

## **Attachment A**

### **Threatened and Endangered Species Correspondence**

- Thomas, J. A., Enercon Services, Inc. to C. B. James, U.S. Fish and Wildlife Service. February 4, 2011.
- Rick, S., Fish and Wildlife Service, Mississippi Field Office, to J. Thomas, Enercon Services, Inc. February 23, 2011.
- Thomas, J. A., Enercon Services, Inc., to R. C. Watson, U.S. Fish and Wildlife Service. February 4, 2011.
- Rieck, B. S., Fish and Wildlife Service, Louisiana Ecological Services Office, to J. A. Thomas, Enercon Services, Inc. March 4, 2011.
- Thomas, J. A., Enercon Services, Inc., to Dr. S. Surette, Mississippi Natural Heritage Program, Department of Wildlife, Fisheries, and Parks. February 4, 2011.
- Carney, J., Mississippi Natural Heritage Program, Department of Wildlife, Fisheries, and Parks, to J. Thomas, Enercon Services, Inc. February 23, 2011.
- Thomas, J. A., Enercon Services, Inc. to C. Michon, Louisiana Natural Heritage Program, Department of Wildlife and Fisheries. February 4, 2011.
- Bass, A., Louisiana Natural Heritage Program, Department of Wildlife and Fisheries, to J. A. Thomas, Enercon Services, Inc. February 18, 2011.
- Thomas, J. A., Enercon Services, Inc. to D. Bernhart, NOAA Fisheries Services, Southeast Regional Office, Protected Resources Division. March 4, 2011.
- Bernhart, D., NOAA, National Marine Fisheries Service, to J. A. Thomas, Enercon Services, Inc. June 14, 2011.



**ENERCON**

*Excellence—Every project. Every day.*

February 4, 2011

Curtis B. James  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service  
Mississippi Field Office  
6578 Dogwood View Parkway, Suite A  
Jackson, MS 39213

SUBJECT: Grand Gulf Nuclear Station  
License Renewal Application

Dear Mr. James,

In 2011, Entergy plans to apply to the Nuclear Regulatory Commission (NRC) for renewal of the operating license for the Grand Gulf Nuclear Station (GGNS), which is located in Claiborne County, Mississippi on the east bank of the Mississippi River at River Mile 406, approximately 25 miles south of Vicksburg, Mississippi and 37 miles north-northeast of Natchez, Mississippi. The existing operating license for GGNS was issued for a 40-year term that expires in 2024. If the NRC approves the application, Entergy will then have the option to continue operating GGNS until 2044. In conjunction with this effort, Enercon is gathering information on Entergy's behalf relative to this license renewal project.

The NRC requires that the license renewal application for GGNS include an environmental report assessing potential environmental impacts from operation during the license renewal term. One of these potential environmental impacts would be the effect of license renewal on threatened or endangered species or designated critical habitat located on the GGNS site, its immediate environs (6-mile radius), and transmission line corridors constructed for purposes of connecting the plant to the regional transmission grid. Accordingly, the NRC requires that the environmental report for each license renewal application assess such a potential effect (10 CFR 51.53). Later, during its review of the license renewal environmental report pursuant to the National Environmental Policy Act (NEPA), the NRC may request information from your office to ensure compliance with Section 7 of the Endangered Species Act.

Enercon is contacting you now in order to obtain input regarding issues that may need to be addressed in the GGNS license renewal environmental report, and to assist Entergy in identifying any information your staff believes would be helpful to expedite NRC's review.

Curtis B. James  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service  
Mississippi Field Office  
Page 2 of 5

The 2,100 acre GGNS site consists primarily of woodlands and former farms as well as two lakes, Hamilton Lake and Gin Lake (see Figure 1). The land in the vicinity of the GGNS site is mostly rural. There are two transmission corridors containing a single-circuit 500-kV transmission line that were constructed for purposes of connecting GGNS to the regional electricity grid (see Figure 2). These transmission corridors are considered by the NRC to be within the scope of its environmental reviews for renewal of the GGNS operating license. Entergy's Transmission group owns and operates these two lines. The total length of the two corridors is approximately 66 miles, and cross Claiborne, Warren, Jefferson and Franklin Counties in Mississippi.

