Appendix C

Chronology of NRC Staff Environmental Review Correspondence Related to Exelon Generation Company, LLC's Application for License Renewal of Dresden Nuclear Power Station, Units 2 and 3

Appendix C

Chronology of NRC Staff Environmental Review Correspondence Related to Exelon Generation, LLC's Application for License Renewal of Dresden Nuclear Power Station, Units 2 and 3

This appendix contains a chronological listing of correspondence between the Nuclear Regulatory Commission (NRC) and the Exelon Generation Company, LLC (Exelon) and other correspondence related to the NRC staff's environmental review, under 10 CFR Part 51, of Exelon's application for renewal of the Dresden Nuclear Power Station, Units 2 and 3, operating licenses. All documents, with the exception of those containing proprietary information, have been placed in the Commission's Public Document Room, at One White Flint North, 11555 Rockville Pike (first floor), Rockville, MD, and are available electronically from the Public Electronic Reading Room found on the Internet at the following web address: http://www.nrc.gov/NRC/ADAMS/index.html. From this site, the public can gain access to the NRC's Agencywide Document Access and Management Systems (ADAMS), which provides text and image files of NRC's public documents in the Publicly Available Records (PARS) component of ADAMS. The ADAMS accession numbers for each document are included below.

January 3, 2003	Letter from Mr. Jeffrey A. Benjamin, Exelon, to NRC submitting the application for the renewal of the operating license for Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML030090203)
January 6, 2003	Comment letter from Dick Kopczick, Mayor, City of Morris, Illinois, to NRC regarding the license renewal of Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML030210119)
January 10, 2003	NRC Press Release No. 03-007, "NRC Announces The Availability of License Renewal Application for Dresden, Quad Cities Nuclear Power Plants" (Accession No. ML030100360)
January 24, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon, regarding the receipt and availability of the Dresden and Quad Cities license renewal applications (Accession No. ML030240603)

February 24, 2003	Letter from NRC staff to Ms. Jolene Franciskovich, Coal City Public Library District, Coal City, IL, concerning the maintenance of reference material for public access related to the Dresden Nuclear Power Station, Units 2 and 3 license renewal environmental review (Accession No. ML030630385)
February 24, 2003	NRC staff letter to Ms. Deborah Steffes, Morris Area Public Library, Morris, IL, regarding the maintenance of reference material for public access related to the Dresden Nuclear Power Station, Units 2 and 3 license renewal environmental review (Accession No. ML030630416)
February 26, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon Generation Company, LLC, forwarding determination of acceptability and sufficiency of docketing, proposed review schedule, and opportunity for a hearing regarding an application for license renewal of Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML030570654)
March 6, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon Generation Company, LLC, Notice of Intent to prepare an environmental impact statement and conduct scoping process for license renewal of Dresden Nuclear Station, Units 2 and 3 (Accession No. ML030660306)
March 11, 2003	NRC staff letter to the Honorable Kenneth Meshigaud, Chairperson, Hannahville Indian Community, inviting participation in the environmental review scoping process (Accession No. ML030710302)
March 11, 2003	Letter from NRC staff to Mr. Richard Nelson, United States Fish and Wildlife Service, requesting information relevant to the NRC environmental review (Accession No. ML030710635)
March 11, 2003	NRC staff letter to the Honorable Juan Garcan Jr., Chairperson, Kickapoo Traditional Tribe of Texas, inviting participation in the environmental review scoping process (Accession No. ML030710348)
March 12, 2003	NRC staff letter to the Honorable Harold Frank, Chairperson, Forest County Potawatomi Community, Wisconsin, inviting participation in the environmental review scoping process (Accession No. ML030730705)

March 12, 2003	NRC staff letter to the Honorable Gil Holliday, Chairperson, Huron Potawatomi, Inc., Michigan, inviting participation in the environmental review scoping process (Accession No. ML030730061)
March 12, 2003	NRC staff letter to the Honorable David K. Sprague, Chairperson, Match-E-Be-Nash-She-Wish Band of Potawatomi Indians of Michigan, inviting participation in the environmental review scoping process (Accession No. ML030730768)
March 12, 2003	NRC staff letter to the Honorable John Miller, Chairperson, Match-E-Be-Nash-She-Wish Band of Potawatomi Indians of Michigan, inviting participation in the environmental review scoping process (Accession No. ML030730773)
March 12, 2003	NRC staff letter to the Honorable John A. Barrett, Chairperson, Citizen Potawatomi Nation, Oklahoma, inviting participation in the environmental review scoping process (Accession No. ML030730343)
March 12, 2003	NRC staff letter to the Honorable Zachariah Pahmahmie, Chairperson, Prairie Band of Potawatomi Nation, Kansas, inviting participation in the environmental review scoping process (Accession No. ML030720625)
March 12, 2003	NRC staff letter to the Honorable Lisa Waukau, Chairperson, Menominee Indian Tribe of Wisconsin, inviting participation in the environmental review scoping process (Accession No. ML030730444)
March 12, 2003	NRC staff letter to the Honorable Danny Kaskaske, Chairperson, Kickapoo Tribe of Oklahoma, inviting participation in the environmental review scoping process (Accession No. ML030730249)
March 12, 2003	NRC staff letter to the Honorable Steve Cadue, Chairperson, Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas, inviting participation in the environmental review scoping process (Accession No. ML030730381)
March 12, 2003	NRC staff letter to the Honorable John Blackhawk, Chairperson, Winnebago Tribe of Nebraska, inviting participation in the environmental review scoping process (Accession No. ML030730744)

March 12, 2003	NRC staff letter to the Honorable Troy Swallow, President, Ho-Chunk Nation of Wisconsin, inviting participation in the environmental review scoping process (Accession No. ML030720621)
March 21, 2003	Notice of public meeting for April 10, 2003, public meetings in Morris, IL to discuss environmental scoping process for the Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML030790593)
April 17, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon Generation Company, LLC, Request for Additional Information - environmental review of license renewal applications for Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML031070572)
May 1, 2003	E-mail to DresdenEIS@nrc.gov from Fred Bevington requesting information regarding the environmental review scoping process meeting (Accession No. ML031400095)
May 2, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon Generation Company, LLC, Revised Request for Additional Information - environmental review of license renewal applications for Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML031220535)
May 8, 2003	Letter from Mr. Stephen K. Davis, Illinois Department of Natural Resources, providing comments for the environmental scoping process (Accession No. ML031420027)
May 14, 2003	E-mail from Mr. William D. Maher, Exelon Generation Company, LLC, providing information requested regarding land use classifications (Accession No. ML031970776)
May 21, 2003	Letter from Mr. David N. Given, United States Department of the Interior, National Park Service, providing comments for the environmental scoping process (Accession No. ML031600183)
May 28, 2003	Letter from Mr. Patrick R. Simpson, Exelon Generation Company, LLC, responding to NRC Request for Additional Information dated May 2, 2003, related to the environmental review of license renewal applications of Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML031540677)

May 30, 2003	Letter from NRC staff to Mr. John L. Skolds, Exelon Generation Company, LLC, Request for Additional Information related to the staff's review of the license renewal environmental report for the Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML031530067)
June 12, 2003	Summary of public meetings held on April 10, 2003, in Morris, IL to discuss environmental scoping process for the Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML031640319)
June 19, 2003	E-mail from Mr. William D. Maher, Exelon Generation Company, LLC, providing revised pages to the environmental report, concerning the scope of transmission lines reviewed for shock (Accession No. ML032030221)
June 24, 2003	Letter to the NRC staff from Mr. John Skermont and Mr. Robert Schwartz, providing statements in support of license renewal from union members (ML031820438)
July 1, 2003	NRC staff letter to Mr. Maynard Crossland, Director, Illinois Historic Preservation Agency, providing information regarding the environmental review being conducted for the Dresden license renewal application and requesting comment (ML031820776)
July 3, 2003	NRC staff letter to Mr. John Skermont, International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers responding to the June 24, 2003, letter (ML031890768)
July 8, 2003	E-mail from Mr. William D. Maher, Exelon Generation Company, LLC, forwarding environmental data requested by NRC and Exelon from the Illinois Department of Natural Resources (Accession No. ML032030211)
July 16, 2003	E-mail from Mr. Donald E. Vancover, Exelon Generation Company, LLC, providing draft Severe Accident Mitigation Alternatives Request for Additional Information responses (Accession No. ML032030227)
July 21, 2003	Letter from NRC staff to Mr. Jeffery A. Benjamin, Exelon Generation Company, LLC, providing a copy of the Scoping Summary Report associated with the license renewal environmental review (Accession No. ML032030608)

July 23, 2003	Letter from Mr. Patrick R. Simpson, Exelon Generation Company, LLC, responding to the NRC Request for Additional Information dated May 30, 2003, related to the environmental review of license renewal applications of Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML032060390)
August 11, 2003	Letter to Mr. Richard Nelson, United States Fish and Wildlife Service, requesting comments regarding the expanded scope of the Dresden Nuclear Power Station, Units 2 and 3 environmental scoping process (Accession No. ML032250248)
September 15, 2003	Letter from Mr. Richard Nelson, United States Fish and Wildlife Service, providing a response to the March 11 and August 11, 2003, NRC staff letters requesting information on threatened or endangered species in the vicinity of the Dresden site (Accession No. ML032730720)
September 18, 2003	E-mail from Mr. William D. Maher, Exelon Generation Company, LLC regarding procedure change to address State Preservation Historic Officer Issues (Accession No. ML033080100)
October 27, 2003	Email from Mr. William Maher, Exelon Generation Company, LLC, providing confirmation of completion of an Exelon procedure modification regarding the identification of potential historic or archaeological sites (Accession No. ML033090462)
December 2, 2003	NRC staff letter to Exelon requesting comments on the Draft SEIS (Accession No. ML033361070)
December 2, 2003	NRC staff letter to U.S. Environmental Protection Agency regarding the filing of the Draft SEIS (Accession No. ML033361096)
December 22, 2003	NRC Staff letter for the forthcoming meeting to discuss the draft supplemental environmental impact statement (DSEIS) for license renewal at Dresden Nuclear Power Station, Units 2 and 3 (Accession No. ML033570303)
January 13, 2004	NRC staff letter to the Illinois Historic Preservation Agency requesting comments on the Draft SEIS and the staff preliminary conclusions regarding historic properties (Accession No. ML040150324)

January 16, 2004	Letter to the NRC staff from Mr. Alfred Bourdelais, County Administrator of Grundy County, providing comments related to the NRC staff environmental review for the proposed Dresden license renewal (Accession No. ML040330851)
February 4, 2004	Letter to the NRC staff from the Illinois Historic Preservation Agency providing comments on the Draft SEIS under the provisions of Section 106 of the National Historic Preservation Act, in response to the NRC staff letter dated January 13, 2004 (Accession No. ML040750430)
February 4, 2004	Letter to President Bush from Mrs. Cynthia Sauer regarding issues raised in public meeting (Accession No. ML040900300)
February 12, 2004	NRC staff letter to U.S. Fish and Wildlife Service requesting review and concurrence in the staff's Biological Assessment (Accession No. ML040440151)
February 20, 2004	Letter from Exelon to the NRC staff providing comments on the Draft SEIS (Accession No. ML040650364)
February 20, 2004	Letter from U.S. Department of the Interior, Office of Environmental and Policy Compliance, providing comments on the Draft SEIS (Accession No. ML040620207)
February 24, 2004	Letter from the Environmental Law and Policy Center providing comments on the Draft SEIS (Accession No. ML040580314)
February 24, 2004	Letter from the U.S. Environmental Protection Agency, Region 5, to the NRC staff providing comments on Draft SEIS (Accession No. ML040650365)
March 11, 2004	Letter from Mr. Richard Nelson, United States Department of the Interior, Fish and Wildlife Service, providing comments for the environmental scoping process (Accession No. ML040820470)
March 18, 2004	Meeting summary for the public meetings held in Morris, Illinois on January 14, 2004, for the purpose of receiving comments on the Draft Supplemental Environmental Impact Statement (Accession No. ML040830286)

March 18, 2004	NRC staff letter to Mr. John Skolds, Exelon, informing Exelon of NRC environmental project manager assignments for QCNPS and DNPS license renewal reviews (Accession No. ML040830239)
April 1, 2004	NRC staff letter to Mrs. Cynthia Sauer regarding issues raised in public meeting (Accession No. ML040930237)
April 18, 2004	Letter to the NRC staff from Dr. Joseph Sauer regarding issues raised in public meeting (Accession No. ML041130477)
April 19, 2004	Letter to the NRC staff from Mrs. Cynthia Sauer regarding issues raised in public meeting (Accession No. ML041130477)
April 16, 2004	NRC staff letter to Mrs. Cynthia Sauer regarding issues raised in public meeting (Accession No. ML040990334)
May 20, 2004	Letter to the NRC staff from Dr. Joseph Sauer regarding issues raised in public meeting (Accession No. ML041490037)
May 21,2004	Letter to the NRC staff from Mrs. Cynthia Sauer regarding issues raised in public meeting (Accession No. ML041470167)
June 9, 2004	NRC staff letter to Dr. and Mrs. Joseph Sauer regarding issues raised in public meeting (Accession No. ML041560573)

Appendix D

Organizations Contacted

Appendix D

Organizations Contacted

During the course of the staff's independent review of environmental impacts from operations during the renewal term, the following Federal, State, regional, and local agencies were contacted:

City of Morris, IL

Grundy County Economic Development Council, Morris, IL

Grundy County Planning and Zoning, Morris, IL

Grundy County Tax Assessor, Morris, IL

Illinois and Michigan Canal National Heritage Corridor Commission

Illinois Environmental Protection Agency

Illinois Historic Preservation Agency

Illinois Department of Natural Resources

Hannahville Indian Community

Kickapoo Tribe

- Kickapoo Tribe of Oklahoma
- Kickapoo Tribe of Indians of the Kickapoo Reservation in Kansas
- Kickapoo Traditional Tribe of Texas

Menominee Tribe

- Menominee Indian Tribe of Wisconsin

National Park Service, U.S. Department of the Interior

Potawatomi Tribe

- Forest County Potawatomi Community, WI
- Huron Potawatomi, Inc., Michigan
- Match-E-Be-Nash-She-Wish Band, Potawatomi Indians of Michigan
- Potawatomi Tribe, Oklahoma
- Prairie Band, Potawatomi Nation, Kansas

State Historical Society of Iowa

The Salvation Army, Will County, Joliet, IL

Appendix D

The United Way, Grundy County, Morris, IL
U.S. Fish and Wildlife Service
U.S. Forest Service, Midewin National Tall Grass Prairie
Will County Center for Economic Development, Joliet, IL
Will County Executive Officer, Joliet, IL
Will County Planning Division, Joliet, IL
Winnebago Tribe
    Winnebago Tribe of Nebraska
    Ho-Chunk Nation of Wisconsin

Appendix E

Exelon Generation Company, LLC's
Compliance Status and Consultation Correspondence

Appendix E

Exelon Generation Company, LLC's Compliance Status and Consultation Correspondence

Correspondence issued and received during the evaluation process of the application for renewal of the operating license for Dresden Nuclear Power Station, Units 2 and 3 (Dresden) is identified in Table E-1. Copies of the correspondence are included at the end of this appendix.

The licenses, permits, consultations, and other approvals obtained from Federal, State, regional, and local authorities for Dresden are listed in Table E-2.

Table E-1. Consultation Correspondence

Source	Recipient	Date of Letter
U.S. Nuclear Regulatory Commission (P. T. Kuo)	U.S. Fish and Wildlife Service (R. C. Nelson)	March 11, 2003
Illinois Department of Natural Resources (S. K. Davis)	U.S. Nuclear Regulatory Commission	May 8, 2003
National Park Service (D. N. Given)	U.S. Nuclear Regulatory Commission	May 21, 2003
U.S. Nuclear Regulatory Commission (P. T. Kuo)	Illinois Historic Preservation Agency (M. Crossland)	July 1, 2003
U.S. Nuclear Regulatory Commission (P. T. Kuo)	U.S. Fish and Wildlife Service (R. Nelson)	August 11, 2003
U.S. Fish and Wildlife Service (R. C. Nelson)	U.S. Nuclear Regulatory Commission (L.L. Wheeler)	September 15, 2003
U.S. Nuclear Regulatory Commission (P. T. Kuo)	Illinois Historic Preservation Agency (M. Crossland)	January 13, 2004
U.S. Nuclear Regulatory Commission (L. L. Wheeler)	U.S. Fish and Wildlife Service (R. Nelson)	February 12, 2004
U.S. Department of the Interior (N. Cnezik)	U.S. Nuclear Regulatory Commission) (M. Lesar)	February 20, 2004
U.S. Environmental Protection Agency (K. A. Westlake)	U.S. Nuclear Regulatory Commission	February 24, 2004
Illinois Historic Preservation Agency (A. E. Haaker)	U.S. Nuclear Regulatory Commission (P. T. Kuo)	February 24, 2004
U.S. Fish and Wildlife Service (R.C. Nelson)	U.S. Nuclear Regulatory Commission (P. T. Kuo)	March 11, 2004

Table E-2. Federal, State, Local, and Regional Licenses, Permits, Consultations, and Other Approvals for Current Dresden Nuclear Power Station, Units 2 and 3 Operation

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
NRC						
10 CFR Part 50	Operating license, Dresden Unit 2	DPR -19	December 22, 1969	December 22, 2009	Authorizes operation of Unit 2	
NRC	10 CFR Part 50	Operating license, Dresden Unit 3	DPR - 25	January 12, 1971	January 12, 2011	Authorizes operation of Unit 3
FWS	Section 7 of the Endangered Species Act (16 USC 1536)	Consultation	NA		NA	Requires a Federal agency to consult with FWS regarding whether a proposed action will affect endangered or threatened species
Illinois Historic Preservation Agency	National Historic Preservation Act, Section 106	Consultation	NA		NA	The National Historic Preservation Act requires Federal agencies to take into account the effect of any undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register of Historic Places.
IEPA	Illinois Environmental Protection Act (Title 35 IAC, Subtitle C, Ch.1)	National Pollution Discharge Elimination System Permit	IL0002224	October 6, 2000	October 31, 2005	Permit for discharge of wastewater and once-through cooling water to the Mississippi. Section 1.E.15 of the permit states that the permit constitutes certification of compliance with §401 of the Federal Water Pollution Control Act (Clean Water Act).

