Commonwealth Edison Company LaSalle Generating Station 2601 North 21st Road Marseilles, IL 61341-9757 Tel 815-357-6761



March 24, 2000

United States Nuclear Regulatory Commission Attention: Document Control Desk Washington, D.C. 20555

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373 and 50-374

Subject: Response to Request for Additional Information License Amendment Request for Power Uprate Operation

References: (1) Letter from R. M. Krich (Commonwealth Edison (ComEd) Company) to U.S. NRC, "Request for License Amendment for Power Uprate Operation," dated July 14, 1999.

(2) Letter from D. M. Skay (U.S. NRC) to O.D. Kingsley (ComEd), "Request for Additional Information – LaSalle County Station, Units 1 and 2 (TAC Nos. MA6070 and MA6071)," dated February 15, 2000.

In the Reference 1 letter, pursuant to 10 CFR 50.90, "Application for Amendment of License or Construction Permit," we proposed to operate both LaSalle County Station Units at an "uprate" power level of 3489 Megawatts Thermal (MWT). During a conference call on March 8, 2000, the NRC requested additional information concerning the proposed amendment request to support their review. The attachment to this letter provides our partial response to the request for additional information.

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This response provides answers to two of the three NRC questions from the March 8th conference call. The response to the third question is delayed due to calculations that are not complete at this time, which are also required to respond to question 1 of reference 2. ComEd will provide the response to the third question raised in the conference call of March 8, 2000 by March 31, 2000.

The no significant hazards consideration, submitted in Reference 1, remains valid for the information attached.

Should you have any questions concerning this letter, please contact Mr. Frank A. Spangenberg, III, Regulatory Assurance Manager, at (815) 357-6761, extension 2383.

Respectfully,

Charles G. Pardee Site Vice President LaSalle County Station

Much for

Attachment

cc: Regional Administrator - NRC Region III

NRC Senior Resident Inspector – LaSalle County Station

STATE OF ILLINOIS N THE MATTER OF	)	
COMMONWEALTH EDISON COMPANY		
LASALLE COUNTY STATION - UNIT 1 & UNIT 2	)	Docket Nos. 50-373 50-374

Subject:

Response to Request for Additional Information License

Amendment Request for Power Uprate Operation

## **AFFIDAVIT**

I affirm that the content of this transmittal is true and correct to the best of my knowledge, information and belief.

Charles G. Pardee Site Vice President LaSalle County Station

Subscribed and sworn to before me, a Notary Public in and for the State above named, this 3/d day of 1/a/a, 2000.

My Commission expires on

OFFICIAL SEAL LYNN ELLEN GASSMAN NOTARY PUBLIC, STATE OF ILLINOIS MY COMMISSION EXPIRES 1-24-2001

Notary Public

## Attachment Response to Request for Additional Information

#### Question 1:

You have requested an increase in maximum generator gross output from 1124.8 MWe to 1183.3 MWe (rated) and 1218.6 MWe (valves wide open). The present generator rating is 1300.3 MVA at a power factor (PF) of 0.9 (1124.8 MWe and 570 KVAR). With the power uprate the generator will be uprated to 1300.3 MVA at PF of 0.91 (rated) (i.e., 1183.3 MWe and 538 KVAR) and 1300.3 MVA at PF 0.94 (valves wide open) (i.e., 1218.6 MWe and 443 KVAR). With the power uprate, the MVAR has been decreased by 5.6% (rated) and by 22% (valves wide open). Please explain how you compensate for the loss of MVAR and still maintain the grid stability. Discuss whether you need to add or adjust the capacitor banks.

## Response 1:

There are no physical changes to the 345 kV switchyard equipment. The voltage rating and operating ranges remain unchanged. ComEd's Bulk Power Operations (BPO) requests the LaSalle Station to increase or decrease reactive power (MVARs) as required by the grid needs. The generator rating (MVA and Power Factor (PF)), as described by the generator's capability curves that are part of the LaSalle Station Operating Procedures, determine MVAR production. MWe output limitations may be necessary for uprate conditions to meet the MVAR requirements.

Studies performed in support of the LaSalle Power Uprate indicate that the decreased MVAR capability at the higher MWe output will have an impact on voltage stability. Using a year 2001 base case, our studies indicate that this reduced MVAR output will decrease the voltage collapse point 74 MWe, however, the reduced collapse point is still greater than 105% of the predicted peak load for year 2001.

In addition to the studies mentioned above, ComEd performs ongoing analyses of the power system to insure that adequate reliability can be maintained under many different contingency situations. All of these studies follow established criteria defined by ComEd's System Planning Department. The criteria define the various contingencies, which are simulated to insure adequate reliability of the bulk power transmission system during steady state and transient conditions. These criteria are maintained by System Planning and are reviewed annually. The criteria are documented and reported to Federal Energy Regulatory Commission (FERC) on an annual basis as part of ComEd's FERC 715 filing, titled "Transmission Planning Criteria." Additional capacitors may be required, at key locations, to compensate for system load growth. The LaSalle Power Uprate is considered during routine power system analysis.

The protective relay settings for the generator, Main Power Transformer, Unit Auxiliary Transformer, and System Auxiliary Transformer correlate with the respective equipment MVA, voltage, impedance, and current parameters. Except for one of the LaSalle switchyard Circuit Breaker 1-2 Local Breaker Backup (LBB) timer settings that requires reduction, the existing protective

# Attachment Response to Request for Additional Information

relay settings remain adequate for power uprate. The required change to the LBB settings will be implemented prior to uprate power ascension. The 345 kV switchyard equipment and stability remain adequate with the uprate LBB timer settings. The connections to the switchyard have been reviewed and determined to remain adequate under uprated conditions.

#### Question 2:

Discuss the impact of power uprate on the simulator compliance with ANSI/ANS 3.5.

#### Response 2:

The LaSalle simulator currently models the L1C09 core design, evaluated in the cycle specific analysis for uprate conditions, and complies with the requirements of ANSI/ANS 3.5 1993, "Nuclear Power Plant Simulators for Use in the Operator Training and Examination." Turbine performance will be updated to predicted heat balance data (as required to meet ANSI/ANS 3.5 modeling criteria) prior to the implementation of power uprate. Upon completion of uprate power ascension, the simulator will be compared to actual plant performance to confirm compliance with ANSI/ANS 3.5 modeling requirements.