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.



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 singlecircuit 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, <u>jthomas@enercon.com</u>. Thank you in advance for your assistance.

Thank you,

A Chenus toma

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

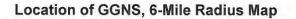
Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
Mammals							
Puma concolor coryi	Florida Panther	Е	Е	Е	No	No	No
Ursus americanus luteolus	Louisiana Black Bear	т.	E	Т	Yes	Yes	Yes
Ursus americanus	American Black Bear	т	E	10.0	Yes	Yes	Yes
Birds							
Haliaeetus leucocephalus	Bald Eagle	1.	E	E	Yes	Yes	Yes
Mycteria americana	Wood Stork	E	E	_	Yes	Yes	Yes
Sterna antillarum athalassos	Interior Least Tern	E*	E*	Е	No	Yes	Yes
Picoides borealis	Red-Cockaded Woodpecker	Е	E	_	No	No	Yes
Eudocimus albus	White Ibis	-	S2, S3	-	Yes	Yes	Yes
Reptiles							
Alligator mississippiensis	American Alligator	T (S/A)	_		Yes	Yes	Yes
<u>Fish</u>					× *		
Scaphirhynchus albus	Pallid Sturgeon	Е	E	Е	Yes	Yes	No
Etheostoma rubrum	Bayou Darter	т	Е	_	No .	Yes	No
Crystallaria asprella	Crystal Darter	-	E	-	Yes	Yes	No
Macrhybopsis meeki	Sicklefin Chub	_	S1	_	Yes	Yes	1.00-010
Macroinvertebrates							
Potamilus capax	Fat Pocketbook Mussel	E	Е	-	No	No	Yes
Quadrula cylindrica	Rabbitsfoot Mussel	CS	_		No	Yes	Yes

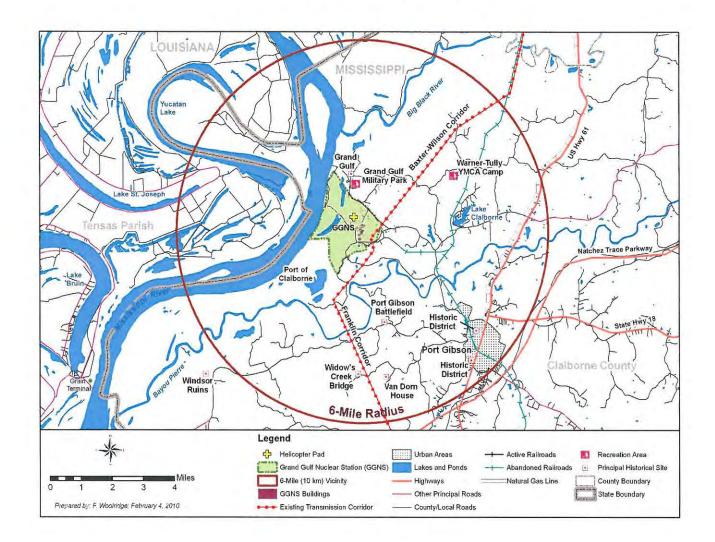
Table 1 (Continued)

Federal and State-Listed Species

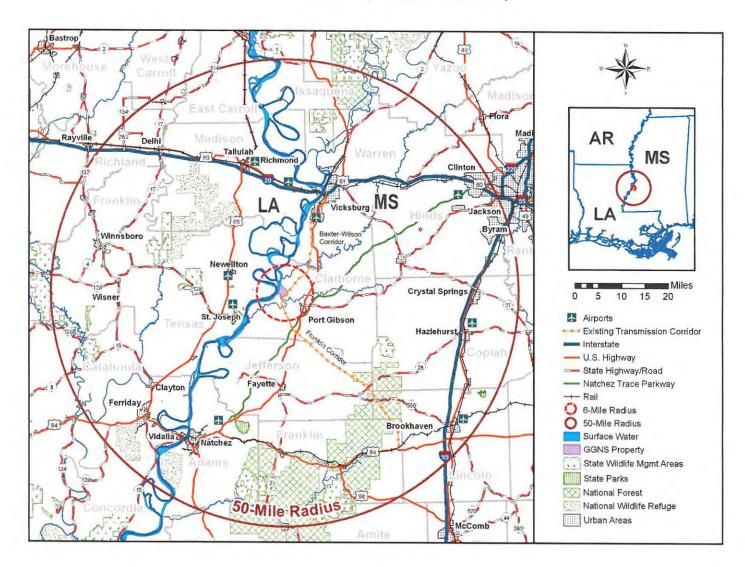
Scientific Name	<u>Common Name</u>	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
<u>Insects</u>							
Epitheca spinosa	Robust Baskettail		S1	_	Yes	Yes	St. Land
<u>Plants</u>							
Lindera melissifolia	Pondberry	E	E	4	No	No	Yes
T = Threatened	in the second			N	1		
E = Endangered							
CS = Candidate Species							
S1 = Critically Imperiled in Mi	ssissippi						
S2 = Imperiled in Mississippi							
S3 = Rare or uncommon in N	lississippi						
T (S/A) = Threatened by simi	arity 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.





