



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60516

10 CFR 50.90

March 31, 1992

Dr. Thomas E. Murley  
Office Of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Attn: Document Control Desk

Subject: Quad Cities Station Units 1 and 2  
LaSalle County Station Units 1 and 2  
Application of Amendment to Facility Operating  
Licenses DPR-29, DPR-30, NPF-11, and NPF-18,  
Appendix A, Technical Specifications; Proposed  
Amendment to add Commonwealth Edison (CECo) Topical  
Report to Section 6.6, Administrative Controls  
NRC Docket Nos. 50-254, 50-255, 50-373, and  
50-374 Respectively

References:

- (a) Commonwealth Edison Topical Report NFSR-0085, "Benchmark of BWR Nuclear Design Methods," November 1990.
- (b) Commonwealth Edison Topical Report NFSR-0085, Supplement 1, "Benchmark of BWR Nuclear Design Methods - Quad Cities Gamma Scan Comparison," April 1991.
- (c) Commonwealth Edison Topical Report NFSR-0085, Supplement 2, "Benchmark of BWR Nuclear Design Methods - Neutronic Licensing Analyses," April 1991.
- (d) GE Proprietary Document NEDE-24011-P-A, "General Electric Standard Application for Reactor Fuel," as supplemented and approved.
- (e) M.H. Richter (CECo) memo to T.E. Murley (NRC), dated December 12, 1990, submitting CECo Topical Report NFSR-0085.
- (f) M.H. Richter (CECo) memo to T.E. Murley (NRC), dated May 8, 1991, submitting Supplements 1 and 2 to CECo Topical Report NFSR-0085.
- (g) B.L. Siegel (NRC) memo to T.J. Kovach, dated February 27, 1992, "Safety Evaluation Relating to Topical Report for Neutronics Methods for BWR Reload Design for Commonwealth Plants."

Pursuant to 10 CFR 50.90, Commonwealth Edison (CECo) proposes to amend Appendix A, Technical Specifications, of Facility Operating Licenses DPR-29, DPR-30, NPF-11 and NPF-18 to include the Commonwealth Edison Topical Report, NFSR-0085, and Supplements 1 and 2 to Section 6.6. The proposed amendment will add this NRC approved methodology to the approved list of analytical

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methods for determining the Cycle Specific Limits in the Core Operating Limits Report (COLR). CECO requests that the proposed amendment be approved for both LaSalle County and Quad Cities Stations by June 15, 1992 to facilitate the reload design for LaSalle County Unit 1, Reload 5.

This proposed amendment is subdivided as follows:

1. Attachment A gives a description and safety analysis of the proposed changes in this amendment.
2. Attachment B includes the marked-up Technical Specification pages with the requested changes indicated for Quad Cities Station.
3. Attachment C includes the marked-up Technical Specification pages with the requested changes indicated for LaSalle County Station.
4. Attachment D describes CECO's evaluation performed in accordance with 10 CFR 50.92(c), which confirms that no significant hazards consideration is involved.
5. Attachment E provides the Environmental Assessment.

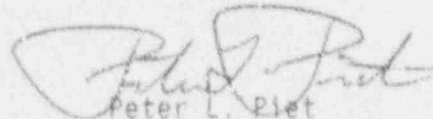
The proposed amendment has been reviewed and approved by CECO On-Site and Off-Site Review committees in accordance with company procedures.

To the best of my knowledge and belief, the statements contained above are true and correct. In some respect these statements are not based on my personal knowledge, but obtained information furnished by other Commonwealth Edison employees, contractor employees, and consultants. Such information has been reviewed in accordance with company practice, and I believe it to be reliable.

Commonwealth Edison is notifying the State of Illinois of this application for amendment by transmitting a copy of this letter and its attachments to the designated state official.

Please direct any questions you may have concerning this submittal to this office.

Sincerely,



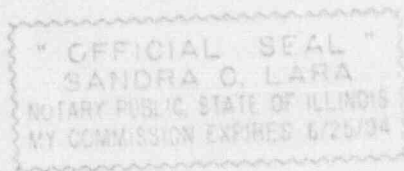
Peter L. Piet  
Nuclear Licensing Administrator

Attachments:

- A. Description of Safety Analysis of the Proposed Changes
- B. Marked-up Technical Specifications Pages for Quad Cities Station
- C. Marked-up Technical Specifications Pages for LaSalle County Station
- D. Evaluation of Significant Hazards Consideration
- E. Environmental Assessment

cc: A.B. Davis - Regional Administrator, RIII  
 D. Hillis - Senior Resident Inspector - LSCS  
 T. Taylor - Senior Resident Inspector - CCNPS  
 L.N. O'Leary - NRR, Project Manager - Quad Cities  
 B.L. Siegel - NRR, Project Manager - LaSalle  
 Office of Nuclear Facility Safety - IDNS

Signed before me on this 31st day  
 of March, 1992,  
 by [Signature]  
 Notary Public



## ATTACHMENT A

### DESCRIPTION AND SAFETY ANALYSIS OF PROPOSED CHANGES TO APPENDIX A, TECHNICAL SPECIFICATIONS OF FACILITY OPERATING LICENSES DPR-29, DPR-35, WPF-11 and NPF-18

#### BACKGROUND

Commonwealth Edison Company's (CECo) Nuclear Fuel Services (NFS) Department has been developing its ability to perform Reload Nuclear Design and Safety Analyses. The NRC has encouraged utilities to perform such analyses and expects CECo to be an industry leader. In support of that effort, CECo submitted a Topical Report for Neutronics Methods for BWR Reload Design (Reference (a)). The NRC has reviewed and approved the methodology presented in the Topical Report (Reference (g)).