Table E-2 (Contd)

Agency	Authority	Description	Number	Issue Date	Expiration Date	Remarks
IEPA	Rivers, Lakes, and Streams Act (615 ILCS)	Class 1 Dam Permit	DS 2000233	December 19, 2000	December 19, 2002	The permit authorizes operation and maintenance of the cooling pond and appurtenances.
IEPA	IRS Ch. 111-1/2 Sec. 1039	Federally-enforceable Air Operating Permit	063806AAC	April 19, 2001	April 19, 2006	The permit authorizes emissions from diesel emergency generators, boilers, and miscellaneous emissions units and activities.
IEPA	IRS Ch. 111-1/2, Section 1039	Open Burning permit	ID# 04030 Location ID# 161807AAB	February 16, 2002	February 16, 2003	Open burning for emergency response fire fighter training

CFR = Code of Federal Regulations
FWS= U.S. Fish and Wildlife Service
NRC= U.S. Nuclear Regulatory Commission
EPA = U.S. Environmental Protection Agency
IEPA = Illinois Environmental Protection Agency
NMFS = National Marine Fisheries Service
USC = United States Code

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

March 11, 2003

Mr. Rick Nelson
Field Supervisor
U.S. Fish and Wildlife Service
4469 48th Avenue Court
Rock Island, IL 61201

SUBJECT: REQUEST FOR COMMENTS CONCERNING DRESDEN NUCLEAR POWER STATION APPLICATION FOR OPERATING LICENSE RENEWAL

Dear Mr. Nelson:

The U.S. Nuclear Regulatory Commission (NRC) is reviewing an application for the renewal of the operating license for the Dresden Nuclear Power Station, Units 2 and 3 (DNPS), located on the south shoreline of the Illinois River, at the confluence of the Des Plaines and Kankakee Rivers at river mile 272.4. As part of the review of the license renewal application, the NRC is preparing a Supplemental Environmental Impact Statement (SEIS) under the provision of the National Environmental Policy Act (NEPA), which includes analyses of pertinent environmental issues, including endangered or threatened species and impacts to fish and wildlife. This letter is being submitted under the provisions of the Endangered Species Act and the Fish and Wildlife Coordination Act.

The proposed action would include the use and continued maintenance of existing facilities and transmission lines and would not result in any new construction or disturbance. DNPS is located in Grundy County, Illinois. In total, for the specific purpose of connecting DNPS to the regional transmission system, there are approximately 200 miles of corridor that occupy approximately 5,500 acres of land. As shown in the enclosed transmission line maps, two 1.1-mile lines, located on Station property, connect DNPS to an existing line between the Pontiac and Electric Junction substations. The Electric Junction lines runs east and then turns north, crossing the Illinois River. The lines run for 31.1-miles. The two Goodings Grove lines cross the Kankakee River south of DNPS and then run northeast and terminate at the Elwood Substation. The Goodings Grove corridor is 12.4-miles long. Pontiac Mid-Point is a 43.3-mile line that runs in a southwesterly direction and terminates south of Pontiac, Illinois. Powerton is a 104.5-mile line that crosses the Kankakee River twice before heading southwest and terminating near the Illinois River. The last line connecting DNPS to the regional system is the Collins Station line that extends 11.8-miles with a 150-foot right-of-way. This line crosses the Illinois River along the Electric Junction corridor and then runs west for approximately 4-miles before crossing back over the Illinois River to the Collins Station.

DNPS operates in the indirect open-cycle mode from June 15 through September 30. After circulating through the condensers, water is discharged into a 2-mile-long cooling canal to remove waste heat from the facility. As water travels through the hot canal, it may be withdrawn and circulated through a series of 36 mechanical draft cooling towers as needed to maintain water temperatures, and is returned to the canal at a cooler temperature. The water is then discharged to the Illinois River. The Illinois River in the vicinity of the plant is considered part of the aquatic environment of interest.

The other mode of plant operation is closed-cycle. DNPS can operate in closed-cycle at any time, but normally operates in this mode from October 1 through June 14, when the mechanical draft towers are typically not utilized. In this mode, water is circulated through the condensers for Units 2 and 3, passed through the hot canal, and then routed back to the intake structure via the flow regulating station gates. As cooling water system schematic diagram is enclosed.

To support the environmental impact statement preparation process and to ensure compliance with Section 7 of the Endangered Species Act, the NRC requests a list of species and information on protected, proposed, and candidate species and critical habitat that may be in the vicinity of DNPS and its associated transmission lines. In addition, please provide any information you consider appropriate under the provisions of the Fish and Wildlife Coordination Act.

We plan to hold a public NEPA scoping meeting on April 10, 2003, at the Jennifer's Garden Banquet and Convention Center, 555 West Gore Road, Morris, Illinois. You and your staff are invited to attend. 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 December 2003.

If you have any questions concerning the NRC staff review of the license renewal application, please contact Mr. Louis Wheeler, Senior Project Manager, at (301) 415-1444 or by email at DXW@nrc.gov.

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

Docket Nos.: 50-237 and 50-249

Enclosures: DNPS Transmission Line Maps (2)
DNPS Cooling Water System Schematic Diagram

cc w/encls.: See next page

Dresden Nuclear Power Units 2 and 3

cc:

Site Vice President - Dresden Nuclear Power Station
Exelon Generation Company, LLC
6500 N. Dresden Road
Morris, IL 60450-9765

Dresden Nuclear Power Station Plant Manager
Exelon Generation Company, LLC
6500 N. Dresden Road
Morris, IL 60450-9765

Regulatory Assurance Manager - Dresden
Exelon Generation Company, LLC
6500 N. Dresden Road
Morris, IL 60450-9765

U.S. Nuclear Regulatory Commission
Dresden Resident Inspectors Office
6500 N. Dresden Road
Morris, IL 60450-9766

Chairman
Grundy County Board
Administration Building
1320 Union Street
Morris, IL 60450

Regional Administrator
U.S. NRC, Region III
801 Warrenville Road
Lisle, IL 60532-4351

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, IL 62704

Document Control Desk-Licensing
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Warrenville, IL 60555

Vice President
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Exelon Generation Company, LLC
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Senior Vice President
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Director - Licensing
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Senior Counsel, Nuclear
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Warrenville, IL 60555

Mr. John L. Skolds, President
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Ms. Jolene Franciskovich
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Coal City Public Library District
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Coal City, IL 60416

Ms. Deborah Steffes
Reference Manager
Morris Area Public Library
604 West Liberty Street
Morris, IL 60450

William D. Maher
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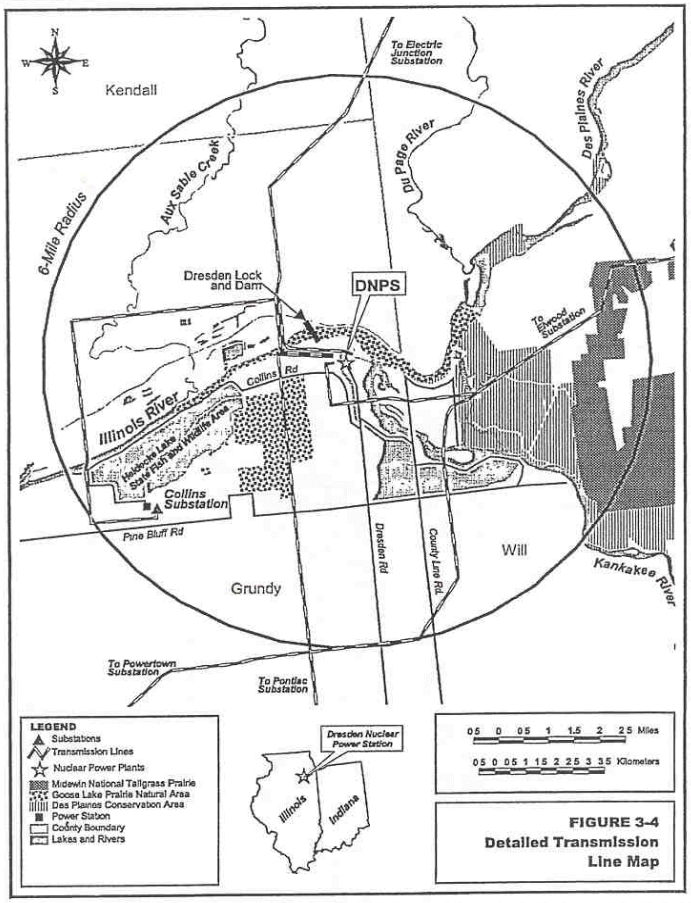
Frederick W. Polaski
License Renewal Manager
Exelon Nuclear
200 Exelon Way
Kennett Square, PA 19348

Albert A. Fulvio
Exelon Nuclear
200 Exelon Way
Kennett Square, PA 19348


N
W
E
S
Kendall
To Electric Junction Substation
Des Plaines River
Aux Sable Creek
Du Page River
6-Mile Radius
Dresden Lock and Dam
DNPS
To Elwood Substation
Collins Rd
Illinois River
Goose Lake Prairie State Natural Area Wildlife Area
Collins Substation
Pine Bluff Rd
Dresden Rd
County Line Rd
Will
Kankakee River
Grundy
To Powertown Substation
To Pontiac Substation
LEGEND
Substations
Transmission Lines
Nuclear Power Plants
Midewin National Tallgrass Prairie
Goose Lake Prairie Natural Area
Des Plaines Conservation Area
Power Station
County Boundary
Lakes and Rivers
Dresden Nuclear Power Station
Illinois
Indiana
0.5 0 0.5 1 1.5 2 2.5 Miles
0.5 0 0.5 1 1.5 2 2.5 3 3.5 Kilometers
FIGURE 3-4
Detailed Transmission Line Map

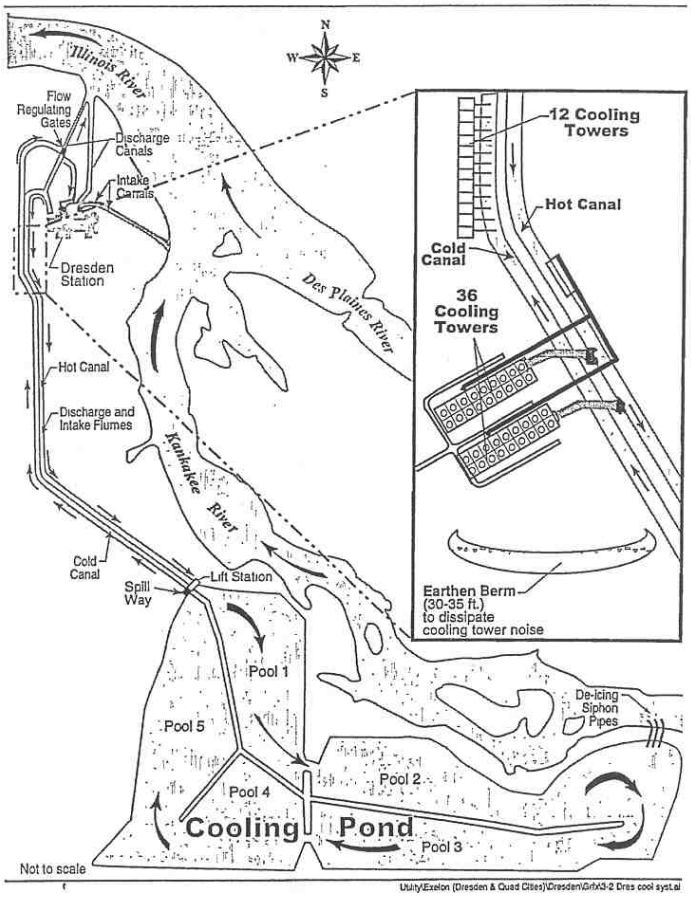


FIGURE 3-2. Cooling Water System Schematic.

Illinois
Department of
Natural Resources

http://dnr.state.il.us

One Natural Resources Way • Springfield, Illinois 62702-1271

Rod R. Blagojevich, Governor

May 8, 2003

3/14/03
68FR12385
(6)

NRC Docket Nos. 50-254 and 50-265
50-238 and 50-249

RECEIVED
2003 MAY 29 AM 9:19
Rules and Directives Branch
USNRC

Chief of Rules and Directives Branch
Division of Administrative Services
Mailstop T-6D59
United States Nuclear Regulatory Commission
Washington, DC 20555

RE: **Dresden Nuclear Power Station, Units 2 & 3 License Renewal**
Grundy County - License Nos. DPR-19 and DPR-25
Quad Cities Nuclear Power Station, Units 1 & 2 License Renewal
Rock Island County - License Nos. DPR-29 and DPR-30

Endangered Species Consultation Program
Natural Heritage Database Review #'s 0201014 & 0201015

To Whom This Concerns:

Thank you for submitting the January 3, 2003 operating license renewal applications regarding the Quad Cities Nuclear Power Station, Units 1 & 2 and Dresden Nuclear Power Station, Units 2 & 3 for consultation in accordance with the *Illinois Endangered Species Protection Act* [520 ILCS 10/11], the *Illinois Natural Areas Preservation Act* [525 ILCS 30/17], and Title 17 *Illinois Administrative Code* Part 1075. The Natural Heritage Database identified the presence of State protected resources within the vicinity of portions of the existing transmission lines associated with each power station. Adverse impacts to State protected resources do not appear likely. Excelon has been advised to inform the Department if new transmission lines are proposed in the future.

The Department thoroughly discussed and evaluated the operating license renewal applications for each of the subject power stations. It is the Department's biological opinion that continued operation of the power stations, as described and detailed in the operating license applications, will not adversely affect State protected resources or existing environmental conditions in the immediate vicinity of the Dresden and Quad Cities nuclear power stations.

Consultation is limited to State-listed threatened or endangered species, Illinois Natural Areas and dedicated Land & Water Reserves and Nature Preserves; it does not entail a comprehensive environmental impact assessment. The Department may raise concerns through other venues regarding potential impacts to other natural resources as it deems appropriate.

E-RIDS = ADM-03
Call = D.L. Wheeler (DXW)
Template = ADM-013

Printed on recycled and recyclable stock

NRC Docket Nos. 50-254 and 50-265
50-238 and 50-249

Thank you for the opportunity to comment on these nuclear power station operating license renewal applications. Should you have any questions, please do not hesitate to contact me.

Sincerely,

Stephen K. Davis, P.G.
Chief
Division of Natural Resource Review and Coordination
Office of Realty and Environmental Planning

cc: Division File
M. Conlin
T. Hickman
R. Pietruszka
D. Wheeler, NRC
K. Jury, Excelon

United States Department of the Interior

NATIONAL PARK SERVICE
MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

IN REPLY REFER TO:

MAY 21 2003

3/24/03
68FR12386
(3)

ER-03/0276

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mail Stop T-6 D 59
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Ref: Docket 50-237 and 50-249

Dear Chief:

Our office recently sent you comments concerning the review of the notice of intent to prepare an environmental impact statement for the Exelon Generation Company, LLC, Quad Cities nuclear power station, units 1 and 2, Rock Island County, Illinois, published in the *Federal Register*, on March 14, (page 12385). However, we intended those comments to be directed to the Exelon Generation Company, LLC, Dresden Nuclear Power Station, units 2 and 3, in Grundy County, Illinois, with the docket numbers listed above. We apologize for this confusion but we would like to offer again our comments that concern specifically the Dresden facilities.

This project is located within the Illinois and Michigan Canal National Heritage Corridor (ILMI), an affiliated area of the National Park Service. Please include ILMI in all related project correspondences. If you have any questions, please contact Phyllis Ellin, Executive Director of ILMI, at 201 W. 10th St., #1-SE, Lockport, Illinois, 60441, telephone 815-588-6040.

We again apologize for the confusion and appreciate the opportunity to provide these late comments.

