GEHitachiUELAPEm Resource

From: Ridge, Christianne
Sent: Monday, June 22, 2009 11:03 AM
To: Avci, Halil I.
Cc: Fischer, Karl W.; vinikour@anl.gov
Subject: GLE: consultation reply from US FWS
Attachments: GLE consultation reply from FWS.pdf

Halil,
On 6/18 we received the attached reply from U.S. Fish and Wildlife Service and sent a consultation letter to NOAA Marie Fisheries.
Christianne

Hearing Identifier: GEHitachiUE_LicenseApplication_Public
Email Number: 233

Mail Envelope Properties (89515C5A6407354784A897CABE08E52D0889E0731C)

Subject: GLE: consultation reply from US FWS
Sent Date: 6/22/2009 11:03:09 AM
Received Date: 6/22/2009 11:03:00 AM
From: Ridge, Christianne

Created By: Christianne.Ridge@nrc.gov

Recipients:
"Fischer, Karl W." <kfischer@anl.gov>
Tracking Status: None
"vinikour@anl.gov" <vinikour@anl.gov>
Tracking Status: None
"Avci, Halil I." <avci@anl.gov>
Tracking Status: None

Post Office: HQCLSTR02.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	160	6/22/2009 11:03:00 AM
GLE consultation reply from FWS.pdf	506998	

Options
Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

BRANCH
USNRC

United States Department of the Interior

2009 JUN 15 AM 8:22

FISH AND WILDLIFE SERVICE
Raleigh Field Office
Post Office Box 33726
Raleigh, North Carolina 27636-3726

RECEIVED

June 8, 2009

Ms. Andrea Kock
Chief, Environmental Review Branch
Division of Waste management and Environmental Protection
Office of Federal and State Materials and Environmental Management Programs
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

4/09/09
74 FR 16237
(1)

Chief, Rules and Directives Branch
Mail Stop TWB 5B01M
United States Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Subject: Docket No. 70-7016; General Electric-Hitachi Global Laser Enrichment Facility, New Hanover County, North Carolina

Greetings:

This letter responds to Ms. Kock's request of May 1, 2009, for information from the U. S. Fish and Wildlife Service (Service) regarding federally threatened or endangered species within the action area of the Global Laser Enrichment (GLE) facility proposed by General Electric-Hitachi in New Hanover County, North Carolina. The Service is also providing comments to the Chief, Rules and Directives Branch, on the Notice of Intent (NOI), published in the Federal Register on April 9, 2009, to prepare an Environmental Impact Statement (EIS) for this facility. These comments are submitted in accordance with the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661-667d) and section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

The GLE facility, if licensed by the Nuclear Regulatory Commission (NRC), would enrich uranium for use in manufacturing commercial nuclear fuel for use in power reactors. The action area of the proposed GLE facility would be 265 acres of a 1,621-acre area known as the Wilmington Site (WS) that contains an existing nuclear fuels facility. The existing facility occupies 303 acres within the WS and the proposed GLE facility may occupy an additional 100 acres. Managed pines on the site occupy 312 acres.

Existing conditions on the WS are described in the Ecological Resources section (Section 3.5) of GLE Environmental Report (ER) that accompanied Ms. Kock's letter. The WS contain 13 major biotic communities in varying stages of succession, including alluvial

SUNSI Review Complete
Template = ADM-013

E-RIDS = ADM-03
Add = C. Ridge (CCR1)

forest, swamp forest, ephemeral ponds, and pocosin/bay forest. These communities provide habitat for resident and migratory birds. The site contains two unnamed tributaries to the Northeast Cape Fear River. The North Carolina Natural Heritage Program (NCNHP) has identified the swamp forest on the WS as part of a natural area of national significance that includes one of the best examples of the tidal cypress-gum communities in North Carolina.

Federally Protected Species

The action area of the GLE facility appears to be in the northeastern portion of the WS (Figure 3.5-2). A list of all federally-protected endangered and threatened species with known occurrences in North Carolina is now available on the U.S. Fish and Wildlife Service's (Service) web page at < http://www.fws.gov/raleigh/es_tes.html > along with a link to the "County List." Additional information on special status species is available from the NCNHP on special status species at the county level and individual topographic quads. The project is within the Castle Hayne quad. The NCNHP database can be accessed at < http://www.ncnhp.org/Pages/heritagedata.html >.

