

United States Department of the Interior

National Park Service Blue Ridge Parkway 199 Hemphill Knob Road Asheville, North Carolina 28803



L7617 PIN 25400 xL3031

FINDING OF NO SIGNIFICANT IMPACT

NEW ASHEVILLE – ENKA 115KV WEST LINE CROSSING OF THE BLUE RIDGE PARKWAY CORRIDOR, BUNCOMBE COUNTY, NC ON THE PROPERTY OF THE NATIONAL PARK SERVICE

Based on the following summary of effects, as discussed in the attached environmental assessment (EA), it has been determined that the proposed action would not have a significant impact on the human environment. Adverse environmental impacts that could occur are minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action would not violate any federal, state, or local environmental protection law. Based on the foregoing, it has been determined that an environmental impact statement (EIS) is not required for this project, and thus, will not be prepared.

Recommended by:	Plo D. Frances	Date: 17/19/11
	Philip A. Francis, Jr., Superintendent, BLRI	
Approved by:	a dielle	Date: <u>8-8-[]</u>
	David Vela, Southeast Regional Director	

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INTRODUCTION

The National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 CFR 1500-1508); and National Park Service (NPS) Director's Order-12 and Handbook (Conservation Planning and Environmental Impact Analysis and Decision-Making) require the NPS to consider the environmental consequences of major proposed actions. The NPS - Blue Ridge Parkway (Parkway) has conducted an environmental assessment (EA) for issuing a 10-year right-of-way (ROW) permit to Carolina Power & Light Company d/b/a Progress Energy Carolinas (PEC). The purpose of this permit will be to allow PEC to design, build, and operate a new 115kV overhead electric transmission line to ensure continuation of reliable electric service to customers in western North Carolina. The new 115kV transmission line will extend generally north and west approximately 7.6 miles from an existing substation at PEC's Asheville Generating Plant (located at Skyland south of Asheville) to PEC's existing Enka Substation (located off Sardis Road). The entire project area is located in Buncombe County, North Carolina. The new line will cross the Parkway south of Asheville, between NC Highway 191 (Brevard Road) and Interstate 26 near French Broad River mile 158 and near Parkway Milepost 393. The line will run parallel and adjacent to the existing transmission line. This addition is required to ensure continued reliability of the transmission system, which is experiencing growing demand for power by the citizens, businesses, and industries of the region. NPS authority for issuing a ROW permit for the stated purpose can be found in 16 USC Section 79.

PREFERRED ALTERNATIVE

As described in the EA, the preferred alternative (Alternative B) will be to issue a 10-year Parkway ROW permit to PEC to build, operate, and maintain a new 115kV overhead electric transmission line across a 43-foot long by 885-foot wide section of the Blue Ridge Parkway in Buncombe County, North Carolina. The transmission line will be installed adjacent and parallel to the existing transmission line crossing.

Two 115kV electrical transmission lines now run from PEC's Asheville Generating Plant to the Enka Switching Station. These two lines are supported by common structures (double-circuit lattice steel towers) within a single ROW corridor that crosses the Parkway between NC Highway 191 and Interstate Highway 26. The 3-phase line on the west side of the structures is known as the Asheville–Enka West 115kV Line (West Line) and the 3-phase line on the east side of the structures is known as the Asheville–Enka East 115kV Line (East Line). PEC will convert the West Line to 230kV and construct a new 115kV line, that will, in effect, replace the existing 115kV West Line that will be converted to 230kV [Note that the 230kV conversion took place in October of 2010; no work was required on Parkway property for this conversion]. The 115kV

Blue Ridge Parkway ROW Permit for PEC New 115kV Line Crossing line will be a single-circuit line and will run parallel to the existing double-circuit lattice steel tower line. The line will run on the west side of the existing line, which will require increasing the width of the existing corridor from 100 feet to a total width of 143 feet. Where the transmission line corridor crosses the Parkway, PEC will use structures on the line that will allow minimum expansion of the line corridor (i.e., 43 feet of additional corridor width will be needed). These structures include a stacked line configuration (phase over phase) with structures placed outside of NPS property.

Upgrading the existing West Line to 230kV and constructing the new line will ensure continued compliance with NERC reliability standards and allow PEC to continue providing reliable electrical service for PEC's western North Carolina service area.