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,

Stephen Ricks

For ^{*} Stephen Ricks Field Supervisor



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 singlecircuit 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 of 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, <u>ithomas@enercon.com</u>. 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

Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
Mammals	A						
Puma concolor coryi	Florida Panther	Е	E	E	No	No	No
Ursus americanus luteolus	Louisiana Black Bear	Т	Е	Τ -	Yes	Yes	Yes
Ursus americanus	American Black Bear	٠T	E		Yes	Yes	Yes
<u>Birds</u>							
Haliaeetus leucocephalus	Bald Eagle	C 4	E	Е	Yes	Yes	Yes
Mycteria americana	Wood Stork	Е	Е	1	Yes	Yes	Yes
Sterna antillarum athalassos	Interior Least Tern	E*	E*	E	No	Yes	Yes
Picoides borealis	Red-Cockaded Woodpecker	Е	E	- 2	No	No	Yes
Eudocimus albus	White Ibis	_	S2, S3	-	Yes	Yes	Yes
Reptiles							
Alligator mississippiensis	American Alligator	T (S/A)		-	Yes	Yes	Yes
<u>Fish</u>							
Scaphirhynchus albus	Pallid Sturgeon	Е	Е	Е	Yes.	Yes	No
Etheostoma rubrum	Bayou Darter	Т	Е	_	No	Yes	No
Crystallaria asprella	Crystal Darter		Е		Yes	Yes	No
Macrhybopsis meeki	Sicklefin Chub		S1	-	Yes	Yes	-
Macroinvertebrates							
Potamilus capax	Fat Pocketbook Mussel	E	E	_	No	No	Yes
Quadrula cylindrica	Rabbitsfoot Mussel	CS	_	_	No	Yes	Yes
							4 - 0

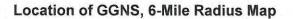
Table 1 (Continued)

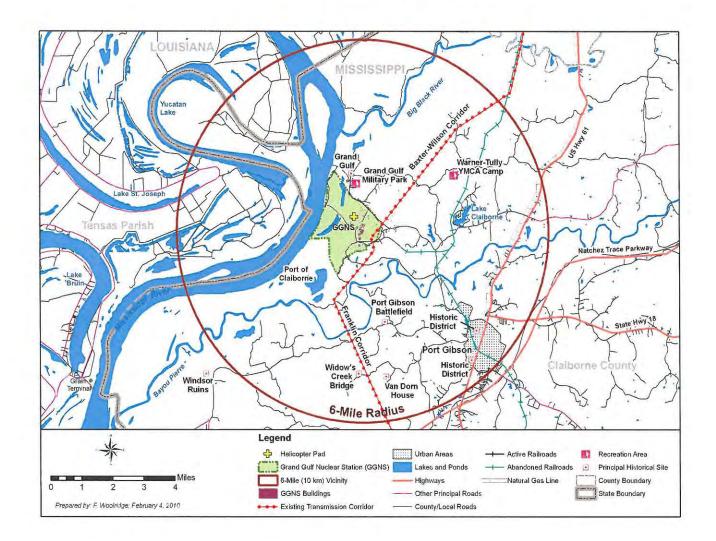
Federal and State-Listed Species

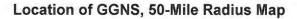
Scientific Name	Common Name	Federal <u>Status</u>	MS Status	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
Insects							
Epitheca spinosa	Robust Baskettail	and the second	S1	- <u>-</u>	Yes	Yes	
Plants							
Lindera melissifolia	Pondberry	E	E	14	No	No	Yes
T = Threatened	100 A 40 A 40 A 40 A	+	1		12 - A - N-		
E = Endangered							
CS = Candidate Species							
S1 = Critically Imperiled in Mi	ssissippi					1 3 34	
S2 = Imperiled in Mississippi							
S3 = Rare or uncommon in M	lississippi		1.1				