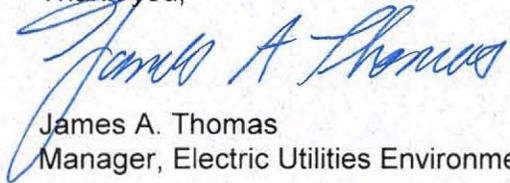
Based on a review of information available and previous consultations, Enercon has included Table 1 which lists federally- or state-listed threatened or endangered species at the station site, the immediate environs, or the transmission line corridors (see Figures 1 and 2). No designated critical habitat was identified by Enercon for these species during the review. However, even with the presence of these species or habitats, Entergy does not expect GGNS operations during the license renewal term to adversely affect any threatened and endangered species or designated critical habitats since there are no plans to alter current operations during the 20-year license renewal period, and any maintenance activities necessary to support continued operation of GGNS would be limited to currently developed areas of the site. Although administrative procedural controls are in place to comply with applicable state and federal laws to preserve biological resources when facility expansion or land disturbance activities do occur, no expansion is planned or needed in support of license renewal. In addition, Entergy's Transmission group has established maintenance procedures for transmission lines that involve minimal disturbance of land, wetlands, and streams and are protective of threatened and endangered species, and designated critical habitats when present.

After your review of the information provided in this letter, I would appreciate you sending a letter detailing any concerns you may have about potential impacts to threatened or endangered species or designated critical habitat on the GGNS property, immediate environs, or along the transmission line corridors, or alternatively, confirming our conclusion these species or habitats will not be adversely affected as a result of renewing the GGNS operating license for an additional 20 years. Entergy will include copies of this letter and your response in the environmental report submitted to the NRC as part of the GGNS license renewal application.

Curtis B. James  
Assistant Field Supervisor  
U.S. Fish and Wildlife Service  
Mississippi Field Office  
Page 3 of 5

If you have any questions, please contact me at (918) 665-7693 or through my email address, [jthomas@enercon.com](mailto:jthomas@enercon.com). Thank you in advance for your assistance.

Thank you,



James A. Thomas  
Manager, Electric Utilities Environmental Services

Attachment – 6-Mile Map  
50-Mile Map

cc: Rick Buckley (Entergy)

**Table 1**  
**Federal and State-Listed Species**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Federal Status</u>	<u>MS Status</u>	<u>LA Status</u>	<u>On-Site</u>	<u>Vicinity (6-mile)</u>	<u>Transmission ROW</u>
<b><u>Mammals</u></b>							
<i>Puma concolor coryi</i>	Florida Panther	E	E	E	No	No	No
<i>Ursus americanus luteolus</i>	Louisiana Black Bear	T	E	T	Yes	Yes	Yes
<i>Ursus americanus</i>	American Black Bear	T	E	–	Yes	Yes	Yes
<b><u>Birds</u></b>							
<i>Haliaeetus leucocephalus</i>	Bald Eagle	–	E	E	Yes	Yes	Yes
<i>Mycteria americana</i>	Wood Stork	E	E	–	Yes	Yes	Yes
<i>Sterna antillarum athalassos</i>	Interior Least Tern	E*	E*	E	No	Yes	Yes
<i>Picoides borealis</i>	Red-Cockaded Woodpecker	E	E	–	No	No	Yes
<i>Eudocimus albus</i>	White Ibis	–	S2, S3	–	Yes	Yes	Yes
<b><u>Reptiles</u></b>							
<i>Alligator mississippiensis</i>	American Alligator	T (S/A)	–	–	Yes	Yes	Yes
<b><u>Fish</u></b>							
<i>Scaphirhynchus albus</i>	Pallid Sturgeon	E	E	E	Yes	Yes	No
<i>Etheostoma rubrum</i>	Bayou Darter	T	E	–	No	Yes	No
<i>Crystallaria asprella</i>	Crystal Darter	–	E	–	Yes	Yes	No
<i>Macrhybopsis meeki</i>	Sicklefin Chub	–	S1	–	Yes	Yes	–
<b><u>Macroinvertebrates</u></b>							
<i>Potamilus capax</i>	Fat Pocketbook Mussel	E	E	–	No	No	Yes
<i>Quadrula cylindrica</i>	Rabbitsfoot Mussel	CS	–	–	No	Yes	Yes

Table 1 (Continued)

Federal and State-Listed Species

<u>Scientific Name</u>	<u>Common Name</u>	<u>Federal Status</u>	<u>MS Status</u>	<u>LA Status</u>	<u>On-Site</u>	<u>Vicinity (6-mile)</u>	<u>Transmission ROW</u>
<b><u>Insects</u></b>							
<i>Epitheca spinosa</i>	Robust Baskettail	-	S1	-	Yes	Yes	-
<b><u>Plants</u></b>							
<i>Lindera melissifolia</i>	Pondberry	E	E	-	No	No	Yes

T = Threatened

E = Endangered

CS = Candidate Species

S1 = Critically Imperiled in Mississippi

S2 = Imperiled in Mississippi

S3 = Rare or uncommon in Mississippi

T (S/A) = Threatened by similarity of appearance.

