

## **Appendix A – Correspondence**

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Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

October 26, 2010

Mr. Lee Andrews, Field Supervisor  
U.S. Fish & Wildlife Service  
330 West Broadway, Room 265  
Frankfort, Kentucky 40601

Dear Mr. Andrews:

**BIOLOGICAL ASSESSMENT: CONSTRUCTION OF A 161-kV (kilovolt)  
TRANSMISSION LINE, GAPCREEK, KENTUCKY TO BYRDSTOWN, TENNESSEE**

Volunteer Energy Cooperative (VEC) plans to upgrade their existing Byrdstown 69-kV substation to 161-kV operation. The Tennessee Valley Authority (TVA) proposes to supply electric power to VEC's substation by constructing and operating approximately 15 miles of new 161-kV transmission line and a new 161-kV switching station. The proposed 100-foot wide right-of-way (ROW) would traverse sections of Clinton and Wayne Counties, Kentucky, and Pickett County, Tennessee, and occupy approximately 182 acres. TVA also would provide two manual switches and metering equipment at VEC's new substation. TVA would complete construction and begin operation of the proposed transmission line and switching station by December 2011 or as soon as possible after that date.

The area encompassing the project site has historically supported a number of terrestrial and aquatic species that are currently listed as endangered or threatened according to the provisions of the Endangered Species Act. These include two plants, 19 mussels, one fish, one bird, and two mammals (see Table 1 below). The enclosed Biological Assessment (BA) analyzes the impacts to these listed species from constructing the Gapcreek-Byrdstown transmission project.

As described in the enclosed BA, TVA has determined that construction of the Gapcreek-Byrdstown project would not affect cracking pearlymussel, Cumberland elktoe, Cumberland bean, Cumberlandian combshell, fanshell, fluted kidneyshell, littlewing pearlymussel, orangefoot pimpleback oystermussel, pink mucket, rabbitsfoot, ring pink, rough pigtoe, scaleshell, sheepnose, spectaclecase, tan riffleshell, yellow-blossom pearlymussel, palezone shiner, and red-cockaded woodpecker. TVA has determined that the project may affect foraging habitat for gray bat, but is not likely to adversely affect gray bat.

Mr. Lee Andrews  
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In addition, TVA has determined that the project could adversely affect Indiana bats. The proposed project would have both direct and indirect effects on the Indiana bat. The primary effect would be direct loss of 120 acres of forested habitat in the following categories:

- 5.7 acres of known Indiana bat maternity summer habitat in Pickett County, Tennessee
- 52 acres of known Indiana bat swarming habitat associated with Priority 1-2 or Priority 3-4 hibernacula in Kentucky
- 62.3 acres of combined known maternity and swarming habitat for Indiana bat.

It is anticipated that clearing of vegetation would take approximately 6-8 weeks. Clearing would be scheduled to occur between February 14 and March 28, 2011. However, purchase of land would not begin until late November 2010, and would likely continue through June 2011, and weather conditions may delay clearing activities. We understand that, per the conditions of the Fish & Wildlife Service's (Service) 2008 Biological Opinion, no clearing can be conducted during June or July due to the presence of non-volant juvenile bats in the project area and that the Service would prefer that all clearing be completed prior to April 1, 2011. A large portion of the ROW could be cleared before April 1, but it is very likely that at least some of the clearing could occur during periods when Indiana bats are establishing maternity colonies (April 1 - May 31) and during periods when volant juveniles and adults could be active in the area (August 1-15, 2011).

TVA has determined that the project would affect Indiana bat, but these effects would be mitigated by actions carried out as part of the MOA. TVA proposes to compensate for the loss of 120 acres of Indiana bat habitat by entering into a Conservation Memorandum of Agreement with the Service. TVA will contribute to the Indiana Bat Conservation Fund established by the Kentucky Ecological Services office of the Service in order to satisfy its Endangered Species Act Section 7 responsibilities.

TVA has determined that the project (including mitigation) is not likely to adversely affect gray bat. TVA respectfully requests concurrence for these determinations.

Sincerely,

ORIGINAL SIGNED BY PEGGY W. SHUTE

Peggy W. Shute, Senior Project Manager  
Endangered Species Act Compliance Officer  
Environment and Technology

Mr. Lee Andrews  
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HGL:JSB  
Enclosures

Cc (Enclosures):

Ms. Mary Jennings, Field Supervisor  
U.S. Fish and Wildlife Service  
Tennessee Field Office  
446 Neal Street  
Cookeville, Tennessee 38501

Kelly R. Baxter, WT 11D-K  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Clayton L. Clem, MR 3F-C  
B. Keith Elder, MR 4B-C  
David M. Goins, MR 3F-C  
Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Roger E. Sparry, MR 4B-C  
EDMS, WT 11D-K

Prepared by Holly G. LeGrand

Federally listed species reported from Pickett County, Tennessee, and Clinton and Wayne Counties, Kentucky, and potentially affected by the Gapcreek-Byrdstown Transmission Line and Switching Station Project.<sup>1</sup>

