NRR-PMDAPEm Resource

From: Balsam, Briana

Sent: Wednesday, September 19, 2012 11:15 AM

To: Fells, Carmen Logan, Dennis

Subject: Callaway: Copies of correspondence regarding T&E species **Attachments:** Callaway T&E email correspondence through 9-19-2012.pdf

Carmen,

As you requested during the writing session, I attached all of the email correspondence to date that I have sent or received regarding T&E species with FWS and Missouri state agencies. Dennis may have additional emails to/from FWS regarding pallid sturgeon data, but I am not sure if he contacted FWS via phone or email for this information. For the SEIS, I believe only the more formal emails need to be included in the agency correspondence appendix.

I will forward this email and attachment on to the NRR PMDA Email capture system so that we can get one ML# for all of the emails. Once I get the ML#, I will forward it on to you.

Briana

Briana A. Balsam

Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042

briana.balsam@nrc.gov

Hearing Identifier: NRR_PMDA

Email Number: 485

Mail Envelope Properties (Briana.Balsam@nrc.gov20120919111500)

Subject: Callaway: Copies of correspondence regarding T&E species

Sent Date: 9/19/2012 11:15:20 AM **Received Date:** 9/19/2012 11:15:00 AM

From: Balsam, Briana

Created By: Briana.Balsam@nrc.gov

Recipients:

"Logan, Dennis" < Dennis.Logan@nrc.gov>

Tracking Status: None

"Fells, Carmen" < Carmen. Fells@nrc.gov>

Tracking Status: None

Post Office:

Files Size Date & Time

MESSAGE 947 9/19/2012 11:15:00 AM

Callaway T&E email correspondence through 9-19-2012.pdf 1047317

Options

Priority:StandardReturn Notification:NoReply Requested:NoSensitivity:Normal

Expiration Date: Recipients Received:

From: Balsam, Briana

Sent: Thursday, April 26, 2012 10:58 AM

To: 'amy_salveter@fws.gov'

Cc: Logan, Dennis

Subject: NRC's review of Callaway Plant license renewal application

Attachments: ML12096A369 Callaway_NRC to FWS_4-20-12.pdf

ADAMSAccessionNumberML121170369

Hi Amy,

I am a biologist with the U.S. Nuclear Regulatory Commission (NRC). My supervisor, Jeremy Susco, forwarded you a copy of the attached letter regarding listed species and critical habitats under the ESA that may occur in the action area for the Callaway Plant proposed license renewal. You should receive a paper copy of the letter soon, if you have not already.

I am contacting you for two purposes: (1) to invite you or members of your staff to visit the Callaway site, and (2) to let you know that your office is welcome to submit scoping comments under our NEPA process.

Myself and the other biologist on the project, Dennis Logan, will be on the Callaway site during the week of May 21 to participate in the NRC's environmental audit for the license renewal application review. Based on our preliminary review and your office's previous correspondence with AmerenUE (NRC's licensee), NRC doesn't expect that the license renewal would adversely affect any listed species, so we don't anticipate needing to coordinate heavily with your staff during our review. However, we want to extend the invitation for you to visit the site as a courtesy and to provide you with the opportunity to see the site, meet us face-to-face, and voice any environmental concerns you may have about the project.

I also want to let you know that you will be receiving two similar letters from NRC, which may be confusing—the first one (attached) concerns the NRC's review of Federally listed species and critical habitat under the ESA. The second letter will inform you of our NEPA process for the license renewal review. I apologize that the letter did not specifically mention scoping comments, but we would welcome any comments you may have on the review. You can address such comments to Dave Wrona, who signed the second letter.

Thank you for your time,

Briana

Briana A. Balsam

Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042

briana.balsam@nrc.gov



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

April 20, 2012

Mr. Tom Melius Midwest Regional Director U.S. Fish and Wildlife Service 1 Federal Drive Ft. Snelling, MN 55111

SUBJECT: REQUEST FOR CONCURRENCE WITH LIST OF FEDERALLY PROTECTED

SPECIES AND HABITATS FOR THE PROPOSED CALLAWAY PLANT

LICENSE RENEWAL

Dear Mr. Melius:

The U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing an application to renew the operating license for the Callaway Plant, Unit 1 (Callaway) located in Fulton, Missouri. Union Electric Company, a subsidiary of Ameren Corporation and doing business as Ameren Missouri (Ameren), submitted its application for renewal to the NRC in a letter dated December 19, 2011, pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54). If approved, the license renewal would authorize Ameren to operate Callaway for an additional 20 years beyond the current licensing period, which expires October 24, 2024.

Ameren corresponded with the U.S. Fish and Wildlife Service (FWS) concerning Federally protected species under the Endangered Species Act of 1973, as amended (ESA) in April 2010 (Enclosure 1) while it was in the process of compiling its license renewal application. In your June 2010 response (Enclosure 2), you indicated that the proposed license renewal is unlikely to adversely affect any Federally listed species and that the FWS has no major concerns with the potential effects of continued operation of Callaway.

The purpose of this letter is to seek updated information, if applicable, to aid the NRC staff's assessment of potential impacts to Federally listed species that could result from the proposed license renewal.

Project Description

The proposed license renewal would include continued operation and maintenance of the Callaway plant and four transmission lines. Ameren does not plan to construct any new buildings, transmission lines, or undertake any other land-clearing or ground-disturbing activities as part of the license renewal.