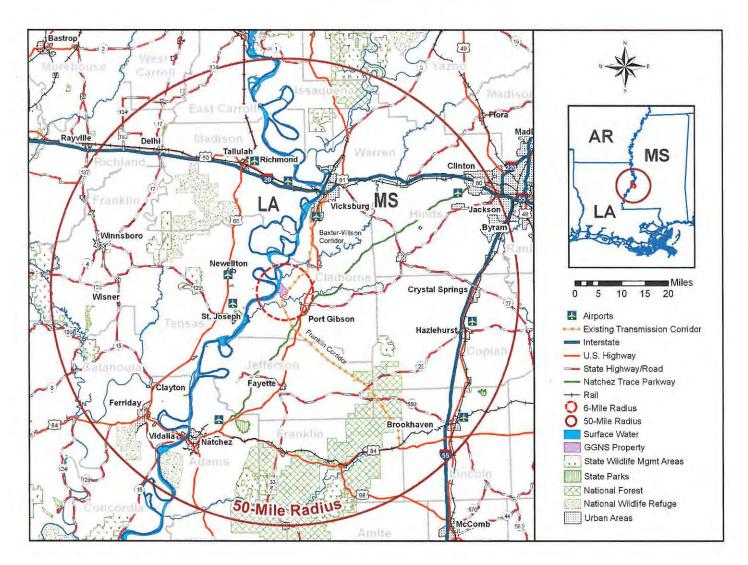
T (S/A) = Threatened by similarity of appearance.

* 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.











United States Department of the Interior

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

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





February 4, 2011

Dr. Sherry Surrette Mississippi Natural Heritage Program Mississippi Museum of Natural Science Department of Wildlife, Fisheries and Parks 2148 Riverside Drive Jackson, MS 39202

SUBJECT: Grand Gulf Nuclear Station License Renewal Application

Dear Dr. Surrette,

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 existing transmission system. 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. 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 lines that were constructed for purposes of connecting GGNS to the regional electricity grid (see Figure 2). These transmission

Dr. Sherry Surrette Mississippi Natural Heritage Program Mississippi Museum of Natural Science Department of Wildlife, Fisheries and Parks Page 2 of 4

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.

If you have any questions, please contact me at (918) 665-7693 or through my email address, <u>ithomas@enercon.com</u>. Thank you in advance for your assistance.

Thank you,

and A flemant

James A. Thomas Manager, Electric Utilities Environmental Services

Attachment – 6-Mile Map 50-Mile Map

cc: Rick Buckley (Entergy)

	Federal and	State-Listed	Species				
Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
Mammals							
Puma concolor coryi	Florida Panther	Е	E	E	No	No	No
Ursus americanus luteolus	Louisiana Black Bear	T	Е	Т	Yes	Yes	Yes
Ursus americanus	American Black Bear	Т	E		Yes	Yes	Yes
<u>Birds</u>							
Haliaeetus leucocephalus	Bald Eagle	_	E	E	Yes	Yes	Yes
Mycteria americana	Wood Stork	Е	Е		Yes	Yes	Yes
Sterna antillarum athalassos	Interior Least Tern	E*	E*	E	No	Yes	Yes
Picoides borealis	Red-Cockaded Woodpecker	E	E	-	No ·	No	Yes
Eudocimus albus	White Ibis	_	S2, S3	_	Yes	Yes	Yes
<u>Reptiles</u>							
Alligator mississippiensis	American Alligator	T (S/A)	_ 17	112	Yes	Yes	Yes
<u>Fish</u>							
Scaphirhynchus albus	Pallid Sturgeon	E	Е	Е	Yes	Yes	No
Etheostoma rubrum	Bayou Darter	Τ.	E	-	No	Yes	No
Crystallaria asprella	Crystal Darter		E	_	Yes	Yes	No
Macrhybopsis meeki	Sicklefin Chub	_	S1	- 14	Yes	Yes	
Macroinvertebrates							
Potamilus capax	Fat Pocketbook Mussel	Е	E	1	No	No	Yes
Quadrula cylindrica	Rabbitsfoot Mussel	CS	1-1-1		No	Yes	Yes