Scientific Name	Common Name	Federal Status	Determination
<b>PLANTS</b>			
<i>Arenaria Cumberlandensis</i>	Cumberland sandwort	E	No effect
<i>Conradina verticillata</i>	Cumberland rosemary	T	No effect
<b>MUSSELS</b>			
<i>Alasmidonta atropurpurea</i>	Cumberland elktoe	E	No effect
<i>Cumberlandia monodonta</i>	Spectaclecase	C	No effect
<i>Cyprogenia stegaria</i>	Fanshell	E	No effect
<i>Epioblasma brevidens</i>	Cumberlandian corribshell	E	No effect
<i>Epioblasma capsaeformis</i>	Oystermussel	E	No effect
<i>Epioblasma florentina florentina</i>	Yellow-blossom pearlymussel	E	No effect
<i>Epioblasma florentina walkeri</i>	Tan ruffleshell	E	No effect
<i>Epioblasma obliquata obliquata</i>	Catspaw	E	No effect
<i>Hemistena lata</i>	Cracking pearlymussel	E	No effect
<i>Lampsilis abrupta</i>	Pink mucket	E	No effect
<i>Leptodea leptodon</i>	Scaleshell	E	No effect
<i>Obovaria retusa</i>	Ring pink	E	No effect
<i>Pegias fibula</i>	Littletwing pearlymussel	E	No effect
<i>Plethobasus cooperianus</i>	Orangefoot pimpleback	E	No effect
<i>Plethobasus cyphus</i>	Sheepnose	C	No effect
<i>Pleurobema plenum</i>	Rough pigtoe	E	No effect
<i>Ptychobranchus subtertium</i>	Fluted kidneyshell	C	No effect
<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	C	No effect
<i>Villosa trabalis</i>	Cumberland bean	E	No effect
<b>FISH</b>			
<i>Notropis albizonatus</i>	Palezone shiner	E	No effect
<b>BIRDS</b>			
<i>Picoides borealis</i>	Red-cockaded woodpecker	E	No effect
<b>MAMMALS</b>			
<i>Myotis grisescens</i>	Gray bat	E	May affect, not likely to adversely affect
<i>Myotis sodalis</i>	Indiana bat	E	May affect, likely to adversely affect

<sup>1</sup>Primary source: TVA Regional Natural Heritage Program Database accessed June - August 2010.



## United States Department of the Interior

RECEIVED  
11/22/10

FISH AND WILDLIFE SERVICE  
Kentucky Ecological Services Field Office  
330 West Broadway, Suite 265  
Frankfort, Kentucky 40601  
(502) 695-0468

November 17, 2010

Ms. Peggy Shute  
Endangered Species Act Compliance Officer  
Tennessee Valley Authority  
400 W. Summit Hill Drive, WT 11C  
Knoxville, Tennessee 37902

Re: FWS 2010-B-0793; Tennessee Valley Authority (TVA), Byrdstown Transmission Line Project, located in Clinton and Wayne Counties, Kentucky and Pickett County, Tennessee

Dear Ms. Shute:

The U.S. Fish and Wildlife Service (Service) has reviewed the October 25, 2010 *Biological Assessment: Construction of a 161-KV Transmission Line, Gapcreek, KY to Byrdstown, TN* (BA). The BA was prepared by Tennessee Valley Authority. The Service offers the following comments in accordance with the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*), and the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 *et seq.*). These comments apply to the portion of the project that would be located within the State of Kentucky. Please contact the Service's Tennessee Field Office for comments regarding the portion of the project that would be within their State.

The BA identifies and addresses all of the sixteen (16) federally listed species, which the Service believes may potentially be impacted by the portion of the proposed project within the State of Kentucky. Those species are:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Federal Status</u>
gray bat	<i>Myotis grisescens</i>	endangered
Indiana bat	<i>Myotis sodalis</i>	endangered
palezone shiner	<i>Notropis albizonatus</i>	endangered
Cumberland bean	<i>Villosa trabalis</i>	endangered
Cumberlandian combshell	<i>Epioblasma brevidens</i>	endangered
Cumberland elktoe	<i>Alasmidonta atropurpurea</i>	endangered
fanshell mussel	<i>Cyprogenia stegaria</i>	endangered
fluted kidneyshell	<i>Ptychbranchus subtentum</i>	candidate
little-wing pearlymussel	<i>Pegias fibula</i>	endangered
orangefoot pimpleback	<i>Plethobasus cooperianus</i>	endangered

oyster mussel	<i>Epioblasma capsaeformis</i>	endangered
pink mucket	<i>Lampsilis abrupta</i>	endangered
ring pink	<i>Obovaria retusa</i>	endangered
rough pigtoe	<i>Pleurobema plenum</i>	endangered
spectaclecase	<i>Cumberlandia monodonta</i>	candidate
tan riffleshell	<i>Epioblasma florentia walkeri</i>	endangered

Listed below are fourteen (14) of the aforementioned species that have ranges outside of the proposed project's action area, and/or do not have suitable habitat within the action area of the project. Therefore, the Service concurs that the proposed project would have "no effect" on the following federally listed species:

palezone shiner	orangefoot pimpleback
Cumberland bean	oyster mussel
Cumberlandian combshell	pink mucket
Cumberland elktoe	ring pink
fanshell mussel	rough pigtoe
fluted kidneyshell	spectaclecase
little-wing pearlymussel	tan riffleshell

**gray bat**

Section 4.3.3 of the BA addresses the project's potential effects to gray bats. The mist-net survey that was conducted in association with the project resulted in the capture of forty-four (44) gray bats. These captures indicate that gray bats utilize the proposed project area for foraging habitat and/or travel corridors. Gray bats typically forage and travel along open water such as streams and rivers. The BA states that best management practices (BMPs) would be implemented for all stream and river crossings.

Additionally, the project area was assessed for the presence of potential gray bat summer roost / hibernacula habitat (*i.e.*; caves and abandoned mines). One (1) cave was discovered within the proposed project area; however, a Phase I cave assessment determined that the cave is not suitable to serve as gray bat habitat.

Because BMPs would be implemented for all stream and river crossings, the Service believes that the project's impacts to gray bat foraging habitat and travel corridors would be insignificant. Based on the habitat assessment, the Service believes that the proposed project would not likely adversely affect gray bat summer roost / hibernacula habitat. In summary of these findings regarding the project's potential effects to the gray bat, the Service concurs that the proposed project would not likely adversely affect the gray bat.