\* Interior least terns belong to a subspecies of least terns and are protected Federally, and by the state of Mississippi under the species name. *Sterna antillarum athalassos* is the subspecies endemic to the project region and is therefore specified above.

Figure 1

Location of GGNS, 6-Mile Radius Map

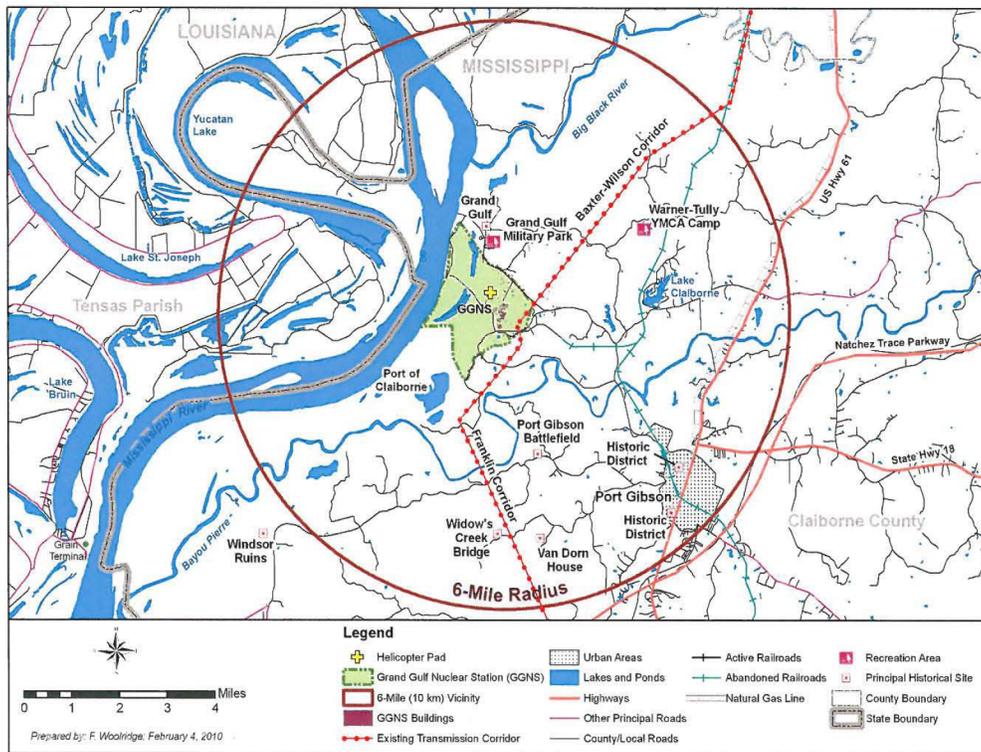
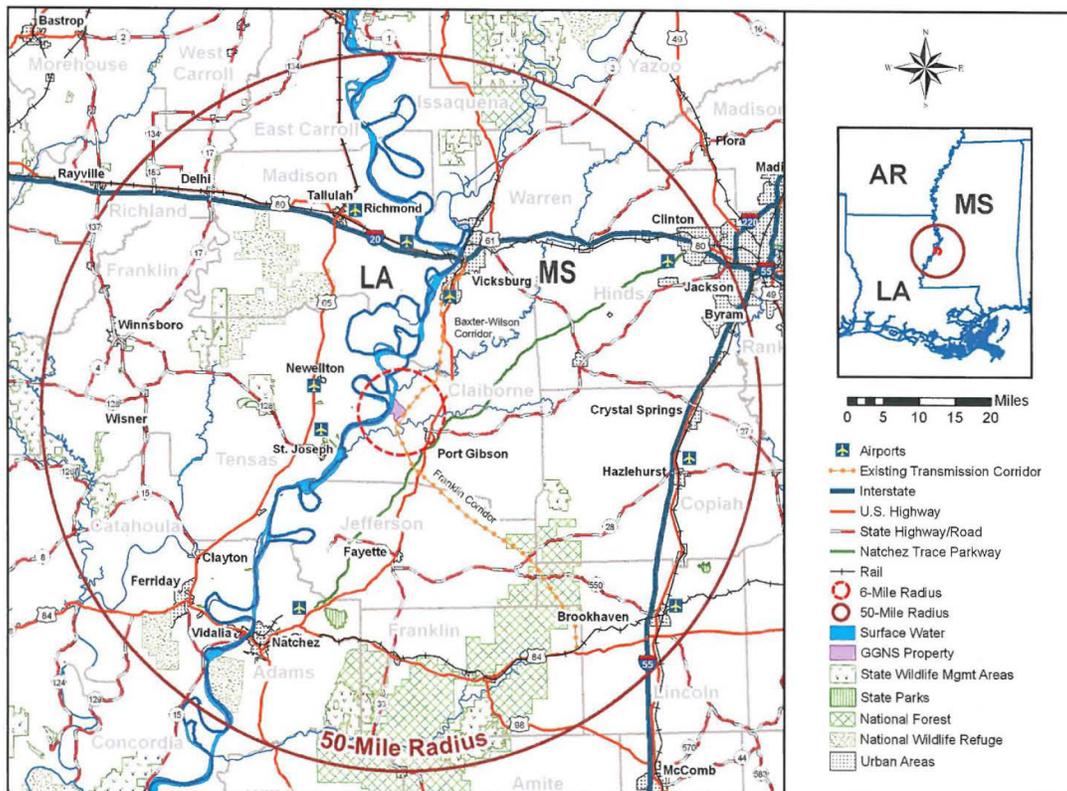