MITIGATION

Mitigation measures have been integrated into project planning, and will be implemented as part of construction and maintenance operations associated with the right-of-way permit. The NPS will ensure that these measures are accomplished. These mitigation measures will be included as part of the ROW permit provisions, as well as any other mitigating measures that are in the right-of-way permit.

Natural Resources (Vegetation)

To mitigate adverse impacts to vegetation, planting plans have been proposed for the north side of the motor road and adjacent to the Mountains to Sea Trail. These areas will be replanted with native low-growing vegetation that will provide a seed source to populate the adjacent ROW. Mulch will be incorporated into the landscaping plan to provide a natural ground cover. Any mulch material used on site will be clean and free of exotic weeds. The source of mulch used at the site will be inspected and approved by NPS staff. PEC will provide the NPS with 14 days advance notification to inspect the source. If it is found unsuitable, another source will be found and approval process repeated. A Corridor Vegetation Management Plan outlining routine maintenance activities (including the management of invasive species through mechanical- and hand-cutting and herbicide application) will be followed. PEC will provide the Parkway with the following information whenever herbicides are used within the permitted ROW: name of herbicide used, date, area covered, target species, wind speed, air temperature and relative humidity readings for the time of application.

Cultural Resources (Cultural Landscapes)

To mitigate impacts to cultural landscapes, PEC will use both native vegetation and visual impact reduction techniques. PEC will utilize landscape plantings on the north side of the Parkway to significantly screen the structures on the existing and new lines. Using plants that are indigenous to the mountainous region of western NC and compatible with both the Parkway's and PEC's list of approved species, PEC will introduce plantings that will provide visual screening looking north toward an otherwise open corridor. A new buffer zone will be retained to screen structure #19A on the new ROW. To mitigate adverse impacts to visual resources, a planting plan has been prepared for the area on the north side of the Parkway that calls for low growing vegetation to be planted across the corridor. PEC will incorporate several visual impact reduction techniques to mitigate adverse impacts to visual resources and ensure

that portions of the new line visible from overlooks will be consistent with and immediately adjacent to the existing corridor. Use of mitigation measures as described in the bulleted items below will not only minimize visual recognition of the new line from key vistas and overlooks, but will also be effective in reducing or eliminating the current lines' visibility. The view will be similar to what is currently seen from Parkway overlooks.

- The new line will be placed immediately adjacent to the existing line across the Parkway and will utilize a vertically stacked (phase-over-phase) conductor configuration to minimize the additional width of new ROW needed.
- The new line structure immediately north of the Parkway will be a dull, galvanized steel single-pole aligned beside a lattice steel tower on the existing line so they will be seen as a single element when viewed from the French Broad Overlook.
- To the extent possible, the "sag" of the new line's conductors will be matched to the sag of the existing line's conductors when viewed by Parkway users. This includes placing the conductors on the new line in the same height range as the existing ones at the crossing point, with the lowest conductor being approximately 62 feet above the Parkway motor road and the highest one being approximately 91 feet above the motor road.
- Darkened galvanized steel structures will be used on the new line north of the Parkway where they are visible against a vegetated backdrop from the French Broad River Bridge and the French Broad Overlook.
- Selected lattice steel towers, both north and south of the Parkway on the existing line will be darkened to reduce their visibility where they are visible against a vegetative backdrop when viewed from the French Broad River Bridge, the French Broad Overlook, and the roadside vista near Milepost 394.5 on the Parkway.
- Non-specular (matte-finished) conductors will be used on the new line to reduce conductor sheen (light reflectivity) and consequently, sharp contrast with natural elements in the view shed.

Visual Resources (Viewshed)

To mitigate impacts to the viewshed, PEC will use both native vegetation and visual impact reduction techniques as described above. PEC will use several visual impact reduction techniques based on carefully selected transmission structure types, material finishes, and locations. These techniques will not only minimize visual recognition of the new line from key vistas and overlooks, but will also be effective in reducing or eliminating the current lines' visibility.

Visitor Use and Experience (Visitor Activities)

The Mountains to Sea Trail crosses the transmission line corridor within the Parkway corridor just south of the motor road. To mitigate adverse impacts to visitor activities, PEC will add plantings that will partially screen views from the trail looking in either direction down the transmission line corridor and has developed a preliminary landscape plan. PEC will address public safety on the Mountain to Sea Trail by closing the trail during the relatively short time that ROW clearing is being performed.

