Keith, Felicia

From:

Darden, Richard L SAC < Richard. Darden@usace.army.mil>

Sent:

Thursday, January 10, 2013 3:21 PM

To:

Wylie, Robert R

Cc: Subject: Dobrasko, Rebekah; Wenonah Haire; Vokoun, Patricia; Boos, Laura M SAC Lee Nuclear Station - Cultural Resource Management Plan (UNCLASSIFIED)

Attachments:

Executed CRMP MOA 1-9-2013.pdf

Classification: UNCLASSIFIED

Caveats: NONE

Hi Robert,

Attached please find a scanned copy of the CRMP and MOA for the project that has been executed by the four signatory parties. Hard copies to everyone included on this message will follow in regular mail.

Thanks, Richard

Richard L. Darden, Ph.D. Regulatory Division U.S. Army Corps of Engineers Charleston District 69-A Hagood Avenue Charleston, South Carolina 29403

(843) 329-8043 phone (843) 329-3223 fax

In order to assist us in improving our service to you, please complete the survey found at http://per2.nwp.usace.army.mil/survey.html

Classification: UNCLASSIFIED

Caveats: NONE

CULTURAL RESOURCE MANAGEMENT PLAN AND AGREEMENT

among

U.S. ARMY CORPS OF ENGINEERS, SOUTH CAROLINA DEPARTMENT OF ARCHIVES AND HISTORY STATE HISTORIC PRESERVATION OFFICE, CATAWBA INDIAN NATION

and

DUKE ENERGY CAROLINAS, LLC

regarding

WILLIAM STATES LEE III NUCLEAR STATION, UNITS 1 AND 2

and

NEW 230 kV and 525 kV TRANSMISSION LINES

I. INTRODUCTION

Duke Energy Carolinas, LLC (Duke) is a regulated utility in North Carolina and South Carolina with a designated franchise service area. It is a wholly owned subsidiary of Duke Energy Corporation. Duke has applied to the United States Nuclear Regulatory Commission (NRC) for a combined construction and operating license (COL) for the William States Lee III Nuclear Station, Units 1 and 2, hereinafter referred to as the Lee Nuclear Station. The requested license would authorize the construction and operation of Lee Nuclear Station and its associated support facilities.

The two new nuclear generating units will be constructed in Cherokee County, South Carolina. Lee Nuclear Station is located on the west side of the Broad River, approximately 1,000 feet upstream from the Ninety-Nine Islands Hydroelectric Station.

NRC will prepare an Environmental Impact Statement (EIS) pursuant to the National Environmental Policy Act (NEPA) to evaluate potential environmental effects of the project. The NRC has prepared and published Environmental Standard Review Plans (ESRPs) to be used as guidance by the NRC staff responsible for environmental reviews of nuclear power plants. These documents are made available to the public as part of NRC's policy to inform the nuclear industry and the general public of regulatory procedures and policies. ESRPs are not substitutes for regulatory guidelines or NRC regulations, and compliance with them is not required. The ESRPs are used to facilitate preparation of Environmental Reports for Nuclear Power Stations. NUREG-1555 contains the ESRPs for new site applications and requires the identification of any ".... historic properties within 16 kilometers (10 miles) of the plant site and within 2 kilometers (1.2 miles) of proposed transmission line routes, access corridors, and offsite areas that are in, or have been determined eligible for inclusion in the National Register of Historic Places (NRHP), or are included in state or local registers or inventories of historic and cultural resources" Moreover, NUREG-1555 provides guidance on specific studies, information and types of data that must be conducted and considered in order to determine the types and magnitude of potential impacts to cultural resources that may result from proposed actions.

Activities associated with construction of Lee Nuclear Station will result in the placement of fill in "waters of the United States" and are subject to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 and is, therefore, considered to be a federal undertaking.

Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, the effects of any federal undertaking on cultural resources must be considered prior to the beginning of any construction. As part of their responsibilities related to the federal permits under their jurisdiction (Section 404 and Section 10), the USACE has entered into consultation with the South Carolina State Historic Preservation Office (SHPO) to discuss the management of cultural resources as it relates to this project and compliance with Section 106 of the NHPA.

