



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

February 16, 2011

Mr. David Bernhart  
Asst. Regional Administrator for Protected Resources  
NOAA Fisheries Services (NMFS)  
Southeast Region Office  
263 13<sup>th</sup> Avenue South  
St. Petersburg, FL 33701

SUBJECT: REQUEST FOR LIST OF FEDERALLY PROTECTED SPECIES AND  
IMPORTANT HABITATS WITHIN THE AREA UNDER EVALUATION FOR THE  
SOUTH TEXAS PROJECT, UNITS 1 AND 2, LICENSE RENEWAL  
APPLICATION REVIEW

Dear Mr. Bernhart:

The U.S. Nuclear Regulatory Commission (NRC or the staff) is reviewing an application submitted by South Texas Project Nuclear Operating Company (STPNOC) for the renewal of the operating license for the South Texas Project (STP), Units 1 and 2. STP is located in Matagorda County in Texas, approximately 70 miles South-Southwest of Houston. The application for renewal was submitted by STPNOC in a letter dated October 25, 2010, pursuant to Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54). The NRC has established that, as part of the staff's review of any nuclear power plant license renewal application, a site-specific Supplemental Environmental Impact Statement (SEIS) to its *Generic Environmental Impact Statement for License Renewal of Nuclear Plants*, NUREG-1437, must be prepared under 10 CFR Part 51, the NRC's regulation that implements the National Environmental Policy Act (NEPA) of 1969, as amended. In the SEIS for STP, the NRC staff will consider the proposed action of whether or not to renew STP's operating license for an additional 20 years beyond the initial 40-year licensing period. The SEIS will include an analysis of pertinent environmental issues, impacts to endangered or threatened species, impacts to marine resources and habitats and impacts to other fish and wildlife. This letter is being submitted under the provisions of the Endangered Species Act of 1973, as amended, and the Fish and Wildlife Coordination Act of 1934, as amended.

The STP site is approximately 12,220 acres in size and consists of approximately 46 acres of site buildings, support facilities, transmission rights-of-way, and other developed land. The remaining land includes an Essential Cooling Pond (46 acres); a Main Cooling Reservoir (7,000 acres); natural lowland habitat (1,700 acres); and other undeveloped land (3,474 acres), some of which is leased for cattle grazing. The STP site is bounded on the north, east, and south by estuarine marshland. In their license renewal application, STPNOC stated that, if renewed, STP would continue to use existing plant facilities and structures and existing power transmission facilities. No major construction or component replacement (referred to collectively in the GEIS as "refurbishment") would occur as a result of the proposed license renewal.

STP uses a cooling pond-based heat dissipation system to cool its reactor units. Heated discharge water flows from the main condensers and into the Main Cooling Reservoir, where waste heat is removed. The Colorado River supplies makeup water for the Main Cooling Reservoir. Four makeup pumps carry with a total capacity of 269,000 gallons per minute transport water from the Colorado River to a Reservoir Makeup Pumping Facility, which then releases water to the Main Cooling Reservoir. The makeup pumps are operated intermittently as needed. The Main Cooling Reservoir also has a blowdown structure, which releases reservoir water to the Colorado River 1.1 miles downstream of STP along the west bank.

The transmission lines associated with STP include 9 345-kV lines and are depicted in the Transmission Line Map (enclosed). The associated transmission line rights-of-way extend a total distance of 336 miles and encompass approximately 4,775 acres of land. The transmission lines pass through primarily agricultural and rangeland as well as developed areas with low population densities and some forested areas. In its review, the NRC staff will consider Federally listed species and terrestrial and aquatic habitats that occur in or near the transmission line rights-of-way. Note that though the STP site is contained within Matagorda County, the transmission lines traverse an additional 14 counties, which are listed at the bottom of the Federally Listed Species Table (enclosed).

To support the SEIS preparation process and to ensure compliance with Section 7 of the Endangered Species Act, the NRC requests concurrence on the enclosed Federally Listed Species Table, which includes threatened, endangered, proposed, and candidate species that may be on or in the vicinity of the STP or its associated transmission line rights-of-way. The NRC also requests any additional information on protected species and critical habitat that may be in the vicinity of the STP if such information is available. In addition, please provide any information you consider appropriate under the provisions of the Fish and Wildlife Coordination Act.

