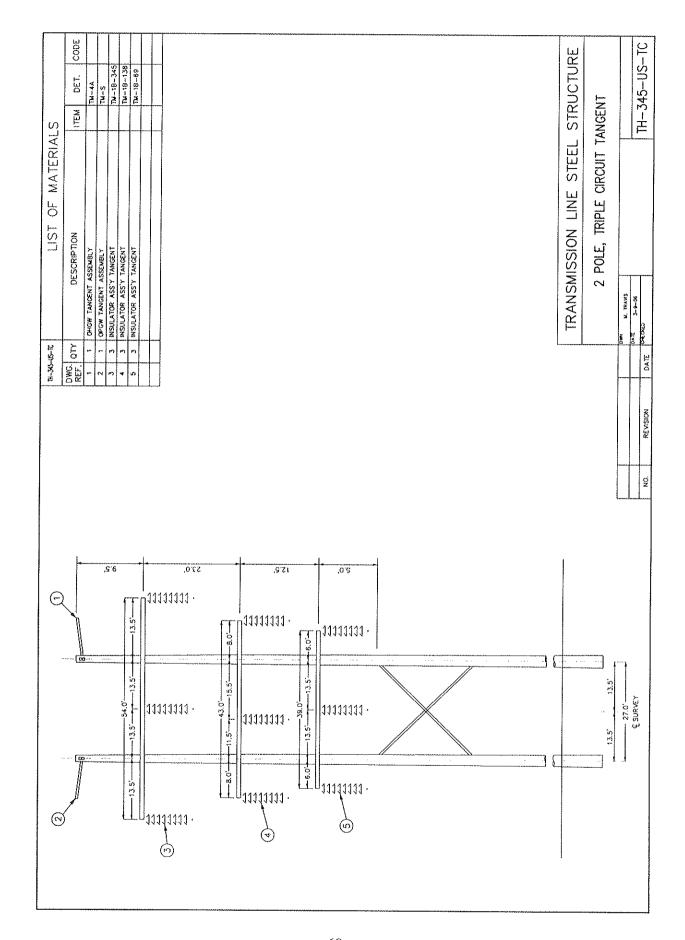
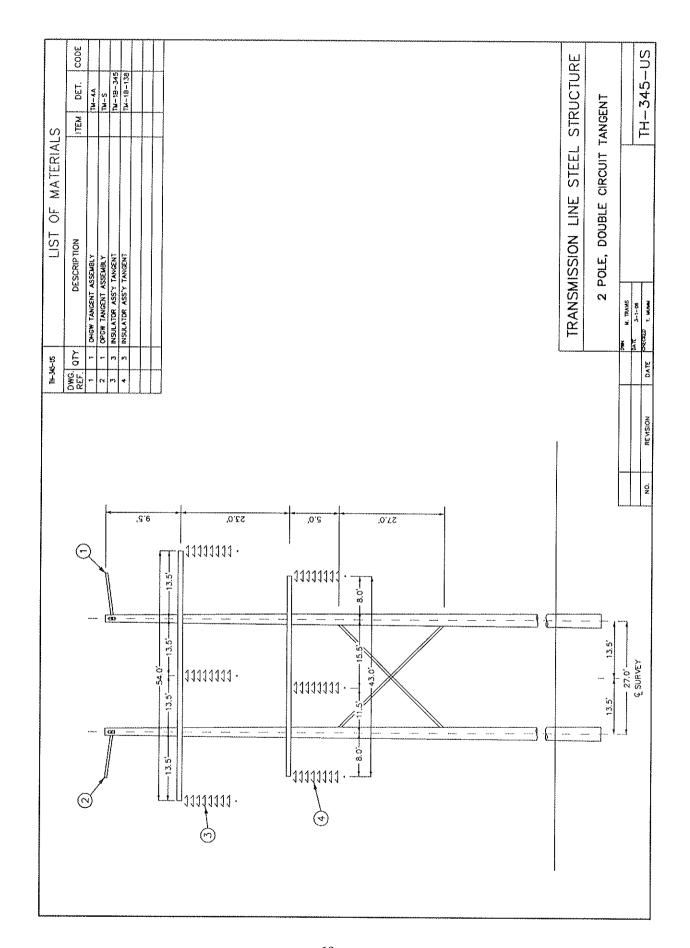
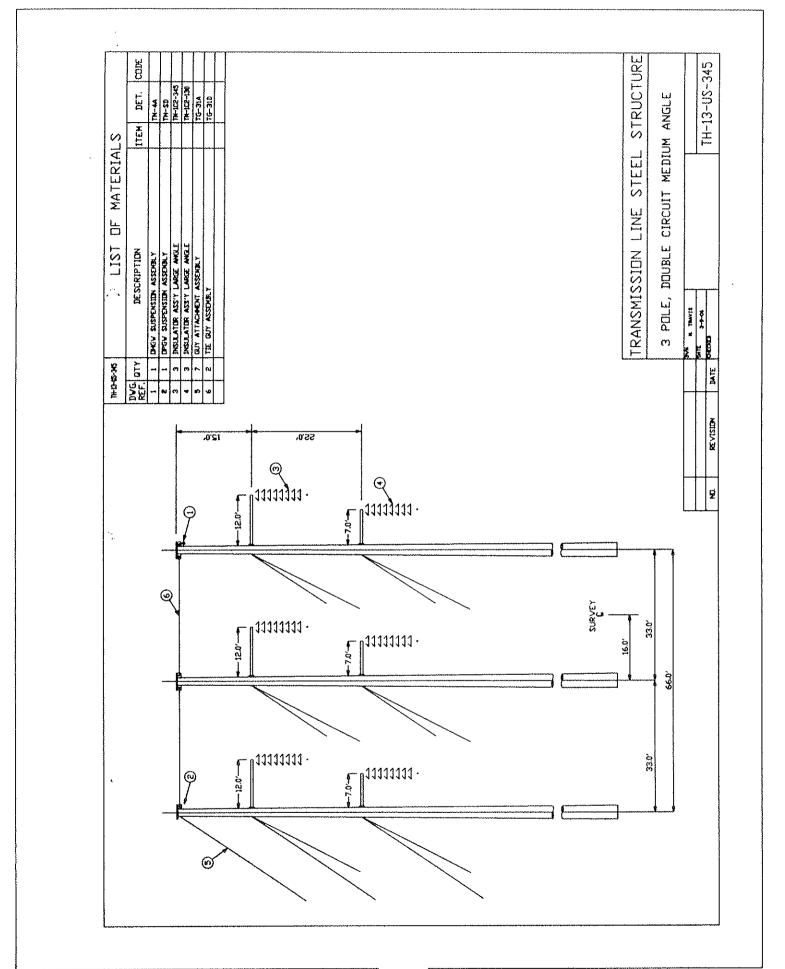