More site specific information on special status species, both State and federal, can be obtained through the Virtual Workroom of the NCNHP at the same intranet address given above. The Virtual Workroom is a web-based GIS application that allows users to obtain information on rare species, natural communities, and natural areas. This site allows the public to generate a list of all NCNHP records (designated as element occurrences) within two miles of the location specified by the user, and reflects the data as it currently exists in the program's database. Before using the Virtual Workroom, users should review the User's Manual (available through the "Help" link at the upper right of the Web page).

The Service's review of the ER indicates that the nine species listed in Table 3.5-7 as the federally threatened or endangered species known to occur in New Hanover County is accurate at this time. This table presents an assessment of whether habitat is present for each species within the WS. The Service concurs that the three coastal species would not be present in the action area. These are the two sea turtles and the piping plover (*Charadrius melodus*). There is no formally designated critical habitat in the project area.

The Service does not concur that the federally endangered West Indian manatee (*Trichechus manatus*) could not use the tidal creeks on the site. The Northeast Cape Fear River and some of its tributaries may provide suitable habitat for manatees that move along the Atlantic Coast and into inland waters during summer months and are seasonal transients in North Carolina, primarily from June through October. While the ER states (p. 3.5-15) that manatees use waters at least five feet deep, the species may occur in water as shallow as one to two meters (3.3 -6.6 feet) deep. The species moves extensively when in North Carolina waters and past occurrence records cannot be used to precisely determine the likelihood that it will be presence at a particular construction site. Therefore, potential impacts to this species should be assessed if construction and

operation of the facility would produce any direct or indirectly impacts on waters of sufficient depth and with a direct, unobstructed connection to the river.

The American alligator (*Alligator mississippiensis*) in North Carolina does not require ESA consideration. The species is only listed as threatened due to similarity of appearance (TS/A) with the American crocodile (*Crocodylus acutus*) which only occurs in southern Florida. From the federal perspective, the alligator is not biologically threatened and does not have protection under the ESA. However, the alligator has a State status of threatened.

The federally endangered shortnose sturgeon (*Acipenser brevirostrum*) is under the jurisdiction of the National Marine Fisheries Service (NMFS). That agency should be contacted for potential impacts to this species which may occur in the lower Cape Fear River watershed.

While the biotic communities that would be impacted by the proposed GLE facility are not identified, Table 3.5-7 indicates that there is habitat for two federally endangered species under the jurisdiction of the Service in the action area. The endangered rough-leaved loosestrife (RLL) (*Lysimachia asperulaefolia*) is considered in the ER (pp. 3.5-15 to 16). This perennial herb generally occurs in the ecotones, or edges, between longleaf pine uplands and pond pine pocosins (areas of dense shrub and vine growth usually on a wet, peaty, poorly drained soil), on moist to seasonally saturated sands, and on shallow organic soils overlaying sand. It has also been found on deep peat soils in the low shrub community of Carolina bays. The grass-shrub ecotone, where RLL is found, is fire-maintained, as are the adjacent plant communities (longleaf pine-scrub oak, savanna, flatwoods, and pocosin). Suppression of naturally-occurring fire in these ecotones allows shrubs to increase in density and height. Shrubs may eliminate the open edges required by this plant.

The portion of the ER available to the Service is unclear on the current status of RLL habitat in the WS. While Table 3.5-7 states that habitat is present, Section 3.5.8.1.2 states that naturally occurring habitat for the RLL "may have occurred naturally on the Wilmington Site in the past, but the pocosin habitat that could have supported this plant has been drained." Furthermore, the fire regime necessary for the species is not currently present on the site. If suitable burning and hydrology were reestablished, the ER concludes that habitat is potentially available on the site.

The evaluation of impacts to this species in the EIS should state whether RLL habitat currently exists on the site. Surveys for the presence of suitable RLL habitat (as opposed to the actual plants) can generally be performed year round.

If these surveys reveal that suitable habitat exists within the project area, then actual RLL surveys should be done. This work should be performed during the period when RLL is detectable. The optimal period is mid-May through June (refer to < http://www.nc-es.fws.gov/plant/optimal_survey_window_for_plants.htm >), but can extent to October. Most RLL populations are small, both in area covered and in number of stems. If RLL

plants are discovered within areas that would be impacted, the Service should be contacted in order to develop a conservation plan.

The ER states (p. 3.5-15) that one active colony of the endangered red-cockaded woodpecker (RCW) (*Picoides borealis*) is located within a five-mile radius of the WS. While no cavity (nesting) trees have been observed on the site, some birds "may occasionally forage in the Site." As noted, Table 3.5-7 states that RCW habitat is present on the site.