The NRC staff plans to hold two public scoping meetings on March 2, 2011. The first session will be held in the afternoon and an identical session will be held later that evening. The first meeting will convene at 1:30 PM and will continue until 3:30 PM, as necessary. The second meeting will convene at 7:00 PM and will continue until 9:00 PM as necessary. Both sessions will be held at the Bay City Civic Center, Main Hall, Room 100, 201 Seventh Street, Bay City, TX 77414. In addition, during the week of July 11, 2011, the NRC plans to conduct a site audit. You and your staff are invited to attend both the public meetings and the site audit. Your office will receive a copy of the draft SEIS along with a request for comments. The anticipated publication date for the draft SEIS is in 2012.

D. Bernhart

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If you have any questions concerning the NRC staff's review of this license renewal application, please contact Tam Tran, License Renewal Project Manager, at 301-415-3617 or by e-mail at [Tam.Tran@nrc.gov](mailto:Tam.Tran@nrc.gov).

Sincerely,

A handwritten signature in black ink, appearing to be 'Bo M. Pham', with a long horizontal line extending to the right.

Bo M. Pham, Branch Chief  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

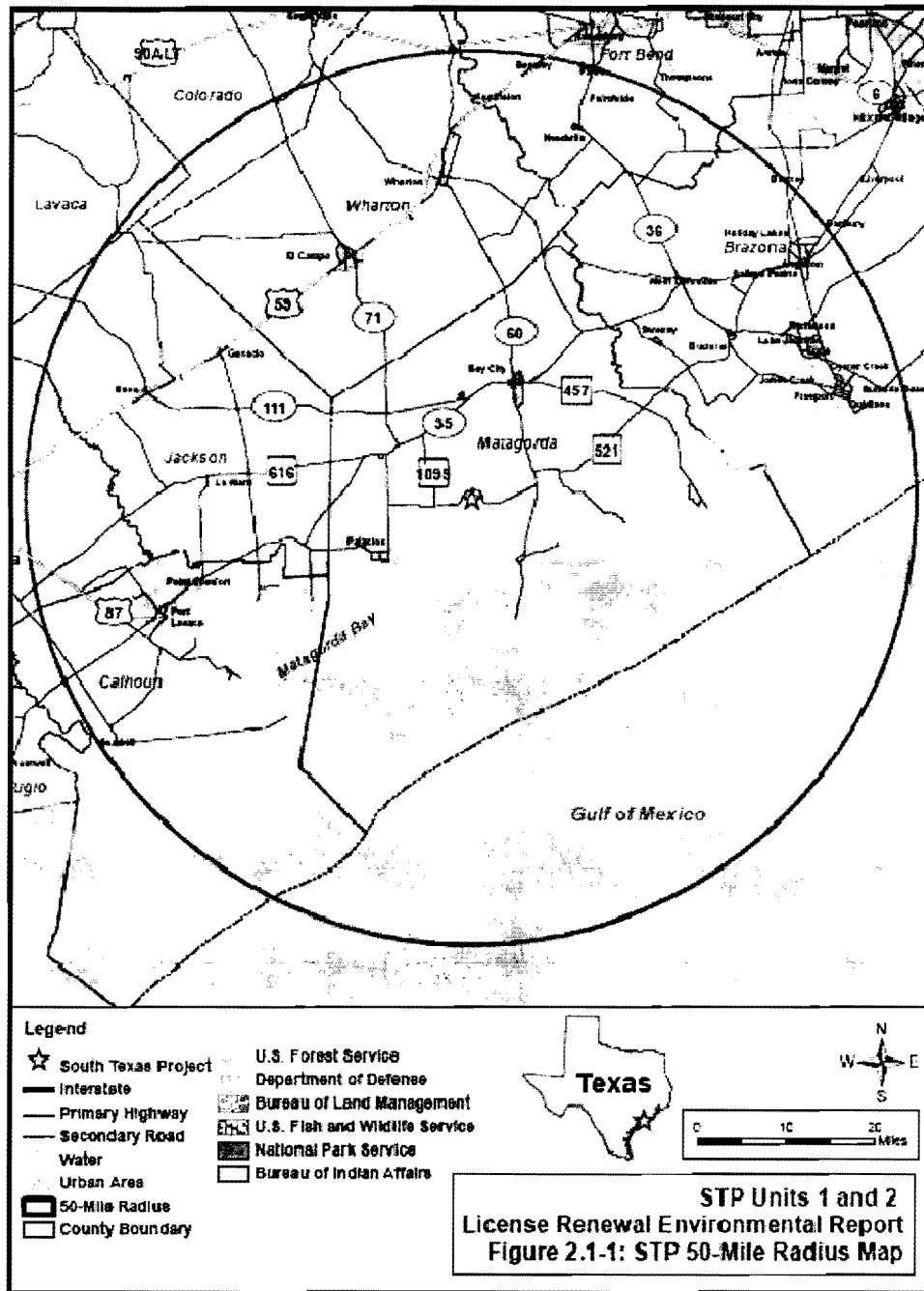
Docket Nos. 50-498 and 50-499

Enclosures:

- |                             |                              |
|-----------------------------|------------------------------|
| 1. Area Map, 50-mile radius | 4. Transmission Line Map     |
| 2. Area Map, 6-mile radius  | 5. Federal T&E Species Table |
| 3. Site Area Map            |                              |

cc w/encls: Distribution via Listserv

## AREA MAP, 50-MILE RADIUS

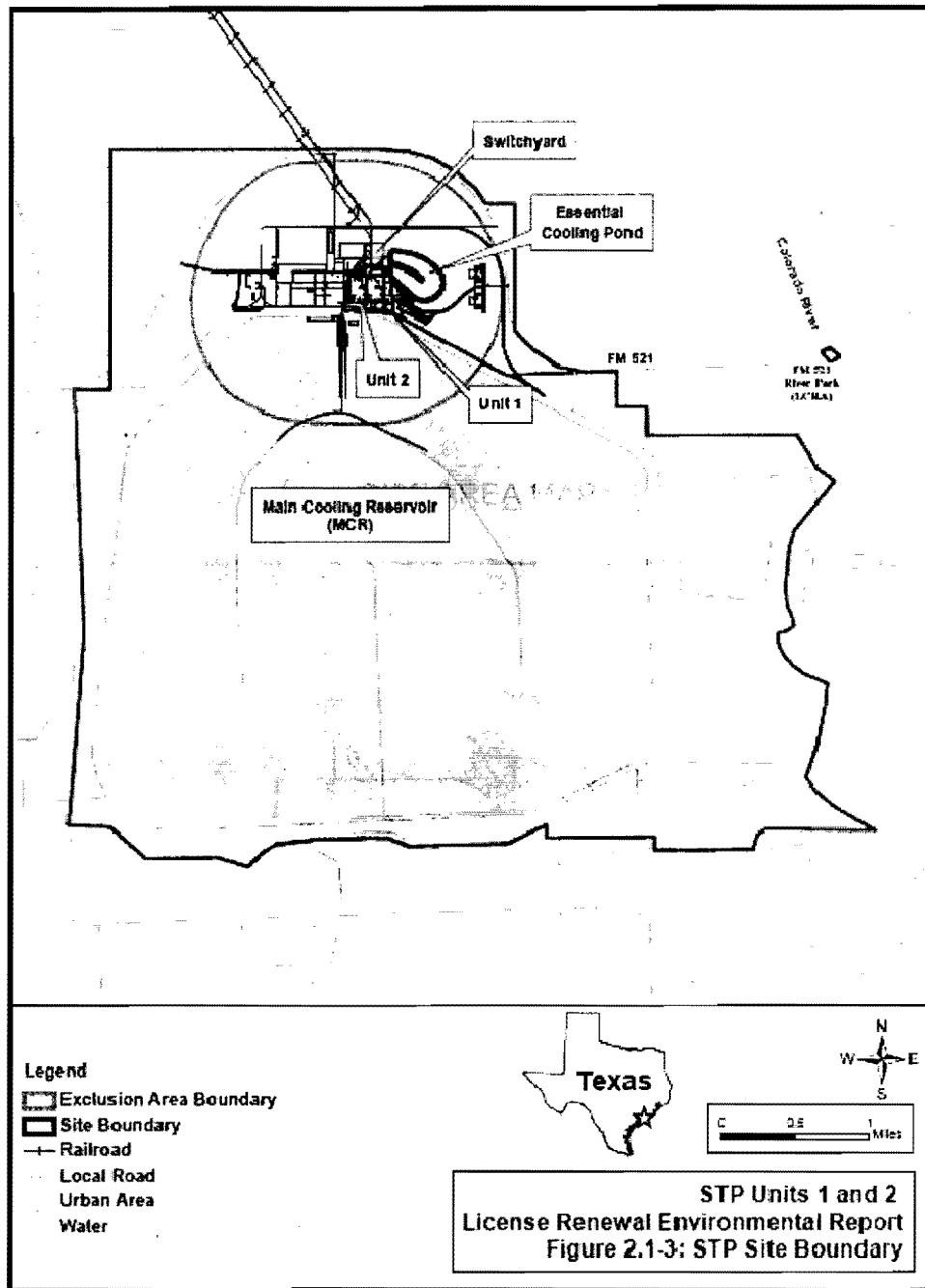


**Legend**

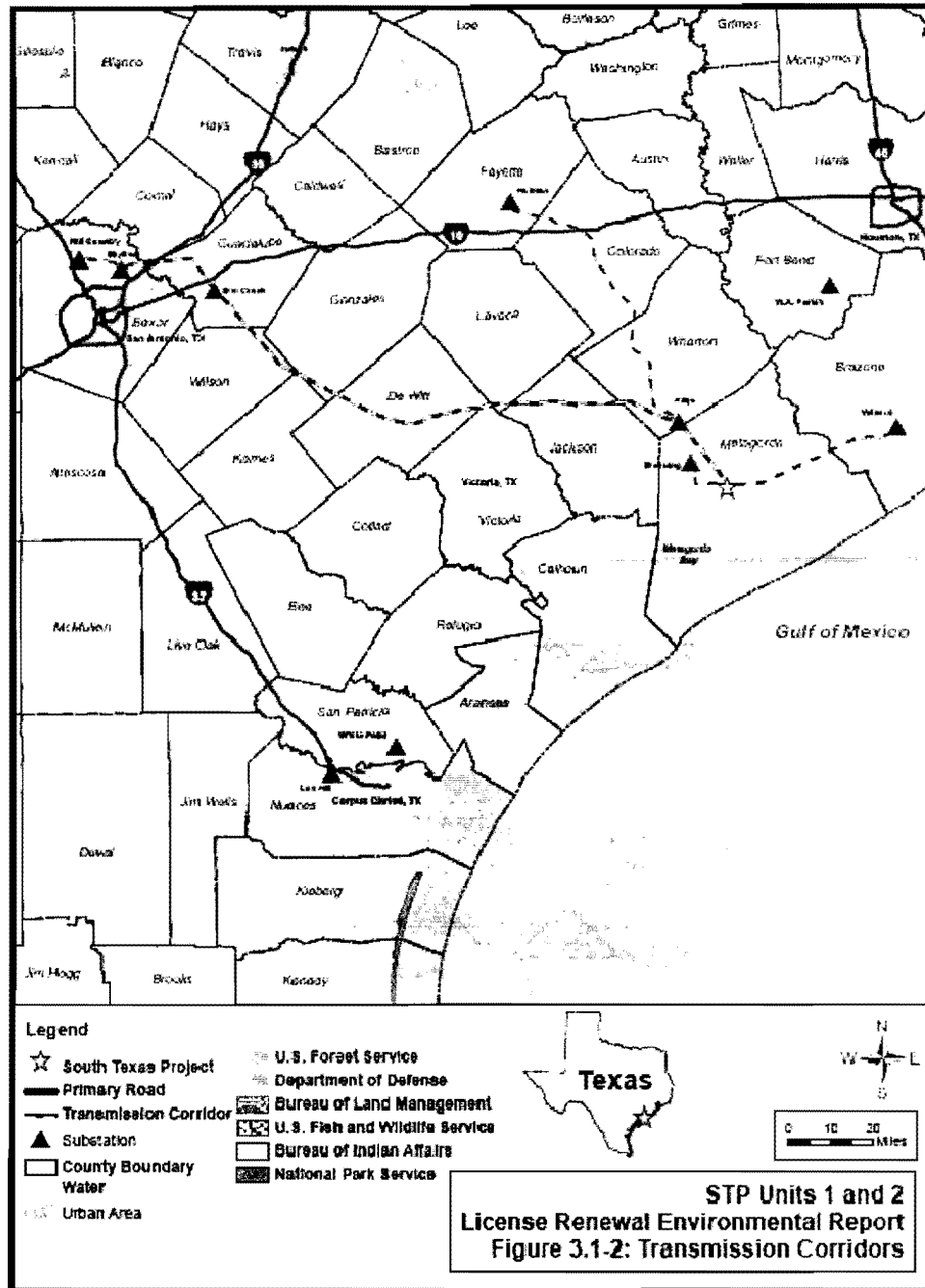
- ☆ South Texas Project
- [Thick black outline] Site Boundary
- [Thin black outline] Six-Mile Radius
- + Railroad
- Secondary Road
- Local Road
- [Stippled pattern] Urban Area
- [Blue wavy lines] Water

**STP Units 1 and 2  
License Renewal Environmental Report  
Figure 2.1-2: STP Six-Mile Radius Map**

## SITE AREA MAP



## RANSMISSION LINE MAP



**Federally Listed Species Potentially Occurring On and In The Vicinity of  
the South Texas Project Site and Its Associated Transmission Line Rights-of-Way**