Sincerely,

David N. Given
Acting Regional Director

E-12FDS=ADM-03
cc: L. Yuhas (DXW)

Template=ADM-013

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

July 1, 2003

Mr. Maynard Crossland
Director
Illinois Historic Preservation Agency
Preservation Services Division
One Old State Capitol Plaza
Springfield, IL 62701

SUBJECT: DRESDEN NUCLEAR POWER STATION LICENSE RENEWAL REVIEW AND (IHPA LOG NO. 0201160019WGR)

Dear Mr. Crossland:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing an application to renew the operating licenses for Dresden Nuclear Power Station, Units 2 and 3 (DNPS), which is located in Goose Lake Township, Grundy County, Illinois. DNPS is owned and operated by Exelon Generation Company, LLC (Exelon). The application for renewal was submitted by Exelon on January 3, 2003, pursuant to NRC requirements at Title 10 of the *Code of Federal Regulations* Part 54 (10 CFR Part 54). The NRC has established that, as part of the staff review of any nuclear power plant license renewal action, a site-specific Supplemental Environmental Impact Statement (SEIS) to its "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS), NUREG-1437, will be prepared under the provisions of 10 CFR Part 51, the NRC rules that implement the National Environmental Policy Act (NEPA). In accordance with 36 CFR 800.8, the SEIS will include analyses of potential impacts to historic and cultural resources. A draft SEIS is scheduled for publication in December of 2003, and will be provided to you for review and comment.

In the context of the National Historic Preservation Act, the Agency official (the Director, Office of Nuclear Reactor Regulation, NRC) has determined that the area of potential effect (APE) for a license renewal action is the area at the power plant site and its immediate environs which may be impacted by post-license renewal land disturbing operation or projected refurbishment activities associated with the proposed action. The APE may extend beyond the immediate environs in those instances where post-license renewal land disturbing operations or projected refurbishment activities, specifically related to license renewal, potentially have an effect on known or proposed historic sites. This determination is made irrespective of ownership or control of the lands of interest.

While preparing its application, Exelon contacted your office by letter dated January 11, 2002, and your office responded on January 30, 2002. In its letter, Exelon stated that the operation of DNPS, including the maintenance of identified transmission lines, through the license renewal term is not expected to affect cultural or historic resources in the area. Exelon further stated that no new construction was planned, and maintenance activities would be limited to previously disturbed areas. It was also noted that the American Nuclear Society designated DNPS Unit 1 as a Nuclear Historic Landmark. The January 30, 2002, response letter stated that based on

the information provided, no historic properties would be affected, and IHPA had no objection to the undertaking proceeding as planned.

We request that you respond to this letter and indicate whether there are any changes to the determination in your January 30, 2002, letter to Exelon. For your information, enclosed is one example of a letter sent from the NRC staff to 13 Native American Tribes identified by the Bureau of Indian Affairs as having potential interest in the proposed undertaking affording them the opportunity to participate in this process and identify issues of concern to them. No issues have been identified to date. If you have any questions or require additional information, please contact the Environmental Project Manager, Duke Wheeler at 301-415-1444 or DXW@nrc.gov.

Sincerely,
/RA/

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

Docket Nos.: 50-237 and 50-249

Enclosure: As stated

cc w/o encl.: See next page

Dresden Nuclear Power Units 2 and 3

cc:

Site Vice President - Dresden Nuclear Power Station
Exelon Generation Company, LLC
6500 N. Dresden Road
Morris, IL 60450-9765

Dresden Nuclear Power Station Plant Manager
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6500 N. Dresden Road
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Regulatory Assurance Manager - Dresden
Exelon Generation Company, LLC
6500 N. Dresden Road
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U.S. Nuclear Regulatory Commission
Dresden Resident Inspectors Office
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Morris, IL 60450-9766

Chairman
Grundy County Board
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1320 Union Street
Morris, IL 60450

Regional Administrator
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Lisle, IL 60532-4351

Illinois Department of Nuclear Safety
Office of Nuclear Facility Safety
1035 Outer Park Drive
Springfield, IL 62704

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ENCLOSURE

LETTER TO: THE HONORABLE LISA WAUKAU, CHAIRPERSON

MENOMINEE INDIAN TRIBE OF WISCONSIN

(NATIVE AMERICAN TRIBE IDENTIFIED BY THE BUREAU OF INDIAN AFFAIRS)

MARCH 12, 2003

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

March 12, 2003

The Honorable Lisa Waukau, Chairperson
Menominee Indian Tribe of Wisconsin
P.O. Box 910
Keshena, WI 54135-0910

SUBJECT: U.S. NUCLEAR REGULATORY COMMISSION REVIEW OF THE DRESDEN NUCLEAR POWER STATION LICENSE RENEWAL APPLICATION

Dear Ms. Waukau:

The U.S. Nuclear Regulatory Commission (NRC) is seeking input for its environmental review of an application from Exelon Generation Company, LLC (Exelon) to renew its operating license for the Dresden Nuclear Power Station, Units 2 and 3 (DNPS), located in Grundy County, Illinois. DNPS is in close proximity to lands that may be of interest to the Menominee Tribe. As described below, the NRC process includes an opportunity for public participation in the environmental review. We want to ensure that you are aware of our efforts and, pursuant to 10 CFR 51.28(b), the NRC invites the Menominee Indian Community to provide input to the scoping process relating to the NRC's environmental review of the application.

The NRC will hold public scoping meetings for the DNPS license renewal supplement to the NRC's "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS) (NUREG-1437). These scoping meetings will be held at Jennifer's Garden Banquet and Convention Center, 555 West Gore Road, Morris, Illinois, on April 10, 2003. There will be two sessions to accommodate interested parties. The first session will convene at 1:30 p.m. and will continue until 4:30 p.m., as necessary. The second session will convene at 7:00 p.m., with a repeat of the overview portions of the meeting, and will continue until 10:00 p.m., as necessary. Additionally, the NRC staff will host informal discussions one hour before the start of each session. No formal comments on the proposed scope of the supplement to the GEIS will be accepted during the informal discussions. To be considered, comments must be provided either at the transcribed public meetings or in writing. The application and the environmental review process are described below.

Under NRC regulations, the original operating license for a nuclear power plant is issued for up to 40 years. The license may be renewed for up to an additional 20 years if NRC requirements are met. The current operating licenses for DNPS will expire in 2011. Exelon submitted an environmental report as part of its application for renewal of the DNPS operating license on January 3, 2003. The application is electronically available for inspection from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible at http://www.nrc.gov/reading-rm/adams.html, which provides access through the NRC's Public Electronic Reading Room (PERR) link. If you do not have access to ADAMS or if there are problems in accessing the documents located in ADAMS, contact the NRC's Public Document Room (PDR) Reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr@nrc.gov. In addition, the application can be viewed on the Internet http://www.nrc.gov/reactors/operating/licensing/renewal/applications/dresden-quad.html.

A paper copy of the document can be viewed at the NRC's PDR, located at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland; at the Morris Area Public Library, 604 West Liberty Street, Morris, Illinois; and the Coal City Public Library District, 85 North Garfield Street, Coal City, Illinois. Also, the GEIS assesses the scope and impact of environmental effects that would be associated with license renewal at any nuclear power plant site. A copy of this document can also be found on the NRC's website or at the NRC's PDR.

The NRC is gathering information for the document that will be a DNPS-specific supplement to the GEIS. The supplement will contain the results of the review of the environmental impacts on the area surrounding the DNPS site that are related to terrestrial ecology, aquatic ecology, hydrology, cultural resources, and socioeconomic issues (among others) and will contain a recommendation regarding the environmental acceptability of the license renewal action.

Please submit any written comments the Menominee Indian Community may have to offer on the scope of the environmental review by May 12, 2003. Comments should be submitted either by mail to the Chief, Rules and Directives Branch, Division of Administrative Services, Mail Stop T-6 D59, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001, or by e-mail to DresdenEIS@nrc.gov.

At the conclusion of the scoping process, the NRC staff will prepare a summary of the significant issues identified, the conclusions reached, and will mail a copy to you.

The NRC will prepare a draft supplemental environmental impact statement (SEIS) for public comment, and will hold another set of public meetings in the site vicinity to solicit comments on the draft. A copy of the draft SEIS will be sent to you for your review and comment. After consideration of public comments received on the draft, the NRC will prepare a final SEIS. The issuance of a final environmental statement for DNPS is planned for July 2004. If you need additional information regarding the environmental review process, please contact Louis L. Wheeler, Project Manager, at (301) 415-1444.

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. 50-237, 50-249

cc: See next page

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

August 11, 2003

Mr. Rick Nelson
Field Supervisor
U.S. Fish and Wildlife Service
4469 48th Avenue Court
Rock Island, IL 61201

SUBJECT: EXPANDED SCOPE OF DRESDEN NUCLEAR POWER STATION APPLICATION FOR OPERATING LICENSE RENEWAL

Dear Mr. Nelson:

This letter requests comments regarding the expanded scope of the environmental review associated with the proposed operating license renewals for Dresden Nuclear Power Station, Units 2 and 3 (DNPS).

On March 11, 2003, the U.S. Nuclear Regulatory Commission (NRC) staff requested your comments on the operating license renewal application for DNPS, located in Grundy County, Illinois. To support our preparation of an environmental impact statement and to ensure compliance with Section 7 of the Endangered Species Act (ESA), we requested a list of species and information on protected, proposed, and candidate species and critical habitats which may be in the vicinity of DNPS and its associated transmission lines. In addition, we requested any information you considered appropriate under the provisions of the Fish and Wildlife Coordination Act (FWCA).

We are writing now to inform you that since our March 11, 2003, letter, the scope of the transmission lines included in this environmental review has been expanded. Specifically, the length of the Goodings Grove transmission line corridor was stated in our letter as being 12.4 miles long and terminating at the Elwood substation in Will County. Based on additional information provided by the licensee, Exelon Generation Company, LLC, the length of the Goodings Grove corridor pertinent to our review extends 29.8 miles to the Goodings Grove substation in Will County, and occupies 903 acres (see attached map).

As provided for by the ESA and FWCA, we request that you consider the effects the expanded scope of the project may have on endangered and threatened species of fish and wildlife. Please notify us of any issues that we should consider during the preparation of the environmental impact statement for the proposed DNPS license renewal.

If you have any questions concerning the process for the NRC staff review of the license renewal application, please contact Mr. Louis Wheeler, Senior Project Manager, at (301) 415-1444 or via e-mail at DXW@nrc.gov.

Sincerely,

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

Docket Nos.: 50-237 and 50-249

Enclosure: DNPS Transmission Line Map

cc w/encl.: See next page

Dresden Nuclear Power Units 2 and 3

cc:

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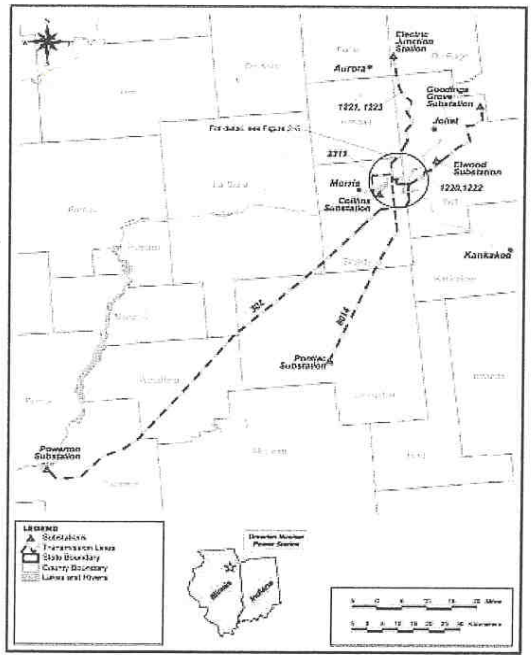

Transmission Line Corridors Associated with Dresden Nuclear Power Station.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office
4469 48th Avenue Court
Rock Island, Illinois 61201
Phone: (309) 793-5800 Fax: (309) 793-5804

IN REPLY REFER TO:
FWS/RIFO

September 15, 2003

United States Nuclear Regulatory Commission
Attn: Mr. Louis Wheeler, Senior Project Manager
License Renewal and Environmental Impacts
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
Washington, D.C. 20555-0001

Dear Mr. Wheeler:

This is in response to your letters of March 11, 2003, and August 11, 2003, requesting our comments regarding renewal of the operating license for the Dresden Nuclear Power Station, Units 2 and 3 and the expanded scope of the environmental review associated with the proposed license renewals for Dresden Nuclear Power Station, Units 2 and 3 in Tazewell, Woodford, La Salle, Livingston, Grundy, Will, Kendall and Du Page Counties in Illinois. The expanded scope consists of expanding transmission lines into other counties.

The following federally listed species are known to occur in the aforementioned counties in Illinois.

Classification	Common Name (Scientific Name)	Habitat
Tazewell County		
Threatened	Bald eagle *Haliaeetus leucocephalus*	wintering
Threatened	Lakeside daisy *Hymenoxis herbacea*	dry rocky prairies (introduced)
Threatened	Decurrent false aster *Boltonia decurrens*	Illinois River floodplain
Woodford County		
Threatened	Bald eagle *Haliaeetus leucocephalus*	wintering

Threatened	Decurrent false aster *Boltonia decurrens*	Illinois River floodplain
La Salle County		
Threatened	Bald eagle *Haliaeetus leucocephalus*	wintering
Threatened	Decurrent false aster *Boltonia decurrens*	Illinois River floodplain
Endangered	Indiana bat *Myotis sodalis*	caves, mines; small stream corridors with well-developed riparian woods; upland and bottomland forests
	Critical habitat	**Blackball Mine**
Livingston County		
See statewide distribution below.		
Grundy County		
Threatened	Bald eagle *Haliaeetus leucocephalus*	wintering
Threatened	Eastern prairie fringed orchid *Platanthera leucophaea*	wet grassland habitats
Will County		
Threatened	Bald eagle *Haliaeetus leucocephalus*	wintering
Threatened	Lakeside daisy *Hymenoxis herbacea*	dry rocky prairies (introduced)
Threatened	Mead's milkweed *Asclepias meadii*	dry/mesic prairies (introduced)
Endangered	Hine's emerald dragonfly *Somatochlora hineana*	spring-fed wetlands
Endangered	Leafy prairie clover *Dalea foliosa*	Des Plaines River floodplain
Candidate	Eastern massasauga *Sistrurus catenatus catenatus*	shrubby wetlands

Kendall County
See statewide distribution below.

Du Page County		
Threatened	Prairie bush-clover *Lespedeza leptostachya*	dry to mesic prairies
Threatened	Eastern prairie fringed orchid *Platanthera leucophaea*	wet grassland habitats
Endangered	Hine's emerald dragonfly *Somatochlora hineana*	spring-fed wetlands
Statewide		
Threatened	Prairie bush-clover *Lespedeza leptostachya*	dry to mesic prairies
Threatened	Eastern prairie fringed orchid *Platanthera leucophaea*	wet grassland habitats
Endangered	Indiana bat *Myotis sodalis*	caves, mines; small stream corridors with well-developed riparian woods; upland and bottomland forests

The threatened **bald eagle** is listed as wintering and possibly breeding in Tazewell, Woodford, La Salle, Grundy and Will Counties in Illinois. Bald eagles build their nests in large trees near rivers or lakes. A typical nest is around 5 feet in diameter. Eagles often use the same nest year after year.

During the winter, this species feeds on fish in the open water areas created by dam tailwaters, the warm water effluents of power plants and municipal and industrial discharges, or in power plant cooling ponds. The more severe the winter, the greater the ice coverage and the more concentrated the eagles become. They roost at night in groups in large trees adjacent to the river in areas that are protected from the harsh winter elements. They perch in large shoreline trees to rest or feed on fish. There is no critical habitat designated for this species. The eagle may not be harassed, harmed, or disturbed when present nor may nest trees be cleared. Please refer to the enclosed "Management Guidelines for Breeding Areas."

The federally endangered **lakeside daisy** is known to occur in Will and Tazewell Counties, Illinois. Historically, it has grown in outcrops of dolomite or limestone bedrock, dry, gravelly prairies, on terraces or hills associated with major river systems. It is now restricted to dry, thin-soiled, degraded prairie remnants. There is no critical habitat listed for this species in Illinois. Federal regulations prohibit any commercial activity involving this species or the malicious damage or removal of this species from Federal land or any other lands in knowing violation of

State law or regulation, including State criminal trespass law. If any of the aforementioned habitat criteria are found in the project area, we request that searches for this species be conducted between late April through early June, when the daisy typically blooms and is more easily identified.

The threatened **decurrent false aster** is known to occur in Tazewell, Woodford, and La Salle Counties, Illinois (Illinois River floodplain). It is also considered to potentially occur in any county bordering the Illinois River and the counties bordering the Mississippi River between the mouths of the Missouri River and the Ohio River. It occupies disturbed alluvial soils in the floodplains of these rivers. There is no critical habitat listed for this species in Illinois.