Callaway lies approximately 10 miles southeast of Fulton, Missouri, and 80 miles west of the St. Louis metropolitan area. The Callaway site is 7,354 acres and lies in a predominantly rural area. Power generating facilities, including the containment building, a natural draft cooling tower, a switchyard, a retention pond, a water treatment plant, and other associated buildings and infrastructure occupy 512 acres (see Enclosure 3). The Missouri Department of Conservation (MDC) manages 6,300 acres of the site as the Reform Conservation Area, much of which is open to the public for hiking, birding, hunting, and fishing. The MDC also manages

T. Melius -2-

this area to conserve natural habitats and remove invasive plant species. The remaining site land consists of deciduous forest, grassland/pasture, and cropland.

Callaway is a single-unit pressurized water reactor plant that uses a closed-cycle cooling water system. Callaway withdraws about 14,000 to 17,000 gallons per minute of water from the Missouri River for cooling purposes. Water travels through pipes approximately five miles north from the Missouri River to the plant. The cooling water intake system includes vertical traveling screens and fish escape openings in the side walls, but no fish-return system. Heated water is discharged to a natural draft cooling tower, and water that does not evaporate returns to the Missouri River as blowdown.

Ameren constructed four transmission lines to connect Callaway to the power grid (see Enclosure 4). Montgomery lines #1 and #2 extend northeast for 23.2 miles to a substation near Florence, Missouri. The Bland line extends 31.5 miles southeast to a substation north of Owensville, Missouri. The Loose Creek line extends 23.3 miles southwest to a substation near Loose Creek, Missouri. The transmission line corridors pass through land that is primarily forested and farmland.

Federally Listed Species

To ensure compliance with the ESA, the NRC staff will consider effects of the proposed license renewal on Federally listed species and document its analysis in an environmental impact statement.

During its preliminary review, the NRC identified 11 Federally listed species that may occur in the vicinity of Callaway. In addition to those species identified by Ameren in its 2010 correspondence with FWS, the NRC identified three mussel species that the FWS has recently listed that occur in the vicinity of Callaway: sheepnose (*Plethobasus cyphyus*), snuffbox (*Epioblasma triquetra*), and spectaclecase (*Cumberlandia monodonta*). The NRC did not identify any designated critical habitat on the Callaway site or along the associated transmission line corridors. The NRC also did not identify any proposed species or proposed critical habitat in the vicinity of Callaway. Enclosure 5 is a table of Federally listed species.

Conclusion

The NRC requests your concurrence with its table of Federally listed species per 50 CFR 402.12(d). The NRC also requests any additional information that you may have on Federally listed species and designated critical habitats that might aid the staff in its review.

The Callaway license renewal application is available on the internet at http://www.nrc.gov/reactors/operating/licensing/renewal/applications/callaway.html. If you have any questions or require additional information regarding the project, please contact Carmen Fells, Project Manager, by phone at 301-415-6337 or by e-mail at Carmen.Fells@nrc.gov. For questions specific to Federally protected species or the ecology review, please contact Briana Balsam, Biologist, by phone at 301-415-1042 or by e-mail at Briana.Balsam@nrc.gov.

T. Melius - 3 -

I have also sent a copy of this letter to Ms. Amy Salveter, Field Supervisor, FWS Columbia Missouri Field Office. I understand that Ms. Salveter replaced Mr. Charlie Scott, who was Ameren's main point of contact related to threatened and endangered species during Ameren's preparation of its license renewal application in 2010.

Sincerely,

Jeremy J. Susco, Acting Chief Environmental Review and Guidance Update Branch Division of License Renewal Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures: As stated

cc w/encls: Listserv

Ameron Services

Environmental Services 314.554.2978 (Phone) 314.554.4182 (Facsimile ktyno@ameren.com One Ameren Plaza 1901 Chouteau Avenue PO Box 66149 St. Louis, MO 68166-6149 314621.3222

April 16, 2010

Charlie Scott, Field Supervisor U.S. Fish and Wildlife Service Columbia Missouri Field Office 101 Park DeVille Drive, Suite A Columbia, MO 65203-0057



E: Callaway Unit 1 License Renewal--Request for Information on Threatened or Endangered Species

Dear Mr. Scott:

In late fall 2011, AmerenUE plans to apply to the U.S. Nuclear Regulatory Commission (NRC) for renewal of the operating license for Callaway Unit 1 in Callaway County, Missouri. The existing operating license for Callaway Unit 1 was initially issued for a 40-year term that will expire in 2024. License renewal would extend the operating period for the plant by 20 years beyond the expiration of the existing license.

The NRC requires each applicant for renewal of an operating license to submit an Environmental Report describing potential environmental impacts from license renewal and from operation during the renewal term. Accordingly, the NRC requires [10 CFR 51.53(c)(3)(ii)(E)] that the Environmental Report for each license renewal application assess impacts to threatened and endangered species in accordance with the Endangered Species Act. The NRC will use this assessment in its review of the project pursuant to the National Environmental Policy Act (NEPA) and to determine the appropriate level of consultation (informal or formal) under Section 7 of the Endangered Species act.

We are contacting you now in order to obtain input regarding issues of concern to your office and to identify any information your staff believes would be helpful to expedite the Section 7 consultation.