The USACE is the "cooperating agency" within the context of NEPA, where the NRC is serving as the lead agency preparing an EIS for the federal action related to issuance of a COL. The USACE must satisfy NEPA requirements and its internal regulations regarding consultation obligations associated with its Section 404 and Section 10 Permit decisions, which includes consultation with the SHPO regarding Section 106 compliance and is, therefore, a signatory to this Cultural Resources Management Plan and Agreement (CRMP). The Catawba Indian Nation will also be a participant in the CRMP and are, therefore, a signatory to this CRMP.

This document provides a management plan that is intended to present the steps Duke will implement and follow to protect cultural resources when constructing and operating the Lee Nuclear Station and associated transmission lines. After construction of the Lee Nuclear Station is complete, cultural resource protection programs for construction will be combined with existing Lee Nuclear Station procedures.

II. BACKGROUND INFORMATION

Duke has performed several cultural resource surveys covering the construction and operation of Lee Nuclear Station¹. These cultural resource surveys were reviewed by the SHPO, which concurred with the findings of the studies. Results of the cultural resource surveys are summarized in Section IV. References to these studies are included in the attached bibliography.

III. MANAGEMENT PLAN AND AGREEMENT SCOPE

Development of the CRMP is the result of discussions between the USACE, SHPO, and Duke. It addresses how Duke will identify, assess, and protect cultural resources that could potentially be impacted by the construction, operation, and maintenance of the Lee Nuclear Station. The

^{1 -} These reports contain information and locations for cultural resources protected from public disclosure under the provisions of 16 USC 470hh, Confidentiality of information concerning the nature and location of archaeological resources. Consequently, Duke has withheld these reports from public disclosure in accordance with the provisions of 10 CFR 2.390(a)(3).

scope of the CRMP applies to four major project components that comprise the Lee Nuclear Station. Each project component is described in the following paragraphs:

Lee Nuclear Site

For the purposes of this document, the Lee Nuclear Site is 1,900 acres that comprise the former Duke Power Cherokee Nuclear Station site. The proposed plant would be constructed within a large, open, contiguous area of land that was previously cleared for construction of the former Cherokee Nuclear Station. Additional areas on the Lee Nuclear Site are expected to be cleared for the cooling water intake structure, the cooling water discharge structure, laydown yard, and rerouting of the overlook road. The proposed plant is estimated to require approximately 400 acres within the cleared area.

Railroad Corridor

During construction of the Cherokee Nuclear Station, a railroad spur was constructed between East Gaffney and the site. When this earlier construction ended, the railroad spur was abandoned, and the rails were removed. Duke plans to reconstruct this railroad spur to support construction and operations at the Lee Nuclear Station. With the exception of a short detour at an existing industrial facility (Reddy Ice Plant) and box culvert expansion at London Creek, current plans are to reconstruct the spur on the existing rail bed.

Make-up Pond C and Water Pipeline

The construction of Make-up Pond C (MUPC) is proposed for the Lee Nuclear Station to provide supplemental water during drought conditions. MUPC will encompass approximately 620 acres, with a 300-foot natural buffer surrounding the high water line. MUPC will require additional pipelines to transport water from the Broad River to MUPC, transport water between Make-up Pond B and MUPC, and a 44-kilovolt (kV) transmission line to supply power to the pumps at MUPC. The impoundment of London Creek will also result in the realignment of SC 329 (including a bridge over MUPC), expansion of a box culvert at the railroad crossing of London Creek (previously mentioned), and the re-routing of an existing transmission line.

230 kV and 525 kV Transmission Lines

Two transmission lines are planned for the Lee Nuclear Station. The plant is connected to the transmission system through two switchyards on the Lee Nuclear Site. Power from the units is routed to a 230 kV and a 525 kV switchyard for system reliability. Two 325-foot-wide corridors, each containing a 230 kV line and a 525 kV line, extend southward from the site approximately eight miles to an existing 230 kV transmission line. From these points, each 200-foot-wide 525 kV corridor extends an additional eight miles to an existing 525 kV transmission line. Duke will own the transmission lines but will obtain rights-of-way easements rather than owning the property in fee.

IV. MANAGEMENT ACTIVITIES DURING CONSTRUCTION

ARCHAEOLOGICAL SITES

Cultural resource surveys conducted in support of the Lee Nuclear Station revealed no archaeological sites eligible for the NRHP.