The **Indiana bat** is known to occur in La Salle County, Illinois and potentially occurs statewide in Illinois. **The Blackball Mine in La Salle County is listed as Critical habitat.**

During the summer, the Indiana bat frequents the corridors of small streams with well-developed riparian woods as well as mature upland forests. It forages for insects along the stream corridor, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, and over farm ponds and in pastures. It has been shown that the foraging range for the bats varies by season, age, and sex and ranges up to 81 acres (33ha). It roosts and rears its young in cavities and beneath the loose bark some live species of trees and those of large dead or dying trees. It winters in caves and abandoned mines.

An Indiana bat maternity colony typically consists of a primary roost tree and several alternate roost trees. The use of a particular tree appears to be influenced by weather conditions (temperature and precipitation). For example, dead trees found in more open situations were used more often during cooler or drier days while interior live and dead trees were selected during periods of high temperature and/or precipitation. Indiana bats tend to return to the same roosting area year after year. Please refer to the attached "Indiana bat guidelines for Illinois."

The threatened **Mead's milkweed** is known to occur in Will County, Illinois where it has been introduced. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The endangered **Hine's emerald dragonfly** is known to occur in Will and Du Page Counties in Illinois. It occupies marshes and sedge meadows fed by calcareous groundwater seepage and underlain by dolomite bedrock. In general, these areas are characterized by the presence of slowly flowing water and nearby or adjacent forest edges. If suitable habitat for this species occurs in a project area, we ask that surveys be conducted. If a Hine's emerald dragonfly is found, this office should be notified immediately. Water quality is an important element of this species habitat. Environmental studies should address how the project would affect water quality and quantity, including any effects associated with future developments made possible by the proposed project.

The endangered **leafy prairie clover** is known to occur in Will County, Illinois, and may potentially occur in LaSalle County. It occupies prairie remnants on thin soil over limestone bedrock. There is no critical habitat designated for this species. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. If any prairie remnants are found within the project area, we request that searches for this species be conducted from late July through August, as this is when the clover typically flowers and is more easily identified.

The **prairie bush clover** is known to occur in Lee County, Illinois and potentially occurs throughout Iowa and Illinois. Prairie bush clover occupies dry to mesic prairies with gravelly soil. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law. This species should be searched for whenever prairie remnants are encountered.

The **eastern prairie fringed orchid** occupies wet grassland habitats and potentially occurs throughout Illinois. Possible habitat includes, but is not restricted to, mesic prairie, sedge meadows, marsh edges and bogs. If any of these aforementioned habitat remnants are found within any of the project areas, we request that searches for this species be conducted between June 28 and July 11, when the orchid typically flowers and is most identifiable. Federal regulations prohibit any commercial activity involving this species or the destruction, malicious damage or removal of this species from Federal land or any other lands in knowing violation of State law or regulation, including State criminal trespass law.

The endangered **Iowa Pleistocene snail** is known to occur on north-facing slopes of the driftless area in Clinton County, Iowa. It occupies algific (cold-producing) talus slopes at the outlet of underground ice caves along limestone bluffs within a narrow regime of soil moisture and temperature. There is no critical habitat designated. It must not be harmed, harassed or disturbed.

The project lies within the range of the **eastern massasauga**, a docile rattlesnake that is declining throughout its national range and is currently a Federal Candidate species. **The snake is currently listed as endangered by the State of Illinois and is believed to occur in Will County.** Your proactive efforts to conserve this species now may help avoid the need to list the species under the Endangered Species Act in the future. Due to their reclusive nature, we encourage early project coordination to avoid potential impacts to massasaugas and their habitat.

The massasauga is often found in or near wet areas, including wetlands, wet prairie, or nearby woodland or shrub edge habitat. This often includes dry goldenrod meadows with a mosaic of early successional woody species such as dogwood or multiflora rose. Wet habitat and nearby dry edges are utilized by the snakes, especially during the spring and fall. Dry upland areas up to 1.5 miles away are utilized during the summer, if available. Some project management ideas include the following:

1) At a minimum, project evaluations should contain delineations of whether or not massasauga habitat occurs within project boundaries. Descriptions should indicate the quality and quantity of

massasauga habitat (holes, crayfish burrows, foraging area, or basking sites) that may be affected by the project.

2) In cases where massasaugas are known to occur or potential habitat is rated moderate to high, massasauga surveys may be necessary. If surveys are conducted, it may be helpful to inquire with local resource agency personnel, or reliable local residents, who may know of massasauga sightings. For more detailed information, please contact us.

Migratory birds
In addition to trying to ensure that electrical transmission lines and structures do not adversely affect threatened and endangered species, the U. S. Fish and Wildlife Service is also interested in minimizing potential impacts to other wildlife resources, particularly migratory birds. The Migratory Bird Treaty Act (16 U.S.C. 703-712) prohibits the taking, killing, possession, sale, transportation and importation of migratory birds, their eggs, parts and nests, except when specifically authorized by the Secretary of the Interior. The Bald and Golden Eagle Protection Act (16 U.S.C. 668) prohibits the taking of any bald or golden eagle except when specifically authorized by the Secretary of the Interior. These laws do not allow the killing of migratory birds, including eagles without a permit. To avoid killing migratory birds, many companies employ raptor and migratory bird deterents and line configurations, which minimizes electrocution. These and other methods are described in *Avian Power Line Interaction Committee (APLIC), 1994; Mitigating Bird Collisions with Power Lines: The State of the Art in 1994, Edison Electric Institute, Washington D.C., 78 pp.; Avian Power Line Interaction Committee (APLIC), 1996; Suggested Practices for Raptor Protection on Power Lines, Edison Electric Institute/Raptor Research Foundation, Washington, D. C., 128 pp.* Copies can be obtained via the internet at *http://www.eei.org/productsandservices/descriptionandaccess/* or by calling 1-800-334-5453.

We encourage you to work with us to eliminate loss of migratory birds attributable to power lines and other power transmission facilities. If you would like additional information, please contact us as indicated below.

In addition, The Corps of Engineers is the Federal agency responsible for wetland regulation. We recommend that you contact them for assistance in delineating any wetland types and acreage within the expanded scope of the project. Priority consideration should be given to avoid impacts to these wetland areas. Any activities that would alter these wetlands may require a Section 404 permit. Unavoidable impacts will require a mitigation plan to compensate for any losses of wetland functions and values. The U.S. Army Corps of Engineers, Clock Tower Building, P.O. Box 2004, Rock Island, Illinois 61201, should be contacted for information about the permit process.

These comments provide technical assistance only and do not constitute a report of the Secretary of the Interior on a project within the meaning of Section 2(b) of the Fish and Wildlife Coordination Act, do not fulfill the requirements under Section 7 of the Endangered Species Act, nor do they represent the review comments of the U.S. Department of the Interior on any forthcoming environmental statement.

If you have any questions concerning our comments, please contact Ginger Molitor of my staff at (309) 793-5800 ext. 212.

Sincerely,

Richard C. Nelson
Supervisor

Cc: Jessie Coty, Kris Lah
Enclosures

G:\Word Documents\Ginger\completed\Illinois\DresdenNuclear Regulatory Commission

Guidelines for Protection of Indiana Bat Summer Habitat in Illinois

The endangered Indiana bat (*Myotis sodalis*) is known to occur in Adams, *Alexander, Bond, Ford, *Hardin, Henderson, *Jackson, *Jersey, Johnson, *La Salle, Madison, Macoupin, McDonough, *Monroe, Perry, Pike, *Pope, Pulaski, Saline, Schuyler, Scott, *Union, and Vermilion Counties in Illinois. (*Counties with hibernacula) **The Blackball Mine in La Salle County has been listed as Critical Habitat. Potential habitat for this species occurs statewide, therefore, Indiana bats are considered to potentially occur in any area with forested habitat.**

Indiana bats migrate seasonally between winter hibernacula and summer roosting habitats. Winter hibernacula include caves and abandoned mines. Females emerge from hibernation in late March or early April to migrate to summer roosts. Females form nursery colonies under the loose bark of trees (dead or alive) and/or cavities, where each female gives birth to a single young in June or early July. A maternity colony may include from one to 100 individuals. A single colony may utilize a number of roost trees during the summer, typically a primary roost tree and several alternates. Some males remain in the area near the winter hibernacula during the summer months, but others disperse throughout the range of the species and roost individually or in small numbers in the same types of trees as females. The species or size of tree does not appear to influence whether Indiana bats utilize a tree for roosting provided the appropriate bark structure is present. However, the use of a particular tree does appear to be influenced by weather conditions, such as temperature and precipitation.

During the summer, the Indiana bat frequents the corridors of small streams with riparian woods as well as mature upland forests. It forages for insects along stream corridors, within the canopy of floodplain and upland forests, over clearings with early successional vegetation (old fields), along the borders of croplands, along wooded fencerows, over farm ponds and in pastures. **To avoid impacting this species, tree clearing activities should not occur during the period of April 15 to September 15. If a proposed action occurs within a 5-mile radius of a winter hibernacula, tree clearing should be prohibited from April 1 to November 15.** If it is necessary to clear trees during this time frame, mist net surveys may be necessary to determine if Indiana bats are present. "Mist Netting Guidelines" can be obtained from our office. A search for this species should be made prior to any cave-impacting activities.

Suitable summer habitat in Illinois is considered to have the following characteristics within a ½ mile radius of a project site:

1) forest cover of 15% or greater;
2) permanent water;
3) one or more of the following tree species: shagbark and shellbark hickory that may be dead or alive, and dead bitternut hickory, American elm, slippery elm, eastern cottonwood, silver maple, white oak, red oak, post oak, and shingle oak with slabs or plates of loose bark;
4) potential roost trees with 10% or more peeling or loose bark

If the project site contains any habitat that fits the above description, it may be necessary to conduct a survey to determine whether the bat is present. If Indiana bats are known to be present, they must not be harmed, harassed or disturbed when present. **Large-scale habitat alterations within known or potential Indiana bat habitat should not be permitted without a bat survey and/or consultation with this office.**

Minor tree clearing (i.e. timber stand improvement or clearing of small stands) should conserve trees which are dead or have loose bark and should be limited to non-maternity periods between the dates of September 16 and April 14.

If you have any comments or questions, please contact the Rock Island Field Office at (309) 793-5800.

From:
Northern States Recovery Pl
1983

Appendix E

MANAGEMENT GUIDELINES FOR BREEDING AREAS

The purpose of these guidelines is to provide minimum criteria for protecting bald eagles at their breeding areas from human disturbance and to preserve and enhance important habitat features of these areas. The criteria are based on a synthesis of existing guidelines in present use by the U.S. Forest Service (Eastern Region), U. S. Fish and Wildlife Service, and the views of eagle researchers.

Although eagles often use particular nests for many years, they frequently move to different sites. Turnover of existing nests, from losses to wind, changes by the eagles, and other natural factors may be as much as 12% of the sites per year. Eagle "real estate" is much less fixed than for humans. Thus, the conservation and management of nesting habitat is far more important than the identification and preservation of specific nest sites or even breeding areas.

Eagle tolerance of human presence is highly variable, both seasonally and among different individuals or pairs of eagles. Some bald eagles nest and accept people, boaters, hikers, cabins, roads, and other human presence in very close proximity, possibly as a result of habituation. On the other hand, some may be extremely intolerant and be disturbed readily. This variability must be recognized in both research and management. Management should be conservative and assume that intolerant birds may be present now or in the future. We should be especially conservative in areas with low populations.

All nesting eagles are disturbed more easily at some times of the nesting season than at others. Four periods of sensitivity to disturbance can be identified for nesting areas. These are as follows.

1. Most critical period. Prior to egg laying bald eagles engage in courtship activities and nest building. During this and the incubation periods they are most intolerant of external disturbances and may readily abandon the area The most critical period for disturbances therefore extends from approximately one month prior to egg laying through the incubation period.

2. Moderately critical period. This includes approximately one month prior to the above period and about four weeks after hatching. Prior to the nesting season individual pairs of eagles vary considerably in time of return to the nest site or, if permanent residents, the time they begin to come into physiological condition for breeding and become sensitive to

disturbance. After hatching the chicks are quite vulnerable to inclement weather and need frequent brooding and feeding. Disturbance can keep adults from nests and, depending on the weather and length of time involved, may cause weakening or death of chicks. The adults are quite protective of the nest site as long as one or more healthy chicks are present. Thus, disturbance at this time is less critical, although still potentially detrimental, than during the pre-laying and incubation period.

3. Low critical period. This period extends from the time chicks are about one month of age until approximately six weeks after fledging. During this time adults are still quite attached to nesting areas but tolerate moderate amounts of human presence. Restriction should be decided on a case by case basis.

4. Not critical period. The existence of this period depends on whether adults are permanent residents in their nesting areas. In most regions adults leave the vicinity for a few weeks or months each year. During the time they are gone one need be concerned only with activities that alter the habitat in ways that would make it unsuitable for future nesting.

The timing of these periods depends on geographic location. Eagles tend to breed earlier farther south or in coastal locations. Establishment of critical periods in managment planning will therefore depend on the timing of nesting in each area.

Management of nesting areas will depend on the amount of suitable habitat, numbers of pairs present, extent of the areas used by nesting eagles, and present land uses. Plans should be prepared for each breeding area and planning should encompass larger units when habitat is suitable and many nesting pairs are present. In planning for a large region, particularly if major changes in land use or development are anticipated, the following major items should be addressed:

1. Distribution of habitat modification. Large contiguous areas of habitat should remain suitable, not just small, specific sites where nests currently are located.

2. Upper limit to habitat modification. Limits on habitat modification should be clearly established in advance, and unplanned development should be discouraged or prohibited. Limits set in advance are generally more acceptable to persons desiring further development; the process permits reasonable negotiation and compromise and limits are easier to enforce.

3. Rate of development. Development should only be allowed to approach the upper limit slowly, over a period of years. Sudden, large-scale development should be prevented if possible.

4. Seasonal timing of human activity. Construction and related activities should be confined to the low or non-critical periods of the year described above.

5. Human attitudes toward eagles in the area. Much human-eagle interaction depends on the predominant attitude of human residents of each area. Residents and visitors of some areas are very favorably disposed toward the birds, if not proud and quite protective. They may be careful not to disturb the birds and may help prevent disturbance or destruction by other persons. Such attitudes should be encouraged through education and law enforcement. Illegal shooting of eagles, especially young birds of the year still in the vicinity of nests during the fall hunting season, should be severely penalized.

The above guidelines pertain to larger geographic units where several eagles may be nesting. The following pertain to specific breeding areas.

SITE-SPECIFIC MANAGEMENT PLANS

A. Basic information and essential habitat. Site-specific management plans should be tailored to the size and configuration of essential habitats, and should address such factors as the prey base, habitat used for foraging, and any other features necessary for maintaining habitat suitability. In addition, management plans should clearly specify restrictions on human activities and habitat alterations in establishing buffer zones around nests (see next point in outline). For basic information forms, see end of this appendix.

B. Disturbance Buffer Zones for Nest Trees. Each nest within a breeding area will be protected by three zones that become less restrictive to human activity as the distance from the nest increases. Some activities need to be restricted only during the nesting season, or critical periods. Guidelines for zones, based on those developed by the U. S. Forest Service in the Eastern Region and used in several parts of the United States, are described below. If buffer zones are used they should be established around all nest sites within a breeding area regardless of their activity status, since alternate nests often are used as feeding platforms and roosting sites.

1. Primary Zone

   a) Size: The boundary of this zone should be 330 feet (5 chains) from the nest.

   b) Restrictions: All land use except actions necessary to protect or improve the nest site should be prohibited in this zone. Human entry and low-level aircraft operations should be prohibited during the most critical and moderately critical periods, unless performed in connection with eagle research or management by qualified individuals. Motorized access into this zone should be prohibited. Restrictions on human entry

at other times should be addressed in the breeding area management plan, considering the types, extents, and durations of proposed or likely activities.

2. Secondary zone

a) Size: This zone should extend 660 feet (10 chains) from the nest.

b) Restrictions: Land-use activities that result in significant changes in the landscape, such as clearcutting, land clearing, or major construction, should be prohibited. Actions such as thinning tree stands or maintenance of existing improvements can be permitted, but not during the most critical and moderately critical periods. Human entry and low-level aircraft operations should be prohibited during the most critical period unless performed in connection with necessary eagle research and management by qualified individuals. Roads and trails in this zone should be obliterated, or at least closed during the most and moderately critical periods. Restrictions on human entry at other times should be addressed in the breeding area management plan, considering the types, extents, and durations of proposed or likely activities.

3. Tertiary Zone

a) Size: This is the least restrictive zone. It should extend one-quarter mile (20 chains) from the nest, but may extend up to one-half mile (40 chains) if topography and vegetation permit a direct line of sight from the nest to potential activities at that distance. The configuration of this zone, therefore, may be variable.

b) Restrictions: Some activities are permissible in this zone except during the most critical period. Each breeding area management plan may identify specific hazards that require additional constraints.

