity of NYS Route 52 near Old Greenfield Road. Because this proposed access road (as well as a second access road on NYS Route 52 west of Hacienda Road) may be subject to clearing and grading, a limited Phase 1 archeological survey was conducted along the proposed route of the access roads to fulfill NYSOPRHP’s request to investigate previously undisturbed portions of the Project Site.
- A copy of the Phase 1 Archeological Resources Survey was filed with the SHPO on May 29, 2015.
- In a letter dated June 3, 2015, the SHPO concluded that *“your project will have No Effect upon cultural resources in or eligible for inclusion in the National Registers of Historic Places.”*

Copies of the correspondence with NYSOPRHP (summarized above) are included in Appendix C.

3.7 Waste Disposal Sites

According to the NYSDEC Division of Environmental Remediation (2008), there are three inactive hazardous waste disposal sites and one active waste disposal site within one mile of the Project Site. However, none are actually located within the ROW or its immediate vicinity. The closest inactive waste disposal site is the Napanoch Paper Mill, a State Superfund site located on Route 55 in Wawarsing, approximately 0.15 mile from the eastern portion of the Project Site at Rondout Creek. This and other inactive active waste sites in the vicinity of the Project Site are identified in Table 2.

Table 6: Waste Disposal Sites within One Mile of the Project Site

Site Name	Type	Distance to Line
Napanoch Paper Mill	Inactive Hazardous Waste	0.15 mile
Anjopa Paper Mill	Inactive Hazardous Waste	0.25 mile
Ellenville Scrap Iron and Metal	Inactive Hazardous Waste	0.25 mile
Wawarsing Transfer Station	Active Waste Disposal	1.50 mile

3.8 Visibility and Visual Character

An analysis of the potential visibility and visual impact of the Project was undertaken to:

1. Identify visually sensitive sites located within a 1-mile radius of the Project centerline;
2. Determine the availability of open views of the Project (as determined through field evaluation);
3. Illustrate typical views from landscape settings where views of the Project will be available;
4. Illustrate typical views of the proposed Project that will be available to representative viewer/user groups within the visual study area; and
5. Illustrate views from a variety of viewer distances and elevations, to illustrate the range of Project visibility and visual change that will occur with the Project in place. Views were also selected to illustrate and variety of proposed structure types.

Viewshed Analysis

A 1-mile radius visual study area was mapped for the Project Site. Digital Elevation Model (“DEM”) data were obtained from the USGS (7.5 minute and 1:250,000 scale), and ESRI ArcView® software with the Spatial Analyst extension was used to define areas where both the existing and proposed poles on the WH-1/2 Lines would potentially be visible. The analysis was based on the location of individual existing transmission structures ranging in height from ±38 to 65.5 feet above ground level and proposed replacement structures ranging in height from ±40 to 75 feet. The resulting viewshed maps (see Figure 6) define the areas from which the top of any of these structures could potentially be seen from ground level vantage points within the 1-mile radius study area. These analyses as described below indicate that the impacts of the minor increase in pole heights are minor, and are clearly outweighed by the benefits of overall consolidation of electrical infrastructure within the existing cleared ROW .

Existing Viewshed

The topographic viewshed map for the existing transmission structures (Figure 6a) suggests that, based on the topography alone, without consideration of vegetation screening or screening by structures, some portion of one or more of the existing transmission structures is potentially visible within 94.7% of the 1-mile radius study area. This "worst case" assessment of potential visibility indicates the theoretical area where any portion of the transmission structures could possibly be seen, without considering the screening effect of existing vegetation and structures. The screening effect of mapped forest vegetation reduces the area of potential visibility to approximately 9.3% of the study area. Vegetation viewshed mapping indicates that views of the existing structures are available on the ROW, along developed portions of NYS Route 52 and a few other high ground areas north of the ROW.