**Indiana bat**

The Service concurs that the proposed project would likely adversely affect the Indiana bat. The primary adverse effects would be due to the loss of a total of 120 acres of forested habitat that is known to be utilized by Indiana bats (5.7 acres of maternity summer habitat, 52 acres of Priority 1-2 swarming habitat, and 62.3 acres of maternity habitat that overlaps swarming habitat).

Please note that this area covers the entire project area, including the Tennessee portion of the project and the Kentucky portion of the project.

It is our understanding that TVA proposes to minimize these adverse effects and likely incidental take of Indiana bats by entering into an Indiana Bat Conservation Memorandum of Agreement (MOA) with the Service. The Service agrees with TVA's approach, and believes that entering into an MOA would account for the adverse impacts to the Indiana bat, which we believe will occur as a result of the proposed project. Entering into an MOA would also ensure that TVA would be in full compliance with section 7 of the ESA.

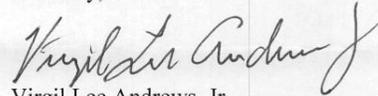
Please note that if TVA elects to enter into a Conservation MOA for the entire project, the Service's Kentucky Field Office and Tennessee Field Office must modify the *Indiana Bat Mitigation Guidance for the Commonwealth of Kentucky* so that the MOA would cover the entire project area, including the portion of the project that would be within the State of Tennessee. This modification is currently underway and should be completed by December of this year.

**Migratory Non-game Birds**

Avian interactions with overhead power lines- including electrocutions, collisions, and nest construction- have been documented since the early 1900s when such lines were first constructed in rural areas. According to section 4.3.6 of the BA, the proposed transmission line would be constructed with insulator lengths and phase-to-ground distances of greater than 70 inches. The transmission line would likely include suspension insulators which would result in the energized line hanging greater than 70 inches below the cross-arms, davit arms, or pole tops where birds have a propensity to perch. Additionally, TVA would restrict the time frame of work on particular structures to avoid actively nesting birds. Based on the proposed design configuration and the avoidance and minimization measures that TVA would incorporate, the Service concurs that the proposed project would not likely adversely affect migratory birds.

Thank you again for your request. Your concern for the protection of endangered and threatened species is greatly appreciated. If you have any questions regarding the information that we have provided, please contact James Gruhala at (502) 695-0468 extension 116.

Sincerely,



Virgil Lee Andrews, Jr.  
Field Supervisor



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

October 5, 2010

Mr. Mark Dennen  
State Historic Preservation Officer  
and Executive Director  
Kentucky Heritage Council  
300 Washington Street  
Frankfort, Kentucky 40601

Dear Mr. Dennen:

TENNESSEE VALLEY AUTHORITY (TVA), THE PROPOSED TVA BYRDSTOWN 161-KV TRANSMISSION LINE (TL), CLINTON AND WAYNE COUNTIES, KENTUCKY

TVA proposes to construct and operate approximately 15 miles of new 161-kV TL. The line will start at the existing Wolf Creek-Huntsville 161-kV TL in Wayne County, Kentucky, run generally south-southwest through Clinton County, Kentucky, and into Pickett County, Tennessee, and end on the south side of State Route 325, southeast of Byrdstown. Approximately 9.8 miles of the proposed TL right-of-way (ROW) would be in Kentucky. TVA considers the architectural area of potential effect (APE) to be the 0.5 mile-wide area linearly centered along the proposed TL ROW. The archaeological APE is addressed in a separate report. TVA is consulting with the Tennessee State Historic Preservation Office regarding the proposed TL ROW in Tennessee.

TVA contracted with TRC, Inc. (TRC) in order to conduct the cultural resources survey. Prior to initiating fieldwork, a records search was conducted in order to document all previously recorded architectural properties within the APE. The records search identified one previously recorded architectural resource (CT-3). According to information provided by the Kentucky Heritage Council, the property was eligible for the National Register of Historic Places (NRHP) at the time of its initial recordation in 1993.

Following the records search, TRC conducted the architectural survey. Enclosed is the draft report titled *Phase I Architectural Survey of the Proposed TVA Byrdstown 161-kV Transmission Line, Clinton and Wayne Counties, Kentucky*. Architectural resource, CT-3, was revisited and it is recommended that CT-3 is ineligible for the NRHP because the integrity of the house has been compromised by neglect and alterations, and the historic setting has been altered through the introduction of modern outbuildings. Therefore, TVA finds CT-3 ineligible for the NRHP. In addition, the architectural survey identified four previously unrecorded architectural resources (CT-121–124) within the APE. TVA finds these four properties ineligible for the NRHP due to lack of architectural distinction and loss of integrity caused by modern alterations as well as the inability to associate the house and/or its original owner(s) with an important historical event or series of events.

Mr. Mark Dennen  
Page 2  
October 5, 2010

TVA has reviewed the enclosed report and agrees with the recommendations of the authors. It is TVA's finding that no architectural resources potentially eligible for the NRHP would be affected and no further investigations are recommended. Pursuant to 36 CFR Part 800, we are seeking your concurrence with TVA's findings and recommendations.

If you have any questions or comments, please call Richard Yarnell by telephone at (865) 632-3463 or by email at [wryarnell@tva.gov](mailto:wryarnell@tva.gov).

