

April 12, 2000

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, Illinois 60515

SUBJECT: LASALLE - ENVIRONMENTAL ASSESSMENT AND FINDING OF NO
SIGNIFICANT IMPACT REGARDING POWER UPRATE (TAC NOS. MA6070
AND MA6071)

Dear Mr. Kingsley:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendments dated July 14, 1999, as supplemented on January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000. The proposed amendments would increase the maximum reactor core power level to 3489 megawatts thermal, an increase of five percent of rated core thermal power, for LaSalle County Station, Units 1 and 2.

The assessment is being forwarded to the Office of Federal Register for publication.

Sincerely,

/RA/

Donna M. Skay, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosure: Environmental Assessment

cc w/encl: See next page

April 12, 2000

Mr. Oliver D. Kingsley, President
Nuclear Generation Group
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, Illinois 60515

SUBJECT: LASALLE - ENVIRONMENTAL ASSESSMENT AND FINDING OF NO
SIGNIFICANT IMPACT REGARDING POWER UPRATE (TAC NOS. MA6070
AND MA6071)

Dear Mr. Kingsley:

Enclosed is a copy of the Environmental Assessment and Finding of No Significant Impact related to your application for amendments dated July 14, 1999, as supplemented on January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000. The proposed amendments would increase the maximum reactor core power level to 3489 megawatts thermal, an increase of five percent of rated core thermal power, for LaSalle County Station, Units 1 and 2.

The assessment is being forwarded to the Office of Federal Register for publication.

Sincerely,

/RA/

Donna M. Skay, Project Manager, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket Nos. 50-373, 50-374

Enclosure: Environmental Assessment

cc w/encl: See next page

DISTRIBUTION:

File Center
PDIII/2 r/f

PUBLIC
ACRS

OGC
MLeach, RIII

ACCESSION NUMBER: ML003701172

To receive a copy of this document, indicate in the box: "C" = Copy without enclosures "E" = Copy with enclosures "N" = No copy

OFFICE	PM:LPD3	c	LA:LPD3	e	RGEB	E	OGC	NLO		SC:LPD3	
NAME	DSKAY		CMOORE		CCARPENTER		SHom			AMENDIOLA	
DATE	03/29/00		03/29/00		03/30/00		04/7/00			04/11/00	

OFFICIAL RECORD COPY

O. Kingsley
Commonwealth Edison Company

LaSalle County Station
Units 1 and 2

cc:

Phillip P. Steptoe, Esquire
Sidley and Austin
One First National Plaza
Chicago, Illinois 60603

Robert Cushing, Chief, Public Utilities Division
Illinois Attorney General's Office
100 W. Randolph Street
Chicago, Illinois 60601

Assistant Attorney General
100 W. Randolph St. Suite 12
Chicago, Illinois 60601

Document Control Desk-Licensing
Commonwealth Edison Company
1400 Opus Place, Suite 400
Downers Grove, Illinois 60515

U.S. NRC-LaSalle Resident Inspectors Office
2605 N. 21st Road
Marseilles, Illinois 61341-9756

Commonwealth Edison Company
Site Vice President - LaSalle
2601 N. 21st Road
Marseilles, Illinois 61341-9757

Chairman
LaSalle County Board
707 Etna Road
Ottawa, Illinois 61350

Mr. David Helwig
Senior Vice President
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

Attorney General
500 S. Second Street
Springfield, Illinois 62701

Chairman
Illinois Commerce Commission
527 E. Capitol Avenue, Leland Building
Springfield, Illinois 62706

Mr. Gene H. Stanley
Vice President - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Mr. Christopher Crane
Senior VP - Nuclear Operations
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 900
Downers Grove, Illinois 60515

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

Commonwealth Edison Company
LaSalle Station Manager
2601 N. 21st Road
Marseilles, Illinois 61341-9757