Secondary Mitigation Measures

To accomplish its goal to construct the Asheville–Enka 115kV Line in a manner that will result in no significant adverse visual effects to the scenic quality of the Parkway, PEC will perform three actions that are not directly related to the proposed line.

- PEC will remove the distribution line at the "Love Connection."
- PEC has determined that the existing three phase overhead distribution line that crosses the Parkway to the east of US Highway 25 can be relocated. PEC will install the line underground along the shoulder of US Highway 25 and remove the existing overhead facilities crossing the Parkway.
- PEC will place the existing distribution line underground at Highway 74A and bring the line above ground at existing structures located near the edges of the Parkway property boundary, thus eliminating the line's visibility where it crosses the motor road.

OTHER ALTERNATIVES CONSIDERED

The EA analyzed two alternatives in detail: the No Action Alternative and the preferred alternative, which was the proposed action. Four other alternatives were also considered, but eliminated from further evaluation in the EA.

Alternative A (No Action)

The No-Action Alternative on the part of the NPS would be a denial of PEC's request for a ROW permit to build, operate, and maintain a new 115kV overhead electric transmission line across a 43-foot long by 885-foot wide section of the Parkway. The No Action Alternative would require no new impacts to resources at the site. Under the No Action Alternative, the current electrical configuration within the Parkway corridor would remain as it is: two lines on common structures within an existing 100-foot right-of-way (ROW). Existing structures which suspend the line over the Parkway property are located beyond the park boundaries.

Routine maintenance is conducted by qualified contractors, working under direction of a PEC forester. Maintenance would continue as it has on the existing ROW including periodic foot and/or aerial patrols (twice annually); hand cutting, machine cutting, and/or herbicide control within the existing ROW on a 3-year cycle; periodic side-trimming of the existing ROW on a 6-year cycle; periodic reactive trimming (immediate response to an identified threat); and periodic cutting of "danger trees" on a 5-18-year cycle.

The No Action Alternative would not provide PEC the ability to meet all of the NERC Reliability Standards in a safe, efficient manner while maintaining reliable electrical service for PEC customers in Western North Carolina.

Alternatives Considered But Dismissed

A total of four additional alternatives were considered but dismissed during the course of the project. These alternatives included: 1) reconductor the existing line, 2) use of the existing I-26 corridor, 3) purchase supplemental electrical capacity, and 4) place the proposed line on common structures. Evaluation of these alternatives in the EA showed, however, that these alternatives

were not feasible for one or more of the following reasons: 1) the existing line would need to be taken out of service, 2) policies against allowing parallel installations within the ROW of a controlled access highway, 3) potential for overload conditions, and 4) logistics of maintaining a reliable power source during construction. Alternatives that were considered but dismissed are further described in the EA.

THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is the alternative that would best promote the national environmental policy expressed in the National Environmental Policy Act (NEPA). The environmentally preferred alternative would cause the least damage to the biological and physical environment, and would best protect, preserve, and enhance historical, cultural, and natural resources.

Section 101(b) of NEPA identifies six criteria to help determine the environmentally preferred alternative. The act directs that Federal plans should:

- 1. Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- 2. Assure for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
- 3. Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- 4. Preserve important historic, cultural and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice;
- 5. Achieve a balance between population and resource use that would permit high standards of living and a wide sharing of life's amenities; and
- 6. Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

In this instance, the environmentally preferred alternative is the same as the "no action" alternative. Under the No Action Alternative, the current electrical configuration within the Parkway corridor would remain as it is: two lines on common structures within an existing 100-foot ROW. Under this alternative, there would be no action taken by the NPS on a request by PEC for a right-of-way permit. Maintenance would continue as it has on the existing ROW, including field inspections and selective tree removal within the ROW, and removal of danger trees immediately adjacent to the ROW. Even if the proposed project were not approved, maintenance on the existing ROW will continue as it has in the past. However, the "no action" alternative is not a feasible alternative because it does not meet the project need. Implementation of the preferred alternative will facilitate PEC's ability to meet all of the NERC Reliability Standards in a safe, efficient manner while maintaining reliable electrical service for PEC customers in Western North Carolina.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an Environmental Impact Statement.

No major adverse impacts were identified that would require analysis in an Environmental Impact Statement.