Prior to licensing, the NRC must require the company to determine the impact of the proposed facility on the RCW. The second revision of the Service's Recovery Plan for the RCW (U. S. Fish and Wildlife Service [hereafter USFWS] 2003) provides survey protocols (Appendix 4) for nesting and foraging habitat. The first step in the survey procedure is to determine if suitable nesting or foraging habitat exists within the area to be impacted. If no suitable nesting or foraging habitat is present within the project impact area, further assessment is unnecessary and a "no effect" determination is appropriate.

The EIS should provide information to support the finding that no RCW cavity trees occur on the site. The recovery plan discusses the identification of suitable nesting habitat and survey methods for RCW cavity trees (USFWS 2003, p. 289-290). For the purpose of surveying, suitable nesting habitat consists of pine, pine/hardwood, and hardwood/pine stands that contain pines 60 years in age or older. Additionally, pines 60 years in age or older may be scattered or clumped within younger stands. Older pine trees within younger stands must be considered as potential RCW nesting sites. These characteristics do not necessarily describe good quality nesting habitat; rather, this is a conservative description of potential nesting habitat. Determination of suitable nesting habitat may be based on existing stand data, aerial photo interpretation, and/or field reconnaissance. All stands meeting the above description, regardless of ownership, should be considered as suitable nesting habitat.

If suitable nesting habitat is identified on the site, this habitat must be surveyed for cavity trees (nest sites) of the RCW by personnel experienced in management and/or monitoring of the species (USFWS 2003, pp. 289-290). Potential nesting habitat is surveyed by running line transects through stands and visually inspecting all medium-sized and large pines for evidence of cavity excavation by the RCW. Transects must be spaced so that all trees are inspected. Necessary spacing will vary with habitat structure and season from a maximum of 91 m (100 yards) between transects in very open pine stands to 46 m (50 yards) or less in areas with a dense mid-story. Transects should run north-south, because many cavity entrances are oriented in a westerly direction, and can be set using a hand compass. If RCW cavity trees are found, these trees must not be cut and this office should be contacted before work commences to develop plans for avoiding take of the species.

Even if no cavity trees are present in the project area, surveys should establish whether RCW foraging habitat is present for those birds that "may occasionally forage in the

site." Suitable foraging habitat consists of a pine or pine/hardwood stand of forest, woodland, or savannah in which 50 percent or more of the dominant trees are pines and the dominant pine trees are generally 30 years in age or older (USFWS 2003, pp. 288-289). These characteristics do not necessarily describe good quality foraging habitat; rather, this is a conservative description of potentially suitable habitat. Identification of pine and pine/hardwood stands can be made using cover maps that identify pine and pine/hardwood stands, aerial photographs interpreted by standard techniques, or a field survey conducted by an experienced forester or biologist. Age of stands can be determined by aging representative dominant pines in the stands using an increment-borer and counting annual growth rings. Stand data describing size classes may be substituted for age if the average size of 30 year-old pines is known, i.e., at least 20.3 cm (8 in) diameter breast height (dbh) or larger, for the local area and habitat type.

Stands cannot be considered suitable as RCW foraging habitat unless they have an "open" character. A pine stand that is 30 years in age and has an average tree dbh of 20.3 cm (8 in) or more does not necessarily qualify as suitable foraging habitat (USFWS 2003, p. 294). If such a stand has not been prescribed burned (or otherwise treated to control hardwood mid-story) and has not been thinned to a basal area of 16.1 m^2/ha (70 ft^2/ac) or less, it will not satisfy the "open" condition criterion. Dense stands of young pine and pine/hardwood are typical of unmanaged plantations and natural regeneration areas (particularly loblolly seed tree harvests) that have not been thinned or frequently burned. Such stands cannot be considered suitable foraging habitat simply because they have the required total and stand basal area and average stem diameter. Stand quality, as measured by an open structure, is a critical factor determining suitability and use of foraging habitat and must be considered when acceptable foraging habitat is identified.

If suitable foraging habitat is present and would be impacted, potential use of this foraging habitat by RCW clusters outside the actual construction corridor must be determined. This is accomplished by identifying any potential nesting habitat within 0.8 km (0.5 mile) of the suitable foraging habitat that would be impacted. Surveys of potential nesting habitat for RCW cavity trees should be made in the area one-half mile from the foraging habitat. If active clusters are located in this area, surveys must be made to determine if clearing foraging habitat within the project area would adversely affect these birds.