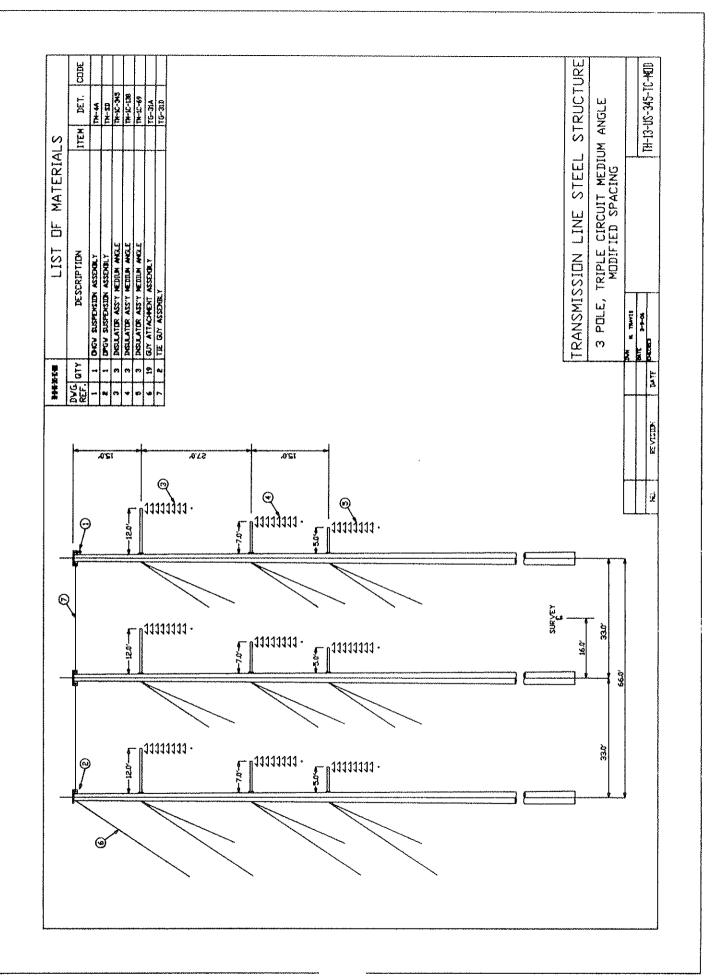
APPENDIX B TRANSMISSION SUPPORT STRUCTURE DIAGRAMS