Callaway Unit 1 is located in Callaway County (Figures 1 and 2), approximately five miles north of the Missouri River. The 7,350-acre site lies in a largely rural area dominated by deciduous forests, grassland/pasture, and cropland. Approximately 512 acres of the site property consists of the power generating facilities and associated infrastructure. Most of the remaining land consists of deciduous forest (approximately 47%), grassland/pasture (approximately 30%),

subsidiacy of America Corporation

and cropland (13%) (Figure 3). Much of the Callaway site (approximately 6,300 acres) is managed by the Missouri Department of Conservation as the Reform Conservation Area. Most of the managed land is open to the public for multiple uses, including hiking, birding, hunting, and fishing. The MDC also manages this area by conserving natural habitats and removing invasive exotic plant species.

The transmission lines built to connect Callaway Unit 1 to the grid are approximately 72 miles in length and occupy three main corridors (Figure 4): identified here as Northern (2 lines combined in one corridor), Southwestern, and Southeastern (Figure 4). The two southerly corridors depart the site as a combined corridor that crosses the Missouri River prior to splitting into two divergent corridors. For the most part, all corridors pass through deciduous forests, agricultural lands and pasture/rangeland. No lands designated by the USFWS as "critical habitat" for endangered or threatened species are crossed by these corridors, nor do they cross any state or federal parks, wildlife refuges or preserves, or wildlife management areas, other than the Reform Conservation Area within the Callaway site.

Based on a review of information on the Missouri Department of Conservation (MDC) and U.S. Fish and Wildlife Service (USFWS) websites (county lists of threatened and endangered species) and previous on-site surveys, AmerenUE believes that only one special-status species, the federally-protected bald eagle, occurs on the Callaway site. The bald eagle is occasionally observed on the Callaway site, typically near the Missouri River, and nesting by the species has been documented in the four counties containing the site and its transmission lines. Two bat species, gray and Indiana bats, are federally endangered and occur in the four counties. Neither species has been observed on Callaway property, although a gray bat has been documented in a cave along an off-site segment of Auxvasse Creek. Three federally-listed fish species occur or have occurred in the four counties associated with the site/transmission corridors. The pallid sturgeon has been documented on occasion in the Missouri River near the Callaway Plant outfall. Topeka shiners were found in nearby Auxvasse Creek in 1945, but have not been found there since that time. Niangua darters are restricted to the Osage River watershed (Osage County, crossed by transmission corridor). Also, three species of federally-listed mussels may occur in the Missouri River and/or associated tributaries (Table 1), but none has been collected near Callaway property. Several other federal and state-protected plants and animals are listed for the counties containing Callaway and its associated transmission corridors (see Table 1).

AmerenUE does not expect Callaway Unit 1 operations during the license renewal term to adversely affect threatened or endangered species because license renewal will not alter existing operations. No expansion of existing facilities is planned, and no structural modifications or refurbishment activities have been identified that are necessary to support license renewal. Maintenance activities during the license renewal term would be restricted to previously disturbed areas. The company associated with transmission line maintenance and transmission corridor management has established procedures that involve minimal disturbance of land,

wetlands, and streams and thus are unlikely to adversely affect any threatened or endangered species.

After your review of the information provided in this letter, we would appreciate your sending a letter detailing any concerns you may have about any listed species or critical habitat in the area of the Callaway Unit 1 site and the associated transmission corridors, or alternatively, confirming our conclusion that operation of Callaway Unit 1 over the license renewal term would have no effect on any threatened or endangered species, if possible, no later than June 10, 2010.

AmerenUE will include copies of this letter and your response in the Environmental Report that will be submitted to the NRC as part of the Callaway Unit 1 license renewal application.

Please do not hesitate to contact me if there are questions or you need additional information to complete a review of the proposed action. Thank you in advance for your assistance.

Sincerely,

Kenneth W. Lynn

Consulting Environmental Scientist

Attachments: Table 1, Figures 1, 2, 3 and 4

Tenneck W. Lyn

Table 1. Protected species in the counties containing the Callaway Plant and its associated transmission lines.

Group			ederal/State Stat	us' By Cou	nty
Common Name	Scientific Name	Callaway	Montgomery	Osage	Gasconade
Amphiblan					
Eastern Hellbender	Cryptobranchus alleganiensis	-/-	-/E	-/E	-/E
Bird					
Northern Harrier	Circus cyaneus	-/E	-/E	/E	-/E
Bald Eagle	Haliaeetus leucocephalus	P2/-	-/-	P2/-	-/-
Fish					
Lake Sturgeon	Acipenser fulvescens	-/E	-/E	-/E	-/E
Crystal Darter	Crystallaria asprella	-/-	-/-	-/-	-/E
Niangua Darter	Etheostoma nianguae	-/-	-/-	E/E	-/-
Topeka Shiner	Notropis topeka	T/-	-/-	-/-	-/-
Flathead Chub	Platygobio gracilis	-/E	-/E	-/E	-/E
Pallid Sturgeon	Scaphirhynchus albus	E/E	E/E	E/E	E/E
Mammals					
Gray Bat	Myotis grisescens	E/E	-/-	E/E	E/E
Indiana Bat	Myotis sodalis	E/E	E/E	-/-	E/E
Mollusks					
Spectaclecase	Cumberlandia monodonta	-/-	-/-	C/-	C/-
Elephantear	Elliptio crassidens	-/-	-/-	-/E	-/E
Ebonyshell	Fusconaia ebera	-/-	-/-	-/E	-/E
Pink Mucket	Lampsilis abrupta	-/-	-/-	E/E	E/E
Scaleshell	Leptodea leptodon	-/-	-/-	E/E	E/E
Plants					
Running Buffalo Clover	Trifolium stoloniferum	E/E	E/E	-/-	-/-

Federal/State protected status: E = listed as endangered under federal/state law within this county, T = threatened, C = candidate species, and "-" = not listed.

