



Commonwealth Edison  
1400 Opus Place  
Downers Grove, Illinois 60515

June 7, 1991

U.S. Nuclear Regulatory Commission  
ATTN: NRR Document Control Desk  
Washington, DC 20555

Subject: LaSalle County Station Units 1 and 2  
Response to Notice of Violation  
Inspection 50-373/91005; 50-374/91004  
NRC Docket Nos. 50-373 and 50-374

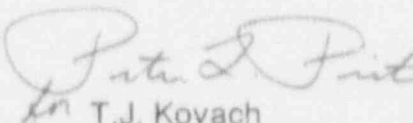
Reference: W.D. Shafer letter to Cordell Reed dated  
May 8, 1991 transmitting NRC Inspection  
Report 50-373/91005; 50-374/91004

Enclosed is Commonwealth Edison Company's (CECo) response to the subject Notice of Violation (NOV) which was transmitted with the referenced letter and Inspection Report. The NOV cited two Severity Level IV violations. The first violation was the result of an excessive delay in correcting a fire protection issue. The second violation cited six (6) examples of procedural inadequacies or lack of adherence to procedures.

CECo understands the significance of these events as well as the need for effective corrective actions to prevent recurrence. These have been considered in developing actions in response to the cited violations. LaSalle Station has performed a review of all Deviation Reports and Licensee Event Reports since 1990 which were procedure related events. This review was conducted to determine the collective root cause of events such as those identified in this NOV and also in previous inspection reports. The results of this review are being evaluated to determine the appropriate form of corrective action. CEC's response to the cited violations is provided in the following attachment.

If your staff has any questions or comments concerning this letter, please refer them to Annette Denenberg, Compliance Engineer at (708) 515-7352.

Very truly yours,

  
for T.J. Kovach  
Nuclear Licensing Manager

GAD/TJK/CAH

Enclosure

cc: A.B. Davis, Regional Administrator - RIII  
B. Siegel, Project Manager - NRR  
T. Tongue, Senior Resident Inspector

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**VIOLATION: IR 374/91004-01**

10 CFR 50, Appendix B, Criterion XVI, states, in part, measures shall be established to ensure that conditions adverse to quality, such as failures, malfunctions, deficiencies, deviations, defective material and equipment and nonconformances are promptly identified and corrected.

Contrary to the above, from 1987 to April 16, 1991, a condition adverse to quality, a fire hazard, was not promptly corrected. A work request dated in 1987 identified oil leakage from the 2A Turbine Driven Reactor Feed Pump (TDRFP) which had saturated fire retardant materials in the Unit 2 Auxiliary Building. This condition and a similar condition of unknown duration regarding the 1A TDRFP identified by the NRC had not been corrected as of April 16, 1991. (374/91004-01)

**RESPONSE:**

Commonwealth Edison acknowledges the violation. The violation involved CEC's failure to replace oil saturated fire retardant insulation in a timely manner.

Commonwealth Edison reviewed the condition when it was found in 1987. At that time, the Station Fire Marshall and the insulation vendor determined that the oil soaked insulation was an acceptable fire retardant because it was not wet. The replacement of the insulation was therefore deferred until the feedpump oil leaks could be adequately repaired to prevent recurrence of oil leaking onto the insulation. However, after the oil leaks were repaired, there was no feedback to initiate the work request to have the insulation replaced.

The Station considers the length of time that the identified condition existed to be unacceptable. The oil soaked insulation should have been replaced following the repairs for the oil leaks since a unit outage was not required to perform the insulation work.

**CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED:**

The oil leaks were repaired and the insulation was replaced for the identified TDRFPs. Additionally, the remaining TDRFPs were examined to ensure that similar conditions did not exist.

**CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:**

Drainage trays were installed on the 1A and 2A TDRFPs to help catch oil and channel it away from areas where it could drip on insulation and other components.

Additionally, closer attention will be given to completion of work requests dealing with fire protection issues. The Station Fire Marshall or Assistant will review fire protection designated Work Requests for urgency and scheduling input.

**DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:**

The corrective actions in response to the violation have been completed for both units. Full compliance has been achieved.

**VIOLATION: IR 373/91005-01a to 373/91005-01f**

10 CFR 50, Appendix B, Criteria V, states, in part, that activities affecting quality shall be prescribed by documented instructions, procedures, or drawings of a type appropriate to the circumstances, and shall be accomplished in accordance with these instructions, procedures or drawings.