APPENDIX C AGENCY CORRESPONDENCE



December 20, 2005

2087 Ketchner Road Wellsville, New York 14895 Phone: (585) 593-5696 E-mail: Gilpin@eznet.net

Virgil Lee A. Andrews, Jr., Field Supervisor U.S. Fish and Wildlife Service 3761 Georgetown Road Frankfort, Kentucky 40601

Dear Mr. Andrews:

GILPIN GROUP – Environmental Consulting & Planning is in the process of conducting an environmental investigation and preparing an environmental report for East Kentucky Power Cooperative (EKPC) of Winchester, Kentucky to assess the environmental impacts associated with a proposed new electric transmission line in Clark County, Kentucky. The environmental report will be submitted to the USDA, Rural Utilities Service for its independent review and evaluation.

In addition to informing your agency of EKPC's plans, we are soliciting your advice and comments pertaining to the proposed new transmission line as it relates to threatened and endangered species, wildlife, wildlife refuges, wetlands and other important natural resource concerns. Any written comments received by your agency will be incorporated into the subject environmental investigation and report. A concise description of the proposed electric line and copies of portions of USGS topographic maps locating the proposed new facility are enclosed for your agency's review.

To avoid unnecessary delays in the planning and construction of the proposed project, we would appreciate receiving your written comments within 30 days. Should you have any questions or need additional information pertaining to the proposed project, please do not hesitate to contact me at the mailing address, e-mail address or telephone number given above.

Sincerely,

Gary W. Gilpin

Environmental Scientist/Owner

cc: Joe Settles, EKPC Enclosures

1983-2005

22

YEARS OF SERVICE



United States Department of the Interior

FISH AND WILDLIFE SERVICE

3761 Georgetown Road Frankfort, Kentucky 40601

January 30, 2006

Mr. Gary Gilpin Gilpin Group 2087 Ketchner Road Wellsville, New York 14895

Subject:

FWS #06-0479; East Kentucky Power Cooperative Proposed Transmission Line,

Clark County, Kentucky

Dear Mr. Gilpin:

Thank you for your correspondence of December 20, 2005, regarding the new electric transmission line proposed by East Kentucky Power Cooperative (EKPC) in Clark County, Kentucky. According to your letter, the double circuit 345/138 kV line will be approximately 18.0 miles in length with a 150-foot wide Right-of-Way (ROW). Construction of the new line would involve rebuilding 16.56 miles of existing single circuit 69 kV transmission line supported by double H-frame and triple wood pole structures on existing 100-foot wide ROWs along two separate sections of the proposed route. The proposed new line would utilize the existing 100-foot wide ROW and would require acquisition of an additional 50 feet of ROW width. EKPC is also proposing the construction of two substations in connection with the transmission line that would each occupy approximately 18 acres of land. Fish and Wildlife Service (Service) personnel have reviewed the information submitted, and we offer the following comments.