Sincerely,



A. Eric Howard  
Federal Preservation Officer  
Manager (Acting), Cultural Compliance  
WT 11D-K

MH:RY:IKS  
Enclosures

cc: Cynthia M. Anderson, LP 5D-C  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Tom Cureton, MR 4G-C  
Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Khurshid K. Mehta, WT 6A-K  
EDMS, WT 11D-K



STEVEN L. BESHEAR  
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET  
KENTUCKY HERITAGE COUNCIL**

MARCHETA SPARROW  
SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE  
300 WASHINGTON STREET  
FRANKFORT, KENTUCKY 40601  
PHONE (502) 564-7005  
FAX (502) 564-5820  
www.heritage.ky.gov

MARK DENNEN  
EXECUTIVE DIRECTOR AND  
STATE HISTORIC PRESERVATION OFFICER

November 3, 2010

A. Eric Howard, Federal Preservation Officer  
Manager (Acting), Cultural Compliance  
Tennessee Valley Authority  
400 West Summit Hill Dr.  
Knoxville, TN 37902-1499

**Re: Proposed TVA Byrdstown 161-KV Transmission Line (TL), Clinton and Wayne  
Counties, Kentucky**

Dear Mr. Howard,

The State Historic Preservation Office has received for review and comment a Phase 1 architectural survey for the above referenced project. According to your submission, the undertaking involves construction of 15 miles of new 161-kV transmission line to serve the Byrdstown substation in Tennessee. This line will begin in Wayne County, Kentucky, and run generally southwest through Clinton County, Kentucky. Maximum structure height for the lines is 120 feet, so 0.5 mile around the proposed line was utilized as an area of potential effect for visual effects.

The report identified one previously surveyed house (CT-3) and four new historic resources (CT-121 through 124). We agree with the report authors' conclusion that CT-121, 122, 123 and 124 do not appear to be eligible for listing in the National Register of Historic Places.

Additional research would be needed to better understand the significance of CT-3 that contributed to its original determination of eligibility, and whether alterations and deterioration since it was surveyed have undermined its integrity to the point that it would no longer be eligible. We do concur, however, that given the pole height, intervening vegetation, and the landscape in general, the undertaking will have No Adverse Effect on historic properties.

Questions regarding these comments can be directed to Jill McNutt of my staff at (502) 564-7005, extension 121.

Sincerely,

Mark Dennen  
Executive Director and  
State Historic Preservation Officer

MD;jm

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Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

November 5, 2010

Mr. Mark Dennen  
State Historic Preservation Officer  
and Executive Director  
Kentucky Heritage Council  
300 Washington Street  
Frankfort, Kentucky 40601

Dear Mr. Dennen:

TENNESSEE VALLEY AUTHORITY (TVA), THE PROPOSED TVA BYRDSTOWN 161-KV TRANSMISSION LINE (TL), CLINTON AND WAYNE COUNTIES, KENTUCKY

TVA proposes to construct, operate, and maintain approximately 15 miles of new 161-kV TL. The line will start at the existing Wolf Creek-Huntsville 161-kV TL in Wayne County, Kentucky, run generally south-southwest through Clinton County, Kentucky, and into Pickett County, Tennessee, and end on the south side of State Route 325, southeast of Byrdstown.

The portion of the TL route in Kentucky measures approximately 9.8 miles. TVA considers the archaeological area of potential effects (APE) to be the 9.8-mile long by 100-foot wide right-of-way (ROW) and approximately 1500 feet long by 20 feet wide previously undisturbed temporary access roads. The architectural APE is the 0.5 mile wide area linearly centered along the proposed TL ROW. The architectural APE is addressed in a separate report. TVA is consulting with the Tennessee State Historic Preservation Office regarding the proposed TL ROW in Tennessee.

TVA contracted with TRC, Inc. (TRC) in order to conduct the cultural resources survey. Prior to initiating fieldwork, a records search identified no previously recorded archaeological resources within the APE. Following the records search, TRC conducted the archaeological survey. Enclosed is the draft *Phase I Archaeological Survey of the Proposed TVA Byrdstown 161-kV Transmission Line Project Kentucky Portion, Wayne and Clinton Counties, Kentucky*.

Fourteen new archaeological sites (15WN92-15WN94, and 15CT143-153) and two isolated finds (IF-1 and IF-2) were identified during the archaeological survey. Twelve sites (15WN92-94, 15CT143, 15CT145, and 15CT147-153) consist of low to medium density prehistoric lithic scatters. Soils at these sites were deflated and disturbed and no intact deposits or features were encountered. TVA finds that sites 15WN92-94, 15CT143, 15CT145, and 15CT147-153 are ineligible for the National Register of Historic Places (NRHP) due to the lack of integrity and low research potential.

Two sites (15CT144 and 15CT146) contained intact archaeological deposits and higher artifact densities:

- Site 15CT144 represents a multi-component Archaic to Mississippian open habitation site. Although the site is shallow in depth, excavations identified intact archaeological deposits. TVA finds 15CT144 eligible for the NRHP under Criterion D.

## Byrdstown, Tennessee, 161-kV Transmission Line and Switching Station

Mr. Mark Dennen  
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- Site 15CT146 represents an Early Archaic open habitation site. TRC identified distinct difference within the site in regards to soil deposits and density of cultural material. The northern portion of the site contains multiple distinct soil layers with cultural material to a depth of up to 75 centimeters below surface. At the southern portion of the site, the alluvial deposits become thinner and the presence of cultural material becomes less uniform and in notably lower quantities. TVA agrees with TRC's recommendation and finds that only the northern portion of site 15CT146, within the ROW, is eligible for the NRHP.

To avoid adversely affecting sites 15CT144 and the eligible portion of 15CT146, TVA would not place any TL structures within these sites or if feasible, within 100 feet of the site. Additionally, all work within the site's boundaries would be conducted in dry conditions or with low-ground pressure tired equipment. If these options are not possible, then mats would be used.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance and eligible for the NRHP.