No impacts to jurisdictional streams and wetlands; prime and unique farmland; water resources; terrestrial and aquatic wildlife; threatened and endangered species; floodplains; migratory birds; historic, archaeological, and ethnographic resources; museum collections; visitation patterns; population and economy; housing; community services and infrastructure; land use; socioeconomic conditions; environmental justice; hazardous materials; health and human safety; and energy resources were identified for the preferred alternative.

Minor adverse impacts to topography (short term), soils (short term), air quality (short term), soundscapes (short term), greenhouse gases and climate change (short term), park operations (short term), vegetation (long term), cultural landscapes (short term to long term), viewshed (short term to long term), visitor activities (short term), and transportation (short term) were identified for the preferred alternative.

Degree of effect on public health or safety.

Motorists frequently use the Parkway and there is opportunity for motorists to use the roadway during construction activities. PEC will conduct project activities with safety at the forefront of the project. The preferred alternative will include safety measures such as utilization of signage and flag bearers, traffic control, and utilization of bucket trucks to keep conductors off the motor road.

Additionally, the Mountains to Sea Trail crosses the transmission line corridor within the Parkway corridor just south of the Parkway motor road. To ensure public safety during the relatively short time that ROW clearing and construction is being performed, the short section of the Mountains to Sea Trail within the Parkway corridor will be closed during actual work hours.

Designated work areas will be off-limits to the general public. Although not anticipated, any impacts to public health or safety would be minor and short-term, lasting only as long as construction. Operation and maintenance of the overhead transmission line will not jeopardize public health or safety.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

As described in the EA, prime and unique farmlands, wetlands, and ecologically critical areas will not be affected by the new transmission line. Wild and scenic rivers are not located within or in proximity to the project area; therefore, will not be affected.

Clearing and activities associated with the preferred alternative will occur within the boundaries of the Parkway property, but it will not affect any current uses in the park, except in the small area and for the limited duration as described above.

Degree to which effects on the quality of the human environment are likely to be highly controversial.

The preferred alternative will be limited to an area that is adjacent to a previously disturbed area and will not result in any controversial effect on the quality of the human environment. The public was invited to comment on the proposed project during the review period and during scoping. There were no highly controversial effects identified during either scoping, preparation of the EA, or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks.

The preferred alternative consists of the construction and operation of a new overhead electric transmission line. These activities will result in minimal effects to the quality of the human environment because the project will be constructed adjacent to a previously disturbed site with the same use (the existing transmission line). The potential effects are known and are not considered uncertain or unique. Effects associated with the preferred alternative are discussed in the EA.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

The granting of a right-of-way permit to an entity outside the NPS is neither precedent-setting nor likely to encourage additional or similar permits in the vicinity of the Parkway. The proposed action is wholly independent of any other NPS action.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.

An analysis of the potential cumulative effects of the preferred alternative was conducted in the EA. This was done by comparing the effects of the construction and operation of the new line with other past, present, and reasonably foreseeable actions in the surrounding area. Aside from minor cumulative impacts to vegetation, cultural landscapes, viewshed, and visitor activities, no significant adverse cumulative effects are anticipated.

There are other public and private projects that are planned in the area, as identified in the EA. These other projects will have no combined effects on the area of influence of the preferred alternative.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources.

Under the Preferred Alternative, there will be no adverse effect to sites listed by the National Register of Historic Places. However, there will be short-term to long-term minor adverse effects on the cultural landscape (administratively listed on the National Register) under this alternative. Potential impacts are associated with the visibility of the proposed transmission line from key vistas and overlooks along the Parkway, and equipment present during ROW clearing and line construction. The impact of the preferred alternative on the cultural landscape is identified in the EA, along with mitigation measures to offset impacts.

In accordance with Section 106 of the National Historic Preservation Act, the North Carolina State Historic Preservation Office (SHPO) was consulted and comments solicited. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the NPS concludes that implementation of the Preferred Alternative will have no adverse effect on cultural resources. The North Carolina SHPO concurred with the Parkway's finding of No Adverse Effect on cultural resources on June 24, 2011.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat.

As described in the EA, no threatened or endangered species are known to inhabit the project area. A threatened and endangered species survey of the project area was conducted on May 12, 2010. Species listed as threatened or endangered were not observed during the survey. There is no designated critical habitat at the project site. The preferred alternative is not likely to adversely affect threatened or endangered species.

Whether the action threatens a violation of Federal, State, or local environmental protection law.