Running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered species, may occur within the proposed project site. Running buffalo clover is known to occur in habitats ranging from stream banks and low mesic (moderately moist) forests to lawns and cemeteries. EKPC should survey the project area to determine the presence or absence of this species within the project area in an effort to determine if potential impacts to this species are likely. A qualified biologist, and preferably one who holds the appropriate collection permits for this species, must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If this species is identified, we request written notification of such occurrence(s) and further coordination with you. We suggest that a qualified botanist survey the project site during the growing season to determine the presence or absence of this species and that you coordinate with us to determine the adequacy of measures to protect it.

According to our records, summer roost habitat and/or winter hibernacula for the endangered Indiana bat (*Myotis sodalis*) and gray bat (*Myotis grisescens*) may exist within the proposed project area. Based on this information, we believe that: (1) forested areas in the vicinity of and



on the project area may provide potentially suitable summer roosting and foraging habitat for the Indiana bat and potentially suitable foraging habitat for the gray bat (if suitable roosting sites are present); and (2) caves, rockshelters, and abandoned underground mines in the vicinity of and on the project area may provide potentially suitable winter hibernacula habitat for the Indiana bat and/or potentially suitable summer roosting and winter hibernacula habitat for the gray bat. Our belief that potentially suitable habitat may be present, and possibly occupied by one or both of these species, is based on the information provided in your correspondence, the fact that much of the project site and surrounding areas contain forested habitats that are within the natural ranges of these species, and our knowledge of the life history characteristics of these species.

The Indiana bat utilizes a wide array of forested habitats, including riparian forests, bottomlands, and uplands for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH.

Prior to hibernation, Indiana bats utilize the forest habitat around the hibernacula, where they feed and roost until temperatures drop to a point that forces them into hibernation. This "swarming" period lasts, depending on weather conditions in a particular year, from about September 15 to about November 15. This is a critical time for Indiana bats, since they are acquiring additional fat reserves and mating prior to hibernation. Research has shown that bats exhibiting this "swarming" behavior will range up to five miles from chosen hibernacula during this time. For hibernation, the Indiana bat prefers limestone caves, sandstone rockshelters, and abandoned underground mines with stable temperatures of 39 to 46 degrees F and humidity above 74 percent but below saturation.

Gray bats roost, breed, rear young, and hibernate in caves year round. They migrate between summer and winter caves and will use transient or stopover caves along the way. For hibernation, the roost site must have an average temperature of 42 to 52 degrees F. Most of the caves used by gray bats for hibernation have deep vertical passages with large rooms that function as cold air traps. Summer caves must be warm, between 57 and 77 degrees F, or have small rooms or domes that can trap the body heat of roosting bats. Summer caves are normally located close to rivers or lakes where the bats feed. Gray bats have been known to fly as far as 12 miles from their colony to feed.

Because we have concerns relating to these species on this project and due to the lack of occurrence information available on these species relative to the proposed project area, we have the following recommendations relative to Indiana bats and gray bats.

1. Based on the presence of numerous caves, rockshelters, and underground mines in Kentucky, we believe that it is reasonable to assume that other caves, rockshelters, and/or abandoned underground mines may occur within the project area, and, if they occur, they could provide winter habitat for Indiana bats and/or summer and winter habitat for the gray bat. Therefore, we recommend that you survey the project area for caves,

- rockshelters, and underground mines, identify any such habitats that may exist on-site, and avoid impacts to those sites pending an analysis of their suitability as Indiana bat and/or gray bat habitat by this office. Please provide us with the results of this survey.
- 2. We also recommend that the applicant only remove trees within the project area between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. However, if any Indiana bat hibernacula are identified on the project area or are known to occur within 10 miles of the project area, we recommend the applicant only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.

If these recommendations cannot be accomplished and incorporated as project conditions, you should survey the project area to determine the presence or absence of these species within the project area in an effort to determine if potential impacts to these species are likely. A qualified biologist who holds the appropriate collection permits for these species must undertake such surveys, and we would appreciate the opportunity to approve the biologist's survey plan prior to the survey being undertaken and to review all survey results, both positive and negative. If any Indiana bats and/or gray bats are identified, we request written notification of such occurrence(s) and further coordination and consultation with you.