TVA has reviewed the enclosed report and agrees with the recommendations of the authors. Pursuant to 36 CFR Part 800, we are seeking your concurrence with TVA's findings and recommendations that:

- archaeological sites 15WN92-94, 15CT143, 15CT145, and 15CT147-153 are ineligible for the NRHP;
- archaeological site 15CT144 and northern portion of site 15CT146 are eligible for the NRHP; and
- with the previously described avoidance measures for sites 15CT144 and 15CT146 in place, no archaeological sites eligible for the NRHP would be adversely affected by the proposed undertaking and no further investigations are recommended.

If you have any questions or comments, please contact Richard Yarnell by telephone at (865) 632-3463 or by e-mail at [wryarnell@tva.gov](mailto:wryarnell@tva.gov).

Sincerely,



A. Eric Howard, Manager  
Cultural Compliance  
WT 11D-K

MH:RY:IKS  
Enclosures

cc: Cynthia M. Anderson, LP 5D-C  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Tom Cureton, MR 4G-C  
Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Khurshid K. Mehta, WT 6A-K  
EDMS, WT 11D-K



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

November 5, 2010

Mr. Mark Dennen  
State Historic Preservation Officer  
and Executive Director  
Kentucky Heritage Council  
300 Washington Street  
Frankfort, Kentucky 40601

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Two sites (15CT144 and 15CT146) contained intact archaeological deposits and higher artifact densities:

- Site 15CT144 represents a multi-component Archaic to Mississippian open habitation site. Although the site is shallow in depth, excavations identified intact archaeological deposits. TVA finds 15CT144 eligible for the NRHP under Criterion D.

## Byrdstown, Tennessee, 161-kV Transmission Line and Switching Station

Mr. Mark Dennen  
Page 2  
November 5, 2010

- Site 15CT146 represents an Early Archaic open habitation site. TRC identified distinct difference within the site in regards to soil deposits and density of cultural material. The northern portion of the site contains multiple distinct soil layers with cultural material to a depth of up to 75 centimeters below surface. At the southern portion of the site, the alluvial deposits become thinner and the presence of cultural material becomes less uniform and in notably lower quantities. TVA agrees with TRC's recommendation and finds that only the northern portion of site 15CT146, within the ROW, is eligible for the NRHP.

To avoid adversely affecting sites 15CT144 and the eligible portion of 15CT146, TVA would not place any TL structures within these sites or if feasible, within 100 feet of the site. Additionally, all work within the site's boundaries would be conducted in dry conditions or with low-ground pressure tired equipment. If these options are not possible, then mats would be used.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance and eligible for the NRHP.

TVA has reviewed the enclosed report and agrees with the recommendations of the authors. Pursuant to 36 CFR Part 800, we are seeking your concurrence with TVA's findings and recommendations that:

- archaeological sites 15WN92-94, 15CT143, 15CT145, and 15CT147-153 are ineligible for the NRHP;
- archaeological site 15CT144 and northern portion of site 15CT146 are eligible for the NRHP; and
- with the previously described avoidance measures for sites 15CT144 and 15CT146 in place, no archaeological sites eligible for the NRHP would be adversely affected by the proposed undertaking and no further investigations are recommended.

If you have any questions or comments, please contact Richard Yarnell by telephone at (865) 632-3463 or by e-mail at [wryarnell@tva.gov](mailto:wryarnell@tva.gov).

Sincerely,



A. Eric Howard, Manager  
Cultural Compliance  
WT 11D-K

MH:RY:IKS  
Enclosures

cc: Cynthia M. Anderson, LP 5D-C  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Tom Cureton, MR 4G-C  
Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Khurshid K. Mehta, WT 6A-K  
EDMS, WT 11D-K



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

November 10, 2010

Mr. E. Patrick McIntyre, Jr.  
Executive Director  
Tennessee Historical Commission  
2941 Lebanon Road  
Nashville, Tennessee 37243-0442

Dear Mr. McIntyre:

TENNESSEE VALLEY AUTHORITY (TVA) PROPOSED BYRDSTOWN 161-kV  
TRANSMISSION LINE (TL), PICKETT COUNTY, TENNESSEE

TVA proposes to construct and operate approximately 15 miles of new 161-kV TL, right-of-way (ROW), and approximately three miles of temporary access roads. The line will start at the existing Wolf Creek-Huntsville 161kV TL in Wayne County, Kentucky, run generally south-southwest through Clinton County, Kentucky, and into Pickett County, Tennessee, and end on the south side of State Route 325, southeast of Byrdstown.

For the portion of the TL in Tennessee, TVA considers the archaeological area of potential effects (APE) to be the 5.2-mile long by 100-foot wide TL ROW and the 0.6-mile long by 20-foot wide associated access roads. The architectural APE includes the 0.5-mile wide area linearly centered along the proposed TL ROW. TVA is consulting with the Kentucky State Historic Preservation Office regarding the portion of the TL in Kentucky.

TVA contracted with TRC, Inc. (TRC) to conduct the cultural resource survey. TRC's records search at the Tennessee Department of Archaeology and the Tennessee Historical Commission identified one previously recorded archaeological site (40PT74) and 14 previously recorded architectural resources within the APE. Of the previously recorded architectural properties, seven (PT-211, 223, 226, 228, 333, 337, and 338) have been destroyed since their initial recordation and six (PT-218, 219, 227, 229, 335, and 336) are located within the architectural APE but outside the visual line-of-sight to the proposed project. TVA finds the remaining architectural resource PT-340 ineligible for the National Register of Historic Places (NRHP) due to its lack of architectural distinction and loss of integrity caused by modern alterations.

Following the archival search, TRC conducted the Phase I cultural resources survey. Enclosed is the draft report titled *Phase I Cultural Resources Survey of the Proposed TVA Byrdstown 161-kV Transmission Line, Pickett County, Tennessee*.

