



Commonwealth Edison

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March 13, 1984

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Subject: LaSalle County Station, Units 1 and 2
Fire Protection
NRC Docket Nos. 50-373 and 50-374

- References (a): LaSalle County Station Unit 2 Facility
Operating License NPF-18 (December 16, 1983).
- (b): C.W. Schroeder letter to H.R. Denton dated
November 23, 1983.
- (c): Inspection Report Nos. 50-373/83-44 and
50-374/83-48.

Dear Mr. Denton:

This letter and attachments were prepared in response to the following three items:

- 1) Reference (a) identified condition 2.C (15)(h) which states:

Prior to exceeding five percent power, the licensee shall provide a surveillance program for NRC staff approval to ensure operability of the fire dampers. This program will include a periodic operability test of a sample population of accessible dampers.

- 2) Reference (b) contained issue 8(b) which states:

Commonwealth Edison Company meets all current requirements of Appendix R and the Standard Technical Specifications regarding the operability surveillances of fire doors and fire dampers. The NRC has a concern, however, that the current requirements may not be sufficient to assure operability of fire doors and fire dampers for the forty year life of the plant.

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COMMITMENT

Commonwealth Edison Company agrees to develop a surveillance program to assure the long term operability of dampers. This program, which will include periodic operation of a sample population of accessible dampers, will be in place prior to exceeding 5% power and will be reviewed for technical adequacy by a fire protection engineer. Surveillances as a result of this program will be initiated prior to startup following the first refueling outage.

- 3) Reference (c) identified unresolved items 50-373/83-44-13 and 50-374/83-48-19 concerning this matter and referred them to NRR for resolution.

It is requested the above three matters be closed based on the following information.

1. The fire dampers at LaSalle County Station were purchased in 1976 and the applicable NFPA Standard is the 1976 edition of NFPA 90A. Appendix B in NFPA 90A is not mandatory and is included in the standard for guidance only. According to Appendix B, Article B-7 of the 1976 standard, "Each fire door and fire damper should be examined once a year, giving attention to hinges and other moving parts, to see that it is in good operable condition". This requirement is satisfied by a periodic visual inspection of all fire dampers. If the visual inspection reveals damage or corrosion, corrective action can be taken to resolve the problems. LaSalle County Station procedure LTS-1000-36 meets these requirements. A copy of this procedure is included as Attachment A for information only (future revisions will be controlled in accordance with the LaSalle Unit 2 Technical Specification Administrative Section).
2. CECO's position identified in 1. above has been concurred with by Schirmer Engineering in a March 1, 1984 letter to Sargent and Lundy Engineers:

"We have reviewed NFPA Standard 90A, Appendix B, regarding procedures to be utilized at LaSalle County Station (LSCS) and the scheme of operation of the air handling systems serving selected areas.

We concur that a visual inspection program for fire dampers at LSCS meets the intent of NFPA 90A regarding periodic maintenance, provided that further investigation, including operation of the damper, should be conducted if the visual inspection reveals signs of damage, wear, corrosion, etc., which may affect the operation of the damper. It is my understanding that procedures in effect at LSCS incorporate the above. Such procedures would constitute good fire protection engineering practice and would be consistent with actual practices in the industry."

3. A review of LER history of failed fire dampers, as maintained by INPO and included as Attachment B, does not indicate problems that a good visual surveillance would not discover and correct.

CONCLUSION

We are convinced that fire dampers which are initially tested for operability to verify correct installation can be maintained operable throughout their lifetime by a good visual inspection of all fire dampers. LTS-1000-36 satisfies this requirement.

ADDITIONAL INFORMATION

NFPA 90A (1983)

Although the 1983 edition of NFPA 90A is not applicable to the LaSalle Station fire dampers, we have also reviewed the requirements of Appendix B, Article B-7, to the 1983 standard. The following requirement was added to this latest edition: "It is desirable to operate doors or dampers with normal system airflow to assure that they are not held open by the air stream". NFPA 90A technical committee's unofficial interpretation of this requirement is as follows (an official interpretation from the the committee has been requested by S&L letter dated March 7, 1984):

1. Fire dampers in systems that shutdown upon detection of smoke need not be tested under airflow conditions.
2. Fire dampers in engineered smoke control systems that are designed to continue operation upon detection of smoke should be tested under air flow conditions.

BACKGROUND

There are 292 fire dampers in the plant at the LaSalle County Station. 102 of these are in systems that automatically shutdown on detection of smoke. The following 190 dampers are in systems that do not shutdown automatically with smoke in the plant. Areas served by these systems have smoke detectors that alarm locally and in the Control Room.

<u>System</u>	<u>Total</u>
VC (Control Room)	19
VE (Auxiliary Electrical Equipment Rooms)	27
VH (Lake Screen House)	?
VR (Reactor Building)	4
VT (Turbine Building)	51
VW (Radwaste Building)	15
VX (Switchgear Rooms)	65
VY (Equipment Core Cooling Systems)	7
Total	190

COMMITMENTS

1. The 102 fire dampers in systems that automatically shutdown on smoke detection (VA, VD, VL, VV) need only be visually inspected periodically in accordance with Procedure LTS-1000-36.
2. The VT, VW, VX, and VY systems should remain operational on area smoke detection and be shutdown at the discretion of personnel responding to a smoke alarm. To accomplish manual shutdown of these systems, LaSalle's fire fighting procedures will incorporate this requirement prior to startup following the first refueling outage at Unit 2. Therefore, the 138 fire dampers in these systems need only be periodically inspected visually in accordance with Procedure LTS-1000-36.
3. Systems VC and VE should not be shutdown upon detection of smoke. These systems are designed to continuously operate to protect IEEE-323 qualified electrical equipment in the Control Room and Auxiliary Electrical Equipment Rooms. In the event of serious fire these ventilation systems can be shutdown by trained personnel.

The two lake screen house (VH) fire dampers are in walls between the pump house and diesel-driven fire pump rooms. These dampers need not be shutdown on detection of smoke, they will close on temperature (165°F). With a fire damper closed, cooling air for the diesel engine and pump is obtained from outside the building through a louver with a control damper on the inside.

To control contaminants, the Reactor Building System (VR) will continue to operate in order to maintain a negative pressure in the Containment Building. The four fire dampers in the VR system are in the supply ducts to the two elevator machine rooms, and in openings between the elevator machine rooms and the fuel loading bay.

The accessible dampers in VC, VE, VH and VR Systems will be tested with systems operating to assure that they will close under airflow conditions prior to startup following the first refueling outage at Unit 2. If the dampers fail to close during this test, they will be modified or the system will be manually shutdown in accordance with Commitment No. 2. Having demonstrated that these dampers close under system airflow, there is no need for periodic operability testing; however, periodic visual inspection in accordance with Procedure LTS-1000-36 will be performed.

H. R. Denton

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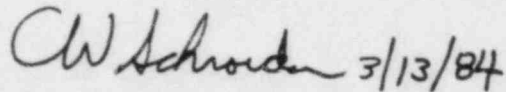
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To the best of my knowledge and belief the statements contained herein and in the enclosures are true and correct. In some respects these statements are not based on my personal knowledge but upon information furnished by other Commonwealth Edison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

If there are any questions regarding this matter, please contact this office.

Enclosed for your use are one signed original and ten (10) copies of this letter and the enclosure.

Very truly yours,

Handwritten signature of C. W. Schroeder, dated 3/13/84.

C. W. Schroeder
Nuclear Licensing Administrator

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cc: Dr. A. Bournia - Federal Express
NRC Resident Inspector - LSOS

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