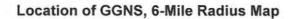
Table 1 Federal and State-Listed Species

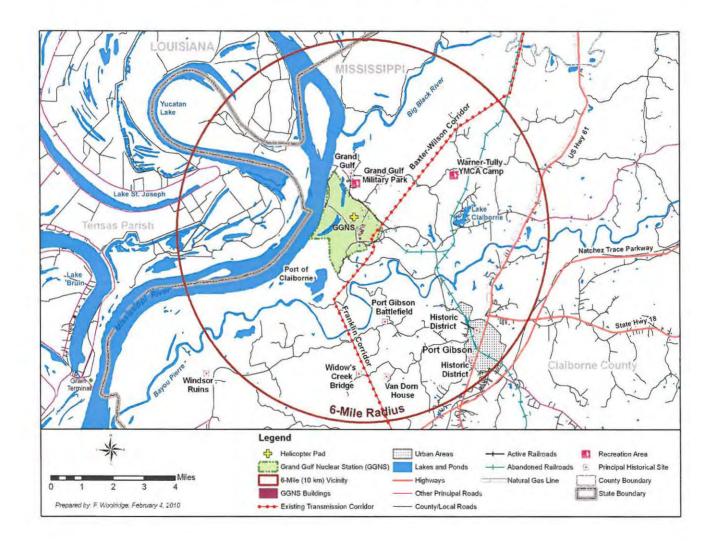
Table 1 (Continued)

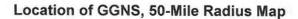
Federal and State-Listed Species

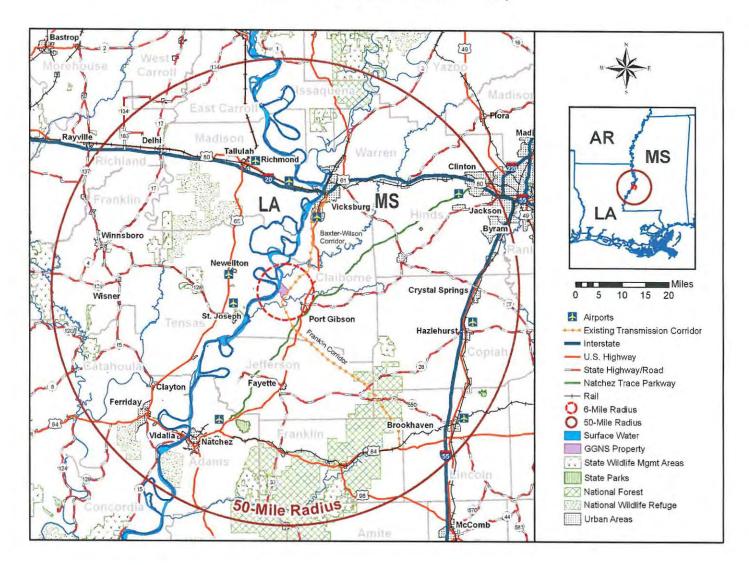
Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
<u>Insects</u>							
Epitheca spinosa	Robust Baskettail	1112121	S1	1	Yes	Yes	
<u>Plants</u>							
Lindera melissifolia	Pondberry	E	E	_	No	No	Yes
T = Threatened		5- 10	200				
E = Endangered							
CS = Candidate Species						1000	
S1 = Critically Imperiled in M	ississippi			4		1.0	
S2 = Imperiled in Mississippi		19. I.					
S3 = Rare or uncommon in M	Aississippi						
T (S/A) = Threatened by similar	ilarity of appearance						

Sterna antillarum athalassos is the subspecies endemic to the project region and is therefore specified above.