The preferred alternative violates no Federal, State, or local environmental protection laws.

PUBLIC INVOLVEMENT

As described in the EA, in June 2008, initial contact letters were sent out to resource agencies informing them of the proposed Asheville – Enka 115kV line and its purpose. Field meetings and site visits were also held in June and July of 2008 with resource agencies to identify potential impacts and additional areas of concern.

Public scoping letters were mailed in November 2008 to property owners whose property coincided with one or more of the segments of the alternatives. Also during this time additional information for the proposed project was listed on PEC's website, a news release was sent, and a public information workshop was held. In addition, a 1-800 telephone line was also made

available indefinitely for providing comment and feedback. Based on the public ranking of the evaluation criteria, as well as other comments received on the route alternatives, a final route was identified and announced publicly in April 2009.

Following identification of the line route, PEC held a series of stakeholders meetings with resource agencies. These meetings were held in August, September, and October 2009, and February 2010, and attendees at some or all of the meetings included representatives from the NPS, US Army Corps of Engineers, NC Division of Water Quality (DWQ), US Fish and Wildlife Service (FWS), NC Wildlife Resources Commission, US Forest Service (USFS), PEC, and NC Division of Land Resources.

The EA was made available for public review and comment for more than 30 days during a period ending June 3, 2011. Printed copies of the document were distributed to federal and state agencies, local organizations, and interested parties and a press release announced the availability of the EA. An electronic version of the EA was broadly available through a posting on the NPS Planning, Environment, and Public Comment (PEPC) website and linked to the park's public website.

Local, State, and Federal agencies reviewed the EA to determine if the proposed project would impact any of the resources that they were created to protect. The following paragraphs are a summary of these agency comments.

The United States Department of the Interior Fish and Wildlife Service reviewed the EA and indicated they had concerns about the overhead crossings of streams and wetlands along the transmission line route (not just the Parkway crossing). Additionally, they expressed concerns that the project has the potential to further fragment forest habitats, provide disturbance to natural communities, and increase the potential for spread of invasive exotic species.

The North Carolina Division of Water Quality also reviewed the EA and indicated that an NPDES Construction Stormwater Permit NCG010000 and/or a 401 Water Quality Certification may be required for the proposed project.

The North Carolina State Historic Preservation Office (SHPO) noted three historic properties located within the project's Area of Potential Effect (APE). These properties are: Bent Creek Campus (BN 0898, listed in the National Register of Historic Places), the Blue Ridge Parkway (NC 0001, determined eligible for listing in the National Register), and Pisgah Forest Pottery (NC0594, on the State Study list as potentially eligible for listing in the National Register). The proposed transmission lines will follow an existing power line route in the area of these historic properties, and the Bent Creek Campus and Pisgah Forest Pottery properties are outside of the required power line right-of-way. Therefore, the project will have no adverse effect on historic structures.

Additionally, two public comments were also received during the comment period. Both commenters questioned why the proposed transmission line could not be placed underground. Responses to the agency and public comments are provided in the Errata Sheet attached to this document. All comments received in response to the scoping notices have been duly considered and will remain in the project administrative record.

ATTACHMENT A

Public Comments Content Analysis Report

Comment Distribution by Code

(Note: Each comment may have multiple codes. As a result, the total number of comments may be different than the actual comment totals)

Code	Description	Number of Comments
AE10000	Affected Environment: Rare Or Unusual Vegetation	1
AE11000	Affected Environment: Species Of Special Concern	1
AE14000	Affected Environment: Historic Structures	1
AE19000	Affected Environment: Other Agencies' Land Use Plans	2
AL4000	Alternatives: New Alternatives Or Elements	1
AL4500	Alternatives: New Alternative (Place Line Underground)	2
AR1000	Affected Environment: Archeological Resources	2
AR2000	Archeological Resources: Impact of Proposal And Alternatives	2
CC1000	Consultation and Coordination: General Comments	11
TE1000	Threatened And Endangered Species: Guiding Policies, Regs And Laws	1
TE4000	Threatened And Endangered Species: Impact Of Proposal And Alternatives	1
VE1500	Vegetation: Impact Of Proposal And Alternatives	1
VR4000	Vegetation And Riparian Areas: Impact Of Proposal And Alternatives	1
VR5000	Vegetation And Riparian Areas: Cumulative Impacts	1
WE1000	Wetlands and Streams: Impact of Proposal and Alternatives	1
WE2000	Wetlands and Streams: Cumulative Impacts	1
WQ1000	Water Resources: Guiding Policies, Regs And Laws	2
WQ4000	Water Resources: Impact Of Proposal And Alternatives	1