Proposed Viewshed

The topographic viewshed map for the proposed transmission structures (Figure 6b) suggests that, based on the screening effect of topography alone, some portion of one or more of the proposed transmission structures would potentially be visible within 95.4% of the 1-mile radius study area. Factoring in the screening effect of mapped forest vegetation reduces the area of potential visibility to approximately 10.0% of the study area. This represents a 0.7% increase in the area of potential transmission line visibility within the visual study area. Vegetation viewshed mapping indicates that views of the proposed structures will generally be available from the same general locations that have potential views of the existing lines, including along the ROW, from NYS Route 52 and at higher elevations north of the ROW. Therefore, there will be no significant change in the WH-1/2 Lines viewshed following the rebuild.

Sensitive Sites

Aesthetic resources of statewide significance (scenic areas, historic sites, parks, trails, etc.) located within the 1-mile radius viewshed of the Project include one National Register of Historic Places (NRHP)-listed historic site, one NRHP-listed historic district, and a designated scenic byway (see Figure 5). Field assessments verified that the existing WH-1/2 Lines and the cleared ROW are not visible from these locations.

Visual Simulations

On August 26, 2014 two EDR staff members visited the study area to document views of the existing transmission line. The purpose of this field investigation was to evaluate potential Project visibility based on actual field conditions and to obtain photographs and locational data for subsequent development of computer-generated visual simulations. Weather was clear and visibility remained good (*i.e.* no haze, low clouds or fog) throughout the day.

Photos were taken from 74 representative viewpoints (See Appendix D) within the 1-mile radius study area using a digital SLR camera, with a 50 mm lens setting to simulate normal human perception of scale and spatial relationships

in the landscape. The time and location of each photo were noted on field maps and data sheets, and at each site it was determined whether the proposed Project would or would not be visible. This determination was based on the visibility of existing transmission structures. Global positioning system (“GPS”) readings were also taken at each viewpoint to document photo and reference point locations.

Field verification and photo documentation indicate that the actual visibility of the proposed station and transmission structures is likely to be even less than the vegetation viewshed mapping suggests. Areas of visibility were generally limited to local residences and roads immediately adjacent to the ROW, and a few open views across cleared agricultural fields within 0.5 mile of the proposed Project. No open views were documented from any of the aesthetic resources of statewide significance documented within the 1-mile radius study area. Therefore, no adverse visual impact to these resources is anticipated to result from Project construction.

Four viewpoints were selected to show representative views of the proposed Project. Viewpoints were selected for simulation because they offered the most open available views of the proposed lines. Because views from roads and other public vantage points were often at least partially screened by trees and/or houses, some of the selected viewpoints were taken directly under the transmission lines to obtain the most open view possible. Additionally, because distant visibility of the Project is limited (due to structure size and screening), the selected viewpoints are generally within or just outside the foreground distance zone (*i.e.* less than 0.5 mile). The locations of these viewpoints include the following:

Table 3. Viewpoints Selected for Simulations and Evaluation

Viewpoint Number	Location	View Orientation¹
10	Irish Cape Road	E
19	Greenfield Road	SE
26	Briggs Highway	N
51	Steam Hollow Road	W

¹ N = North, S = South, E = East, W = West

These viewpoints are illustrated in the Visual Photolog in Appendix D. Computer-assisted visual simulations of the same views following completion of the proposed transmission line are included in Appendix E. A description of each simulation is provided below:

Viewpoint 10 (Figure 7)

Existing View

This view is from Irish Cape Road, west of Pumpkin Lane, looking east toward the existing WH-1/2 Lines ROW. The foreground of this view includes a broad, flat road shoulder and a portion of the maintained ROW. The backdrop, provided by the edge of a mixed woodland, is located along the southern edge of the ROW and clearly indicates the scale of topographic relief in this area. Two existing wood pole H-frame transmission structures are visible within the cleared ROW.

Proposed Project

With the proposed Project in place, unobstructed views of two replacement structures will be available from this viewpoint. One replacement structure is situated closer to Irish Cape Road while the other is located at the original pole location on the hillside in the background. The rebuilt transmission line is in the same central location within the ROW. Therefore, the perceived land use and scale of the ROW remain unchanged (i.e., no additional clearing). These structures are consistent with the existing electrical infrastructure on site but are slightly taller than the original structures. This results in a minor impact on the skyline.