Contrary to the above, the following are examples of improper procedure adequacy and adherence:

**EXAMPLE A:**

On March 21, 1991, Work Request L99799 was inadequate for preventive maintenance on the Unit 1 hydrogen recombiner when it failed to require replacement of the blower cover which resulted in a loss of Unit 2 primary containment to the secondary containment. The work procedure allowed the hydrogen recombiner to be lined up to the drywell of the operating unit with the blower cover removed. The blower cover is an integral part of the primary containment. The need to have the blower cover installed had been previously identified during the last performance of this preventative maintenance on Unit 2 in 1988 Work Request L75487. (373/91005-01a)

**CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:**

The blower was started at 11:10 on March 21, 1991 and remained running for ten minutes. Operations discovered the breach of Unit 2 primary containment at 11:50, with subsequent corrective actions as follows:

- Immediately entered a one hour time clock pursuant to Technical Specification 3.6.1.1.
- Immediately closed the Unit 2 hydrogen recombiner (HG) primary containment isolation valves.
- At 13:45, started post-LOCA sampling equipment to analyze Unit 2 suppression chamber oxygen content which was found to be greater than 4%.
- At 14:05, entered twenty-four hour timeclock pursuant to Technical Specification 3.6.6.2.
- At 14:20, secured post-LOCA sampling equipment with suppression chamber oxygen content at 4.8%.
- At 19:15, started inerting Unit 2 suppression chamber.
- At 20:40, secured inerting with suppression chamber oxygen content within acceptable limits at 2.6%.

## CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

The LaSalle Station Technical Staff has determined that the work procedure should only be performed while the unit is in condition 4 or 5, and that the HG primary containment valves on the opposite unit should be taken administratively out-of-service. When the system is in this configuration, the blower can run with the cover removed.

A revision to LES-HG-103 (Rev. 1, entitled "Hydrogen Recombiner Blower Motor Lubrication") has been submitted as recommended by the cognizant Technical Staff system engineer. The following changes and additions to LES-HG-103 will be incorporated:

1. A prerequisite will be added to take the affected HG primary containment isolation valves for both units administratively out-of-service (closed) during maintenance noting that the Out-of-Service for the 5A and 6A valves of the outage unit will need to be temporarily lifted for the ten minute run.
2. A precaution will be added to specify that the blower will be operated with its cover removed, and that this arrangement will cause the blower to take suction from the reactor building atmosphere and thus shall not be allowed to discharge to primary containment in reactor conditions 1, 2, or 3.
3. A limitation statement will be added noting that the primary containment as defined by the existing hydrogen recombiner loop will be breached with the removal of the blower cover.
4. A limitation statement will be added noting that the hydrogen recombiner will be considered inoperable and remain isolated from required Primary Containment until a successful local leak rate test (LLRT) is completed.
5. A procedure step will be added after the section for the ten minute run to notify the Technical Staff to perform a local leak rate test following completion of all work. Additionally, it will be noted that an integrated leak rate test (ILRT) is not an acceptable substitute for an LLRT.

## DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Compliance via the immediate corrective action was achieved by 20:40 on March 21, 1991. At that time, the Unit 2 primary containment was secured with suppression chamber oxygen content within acceptable limits.

Revision 1 of LES-HG-103 is scheduled for completion by December 1, 1991.

#### EXAMPLE B:

On January 2, 1991, work performed was not in accordance with procedure LEP-EQ-115, "Klockner-Moeller Circuit Breakers and Related MCC Equipment," which requires that a functional test of the overload bypass circuitry be performed after maintenance in order to meet Technical Specification 4.8.3.3.1.b. This resulted in an inadequate work request which allowed the Unit 1 drywell nitrogen make-up valve 1VQ047 to be placed back in service without a test of the overload bypass circuitry after replacing the forward/reversing motor starter contactor. (373/91005-01b)

#### CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

The 1VQ047 valve was immediately closed and declared inoperable. The applicable action required by Technical Specification 3.6.3. was taken to close and deactivate valve 1VQ047 within the required four hours. An Out-Of-Service on the valve was logged as completed at 08:40 on January 3, 1991. The 1VQ047 valve was tested for overload bypass and performed satisfactorily per procedure LST-91-002. This test occurred during the afternoon shift on January 3, 1991 under the applicable timeclocks of Technical Specifications 3.6.3. and 3.8.3.3. The 1VQ047 valve was then returned to operable status.

The Electrical Maintenance personnel involved with this event have been counseled, emphasizing strict adherence to procedures.

This event was reviewed with all Electrical Maintenance Department personnel to clarify the Technical Specification requirements of procedure LEP-EQ-115.

#### CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

Procedure enhancements are being made to clarify the Technical Specification requirements of procedure LEP-EQ-115 steps E.3 through E.5.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved with the return of the 1VQ047 valve to an operable status.

The revision to LEP-EQ-115 is scheduled for completion by November 1, 1991.

## EXAMPLE C

On March 16, 1991, a procedure was not appropriate such that instrument surveillance LIS-NR-103BA, "Unit 1 Average Power Range Monitor (APRM) Channels B, D, F Rod Block and Scram Semi-Annual Calibration for Normal Conditions," failed to provide a step to reposition a meter scale switch which was necessary to proceed. The surveillance was completed under verbal authorization from the Instrument Maintenance Supervisor. (373/91005-01c)

### CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

A procedure step was inserted in the appropriate sections of LIS-NR-103AA, LIS-NR-103AB, LIS-NR-103BA and LIS-NR-103BB. This additional procedure step addresses the APRM's panel meter scale switch position which the technician must use in order to perform the calibration. Prior to this change, this switch position was indeterminate. Additional clarifications and typographical corrections were made based upon feedback from workers and supervisors. With the addition of the step and other minor corrections, the procedures used to perform the APRM calibrations are now effective and consistent.

### CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

LaSalle Station cautiously approached revising the procedures for the APRM calibrations and functional tests. A temporary procedure was written for functional testing in order to preclude any serious problems, prior to the permanent procedure being approved. This type of action is used when deemed appropriate by the Station based upon the extent of change to a procedure. Once the permanent procedures are approved, feedback from the field, via addendum deficiency sheets, provide the input needed to make the Instrument Maintenance procedures as effective as possible.

### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved upon adding the procedure step which addresses meter scale switch positioning. Procedure enhancements resulting from field input are a continuing process.

#### EXAMPLE D:

On March 19, 1991, a procedure was not appropriate when an inadvertent engineered safety feature (ESF) actuation occurred. While performing diesel generator protective relay calibrations in accordance with procedure LES-GM-129, "Unit 1 Southern Division OAD Periodic Protective Relay Calibration Procedure at LaSalle County Station for Relays Not Mentioned in Technical Specifications" the auto-start signal to diesel generator 1B occurred when the feeder breaker to bus 143 opened. Although LES-GM-129 provides for disabling trips that could occur during testing, the procedure did not give specific direction as to what items were required to be disabled. The opening of the feeder breaker was a direct result of not disabling the proper trips during the performance of LES-GM-129. The diesel generator did not auto-start because it was inoperable due to preventive maintenance. (373/91005-01d)

#### CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Once the cause of the feed breaker trip was determined, ESF bus 143 was reenergized.

Onsite OAD personnel were tailgated on this event, emphasizing that care must be taken when using general procedures to ensure all isolation points are identified prior to performing required actions.

#### CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

LES-GM-129 and LES-GM-229 are being replaced with procedures written on a per system/equipment basis (LES-GM-300/400 series). These new procedures will specify equipment isolation points required to perform the surveillance, and will no longer rely solely on test personnel review. The procedure writing and submittal for the LES-GM-300/400 series was begun in early 1990 as part of a response to concerns identified in an evaluation of 4 kV preventive maintenance.

Additional revisions of the new procedure LES-GM-309 ("Unit 1 Southern Division OAD Inspections and Calibrations for the DG-1B System") which relate specifically to this event have been written and submitted for approval.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved upon reenergizing ESF bus 143. The revision to LES-GM-309 is scheduled for completion by July 31, 1991. Completion of the remaining LES-GM-300/400 series of procedures for other systems and equipment is expected by Fall 1991.

#### EXAMPLE E:

On March 28, 1991, activities affecting quality were not accomplished in accordance with documented procedures when failure to follow LOP-RP-03, "RPS Bus A Transfer," resulted in a Group IV Primary Containment Isolation. The Nuclear Station Operator responsible for the evolution made an error while copying instructions from the procedures which were given to equipment operators. Use of the incorrect instructions caused the Group IV isolation. (373/91005-01e)

#### CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Unit recovery from the isolation was performed in accordance with LOA-VR-01, "Recovery from a Group IV Isolation or Spurious Trip of Reactor Building Vent."

The individuals involved in the event were counselled and reprimanded for failing to adhere to procedures. The counselling reiterated procedural adherence requirements and the need to employ correct and approved documents in performing evolutions.

#### CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

The operators involved in this event have tailgated the Operating crews on the importance of procedural adherence. This review stressed the significant consequences involved with transposing information from procedures onto note paper.

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance has been achieved.

#### EXAMPLE F:

On April 5, 1991, activity affecting quality was not prescribed by procedure when Residual Heat Removal (RHR) vents were apparently opened by an unauthorized individual(s). While returning the B RHR loop to service, approximately 100 gallons of water from the suppression pool was spilled onto the floor from the suction line vents. (373/91005-01f)

#### CORRECTIVE ACTIONS THAT HAVE BEEN TAKEN AND THE RESULTS ACHIEVED:

Upon noticing water coming from the high point vent valves, the equipment attendant present at the pump, closed the vent valves and installed the pipe cap. This action stopped the flow of water. The area where the water spilled was cleaned up.

A HPES investigation was performed to determine why the vent valves were open. The investigation was unable to determine how the valves came to be opened. Intentional mispositioning of the valves was considered and determined during the investigation not to be the cause of the event.

#### CORRECTIVE ACTIONS THAT WILL BE TAKEN TO AVOID FURTHER VIOLATIONS:

The following corrective actions were initiated as a result of the HPES investigation:

LOP-RH-03, "Draining the Residual Heat Removal System," will be revised to properly identify the valves that should be closed by Step F.6.h.2.

An evaluation is being performed to determine whether or not the high point vent valves should be locked valves.

To eliminate filling a system that has vent or drain valves mispositioned when returning the system to service, a mechanical checklist lineup of vents and drains will be employed prior to clearing outages that admit a liquid back into the system. This requirement is being added to LAP-900-4, "Equipment Out-Of-Service Procedure."

#### DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED:

Full compliance was achieved with the closure of the vent valves. The revision to LAP-900-4 is scheduled for completion by June 23, 1991. The evaluation of locking the high point vent or drain valves is scheduled for completion by July 2, 1991. The revision to LOP-RH-03 is scheduled for completion by September 2, 1991.