HISTORIC PROPERTIES

Results of the surveys indicate there are three sites eligible for, or listed on the NRHP in areas where land disturbance is planned.

A wastewater discharge structure will be secured to the Ninety-Nine Islands Dam (Resource 0042), which along with the powerhouse, is eligible for the NRHP. It is the SHPO's opinion that the proposed wastewater line will have no effect on the dam or powerhouse.

The railroad corridor passes through the Ellen Furnace (Resource 38CK68), which is listed on the NRHP. The corridor was graded previously during construction of the former Cherokee Nuclear Station railroad line. It is the SHPO's opinion that re-use of the corridor would have no effect on the site.

The Reid-Walker-Johnson Farm (Resource 021-229-0140) was identified within the eastern transmission corridor (Route O) and is considered eligible for the NRHP. Duke has consulted with SHPO personnel to ensure placement of transmission line towers will not result in an impact to the farm.

EXISTING CEMETERIES

Seven cemeteries and one single grave were identified during surveys of the project component areas. These sites are protected by South Carolina statutes².

Two cemeteries associated with the Reid-Walker-Johnson Farm (Reid and Pleasant Grove cemeteries) were identified during the survey of the transmission corridor (Route O). A potential single grave (Resource 38CK172) located within Route O was also identified. Four additional cemeteries were identified within the Lee Nuclear Site (J.H. Stroup, Moss, McKown, and an unnamed cemetery). One cemetery was located within the MUPC component area (Service Family Cemetery (Resource (38CK142)). With the exception of the Service Family Cemetery and the potential single grave recorded as 38CK172, all are located outside the area of planned disturbance.

^{2 -} SC Code 16-17-600 (Destruction or desecration of human remains or repositories thereof; penalties), SC Code 27-43-10 through 27-43-40 (Removal of abandoned cemeteries), SC Code 6-1-35 (Preservation of abandoned or unmaintained cemeteries), and SC Code 27-43-310 (Access to Cemeteries on Private Property).

The Service cemetery is located on a small wooded hill within an open pasture. A low, metal 25x30 foot fence surrounds the cemetery. The cemetery contains approximately six inscribed markers for graves that range in date from 1865 to 1932. Several of the monuments and grave markers have fallen. There appear to be several unmarked graves within the fence as well. This area will be inundated from the construction of MUPC. Prior to the inundation of MUPC, Duke will relocate the cemetery in accordance with South Carolina statutes. The potential single grave (Resource 38CK172), located within the eastern transmission right-of-way, will be avoided during construction of the transmission lines.

The following guidelines will be followed for cemeteries located within Lee Nuclear Station:

- Protective buffers (50 feet width) will be flagged with highly-visible survey flagging prior to construction.
- Grave markers, depressions, or cobble stones will not be disturbed.
- Cemetery maintenance, including grass mowing, removal of invasive plants, and selective pruning of shrub and tree limbs threatening to fall on grave markers will be allowed.
- Ornamental shrubs, flowers, and groundcovers that do not threaten grave markers or other cemetery features will be preserved.
- Machinery (other than push mowers) will not be allowed within fence perimeters.
- Removal of stumps will not be allowed.
- Repairs to perimeter fencing, grave markers, or other soil disturbing activities will not be allowed without prior approval from the SHPO.
- In the event a grave is inadvertently disturbed, work activities will stop and the Lee Nuclear Station site manager will be notified immediately. Following notification, the site manager will contact the SHPO regarding the incident.
- Family descendents and researchers will be allowed access to the cemeteries with reasonable, advance notice.

PROCEDURES FOR INADVERTENT DISCOVERIES

Archaeological materials consist of any items, fifty years old or older, which were made or used by man. These items include, but are not limited to, stone projectile points (arrowheads), ceramic sherds, bricks, worked wood, bone and stone, metal and glass objects, and human skeletal materials.

Since all areas of potential ground disturbance within the construction site have been surveyed, discovery of archaeological materials during construction is not anticipated. If these, or other suspected materials are encountered during construction, Duke will coordinate efforts with appropriate agency officials to develop reasonable alternatives to avoid, minimize or mitigate adverse effects to such discoveries.