The new structure in the foreground presents notable visual contrast when compared to the existing view. However, the new structure will remain greater than 100 feet from the edge of the road. This shifted structure location is a relative isolated instance. Of the proposed 141 structures, only three (WH 12, WH 104 and WH 119) are proposed closer to a residential area than the existing structures. In each of these instances, the new structure location are 150, 225 and 100 feet away from a residential area respectively. Additionally, these new locations were required to avoid wetland resources, meet NESC clearance requirements and maintain long-term accessibility for routine and/or emergency maintenance. The majority of the replacement poles are located in the same vicinity of the existing structures along the ROW.

Viewpoint 19 (Figure 8)

Existing View

This view is from Greenfield Road, east of NYS Route 52, looking southeast toward the existing ROW. The viewpoint is located near a residential area where the existing Ellenville Tap Line crosses Greenfield Road and extends to the Greenfield Substation. The foreground of this view is typical of a residential setting, and includes a mowed lawn, driveway, and satellite dish. The foreground view is separated from the existing ROW in the background by a large hedgerow. In the background behind the existing hedgerow, a total of four

existing poles (two H-frame structures) and transmission line infrastructure are visible descending down a slope. There are numerous conductors, insulators and guy wires visible in the background.

Proposed Project

There are no changes to the foreground or mid-ground (hedgerow) after the rebuild is constructed. Two self-weathering steel monopoles are visible in the background, along with the top of a third pole. The pole color (brown) is generally consistent with the wooded areas off-ROW. Although there is a minor increase in the height of the poles, there is an overall reduction in the quantity of visible poles as well as the number of conductors visible from this viewpoint. There is a substantial consolidation of electric transmission infrastructure within the ROW which results in reduce visual clutter when compared to the existing view.

Viewpoint 26 (Figure 9)

Existing View

This view is from Briggs Highway looking north onto the existing ROW. The viewpoint is located at the ROW crossing in a low-density residential area. The foreground of this view consists of relatively flat maintained ROW and old field. There are wooded areas along both sides of the cleared ROW. The background is comprised of steep slopes, and a total of seven existing poles and associated transmission infrastructure (insulators, conductors) are visible from this viewpoint. The visible poles include two H-frame structures as well as three single poles within the WH-1/2 Lines ROW and along the Ellenville Tap Line.

Proposed Project

With the Project in place there is a replacement monopole located slightly closer to Briggs Highway, although the character of the foreground has not changed. In total, three self-weathering steel monopoles are now visible, which is a substantial reduction in visible transmission infrastructure from this viewpoint. Although the new poles are somewhat taller, the poles remain centrally located within the ROW, and the line, color, and form of the new poles are consistent with the existing vegetation and land use that characterizes this existing ROW. These vertical elements will have relatively minimal impact on the skyline since they do not exceed the heights of the adjacent tree-lines. The rebuild also results in an overall consolidation and streamlining of infrastructure. For these reasons, the Project will not have an adverse visual impact at this viewpoint.

Viewpoint 51 (Figure 10)

Existing View

This view is from Steam Hollow Road looking west toward the existing WH-1/2 Lines ROW. The viewpoint is located in a rural setting along the western end of the Project Site near the Ulster/Sullivan County line. The foreground of this view consists of shrubs and portions of the maintained ROW. There are two sets of H-frame structures (four poles) visible in the background. The cleared ROW is lined by forest vegetation on both sides. The existing poles blend well with these wooded areas. There is also a single shorter distribution line located along the north side of the ROW

Proposed Project

With the Project in place, there is little to no change in the foreground or background of this view. The proposed H-frame structures are similar to the existing structures in form, height and location on the ROW. Therefore, the proposed structures do not increase contrast with the surrounding landscape. The new structures' brown color generally matches the surrounding conditions (i.e., forest/wooded areas) and the existing distribution line which will remain.

As indicated in the viewshed analysis maps, the proposed Project will not result in a substantial increase in the area where the transmission line is visible. Views of the rebuild line will generally be limited to the areas at which the existing structures are already visible. Because the Project is located within an existing transmission line ROW, and will not require additional expansion of "ROW", the type and intensity of perceived land use will remain unchanged. Additionally, the rebuild design will consolidate much of the electrical infrastructure along the ROW by reducing the number of poles and conductors. This consolidation of infrastructure within the existing cleared ROW offsets any impacts associated with the minor increase in pole heights. Therefore, no significant adverse visual impacts are anticipated as result of proposed Project.

