August 26, 2005

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

SUBJECT: SUPPLEMENTAL DRAFT SAFETY EVALUATION REPORT FOR THE EXELON EARLY SITE PERMIT APPLICATION

Dear Ms. Kray:

On September 25, 2003, Exelon Generation Company, LLC (Exelon) tendered its application for an early site permit (ESP) in accordance with Subpart A of Part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR). The proposed site is co-located with the existing Clinton Power Station facility near Clinton, Illinois, hereafter identified as the Exelon Generation Company (EGC) ESP site. The U.S. Nuclear Regulatory Commission (NRC) formally accepted the application as a docketed application for an ESP on October 27, 2003.

The NRC staff issued its draft safety evaluation report (DSER) on February 10, 2005. The DSER did not include the staff's technical evaluation of seismology and geology because the Exelon ESP application included a previously unreviewed performance-based methodology for determining the safe shutdown earthquake (SSE) for the Exelon ESP site. The NRC staff has reviewed the information in Section 2.5, "Geology, Seismology, and Geotechnical Engineering," and Section 3.4.2, "10 CFR 100.23—Geologic and Seismic Siting Criteria," of Exelon's site safety analysis report (SSAR) and has developed the enclosed supplemental DSER.

The supplemental DSER is being issued in accordance with the review schedule identified in the staff's letter to Exelon dated August 16, 2005. The supplemental DSER provides information to stakeholders regarding the state of completion of the staff's review of seismology and geology and the remaining information needed for issuance of the final safety evaluation report (FSER). Because the supplemental DSER contains open items (subjects for which Exelon needs to provide additional information), the NRC staff has not made a decision regarding whether to recommend to the Commission that an ESP be issued for the EGC ESP site.

Issuance of this supplemental DSER is an important milestone in the staff's review to determine whether Exelon's application meets the Commission's regulations. In the period preceding preparation of the FSER, both Exelon and the NRC staff will need to focus on resolution of the open items identified in the supplemental DSER. The August 16, 2005, letter specifies February 17, 2005, as the estimated date for issuance of the FSER. However, this date is contingent on Exelon's successful resolution of all open items in the supplemental DSER by October 31, 2005, and Exelon's issuance of the final revision to the Exelon ESP application by November 21, 2005.

M. Kray

It is imperative that Exelon and the NRC staff exchange complete, timely, and accurate information if all open items are to be resolved expeditiously. The staff requests Exelon's cooperation in setting up meetings, responding fully to the staff's needs for information, and docketing the needed information in a timely manner. Exelon should ensure that its meeting attendees have the authority to make commitments to resolve issues. Senior management meetings may be used to address difficult issues, if necessary.

By letter dated December 15, 2004, you requested, on behalf of the State of Illinois and the Illinois Emergency Management Agency, that the state and local emergency plans (in their entirety) be exempt from mandatory public disclosure. By letter dated September 7, 2004, you also requested that the Exelon ESP project quality assurance instructions and project quality plan be exempt from mandatory public disclosure in accordance with the requirements of 10 CFR 2.390. The staff concludes that the enclosed supplemental DSER does not contain any information for which exemption has been sought or approved. However, the NRC will withhold the enclosed supplemental DSER from public disclosure for 14 calendar days from the date of this letter to allow Exelon the opportunity to verify, in consultation with the State of Illinois and the Illinois Emergency Management Agency, the staff's conclusions in this regard. If, after that time, you do not request that all or portions of the supplemental DSER be withheld from public disclosure in accordance with 10 CFR 2.390, the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Please contact John Segala, the NRC's project manager, at (301) 415-1858 (or jps1@nrc.gov) if you have any questions or comments concerning this matter.

Sincerely,

/**RA**/

William D. Beckner, Program Director New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

Docket No. 52-007

Enclosure: As stated

cc w/o encl: See next page

It is imperative that Exelon and the NRC staff exchange complete, timely, and accurate information if all open items are to be resolved expeditiously. The staff requests Exelon's cooperation in setting up meetings, responding fully to the staff's needs for information, and docketing the needed information in a timely manner. Exelon should ensure that its meeting attendees have the authority to make commitments to resolve issues. Senior management meetings may be used to address difficult issues, if necessary.