On June 21, 2010, TRC conducted a historic architectural survey of the APE, which resulted in the identification of no previously unrecorded architectural resources. The archaeological survey conducted in June through August 2010, identified four newly recorded archaeological sites (40PT139, 40PT140, 40PT141, and 40PT142) and revisited site 40PT74:

- Site 40PT139 consists of a prehistoric open habitation marked by a light density lithic and historic artifact scatter and the disturbed remnants of a possible chimney base. TVA finds site 40PT139 ineligible for the NRHP due to lack of integrity and research value;

Byrdstown, Tennessee, 161-kV Transmission Line and Switching Station

Mr. E. Patrick McIntyre, Jr.  
Page 2  
November 10, 2010

- Sites 40PT140 and 40PT141 consist of an indeterminate prehistoric open habitation sites, characterized by shallow, disturbed deposits and lithic scatter. TVA finds sites 40PT140 and 40PT141 ineligible for the NRHP due to lack of integrity;
- Site 40PT142 consists of a Woodland and Mississippian period site. Shovel testing at the site found evidence of intact buried cultural deposits. TVA finds 40PT142 potentially eligible for the NRHP under Criterion D, due to its potential for significant prehistoric research. To avoid adversely affecting the site, TVA would not place any TL structures within 100 feet of the site. Additionally, to ensure that no rutting or excavations would occur, all work within the site's boundaries will be conducted in dry conditions with low-ground pressure tired equipment. If this is not possible, then mats will be used; and
- TRC identified no artifacts and no evidence of archaeological deposits within the portion of the 40PT74 within the TL ROW. TVA finds the portion of site within the TL ROW does not contain intact archaeological deposits and would not be adversely affected by the undertaking.

Pursuant to 36 CFR Part 800.3(f)(2), TVA is consulting with federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance and eligible for the NRHP.

TVA has reviewed the enclosed report and agrees with the recommendations of the authors. Pursuant to 36 CFR Part 800, we are seeking your concurrence with TVA's findings and recommendations that:

- archaeological sites 40PT139, 40PT140, and 40PT141 and architectural resource PT-340 are ineligible for the NRHP;
- archaeological site 40PT142 is potentially eligible for the NRHP;
- the portion of previously recorded site 40PT74 that falls within the TL ROW does not contain intact archaeological deposits; and
- with the previously described avoidance measures for site 40PT142 in place, no cultural resources potentially eligible for the NRHP would be adversely affected by the proposed undertaking and no further investigations are recommended.

If you have any questions or comments, please contact Richard Yarnell by telephone at (865) 632-3463 or by email at [wryarnell@tva.gov](mailto:wryarnell@tva.gov).

Sincerely,



A. Eric Howard, Manager  
Cultural Compliance  
WT 11D-K

MH:RY:IKS  
Enclosures

cc: Ms. Jennifer Barnett  
Tennessee Division of Archaeology  
1216 Foster Avenue, Cole Bldg. #3  
Nashville, Tennessee 37210

Cynthia M. Anderson, LP 5D-C  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Tom Cureton, MR 4G-C

Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Khurshid K. Mehta, WT 6A-K  
EDMS, WT 11D-K



Tennessee Valley Authority, 400 West Summit Hill Drive, Knoxville, Tennessee 37902-1499

November 10, 2010

To Those Listed:

TENNESSEE VALLEY AUTHORITY (TVA) PROPOSED BYRDSTOWN 161-KV TRANSMISSION LINE (TL), PICKETT COUNTY, TENNESSEE

TVA proposes to construct and operate approximately 15 miles of new 161-kV TL, right-of-way (ROW), and approximately three miles of temporary access roads. The line will start at the existing Wolf Creek-Huntsville 161-kV TL in Wayne County, Kentucky, run generally south-southwest through Clinton County, Kentucky, and into Pickett County, Tennessee, and end on the south side of State Route 325, southeast of Byrdstown.

For the portion of the TL in Tennessee, TVA considers the archaeological area of potential effects (APE) to be the 5.2-miles long by 100-foot wide TL ROW and the 0.6-mile long by 20-foot wide associated access roads. The architectural APE includes the 0.5-mile wide area linearly centered along the proposed TL ROW. TVA is providing information regarding the Kentucky portion of the undertaking under separate cover.

TVA contracted with TRC, Inc. (TRC) to conduct the cultural resource survey. TRC's record search at the Tennessee Department of Archaeology and the Tennessee Historical Commission identified one previously recorded archaeological site (40PT74) within the APE.

Following the archival search, TRC conducted the Phase I cultural resources survey. An online version of the draft report titled *Phase I Cultural Resources Survey of the Proposed TVA Byrdstown 161-kV Transmission Line, Pickett County, Tennessee* can be downloaded at <https://portal.trcsolutions.com/portal/server.pt>.

The archaeological survey conducted in June through August 2010, identified four newly recorded archaeological sites (40PT139, 40PT140, 40PT141, and 40PT142) and revisited site 40PT74:

- Site 40PT139 consists of a prehistoric open habitation marked by a light lithic and historic artifact scatter and the disturbed remnants of a possible chimney base. TVA finds site 40PT139 ineligible for the National Register of Historic Places (NRHP) due to lack of integrity and research value;
- Sites 40PT140 and 40PT141 consist of indeterminate prehistoric open habitation sites, characterized by shallow, disturbed deposits and lithic scatter. TVA finds sites 40PT140 and 40PT141 ineligible for the NRHP due to lack of integrity;
- Site 40PT142 consists of a Woodland and Mississippian period site. Shovel testing at the site found evidence of intact buried cultural deposits. TVA finds 40PT142 potentially eligible for the NRHP under Criterion D, due to its potential for significant prehistoric research. To avoid adversely affecting the site, TVA would not place any TL structures within 100 feet of the site. Additionally, to ensure that no rutting or excavations would occur, all work within the site's boundaries will be conducted in dry conditions with low-ground pressure tired equipment. If this is not possible, then mats will be used; and

Those Listed  
Page 2  
November 10, 2010

- TRC identified no artifacts and no evidence of archaeological deposits within the portion of the 40PT74 within the TL ROW. TVA finds the portion of site within the TL ROW does not contain intact archaeological deposits and would not be adversely affected by the undertaking.