<b>Scientific Name</b>	<b>Common Name</b>	<b>Federal Status<sup>(a)</sup></b>	<b>County(ies) of Occurrence<sup>(b)</sup></b>
<b>Amphibians</b>			
<i>Bufo houstonensis</i>	Houston toad	E	Colorado, Lavaca
<b>Arachnids</b>			
<i>Cicurina baronia</i>	robber baron cave meshweaver	E	Bexar
<i>Cicurina madla</i>	Madla's cave meshweaver	E	Bexar
<i>Cicurina venii</i>	braken bat cave meshweaver	E	Bexar
<i>Cicurina vespera</i>	Government Canyon bat cave meshweaver	E	Bexar
<i>Neoleptoneta microps</i>	Government Canyon bat cave spider	E	Bexar
<i>Texella cokendolpheri</i>	Cokendolpher cave harvestman	E	Bexar
<b>Birds</b>			
<i>Charadrius melodus</i>	pipin plover	T	Brazoria, Matagorda
<i>Dendroica chrysoparia</i>	golden-cheeked warbler	E	Bexar, Comal
<i>Falco femoralis septentrionalis</i>	northern aplomado falcon	E	ALL
<i>Tympanuchus cupido attwateri</i>	Attwater's greater prairie-chicken	E	Colorado
<i>Vireo atricapilla</i>	black-capped vireo	E	Bexar, Comal
<b>Crustaceans</b>			
<i>Stygobromus pecki</i>	Peck's cave amphipod	E	Comal
<b>Fish</b>			
<i>Etheostoma fonticola</i>	fountain darter	E	Comal
<i>Gambusia georgei</i>	San Marcos gambusia	E	Bexar, Comal
<b>Flowering Plants</b>			
<i>Batrissodes ventyivi</i>	helotes mold beetle	E	Bexar
<i>Hoffmannseggia tenella</i>	slender rush-pea	E	ALL
<b>Insects</b>			
<i>Heterelmis comalensis</i>	Comal Springs riffle beetle	E	Comal
<i>Rhadine exilis</i>	unnamed ground beetle	E	Bexar
<i>Rhadine infernalis</i>	unnamed ground beetle	E	Bexar
<i>Spiranthes parksii</i>	Navasota ladies' tresses	E	Fayette
<i>Stygoparnus comalensis</i>	Comal Springs dryopid beetle	E	Comal
<b>Mammals</b>			
<i>Herpailurus yagouaroundi cacomitli</i>	Gulf Coast jaguarondi	E	Karnes
<i>Leopardus pardalis</i>	ocelot	E	Karnes
<i>Trichechus manatus</i>	West Indian manatee	E	Brazoria, Jackson, Matagorda
<i>Ursus americanus</i> <sup>(3)</sup>	American black bear	T	ALL
<b>Reptiles</b>			
<i>Caretta caretta</i>	loggerhead sea turtle	T	Brazoria, Matagorda
<i>Chelonia mydas</i>	green sea turtle	T	Brazoria, Matagorda
<i>Dermochelys coriacea</i>	leatherback sea turtle	E	Brazoria, Matagorda
<i>Eretmochelys imbricate</i>	hawksbill sea turtle	E	Brazoria, Matagorda
<i>Lepidochelys kempii</i>	Kemp's ridley sea turtle	E	Brazoria, Matagorda



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<sup>(a)</sup> C = candidate, E = endangered, T = threatened

<sup>(b)</sup> The South Texas Site is located in Matagorda County. The transmission lines associated with the South Texas Site traverse Matagorda County as well as the following counties: Bexar, Brazoria, Colorado, DeWitt, Fayette, Gonzales, Guadalupe, Jackson, Lavaca, Wharton, and Wilson Counties.

<sup>(3)</sup> The American black bear is designated threatened within the historic range of the Louisiana black bear (*Ursus americanus luteolus*) due to its similarity of appearance with this species.

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**Table Source:**

FWS (U.S. Fish and Wildlife Service). "Find Endangered Species: Species By County Report" for Bexar, Brazoria, Colorado, Comal, DeWitt, Fayette, Gonzales, Guadalupe, Jackson, Karnes, Lavaca, Matagorda, Victoria, Wharton, and Wilson Counties. Available URL: <http://www.fws.gov/endangered/> (accessed January 27, 2011).

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D. Bernhart

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Sincerely,

**/RA/**

Bo M. Pham, Branch Chief  
Projects Branch 1  
Division of License Renewal  
Office of Nuclear Reactor Regulation

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