If no active clusters are found that could potentially use the forage habitat in the project corridor, then a "no effect" determination is appropriate. If one or more active clusters are found within 0.5 mile of foraging habitat in the project area, a foraging habitat analysis must be conducted (see Section 8I of the recovery plan) to determine whether sufficient amounts of foraging habitat will remain for each group after construction.

As stated in the ER (p. 3.5-20), if the proposed action may affect a listed species, then formal consultation with the Service would be required. A biological assessment or evaluation may be prepared to fulfill that requirement and in determining whether additional consultation with the Service is necessary. Information on completing a biological assessment or evaluation and can be found on our web page at <

http://www.fws.gov/raleigh/es_consultation.html >. Please check the web site often for updated information or changes.

Other Special Status Species

The site contains potential habitat for several Federal Species of Concern (FSC), a term referring to those species which the Service believes might be in need of concentrated conservation actions. These species receive no legal protection and their designation does not necessarily imply that the species will eventually be proposed for listing as a federally endangered or threatened species. As noted in the ER (p. 3.5-16) the federal status of these species may change at any time. For this reason, the Service supports their consideration in project planning and recommends that all practicable measures be taken to avoid or minimize adverse impacts to any FSC.

Table 3.5-8 lists the 31 FSCs that are known to occur in New Hanover County. The ER discusses (pp. 3.5-16 to 20) the FSCs that have been observed on the WS or in the immediate vicinity. These species include the southern hognose snake (*Heterodon simus*), the southeastern myotis (*Myotis austroiparius*), Venus flytrap (*Dionaea muscipula*), spring-flowering goldenrod (*Solidago verna*), and coastal goldenrod (*S. villosicarpa*). The two goldenrods have a state status of endangered. Pondspice (*Litsea aestivalis*) is known to occur in the North-Central Sector, but altered hydrologic conditions do not favor recruitment of new plants. The Service recommends that planning consider that the coastal plain subspecies of Rafinesque's big-eared bat (*Corynorhinus rafinesquii macrotis*) may occur within the WS. The virtual workroom of the NCNHP shows that this FSC has been reported within two miles of the site. This species roosts in hollow trees, old buildings, and beneath bridges, usually near water.

Service Recommendations for the Environmental Impact Statement

The NOI provides the environmental aspects to be considered in the EIS. The list is comprehensive and a thorough evaluation of each should form a sound basis for choosing a course of action. We encourage a careful consideration of the cumulative impacts of any development along the Northeast Cape Fear River.

The Service seeks to foster the recovery and delisting of federally listed species and conserve FSCs in order to prevent their formal listing as threatened or endangered. As a means of achieving these goals, the Service sees an opportunity to conserve and restore areas within the WS that are not now being used by the company or would not be developed for the proposed GLE facility. As part of the consideration of indirect, or secondary, impacts of the GLE facility, the Service recommends that the EIS consider the likelihood that those areas of the site that are now undeveloped would retain their natural ecological functions. We encourage the company to develop a long-term conservation plan for the undeveloped areas, especially wetland forests along the river, tidal creeks, and ponds. There may be opportunities for restoration of degraded habitats such as the altered conditions that prevent the recruitment of pondspice. The naturally occurring habitat for the RLL that once occurred on the WS could be restored by eliminating

artificial drainage and implementing a natural fire regime through carefully controlled burns. Local, conservation groups could be contacted to assist in the development and management of conservation areas. This office can provide general advice on developing a conservation plan for the site.

The Service appreciates the opportunity to provide these scoping comments and technical assistance on the proposed work. If you have questions regarding these comments, please contact Howard Hall at 919-856-4520, ext. 27 or by e-mail at < howard_hall@fws.gov >.

Sincerely,

/Howard F. Hall

for Pete Benjamin
Field Supervisor

U.S. Fish and Wildlife Service. 2003. Recovery plan for the red-cockaded woodpecker (*Picoides borealis*): second revision. U.S. Fish and Wildlife Service, Atlanta, GA. 296 pp. available at < http://ecos.fws.gov/docs/recovery_plan/030320_2.pdf >.

cc:

Jennifer Frye, U. S. Army Corps of Engineers, Wilmington, NC
Stephen Rynas, NC Division of Coastal Management, Morehead City, NC
Molly Ellwood, NC Wildlife Resources Commission, Wilmington, NC