May 6, 2009

Dr. Roy Crabtree
NOAA
National Marine Fisheries Service
Southeast Regional Office
263 13th Avenue South
St. Petersburg, FL 33701

SUBJECT: REQUEST FOR LIST OF PROTECTED SPECIES AND ESSENTIAL FISH HABITAT WITHIN THE AREA UNDER EVALUATION FOR THE DUANE ARNOLD ENERGY CENTER LICENSE RENEWAL APPLICATION REVIEW

Dear Dr. Crabtree:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing an application submitted by FPL Energy Duane Arnold, LLC for the renewal of the operating license for Duane Arnold Energy Center (DAEC). The DAEC is located in Linn County, Iowa on the western bank of the north-south reach of the Cedar River, approximately two miles north-northeast of the town of Palo and approximately three miles east of the Benton county line. As part of the review of the license renewal application, the NRC is preparing a supplemental environmental impact statement (SEIS) under the provisions of the National Environmental Policy Act (NEPA) of 1969, as amended. The SEIS includes an analysis of pertinent environmental issues, including endangered or threatened species, and impacts to marine resources and habitat. 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, and the Sustainable Fisheries Act of 1996.

FPL Energy Duane Arnold, LLC has stated that it has no plans to alter current operations over the license renewal period. Operating under a renewed license, the DAEC would use existing plant facilities and transmission lines and would not require additional construction or disturbance of new areas. Any maintenance activities would be limited to previously disturbed areas.

The DAEC site encompasses approximately 500 acres of land. The site is located on a strip of land running northeast and parallel to the Cedar River, which is the largest tributary of the Iowa River. The slopes are heavily wooded, but transition into gently rolling farmland as one moves away from the immediate vicinity of the river. Aquatic communities of the Cedar River in the vicinity of DAEC are directly influenced by the quantity and quality of water in the river, which is the source of makeup water for the plant's mechanical draft cooling towers. Approximately 25 percent (126 acres) of the current site is leased farmland. The remainder of the site is a combination of small forested plots, a marsh and hardwood forest along the river, and the industrial plant complex (See Enclosed Map).

The plant employs a closed-cycle heat dissipation system with cooling towers, designed to remove waste heat from the Circulating Water System which cools the main condensers. The intake structure is located on the west bank of the Cedar River. Makeup water for the Circulating Water System is provided by the River Water Supply System, which includes the intake structure, intake pumps, and various features to control the amount of debris entering the system (See Enclosed Map).

Five transmission lines were built to connect DAEC to the electric grid. Two 345-kV lines tie into an existing 345-kV line, and three 161-kV lines deliver power to three substations at Washburn, Bertram, and Hiawatha (AEC 1973). An additional 161-kV line was later added to this system. The transmission system is summarized below (See Enclosed Map).

- Hills 345-kV Line – A single circuit line, which runs westward from DAEC along a 665-foot wide corridor shared with the Hazelton line, the Washburn Line, and for approximately 0.34 miles, the Bertram line. After the Bertram line splits off, the corridor becomes 500 feet wide. The Hills line runs approximately 2.7 miles and then turns south to the Hills substation feed, an existing line running in the north-south direction approximately 3.5 miles west of the site.

- Hazelton 345-kV Line – A single circuit line, which runs westward from DAEC in a 665-foot wide corridor shared with the Hills line, the Washburn Line, and for approximately 0.34 miles, the Bertram line. After the Bertram line splits off, the corridor becomes 500 feet wide. This line runs approximately 2.7 miles and turns north to the Hazelton substation to feed an existing line, which runs in a north-south direction approximately 3.5 miles west of the site.

- Washburn 161-kV Line – A single circuit line, which shares the westward 500-665 foot wide corridor with the Hills and Hazelton lines and continues west 16 miles to the Garrison substation, then an additional 30 miles north to the Washburn substation.

