

Commonwealth Edison Company  
LaSalle Generating Station  
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Tel 815-357-6761



November 1, 1996

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

**Subject:** LaSalle County Station Response to NRC Bulletin  
96-03, "Potential Plugging of Emergency Core Cooling  
Suction Strainers by Debris in Boiling Water Reactors"  
LaSalle County Station Units 1 and 2  
NRC Dockets 50-373 and 50-374

This report provides the ComEd LaSalle County Station (LaSalle) required 180 day response to NRC Bulletin 96-03, "Potential Plugging of Emergency Core Cooling Suction Strainers by Debris in Boiling Water Reactors", dated May 6, 1996. The technical details of the LaSalle response are provided in Attachment 1 to this letter. A summary of the response is provided below.

#### **REQUESTED ACTIONS**

*All BWR licensees are requested to implement appropriate measures to ensure the capability of the ECCS to perform its safety function following a LOCA. The staff has identified three potential resolution options; however, licensees may propose others which provide an equivalent level of assurance that the ECCS will be able to perform its safety function following a LOCA. The three options identified by the staff are as follows:*

Option 1: Installation of a large capacity passive strainer design.

Option 2: Installation of a self-cleaning strainer.

Option 3: Installation of a backflush system.

*All licensees are requested to implement these required actions by the end of the first refueling outage starting after January 1, 1997.*

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LaSalle (BWR-5, Mark II Containment) has evaluated the options identified in NRC Bulletin 96-03 and has determined that the installation of large capacity passive strainers (Option 1), is the optimum method of resolving the issue of ECCS suction strainer plugging. LaSalle is currently planning to install these new strainers on each of the ECCS suction lines from the Pressure Suppression Pool (PSP) during the next scheduled refueling outages, L1R08, currently scheduled for Fall, 1997, and L2R08, currently scheduled for Fall, 1998. As stated in the UFSAR, LaSalle is configured to normally take five (5) ECCS pump suction from the PSP (A/B/C RHR, HPCS, and LPCS). In addition, one of the RCIC suction flowpaths draws from the PSP.

Conceptual sizing of the new (stacked disk) strainers was based upon selecting the largest strainer dimensions that satisfied three basic constraints. First, the new strainer will need to fit through the 36" diameter PSP manway access. Second, the strainer assembly weight should result in piping stresses that are within the existing calculation limits, and third, the hydrodynamic load impact would also remain within the existing hydrodynamic load envelope. Strainer sizing guidance will be taken from the "Utility Resolution Guidance (URG) for Resolution of ECCS Suction Strainer Blockage" to assure that the final strainer size is large enough to accommodate all debris expected to result from the worst case LOCA.

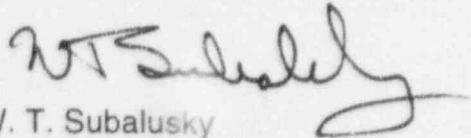
Within sixty (60) days of the issuance of the NRC's Safety Evaluation Report (SER) of the URG document, LaSalle will submit a follow-up correspondence to address and/or reconcile any plant specific technical issues created during the URG review process. In addition, proposed Technical Specification Surveillance requirements will be addressed following completion of our plant specific technical design work.

In accordance with the Bulletin requirements, within thirty (30) days of completion of all requested actions, a report confirming completion and summarizing all actions taken will be submitted to the Staff.

To the best of my knowledge and belief, the statements contained in this document are true and correct.

If there are any questions or comments concerning this letter, please refer them to me at (815) 357-6761, extension 3600.

Respectfully,



W. T. Subalusky  
Site Vice President  
LaSalle County Station

Enclosure

cc: A. B. Beach, NRC Region III Administrator  
M. P. Huber, NRC Senior Resident Inspector - LaSalle  
D. M. Skay, Project Manager - NRR - LaSalle  
F. Niziolek, Office of Nuclear Facility Safety - IDNS  
DCD - Licensing (Hardcopy:    Electronic:    )  
Central File

## ATTACHMENT 1

### LASALLE COUNTY STATION RESPONSE TO NRC BULLETIN 96-03

LaSalle County Station (LaSalle) has evaluated the options identified in Bulletin 96-03 and has determined that the installation of large capacity passive strainers (Option 1), is the preferred method of resolving the issue of potential ECCS suction strainer plugging. LaSalle has scheduled installation of the higher capacity passive strainers during the next scheduled refueling outages, L1R08, Fall, 1997, and L2R08, Fall, 1998. The strainers to be installed are expected to be of the stacked disk design to maximize strainer surface area.