MISSISSIPPI DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS

Sam Polles, Ph.D. Executive Director

February 23, 2011

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

Re: Entergy – Grand Gulf Nuclear Station Operating License Renewal Claiborne County, Mississippi

R# 8192

To Whom It May Concern,

In response to your request for information dated February 4, 2011, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our concerns and recommendations below.

Scientific Name	Common Name	Federal Status	State Status	State Rank
Crystallaria asprella	Crystal Darter		LE	SI
Scaphirhynchus albus	Pallid Sturgeon	LE	LE	SI
Ursus americanus luteolus	Louisiana Black Bear	LT, SAT	LE	S1
Macrhybopsis meeki	Sicklefin Chub			S1
Ursus americanus	Black Bear	PS	LE	S1
Eudocimus albus	White Ibis	1		S2B,S3N
Mycteria americana	Wood Stork	PS:LE	LE	S2N
Ichthyomyzon castaneus	Chestnut Lamprey			S3
Ictiobus niger	Black Buffalo			S3
Polyodon spathula	Paddlefish			S3
Cycleptus elongatus	Blue Sucker			S3
Piethodon websteri	Webster's Salamander			S3

State Rank

S1 — Critically imperiled in Mississippi because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.

S2 — Imperiled in Mississippi because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it vulnerable to extirpation.

\$3 - Rare or uncommon in Mississippi (on the order of 21 to 100 occurrences).

State and Federal Status

LE Endangered — A species which is in danger of extinction throughout all or a significant portion of its range.

LT Threatened - A species likely to become endangered in foreseeable future throughout all or a significant portion of its range.

Based on information provided, we conclude that if best management practices are properly implemented, monitored, and maintained (particularly measures to prevent, or at least, minimize negative impacts to water quality), the proposed project likely poses no adverse threat to listed species or their habitats.

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to this area. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,

Jullon

Joelle Carney, Database Manager/Biologist Mississippi Natural Heritage Program (601) 354-7303

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.



February 4, 2011

Ms. Carolyn Michon Assistant Data Manager Louisiana Natural Heritage Program Department of Wildlife and Fisheries Post Office Box 98000 Baton Rouge, LA 70898-9000

SUBJECT: Grand Gulf Nuclear Station License Renewal Application

Dear Ms. Michon,

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 routed to connect the plant to the existing transmission system. 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.

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

Ms. Carolyn Michon Assistant Data Manager Louisiana Natural Heritage Program Department of Wildlife and Fisheries Page 2 of 4

GGNS site is mostly rural. There are two transmission corridors containing a singlecircuit 500-kV transmission lines that connect the GGNS site 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 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 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 of 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.

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

Thank you,

Tamas Alhanay

James A. Thomas Manager, Electric Utilities Environmental Services

Attachment - 6-Mile Map

Rick Buckley (Entergy) CC:

Table 1

Federal and State-Listed Species

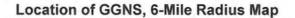
Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
Mammals							
Puma concolor coryi	Florida Panther	Е	E	E	No	No	No
Ursus americanus luteolus	Louisiana Black Bear	т	E	Т	Yes	Yes	Yes
Ursus americanus	American Black Bear	т	E	_	Yes	Yes	Yes
Birds						-	
Haliaeetus leucocephalus	Bald Eagle	1	E	E	Yes	Yes	Yes
Mycteria americana	Wood Stork	E	E	_	Yes	Yes	Yes
Sterna antillarum athalassos	Interior Least Tern	E*	E*	E	No	Yes	Yes
Picoides borealis	Red-Cockaded Woodpecker	Е	E		No	No	Yes
Eudocimus albus	White Ibis	_	S2, S3		Yes	Yes	Yes
<u>Reptiles</u>							
Alligator mississippiensis	American Alligator	T (S/A)		-	Yes	Yes	Yes
<u>Fish</u>							
Scaphirhynchus albus	Pallid Sturgeon	Е	Е	Е	Yes	Yes	No
Etheostoma rubrum	Bayou Darter	т	Е	_	No	Yes	No
Crystallaria asprella	Crystal Darter		Е	-	Yes	Yes	No
Macrhybopsis meeki	Sicklefin Chub	_	S1	_	Yes	Yes	
Macroinvertebrates			- 4				
Potamilus capax	Fat Pocketbook Mussel	E	Е	10.20	No	No	Yes
Quadrula cylindrica	Rabbitsfoot Mussel	CS		_	No	Yes	Yes