Comment Distribution by Status

	Number of
Status	Comments
Coded	20
Total	20

Correspondence Signature Count by Organization Type

Organization Type	Number of Correspondences
Federal Government	2
State Government	7
Unaffiliated Individual	3
Total	12

ATTACHMENT B

Environmental Assessment Errata Sheets

Blue Ridge Parkway North Carolina

These errata sheets should be attached to the original environmental assessment to form the complete record of the environmental impact analysis and conservation planning completed for the project. The combination of the EA and these errata, prepared in response to public comments on the EA, form the complete and final record of the Finding of No Significant Impact.

Part 1 - A summary of the comments made during the 30-day public review of the Environmental Assessment (EA) and the response to those comments follows:

1. Two commenters questioned the need for the proposed transmission line to cross the Parkway aerially; they suggested the line be installed underground.

Evaluation of Overhead and Underground Crossing of the Parkway

PEC considered both overhead (OH) and underground (UG) crossings of the Parkway (and other sections of the line route). Presently, PEC has no UG transmission line in the Carolinas, although one such crossing of the Cape Fear River near Wilmington is in the design stage.

Overhead Transmission

Overhead transmission lines involve clearing a right-of-way (ROW) corridor for the line. The ROW width typically ranges from 70 to 150 feet in width, depending upon the line voltage, structure type and other factors. The ROW is managed to maintain a vegetative cover to a height of typically no greater than 12 - 15 feet, to ensure that mandated electric safety clearances are not exceeded. Such ROWs can, under certain circumstances, fragment habitat types, disturb natural communities, and promote the spread of invasive species. Conversely, such ROWs can also result in increased habitat for certain species and increase habitat diversity for other species. For instance, PEC has cooperative management agreements with the NC Natural Heritage Program for rare plant species on over 40 transmission ROWs in the state, where these ROWs have, for instance, mimicked natural burn conditions that once allowed certain species to thrive.

Construction of OH line typically does not require any change in the natural topography, nor more than minimal soil disturbance. Vegetation is cut to near ground level, and lower growing native species can continue to exist on the ROW.

Underground Transmission

Underground transmission lines can be installed in either of two primary ways. First, the line can be placed in an open trench, similar to construction of a water or wastewater line. Such construction has the potential for significant impacts, particularly in rocky or hilly terrain, or if wetlands and streams are open-trenched. Alternatively, UG transmission can be installed by horizontally directional drilling (HDD) techniques.

HDD installation of transmission-voltage lines imposes additional constraints over installation of lower distribution-voltage lines. HDD technology for UG transmission limits installations to 5,000- to 6,000-foot distances, depending upon terrain and substrate types. Additionally, HDD requires temporary work areas on each end of any drill site, for welding and "stringing" the steel pipe, and for equipment set up and storage. The technique requires the use of "drilling mud" (typically bentonite clay), which serves to cool the drill cutter head, to flush cuttings out of the drill hole to a containment area, and to keep the drilled hole open until the pipe can be pulled through. The clay is filtered and reused, and upon project completion, will be dewatered and disposed of at an appropriately-permitted disposal site. The process is typically well-controlled and "clean", with little disturbance of the water itself. However, particularly when drilling in fragmented rock areas, a "frac-out" (escape of drilling mud to the land surface or water through an unknown fracture in the substrate) can occur. Such an event is somewhat unlikely, but of frequent enough probability that the HDD equipment is equipped with sensing equipment that detects any leakage so that the drilling can be stopped and any leakage addressed.

Because transmission-voltage lines generate considerable heat, an UG alternative requires the pipe containing the electric cable to be filled with dielectric fluid (mineral oil) to provide both cooling and insulation. A pressurization station is incorporated which includes the system controls and monitoring equipment. The pressurization station also houses a storage tank which helps maintain the pressurized oil system. Because the UG pipe is typically welded, coated steel, is underground, and the system is monitored with leak-detection alarms to immediately depressurize the system if a leak is detected, there is minimal risk of a spill to surface or groundwater. However, such project will have to incorporate a spill prevention, control, and countermeasure (SPCC) plan.