- Bertram 161-kV Line – A single circuit line, which shares the westward 665-foot wide corridor with the Hills and Hazelton lines for 0.34 miles, then continues southeast along a 100-foot corridor to Bertram substation for a total distance of 28 miles.

- Hiawatha 161-kV Line – A single circuit line, which leaves the site in an easterly direction, crosses the Cedar River, and continues eight miles to the Hiawatha substation.

- Sixth Street 161-kV Line – A single circuit line, which leaves the site in a southwesterly direction around Palo, then follows a railroad corridor 16 miles southeast to the center of Cedar Rapids proper.

To support the SEIS preparation process and to ensure compliance with Section 7 of the Endangered Species Act, the NRC requests a list of endangered, threatened, candidate, and proposed species, and designated and proposed critical habitat under the jurisdiction of the National Marine Fisheries Service that may be within the vicinity of the DAEC site and its transmission line corridors.

In addition, please provide any information you consider appropriate under the provisions of the Fish and Wildlife Coordination Act. Also, in support of the SEIS preparation and to ensure compliance with Section 305 of the Magnuson-Stevens Fishery Conservation and Management Act, the NRC requests a list of any essential fish habitat that has been designated in the vicinity of the Duane Arnold Energy Center site and its associated transmission line corridors. To meet the project schedule, we request that all information be transmitted by June 1, 2009.

On June 15, 2009, we plan to conduct an audit of the DAEC site. You and your staff are invited to attend this audit. Your office will also receive a copy of the draft SEIS along with a request for comments. The anticipated publication date for the draft SEIS is January 29, 2010. If you would like to submit any comments regarding the scope of this SEIS, or have any questions, please contact the Project Managers, Charles Eccleston at 301-415-8537 or by e-mail at Charles.Eccleston@nrc.gov, or Maurice Heath at 301-415-3137 or by e-mail at Maurice.Heath@nrc.gov.

Sincerely,

/RA/

David L. Pelton, Chief
Projects Branch 1
Division of License Renewal
Office of Nuclear Reactor Regulation

Docket No. 50-331

Enclosures:
1. Duane Arnold Site Description
2. Duane Arnold Site Boundary Map
3. Duane Arnold 6-Mile Vicinity Map
4. Duane Arnold Transmission System

cc w/encls: See next page

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Sincerely,

/RA/

David L. Pelton, Chief
Projects Branch 1
Division of License Renewal
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cc w/encls: See next page

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ADAMS Accession No. **ML091210025**

OFFICE	PM:DLR:RPB1	LA:DLR	BC:RPB1:DLR
NAME	C.Eccleston	YEdmonds	D.Pelton
DATE	05/05/09	05/04/09	05/06/09

OFFICIAL RECORD COPY

Letter to Roy. Crabtree from David L. Pelton dated

SUBJECT: REQUEST FOR LIST OF PROTECTED SPECIES AND ESSENTIAL FISH HABITAT WITHIN THE AREA UNDER EVALUATION FOR THE DUANE ARNOLD ENERGY CENTER LICENSE RENEWAL APPLICATION REVIEW

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M. Heath
C. Eccelston
M. Baty
K. Feintuch
N. Sheehan RI
R. Hannah RII
V. Mitlyng RIII
V. Dricks RIV

Duane Arnold Energy Center

cc:

Mr. Mano Nazar
Executive Vice President, Nuclear and Chief
Nuclear Officer
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Mr. M. S. Ross
Managing Attorney
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Ms. Marjan Mashhadi
Senior Attorney
Florida Power & Light Company
801 Pennsylvania Avenue, NW
Suite 220
Washington, DC 20004

T. O. Jones
Vice President, Nuclear Operations
Mid-West Region
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408

Steven R. Catron
Manager, Regulatory Affairs
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324

U.S. Nuclear Regulatory Commission
Resident Inspector's Office
Rural Route #1
Palo, IA 52324

Mr. D. A. Curtland
Plant Manager
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