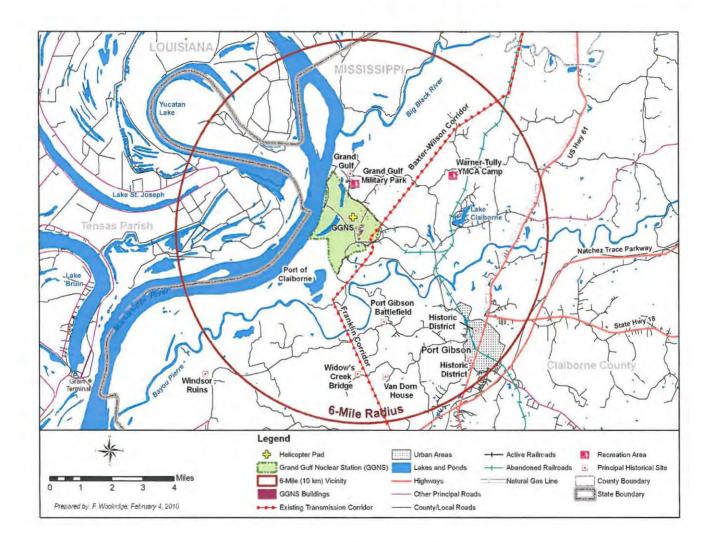
Table 1 (Continued)

Federal and State-Listed Species

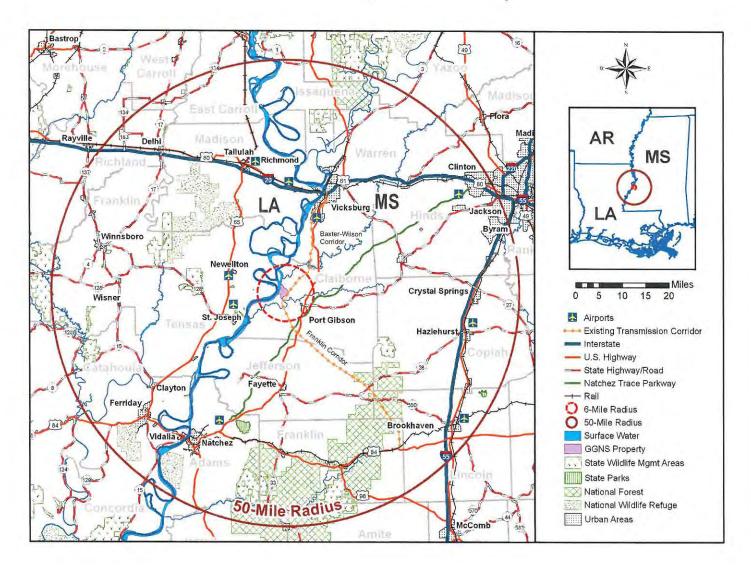
Scientific Name	Common Name	Federal <u>Status</u>	MS <u>Status</u>	LA <u>Status</u>	On-Site	Vicinity (6-mile)	Transmission <u>ROW</u>
<u>Insects</u>						The state	
Epitheca spinosa	Robust Baskettail		S1		Yes	Yes	2013 1 2 2 0 S
Plants							
Lindera melissifolia	Pondberry	Е	E	2 <u>2</u>	No	No	Yes
T = Threatened	and the second sec				1.1	1.1.25	P
E = Endangered			1.1				
CS = Candidate Species			1				
S1 = Critically Imperiled in M	ississippi						14
S2 = Imperiled in Mississippi							
S3 = Rare or uncommon in M	Mississippi				1 . ·		
T (S/A) = Threatened by sim	ilarity of appearance.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1					

Sterna antillarum athalassos is the subspecies endemic to the project region and is therefore specified above.