C. Other Management Guidelines.

1. Abandoned Nest Trees

a) When a tree containing an eagle nest has blown down or has been damaged so it can no longer support a nest, remove all buffer zones. The breeding area management plan itself, however, should remain in effect or be revised, such as by removing buffer zones until a new nest is established.

b) When a nest structure disappears but the nest tree remains the buffer zones should remain in effect through at least the following three breeding seasons. If the nest is not rebuilt, remove the zoning but still consider the area as essential habitat and protect it accordingly.

c) When a nest is classified as a remnant, that is, one that has been unoccupied for five consecutive years, and is not being maintained by eagles, retain only the primary zone.

Roosting and Potential Nest Trees.

a) Three or more super-canopy trees (preferably dead or with dead tops) should be identified and preserved within one-quarter mile of each nest as roosting and perching sites.

b) In areas identified as potential nesting habitat, there should be at least four to six over-mature trees of species favored by bald eagles for every 320 acres within 1320 feet of a river or lake larger than 40 acres. These trees should be taller than surrounding trees or at the edge of the forest stand, and there should be clear flight paths to them.

c) Artificial nest structures may be provided where suitable nest sites are unavailable in occupied or potential habitat. Structures may be placed in trees containing dilapidated nests; in trees without existing nests, but which otherwise appear suitable; or in man-made structures such as powerlines or tripods. Nest platforms should be approximately five to six feet in length and width (25-36 square feet) and be made to last for several years. Roosting structures may be erected using powerpoles with several horizontal perches near the upper end.

3. Prey Base Management

a) Fisheries management should strive to maintain a prey base consistent with eagle food habits.

b) In some breeding areas, particularly in the west, mammals form a portion of the diet of bald eagles. Land management in these areas should maintain an adequate prey base in terrestrial habitats.

c) Feeding of eagles may be considered a valid management tool in areas where natural prey are highly contaminated or temporarily unavailable for some reason. This management option rarely will be used.

d) In some regions, commercial and sport fishermen may be providing an important but unrecognized (by people) food source for eagles by dumping rough fish. Many commercial fishermen are also suffering from reduced catches of game fish and quotas imposed for the purpose of managing fisheries. Subsidization perhaps in the form of monetary or tax incentives might benefit eagles, fishermen, and possibly the fisheries.

SITE-SPECIFIC MANAGEMENT PLANS

Outline for data file and breeding area management plans

Breeding Area No. and Name: _____

Nest No.(s): _____

Location: _____

Date: _____

By: _____

I. Breeding Area Characteristics

A. General Description
Nest Site Relationships
Overview of Habitat and Land Uses

B. Feeding Areas (Known and/or Assumed)

C. Known or Potential Perch/Roost Trees

D. Potential Nest Sites Available

E. Land Ownership within Breeding Area
Identify Acquisition Needs

F. Post-nesting Use of Habitat

II. Nest Site Characteristics (Each nest in territory)

A. Tree Measurements (height, DBH, size); Nest Measurements

B. Condition of Nest Tree

C. Date Constructed

D. Timber Type, Size and Density

E. Distance to Water

F. Distance to Roads and Other Development

G. Accessibility

H. Relation of Nest Height to Surrounding Canopy

I. Precise Directions for Reaching Nest

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

January 13, 2004

Mr. Maynard Crossland
Director
Illinois Historic Preservation Agency
Preservation Services Division
One Old State Capitol Plaza
Springfield, IL 62701

SUBJECT: DRESDEN NUCLEAR POWER STATION LICENSE RENEWAL REVIEW

Dear Mr. Crossland:

The U.S. Nuclear Regulatory Commission (NRC) staff is reviewing an application to renew the operating licenses for Dresden Nuclear Power Station, Units 2 and 3 (DNPS), which is located in Goose Lake Township, Grundy County, Illinois. DNPS is owned by Exelon Generation Company, LLC (Exelon). Exelon holds the NRC license to operate the plant. As part of its review of the proposed action, the NRC staff has prepared a site-specific Supplemental Environmental Impact Statement (SEIS) to its "Generic Environmental Impact Statement for License Renewal of Nuclear Plants" (GEIS), NUREG-1437. The SEIS includes analyses of relevant environmental issues, including potential impacts to historic, archeological and cultural properties from refurbishment activities associated with license renewal, and for the extended period of operation. In accordance with our letter to you of July 1, 2003, a copy of the draft supplement is enclosed. Pursuant to 36 CFR 800.8, we are requesting your comments on the draft supplement and on our preliminary conclusions regarding historic properties.

As stated in our July 1, 2003, letter the NRC staff has determined that the area of potential effect (APE) for a license renewal action is the area at the power plant site and its immediate environs which may be impacted by post-license renewal land disturbing operation or projected refurbishment activities associated with the proposed action. The staff views the APE for the DNPS license renewal as including the DNPS site and the immediate environs.

The NRC staff has conducted an environmental audit at the site, and has reviewed historic and archaeological records. As noted in our July 1, 2003, letter we also contacted fifteen Native American Tribes identified as having potential interest in the proposed undertaking. To date, no comments have been received.

In the context of the National Environmental Policy Act of 1969 under which the draft environmental impact statement was prepared, the NRC staff's preliminary determination is that the impact of license renewal on historical and archaeological resources is SMALL and additional mitigation is not warranted. Under the provisions of the National Historic Preservation Act of 1966, the NRC staff's preliminary determination is that there will be no historic properties affected for the proposed action.

M. Crossland 2

Please note that the period for public comment expires on February 24, 2004. If your office requires additional time, or if there are any other questions regarding this correspondence, please have your representative contact the Environmental Project Manager, Mr. Louis Wheeler, at 301-415-1444 or DXW@nrc.gov.

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

Docket Nos.: 50-237, 50-249

Enclosure: As stated

cc w/o Encl.: See next page

Dresden Nuclear Power Units 2 and 3

cc:

Site Vice President - Dresden Nuclear Power Station
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Morris, IL 60450-9765

Dresden Nuclear Power Station Plant Manager
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Regulatory Assurance Manager - Dresden
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Morris, IL 60450-9765

U.S. Nuclear Regulatory Commission
Dresden Resident Inspectors Office
6500 N. Dresden Road
Morris, IL 60450-9766

Chairman
Grundy County Board
Administration Building
1320 Union Street
Morris, IL 60450

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

February 12, 2004

Mr. Richard C. Nelson, Supervisor
Rock Island Field Office
U.S. Fish and Wildlife Service
4469 48th Avenue Court
Rock Island, Illinois 61201

Subject: REQUEST FOR CONCURRENCE - BIOLOGICAL ASSESSMENT FOR DRESDEN NUCLEAR POWER STATION, UNITS 2 AND 3 LICENSE RENEWAL (TAC NOS. MB6843 AND MB6844)

Dear Mr. Nelson:

The U.S. Nuclear Regulatory Commission (NRC) staff has prepared the enclosed Biological Assessment (BA) to evaluate whether the proposed renewal of the operating licenses of the Dresden Nuclear Power Station, Units 2 and 3 (Dresden), for an additional 20-year period would have adverse effects on listed species, and request concurrence by your office.

Dresden is located in Goose Lake Township on the south shoreline of the Illinois River at the confluence of the Des Plaines and Kankakee Rivers. This BA evaluates the potential impacts of the proposed license renewal on Federally listed threatened or endangered species. Ten species, afforded protection under the Endangered Species Act of 1973, could potentially inhabit the Dresden site or transmission line rights-of-way (ROWs). For four of the species, the decurrent false aster *(Boltonia decurrens)*, the leafy prairie-clover *(Dalea foliosa)*, the lakeside daisy *(Hymenoxys herbacea)*, and the Hine's emerald dragonfly *(Somatochlora hineana)*, the renewal of the Dresden licenses will have "no effect." For the Mead's milkweed *(Asclepias meadii)*, the prairie bush clover *(Lespedeza leptostachya)*, the eastern prairie fringed orchid *(Platanthera leucophaea)*, the eastern massasauga *(Sistrurus catenatus)*, the Indiana bat *(Myotis sodalis)*, and the bald eagle *(Haliaeetus leucocephalus)*, the staff has determined that license renewal for Dresden may affect, but is not likely to adversely affect these six species.

In reaching our conclusion, we relied on information provided by Exelon Generation Company, LLC (the licensee), on research performed by the NRC staff, and on current listings of species provided by the Rock Island Field Office of the U.S. Fish and Wildlife Service.

If you have any questions regarding this BA or our request for concurrence, please contact Mr. Duke Wheeler, NRC Senior Environmental Project Manager, at (301) 415-1444.

Sincerely,

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

Docket Nos.: 50-237 and 50-249

Enclosure: As stated

cc w/encl: See next page

BIOLOGICAL ASSESSMENT

Dresden Nuclear Power Station, Units 2 and 3
License Renewal

Grundy County, Illinois

February 2004

Docket Nos. 50-237 and 50-249

U.S. Nuclear Regulatory Commission
Rockville, Maryland

Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Enclosure

Biological Assessment of the Effects of License Renewal for the Dresden Nuclear Power Station, Units 2 and 3 Threatened or Endangered Species

Executive Summary

This Biological Assessment (BA) evaluates the potential impacts of the proposed license renewal for the Dresden Nuclear Power Station, Units 2 and 3 (Dresden) on Federally listed threatened or endangered species. There will be no major construction, refurbishment, or replacement activities associated with this action. A total of ten species, afforded protection under the Endangered Species Act of 1973, could potentially inhabit the Dresden site or transmission line rights-of-way (ROWs). The U.S. Nuclear Regulatory Commission (NRC) staff has conducted a BA of these ten species and has determined that for four of the species, the decurrent false aster *(Boltonia decurrens)*, the leafy prairie-clover *(Dalea foliosa)*, the lakeside daisy *(Hymenoxys herbacea)*, and the Hine's emerald dragonfly *(Somatochlora hineana)*, the renewal of the Dresden licenses for an additional 20 years will have "no effect." For the Mead's milkweed *(Asclepias meadii)*, the prairie bush clover *(Lespedeza leptostachya)*, the eastern prairie fringed orchid *(Platanthera leucophaea)*, the eastern massasauga *(Sistrurus catenatus)*, the Indiana bat *(Myotis sodalis)*, and the bald eagle *(Haliaeetus leucocephalus)*, the staff has determined that license renewal for Dresden may affect, but is not likely to adversely affect these six species.

Introduction

The NRC licenses the operation of domestic nuclear power plants in accordance with the Atomic Energy Act of 1954, as amended, and NRC implementing regulations. Exelon Generation Company, LLC (Exelon) operates Dresden pursuant to NRC Operating License Numbers DRP-19 and DRP-25, which expire on December 22, 2009, and January 12, 2011, respectively.

Exelon has prepared an environmental report in conjunction with its application for renewal of the Dresden operating licenses, as provided for by the following NRC regulations:

- Title 10, Energy, Code of Federal Regulations (CFR) Part 54, Requirements for Renewal of Operating Licenses for Nuclear Power Plants, Section 54.23, Contents of Application - Environmental Information (10 CFR 54.23).
- Title 10, Energy, CFR Part 51, Environmental Protection Requirements for Domestic Licensing and Related Regulatory Functions, Section 51.53, Postconstruction Environmental Reports, Subsection 51.53(c), Operating License Renewal Stage [10 CFR 51.53(c)].

The renewed operating license would allow up to 20 additional years of plant operation beyond the current licensed operating period.

No major refurbishment or replacement of important systems, structures, or components are expected during the Dresden license renewal period. In addition, no construction activities are expected to be associated with license renewal.

In a letter dated March 11, 2003, the NRC staff requested comments from the FWS on the operating license renewal application for Dresden (Kuo 2003a). Specifically, the NRC

requested a list of species and information on protected, proposed, and candidate species and critical habitat that may be in the vicinity of Dresden and its associated transmission line ROWs. The NRC also wrote the FWS on August 11, 2003, requesting information regarding the expanded scope of transmission lines being included in this review (Kuo 2003b). The FWS responded with a list of species and critical habitat that could occur on the Dresden site or along its associated transmission line ROWs (Nelson 2003).

This BA examines the effects of the Dresden operating license renewal on Federally listed species that occur in the counties where the Dresden site and associated transmission line ROWs are located. It has been prepared to support consultation regarding the effects of the proposed renewal of the operating licenses for Dresden on threatened and endangered species and designated critical habitat pursuant to Section 7(a)(2) of the Endangered Species Act (ESA). This consultation is between the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Fish and Wildlife Service (FWS). The BA examines the effects of the proposed action on the listed species that occur in counties where the Dresden site and associated transmission lines are located. The pallid sturgeon (*Scaphirhynchus albus*) is the only Federally listed fish species found in Illinois. This species occurs in the Mississippi River downstream of the confluence with the Missouri River and is unlikely to occur in the Upper Illinois River Basin where the Dresden site is located (FWS 1998). Pallid sturgeon have not been found in the vicinity of the Dresden site and are not considered in this BA.

The ten Federally listed species that could occur within the Dresden site or along its associated transmission line ROWs are listed in Table 1. In addition to the species in Table 1, a designated critical habitat exists for the Indiana bat in LaSalle County, far (40 mi [64 km]) from the nearest Dresden transmission line ROW.

Exelon has also corresponded with the FWS and the Illinois Department of Natural Resources (IDNR) regarding potential impacts of license renewal on threatened and endangered species (Jury 2002a, 2002b). The FWS indicated that it had no objection to the proposed license renewal action (Millar 2002).

Proposed Action

The proposed Federal action is renewal of the operating licenses for Dresden Units 2 and 3. The current operating license for Unit 2 expires on December 22, 2009, and for Unit 3 on January 12, 2011. Exelon submitted an application to the NRC (Exelon 2003) to renew these operating licenses for an additional 20 years of operation.

Dresden has two boiling water reactors designed by General Electric Company, each with a design rating for 912 megawatts electric (MW[e]). The cooling systems can operate in either of two modes. In the indirect open-cycle mode, once-through cooling water from the Kankakee River is used to remove heat from the main (turbine) condensers. The heated effluent is circulated through a cooling canal and pond before being discharged to the Illinois River. In the closed-cycle mode, heated effluent is circulated through mechanical draft cooling towers and then recycled through the condensers with limited make-up water withdrawn from the Kankakee River.

The proposed action would necessitate continued maintenance activities on ROWs for seven transmission lines that are used to connect Dresden to the electric power grid.

Table 1. Threatened, Endangered, and Candidate Species that Occur in Counties that Contain Dresden Units 2 and 3 and Associated Transmission Lines.[a]

Scientific Name	Common Name	Federal Status[b]	County[c]	Habitat
Asclepias meadii	Mead's milkweed	T	Will	Mesic prairies[d, e]
Boltonia decurrens	decurrent false aster	T	LaSalle, Tazewell, Woodford	Alluvial prairie and marshlands of the Illinois River flood plain[d, e]
Dalea foliosa	leafy prairie-clover	E	Will	Dolomite prairie remnants[d, e]
Hymenoxys herbacea	lakeside daisy	T	Tazewell, Will	Dolomite prairies[d, e]
Lespedeza leptostachya	prairie bush clover	T	DuPage, Grundy, Kendall, LaSalle, Livingston, Tazewell, Woodford, Will	Dry gravel and sand prairies[d, e]
Platanthera leucophaea	eastern prairie fringed orchid	T	DuPage, Grundy, Kendall, LaSalle, Livingston, Tazewell, Woodford, Will	Mesic to wet prairies[d, e]
Somatochlora hineana	Hine's emerald dragonfly	E	DuPage, Will	Calcareous spring-fed marshes[e, f]
Sistrurus catenatus	eastern massasauga	C	Will	Shrubby wetlands[e, g]
Haliaeetus leucocephalus	bald eagle	T	Grundy, LaSalle, Tazewell, Woodford, Will	Known to occur in winter, possibly also breeding in area; occurs along large rivers and lakes[e, f]
Myotis sodalis	Indiana bat	E	DuPage, Grundy, Kendall, LaSalle, Livingston, Tazewell, Woodford, Will	Wooded, riparian corridors, floodplain forests and upland forests[e, f]

(a) Federally listed species in project area based on the FWS (2003a, b).
(b) E = endangered; T = threatened; C = candidate for listing. Source: FWS (2003a, b).
(c) County distributions for Federally listed species from the FWS (2003b).
(d) Herkert (1991).
(e) Nelson (2003).
(f) Herkert (1992).
(g) FWS (2003b).

Project Area Description

Dresden is owned and operated by Exelon, and it is located on the south bank of the Illinois River at the confluence of the Des Plaines and Kankakee Rivers in Goose Lake Township, Grundy County, Illinois (Figure 1). The plant consists of three units. Units 2 and 3 are operating nuclear reactors and the subject of this consultation. Unit 1 was retired in 1978 and decontaminated in 1984, including the removal of fuel from the reactor. Units 2 and 3 are boiling water reactors (BWRs) that produce steam that turns turbines to generate electricity. In addition to the nuclear reactors and their turbine buildings, the site features intake and discharge canals, a cooling pond and canals, auxiliary buildings, switch yards, an independent spent fuel storage installation, a training center, and river frontage leased from the State of Illinois. Approximately one-half of the cooling pond is in Wilmington Township, Will County; and the other half is in Goose Lake Township, Grundy County, Illinois.