Abdy Khanpour
Vice President, Engineering Support
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408

Daniel K. McGhee
Iowa Department of Public Health
Bureau of Radiological Health
321 East 12th Street
Lucas State Office Building, 5th Floor
Des Moines, IA 50319-0075

Chairman, Linn County
Board of Supervisors
930 1st Street SW
Cedar Rapids, IA 52404

Peter Wells, Acting Vice President, Nuclear
Training and Performance Improvement
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Mark E. Warner
Vice President, Nuclear Plant Support
Florida Power & Light Company
P. O. Box 14000
Juno Beach, FL 33408-0420

Mr. Richard L. Anderson
Vice President
Duane Arnold Energy Center
3277 DAEC Road
Palo, IA 52324-9785

Duane Arnold Energy Center Site Description

SITE DESCRIPTION

The Duane Arnold Energy Center (DAEC) site is located on the western side of a north-south reach of the Cedar River, approximately 2.5 miles north-northeast of the Village of Palo, Iowa, in Linn County (T-84N, R-8W, Sections 9 and 10). The closest city is Cedar Rapids with its outer boundary being 8 miles to the southeast. The site is approximately 500 acres in size, on a flat strip of land running northeast and parallel to the Cedar River. The distance from the plant stack to the nearest site boundary is approximately 440 meters (m). A paved county highway provides access to the site.