Surveys would not be necessary if sufficient site-specific information was available that showed: (1) that there is no potentially suitable habitat within the project area or its vicinity or (2) that the species would not be present within the project area or its vicinity due to site-specific factors. Please provide us with a written justification or explanation if either would apply to the proposed project site.

We appreciate the opportunity to provide input on this project. If you have any questions, please contact Mindi Lawson of my staff at (502) 695-0468.

Sincerely,

Virgil Lee Andrews, Jr.

Field Supervisor



March 1, 2006

Mr. Lee Andrews U.S. Fish and Wildlife Service Frankfort Field Office 3761 Georgetown Road Frankfort, KY 40601

Dear Lee,

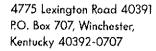
RE: Smith-Sideview 345 kV Transmission Line and Substation Project

Thank you for providing your comments regarding the Smith-Sideview project in your letter dated January 30, 2006. I would also like to thank you for taking the time to discuss this project and others in our meeting at our facility on February 23rd. As you are aware, the vast majority (approximately 92%) of this project involves rebuilding of an existing transmission line. The existing right-of-way will be expanded from 100 feet to 150 feet to accommodate the larger voltage line.

In your letter, you suggested that EKPC conduct surveys of the proposed project for three federally endangered species. The species and surveys suggested were:

- Running buffalo clover (*Trifolium stoloniferum*): a botanical survey of the project to determine presence/absence of the species in the proposed project area.
- Gray bat (Myotis grisescens): a survey of the project area for potential summer and winter roosting habitat
- Indiana bat (Myotis sodalis): a survey for potential winter roosting habitat, and a mist netting survey of the proposed project area to determine presence/absence of the species if EKPC plans to clear potential Indiana bat habitat between March 31 and October 15.

In regards to running buffalo clover, EKPC surveyed the substation and proposed transmission line during the latter parts of September 2005 in an effort to determine the presence/absence of the species. This species was not discovered during these survey efforts. After surveying this line last fall, EKPC is willing to conduct additional site visits in the portions of the line that appeared to provide the best potential habitat in the spring of 2006. EKPC will provide written notification of the absence or presence of the species upon completion of these additional site visits. In the unlikely event the species is discovered, EKPC will coordinate further activities related to this species with your office.



Tel. (859) 744-4812 Fax: (859) 744-6008 http://www.ek_F 77



In regards to roosting habitat for the gray bat, the project area was surveyed for caves, rockshelters, and underground mines during our site visits in 2005. None of these features occur in the proposed project area. It is the opinion of EKPC biologists that the project will not have an adverse effect on gray bats or gray bat roosting habitat.

In regards to the Indiana bat, EKPC surveyed the proposed project area in 2005 for winter roosting habitat in the form of caves, rockshelters, and underground mines. None of these features were discovered in the proposed project area. Potential summer roosting habitat for this species does occur in limited portions of the project area. In order to determine the presence/absence of the species, EKPC will conduct a mist netting survey in areas of the project that provide suitable summer roosting habitat for Indiana bats. The mist netting survey will commence on May 15, 2006 and the mist-netting effort will be consistent with the amount of disturbance to potential summer roosting habitat.

EKPC will provide you with the results of the mist netting data upon completion of the surveys. In the event an Indiana bat is captured, EKPC will place a transmitter upon the bat and attempt to track the bat to its summer roost. At that time EKPC would coordinate all further project activity related to this species with your office.

Based on the efforts and commitments above and in the event that no new populations of running buffalo clover are found, no new roosting habitat for gray bats is discovered, or no Indiana bats are captured in the project area; EKPC would like to request concurrence on the project with a "not likely to adversely effect statement" for the federally endangered species listed above. In the event that running buffalo clover, gray bats, or Indiana bats are discovered in the project area, EKPC will provide notification and coordinate all further project activities related to the species with your office.

I appreciate your help in this matter, and I look forward to your timely response. If you have any questions, please do not hesitate to give me a call.