The local terrain is level to gently undulating except for the Kankakee Bluffs just northeast of the Dresden site on the north bank of the Illinois River. The area around Dresden is largely rural, characterized by farmland, woodlands, and small residential communities. The Goose Lake Prairie State Natural Area is located approximately 1.6 km (1 mi) southwest of the Dresden site. This 1015-ha (2537-ac) preserve contains the largest remnant of prairie left in Illinois and includes open grasslands and prairie marshes (Exelon 2003). Directly across the Kankakee River from the Dresden site is the 200-ha (500-ac) Des Plaines Conservation Area, which offers a variety of recreational opportunities. To the east of the Des Plaines Conservation Area is the Midewin National Tallgrass Prairie, a 6400-ha (16,000-ac) site formerly used as the Joliet Army Ammunition Plant. This area was transferred to the U.S. Forest Service in 1997 and is now being managed to restore, maintain, and enhance prairie habitats (Exelon 2003).

Dresden is located at the headwaters of the Illinois River where the Des Plaines and the Kankakee Rivers join to form the Illinois River (Figure 2). There is a 7-m-high (22-ft-high) dam at Dresden Island, approximately 3 km (2 mi) downstream from the confluence of the Kankakee and the Des Plaines Rivers, a 10-m-high (34-ft-high) dam just south of Joliet at Brandon Road, and a 12-m-high (40-ft-high) dam on the Des Plaines River just south of Lockport. Construction of these dams has resulted in a series of reservoirs maintained principally to facilitate barge traffic. Pool elevations are controlled, eliminating natural, seasonal flushing events, and are manipulated frequently.

The Dresden site occupies approximately 1011 ha (2500 ac) (Exelon 2003). Undeveloped areas of the Dresden site are located mostly on the western half and support a mosaic of habitats, including old fields, wetlands, and woodland vegetation. Several small, intermittent streams drain the site. Some of this undeveloped area is leased for cattle grazing.

- 5 -

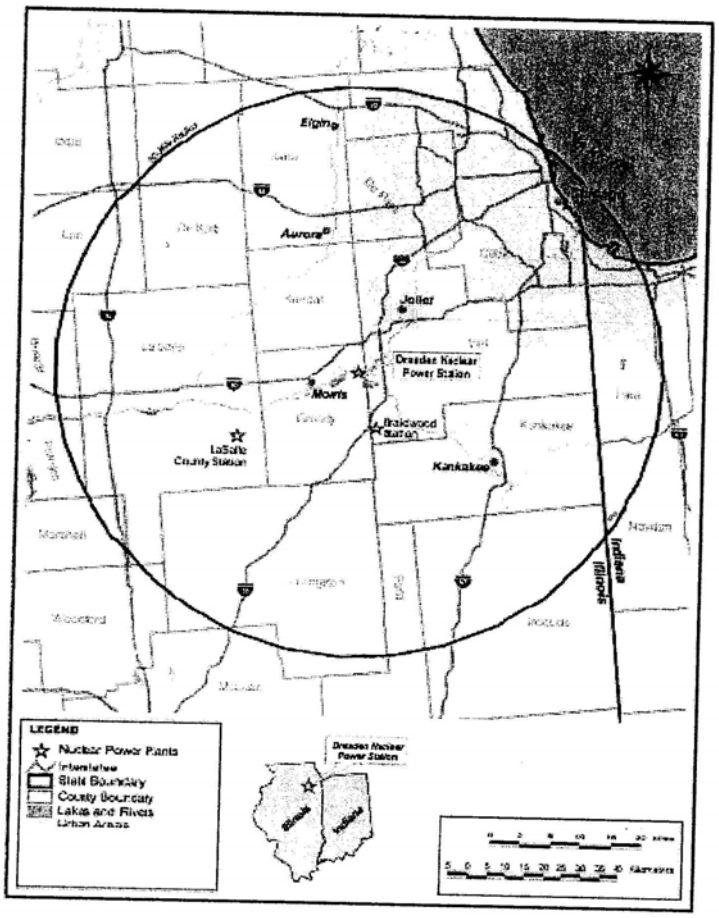


Figure 1. Location of Dresden Site with 80-km (50-mi) Radius.

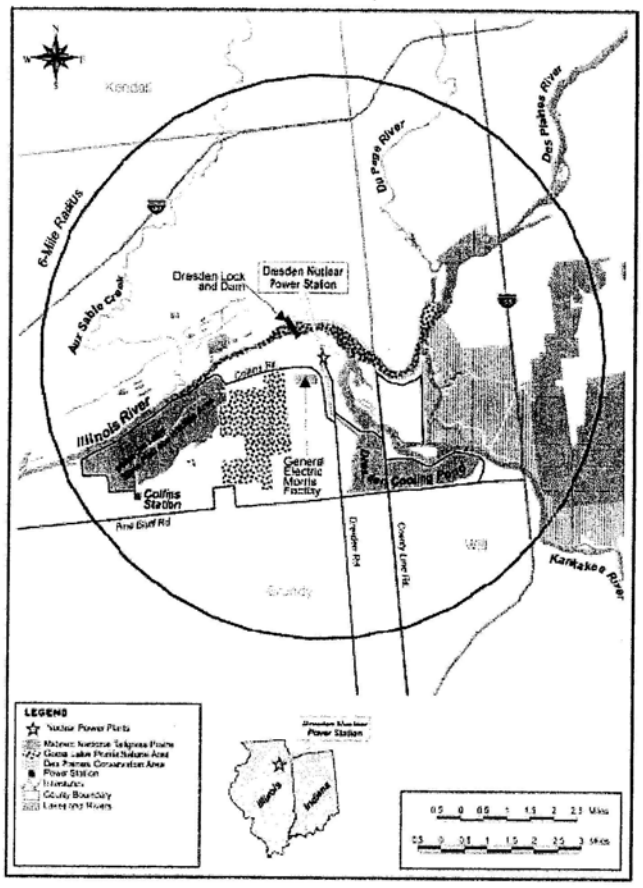


Figure 2. Dresden Site Detail with 10-km (6-mi) Radius.

Seven transmission lines connect Dresden to the electric grid (Exelon 2003). These lines occupy about 2440 ha (6030 ac) of land along 355 km (220 mi) of ROWs. These transmission line (ROWs) cross mostly agricultural land, but portions of the lines cross undeveloped habitats. Exelon maintains the ROWs by trimming and mowing, and through the application of approved herbicides (Cunningham 2003). Exelon participates in "Project Habitat," an industry program that emphasizes ROW management practices that are compatible with wildlife and improve habitat for native species. Exelon has converted some portions of the transmission line corridors to native prairie grass species (Exelon 2003). On those line ROWs associated with Dresden license renewal, prairie has been established on a 4-km (2.5-mi) segment on the northern portion of the Electric Junction transmission line in DuPage County.

The Pontiac-Midpoint transmission line ROW (69.7 km [43.3 mi] long) crosses the Goose Lake Prairie State Natural Area, which is located approximately 1.6 km (1 mi) southwest of the Dresden site (Exelon 2003). Habitats within the Goose Lake Prairie State Natural Area include tallgrass prairie and marshes (IDNR 2003).

The Powerton and the Goodings Grove transmission line ROWs (168.2 km [104.5 mi] and 20.0 km [12.4 mi], respectively) cross the Des Plaines Conservation Area, which is located across the Kankakee and the Des Plaines Rivers approximately 3.2 km (2 mi) east of the Dresden site. Natural habitats within the Des Plaines Conservation Area include river shorelines, lakes, swamps, marshes, and prairie (Exelon 2003). The Midewin National Tallgrass Prairie is immediately east of the Des Plaines Conservation Area and is crossed by a short segment of the Goodings Grove transmission line corridor. All ROW maintenance activities on the Midewin National Tallgrass Prairie must be reviewed and approved by U.S. Forest Service staff before implementation.

A portion of the Collins transmission line ROW (19.0 km [11.8 mi]) is located along Heidecke Lake State Fish and Wildlife Area, approximately 8 km (5 mi) southwest of the Dresden site. Most of the area is occupied by a cooling lake which is leased to the IDNR for hunting and fishing. The Electric Junction transmission line ROW (50.1 km [31.1 mi]) does not cross any designated natural areas. Both of these transmission lines cross the Illinois River.

Exelon maintains its transmission corridors by trimming and mowing and through the use of approved herbicides. Unless otherwise needed, vegetation management follows a five-year cycle. The preferred method of vegetation management is the use of low-volume foliar herbicides. This allows the elimination of undesirable species while preserving grasses, herbs, forbs, shrubs, and other low-growing vegetation. Herbicide application is performed according to label specifications by certified applicators. Special attention is given to stream crossings, riparian and wetland areas (NRC 2003).

Current Exelon ROW management practices reduce the probability of impacts to habitats and the species that are dependent on them. All activities in Goose Lake Prairie State Natural Area, Des Plaines Conservation Area, and Midewin National Tallgrass Prairie are planned in consultation with staff at those sites and must be approved prior to implementation. In general, ROWs across prairie habitat require little, if any, maintenance because of the absence of trees. Disturbance to wetland habitats and stream crossings are avoided and would be limited to occasional tree trimming or removal to prevent contact with transmission lines. Current

transmission line ROW maintenance practices favor native species and reduce the likelihood of adverse impacts to sensitive habitats (e.g., wetlands, streams) and any listed species that could be present within the ROWs (NRC 2003).

A variety of terrestrial wildlife species occurs in the project area. Terrestrial mammals of the area include white-tailed deer (*Odocoileus virginianus*), coyote (*Canis latrans*), red fox (*Vulpes fulva*), eastern cottontail (*Sylvilagus floridanus*), muskrat (*Ondatra zibethicus*), and beaver (*Castor canadensis*) (IDNR 2003). Birds include Canada goose (*Branta canadensis*), mallard (*Anas platyrhynchos*), great blue heron (*Ardea herodias*), killdeer (*Charadrius vociferus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), northern harrier (*Circus cyaneus*), and red-winged blackbird (*Agelaius phoeniceus*).

Figures 3 and 4, and Table 2, provide information on the transmission line corridors included in the Dresden license renewal application environmental review.

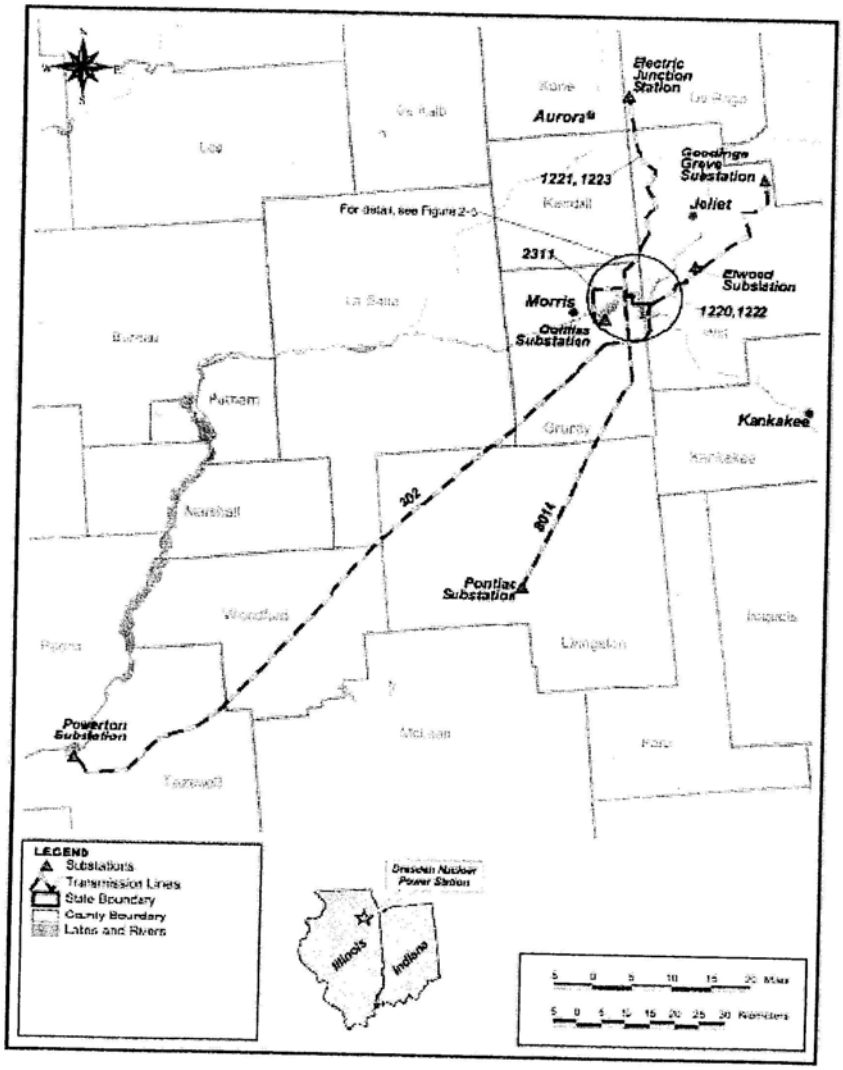
Description of Federally-Protected Species Occurring in the Project Area and Effects on These Species of the Proposed Action

1. Mead's Milkweed *(Asclepias meadii)*

Mead's milkweed (Federally listed as threatened) formerly occurred throughout the eastern tallgrass prairie region of the central United States including Kansas, Missouri, Illinois, Iowa, Wisconsin, and Indiana (FWS 2003c). There are four remaining populations in Illinois, and these are located in the Shawnee National Forest in Saline County in southern Illinois. Restoration projects have introduced the Mead's milkweed to a site in Will County (Nelson 2003; FWS 2003c). The primary habitat of Mead's milkweed is mesic to dry mesic, upland tallgrass prairie (Herkert 1991; FWS 2003c).

Although no populations of Mead's milkweed are known from the project area, it is possible that undeveloped portions of the Dresden site and associated transmission line ROWs could support this species, especially in those segments of the line that pass through natural areas, such as the Goose Lake Prairie State Natural Area, the Des Plaines Conservation Area, and the Midewin National Tallgrass Prairie. Undeveloped portions of the Dresden site that have the potential to support this species would not be affected by continued operations because no refurbishment activities that could result in habitat disturbance are planned (Exelon 2003). Current Exelon ROW management practices (Cunningham 2003) reduce the probability of impacts to these habitats and the species that are dependent on them. All activities in Goose Lake Prairie State Natural Area, Des Plaines Conservation Area, and Midewin National Tallgrass Prairie are planned in consultation with staff at these sites and must be approved prior to implementation. In general, transmission line ROWs across prairie habitat require little, if any, maintenance because of the absence of trees.

On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the Mead's milkweed in the project area and the lack of habitat-disturbing activities on undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year license renewal period is not likely to adversely affect the Mead's milkweed.



3. Transmission Lines Associated with the Dresden Site.

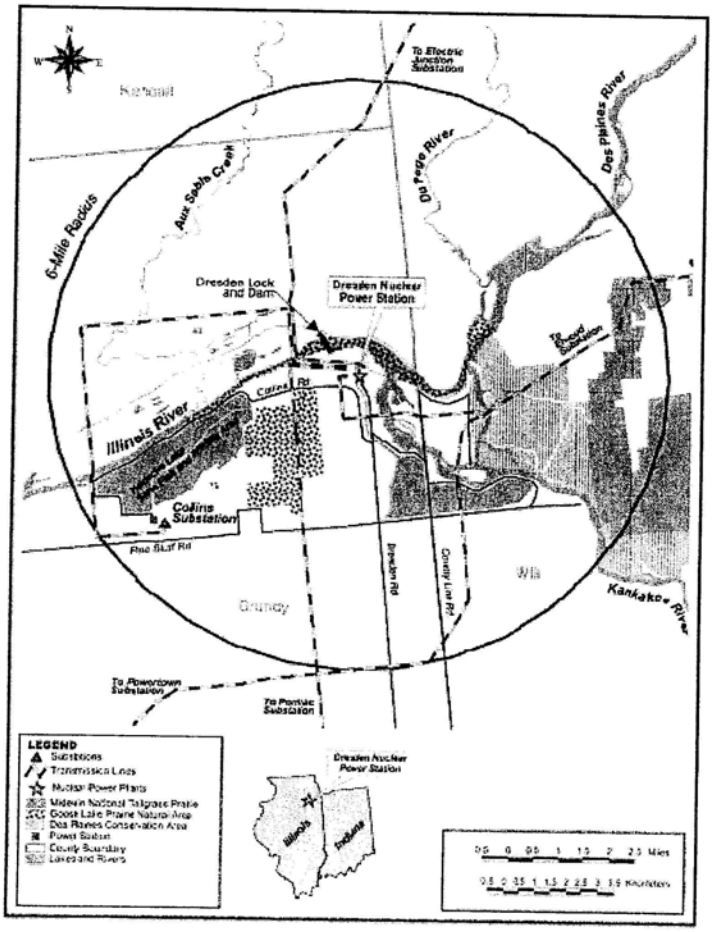


Figure 4. Transmission Line Detail for the Dresden Site.