Figure 2

Location of GGNS, 50-Mile Radius Map





**United States Department of the Interior**  
**FISH AND WILDLIFE SERVICE**  
Mississippi Field Office  
6578 Dogwood View Parkway, Suite A  
Jackson, Mississippi 39213

February 23, 2011

ENERCON  
5100 East Skelly Drive  
Suite 450  
Tulsa, Oklahoma 744135  
Attn: James Thomas

Dear Mr. Thomas:

The Fish and Wildlife Service (Service) received your letter dated February 4, 2011, requesting information on the presence of federal threatened and endangered species, which may be affected by the proposed operating license renewal for the Grand Gulf Nuclear Station (GGNS) located approximately 25 miles south of Vicksburg in Claiborne County, Mississippi. The following comments are provided in accordance with the Endangered Species Act (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.).

Based on the location and nature of the proposed work, the Service has determined that no federally listed species or their habitats are likely to be "affected" from the proposed license renewal and routine maintenance operations of GGNS. No further consultation under Section 7 of the ESA will be necessary unless the size or location of the project were to change.

If you have any questions, please feel free to contact Daniel Gregg with this office, telephone: (601) 321-1136.

Sincerely,

For Stephen Ricks  
Field Supervisor



**ENERCON**

*Excellence—Every project. Every day.*

February 4, 2011

Mr. Russell C. Watson  
Supervisor  
U.S. Fish and Wildlife Service  
Louisiana Field Office  
646 Cajundome Blvd., Suite 400  
Lafayette, LA 70506

RE: Entergy Operations, Inc. (EOI)  
Grand Gulf Nuclear Station

Dear Mr. Watson,

In 2011, Entergy plans to apply to the Nuclear Regulatory Commission (NRC) for renewal of the operating license for the Grand Gulf Nuclear Station (GGNS), which is located in Claiborne County, Mississippi on the east bank of the Mississippi River at River Mile 406, approximately 25 miles south of Vicksburg, Mississippi and 37 miles north-northeast of Natchez, Mississippi. The existing license for GGNS was issued for a 40-year term that expires in 2024. If the NRC approves the application, Entergy will then have the option to continue operating GGNS until 2044. In conjunction with this effort, Enercon is gathering information on Entergy's behalf relative to this license renewal project.

The NRC requires that the license renewal application for GGNS include an environmental report assessing potential environmental impacts from operation during the license renewal term. One of these potential environmental impacts would be the effect of license renewal on threatened or endangered species located on the GGNS site, its immediate environs (6-mile radius), and transmission line corridors specifically constructed to connect the plant to the existing regional transmission grid. Accordingly, the NRC requires that the environmental report for each license renewal application assess such a potential effect (10 CFR 51.53). Later, during its review of the license renewal environmental report pursuant to the National Environmental Policy Act (NEPA), the NRC may request information from your office to ensure compliance with Section 7 of the Endangered Species Act.