The piping insulation installed in the drywell at LaSalle Unit 1 & 2 is RMI with 1.5 mil thick aluminum foil liners. The replacement strainers are expected to be of sufficient capacity to ensure that debris loading equivalent to a scenario calculated in accordance with the "Utility Resolution Guidance (URG) for Resolution of ECCS Suction Strainer Blockage" as developed by the Boiling Water Reactor Owner's Group, does not cause an unacceptable reduction of NPSH for each ECCS, therefore ensuring compliance with 10 CFR 50.46. Based on an initial engineering strainer sizing assessment, the new strainers for the RHR(3), LPCS, HPCS and RCIC systems will have a nominal 5-fold increase in surface area when compared to the existing installation. The preliminary strainer dimensions were selected to maximize the surface area while remaining within the existing structural and hydrodynamic load analyses.

Additionally, LaSalle will establish new and/or modify a) existing licensing basis documentation, and b) programs as necessary, to ensure that the potential for debris to be generated and transported to the strainer surface does not, at any time, exceed the calculated capacity of the replacement strainers. As a minimum, LaSalle's UFSAR and Modification Program will be updated to reflect the updated ECCS strainer design basis.

LaSalle will be utilizing the technical methodology presented in the URG as developed by the Boiling Water Reactor Owner's Group. As this document is currently in DRAFT status, initial design will proceed with the draft information, but will not be finalized until this document has been reviewed and approved by NRC. It is understood that NRC plans to issue a Safety Evaluation Report (SER) to approve the URG calculational methodology.

Although LaSalle intends to closely follow the recommendations of the URG, there exists a potential for plant specific conditions to warrant exceptions. Any technical issues that may need to be clarified or reconciled will be addressed in a 60 day follow-up response to NRC.

The existing ECCS strainers at LaSalle were designed and fabricated to meet all appropriate requirements of ASME Section III, Class 2. The new replacement strainers will also be designed and fabricated to these original specifications.

## ATTACHMENT 1

### LASALLE COUNTY STATION RESPONSE TO NRC BULLETIN 96-03

#### Supporting Actions

The Pressure Suppression Pool (PSP) was cleaned, desludged, and inspected during the most recent refueling outages for each unit (L1R07 in January, 1996, and L2R07 in September, 1996). The existing strainers will be inspected for as-found condition (prior to removal) during L1R08 and L2R08. Although LaSalle has not yet received an NRC SER for its response to NRC Bulletin 95-02, the PSPs will be desludged in accordance with the schedule committed to in our response to that Bulletin. This desludging frequency will be re-evaluated as part of the detailed design effort, and any changes will be addressed in the 60-day follow-up response.

LaSalle will continue to implement daily drywell housekeeping inspections and enhanced drywell closeout inspections during each unit outage.

STATE OF ILLINOIS )

COUNTY OF LASALLE )

Docket Nos. 50-373  
50-374

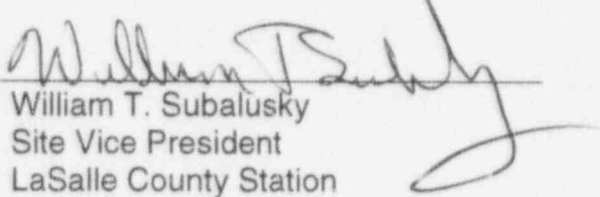
IN THE MATTER OF )

COMMONWEALTH EDISON COMPANY )

LASALLE COUNTY STATION - UNITS 1 & 2 )

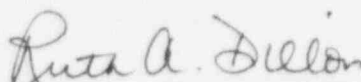
### AFFIDAVIT

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

  
William T. Subalusky  
Site Vice President  
LaSalle County Station

Subscribed and sworn to before me, a Notary Public in and  
for the State and County above named, this 30<sup>th</sup> day of  
October, 1996. My Commission expires on  
March 28, 2000.



  
Ruth A. Dillon  
Notary Public