P: bald eagles are no longer protected under the Endangered Species Act, but still receive federal protection under the Bald and Golden Eagle Protection Act.

Figure 1: 50-Miles Radius Surrounding the Callaway Plant Site

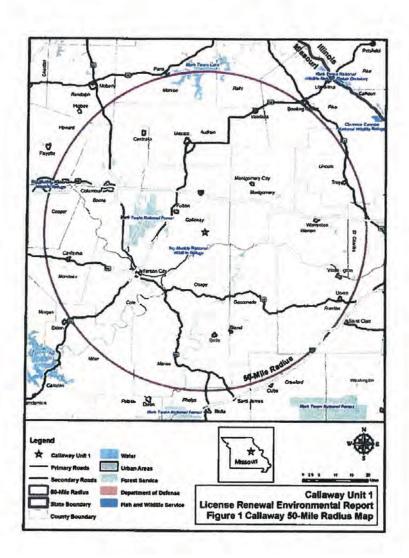


Figure 2: Callaway Plant Site Boundary

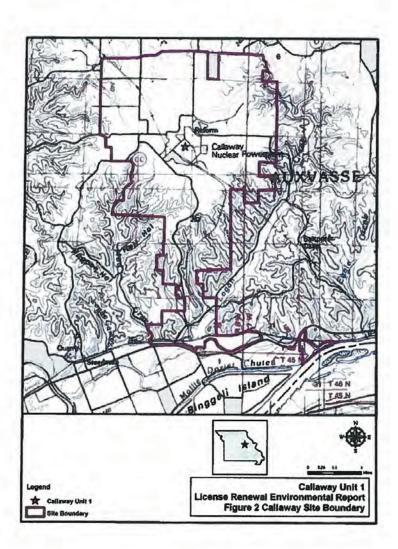


Figure 3: Callaway Plant Site Land Cover

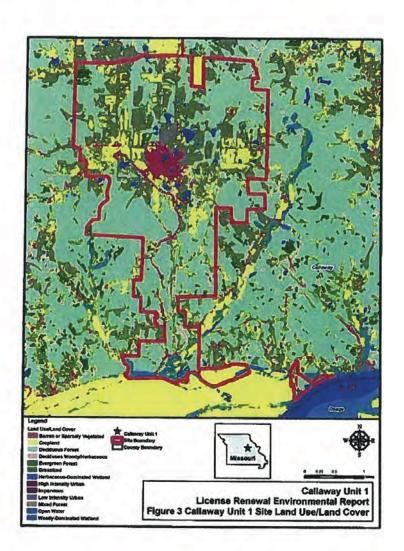
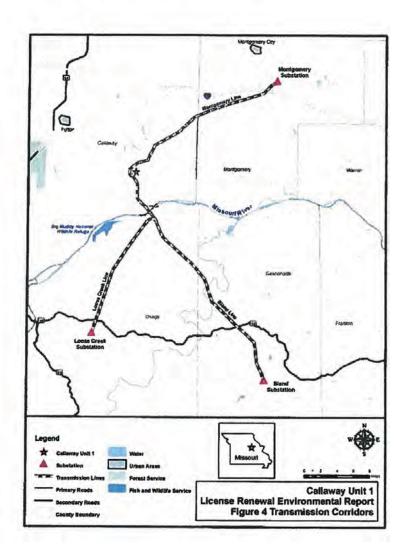


Figure 4: Callaway Plant Site Transmission Corridors



bcc: A. J. Burgess JCP/BFH/KWL FILE: WQ-3.1.1



United States Department of the Interior

FISH AND WILDLIFE SERVICE Columbia Ecological Services Field Office 101 Park DeVille Drive, Suite A Columbia, Missouri 65203-0057 Phone: (573) 234-2132 Fax: (573) 234-2181

June 14, 2010

MONEGIAL SHAPE

Kenneth W. Lynn Consulting Environmental Scientist AmerenUE PO Box 66149 St. Louis, Missouri 63166-6149

Dear Mr. Lynn:

This is in response to your April 16, 2010, letter pertaining to the Callaway Unit 1 license renewal process. In late Fall 2011, AmerenUE plans to apply to the U.S. Nuclear Regulatory Commission (NRC) for renewal of the operating license for the Callaway Unit 1 in Callaway County, Missouri. Your letter specifically requested information from the U.S. Fish and Wildlife Service (Service) pertaining to species listed under the Endangered Species Act that may occur on the project site. This information will be used by NRC and AmerenUE in the environmental assessment of the license renewal, including consultation under section 7(a)(2) of the Endangered Species Act.

The Callaway Unit 1 site encompasses 7,350 acres of which 512 acres is occupied by the power generating facilities and associated infrastructure. The Missouri Department of Conservation manages 6,300 acres of the site as the Reform Conservation Area. The site is predominately rural lands composed of deciduous forests, grassland/pasture, and cropland.

During the term of the license renewal, there are no plans to expand beyond existing facilities and no structural modifications or refurbishment activities have been identified. Maintenance activities would be restricted to previously disturbed areas.

We have reviewed the information in your letter relating to threatened and endangered species. Based on this information you state that continued operation of the facility under the term of the license renewal is unlikely to adversely affect any threatened or endangered species. The Service has no major concerns with the effects of continued operation of the Callaway Unit 1 on federally listed species and concurs with your assessment that adverse effects are unlikely to occur.