Sincerely,

Joe Settles

Supervisor, Natural Resources

And Environmental Communications



United States Department of the Interior

FISH AND WILDLIFE SERVICE 3761 Georgetown Road Frankfort, Kentucky 40603

March 9, 2006

Mr. Joe Settles Eastern Kentucky Power Cooperative 4775 Lexington Road Winchester, Kentucky 40391

Subject:

FWS #06-0479a; East Kentucky Power Cooperative Proposed Smith-Sideview

345 kV Transmission Line, Clark County, Kentucky

Dear Mr. Settles:

Thank you for your letter dated March 1, 2006 regarding the Smith-Sideview 345 kV transmission line and substation project in Clark County, Kentucky. In a previous letter dated January 30, 2006 regarding this project, the Service recommended that East Kentucky Power Cooperative (EKPC) conduct surveys of the proposed project for three federally endangered species: running buffalo clover, Indiana bat, and gray bat. EKPC is requesting a "not likely to adversely affect" determination from the Service contingent upon future surveys for these species in order to move forward on associated environmental documents. Fish and Wildlife Service (Service) biologists have reviewed your letter, and we offer the following comments.

In order to obtain a determination of "not likely to adversely affect" for the project, EKPC will perform additional surveys for running buffalo clover and the Indiana bat. Additional site visits in the portions of the line that appeared to provide the best potential habitat for running buffalo clover will take place in the spring 2006. In regards to summer and/or winter habitat for the gray bat and winter habitat for the Indiana bat, the project area was surveyed for caves, rockshelters, and underground mines during site visits in 2005. No features providing suitable habitat for the gray bat and Indiana bat were found during those surveys. Additional surveys regarding winter/summer habitat for the gray bat and winter habitat for the Indiana bat will not be necessary. However, potential summer roosting habitat for the Indiana bat does exist within the project area. EKPC will conduct mist-netting surveys in areas of the project that provide suitable summer roosting habitat for Indiana bats. The mist netting surveys will commence on May 15, 2006, and will be consistent with the amount of disturbance to potential summer roosting habitat. EKPC will provide the Service with the results of the mist netting data upon completion of the surveys. In the event an Indiana bat is captured, EKPC will place a transmitter on the bat and attempt to track the bat to its summer roost and will coordinate with this office all further project activity related to the Indiana bat. Construction will not take place until all survey work for each of these species has been completed and reviewed by this office.

Based on EKPC's commitment to perform survey work before construction begins and notify the Service of any listed species found as a result of surveys, we believe that a determination of "not



likely to adversely affect" for the Indiana bat, gray bat, and running buffalo clover is warranted. In view of this, we believe that the requirements of section 7 of the Endangered Species Act have been fulfilled for this project. Your obligations under section 7 must be reconsidered, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action. Thank you for the opportunity to comment on this action.

If you have any questions or if we can be of further assistance, please contact Mindi Lawson at (502)/695-0468 (ext.229).

Sincerely,

Virgil Lee Andrews, Jr.

Field Supervisor

None would require a Section 10 permit.

We have a listing of all our navigable waters on our internet site - www.frl.usace.army.mil

When you get into that site click on Obtain a Permit and then Information.

From: GILPIN GROUP - Environmental Consulting [mailto:gilpin@eznet.net]

Sent: Tuesday, February 07, 2006 11:08 AM

To: Devine, Lee Anne LRL

Cc: Joe Settles

Subject: Proposed Smith to Sideview Electric Transmission Line

Lee Anne Devine U.S. Army Corps of Engineers Louisville District

Dear Ms. Devine.

East Kentucky Power Cooperative is proposing to construct an electric transmission line in Clark County, Kentucky, which would cross a number of streams. Please review the list of proposed stream crossings given below and notify me know as to whether any are considered navigable and are subject to the provisions of Section 10 of the Rivers and Harbors Act of 1899:

- Donaldson Creek- northern Clark Co. near the Clark/Montgomery County Line;
- Stoner Creek northern Clark Co., north of I-64;
- Cabin Creek northern Clark Co., north of I-64;
- East Fork Fourmile Creek central Clark Co.:
- Long Branch southern Clark Co.;
- Indian Creek southern Clark Co.; and
- Upper Howard Creek.