3.9 Helicopter Usage

CHG&E is evaluating the potential use of a helicopter construction support service to facilitate construction activities. The proposed use of a helicopter service would not eliminate vehicular trips in and out of the ROW. However, the number of trips and size of construction vehicles traveling to, from and along the ROW, would be reduced, as would the impacts of driving through more difficult terrain or environmentally sensitive areas. It is anticipated that use of the helicopter service may include tasks such as delivery of poles to specific locations, removing existing poles from specific locations, delivering wire and materials to specific locations, removing logs and other debris, delivery and

removal of equipment, installing blocks on poles and stringing the lead line used to pull conductors and static wire. Central Hudson will assure that any Helicopter construction service firm selected, has all the required certifications and qualifications, and is experienced in electric transmission line construction support and flight operations. Prior to any implementation of such work, a helicopter construction plan would be developed in conjunction with the selected helicopter support service. Additionally, all helicopter construction would be conducted in accordance with applicable Federal Aviation Administration (“FAA”) Regulations and applicable Occupation Safety and Health Administration (“OSHA”) guidelines.

The use of helicopter construction methods may result in additional temporary and transient noise impacts. However, the areas in which helicopter construction may be employed are by nature remote and generally inaccessible from public roads. Therefore, it is anticipated that a limited number of residential receptors or sensitive sites will be in close proximity to these locations, thus limiting the potential extent of temporary noise impacts associated with helicopter use. Additionally, helicopter construction methods can also result in direct environmental benefits which can offset the potential temporary noise impacts. For instance, impacts to sensitive environmental areas such as wetlands, steep slopes and streams can be avoided or reduced by limiting the need for vehicular access and associated on-site grading for access roads and work areas.

CHG&E will assure that any Helicopter construction service firm selected, should helicopter construction support be utilized, will have all the required certifications and qualifications, and will be experienced in electric transmission line construction support and flight operations. Prior to any implementation of such work, a helicopter construction plan would be developed in conjunction with the selected helicopter support service.

3.10 Public Notice

CHG&E is committed to extensive community outreach regarding the WH-1/2 Lines Rebuild Project. CHG&E met with a number of Town of Wawarsing officials on September 29, 2014 to provide an overview of the project and discuss the Town regulations regarding zoning and permitting. On June 16, 2015, CHG&E appeared before the Town of Wawarsing Planning Board to formally present the project and to discuss the Site Plan Application documents which were submitted on June 1, 2015. CHG&E also participated in a meeting with the Ulster County and Town of Wawarsing Planning Boards on June 26, 2015 to discuss the local and regional context of the Project. CHG&E again appeared at the Planning Board on August 18th to provide responses to the Town Engineer’s technical review of the application, at which time, the Board found the application complete and scheduled a public hearing for September 15, 2015. The public hearing was advertised, and notices sent to all abutting owners. The public hearing was opened and closed on September 15, 2015.

3.11 Other Permits and Approvals

The Project is currently under Site Plan and SEQRA Review by the Town of Wawarsing Planning Board. CHG&E will seek approval by the Town Planning Board to proceed with construction of the project. CHG&E will then review with the Town whether a Building Permit will be required for the construction of the transmission line rebuild.

CHG&E will consult with the New York State Department of Transportation (“NYSDOT”) and Ulster County Department of Transportation, as needed, for any work within the state and county highway rights-of-way. CHG&E will develop and implement maintenance and protection of traffic (“MPT”) plans as needed to secure required highway work permits. As noted in Section 3.1 above, Project construction will need to comply with the Applicant’s NYSDEC Maintenance General Permit No. 0-000-01151-00010. The Project complies with USACE Section 404 Nationwide Permit No.12 for utilities and is considered a non-reporting action. CHG&E will file a Stormwater Notice of Intent to obtain coverage under the State Pollution Discharge Elimination System (“SPDES”) General Permit for Stormwater Discharges from Construction Activity (GP-0-15-001 or latest version) and will implement an associated SWPPP for the project.

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