O. Kingsley
Commonwealth Edison Company

- 2 -

LaSalle County Station
Units 1 and 2

89

Mr. R. M. Krich
Vice President - Regulatory Services
Commonwealth Edison Company
Executive Towers West III
1400 Opus Place, Suite 500
Downers Grove, Illinois 60515

Commonwealth Edison Company
Reg. Assurance Supervisor - LaSalle
2601 N. 21st Road
Marseilles, Illinois 61341-9757

Ms. Pamela B. Stroebe
Senior Vice President and General Counsel
Commonwealth Edison Company
P.O. Box 767
Chicago, Illinois 60690-0767

Sherry Kamke, Acting (5)
Environmental Review Coordinator
US EPA Region 5
77 W. Jackson Blvd.
Chicago, Illinois 60604-3507

UNITED STATES NUCLEAR REGULATORY COMMISSION

COMMONWEALTH EDISON COMPANY

DOCKET NOS. 50-373 AND 50-374

LASALLE COUNTY STATION, UNITS 1 AND 2

ENVIRONMENTAL ASSESSMENT AND FINDING OF

NO SIGNIFICANT IMPACT

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of amendments to Facility Operating Licenses Nos. NPF-11 and NPF-18, issued to Commonwealth Edison Company (ComEd, the licensee) for operation of LaSalle County Station, Units 1 and 2, located in LaSalle County, Illinois.

ENVIRONMENTAL ASSESSMENT

Identification of the Proposed Action:

The proposed action would allow ComEd to increase the maximum reactor core power level for facility operation from 3323 megawatts-thermal (MWt) to 3489 MWt, which is a five percent increase in rated core power.

The proposed action is in accordance with ComEd's application for amendments dated July 14, 1999, as supplemented by letters dated January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000.

Need for the Proposed Action:

The proposed action is needed to allow ComEd to increase the electrical output of each LaSalle unit and, thus, provide additional electrical power to service domestic and commercial areas of the licensee's grid. Power uprate has been widely recognized by the industry as a

safe and cost-effective method to increase generating capacity. The proposed uprate will provide the licensee with additional operational flexibility.

Environmental Impacts of the Proposed Action:

ComEd has submitted an environmental evaluation supporting the proposed extended power uprate action and provided a summary of its conclusions concerning both the radiological and non-radiological environmental impacts of the proposed action. Based on its independent analyses and the evaluation performed by the licensee, the staff concludes that the proposed increase in power is not expected to result in a significant environmental impact.

Radiological Environmental Assessment:

Radwaste Systems

ComEd concluded that the operation of the radwaste systems that process radioactive effluents at LaSalle would not be impacted by operation at uprated power conditions and the slight increase in effluents discharged would continue to meet the requirements of 10 CFR Part 20, "Standards for Protection Against Radiation," and 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents." Therefore, power uprate does not have an adverse effect on the processing of radioactive effluents and there are no significant environmental effects from radiological releases.

Dose Consideration

ComEd evaluated the effects of power uprate on the radiation sources within the plant and the radiation levels during normal and post-accident conditions. For normal operations, the licensee determined that conservatism in the analyses and the margins added to calculated

doses and specific shield thickness are sufficient to accommodate any increases attributed to the five percent increase in rated thermal power. For post-accident conditions, the resulting radiation levels were determined to be within current regulatory limits. In addition, the licensee determined that there would be no effect on the plant or habitability or the control room envelope or the Technical Support Center. The licensee evaluated the whole body and thyroid doses at the exclusion area boundary that might result from the postulated design basis loss-of-coolant accident and determined the doses remain below established regulatory limits.

Summary

The proposed power uprate will not significantly increase the probability or consequences of accidents, will not involve any new radiological release pathways, will not result in a significant increase in occupational or public radiation exposure, and will not result in significant additional fuel cycle environmental impacts. Accordingly, the Commission concludes that there are no significant radiological environmental impacts associated with the proposed action.

