

May 26, 2004

LICENSEE: Exelon Generation Company, LLC (EGC or Exelon)

FACILITY: EGC Early Site Permit (ESP) Site (Clinton, Illinois)

SUBJECT: SUMMARY OF SITE AUDIT TO SUPPORT REVIEW OF THE EGC ESP SITE  
IN CLINTON, ILLINOIS

An environmental review team consisting of the U.S. Nuclear Regulatory Commission (NRC) staff and contractors from Pacific Northwest National Laboratory (PNNL) participated in a site audit at the EGC ESP site in Clinton, Illinois on March 2 - 3, 2004, to support the review of the EGC ESP site application. The primary goal of the site audit was to review documentation to help the staff assess the potential environmental consequences of constructing and operating a new nuclear facility at the site, gather information to ensure that environmental requirements as codified in Title 10 *Code of Federal Regulations* Part 51 (10 CFR Part 51) are met for this application, and to interface with officials in State and local government permitting and resource agencies to obtain related information. Attachment 1 is the list of NRC, PNNL, and Exelon representatives who participated in the audit.

Exelon provided a brief overview of the layout of the plant and answered general staff questions concerning the site and environs, which was then followed by a guided tour of the site, focusing on areas relevant to the environmental review. These areas included the footprint area, including the cooling tower area, switchyard, existing intake and discharge structures, and Clinton Lake dam. During the rest of the site audit, review team members broke off into smaller groups with Exelon representatives with corresponding environmental disciplines. These groups participated in various activities, including tours of the meteorological tower, cultural and historical sites, and transmission line corridors.

In addition, during the site audit, review team members met with staff representing state and local government agencies and various local service agencies, including the Illinois Emergency Management Agency, Illinois Department of Natural Resources, Illinois Historic Preservation Agency, and local County and City officials. The staff also met with representatives of the Illinois Power Company to discuss matters concerning possible transmission rights-of-way matters.

During the audit, the staff identified the need for clarification of certain matters addressed in the EGC ESP environmental report, as listed in Attachment 2. In addition, Attachment 3 contains a table of documents and information provided to the staff by Exelon to assist the staff during its review of the EGC ESP Environmental Report. The information listed in Table 3 can be viewed through the Agencywide Documents Access and Management System (ADAMS) using accession number ML041200352. 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. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR Reference staff at 1-800-397-4209, or 301-415-4737, or by e-mail at [pdr@nrc.gov](mailto:pdr@nrc.gov).

At the conclusion of the site visit, the NRC and PNNL staff participated in a summary exit meeting with Exelon representatives. The staff indicated that Exelon provided an informative and well-represented site visit for the environmental review team. The NRC staff indicated that it did not identify other issues, beyond those listed in Attachment 2, during its site visit or the visits offsite with Federal, State, and local agencies. However, it further indicated that the review was ongoing, and that any additional information necessary to support the review would be formally requested as a request for additional information.

**/RA/**

Thomas J. Kenyon, Senior Project Manager  
License Renewal and Environmental Impacts  
Division of Regulatory Improvement Programs  
Office of Nuclear Reactor Regulation

Docket No. 52-007

Attachments: As stated

cc: See next page

At the conclusion of the site visit, the NRC and PNNL staff participated in a summary exit meeting with Exelon representatives. The staff indicated that Exelon provided an informative and well-represented site visit for the environmental review team. The NRC staff indicated that it did not identify other issues, beyond those listed in Attachment 2, during its site visit or the visits offsite with Federal, State, and local agencies. However, it further indicated that the review was ongoing, and that any additional information necessary to support the review would be formally requested as a request for additional information.

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cc: See next page

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1. Letter to Sen. Jelinek: **ML041560239**

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DATE	5/19/04	5/18/04	5/26/04	5/26/04

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**ATTENDEES  
ENVIRONMENTAL SITE AUDIT FOR  
EGC ESP SITE  
MARCH 2-3, 2004**

**Attendees**

**Affiliation**

Tom Mundy	Exelon
Amy Lientz	Exelon
Tamar Cerafici	CH2MHill
Jewelle Keiser	Exelon
Joe Stuber	Exelon
Takako Maki	Exelon
John Petro	Exelon
Jessica Wollmuth	Exelon
Bernie Holcomb	Exelon
Wayne Schofield	Exelon
Mike Cambria	Exelon
George Howroyd	Exelon
Eddie Grant	Exelon
Bill Maher	Exelon
Thomas Kenyon	U.S. Nuclear Regulatory Commission (NRC)
Jenny Davis	NRC
Jim Wilson	NRC
Nanette Gilles	NRC
Brad Harvey	NRC
Jay Lee	NRC
Duke Wheeler	NRC
Jack Cushing	NRC
Bill Dam	NRC
Eva Hickey	Pacific Northwest National Laboratories (PNNL)
Kim Leigh	PNNL
Van Ramsdell	PNNL
Sue Sargeant	PNNL
Greg Stoetzel	PNNL
Jim Becker	PNNL
Darby Stapp	PNNL
Dave Anderson	PNNL
John Jaksch	PNNL
Lance Vail	PNNL
David Zemel	Illinois Emergency Management Agency
Mike Garthaus	Illinois Department of Natural Resources (IDNR)

