October 6, 2004

LICENSEE: Exelon Generation Company, LLC (Exelon)

FACILITY: Clinton Nuclear Power Station, Unit 1

SUBJECT: TELECON SUMMARY TO CLARIFY RESPONSES TO NRC ENVIRONMENTAL REQUESTS FOR ADDITIONAL INFORMATION ON THE EXELON EARLY SITE PERMIT APPLICATION

On September 16, 2004, representatives from the Exelon Generation Company, LLC (Exelon); Pacific Northwest National Laboratories (PNNL); and the U.S. Nuclear Regulatory Commission (NRC) held a teleconference to obtain clarification of Exelon's July 23, 2004 response to the staff's requests for additional information (dated May 11, 2004) regarding the Exelon early site permit (ESP) application. A list of participants is attached (Attachment 1). The following is a summary of the discussion.

RAI No. E4.3-1, Section 4.3.1 (Impacts to Terrestrial Ecosystems from Construction)

Figures 2.1-4 and 2.2-1 of the Exelon ESP Environmental Report (ER) indicates that there is forested land located where the normal heat sink cooling towers and possibly the power block structures will be located. The staff requested clarification of the number of acres that constituted the forested area because of the need to estimate potential habitat loss due to construction.

Exelon replied that the footprint of the facility and adjoining areas are mainly comprised of areas disturbed by the construction of the Clinton Unit 1, and that there was only a small stand of trees in the area of concern, as shown in the cover picture of the ER.

RAI No. 7.2-3, Section 7.2 (Severe Accidents)

The staff identified inconsistencies between the values provided in the July 23, 2004 response to RAI No. 7.2-3 and input values to the MACCS2 code that were provided to the staff electronically, and asked which values were correct.

Exelon indicated that the input values to the MACCS2 code that were provided electronically were the correct values, and that some of the values provided in the July 23, 2004 RAI response were incorrect. Exelon agreed to correct their response to this RAI in an upcoming RAI submittal.

RAI No. E9.3-1, Section 9.3 (General Question)
RAI No. E9.3-2, Section 9.3 (General Question)
RAI No. E9.3-3, Section 9.3 (General Question)

In the July 23, 2004 RAI response, Exelon states that (in their alternative sites analysis) "transmission capacity at potentially environmentally preferable sites would have been compared 'to see if any is obviously superior.'" However, because no environmentally preferable sites were identified, the transmission analysis was never triggered. Therefore, no information is available to suggest whether existing transmission corridors might be affected, and to what degree.

In ER Section 9.3.1.1, Exelon states that it "considered additional issues such as environmental impacts, land use, *transmission congestion*, proximity to population centers, and *economic viability*." [emphasis added] The staff interpreted this statement to imply that transmission congestion *was* analyzed, and further, any analysis of economic viability must have included the economics of transmission. These types of analyses - even if informal - would have had to factor in potential transmission routing and capacity.

In ER Section 9.3.3.3.8, Exelon discusses the transmission constraints issue affecting the alternative sites. It used Table 9.3-2 to assign values to the alternative sites relating to each site's ability to transmit to demand centers. This table indicates that each alternative site is somewhat constrained by the "transmission bottleneck" affecting the Chicago metro area market. The staff requested clarification on how this determination was made, and whether the bottle neck implies that existing corridors in fact are at capacity. This would help the staff determine whether new right(s)-of-way would be needed for the alternative sites or whether existing line upgrades would be sufficient.

Exelon stated that their transmission analysis was performed at a high level, and they did not mean to imply in the ER that a detailed assessment had been performed. Exelon referred the staff to the white paper describing the process it used to assess the six alternative sites against the EGC ESP site (see April 8, 2004 alternative site audit summary) to provide further information on why a detailed transmission analysis was not conducted. Exelon also pointed to two references in the ER (*National Energy Policy*, May 2001, and *National Transmission Grid Study*, May 2002) that discuss transmission issues. Further, Exelon indicated that additional information regarding transmission congestion in Illinois can be found in a May 2004 Department of Energy (DOE) report to Congress entitled "An Analysis of Wind Resource Locations and Transmission Requirements in the Upper Midwest." They believed that the ER was correct as written, and did not require modification.