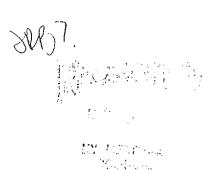
Should you have any questions, please contact me at this e-mail address or at the telephone number given below.

Thank you,
Gary W. Gilpin
Environmental Scientist/Owner
GILPIN GROUP - Environmental Consulting & Planning
(585) 593-5696



December 7, 2005

Mr. David Morgan Kentucky Heritage Council 300 Washington Street Frankfort, Kentucky 40601



Dear David,

I appreciate Dave Pollack and Janie Rice Brothers for taking the time to look at the maps for some of our projects this morning. We looked at maps from the following projects:

Gap of the Ridge Smith-Sideview Barren-Oakland-Magna GM-Memphis Junction

After looking at the maps, it was my understanding that the Smith-Sideview and Gap of the Ridge projects will not have any impacts on archaeological, cultural or historical resources.

Upon reviewing the Barren-Oakland-Magna project maps, Dave and Janie Rice made the following recommendations for the following structures:

BN 220, BN 214, BN 211, BN 210

- these structures need to be evaluated relative to the line location, a determination of eligibility should be made, photographs of the structures should be taken, and forms for these structures need to be updated.
 - The general area surrounding this portion of project area should be evaluated

For the GM – Memphis Junction project the same recommendations as above were made for structures:

WA 135, WA 132, WA 131, WA 325, and WA 318.

I appreciate your attention in these matters. Please contact me as soon as possible if Dave and Janie Rice do not agree with my assessment of today's meeting. We will work to fulfill the above recommendations for the two projects.

the Settles

Sincerel

Joe Settles

Supervisor, Natural Resources and Environmental Communications



December 13, 2005

Mr. David Morgan Kentucky Heritage Council 300 Washington Street Frankfort, Kentucky 40601

Dear David:

Smith - Sideview 345kV Transmission Line and Substation Re: Gap of the Ridge 69 kV Transmission Line and Substation

After showing maps to Dave Pollack and Janie Rice Brothers, they have determined the above projects can move forward under the language in the Categorical Exclusion, Programattic No Effect we have in place with the Kentucky Heritage Council for 2005.

I appreciate the time and efforts of you and your staff in these matters.

Joe Settles

Sincerely,

Supervisor, Natural Resources

and Environmental Communications



December 20, 2005

2087 Ketchner Road Wellsville, New York 14895 Phone: (585) 593-5696 E-mail: Gilpin@eznet.net

Mike Hardin, Fisheries program Coordinator Kentucky Department of Fish & Wildlife Resources Arnold L. Mitchell Building #1 Game Farm Road Frankfort, Kentucky 40601

Dear Mr. Hardin:

GILPIN GROUP – Environmental Consulting & Planning is in the process of conducting an environmental investigation and preparing an environmental report for East Kentucky Power Cooperative (EKPC) of Winchester, Kentucky to assess the environmental impacts associated with a proposed new electric transmission line in Clark County, Kentucky. The environmental report will be submitted to the USDA, Rural Utilities Service for its independent review and evaluation.

In addition to informing your agency of EKPC's plans, we are soliciting your advice and comments pertaining to the proposed new transmission line as it relates to threatened and endangered species. Any written comments received by your agency will be incorporated into the subject environmental investigation and report. A concise description of the proposed electric line and copies of portions of USGS topographic maps locating the proposed new facility are enclosed for your agency's review.

To avoid unnecessary delays in the planning and construction of the proposed project, we would appreciate receiving your written comments within 30 days. Should you have any questions or need additional information pertaining to the proposed project, please do not hesitate to contact me at the mailing address, e-mail address or telephone number given above.