Table 2. Dresden Transmission Line Corridor Data

Substation	Number of Lines	kV	Approximate Corridor Length		Corridor (Right-of-way) Width		Estimated Corridor Area	
			km	(mi)	m	(ft)	ha	(ac)
Electric Junction (Lines 1221 and 1223)	2	345	50	31.1	40 to 116	130 to 380	~420	~1050
Goodings Grove (Lines 1220 and 1222)	2	345	48 (20 to Elwood)	29.8 (12.4 to Elwood)	76	250	370	900
Pontiac-Midpoint (Line 8014)	1	345	70	43.3	44	145	310	760
Powerton (Line 302)	1	345	168	104.5	64 to 76 (mostly 76)	210 to 250 (mostly 250)	~1250	~3100
Collins Station (Line 2311)	1	345	19	11.8	46	150	90	220
Total	7		355	220.5			~2440	~6030

2. Decurrent False Aster *(Boltonia decurrens)*

The decurrent false aster (Federally listed as threatened) was originally widespread in alluvial prairie and marshland of the Illinois River flood plain (Keevin et al. 1990; Herkert 1991). It is most common in lowland areas where it appears to require disturbance for survival (Keevin et al. 1990), but most suitable habitats have been destroyed or affected by siltation or altered flooding regimes (Herkert 1991). Fifteen populations in eleven counties (including LaSalle, Tazewell, and Woodford counties) remain along the Illinois River (Herkert 1991), but the species is considered to potentially occur in any county bordering the Illinois River (Nelson 2003). No critical habitat has been designated for this species (Nelson 2003).

No populations of decurrent false aster are known to occur in the project area. Of the counties where the species is known to occur, only LaSalle, Tazewell, and Woodford Counties contain transmission line ROWs associated with Dresden; however, none of these is near the Illinois River flood plain where the species is found. The Dresden site itself (Grundy County) is located on the Illinois River flood plain, but existing levees, channelization, and dams prevent the flooding disturbance that is thought to be needed for the species. No populations of decurrent false aster are known from Grundy County (Herkert 1991).

On the basis of this information, the NRC concludes that continued operation of Dresden over the 20-year license renewal period will have no effect on the decurrent false aster.

3. Leafy Prairie-Clover *(Dalea foliosa)*

The leafy prairie-clover (Federally listed as endangered) is found in two disjunct regions: the cedar glades of central Tennessee and northern Alabama, and in Illinois where it is now restricted to dolomite prairie on river terraces in seven counties in the northeastern portion of the State (DeMauro and Bowles 1996). Leafy prairie-clover is found only in open limestone cedar glades, limestone barrens, and dolomite prairies that have shallow soils over limestone or dolomite with frequent expanses of exposed bedrock (DeMauro and Bowles 1996). Historically, the species was widespread in Illinois but found only in mesic dolomite prairie habitat (Herkert 1991). It was thought to be extinct in Illinois until rediscovered in 1974 (Herkert 1991). These is no critical habitat designated for this species (Nelson 2003).

In the area potentially affected by the proposed action, the leafy prairie-clover is known to occur in Will County and potentially in LaSalle County (Nelson 2003). Known populations in Will County are found in dolomite prairie habitats in three county preserves along the western side of the Des Plaines River north of Joilet (DeMauro and Bowles 1996). These locations are at least 8 km (5 mi) from the nearest project-related transmission line ROW. The only project-related facility that occurs in LaSalle County is a portion of the Pontiac-Midpoint transmission line ROW that traverses the southeastern corner of the county. This portion of the transmission line ROW crosses agricultural land (row crops) exclusively.

On the basis of this information, the NRC concludes that continued operation of Dresden over the 20-year renewal period will have no effect on the leafy prairie-clover.

4. Lakeside Daisy *(Hymenoxys herbacea)*

The lakeside daisy is Federally listed as threatened. The species occurred historically in dry prairies, on outcrops of dolomite or limestone bedrock, and on sand and gravel terraces of major river valleys (DeMauro 1990; Nelson 2003). Lakeside daisy was known from a few dolomite prairies in Will County (along the Des Plaines River at Rockdale, Illinois) and a gravel bluff along the Illinois River in Tazewell County (Herkert 1991). The last known extant population in Illinois was destroyed in 1981, but the species has been reintroduced into Will and Tazewell Counties. Restored populations are threatened with vegetation encroachment,

off-road-vehicle disturbance, and high herbivory rates (DeMauro 1990). Only one natural population remains, and it is located in an abandoned quarry in northern Ohio (DeMauro 1990). There is no critical habitat listed for this species in Illinois (Nelson 2003).

In the area potentially affected by the proposed action, the lakeside daisy is known to occur in Will and Tazewell Counties (Herkert 1991; Nelson 2003). Populations in Will County have been restored in dolomite prairie habitats in two county preserves along the western side of the Des Plaines River north of Joilet (DeMauro 1990). The species has also been reintroduced to the Illinois River bluff site (a county nature preserve) in Tazewell County where it was found historically (DeMauro 1990). These locations are at least 5 mi (8 km) from the nearest project-related transmission line.

On the basis of this information, the NRC concludes that continued operation of Dresden over the 20-year renewal period will have no effect on the lakeside daisy.

5. Prairie Bush Clover *(Lespedeza leptostachya)*

The prairie bush clover (Federally listed as threatened) is known to occur in Lee County, Illinois, but could potentially occur anywhere in suitable prairie remnants within the State (Nelson 2003). The species occurs on dry gravel and sand prairies and is rare throughout its range (Herkert 1991; Nelson 2003). Critical habitat has not been designated for this species.

Although no populations of prairie bush clover are known to occur the project area, it is possible that undeveloped portions of the Dresden site and associated transmission line ROWs could support this species, especially in those segments of the line that pass through natural areas, such as the Goose Lake Prairie State Natural Area, the Des Plaines Conservation Area, and the Midewin National Tallgrass Prairie. Undeveloped portions of the Dresden site that have the potential to support the prairie bush clover would not be affected by continued operations because no refurbishment activities that could result in habitat disturbance are planned (Exelon 2003). Current Exelon ROW-management practices (Cunningham 2003) reduce the probability of impacts to these habitats and the species that are dependent on them. All activities in Goose Lake Prairie State Natural Area, Des Plaines Conservation Area, and Midewin National Tallgrass Prairie are planned in consultation with staff at these sites and must be approved prior to implementation. In general, ROWs through prairie habitat require little, if any, maintenance because of the absence of trees.

On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the prairie bush clover in the project area and the lack of habitat-disturbing activities in undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year renewal period is not likely to adversely affect the prairie bush clover. See the discussion above on Mead's milkweed regarding the potential for project impacts in these areas.

6. Eastern Prairie Fringed Orchid *(Platanthera leucophaea)*

The eastern prairie fringed orchid (Federally listed as threatened) prefers mesic to wet prairie habitat and potentially occurs throughout Illinois (Nelson 2003). It occurs in tallgrass silt-loam or sand prairies, sedge meadows, fens, and occasionally sphagnum bogs (Bowles 1999). It appears to be adapted to disturbance and occasionally colonizes early succession habitats or recolonizes previously occupied areas (Bowles 1999). The eastern prairie fringed orchid formerly occurred from eastern Iowa, Missouri, and Oklahoma eastward across southern Wisconsin, northern and central Illinois, southern Michigan, northern Indiana and Ohio, and northwestern Pennsylvania to western New York and adjacent southern Ontario. Disjunct populations also occurred in New Jersey, Virginia, and Maine (Bowles 1999). In Illinois, the species has been eliminated from all but portions of the northeast by agriculture, drainage, and urban development (Herkert 1991; Bowles 1999). The eastern prairie fringed orchid is now known from only 22 populations in Illinois located in protected areas that include nature preserves, county forest preserves, and a State park (Herkert 1991).

Although no populations of eastern prairie fringed orchid are known from the project area, it is possible that undeveloped portions of the Dresden site and associated transmission line ROWs could support this species. On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the eastern prairie fringed orchid in the project area and the lack of habitat-disturbing activities in undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year renewal period is not likely to adversely affect the eastern prairie fringed orchid, especially in those segments of the line that pass through natural areas, such as the Goose Lake Prairie State Natural Area, the Des Plaines Conservation Area, and the Midewin National Tallgrass Prairie. Undeveloped portions of the Dresden site that have the potential to support the eastern prairie fringed orchid would not be affected by continued operations because no refurbishment activities that could result in habitat disturbance are planned (Exelon 2003). Current Exelon ROW-management practices (Cunningham 2003) reduce the probability of impacts to these habitats and the species that are dependent on them. All activities in Goose Lake Prairie State Natural Area, Des Plaines Conservation Area, and Midewin National Tallgrass Prairie are planned in consultation with staff at these sites and must be approved prior to implementation. In general, ROWs through prairie habitat require little, if any, maintenance because of the absence of trees.

On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the eastern prairie fringed orchid in the project area and the lack of habitat-disturbing activities in undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year renewal period is not likely to adversely affect the eastern prairie fringed orchid.

7. Hine's Emerald Dragonfly *(Somatochlora hineana)*

The endangered Hine's emerald dragonfly is the only Federally listed aquatic species that occurs in any of the counties that contain the Dresden site or associated transmission line

ROWs. This species occurs in nine sites in Will, Cook, and DuPage Counties (FWS 2001). Aquatic nymphs of this species are restricted to marsh, seep, and sedge-meadow habitats with slow-flowing water and thin soils over dolomite bedrock (FWS 2001). Adults are also found near these habitats. Populations of Hine's emerald dragonfly have been found in the lower Des Plaines River valley in northern Will County, but none has been found on or in the vicinity of the Dresden site (FWS 2001). Critical habitat has not been designated for this species.

The life history of the Hine's emerald dragonfly is similar to that of other dragonfly species and consists of two distinct phases: aquatic nymph and terrestrial aerial adult (FWS 2001). Both life stages are predaceous. Nymphs inhabit small streamlets for two to four years. After this period, nymphs begin to emerge as adults (late May in Illinois), and emergence continues for a population through the summer. Adults live for two to six weeks (FWS 2001).

In the area potentially affected by the proposed action, the Hine's emerald dragonfly is known from Will County. The species is known from six sites in Will County (four in nature preserves and two on privately owned land). These sites are along the Des Plaines River north of Joilet and are at least 8 km (5 mi) from the Dresden site and associated transmission line ROWs.

On the basis of this information, the NRC concludes that continued operation of Dresden over the 20-year renewal period will have no effect on the Hine's emerald dragonfly.

8. Eastern Massasauga *(Sistrurus catenatus)*

The eastern massasauga is a small rattlesnake that is declining throughout its range and is currently a candidate for Federal listing as threatened or endangered (Nelson 2003). The massasauga is usually found in or near wet areas including wetlands, wet prairie, and nearby woodland or shrub habitat (Nelson 2003). The species also uses dry old fields with goldenrod (*Solidago* spp.) and woody species, such as dogwood (*Cornus* spp.) or multiflora rose (*Rosa mulitflora*). Dry upland areas up to 2.4 km (1.5 mi) away from wet habitat are utilized during the summer (Nelson 2003).

The massasauga once occurred in the northern four-fifths of Illinois, but intensive farming and destruction of wetlands has decreased its habitat. In recent years, it has been found in Washington County in southern Illinois, Piatt County in east central Illinois, Knox County in western Illinois, and DuPage, Cook, and Will counties in northeast Illinois (Illinois State Museum 2003). In the area potentially affected by the project, the massasauga is known to occur only in Will County.

Although the eastern massasauga is not known to occur in the project area, it is possible that undeveloped portions of the Dresden site and associated transmission line ROWs could support this species, especially in those segments of the line that pass through natural areas, such as the Goose Lake Prairie State Natural Area, the Des Plaines Conservation Area, and the Midewin National Tallgrass Prairie. Undeveloped portions of the Dresden site that have the potential to support the eastern massasauga would not be affected by continued operations

because no refurbishment activities that could result in habitat disturbance are planned (Exelon 2003). Current Exelon ROW-management practices (Cunningham 2003) reduce the probability of impacts to these habitats and the species that are dependent on them. All activities in Goose Lake Prairie State Natural Area, Des Plaines Conservation Area, and Midewin National Tallgrass Prairie are planned in consultation with staff at these sites and must be approved prior to implementation. In general, ROWs through prairie habitat require little, if any, maintenance because of the absence of trees.

On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the eastern massasauga in the project area and the lack of habitat-disturbing activities in undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year license renewal period is not likely to adversely affect the eastern massasauga.

9. Bald Eagle *(Haliaeetus leucocephalus)*

The bald eagle is currently listed as threatened, but this species has been proposed for delisting. The species is listed as wintering and possibly breeding in Tazewell, Woodford, LaSalle, Grundy, and Will Counties, Illinois (Nelson 2003). Bald eagles nest in large trees near rivers and lakes. During the winter, eagles congregate near open water created by dam tailwaters, power plant effluent, and municipal and industrial discharge, or in power plant cooling ponds (Nelson 2003). The importance of these areas increases in colder winters when open water is not available elsewhere. Large trees near open water are favored for perching and night roosting. Critical habitat has not been designated for the bald eagle (Nelson 2003).

Exelon has not reported bald eagles on the Dresden site, but it is reasonable to assume that the species is an occasional winter visitor to open water bodies on and adjacent to the site. Bald eagles are not known to nest in the project area, and there are no known roosting concentrations in the area. In the winter, eagles may be attracted to open water areas in the vicinity of the Dresden site when other large water bodies are frozen. Water without ice cover provides foraging areas for the bald eagle, and the normal plant operations that maintain these open areas can be considered a benefit to eagles. Exelon does not anticipate refurbishment activities during the license renewal period that could result in any habitat disturbance or removal of potential roost trees. The NRC staff, therefore, concludes that continued operation of Dresden over the 20-year license renewal period is not likely to adversely affect the bald eagle.

10. Indiana Bat *(Myotis sodalis)*

The Indiana bat is known to occur in LaSalle County, Illinois, and could potentially occur statewide (Nelson 2003). The Blackball Mine, located in LaSalle County about 64 km (40 mi) west of the Dresden site and associated transmission line ROWs, is listed as critical habitat for the Indiana bat (FWS 1999; Nelson 2003). Indiana bats congregate for hibernation in only a

few caves or mines within their range, and impacts at these hibernacula have been a major cause of this species' decline (FWS 1999).

During the summer, Indiana bats use a variety of habitats for roosting and foraging but frequent the corridors of small streams with well developed riparian woods (FWS 1999; Nelson 2003). The species forages for insects in the stream corridor; within the canopy of flood plain and upland forests; over old-fields, ponds, and pastures; and along the borders of agricultural fields and wooded fence rows (Nelson 2003). Indiana bats roost and rear young in trees. Preferred roost trees have exfoliating bark with space for bats to roost between the bark and the bole of the tree; to a limited extent, tree cavities and crevices also are used for roosting (FWS 1999). Maternity colonies use multiple roosts. Each colony has at least one (but there may be more than one) "primary" roost that is used by a majority of the bats most of the summer. Indiana bats tend to return to the same roosting area year after year (Nelson 2003).

Although the Indiana bat is not known to occur in the project area, it is possible that undeveloped portions of the Dresden site and associated transmission line ROWs could support the habitat of this species. It is unlikely that ROW maintenance would result in the removal of an Indiana bat roost tree because these ROWs have been maintained for several decades, and large trees suitable as roosts would not have become established within the ROWs. The ROWs could be used by Indiana bats for foraging, but no adverse impacts to foraging bats would be anticipated. Indiana bats could potentially use undeveloped portions of the Dresden site for foraging and roosting. Continued operations would not impact this species, however, because no refurbishment activities that could result in habitat disturbance are planned (Exelon 2003).

On the basis of the minimal anticipated impacts of ROW maintenance on potentially suitable habitat for the Indiana bat in the project area and the lack of habitat-disturbing activities in undeveloped portions of the Dresden site, the NRC staff concludes that continued operation of Dresden over the 20-year license renewal period is not likely to adversely affect the Indiana bat.

Conclusion

The NRC staff has reviewed the information on endangered and threatened species that could be affected by continued operation and maintenance of Dresden and its associated transmission lines and transmission line ROWs. No refurbishment or replacement of important structures, systems or components is currently planned by the applicant. Therefore, disturbance of protected species or their habitats on the Dresden site is not anticipated. Current transmission line ROW maintenance practices favor native species and reduce the likelihood of adverse impacts to sensitive habitats (e.g., wetlands, streams) and any species that may be present within the ROWs. Based on its evaluation, the NRC staff concludes for four of Federally listed species, the decurrent false aster *(Boltonia decurrens)*, the leafy prairie-clover *(Dalea foliosa)*, the lakeside daisy *(Hymenoxys herbacea)*, and the Hine's emerald dragonfly *(Somatochlora hineana)*, the renewal of the Dresden licenses will have "no effect." Also, for the Mead's milkweed *(Asclepias meadii)*, the prairie bush clover *(Lespedeza*

leptostachya), the eastern prairie fringed orchid *(Platanthera leucophaea)*, the eastern massasauga *(Sistrurus catenatus)*, the Indiana bat *(Myotis sodalis)*, and the bald eagle *(Haliaeetus leucocephalus)*, the NRC staff has determined that license renewal for Dresden may affect, but is not likely to adversely affect these six Federally listed species.