From its reading of the ER, the staff believes that the ER implies that more transmission analysis was done than actually was. The staff's interpretation of the statements in the ER was that Exelon may have considered potential modifications to the grid and transmission resources that would be necessary to accommodate the additional power provided by the new power source. The staff indicated that they would review the referenced reports to review what was considered by Exelon.

/RA/

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

Attachment: As stated

Docket No. 52-007

cc: See next page

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

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DISTRIBUTION:
T. Kenyon
A. Kugler
RLEP R/F

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OFFICE	RLEP:DRIP:LA	RLEP:DRIP:PM	RLEP:DRIP:SC:ES
NAME	M. Jenkins	T. Kenyon	A. Kugler
DATE	9/27/04	9/28/04	10/6/04

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Clinton Early Site Permit

cc:

Ms. Marilyn Kray
Vice President, Project Development
Exelon Generation
200 Exelon Way, KSA3-EN
Kennett Square, PA 19348

Mr. Rod Krich
Vice President, Licensing Projects
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

Mr. Thomas Mundy
Director, Project Development
Exelon Generation
200 Exelon Way, KSA3-EN
Kennett Square, PA 19348

Mr. William Maher
Exelon Generation
200 Exelon Way, KSA2-N
Kennett Square, PA 19348

Mr. Thomas S. O'Neill
Associate General Counsel
Exelon Nuclear
4300 Winfield Road
Warrenville, IL 60555

Mr. Eddie Grant
Exelon Generation
200 Exelon Way, KSA3-EN
Kennett Square, PA 19348

Exelon Nuclear
Correspondence Control Desk
200 Exelon Way, KSA1-N
Kennett Square PA, 19348

Mr. David Lochbaum
Union of Concerned Scientists
1707 H Street, NW
Suite 600
Washington, DC 20006-3919

Mr. Paul Gunter
Director of the Reactor Watchdog Project
Nuclear Information & Resource Service
1424 16th Street, NW, Suite 404
Washington, DC 20036

Mr. Ron Simard
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Russell Bell
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Mr. Thomas P. Miller
U.S. Department of Energy
Headquarters - Germantown
19901 Germantown Road
Germantown, MD 20874-1290

Mr. James Riccio
Greenpeace
702 H Street, NW, Suite 300
Washington, DC 20001

Ms. Patricia Campbell
Winston & Strawn
1400 L Street, NW
Washington, DC 20005

Mr. James F. Mallay, Director
Regulatory Affairs
FRAMATOME, ANP
3315 Old Forest Road
Lynchburg, VA 24501

Mr. Ernie H. Kennedy
Vice President New Plants
Nuclear Plant Projects
Westinghouse Electric Company
2000 Day Hill Road
Windsor, CT 06095-0500

cc:

Dr. Regis A. Matzie
Senior Vice President and
Chief Technology Officer
Westinghouse Electric Company
2000 Day Hill Road
Windsor, CT 06095-0500

Mr. John Loaniddi
Parsons Energy and Chemicals
2675 Morgantown Road
Reading, PA 19607

Ms. Amy Lientz
CH2M HILL
151 North Ridge Avenue
Suite 150
Idaho Falls, Idaho 83402

Mr. Steven P. Frantz Esq.
Morgan Lewis and Bockius LLP
1111 Pennsylvania Avenue, NW
Washington, DC 20004

Mr. Gary Wright, Director
Division of Nuclear Safety
Illinois Emergency Management Agency
1035 Outer Park Drive
Springfield, IL 62704

Dr. Gail H. Marcus
U.S. Department of Energy
Room 5A-143
1000 Independence Ave., SW
Washington, DC 20585