TVA is consulting with the following federally recognized Indian tribes regarding properties within the proposed project's APE that may be of religious and cultural significance to them and eligible for listing in the NRHP: Cherokee Nation, Eastern Band of Cherokee Indians, United Keetoowah Band of Cherokee Indians in Oklahoma, Muscogee (Creek) Nation of Oklahoma, Alabama Quassarte Tribal Town, Kialegee Tribal Town, Thlopthlocco Tribal Town, Seminole Nation of Oklahoma, Seminole Tribe of Florida, Absentee Shawnee Tribe of Oklahoma, Eastern Shawnee Tribe of Oklahoma, and the Shawnee Tribe.

It is TVA's findings that with the previously described avoidance measures for site 40PT142 in place, no cultural resources potentially eligible for the NRHP would be adversely affected by the proposed undertaking and no further investigations are recommended.

By this letter, TVA is providing notification of these findings and is seeking your comments regarding this undertaking and any properties that may be of religious and cultural significance and may be eligible for the NRHP pursuant to 36CFR § 800.2 (c)(2)(ii), 800.3 (f)(2), and 800.4 (a)(4)(b).

If you have any questions, please contact me by telephone at (865) 632-6461 or by email at [pbezzell@tva.gov](mailto:pbezzell@tva.gov). If you have any comments on the proposed undertaking, please respond within 30 days of receipt of this letter.

Sincerely,



Pat Bernard Ezzell  
Tribal Liaison and Corporate Historian  
Federal Determinations  
WT 11D-K

MH:RY:IKS  
Enclosure

cc: Cynthia M. Anderson, LP 5D-C  
Brenda E. Brickhouse, LP 5U-C  
Tina I. Broyles, MR 2W-C  
Tom Cureton, MR 4G-C  
Susan J. Kelly, LP 5U-C  
Todd C. Liskey, MR 4G-C  
Khurshid K. Mehta, WT 6A-K  
EDMS, WT 11D-K

**THOSE LISTED:**

Dr. Richard Allen  
Policy Analyst  
Cherokee Nation  
Post Office Box 948  
Tahlequah, Oklahoma 74465

Ms. Augustine Asbury  
Cultural Preservation Coordinator  
Alabama Quassarte Tribal Town  
Post Office Box 187  
Wetumka, Oklahoma 74883

Second Chief Alfred Berryhill  
Muscogee (Creek) Nation  
Post Office Box 580  
Okmulgee, Oklahoma 74447

Mr. Charles Coleman  
NAGPRA Representative  
Thlopthlocco Tribal Town  
Route 1, Box 190-A  
Weleetka, Oklahoma 74880

Ms. Natalie Deere  
Tribal Historic Preservation Officer  
Seminole Nation of Oklahoma  
Post Office Box 1498  
Wewoka, Oklahoma 74884

Ms. Robin DuShane  
Cultural Preservation Director  
Eastern Shawnee Tribe of Oklahoma  
127 West Oneida  
Seneca, Missouri 64865

Mr. Henry Harjo  
Environmental Director  
Kialegee Tribal Town  
Post Office Box 332  
Wetumka, Oklahoma 74883

Mr. Tyler Howe  
Historic Preservation Specialist  
Eastern Band of the Cherokee Indians  
Post Office Box 455  
Cherokee, North Carolina 28719

cc: Mr. Russ Townsend  
Tribal Historic Preservation Officer  
Eastern Band of the Cherokee Indians  
Post Office Box 455  
Cherokee, North Carolina 28719

Byrdstown, Tennessee, 161-kV Transmission Line and Switching Station

Mr. Ted Isham  
Manager  
Cultural Preservation Department  
Muscogee (Creek) Nation  
Post Office Box 580  
Okmulgee, Oklahoma 74447

Ms. Karen Kaniatobe  
Tribal Historic Preservation Officer  
Absentee Shawnee Tribe of Oklahoma  
2025 S. Gordon Cooper  
Shawnee, Oklahoma 74801

Ms. Lisa C. LaRue  
Director, Language, History and Culture &  
Acting Tribal Historic Preservation Officer  
United Keetoowah Band  
of Cherokee Indians in Oklahoma  
Post Office Box 746  
Tahlequah, Oklahoma 74464

Ms. Jennifer Pietarila  
Archaeological Data Analyst  
Seminole Tribe of Florida  
Ah-Tah-Thi-Ki Museum  
HC-61 Box 21-A  
Clewiston, Florida 33440

cc: Ms. Anne Mullins  
Project Coordinator  
Seminole Tribe of Florida  
Ah-Tah-Thi-Ki Museum  
HC-61, Box 21-A  
Clewiston, Florida 33440

cc: Mr. Willard Steele  
Tribal Historic Preservation Officer  
Seminole Tribe of Florida  
Ah-Tah-Thi-Ki Museum  
HC-61, Box 21-A  
Clewiston, Florida 33440

Mr. Emman Spain  
Cultural Preservation Department  
Muscogee (Creek) Nation  
Post Office Box 580  
Okmulgee, Oklahoma 74447

Mr. Ron Sparkman  
Chairman  
Shawnee Tribe  
Post Office Box 189  
Miami, Oklahoma 74355

cc: Ms. Kim Jumper  
Tribal Historic Preservation Officer  
Shawnee Tribe  
Post Office Box 189  
Miami, Oklahoma 74355

Chief Glenna J. Wallace  
Eastern Shawnee Tribe of Oklahoma  
127 West Oneida  
Seneca, Missouri 64865