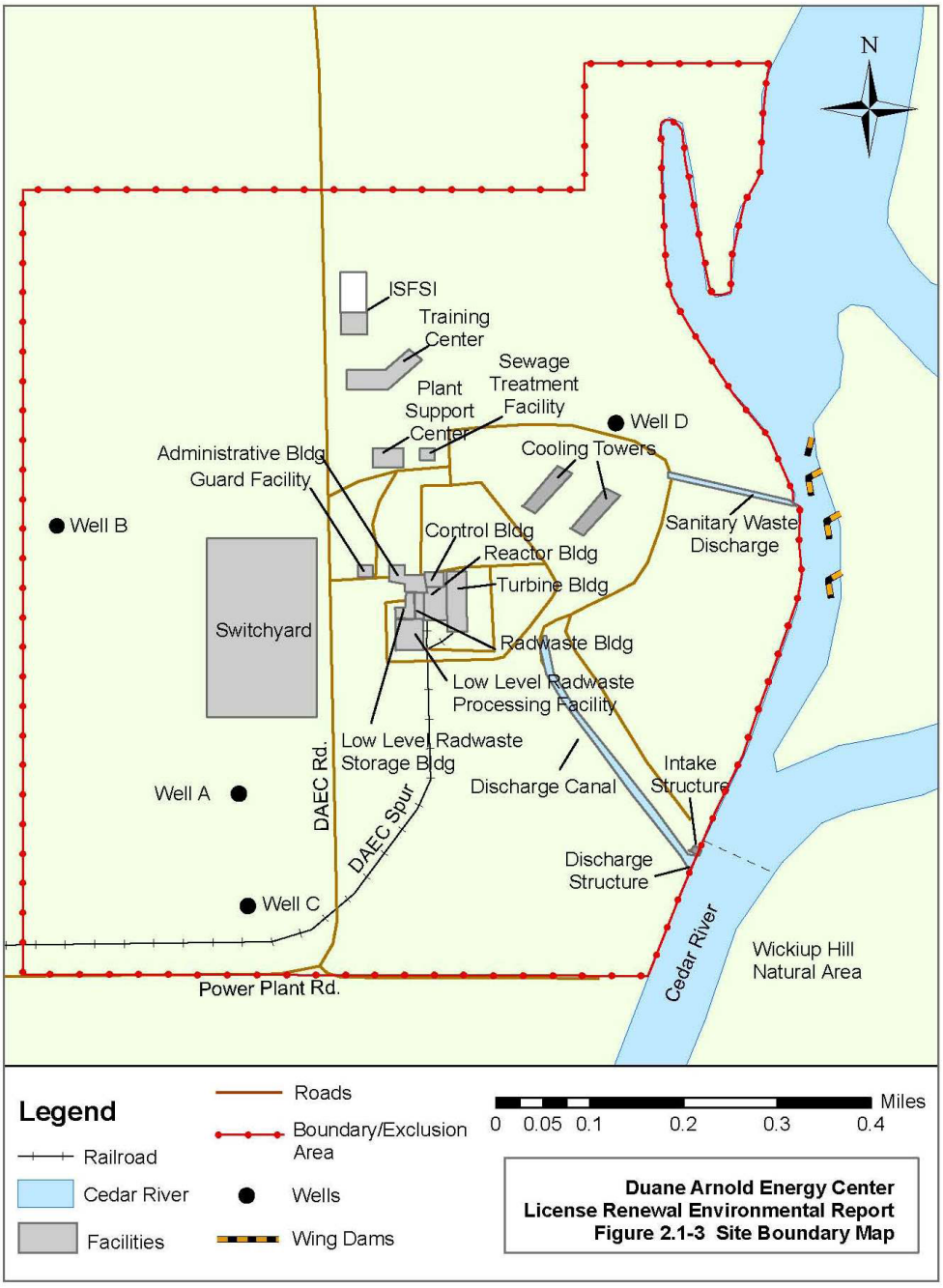
TOPOGRAPHY

A relatively flat plain approximate 750 feet (ft) above mean sea level (msl) extends from the site toward the village of Palo on the southwest, and most of this land is now being farmed. At Palo, the elevation is 747 to 750 ft. Across the river from the site, the land rises from an elevation of 750 ft to an elevation of about 900 ft within a horizontal distance of approximately 2000 ft. These slopes are rather heavily wooded with only an occasional field or pasture dotting the landscape. Beyond this rise, the land is gently rolling farmland. To the northwest, the land rises to an elevation of 850 ft. Adjacent to the east is another heavily wooded low area that constitutes the current flood plain. This area is flat and extends approximately 1500 ft to the west bank of the river. The general topographical features in this portion of the Cedar River consist of broad valleys with relatively narrow flood plains. In many places, these broad valleys merge almost imperceptibly into the adjacent uplands. Away from the immediate vicinity of the river, the land is gently rolling farmland.