Additionally, the UG alternative will require "transition stations" where the UG cable surfaces and transitions back to the conventional overhead transmission line on each side of a drilled-under section. These substation-like facilities contain equipment, including switches, circuit breakers, underground cable terminations, and the above-mentioned pressurization station. Each station would be approximately one to two acres in size, and require access roads for regular equipment inspection. The overall footprint of such an underground installation is considerable. Additionally, the addition of impervious surface (gravel, in the transition stations) would necessitate post-construction stormwater controls.

PEC believes that the choice of UG or OH crossings must be site-specific, and dependent upon many factors, as discussed above. For the proposed Blue Ridge Parkway crossing, PEC believes the choice is straightforward. The OH line will result in far fewer short term construction impacts. In the long term, the OH alternative will have fewer visual impacts (considering it is co-located adjacent to an existing OH line) than an UG crossing with transition stations, and will have fewer risks of other long term environmental impacts (stormwater runoff, oil spills, etc.) from ongoing operations.

- 2. The FWS remains concerned about the overhead crossings of streams and wetlands along the transmission line route. As a complete linear project the corridor will impact other resources including streams and wetlands elsewhere along the route. The project will also further fragment forest habitats, provide disturbance to natural communities and increase the potential for spread of invasive exotic species.
 - a. Impacts to streams and wetlands.

During the planning phases of the project, an Environmental Report was prepared for the proposed transmission line. The field work conducted as a part of this report included a stream and wetland delineation for the entire proposed corridor. The Environmental Report and maps indicating the locations of streams and wetlands along the corridor are included in the EA as Appendix C. As a result of the stream and wetland delineation, PEC was able to designate structure locations outside jurisdictional areas. No jurisdictional discharges (under CWA §404) would be necessary for the placement and construction of transmission towers throughout the proposed transmission line corridor.

Clearing practices throughout the 7-5-mile-long corridor would be consistent with clearing practices proposed across the Parkway. Vegetation in upland areas, except in very steep locations, would be machine cut. Vegetation adjacent to streams and within wetland areas would be hand cut to avoid jurisdictional discharges. Low growing, native species would be left in place and allowed to repopulate the area. Equipment movement in these areas would be avoided, unless no reasonable alternative exists to travel down the ROW. In those cases, streams would be crossed using temporary bridges and wetlands would be crossed using temporary mats that would be immediately removed once they were no longer necessary. Use of temporary mats and bridges are not considered jurisdictional discharges by the US Army Corps of Engineers.

There is one stream and one wetland crossing proposed for the transmission line on Parkway property. Clearing will be done by hand and large trees around the wetland will not be cut. There will be no structures or other discharges within this area or on the Parkway.

b. Disturbance to natural communities and fragmentation of forest habitats. Right-of-way (ROW) clearing and installation of the proposed transmission line will impact natural communities within the corridor. Impacts will be minor because of the location of the preferred route. The proposed transmission line would be immediately adjacent to the existing line for approximately 75% of its total length, and for its entire length of the Parkway crossing. The proposed transmission line deviates from the existing line in 3 locations, all off the Parkway. Siting the proposed line in this manner eliminates disturbance to previous undisturbed areas (the existing line being considered a disturbance). PEC has minimized the width of the corridor to the maximum extent practicable. To eliminate the need for a wider corridor and unnecessary removal of vegetation, PEC would use "danger tree" standards to remove trees outside of the maintained corridor. This eliminates the need for a wider corridor where all vegetation would be removed. Clearing of the proposed transmission line in the location immediately adjacent to the existing transmission line would result in widening of the existing cleared corridor but would not result in new habitat fragmentation to those areas. Additionally, the proposed transmission line is routed through habitats that are already fragmented by interstate highways, secondary roads, and maintained lawns and pastures. Clearing of the proposed transmission line would not significantly increase habitat fragmentation in the location of the proposed transmission line.

The first area where the proposed transmission line deviates from the existing line is at the southern-most end of the transmission line corridor near the Asheville Generating Plant at Lake Julian. This location would have minimal clearing because the line in this location would be mostly over water. Additionally, an existing road and the generating plant are within less than 300 feet of the line. Because of adjacent land use, this area could already be considered disturbed. Additional clearing in this location would not significantly contribute to natural community disturbance or habitat fragmentation in this area.