The Topical Report and subsequent approval by the NRC, establishes CECo as a qualified user of the General Electric (GE) neutronics methodology. The GE methods are described in the GESTAP-II (Reference (d)).

CECo has two fuel vendors for its three BWR stations: GE is the fuel supplier for Quad Cities and LaSalle County Stations; Siemens (formerly ANF) is the fuel supplier for Dresden Station. Due to the differences between the GE and Siemens neutronic methodologies with respect to the Critical Power correlation and the associated uncertainties, CECo is currently not planning on using the GE methods described in the topical report for neutronic licensing calculations for Dresden Station (which has Siemens - supplied fuel).

The current version of Section 6.6 of both LaSalle County and Quad Cities' Technical Specifications references NEDE-24011-P-A (Reference (d)) as the only approved analytical methodology. The proposed changes maintain NEDE-24011-P-A and include CECo's Topical Report (including Supplements 1 and 2). The proposed changes allow CECo to perform the analyses necessary to determine the core operating limits for both LaSalle County and Quad Cities Stations.

#### BASIS OF REQUESTED AMENDMENT

This amendment request is to add the CECo Topical Report, and its Supplements to Quad Cities and LaSalle County Stations' Technical Specifications in Section 6.6, which describes the approved analytical methods for developing the licensing values contained in the COLR. This will allow CECo to perform the neutronic licensing calculations for Quad Cities and LaSalle County.

CECo demonstrated their capability to perform the neutronic analyses required for licensing, operation, testing and surveillance of a BWR reload cycle and provided these results to the NRC for review and concurrence. The NRC reviewed and approved the results contained in the CECo topical and thus determined that the Topical is acceptable for referencing for future reload cycles (Reference (g)).

## ATTACHMENT A (continued)

### FUTURE ANALYSES AND USES

The analyses for pressurization events, stability margins, and Loss of Coolant Accident (LOCA) will continue to be maintained by General Electric for LaSalle County and Quad Cities Stations. CECO will generate the future Core Operating Limits Reports (COLR) in accordance with Reference (d). The benchmarks provided in References (a), (b), and (c) displayed that CECO's calculation of the thermal-mechanical parameters will have no adverse effect on the validity of the cycle specific limits or associated calculations. In addition, CECO will generate the updates to the Core Monitoring software by the methodologies described in Reference (d).

### CECO RELOAD IMPLEMENTATION SCHEDULE

Because CECO is phasing in the process of reload design, an Interfacing Procedure with GE was developed for establishing responsibilities and communication protocol during the phase in process. The purpose of the Interfacing Procedure is to provide the guidelines for design related technical interactions between CECO and GE and to provide detailed guidelines for the type of information, type of correspondence and schedule for interactions between CECO and GE.

The current schedule for phasing in CECO responsibility for reload design is as follows:

<u>UNIT/CYCLE</u>	<u>STARTUP DATE</u>	<u>CECO RESPONSIBILITIES</u>
LaSalle Unit 2 Cycle 5	April 1992	Performed all initial fuel management. Performed neutronic licensing calculations in parallel with official GE calculations.
Quad Unit 1 Cycle 13	November 1992	Performed all initial fuel management. Will perform all neutronic licensing calculations in parallel with official GE calculations. Will develop Core Monitoring Code inputs in parallel with official GE inputs.
LaSalle Unit 1 Cycle 6	January 1993	Perform all initial fuel management. Perform all neutronic licensing calculations. Develop Core Monitoring Code inputs in parallel with official GE inputs.
Quad Unit 2 Cycle 13	June 1993	Perform all initial fuel management. Perform all neutronic licensing calculations. Tentatively develop Core Monitoring Code inputs.



## ATTACHMENT A (continued)

### SUMMARY

CECo proposes to revise Technical Specification Section 6.6 of Quad Cities Units 1 and 2 and LaSalle County Station Units 1 and 2 to include the CECo Topical Report NFSR-0085 and its supplements. The proposed revisions for these amendments, which are identical, are presented in Attachment B and C for Quad Cities and LaSalle County, respectively. The proposed changes will allow CECo to perform the reload neutronic calculations for Quad Cities and LaSalle County Stations. CECo requests that these amendments be issued by June 15, 1992. There are no other Technical Specification changes required.

### SCHEDULE

The normal reload development process requires a lead time of approximately six (6) months. Because LaSalle Unit 1 is scheduled to startup from a refuel outage in January 1993, CECo requests approval for both LaSalle County and Quad Cities Stations, by June 15, 1992 to facilitate the usage of CECo methodologies for initiating the analyses necessary for LaSalle Unit 1, Reload 5. CECo considers this amendment to be purely administrative and hence, the June 15, 1992 date should provide sufficient time for NRC review. The first full utilization for the CECo methodology at Quad Cities is not scheduled for usage until June 1993.