Duke will notify the USACE, SHPO, and Catawba Indian Nation, as soon as possible, not to exceed 10 days following the discovery. Duke will propose a management plan for the site in consultation with the USACE, SHPO, and Catawba Indian Nation, as appropriate. Management alternatives may include, but are not necessarily limited to, additional site investigation, resource monitoring, site protection measures, and data recovery efforts.

If human remains are found or suspected during archaeological investigations or construction, Duke will immediately suspend activities, protect the area and contact the appropriate law enforcement agencies, the USACE, SHPO, and Catawba Indian Nation to determine subsequent actions to be taken regarding the discovery.

V. TRAINING AND EDUCATION

No archaeological resources listed, or eligible for listing on the NRHP, were identified in areas where land disturbance is planned. Three historic resources (Ninety-Nine Islands Dam, Ellen Furnace, and Reid-Walker-Johnson Farm) considered eligible for, or listed on the NRHP, are located in areas where land disturbance is planned. However, it is the opinion of the SHPO that construction activities will not impact these resources.

Seven cemeteries and one single grave were identified during the cultural resource surveys. Prior to construction, a 50 foot buffer will be placed around the seven cemeteries and the unmarked grave. The buffer will be flagged with highly-visible survey flagging.

Duke will furnish personnel engaged in construction, operations and/or maintenance activities with figures depicting the cemeteries and protective buffer locations. Personnel will be directed to avoid flagged areas. Personnel will also be instructed on what may constitute a potential archaeological material and procedures to follow in the event of an inadvertent discovery. Maintenance personnel responsible for cemetery maintenance will be instructed to follow the cemetery protective guidelines.

VI. OPERATIONS AND MAINTENANCE

Normal right-of-way and line maintenance activities for established transmission line rights-ofway have extremely low potential for ground disturbance. Routine operations and maintenance activities will be conducted according to Duke's transmission line maintenance guidelines, designed to promote long-term vegetative stabilization and minimum soil disturbance.

VII. LIMITATIONS

Duke commits to protect cultural resources in accordance with conditions of this Agreement. However, Duke will not acquire title to the properties occupied by the 230 kV and 525 kV transmission lines. Easements are acquired for these properties to provide Duke right of way for ingress and egress to, and from transmission lines. Terms and conditions of the rights-of-way agreements do not impose limitations on the owner that would ensure protection of cultural resources.

VIII. DISPUTE RESOLUTION

Should the SHPO, Catawba Indian Nation, or Duke object to any plan or action proposed or taken by another party pursuant to this CRMP, they shall notify the other parties of the objection promptly in writing (email correspondence from authorized persons to authorized persons can constitute written notification). Upon notification by a party of an objection to a plan or action pursuant to this CRMP and Agreement, the SHPO, Catawba Indian Nation, and Duke shall agree to a time and place for a meeting to be held within fourteen (14) days from the date of the written objection.

The SHPO, Catawba Indian Nation, and Duke will negotiate in good faith to resolve the objection. If a party determines the objection cannot be resolved in a timely manner, the parties will forward all documentation relevant to the objection, including each party's proposed resolution to the dispute, to the USACE with a copy of the transmittal to the NRC. The USACE shall notify the parties of any additional information needed to consider the objection within fourteen (14) days following receipt of the notification. The USACE will provide its final direction on the resolution of the objection within thirty (30) days of receiving adequate documentation. The decision of the USACE shall be final and binding on all signatories to this CRMP and Agreement.

The USACE, SHPO, Catawba Indian Nation, and Duke each agree that responsibilities to carry out all other actions subject to the terms of this CRMP and Agreement that are not the subject of the objection remain unchanged and will continue during dispute resolution.

IX. BIBLIOGRAPHY

- 1. Brockington (2007) Cultural Resources Survey of the Proposed Lee Nuclear Station.
- Brockington (2007) Cultural Resources Survey of the Proposed Lee Nuclear Station Addendum Report.
- Brockington (2007) Cultural Resources Survey of the Lee Nuclear Station Railroad Corridor.