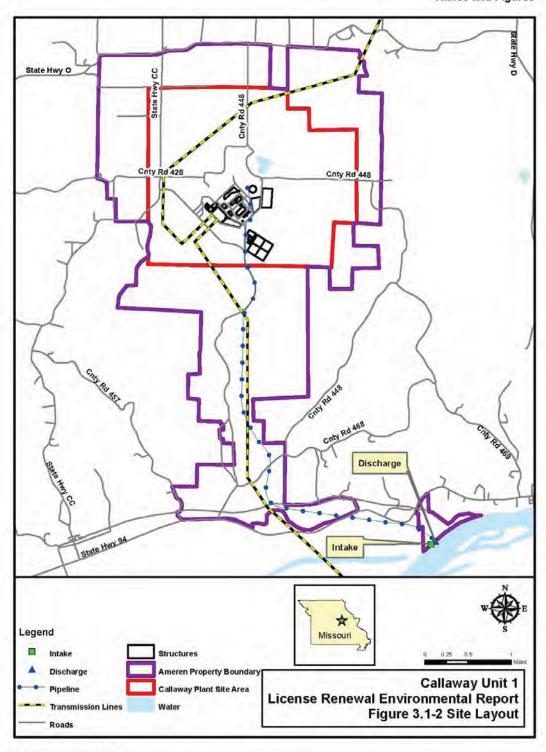
We appreciate the opportunity to review this action. Please contact us if you have any questions or require additional assistance.

Sincerely.

Charles M. Scott Field Supervisor

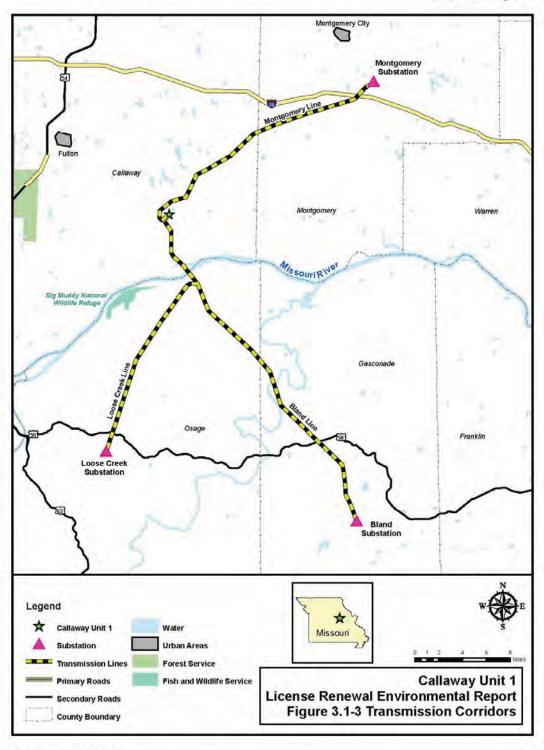
O:\STAFF Folders\Scott\Letters\AmerenUE.CallawayUnit1.TESpeciesResponse.doc

Section 3.5 Tables and Figures



Callaway Plant Unit 1 Environmental Report for License Renewal

Section 3.5 Tables and Figures



Callaway Plant Unit 1 Environmental Report for License Renewal **Table of Federally Listed Species in the Vicinity of the Callaway Plant**

Species	Federal Status ^(a)	Habitat	County(ies) of Occurrence ^(b)
Gray bat (Myotis grisescens)	E	Caves	Callaway, Gasconade, Osage
Indiana bat (Myotis sodalis)	E	Hibernacula = caves and mines; Maternity and foraging habitat = small stream corridors with well developed riparian woods; upland forests	Callaway, Gasconade. Montgomery
Niangua darter (Etheostoma nianguae)	Т	Rivers	Osage
Pallid sturgeon (Scaphirhynchus albus)	E	Mississippi and Missouri Rivers	Callaway, Gasconade, Montgomery, Osage
Pink mucket (Lampsilis abrupta)	Е	Rivers	Gasconade, Osage
Running buffalo clover (Trifolium stolonifereum)	Е	Disturbed bottomland meadows	Callaway, Montgomery
Scaleshell (Leptodea leptodon)	Е	Gasconade River	Gasconade, Osage
Snuffbox (Epioblasma triquetra)	Е	Small- to medium-sized creeks with a swift current	Gasconade
Spectaclecase (Cumberlandia monodonta)	E	Gasconade River	Gasconade, Osage
Topeka shiner (Notropis topeka)	Е	Small, perennial prairie streams in pools containing clear, clean water and gravel, rock, or sand bottoms	Callaway

⁽a) E=endangered; T=threatened

Table Sources:

[FWS] U.S. Fish and Wildlife Service. "Missouri County Distribution of Federally-listed Threatened, Endangered, Proposed, and Candidate Species." Updated March 2012. Available at http://www.fws.gov/midwest/endangered/section7/sppranges/missouri-cty.html (accessed 4 April 2012).

[MDC] Missouri Department of Conservation. Natural Heritage Program Search for Callaway, Gasconade Montgomery, and Osage Counties. Available at http://mdc.mo.gov/landwater-care/heritage-program (accessed 4 April 2012).

⁽b) Callaway is located in Callaway County. The transmission lines associated with Callaway traverse Callway, Gasconade, Montgomery, and Osage Counties.