Location of GGNS, 50-Mile Radius Map





BOBBY JINDAL GOVERNOR

State of Louisiana DEPARTMENT OF WILDLIFE AND FISHERIES OFFICE OF WILDLIFE ROBERT J. BARHAM SECRETARY JIMMY L. ANTHONY ASSISTANT SECRETARY

Date	February 18, 2011
Name	James A. Thomas
Company	ENERCON
Street Address	5100 East Skelly Driv, Suite 450
City, State, Zip	Tulsa, OK 74135
Project	Grand Gulf Nuclear Station License Renewal Application
Project ID	572011
Invoice Number	11021805

Personnel of the Habitat Section of the Coastal & Non-Game Resources Division have reviewed the preliminary data for the captioned project. After careful review of our database, no impacts to rare, threatened, or endangered species or critical habitats are anticipated for the proposed project. No state or federal parks, wildlife refuges, scenic streams, or wildlife management areas are known at the specified site within Louisiana's boundaries.

The Louisiana Natural Heritage Program (LNHP) has compiled data on rare, endangered, or otherwise significant plant and animal species, plant communities, and other natural features throughout the state of Louisiana. Heritage reports summarize the existing information known at the time of the request regarding the location in question. The quantity and quality of data collected by the LNHP are dependent on the research and observations of many individuals. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Louisiana have not been surveyed. This report does not address the occurrence of wetlands at the site in question. Heritage reports should not be considered final statements on the biological elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments. LNHP requires that this office be acknowledged in all reports as the source of all data provided here. If at any time Heritage tracked species are encountered within the project area, please contact the LNHP Data Manager at 225-765-2643. If you have any questions, or need additional information, please call 225-765-2357.

Sincerely,

Carea Micha

Amity Bass, Coordinator Natural Heritage Program



March 4, 2011

Mr. David Bernhart Assistant Regional Administrator NOAA Fisheries Service Southeast Regional Office Protected Resources Division 263 13th Avenue South Saint Petersburg, Florida 33701

RE: Grand Gulf Nuclear Station License Renewal Application

Dear Mr. Bernhart,

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.

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 singlecircuit 500-kV transmission lines that were constructed for purposes of connecting Mr. David Bernhart Assistant Regional Administrator NOAA Fisheries Southeast Regional Office Protected Resources Division Page 2 of 2

GGNS to the regional electricity grid (see Figure 2). These transmission line corridors are considered by the NRC to be within the scope of its environmental reviews for the 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 crosses Claiborne, Warren, Jefferson and Franklin Counties in Mississippi.

Based on a review of information available. Enercon did not identify any threatened and endangered species or designated critical habitats under the jurisdiction of the NOAA fisheries service at the station site, the immediate environs, or the transmission line corridors (see Figures 1 and 2). However, even in the absence of these species or designated critical habitats. Entergy does not expect GGNS operations during the license renewal term to adversely affect any threatened and endangered species or 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 as a result of license renewal to threatened and endangered species or designated critical habitat under your jurisdiction on the GGNS property, immediate environs, or along the transmission line corridors, or alternatively, confirming our conclusion that no species or habitats under the jurisdiction of NOAA exists, and thereby no associated impacts. 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.

If you have any questions, please contact me at (918) 665-7693 or through my email address, <u>ithomas@enercon.com</u>. Thank you in advance for your assistance.