- Brockington (2009) Cultural Resources Survey of the Lee Nuclear Station Utilities Project.
- 5. Brockington (2009) Cultural Resources Survey of the Proposed London Creek Reservoir (Make-up Pond C) and Water Pipeline Phase I Report.
- Brockington (2010) Cultural Resources Survey of the Proposed London Creek Reservoir (Make-up Pond C), Water Pipeline, Railroad Corridor, Transmission Line, SC 329 Realignment, Railroad Culvert, Water Pipeline Additions, Spoils Areas, and Road Widenings.
- Brockington (2010) Cultural Resources Survey of the Proposed London Creek Reservoir (Make-up Pond C) and Water Pipeline Addendum: Archaeological Survey of the Proposed Water Pipeline Realignment.
- 8. Southerlin, et. al. (2009) Cultural Resources Survey of the Proposed William States Lee III Nuclear Station 230 kV and 525 kV Transmission Lines.
- Stallings (2007) Background Research and Windshield Reconnaissance for the London Creek Study Area.

X. AGREEMENT

CULTURAL RESOURCE MANAGEMENT PLAN AND AGREEMENT among

U.S. ARMY CORPS OF ENGINEERS, SOUTH CAROLINA DEPARTMENT OF ARCHIVES AND HISTORY STATE HISTORIC PRESERVATION OFFICE, CATAWBA INDIAN NATION

and
DUKE ENERGY CAROLINAS, LLC
regarding

WILLIAM STATES LEE III NUCLEAR STATION, UNITS 1 AND 2 and associated NEW 230 kV and 525 kV TRANSMISSION LINES

WHEREAS, Duke Energy Carolinas, LLC (Duke) submitted an application on December 13, 2007 to the Nuclear Regulatory Commission (NRC) for a combined construction and operating license (COL) for the William States Lee III Nuclear Station Units 1 and 2, two AP1000, advanced passive pressurized water reactor units located in Cherokee County, South Carolina. These reactors are identified as Lee Nuclear Station Units 1 and 2. The COL, once approved, would authorize Duke to build and operate two nuclear generating units at the Lee Nuclear Station, which will be a federal undertaking due in part to fill that must be placed in waters of the United States; and.

WHEREAS, as part of their responsibilities related to the federal permits under their jurisdiction (Section 404 Clean Water Act and Section 10 Rivers and Harbors Act of 1899), the U.S. Army Corps of Engineers (USACE) is a "cooperating agency" with the NRC for the Environmental Impact Statement and has entered into consultation with the South Carolina State Historic Preservation Office (SHPO) to discuss the management of cultural resources as it relates to this project and compliance with Section 106 of the National Historic Preservation Act.

WHEREAS, pursuant to Section 106 of the National Historic Preservation Act of 1966, the SHPO participates in the review of all federal undertakings that have the potential to impact historic and archaeological resources listed in, or eligible for listing in, the National Register of Historic Places (NRHP); and,

WHEREAS, to ensure compliance with Section 106 of the NHPA, the USACE, SHPO, Catawba Indian Nation, and Duke have cooperated to develop this Cultural Resources Management Plan and Agreement that will define the procedures that will be implemented to protect cultural resources that could potentially be impacted by construction, operation and maintenance of Lee Nuclear Station Units 1 and 2 and the two proposed planned transmission lines that are directly associated with the operation of Lee Nuclear Station.

NOW, THEREFORE, the USACE, SHPO, the Catawba Indian Nation, and Duke agree by executing this Agreement that all undertakings associated with construction, maintenance and

operation of Lee Nuclear Station and construction, operation and maintenance of the two proposed transmission lines directly associated with operation of Lee Nuclear Station will be performed in accordance with the stipulations contained in this Cultural Resources Management Plan and Agreement.

DUKE ENERGY CAROLINAS, LLC-	- NUCL	EAR PLAN	C DEVEL	OPMENT
-----------------------------	--------	----------	---------	--------

By Christopha M. Fallon	Date 11/15/2012
VP. NUCLEAR DEVELOPMENT	
SOUTH CAROLINA STATE HISTORIC PRESERVATI	ON OFFICER
By Elfun M. Johnson	Date 12/19/2012
CATAWBA INDIAN NATION	
By Winonek A-Hair Da	Date
CIN-THPO	
U. S. ARMY CORPS OF ENGINEERS	
By Maftfuller	Date 1/9/2013