TRANSMISSION LINE CORRIDORS

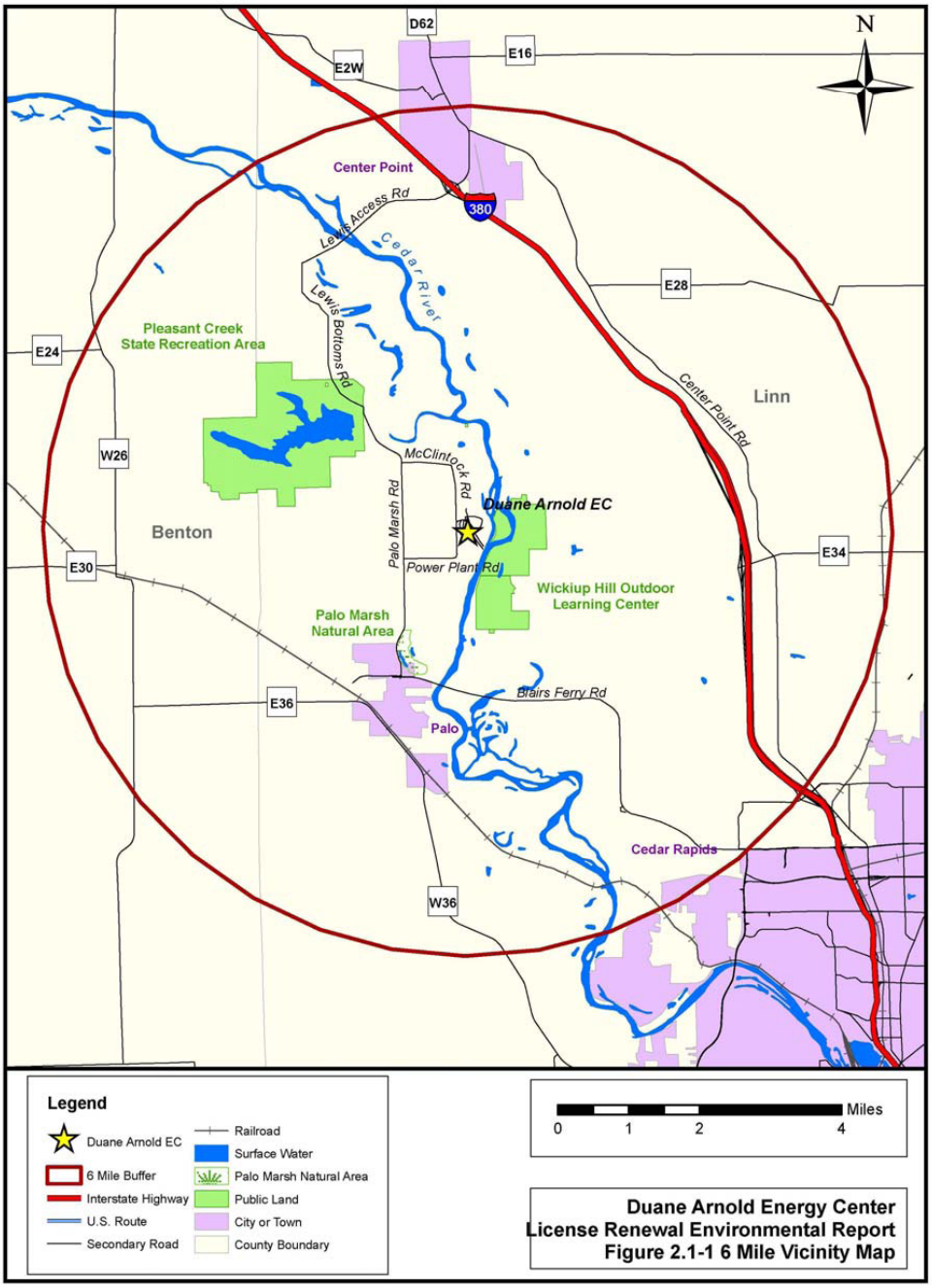
Five transmission-line systems extend westward in a 665-ft wide corridor from the southwest edge of the plant site for a distance of one mile to a north-south county road. Near this road, two 161-kV lines depart and continue within a 100-ft basic width corridor (generally narrower along railroad and public right-of way) in a southerly direction. At the village of Palo, one of these lines follows a railroad right-of-way in a southeasterly direction to the Sixth Street substation in Cedar Rapids. The total distance of this line is 11.2 miles. The other 161-kV line continues in a southerly direction west of Cedar Rapids and then eastward, via Fairfax, to the Bertram substation. The total distance is 28 miles. The remaining 161-kV line and two 345-kV lines continue along a 500-ft wide corridor for a distance of 1.7 miles beyond the county road in a westerly direction. There, one 345 line turns south to the Hills substation, the other 345 line turns north to the Hazelton substation. The 161-kV line continues for a distance of 16 miles to the Garrison substation and then an additional 30 miles to the Washburn substation. A sixth transmission line leaves the plant site in a generally easterly direction, crosses the Cedar River, and continues for a distance of 8 miles to the Hiawatha substation.