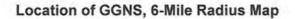
Thank you,

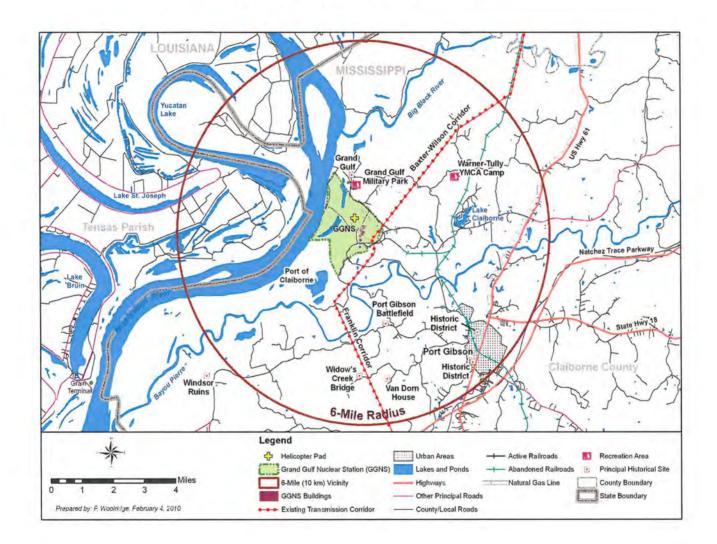
Allemas

James A. Thomas Manager, Electric Utilities Environmental Services

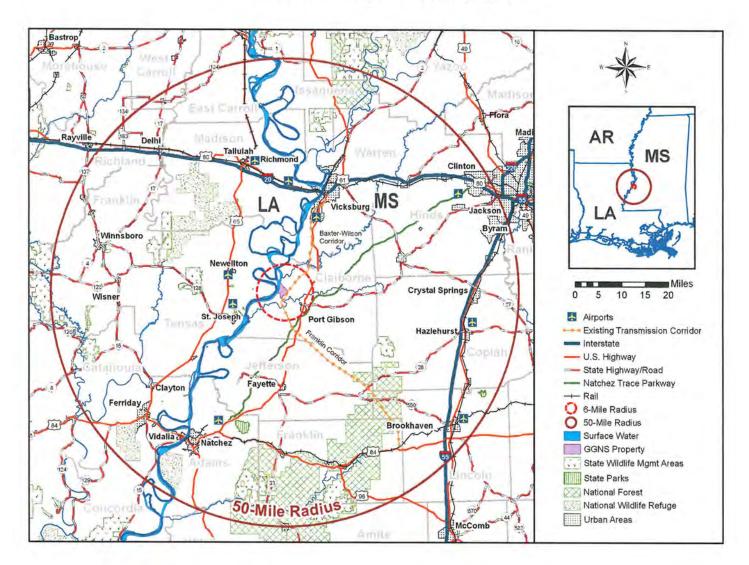
Attachment – 6-Mile Map 50-Mile Map

cc: Rick Buckley (Entergy)











UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office 263 13th Avenue South St. Petersburg, FL 33701-5505 727.824.5312, FAX 824.5309 http://sero.nmfs.noaa.gov

F/SER31:NB

Mr. James A. Thomas Manager, Electric Utilities Environmental Services Enercon 5100 East Skelly Drive, Suite 450 Tulsa, Oklahoma 74135

JUN 1 4 2011

Dear Mr. Thomas:

This is in response to your letter, received by the National Marine Fisheries Service (NMFS) on March 4, 2011, regarding the operating license renewal for the Grand Gulf Nuclear Station near Port Gibson, Mississippi. The current 40-year operating license expires in 2024. Enercon is gathering information on Entergy's behalf relative to this license renewal project.

The Gulf sturgeon (*Acipenser oxyrinchus desotoi*) was listed jointly by NMFS and the U.S. Fish and Wildlife Service (USFWS) as threatened on September 30, 1991 (56 FR 49653). Gulf sturgeon are known to inhabit the Mississippi River and have been collected upstream of the project site in the region of Vicksburg, Mississippi¹. The project area is not within designated Gulf sturgeon critical habitat (50 CFR 226.214).

Pursuant to the jurisdictional responsibilities outlined in the final rule designating Gulf sturgeon critical habitat (68 FR 13400), the USFWS would be the lead agency for activities on the Mississippi River. Therefore, consultation regarding potential impacts to Gulf sturgeon from the license renewal of the Grand Gulf Nuclear Station should be coordinated with Karen Harrington, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, 1601 Balboa Avenue, Panama City, Florida 32405-3721 (tel:850/769-0552).



Thank you for providing the opportunity to provide comments on the project. We look forward to further cooperation with you on other projects to ensure the conservation of our threatened and endangered marine species and designated critical habitat. If you have any questions, please contact Nicole Bailey, ESA Consultant, at (727) 824-5336, or by e-mail at Nicole.Bailey@noaa.gov.

Sincerely, Senhar

David Bernhart Assistant Regional Administrator for Protected Resources

File: 1514-22.m Ref: T/SER/2011/01889

¹ Ross, S.T. 2001. The Inland Fishes of Mississippi. University Press of Mississippi, Jackson.