By letter dated December 15, 2004, you requested, on behalf of the State of Illinois and the Illinois Emergency Management Agency, that the state and local emergency plans (in their entirety) be exempt from mandatory public disclosure. By letter dated September 7, 2004, you also requested that the Exelon ESP project quality assurance instructions and project quality plan be exempt from mandatory public disclosure in accordance with the requirements of 10 CFR 2.390. The staff concludes that the enclosed supplemental DSER does not contain any information for which exemption has been sought or approved. However, the NRC will withhold the enclosed supplemental DSER from public disclosure for 14 calendar days from the date of this letter to allow Exelon the opportunity to verify, in consultation with the State of Illinois and the Illinois Emergency Management Agency, the staff's conclusions in this regard. If, after that time, you do not request that all or portions of the supplemental DSER be withheld from public disclosure in accordance with 10 CFR 2.390, the enclosure will be made available for public inspection through the NRC's Public Document Room and the Publicly Available Records (PARS) component of the NRC's document system (ADAMS). ADAMS is accessible from the NRC web site at http://www.nrc.gov/reading-rm/adams.html (the Public Electronic Reading Room).

Please contact John Segala, the NRC's project manager, at (301) 415-1858 (or jps1@nrc.gov) if you have any questions or comments concerning this matter.

Sincerely,

/**RA**/

William D. Beckner, Program Director New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

Docket No. 52-007

Enclosure: As stated

cc w/o encl: See next page

ADAMS ACCESSION NUMBER:

ML052310459-Package ML052310469-Cover letter ML052310478-Supplemental DSER

OFFICE	PM:RNRP	D:DE	SC:RNRP	PD:RNRP	OGC	D:DRIP	PD:RNRP /s/
NAME	JSegala	MMayfield	LDudes	WBeckner	AHodgdon	DMatthews	WBeckner
DATE	08/19/05	08/22/05	08/23/05	08/23/05	08/25/05	08/25/05	08/25/05

OFFICIAL RECORD COPY

Distribution of Supplemental DSER for Exelon's ESP Application dated August 26, 2005

Hard Copy w/encl.:

JSegala RNRP R/F WBeckner PPrescott GBagchi KCampe DBarss	RBarrett BBoger LDudes CMunson TCheng JLee ATardiff	MMayfield JLyons DMatthews RHarvey TKenyon RMoody AHodgdon
MLemoncelli	ATAIUIII	Anouguon

Hard Copy w/o encl.

PUBLIC

E-mail:

JDyer	RAnand	RDennig
MRubin	EWeiss	SMorris
KManoly	GImbro	DThatcher
NMamish	JShea	MTschiltz
AKugler	FGillespie	KWinsberg
RBorchardt	TQuay	

External E-mail eddie.grant@exeloncorp.com jerald.holm@framatome-anp.com

Exelon ESP

CC:

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. Adrian Heymer 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

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

Ms. Patricia Campbell Morgan, Lewis & Bockius, LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004 Mr. Ernie H. Kennedy Vice President New Plants Nuclear Plant Projects Westinghouse Electric Company 20 International Drive, Bin 31 Windsor, CT 06095-0500

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

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

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

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

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

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

Ms. Amy Lientz CH2MHILL 151 N. Ridge Ave. Ste 150 Idaho Falls, Idaho 83401-4039 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

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

Dr. Jack W. Roe Nuclear Energy Institute 1776 I Street, NW Washington, DC 20006-3708

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

Mr. Glenn H. Archinoff AECL Technologies 481 North Frederick Avenue Suite 405 Gaithersburg, MD. 20877

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

Prairie Group Attn: 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

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

Ms. Vanessa E. Quinn, Chief Radiological Emergency Preparedness Section 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 PA Consulting Group 130 Potter Street Haddonfield, NJ 08033 Mr. Arthur R. Woods Enercon Services, Inc. 500 TownPark Lane Kennesaw, GA 30144

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

Mr. Jerald S. Holm Framatome ANP, Inc. 3315 Old Forest Road P.O. Box 10935 Lynchburg, VA 24506-0935

Ms. Kathryn Sutton, Esq. Morgan, Lewis & Bockius, LLP 1111 Pennsylvania Avenue, NW Washington, DC 20004

Framatome ANP, Inc. ATTN Sherry McFaden 3315 Old Forest Road, OF-16 Lynchburg, VA 24501

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

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

Mr. James F. Mallay, Director Regulatory Affairs FRAMATOME, ANP 3315 Old Forest Road Lynchburg, VA 24501 Dr. Gail H. Marcus U.S. Department of Energy Room 5A-143 1000 Independence Ave., SW Washington, DC 20585

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

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

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

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

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

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

Mr. Donald Dieker 56 Holiday Drive Clinton, IL 61727 Pacific Northwest National Laboratory Attn: Ms. Eva Eckert Hickey MSIN K3-66 PO Box 999 Richland, WA 99352

Mr. Robert E. Sweeney IBEX ESI 4641 Montgomery Avenue Suite 350 Bethesda, MD. 20814

External E-mail eddie.grant@exeloncorp.com jerald.holm@framatome-anp.com mwetterhahn@winston.com gcesare@enercon.com louis.quintana@gene.ge.com whorin@winston.com rob.sweeney@ibexesi.com