**NEED FOR CLARIFICATIONS  
IDENTIFIED DURING ENVIRONMENTAL SITE AUDIT  
MARCH 2-3, 2004**

1. Exelon should clarify instrumentation used to measure sediment thickness and lake water levels (Table 6.7-1 of the ER).
2. Exelon should clarify second sentence of Section 6.1.1.2 of the ER regarding temperature monitoring of Clinton Lake.
3. Exelon should clarify the number of police stations in Clinton, Illinois.
4. Exelon should clarify Section 4.5.3.2 of the ER regarding type of perimeter readings.
5. Exelon should correct Section 4.5.4 of the ER from 0.045 mrem to 0.045 rem.
6. Exelon should clarify the whole body dose equivalent values given in Table 4.5.1 of the ER.
7. Exelon should clarify the second sentence in Section 3.8.2.6 of the ER regarding characteristics under normal conditions.
8. Exelon should clarify information regarding the southern transmission line corridor.
9. Exelon should clarify truck shipment totals over a 40-year period in Section 3.8.2.4 of the ER for PBMR and GT-MHR fuel.

**TABLE OF REFERENCES OBTAINED DURING THE EGC ESP SITE AUDIT  
MARCH 2-3, 2004**

The following table lists documents and information provided to the NRC staff by Exelon during the March 2-3, 2004 EGC ESP site audit to assist the staff during its review of the Environmental Report. All of the references can be viewed through the Agencywide Documents Access and Management System (ADAMS) using accession number ML041200352. 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. Persons who do not have access to ADAMS, or who encounter problems in accessing the documents located in ADAMS, should contact the NRC's PDR Reference staff at 1-800-397-4209, or 301-415-4737, or by e-mail at [pdr@nrc.gov](mailto:pdr@nrc.gov).

	<b>Reference</b>
1	NRC Environmental Review Audit Team Tour Agenda, March 2, 2004.
2	Working file regarding school population.
3	Illinois Department of Natural Resources (IDNR) site attendance numbers for Lake Clinton, August 8, 2002.
4	DeWitt County Comprehensive Plan, 1992
5	Lake Management Status Report, April 17, 2003, filed by Fisheries Manager Mark Garthaus.
6	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, Illinois Environmental Protection Agency (ILEPA), dated December 28, 1994, regarding "Clinton Power Station: 1994 Summer Lake Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."
7	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, ILEPA, dated December 11, 1995, regarding "Clinton Power Station 1995 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."
8	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, ILEPA, dated December 17, 1996, regarding "Clinton Power Station 1996 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."
9	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, ILEPA, dated December 31, 1997, regarding "Illinois Power Company - Clinton Power Station, NPDES Permit No. IL0036919, 1997 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."
10	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, ILEPA, dated December 31, 1998, regarding "Illinois Power Company - Clinton Power Station, NPDES Permit No. IL0036919, 1998 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."
11	Letter from Brett J. Marshall, Illinois Power Company, to Stephen F. Nightingale, ILEPA, dated January 28, 2000, regarding "AmerGen Energy Company, LLC (AmerGen), Clinton Power Station, NPDES Permit No. IL0036919, 1999 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam."

	<b>Reference</b>
12	Letter from Scott G. Massie, AmerGen, to Stephen F. Nightingale, ILEPA, dated January 30, 2001, regarding "AmerGen, Clinton Power Station, NPDES Permit No. IL0036919, 2000 Summer Temperature Monitoring Data in Salt Creek Below Clinton Lake Dam.
13	Letter from Thomas G. McSwiggin, ILEPA, to AmerGen, dated April 24, 2000, regarding issuance of NPDES permit for discharge.
14	Clinton Power Station Fish Impingement Report, April 1987 - May 1988, prepared by Illinois Power Company, 1988.
15	E-mail from Headquarters Operations Officer 1 to RidsNrrDripRlep, dated February 28, 2004 in reference to a fish kill at Clinton Power Station.
16	Petition to the Illinois Pollution Control Board, dated August 26, 1993, in the matter of Illinois Power Company's request for hearing pursuant to 35 Illinois Administrative Code 302.211(j) to determine specific thermal standards.
17	IDNR's listing of new hunting programs at Clinton Lake State Recreation Area.
18	Letter from John R. Petro, Exelon, dated April 18, 2001, to Roger Calloway, ILEPA transmitting report on December 2000 fish kill.
19	Analysis and input parameters of maximum exposures to biota residing in or near Clinton Lake.
20	Letter from Richard C. Nelson, U.S. Fish and Wildlife Service, dated March 16, 2004, to Jim Becker, Pacific Northwest National Laboratory, providing a list of Federally listed threatened or endangered species occurring in DeWitt, Ogle, Grundy, LaSalle, or Rock Island Counties in Illinois
21	CD-ROM containing Illinois Power Company, Clinton Power Station's, Environmental Monitoring Program Water Quality Reports 1978 - 1991.

Clinton Early Site Permit

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