Enercon is contacting you now in order to obtain input regarding issues that may need to be addressed in the GGNS license renewal environmental report, and to assist Entergy in identifying any information your staff believes would be helpful to expedite NRC's review.

Mr. Russell C. Watson  
Supervisor  
U.S. Fish and Wildlife Service  
Louisiana Field Office  
Page 2 of 5

The 2,100 acre GGNS site consists primarily of woodlands and former farms as well as two lakes, Hamilton Lake and Gin Lake (see Figure 1). The land in the vicinity of the GGNS site is mostly rural. There are two transmission corridors containing a single-circuit 500-kV transmission line that were constructed to connect GGNS to the regional electricity grid (see Figure 2). These transmission corridors are considered by the NRC to be within the scope of its environmental reviews for the GGNS license renewal. Entergy's Transmission group owns and operates these two lines. The total length of the two corridors is approximately 66 miles, and crosses Claiborne, Warren, Jefferson and Franklin Counties in Mississippi.

Based on a review of information available and previous consultations, Enercon has included Table 1 which lists federally- or state-listed threatened or endangered species within the vicinity of GGNS and the transmission corridors. However, Entergy does not expect GGNS operations during the license renewal term (an additional 20 years) to adversely affect threatened or endangered species at the station site, the immediate environs, or the transmission line corridors because license renewal will not alter existing operations. There are no plans to alter current operations during the 20-year license renewal period, and any maintenance activities necessary to support continued operation of GGNS will be limited to currently developed areas of the site. Although administrative procedural controls are in place to comply with applicable state and federal laws to preserve biological resources when facility expansion or land disturbance activities occur, no expansion is planned or needed in support of license renewal. In addition, Entergy's Transmission group has established maintenance procedures for transmission lines that involve minimal disturbance of land, wetlands, and streams and are protective of threatened or endangered species.

After your review of the information provided in this letter, I would appreciate you sending a letter detailing any concerns you have about potential impacts to threatened or endangered species or critical habitat in the area of GGNS or along the associated transmission corridors, or alternatively, confirming our conclusion that threatened or endangered species will not be adversely affected as a result of renewing the GGNS operating license for an additional 20 years. Entergy will include copies of this letter and your response in the environmental report submitted to the NRC as part of the GGNS license renewal application.

Mr. Russell C. Watson  
Supervisor  
U.S. Fish and Wildlife Service  
Louisiana Field Office  
Page 3 of 5

If you have any questions, please contact me at (918) 665-7693 or through my email address, [jthomas@enercon.com](mailto:jthomas@enercon.com). Thank you in advance for your assistance.

Thank you,

James A. Thomas  
Manager, Electric Utilities Environmental Services

Attachment – 6-Mile Map  
50-Mile Map

cc: Rick Buckley (Entergy)

**Table 1**  
**Federal and State-Listed Species**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Federal Status</u>	<u>MS Status</u>	<u>LA Status</u>	<u>On-Site</u>	<u>Vicinity (6-mile)</u>	<u>Transmission ROW</u>
<b><u>Mammals</u></b>							
<i>Puma concolor coryi</i>	Florida Panther	E	E	E	No	No	No
<i>Ursus americanus luteolus</i>	Louisiana Black Bear	T	E	T	Yes	Yes	Yes
<i>Ursus americanus</i>	American Black Bear	T	E	-	Yes	Yes	Yes
<b><u>Birds</u></b>							
<i>Haliaeetus leucocephalus</i>	Bald Eagle	-	E	E	Yes	Yes	Yes
<i>Mycteria americana</i>	Wood Stork	E	E	-	Yes	Yes	Yes
<i>Sterna antillarum athalassos</i>	Interior Least Tern	E*	E*	E	No	Yes	Yes
<i>Picoides borealis</i>	Red-Cockaded Woodpecker	E	E	-	No	No	Yes
<i>Eudocimus albus</i>	White Ibis	-	S2, S3	-	Yes	Yes	Yes
<b><u>Reptiles</u></b>							
<i>Alligator mississippiensis</i>	American Alligator	T (S/A)	-	-	Yes	Yes	Yes
<b><u>Fish</u></b>							
<i>Scaphirhynchus albus</i>	Pallid Sturgeon	E	E	E	Yes	Yes	No
<i>Etheostoma rubrum</i>	Bayou Darter	T	E	-	No	Yes	No
<i>Crystallaria asprella</i>	Crystal Darter	-	E	-	Yes	Yes	No
<i>Macrhybopsis meeki</i>	Sicklefin Chub	-	S1	-	Yes	Yes	-
<b><u>Macroinvertebrates</u></b>							
<i>Potamilus capax</i>	Fat Pocketbook Mussel	E	E	-	No	No	Yes
<i>Quadrula cylindrica</i>	Rabbitsfoot Mussel	CS	-	-	No	Yes	Yes