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United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Policy and Compliance
Custom House, Room 244
200 Chestnut Street
Philadelphia, Pennsylvania 19106-2904

IN REPLY REFER TO:

12/10/03
68FR68955
(3)

February 20, 2004

RECEIVED
2004 FEB 27 AM 9:41
Rules and Directives
Branch
USNRC

ER 03/990

Michael T. Lesar
Chief, Rules and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

Dear Mr. Lesar:

The U.S. Department of the Interior (Department) has reviewed the Generic Environmental Impact Statement (EIS) for License Renewal of Nuclear Plants, NUREG-1437, Draft Supplement 17 (dated December 2003), regarding Exelon Generation Company, LLC, Dresden Nuclear Power Station, Units 2 and 3, Grundy County, Illinois, and offers the following comments.

GENERAL COMMNETS

The subject license renewal does not involve any major construction, refurbishment, or physical alteration of the project area. The Generic EIS and Draft Supplement 17 adequately address the concerns of the Department regarding fish and wildlife resources. We concur with the preliminary conclusions of the U. S. Nuclear Regulatory Commission (NRC) staff with respect to the impacts of continued operations on these resources. The NRC staff has provided a Biological Assessment to the U. S. Fish and Wildlife Service (FWS), which concluded with a determination that the proposed action is not likely to adversely affect any federally listed threatened or endangered species. The FWS agrees with that determination and will be providing an official concurrence to the NRC under separate cover.

SPECIFIC COMMENTS

Page 2-42, line 31: The floodplain of the Illinois River and its contributing streams, the Des Plaines and the Kankakee, constitute a portion of the landscape that is capable of cultivation without the plow and that is occupied by riparian vegetation and fish and wetland wildlife populations. All predictive models of site location list the floodplain as a prime zone for archeological site location. While the landform and the location within the floodplain have a high potential to yield important archaeological resources, without survey data, it is difficult to

E-RIDS = ADM-03
Add = D. Wheeler (DXW)

Template = ADM-013

predict the site significance and, thus, potential impacts. Likewise, past/current land disturbances may have jeopardized artifacts to an unknown degree; thus, activity in the flood plain may constitute an ongoing impact that has yet to be evaluated.

Page 2-43 line 16: Please add "Kaskaskia Illinois" Tribe.

Page 2-44 line 10: Please change to "Briscoe mounds and associated habitation site."

Page 2-44 line 12: Please correct. One of the mounds was erected around 1350, the other has never been excavated.

Please continue to include the Illinois and Michigan Canal National Heritage Corridor (NHC) in all related project correspondences. The NHC address is: Executive Director, I &M Canal NHC, 15701 South Independence Boulevard, Lockport, Illinois, 60441. If you have any questions regarding the NHC, please contact Ms. Phyllis Ellin, Executive Director, I&M Canal NHC, at 815-740-2047.

We appreciate the opportunity to provide these comments.

Sincerely,

Michael T. Chezik

Michael T. Chezik
Regional Environmental Officer

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

FEB 2 4 2004

REPLY TO THE ATTENTION OF:
USNRC

12/10/03
68FR68955

B-19J

(5)

Chief, Rules Review and Directives Branch
U.S. Nuclear Regulatory Commission
Mail Stop T6-D59
Washington, D.C. 20555-0001

Re: Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 17: Dresden Nuclear Power Station, Units 2 and 3, Draft Report, NUREG-1437, EIS No. 030549

Dear Sir or Madam:

In accordance with Section 309 of the Clean Air Act and the National Environmental Policy Act (NEPA), the U.S. Environmental Protection Agency (EPA) has reviewed the Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 17: Dresden Nuclear Power Station, Units 2 and 3 (Dresden Units 2 and 3), which is a draft report. The Nuclear Regulatory Commission (NRC) developed the Generic Environmental Impact Statement (GEIS) to streamline the license renewal process on the premise that environmental impacts of most nuclear power plant license renewals are similar, in most cases. NRC develops facility-specific supplemental environmental impact statements (SEIS) for individual plants as the facilities apply for license renewal. EPA provided comments on the GEIS during its development process–for the draft version in 1992, and for the final version in 1996.

The Dresden Nuclear Plant is located on the banks of the Illinois River (at the confluence of the Des Plaines and Kankakee Rivers) in Grundy County, Illinois. The plant has three units. Dresden Units 2 and 3 are operating nuclear reactors and the subject of the proposed Federal action. The other unit (Dresden Unit 1) was shut down in 1978 and decontaminated in 1984. Dresden Units 2 and 3 each produces an output of 2957 megawatts thermal, and each unit has a design rating for a net electrical power output of 912 megawatts. Each unit is refueled on a 24-month cycle; this is done by refueling an alternate unit each year. The cooling system can operate in one of two modes. In the indirect open-cycle mode, once-through cooling water from the Kankakee River is used to remove heat from the main (turbine) condensers. The heated effluent is circulated through a cooling canal and pond and discharged to the Illinois River. In the closed-cycle mode, heated effluent is circulated through mechanical draft cooling towers, then recycled through the condensers with limited make-up water drawn from the Kankakee River.

E-RFDS=ADM-03
Add=D. Wheeler (DXW)

Template=ADM-013

The proposed Federal action is renewal of the operating licenses for Dresden Units 2 and 3. The Exelon Generation Company, LLC has submitted a permit application to the NRC to extend the operating license for Dresden Units 2 and 3 for an additional 20 years. Currently, the operating licenses for Dresden Units 2 and 3 expire on December 22, 2009 and January 12, 2011, respectively.

Based on our review of the Dresden draft SEIS, we have given the project an EC-2 rating. The "EC" means that we have environmental concerns with the proposed action, and the "2" means that additional information needs to be provided in the final SEIS. Our concerns relate to:

1. Information provided on radiological impacts,
2. Cooling water system impacts on aquatic organisms,
3. Thermal impacts,
4. Adequacy and clarity of the information provided,
5. Risk estimates, and
6. On-site waste storage.

We have enclosed our comments and the U.S. EPA rating system summary.

If you have any questions or wish to discuss any aspect of the comments, please contact Newton Ellens of my staff at (312) 353-5562.

Sincerely,

Newton G. Ellens for K.W.

Kenneth A. Westlake, Chief
Environmental Planning and Evaluation Branch
Office of Strategic Environmental Analysis

Enclosures

2

U.S. EPA Comments on
Generic Environmental Impact Statement for License Renewal of Nuclear Plant, Supplement 17: Dresden Nuclear Power Station, Units 2 and 3, Draft Report, NUREG-1437

1. We are concerned about the level of information provided in the draft supplemental environmental impact statement (SEIS) on radiological impacts. According to the SEIS, Exelon Generation Company, LLC (Exelon), the applicant for the operating licenses, has conducted a radiological environmental monitoring program (REMP) around the Dresden Nuclear Power Plant since 1974. Through this program, Exelon has monitored and documented radiological impacts to workers, the public, and the environment. The draft SEIS states:

   > The REMP includes monitoring of the waterborne environment (ground/well, drinking water, surface water, sediments and dredging spoils), ingestions pathways (milk, fish and vegetation), direct radiation (gamma dose at thermoluminescent dosimeter [TLD] locations), and atmospheric environment (airborne radioiodine, particulates, gross beta, and gamma)...

   The SEIS cites two annual reports which summarizes information from the REMP, but it does not contain this summary information itself. Summary information about radiation from the Dresden plant and associated exposure pathways in the environment is relevant in determining radiological impacts from the continued operation of Dresden Units 2 and 3. We are unable to make such a determination from the SEIS as it is written. Therefore, we suggest that the final SEIS include current annual summary information about radiological impacts from the REMP.

2. We are concerned about the amount of organisms pinned against or drawn into Dresden's cooling water systems. Under a final rule signed by U.S. EPA on February 16, 2004, certain power plants with cooling water systems are required to (1) reduce the number of organisms pinned against water intake screens by 80 to 95 percent, and (2) reduce the number of organisms which are sucked into the cooling water system by 60 to 90 percent. Since the draft SEIS was written before the final rule was signed, the draft SEIS couldn't address how the Dresden plant will comply with this new regulation. However, the final SEIS should indicate the applicability of the final rule to the Dresden plant, and the modifications planned by the applicant to comply with the rule.

3. We are concerned about effluents from the Dresden plant which exceeded National Pollutant Discharge Elimination System (NPDES) permit limits on temperature. According to the draft SEIS, Exelon received one provisional variance from permit limits in 2001 and two provisional variances in 1999. The draft SEIS states that the two 1999 provisional variances were the result of an extended heat wave and drought. Exelon conducted biological studies to determine the impact of the provisional variances on fish and other aquatic life. The draft

SEIS states that there were no adverse impacts on these organisms; the only effect was a change in fish distribution during the higher temperature periods. Based on this information, the draft SEIS characterizes the thermal impacts caused by the provisional variances as SMALL. However, we think that the draft SEIS does not adequately discuss the potential for future exceedances of NPDES temperature limits, and the impacts of these exceedances. Also, the draft SEIS does not evaluate the possible cumulative impact of future temperature exceedances combined with future droughts and/or heat waves. The final SEIS should discuss these issues.

4. Section 2.2.4, *Air Quality*, page 2-24, second paragraph .The last sentence has a temperature listed as "B11°C" instead of -11°C. This needs to be corrected to reduce the possibility of confusion.

5. Section 2.2.7, *Radiological Impacts*, page 2-31, last paragraph. The references to the environmental standards need to be complete citations, including title of the rule or regulation, along with the basic standard for comparison. This will reduce the time needed to look up these citations and verify values that are cited in the text.

6. Section 3.0 *Environmental Impacts of Refurbishment*, page3-2, Table 3-1. Under the section on Human Health, specific information supporting any assertions that this area "needs no further evaluation" needs to be presented or more completely cited and described.

7. Section 4.3, *Radiological Impacts of Normal Operations*, page 4-25, paragraph 5. The specific values for exposure need to be provided in addition to the complete citation of the location of this information. This will help to provide the information more clearly than a citation only, that then must be referred to allow verification of the standard being cited.

8. Section 4.8.3, *Cumulative Radiological Impacts*, page 4-48, Paragraph 1. Information or procedures used to generate values to support the assertions in this section need to be provided in a clearer manner to reduce the possibility of misunderstandings and to make explicit the reasoning on procedures to reach these conclusions.

9. *Section 5.2.2, Estimate of Risk*: Page 5-5 states "The baseline core damage frequency (CDF) for Dresden is approximately 1.9 x 10^{-4} per year, based on internally-initiated events. Exelon did not include the contribution to CDF from external events in these estimates even though the risk from external events is significantly higher for Dresden than risk from internal events."

   We recommend evaluating and presenting risk estimates from both internal and external events. In addition, given the draft SEIS statements referenced above, effects of external events should be included in the risk decision considerations, as necessary, to get an accurate portrayal of the risk of the licensing renewal. If the final SEIS does not incorporate external

events into risk calculations or risk decisions, it should provide a rationale for using internally-initiated events only.

10. Section 6.1, *The Uranium Fuel Cycle*, page 6-2. Under the bullet point for Off-site radiological impacts (individual effects from other than disposal of spent fuel and high level waste), no consideration appears to be given to the potential long-term storage of the spent fuel and high-level waste materials on-site until such time as a permanent facility is finally licensed and begins to accept these materials for disposal. A reference to other sections or documents where this evaluation may have been included should be provided here; otherwise, the issue needs to be considered and evaluated.

11. Section 6.1, *The Uranium Fuel Cycle*, page 6-8 Under the bullet point for On-Site Spent Fuel. A more thorough evaluation for the volume of spent fuel expected to be generated during the additional licensed time needs to be provided along with more specific information as to site-specific circumstances that may impair or improve the risk values for potential exposures to this spent fuel.

12. Section 7.1, *Decommissioning*, page 7-2, Under bullet point Radiation Doses. As the GEIS is based on a forty-year licensing period, an extension of another twenty years would have an impact that needs to be quantified and reported. This information should be included specifically in the final SEIS as part of the risk that would be associated with the license extension.

13. Section 8.1, *No-Action Alternative*, page 8-4, under the bullet point Human Health. The actual value representing the cited percent value should be specifically provided in addition to the citation. This will help to reduce unnecessary additional research, except for value verifications, and potential misunderstandings or confusion as to the actual value(s) being specified.

14. Section 8.2.1.1, *Closed-Cycle Cooling System*, page 8-21, under the bullet Uranium and thorium. A better comparison or quantification of the relative concentrations of the uranium and thorium to the background levels need to be provided. As is, this presentation can lead to misunderstanding and confusion.

15. Section 8.2.1.1, *Closed-Cycle Cooling System*, page 8-22, Under bullet point Human Health. Any dose estimate that would have the potential to fall in the range of 10^{-6} to 10^{-4} or greater needs to be specifically evaluated for potential regulatory requirements or risk impacts to the public health. This should be estimated conservatively using the data that is currently available or that can be logically extrapolated from currently available information.

16. Section 8.2.3.1, *Closed -Cycle Cooling System*, page 8-48, Under bullet point Waste. Waste impacts need to be specified rather than merely referenced to provide a clearer

understanding of the risk determination made in this section of the document.

17. Section 8.2.3.1, *Closed -Cycle Cooling System*, page 8-48, Under bullet point Human Health. Human-health impacts need to be specified rather than merely referenced to provide a clearer understanding of the risk determination in this section of the document.

18. Appendix D, *Organizations Contacted*, page D-1,D-2. The United States Environmental Protection Agency was not contacted as one on the cognizant environmental agencies. Please provide the rationale for this procedure.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment

Illinois Historic
Preservation Agency

Voice (217) 782-4836
1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • Teletypewriter Only (217) 524-7128

Grundy County PLEASE REFER TO: IHPA LOG #022012704
Morris
Dresden Nuclear Power Station,

NRC,
Dresden Nuclear Power Station License Renewal, Units 2 and 3

February 24, 2004

Pao-Tsin Kuo
United States Nuclear Regulatory Commission
License Renewal and Environmental Impacts
Division of Regulatory Improvement Programs
Washington, DC 20555-0001

Dear Mr. Kuo:

Thank you for requesting comments from our office concerning the possible effects of the referenced project on cultural resources. Our comments are required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties".

We agree with the NRC staff's determination that the impact of license renewal on historical and archaeological resources is small and that additional mitigation is not warranted.

We also are in agreement with the statement that "Intact archaeological sites could be present within these undeveloped areas" within the facility in the *Genaric Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 17, Regarding Dresden Nuclear Power Station, Units 2 and 3* (2-44). Archaeological surveys to locate unrecorded sites should be undertaken if future construction projects are located in previously undisturbed areas within the facility.

If you have any questions, please contact David J. Halpin, Staff Archaeologist, at 217-785-4998.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer
AEH

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Rock Island Field Office
4469 48th Avenue Court
Rock Island, Illinois 61201
Phone: (309) 793-5800 Fax: (309) 793-5804

IN REPLY REFER TO:
FWS/RIFO

March 11, 2004

United States Nuclear Regulatory Commission
Attn: Pao-Tsin Kuo, Program Director
License Renewal and Environmental Impacts
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation
Washington, D.C. 20555-0001

Dear Pao-Tsin Kuo:

This is in response to the Biological Assessment (BA) for the proposed Dresden Nuclear Power Station license renewal which was received in our office on February 13, 2004. The BA references ten species which are listed as either federally threatened or endangered under the Endangered Species Act of 1973.

The following federally listed species are covered under the referenced BA: **Endangered** leafy prairie clover (*Dalea foliosa*), Hine's emerald dragonfly (*Somatochlora hineana*), Indiana bat (*Myotis sodalis*), **Threatened** Mead's milkweed (*Asclepias meadii*), decurrent false aster (*Boltonia decurrens*), lakeside daisy (*Hymenoxys herbacea*), prairie bush clover (*Lespedeza leptostachya*), eastern prairie fringed orchid (*Platanthera leucophaea*), bald eagle (*Haliaeetus leucocephalus*), **Candidate** eastern massasauga rattlesnake (*Sistrurus catenatus*).

As outlined in the BA, the Nuclear Regulatory Commission (NRC) has made a determination of 'no effect' for decurrent false aster, leafy prairie-clover, lakeside daisy, and Hine's emerald dragonfly. NRC has also made a determination of 'not likely to adversely affect' for Mead's milkweed, prairie bush clover, eastern prairie fringed orchid, eastern massasauga rattlesnake, Indiana bat, and the bald eagle.

Based on existing information and that which was provided in the BA, we concur with your findings that the proposed project will have no effect and not likely to adversely effect the respective federally listed endangered species. Should the project be modified or new information indicate endangered species may be affected, consultation should be initiated.

This letter provides comments under the authority of and in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.); and the Endangered Species Act of 1973, as amended. If you have any questions about our comments or recommendations please contact Kraig McPeek of my staff at 309-793-5800, ext. 210.

Sincerely,

Richard C. Nelson
Supervisor

G:\Office Users\Kraig\FERC\DresdenBO.doc