Mr. Elliot York  
Archaeological Data Analyst  
Seminole Tribe of Florida  
Ah-Tah-Thi-Ki Museum  
HC-61, Box 21-A  
Clewiston, Florida 33440



**TENNESSEE HISTORICAL COMMISSION**  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
2941 LEBANON ROAD  
NASHVILLE, TN 37243-0442  
(615) 532-1550

December 6, 2010

Mr. A. Eric Howard  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

RE: TVA, ARCHAEOLOGICAL ASSESSMENT, BYRDSTOWN 161-KV TRANSMISSION LINE,  
UNINCORPORATED, PICKETT COUNTY, TN

Dear Mr. Howard:

At your request, our office has reviewed the above-referenced cultural resources survey report in accordance with regulations codified at 36 CFR 800 (Federal Register, December 12, 2000, 77698-77739). Based on the information provided, we concur that the project area contains no historic properties eligible for listing in the National Register of Historic Places.

If project plans are changed or archaeological remains are discovered during construction, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act.

Your cooperation is appreciated.

Sincerely,

E. Patrick McIntyre, Jr.  
Executive Director and  
State Historic Preservation Officer

EPM/jmb



Date: \_\_\_\_\_  
Saved: \_\_\_\_\_  
Sent to: \_\_\_\_\_  
File: \_\_\_\_\_

STEVEN L. BESHEAR  
GOVERNOR

**TOURISM, ARTS AND HERITAGE CABINET  
KENTUCKY HERITAGE COUNCIL**

MARCHETA SPARROW  
SECRETARY

THE STATE HISTORIC PRESERVATION OFFICE  
300 WASHINGTON STREET  
FRANKFORT, KENTUCKY 40601  
PHONE (502) 564-7005  
FAX (502) 564-5820  
[www.heritage.ky.gov](http://www.heritage.ky.gov)

MARK DENNEN  
EXECUTIVE DIRECTOR AND  
STATE HISTORIC PRESERVATION OFFICER

December 20, 2010

A. Eric Howard  
Cultural Compliance  
Tennessee Valley Authority  
400 West Summit Hill Drive  
Knoxville, Tennessee 37902-1499

**RE: Phase I Archaeological Survey of the Proposed TVA Byrdstown 161-kV Transmission Line Project  
in Clinton and Wayne Counties, Kentucky, by Larry McKee and Ted Karpynec (TRC).**

**REVISED REPORT**

Dear Mr. Howard:

This office has received the above mentioned revised report for review. The authors document 14 new archaeological sites (15WN92-94 and 15CT143-153). Of these 14 sites, the authors consider 15Wn92-94, 15CT143, 15CT145, and 15CT147-153 15Oh206 as not eligible for listing in the NRHP due to the sparse density of artifacts, lack of intact cultural deposits, and/or previously disturbed soil profiles. We concur with these findings. Sites 15CT144 and 15CT146 are considered to be potentially eligible for listing in the NRHP and avoidance was recommended. We concur with these findings. In accordance with 36CFR Part 800.4(d) of the Advisory Council's revised regulations our finding is that there should be **NO HISTORIC PROPERTIES AFFECTED** within the undertaking's area of potential effect, providing that sites 15CT144 and 15CT146 are avoided in their entirety. If these conditions are met, we have no further comments and responsibility to consult with the Kentucky State Historic Preservation Officer under the Section 106 review process for archaeology is fulfilled.

Should you have any questions, feel free to contact Wes Stoner of my staff at 502-564-7005 ext 151.

Sincerely,

Mark Dennen, Executive Director  
Kentucky Heritage Council and  
State Historic Preservation Officer

MD: wds

cc: Dr. George Crothers (KY-OSA)  
Dr. Larry McKee (TRC)

KentuckyUnbridledSpirit.com



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## Byrdstown, Tennessee, 161-kV Transmission Line and Switching Station

### **Baxter, Kelly Renee**

---

**Subject:** FW: TVA, PROPOSED BYRDSTOWN 161-KV TRANSMISSION LINE (TL), CLINTON AND WAYNE COUNTIES, KENTUCKY

---

**From:** Ezzell, Patricia Bernard  
**Sent:** Tuesday, January 04, 2011 8:39 AM  
**To:** Baxter, Kelly Renee  
**Cc:**  
**Subject:** FW: TVA, PROPOSED BYRDSTOWN 161-KV TRANSMISSION LINE (TL), CLINTON AND WAYNE COUNTIES, KENTUCKY

The United Keetoowah Band of Cherokee Indians in Oklahoma had the following response. There were no other responses.

Thanks,

Pat

Pat Bernard Ezzell  
Program Manager  
Tribal Liaison and Corporate Historian  
Tennessee Valley Authority  
400 W. Summit Hill Drive  
460 WT 11D-K  
Knoxville, Tennessee 37902  
Phone: (865) 632-6461  
E-mail: [pbezzell@tva.gov](mailto:pbezzell@tva.gov)

---

**From:** Lisa Larue [<mailto:llarue@unitedkeetoowahband.org>]  
**Sent:** Tuesday, November 09, 2010 11:07 AM  
**To:** Ezzell, Patricia Bernard  
**Subject:** RE: TVA, PROPOSED BYRDSTOWN 161-KV TRANSMISSION LINE (TL), CLINTON AND WAYNE COUNTIES, KENTUCKY

Hi Pat,  
The United Keetoowah Band has no objection to this project. However, if any human remains or funerary objects are inadvertently discovered, please cease work immediately and contact us.  
Thanks!!

**Lisa C. LaRue**

Director, Language, History and Culture

Acting Tribal Historic Preservation Officer

United Keetoowah Band of Cherokee Indians in Oklahoma