**Table 1 (Continued)**  
**Federal and State-Listed Species**

<u>Scientific Name</u>	<u>Common Name</u>	<u>Federal Status</u>	<u>MS Status</u>	<u>LA Status</u>	<u>On-Site</u>	<u>Vicinity (6-mile)</u>	<u>Transmission ROW</u>
<b><u>Insects</u></b>							
<i>Epitheca spinosa</i>	Robust Baskettail	-	S1	-	Yes	Yes	-
<b><u>Plants</u></b>							
<i>Lindera melissifolia</i>	Pondberry	E	E	-	No	No	Yes

T = Threatened

E = Endangered

CS = Candidate Species

S1 = Critically Imperiled in Mississippi

S2 = Imperiled in Mississippi

S3 = Rare or uncommon in Mississippi

T (S/A) = Threatened by similarity of appearance.

---

\* Interior least terns belong to a subspecies of least terns and are protected Federally, and by the state of Mississippi under the species name. *Sterna antillarum athalassos* is the subspecies endemic to the project region and is therefore specified above.

---

Figure 1

Location of GGNS, 6-Mile Radius Map

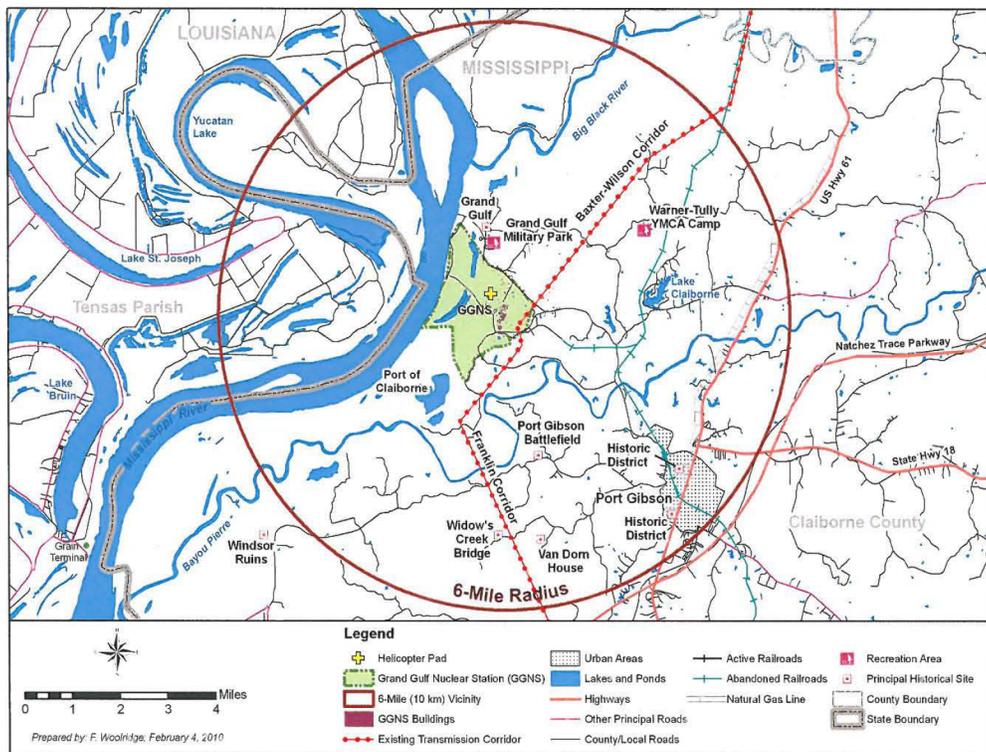
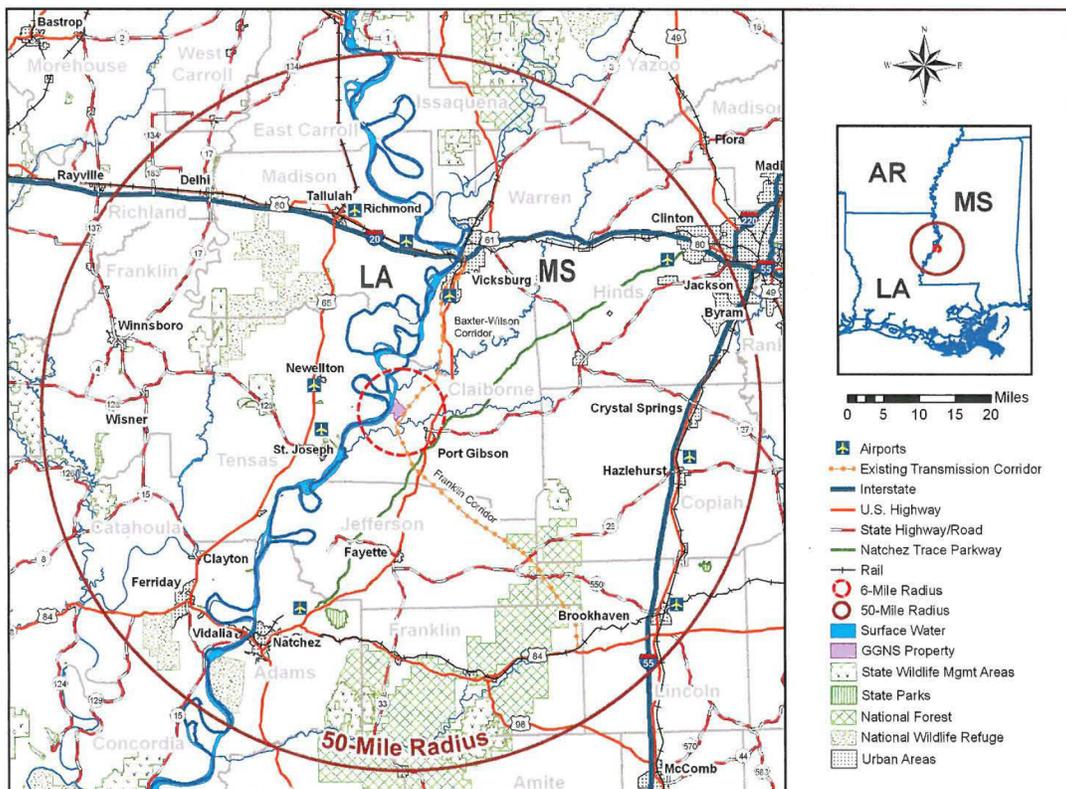


