

October 25, 2004

Mr. Larry Goldman  
Field Supervisor  
U.S. Fish and Wildlife Service  
P.O. Drawer 1190  
Daphne, AL 36526

SUBJECT: BIOLOGICAL ASSESSMENT FOR LICENSE RENEWAL OF THE BROWNS  
FERRY NUCLEAR POWER PLANT, AND A REQUEST FOR INFORMAL  
CONSULTATION

Dear Mr. Goldman:

The U.S. Nuclear Regulatory Commission (NRC) staff has prepared the enclosed biological assessment (Enclosure 1) to evaluate whether the proposed renewal of the Browns Ferry Nuclear Plant, Units 1, 2, and 3 (BFN) operating licenses for a period of an additional 20 years would have adverse effects on listed species. The proposed action (license renewal) is not a major construction activity. BFN is located on the north shore of Wheeler Reservoir in Limestone County, Alabama, at Tennessee River Mile (TRM) 294.

By letter dated March 5, 2004, the NRC requested a list of Federally threatened or endangered species that may be in the vicinity of BFN and its associated transmission lines. In a letter dated May 19, 2004, the U.S. Fish and Wildlife Service (FWS) directed the NRC to the following Website, <http://daphne.fws.gov/es/specieslst.htm>, for a list of Federally listed threatened or endangered species to evaluate in a biological assessment (BA). The FWS Website listed 11 terrestrial and 38 aquatic Federally protected species as potentially occurring in counties containing the BFN site, transmission line and rights-of-way, and Wheeler Reservoir. Your letter dated May 19, 2004, also expressed concerns related to the operation of BFN and the potential impact on the rough pigtoe; specifically, potential impacts resulting from the plant operating at maximum power levels.

For documentation purposes, the NRC has included all terrestrial and aquatic species found on the aforementioned FWS Website in the enclosed BA. This BA provides an evaluation of the potential impact of renewing the BFN operating licenses for an additional 20 years of operation on the forty-five listed species and four candidate species identified in Tables 1, 2, and 3 of the BA.

The NRC has determined that the proposed action has no effect on the red-cockaded woodpecker (*Picoides borealis*), the American hart's tongue fern (*Asplenium scolopendrium* var. *americanum*), and 29 of the aquatic species (Table 3). In addition, the staff has determined that the proposed action may affect, but is not likely to adversely affect, the bald eagle (*Haliaeetus leucocephalus*), gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), Price's potato bean (*Apios priceana*), leafy prairie clover (*Dalea foliosa*), Eggert's sunflower (*Helianthus eggertii*), fleshy-fruited glaucous (*Leavenworthia crassa*), lyrate bladder-pod (*Lesquerella lyrata*), Tennessee yellow-eyed grass (*Xyris tennesseensis*), Anthony's riversnail

(*Athearnia anthonyi*), slender campeloma (*Campeloma decampi*), armored snail (*Pyrgulopsis pachyta*), spectaclecase (*Cumberlandia monodonta*), Cumberlandian combshell (*Epioblasma brevidens*), pink mucket (*Lampsilis abrupta*), slabside pearlymussel (*Lexingtonia dolabellodes*), rough pigtoe (*Pleurobema plenum*), and the slackerwater darter (*Etheostoma boschungii*). The site contains no critical habitat for any protected species. However, some areas within the transmission line rights-of-way have recently been designated critical habitat for the Cumberlandian combshell. TVA has designed and implemented maintenance procedures for its transmission line rights-of-way that protect all listed species and their habitats.

We are placing this BA in our project files and are requesting your concurrence with our determination. In reaching its conclusion, the NRC staff relied on information provided by the licensee, on research performed by NRC staff, and information from the FWS (i.e., including current listings of species provided by FWS, Daphne, Alabama Field Office).

If you have any questions regarding this BA or the staff's request, please contact Dr. Michael Masnik, Senior Project Manager, at 301-415-1191 or by email at [mtm2@nrc.gov](mailto:mtm2@nrc.gov).

Sincerely,

**/RA/**

Pao-Tsin Kuo, Program Director  
License Renewal and Environmental Impacts Program  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket Nos.: 50-259, 50-260, and 50-296

Enclosure: As stated

cc w/encl.: See next page

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Sincerely,

**/RA/**

Pao-Tsin Kuo, Program Director  
 License Renewal and Environmental Impacts Program  
 Division of Regulatory Improvement Programs  
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DATE	10/16/04	10/16/04	10/25/04	10/19/04	10/25/04

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## **BROWNS FERRY NUCLEAR PLANT**

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