T. Melius - 3 -

I have also sent a copy of this letter to Ms. Amy Salveter, Field Supervisor, FWS Columbia Missouri Field Office. I understand that Ms. Salveter replaced Mr. Charlie Scott, who was Ameren's main point of contact related to threatened and endangered species during Ameren's preparation of its license renewal application in 2010.

Sincerely,

/RA/

Jeremy J. Susco, Acting Chief Environmental Review and Guidance Update Branch Division of License Renewal Office of Nuclear Reactor Regulation

Docket No. 50-483

Enclosures: As stated

cc w/encls: Listserv

DISTRIBUTION: See next page

ADAMS Accession No.: ML12096A369

OFFICE	DLR:RPB2:LA	DLR:RERB	DLR:RERB	PM:DLR:RPB2	BC:DLR:RPB2	BC:DLR:RERB
NAME	IKing	BBalsam	DLogan	CFells	DWrona	JSusco
DATE	4/12/12	4/16/12	4/16/12	4/18/12	4/19/12	4/20/12

OFFICIAL RECORD COPY

Letter to T. Melius from J. Susco dated April 20, 2012.

SUBJECT: REQUEST FOR CONCURRENCE WITH LIST OF FEDERALLY PROTECTED

SPECIES AND HABITATS FOR THE PROPOSED CALLAWAY PLANT

LICENSE RENEWAL

DISTRIBUTION:

HARD COPY:

Amy Salveter
Field Supervisor
U.S. Fish and Wildlife Service
Columbia Missouri Field Office
101 Park DeVille Drive, Suite A
Columbia, MO 65203-0057

E-MAIL:

PUBLIC

RidsNrrDlr Resource

RidsNrrDlrRpb1 Resource

RidsNrrDlrRpb2 Resource

RidsNrrDlrRarb Resource

RidsNrrDlrRasb Resource

RidsNrrDlrRapb Resource

RidsOgcMailCenter Resource

RidsOpaMail

RidsOgcMailCenter

BBalsam

DLogan

JSusco

DWrona

CFells

From: Jane_Ledwin@fws.gov

Sent: Tuesday, May 08, 2012 1:14 PM

To: Balsam, Briana
Cc: rick_Hansen@fws.gov

Subject: NRC's review of Callaway Plant license renewal application

Hi Briana -

Amy Salveter forwarded your email message to me. I will serve as the office POC for the activity. Both I and Rick Hansen, another biologist in the office, would like to tour your facility and better acquaint ourselves with your operations. That will help us provide the best feedback to you during license renewal. We received the other letters you mentioned in your email to Amy, so I think I'm caught up. Please feel free to call or email to arrange a meeting. I will be out of the office tomorrow and Thursday, but in after that.

I look forward to meeting you. Best regards -

Jane Ledwin

Jane Ledwin
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
101 Park DeVille Drive
Columbia, Missouri 65203
Phone 573/234-2132, extension 109

email jane ledwin@fws.gov

From: Balsam, Briana

Sent: Wednesday, May 09, 2012 10:49 AM

To: 'Jane_Ledwin@fws.gov'

Cc: rick_Hansen@fws.gov; Fells, Carmen

Subject: RE: NRC's review of Callaway Plant license renewal application

Jane.

Thanks for getting back to me about the Callaway license renewal. I forwarded your message to Carmen Fells (also CCed on this email). She is the project manager for the license renewal and is coordinating the site audit, so she will be in touch with you about the logistics of the visit during the week of May 21.

I look forward to meeting you and Rick that week. If you have any questions or concerns about ESA species or ecology issues between then and now, please feel free to contact me.

Briana

Briana A. Balsam Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042

briana.balsam@nrc.gov

From: Jane_Ledwin@fws.gov [mailto:Jane_Ledwin@fws.gov]

Sent: Tuesday, May 08, 2012 1:14 PM

To: Balsam, Briana **Cc:** <u>rick Hansen@fws.gov</u>

Subject: NRC's review of Callaway Plant license renewal application

Hi Briana -

Amy Salveter forwarded your email message to me. I will serve as the office POC for the activity. Both I and Rick Hansen, another biologist in the office, would like to tour your facility and better acquaint ourselves with your operations. That will help us provide the best feedback to you during license renewal. We received the other letters you mentioned in your email to Amy, so I think I'm caught up. Please feel free to call or email to arrange a meeting. I will be out of the office tomorrow and Thursday, but in after that.

I look forward to meeting you. Best regards -

Jane Ledwin

Jane Ledwin

Fish and Wildlife Biologist

From: Jane_Ledwin@fws.gov
Sent: Friday, May 11, 2012 4:32 PM

To: Balsam, Briana

Cc: Fells, Carmen; rick_Hansen@fws.gov

Subject: RE: NRC's review of Callaway Plant license renewal application

Thanks Briana -

Carmen - Rick Hansen is not in the office today so I cannot check his schedule. I did not know there was a site visit planned that week. At this point I know I have prior commitments the 22nd and 23rd. I will check with Rick next week and hope to connect with you then.

Best regards -

Jane ledwin

Jane Ledwin
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
101 Park DeVille Drive
Columbia, Missouri 65203
Phone 573/234-2132, extension 109
email jane_ledwin@fws.gov

"Balsam, Briana"

<<u>Briana.Balsam@nrc.gov</u>> To"<u>Jane Ledwin@fws.gov</u>" <<u>Jane Ledwin@fws.gov</u>>

05/09/2012 09:48 AM

cc"<u>rick_Hansen@fws.gov</u>" < <u>rick_Hansen@fws.gov</u>>,
"Fells, Carmen" < Carmen.Fells@nrc.gov>

SubjectRE: NRC's review of Callaway Plant license renewal application

Jane.