Non-Radiological Environmental Assessment:

The licensee reviewed the non-radiological environmental impacts of power uprate based on information submitted in the Environmental Report - Operating License Stage to support original licensing of LaSalle, Units 1 and 2, the Final Environmental Protection Statement (NUREG-0486), the requirements of the Environmental Protection Plan and the National Pollutant Discharge Elimination System (NPDES) Permit. The proposed power uprate will not affect compliance with NPDES requirements.

As a result of power uprate to 105 percent of current licensed core power, normal heat loads to the cooling lake will increase primarily from an increase in heat load from the

condenser and from other increased heat loads rejected by the plant service water system. An increase in steam and condensate flow will result in a corresponding increase in the net heat rejection to the cooling lake. Based on a condenser backpressure of 3.5 inches Hga, a 1 degree Fahrenheit rise in circulating water temperature is expected relative to the current temperature rise value of approximately 24 degrees Fahrenheit. This, in turn, will raise cooling lake temperature, thus, increasing circulating water inlet temperature to the condenser. The lake is expected to experience a 0.4 degree increase in temperature on a long-term basis. Based on this minimal temperature rise, thermal shock to the fish population of the lake is not expected. The effect on lake evaporation, makeup, and blowdown was evaluated and found to be acceptable. The effect on cooling lake total dissolved solids was determined to remain within the licensee's administrative limit of 750 ppm.

The LaSalle cooling lake discharges into the Illinois River. ComEd evaluated the effects of power uprate on the temperature of the water in the river in the vicinity of the cooling lake blowdown and concluded that significant margin exists between the maximum expected edge of mixing zone temperature and imposed regulatory limits.

ComEd also evaluated the noise effects due to operation at uprated power and determined that, because the turbine and reactor building supply and exhaust fans will continue to operate at current speeds and noise levels at uprated conditions, the overall noise level will not increase.

With regard to potential non-radiological impacts, the proposed action does not change the method of generating electricity at LaSalle, Units 1 and 2, nor the methods of handling effluents from the environment or effluents to the environment. No changes to land use would result and the proposed action does not involve any historic sites. Therefore, no new or

different types of non-radiological environmental impacts are expected. Accordingly, the Commission concludes that there are no significant non-radiological environmental impacts associated with the proposed action.

Alternatives to the Proposed Action:

As an alternative to the proposed action, the staff considered denial of the proposed action (i.e., the "no-action" alternative). Denial of the application would result in no significant change in current environmental impacts and would reduce the operational flexibility. The environmental impacts of the proposed action and the alternative action are similar.

Alternative Use of Resources:

This action does not involve the use of any resources not previously considered in the Final Environmental Statement for LaSalle County Station, Units 1 and 2.

Agencies and Persons Consulted:

In accordance with its stated policy, on March 23, 2000, the staff consulted with the Illinois State official, Mr. Frank Nizeolik of the Illinois Department of Nuclear Safety, regarding the environmental impact of the proposed action. The State official had no comments.

FINDING OF NO SIGNIFICANT IMPACT

Based upon the environmental assessment, the Commission concludes that the proposed action will not have a significant effect on the quality of the human environment. Accordingly, the Commission has determined not to prepare an environmental impact statement for the proposed action.

For further details with respect to the proposed action, see the licensee's letter dated July 14, 1999, as supplemented on January 21, February 15, February 23, March 10, March 24, March 31, and April 7, 2000, which are available for public inspection at the Commission's

Public Document Room, The Gelman Building, 2120 L Street, NW., Washington, DC, and accessible electronically through the ADAMS Public Electronic Reading Room link at the NRC Web site (<http://www.nrc.gov>)

Dated at Rockville, Maryland this 12th day of April 2000.

FOR THE NUCLEAR REGULATORY COMMISSION

/RA/

Anthony J. Mendiola, Chief, Section 2
Project Directorate III
Division of Licensing Project Management
Office of Nuclear Reactor Regulation