Sincerely,

Gary W. Gilpin

Epvironmental Scientist/Owner

cc: Joe Settles, EKPC Enclosures

1983-2005

22

YEARS OF SERVICE



KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES COMMERCE CABINET

Ernie Fletcher Governor

#1 Sportsman's Lane Frankfort, Kentucky 40601 Phone (502) 564-3400 1-800-858-1549 Fax (502) 564-0506 fw.ky.gov January 26, 2006

Secretary

George Ward

Dr. Jonathan W. Gassett Commissioner

Gary W. Gilpin Gilpin Group Environmental Consulting and Planning 2087 Ketchner Road Wellsville, New York 14895

RE: Threatened/endangered species, critical habitat review, and potential environmental impacts associated with a proposed new electric transmission line and associated substations located in eastern Clark County, Kentucky.

Dear Mr. Gilpin:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) have received your request for the above-referenced information. The Kentucky Fish and Wildlife Information System (KFWIS) indicate that federally listed Indiana bat, *Myotis sodalis*, and the federally listed gray bat, *Myotis grisescens*, are known to occur within close proximity to the project area. Please be aware that our database system is a dynamic one that only represents our current knowledge of the various species distributions.

Based on this information, KDFWR makes the following recommendations:

- The Indiana bat utilizes a wide array of habitats, including riparian forests, upland forest, and fencerows for both summer foraging and roosting habitat. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e., dead trees or dead portions of live trees). Trees in excess of 16 inches diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable maternity roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH. Removal of suitable Indiana bat roost trees due to construction of the proposed project should be completed between October 15 and March 31 in order to avoid impacting summer roosting Indiana bats. However, if any Indiana bat hibernacula are identified on the project area or are known to occur within 10 miles of the project area, we recommend the applicant only remove trees between November 15 and March 31 in order to avoid impacting Indiana bat "swarming" behavior.
- In areas where gray bats are known to occur, cave entrances and mine portals that exist within the project area should be surveyed for potential use by gray bats. Because gray bats are cave residents year-round and maternity colonies are generally found in close proximity to rivers, streams, and lakes, any caves or mine portals within the project area could offer potentially valuable habitat to resident gray bats.
- To minimize impacts to aquatic resources and bat foraging areas strict erosion control measures should be developed and implemented prior to construction to minimize siltation into karst areas



located within the project area. Such erosion control measures may include, but are not limited to silt fences, staked straw bales, brush barriers, sediment basins, and diversion ditches. Erosion control measures will need to be installed prior to construction and should be inspected and repaired regularly as needed.

For more information on how to precede with the threatened/endangered species surveys please contact the US Fish and Wildlife Service Kentucky Field Office at (502) 695-0468 or this office at (502) 564-7109 Extension 366.

I hope this information proves helpful to you. If you have any questions or require additional information, please call me at (502) 564-7109 Extension 366.

Sincerely,

Doug Dawson

Wildlife Biologist III

Cc: Environmental Section File

Gary W. Gilpin Environmental Scientist/Owner

GILPIN GROUP - Environmental Consulting & Planning

(585) 593-5696

Gary: The below listed streams are not OSRWs or exceptional waters.

Randy Payne

Kentucky Division of Water

Water Quality Branch

502-564-3410

From: GILPIN GROUP - Environmental Consulting [mailto:gilpin@eznet.net]

Sent: Saturday, February 25, 2006 4:13 PM **To:** Payne, Randall (EPPC DEP DOW)

Cc: Joe Settles

Subject: Special Use Waters

Randall Payne

Ky. Dept. of Environmental Protection

Division of Water

Randy,

East Kentucky Power Cooperative is proposing to construct a new Smith to Side View Transmission Line that would traverse the following streams:

- Donaldson Creek (northern Clark County);
- Stoner Creek (northern Clark County);
- · Cabin Creek (northern Clark County);
- East Fork Fourmile Creek (central Clark County);
- Long Branch (southern Clark County);
- Indian Creek (southern Clark County); and
- Upper Howard Creek (southern Clark County).

Please review this list and notify me as to whether any of the creeks listed are recognized as Outstanding State Resource Waters, or special use or exception waters.

Thanks, Gary...