Thanks for getting back to me about the Callaway license renewal. I forwarded your message to Carmen Fells (also CCed on this email). She is the project manager for the license renewal and is coordinating the site audit, so she will be in touch with you about the logistics of the visit during the week of May 21.

I look forward to meeting you and Rick that week. If you have any questions or concerns about ESA species or ecology issues between then and now, please feel free to contact me.

Briana

[&]quot;Balsam, Briana" < <u>Briana.Balsam@nrc.gov</u>>

Briana A. Balsam Biologist

Division of License Renewal Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission

301-415-1042 briana.balsam@nrc.gov

From: Jane Ledwin@fws.gov [mailto:Jane Ledwin@fws.gov]

Sent: Tuesday, May 08, 2012 1:14 PM

To: Balsam, Briana

Cc: rick Hansen@fws.gov

Subject: NRC's review of Callaway Plant license renewal application

Hi Briana -

Amy Salveter forwarded your email message to me. I will serve as the office POC for the activity. Both I and Rick Hansen, another biologist in the office, would like to tour your facility and better acquaint ourselves with your operations. That will help us provide the best feedback to you during license renewal. We received the other letters you mentioned in your email to Amy, so I think I'm caught up. Please feel free to call or email to arrange a meeting. I will be out of the office tomorrow and Thursday, but in after that.

I look forward to meeting you. Best regards -

Jane Ledwin

Jane Ledwin
Fish and Wildlife Biologist
U.S. Fish and Wildlife Service
101 Park DeVille Drive
Columbia, Missouri 65203
Phone 573/234-2132, extension 109
email jane ledwin@fws.gov

From: Rick Hansen@fws.gov

Sent: Tuesday, May 15, 2012 8:47 AM

To: Balsam, Briana

Cc: Fells, Carmen; Jane Ledwin@fws.gov

Subject: RE: NRC's review of Callaway Plant license renewal application

Briana:

Apparently Jane is not available for the review of Callaway Plant license renewal application but I am May 21, 22, 23 and the morning of May 24. Does this fit in the schedule?

Rick L. Hansen U.S. Fish and Wildlife Service Ecological Services 101 Park DeVille Drive, Suite A Columbia, Missouri 65203 573-234-2132, ext. 106 fax 573-234-2181 rick hansen@fws.gov

"Balsam, Briana"

<<u>Briana.Balsam@nrc.gov</u>> To"<u>Jane Ledwin@fws.gov</u>" <<u>Jane Ledwin@fws.gov</u>>

05/09/2012 09:50 AM

cc"<u>rick_Hansen@fws.gov</u>" < <u>rick_Hansen@fws.gov</u>>, "Fells, Carmen" < Carmen.Fells@nrc.gov>

SubjectRE: NRC's review of Callaway Plant license renewal application

Jane,

Thanks for getting back to me about the Callaway license renewal. I forwarded your message to Carmen Fells (also CCed on this email). She is the project manager for the license renewal and is coordinating the site audit, so she will be in touch with you about the logistics of the visit during the week of May 21.

I look forward to meeting you and Rick that week. If you have any questions or concerns about ESA species or ecology issues between then and now, please feel free to contact me.

Briana

Briana A. Balsam Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation

[&]quot;Balsam, Briana" < Briana. Balsam@nrc.gov>

U.S. Nuclear Regulatory Commission

301-415-1042 briana.balsam@nrc.gov

From: Jane Ledwin@fws.gov [mailto:Jane Ledwin@fws.gov]

Sent: Tuesday, May 08, 2012 1:14 PM

To: Balsam, Briana

Cc: rick Hansen@fws.gov

Subject: NRC's review of Callaway Plant license renewal application

Hi Briana -

Amy Salveter forwarded your email message to me. I will serve as the office POC for the activity. Both I and Rick Hansen, another biologist in the office, would like to tour your facility and better acquaint ourselves with your operations. That will help us provide the best feedback to you during license renewal. We received the other letters you mentioned in your email to Amy, so I think I'm caught up. Please feel free to call or email to arrange a meeting. I will be out of the office tomorrow and Thursday, but in after that.

I look forward to meeting you. Best regards -

Jane Ledwin

Jane Ledwin Fish and Wildlife Biologist U.S. Fish and Wildlife Service 101 Park DeVille Drive Columbia, Missouri 65203 Phone 573/234-2132, extension 109 email jane ledwin@fws.gov

From: Balsam, Briana

Sent: Monday, June 18, 2012 9:52 AM **To:** 'jennifer.campbell-allison@mdc.mo.gov'

Cc: Logan, Dennis

Subject: Callaway: Follow-up questions from May 22-23 site audit

Hi Jennifer,

It was great meeting you at the Callaway nuclear plant last month, and I hope that the time you spent on the site gave you some insight into the proposed relicensing. I am just getting a chance to tie up some loose ends on outstanding questions from the site audit, and I had written down a few things that you had asked NRC specifically to request from you via email. Would you be able to answer the following questions or point me to references that answer these questions? Thanks,

- 1. Does the MDC have Missouri River fish surveys available for the stretch of river near Callaway that it would be able to share with NRC? Specifically, are surveys available that cover the past 10 years? Have any surveys collected pallid sturgeon?
- 2. Has MDC completed any wildlife surveys within the Reform Conservation Area that it would be able to share with the NRC? Specifically, have surveys been completed that document sensitive or important habitats or threatened and endangered species?
- 3. How often does the MDC hold timber sales within the Reform Conservation Area. Is timber generally harvested via selected cutting, clear-cutting, or some other technique?