Figure 2

Location of GGNS, 50-Mile Radius Map





## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
646 Cajundome Blvd.  
Suite 400  
Lafayette, Louisiana 70506

March 4, 2011

Mr. James A. Thomas  
Enercon  
5100 East Skelly Drive, Suite 450  
Tulsa, OK 74135

Dear Mr. Thomas:

Please reference your February 4, 2011, letter, regarding the renewal of an operating license for the Grand Gulf Nuclear Station (GGNS), which is located in Claiborne County, Mississippi. That letter requested our concurrence with your determination that the proposed project is not likely to adversely affect any federally threatened or endangered species. The U.S. Fish and Wildlife Service (Service) has reviewed the information you provided, and offers the following comments on the Louisiana portion in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). These comments only pertain to those species that fall under the purview of the Louisiana Ecological Services Office (ESO).

The proposed project is located on the east bank of the Mississippi River at River Mile 406. The federally listed species that fall within a 50-mile radius of the GGNS (in Louisiana) include the Louisiana black bear (*Ursus americanus luteolus*), interior least tern (*Sterna antillarum*), pallid sturgeon (*Scaphirhynchus albus*), and fat pocketbook pearly mussel (*Potamilus capax*). According to your letter, there are no expected changes to the operation of the GGNS that would occur during the license renewal term (an additional 20 years). There are also no proposed construction activities. Based on this information, the Service concurs with your determination that the proposed project is not likely to adversely affect the above listed species. Therefore, no further ESA consultation will be necessary with our office for this project.

We appreciate the opportunity to provide these comments. If you need further assistance, please contact Seth Bordelon (337/291-3138) of this office.

Sincerely,

Brad S. Rieck  
Deputy Field Supervisor  
Louisiana Ecological Services Office

cc: LDWF, Natural Heritage Program, Baton Rouge, LA