Duane Arnold Site Boundary Map



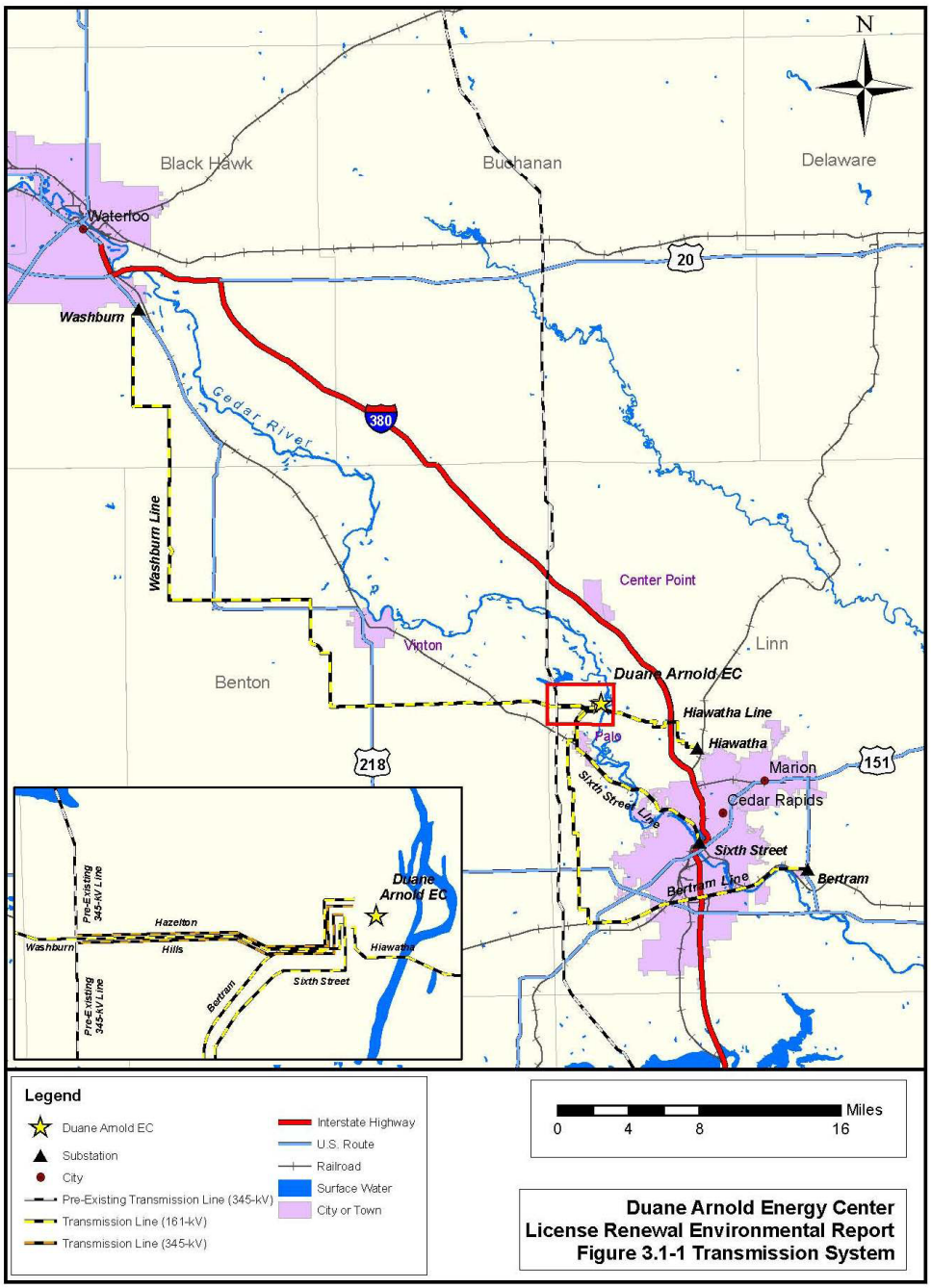
ENCLOSURE 2

Duane Arnold 6-Mile Vicinity Map



ENCLOSURE 3

Duane Arnold Transmission System



ENCLOSURE 4