Mr. Paul Leventhal
Nuclear Control Institute
1000 Connecticut Avenue, NW
Suite 410
Washington, DC 20036

Mr. Jack W. Roe
SCIENTECH, INC.
910 Clopper Road
Gaithersburg, MD 20878

Mr. Tom Clements
6703 Guide Avenue
Takoma Park, MD 20912

Mr. Vince Langman
Licensing Manager
Atomic Energy of Canada Limited
2251 Speakman Drive
Mississauga, Ontario
Canada L5K 1B2

Mr. David Ritter
Research Associate on Nuclear Energy
Public Citizens Critical Mass Energy
and Environmental Program
215 Pennsylvania Avenue, SE
Washington, DC 20003

Mr. George Gore
702 West Washington Street
Urbana, IL 61801

Mr. Arthur L. Brighton
RR1, Box 22
Weldon, IL 61882

Mr. Dale Holtzscher
RR 1, Box 72A
Weldon, IL 61882

Mr. John Stolfa
P.O. Box 589
Mansfield, IL 61854-0589

cc:

Mr. Ed Wallace, General Manager
Projects
PBMR Pty LTD
P.O. Box 9396
Centurion 0046
Republic of South Africa

Ms. Vanessa E. Quinn, Chief
Radiological Emergency Preparedness
Branch
Department of Homeland Security/FEMA
500 C Street, SW
Washington, DC 20472

Mr. Joseph D. Hegner
Lead Engineer - Licensing
Dominion Generation
Early Site Permitting Project
5000 Dominion Boulevard
Glen Allen, VA 23060

Mr. George Alan Zinke
Project Manager
Nuclear Business Development
Entergy Nuclear
M-ECH-683
1340 Echelon Parkway
Jackson, MS 39213

Mr. Charles Brinkman
Westinghouse Electric Co.
Washington Operations
12300 Twinbrook Pkwy., Suite 330
Rockville, MD 20852

Mr. Marvin Fertel
Senior Vice President
and Chief Nuclear Officer
Nuclear Energy Institute
Suite 400
1776 I Street, NW
Washington, DC 20006-3708

Dr. Glenn R. George
Director, Global Energy Capital Markets
Nomura Securities International, Inc.
2 World Financial Center
Building B, 21st Floor
New York, NY 10281-1198

Arthur R. Woods
Enercon Services, Inc.
500 TownPark Lane
Kennesaw, GA 30144

Ginger Molitor
U.S. Fish and Widlife Service
Rock Island Ecological Services Office
4469 48th Avenue Court
Rock Island, IL 61201

Keith Shank, Manager
Division of Resources, Review and
Coordination
Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702-1787

Ken Runkle
Toxicology Section
525 West Jefferson Street
Springfield, IL 62761

Robert Mosher, #15
1021 North Grand Avenue, East
P.O. Box 19276
Springfield, IL 62794-9274

Mike McCulley
Illinois Department of Natural Resources
Region III Office
1556 State Route 54, East
Clinton, IL 61727

Donald Dieker
56 Holiday Drive
Clinton, IL 61727

cc:

Mr. Tom Rudasill
The Vespasian Warner Public Library
District
310 N. Quincy Street
Clinton, IL 61727

Pacific Northwest National Laboratory
Attn: Ms. Eva Eckert Hickey
MSIN K3-66
P.O. Box 999
Richland, WA 99352

LIST OF PARTICIPANTS
IN THE TELEPHONE CONFERENCE
EXELON RESPONSES TO REQUESTS FOR ADDITIONAL INFORMATION
SEPTEMBER 16, 2004

Participants	**Affiliation**
Thomas Kenyon	U.S. Nuclear Regulatory Commission (NRC)
Eva Hickey	Pacific Northwest National Laboratory (PNNL)
Van Ramsdell	PNNL
Dave Anderson	PNNL
Kim Leigh	PNNL
Bill Maher	Exelon
Tamar Cerafici	CH2MHILL (representing Exelon)

Attachment 1