If you don't have this information, that's okay, too. I just want to make sure that I have identified all the available information out there that could consider as part of our review. Thanks,

Briana

Briana A. Balsam Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042 briana.balsam@nrc.gov

From: Balsam, Briana

Sent: Monday, June 18, 2012 9:56 AM

To: 'Rick_Hansen@fws.gov'

Cc: Logan, Dennis

Subject: Callaway: Follow-up question from May 22-23 site audit

Hi Rick,

It was great meeting you at the Callaway nuclear plant last month, and I hope that the time you spent on the site gave you some insight into the proposed relicensing.

I am just getting a chance to tie up some loose ends on outstanding questions from the site audit, and I had written down in my notes that you might be able to locate/have information on pallid sturgeon surveys in the Missouri River in the vicinity of Callaway. Do you have such surveys? If not, would you be able to point me to a contact that might have that information?

Thanks,

Briana

Briana A. Balsam

Biologist

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042

briana.balsam@nrc.gov

From: Rick Hansen@fws.gov

Sent: Thursday, June 28, 2012 10:33 AM

To: Wyatt_Doyle@fws.gov; Jane_Ledwin@fws.gov

Cc: Balsam, Briana

Subject: Fw: Callaway: Follow-up question from May 22-23 site audit

Wyatt/Jane:

Do we have the information requested by Briana (see below) for the Missouri RIver near the Callaway Nuclear Plant?

Rick L. Hansen U.S. Fish and Wildlife Service Ecological Services 101 Park DeVille Drive, Suite A Columbia, Missouri 65203 573-234-2132, ext. 106 fax 573-234-2181

rick hansen@fws.gov

----- Forwarded by Rick Hansen/R3/FWS/DOI on 06/28/2012 09:30 AM -----

"Balsam, Briana"

< <u>Briana.Balsam@nrc.gov</u>> To"<u>Rick Hansen@fws.gov</u>" < <u>Rick Hansen@fws.gov</u>>

06/18/2012 08:56 AM cc"Logan, Dennis" < Dennis.Logan@nrc.gov >

SubjectCallaway: Follow-up question from May 22-23 site audit

Hi Rick,

It was great meeting you at the Callaway nuclear plant last month, and I hope that the time you spent on the site gave you some insight into the proposed relicensing.

I am just getting a chance to tie up some loose ends on outstanding questions from the site audit, and I had written down in my notes that you might be able to locate/have information on pallid sturgeon surveys in the Missouri River in the vicinity of Callaway. Do you have such surveys? If not, would you be able to point me to a contact that might have that information?

Thanks,	
Briana	
Briana A. Balsam Biologist	

Division of License Renewal
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission

301-415-1042

briana.balsam@nrc.gov

From: Wyatt Doyle@fws.gov

Sent: Thursday, June 28, 2012 10:45 AM

To: Rick Hansen@fws.gov

Cc: Balsam, Briana; Jane Ledwin@fws.gov; Tracy hill@fws.gov Subject: Re: Fw: Callaway: Follow-up question from May 22-23 site audit

Briana,

We have 10 years of fish sampling data throughout the lower 200 miles of the missouri river. Depending on your question relative to the nuclear plant, we may be able to help you?

Wyatt J. Doyle

Assistant Project Leader Columbia Fish and Wildlife Conservation Office (573) 234-2132 ex 111 (573)239-0241 cell

Rick Hansen/R3/FWS/DOI

To Wyatt Doyle/R3/FWS/DOI@FWS, Jane Ledwin/R3/FWS/DOI@FWS

cc briana.balsam@nrc.gov

06/28/2012 09:32 AM

Subject Fw: Callaway: Follow-up question from May 22-23 site audit

Wyatt/Jane:

Do we have the information requested by Briana (see below) for the Missouri RIver near the Callaway Nuclear Plant?

Rick L. Hansen U.S. Fish and Wildlife Service **Ecological Services** 101 Park DeVille Drive, Suite A Columbia, Missouri 65203 573-234-2132, ext. 106 fax 573-234-2181 rick hansen@fws.gov

06/18/2012 08:56 AM

---- Forwarded by Rick Hansen/R3/FWS/DOI on 06/28/2012 09:30 AM ----

"Balsam, Briana" < Briana.Balsam@nrc.gov>

To "Rick Hansen@fws.gov" < Rick Hansen@fws.gov>

cc "Logan, Dennis" < Dennis.Logan@nrc.gov>

Subject Callaway: Follow-up question from May 22-23 site audit

Hi Rick,

It was great meeting you at the Callaway nuclear plant last month, and I hope that the time you spent on the site gave you

some insight into the proposed relicensing.

I am just getting a chance to tie up some loose ends on outstanding questions from the site audit, and I had written down in my notes that you might be able to locate/have information on pallid sturgeon surveys in the Missouri River in the vicinity of Callaway. Do you have such surveys? If not, would you be able to point me to a contact that might have that information?

Thanks,	
Briana	
Briana A. Balsam	
Biologist	

Division of License Renewal Office of Nuclear Reactor Regulation U.S. Nuclear Regulatory Commission

301-415-1042 briana.balsam@nrc.gov