A second area where the proposed transmission line deviates from the existing line is located near the intersection of Long Shoals Road and Clayton Road. The proposed line is routed immediately adjacent to the roads and the NC Department of Transportation (DOT) ROW. DOT continues to maintain the ROW. Because of adjacent land use, this area could already be considered disturbed. Additional clearing in this location would not significantly contribute to natural community disturbance or habitat fragmentation in this area.

The third area where the proposed transmission line deviates from the existing line is at the northern-most end of the transmission line corridor. This area has been divided into three sections: US Forest Service property (USFS), property north of the USFS property, and property south of the USFS property.

Because of public concern, the proposed line would be routed to avoid the existing subdivision and cross property owned by the USFS. The USFS concluded that the proposed project was eligible for a Categorical Exclusion because of the relatively small amount of USFS lands impacted (less than 5 acres) and the conclusion that the proposed project would not have a significant effect on the environment. The categorical exclusion was issued on September 30, 2010.

The section of the proposed transmission line located north of the USFS property is within a master planned expansion of Biltmore Lake residential subdivision. The master plan has been filed with Buncombe County. The proposed line is within 300 feet of existing secondary roads, homes, and maintained lawns. Additional clearing in this location would not significantly contribute to natural community disturbance or habitat fragmentation in this area.

The section of the proposed transmission line located south of the USFS property is operated as a horse farm. This area was extensively logged in the past and the wooded area is highly disturbed. Additional clearing in this location would not significantly contribute to natural community disturbance or habitat fragmentation in this area.

c. Increase potential for the spread of invasive exotic species.

Clearing of the proposed ROW may provide opportunity for invasive species to spread into the newly cleared areas. Impacts would not be considered significant in areas where the proposed transmission line parallels the existing transmission line because vegetation edges would not increase in length but instead would be shifted laterally. This should not increase the amount of invasive exotic species only the final location. In areas where the line deviates from the existing alignment, the proposed line will be adjacent to, in proximity to, or crossing existing road corridors, pastures, and maintained lawns. These land use practices present an existing opportunity for invasive exotic species to spread into forested areas. Because of adjacent land use, additional clearing in these locations would not significantly contribute to the spread of invasive exotic species.

3. The DWQ has indicated the following concerns may, or will likely need to be addressed:

NPDES Construction Stormwater Permit NCG010000 - This permit is issued concurrently with an approved Erosion and Sedimentation Control plan to control stormwater discharges from construction activities. If greater than one acre is disturbed, a NCG010000 is required.

PEC has submitted an erosion control plan to NCDENR, Land Quality Section for review and approval. Upon issuance of the Land Quality permit, the NPDES Construction Stormwater Permit (NCG010000) will be concurrently issued. PEC will comply with the approved erosion control plan and conditions of the NPDES Construction Stormwater Permit.

4. The DWQ has indicated the following concerns may, or will likely need to be addressed:

401 Water Quality Certification -If a 404 permit is required by the Army Corp of Engineers, a 401 Water Quality Certification is necessary. Depending on the amount of impact to a stream and/or wetland - written concurrence from this office may be required [ref. 4.2.4 of the document and Appdx. C regarding streams/wetlands on-site].

PEC is aware of the Section 404 and 401 of the Clean Water Act permitting requirements and consistently designs transmission line projects to avoid impacts to the maximum extent practicable. The project would require a Section 401 Water Quality Certification if the US Army Corps of Engineers (Corps) determined a Section 404 permit was required. To date, the preferred transmission line route has been designed and would be constructed in a manner which would avoid Section 404 discharges, eliminating the need for a Section 404 permit. Therefore, a Section 401 Water Quality Certification would not be required for this project. The Corps and the DWQ have been notified of the preferred

transmission line route and construction techniques multiple times since the first scoping meetings held in 2008 and have agreed with PEC's transmission line siting and methods of construction.

PEC is applying to the Corps for authorization to aerially cross federally-navigable waters (the French Broad River) under Section 10 of the Rivers and Harbors Act. There are no jurisdictional discharges associated with these crossings; therefore, no Section 401 Water Quality Certification is required.

Should the Corps determine that a Section 404 permit is required for any activity along the proposed transmission line route, PEC will apply for all appropriate permits.

Part 2 – The following updates and editorial corrections modify the text of the EA.

There are no updates or editorial corrections to modify the text of the EA.