



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

April 23, 1993

U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

Subject: LaSalle County Nuclear Power Station Units 1 and 2
Reason to Reply to Notice of Violations
Inspection Report Nos. 50-373/92023; 50-374/92023
NRC Docket Nos. 50-373 and 50-374

Reference: H.J. Miller letter to C. Reed dated December 16, 1992
transmitting NRC Inspection Report
50-373/92023; 50-374/92023

D.L. Farrar letter to Document Control Desk dated
March 5, 1993, transmitting response to
Notice of Violation transmitted with
NRC Inspection Report 50-373/92023; 50-374/92023

T.O. Martin (NRC) letter to L.O. DelGeorge (CECo),
dated April 14, 1993, "Summary of Meeting Held on
April 6, 1993, with Commonwealth Edison Company
Representatives to Discuss Motor-Operated Valve
Operability Criteria"

Enclosed is the Commonwealth Edison Company (CECo) response to the
Notice of Violations (NOVs) which were transmitted with the reference
inspection report.

Attachment A supersedes the referenced response. CECo requests that
the previously submitted response be withdrawn.

If your staff has any questions or comments concerning this letter,
please refer them to Sara Reece-Koenig, Regulatory Performance
Administrator at (708) 663-7250.

Sincerely,

D.L. Farrar
Regulatory Services Manager

Attachment

cc: A.B. Davis, Regional Administrator - Region III
B. Stransky, Project Manager - NRR
D. Hills, Senior Resident Inspector

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Attachment A

RESPONSE TO NOTICE OF VIOLATION
NRC INSPECTION REPORT
50-373/92023; 50-374/92023

VIOLATION 1: (373/92023-01; 374/92023-01)

10 CFR 50, Appendix B, Criterion III requires, in part, that measures shall be established to assure that applicable regulatory requirements and the design basis, as defined in 10 CFR 50.2, are correctly translated into specifications, drawings, procedures, and instructions. These measures shall include provisions to assure that appropriate quality standards are specified and included in the design documents and that deviations from such standards are controlled.

Contrary to the above, as of November 20, 1992, an inappropriate equation (Limitorque's "stall torque" equation) was used to evaluate the design basis capability of safety-related MOVs. Appropriate technical justification for deviating from the vendor's recommendations was not presented.

This is a Severity Level IV Violation (Supplement I).

THE REASON FOR THE VIOLATION

CECo agrees that the appropriate written documentation justifying CECo's application of the motor stall capability calculation was not available for review by the NRC inspectors. The stall capability calculation was developed by CECo as an approach to address operability concerns on MOVs. Lacking an industry standard methodology for determining operability on MOVs, CECo developed the stall capability methodology using engineering judgement for known phenomena with respect to the operation of motor operated valves. CECo's stall capability calculation is only used in limited cases for establishing testing thrust windows and performing operability assessments on certain MOVs. Due to the changing nature of the industry's implementation of the recommendations in GL 89-10 and the need to address operability concerns in a timeframe commensurate with safety

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significance, the development and documentation of CECo's stall capability methodology was not subject to the rigorous approach that would typically be applied to design calculations. CECo believes that this approach is consistent with guidance for operability provided in GL 91-18. CECo presented the engineering basis for the stall capability methodology to the NRC during the LaSalle MOV inspection. However, CECo was not able to provide the NRC inspectors with appropriate written documentation justifying CECo's position.

CORRECTIVE STEPS TAKEN

Based on information provided by the NRC during the April 6, 1993, Management Meeting between CECo and NRC personnel at the Region III headquarters, CECo understands that the NRC disagrees with some of the assumptions that CECo utilizes in evaluating MOV operability via the stall capability calculation. Specifically, the NRC disagrees with the motor torque assumptions, motor gearing efficiency assumptions, and the application factor assumptions CECo has been using when evaluating operability for certain MOVs using the motor gearing capacity equation for stall capability.

CECo's understanding of the NRC's position, as provided in the April 6, 1993, meeting summary (Reference 3) is as follows:

1. The NRC does not believe that there is sufficient technical justification to use the 0 RPM stall torque value from the generic motor curves. Based on available information from Limitorque, the NRC believes the licensees would be technically justified in using up to and including 110% of the motor nameplate torque rating for evaluating MOV operability.
2. The NRC does not agree with CECo removing the Application Factor from the thrust equation when using the stall capability calculations to evaluate MOV operability.
3. Degraded voltage at locked rotor current should be considered in the evaluation.

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4. Utilization of a stem friction coefficient assumption <0.15 to justify MOV operability needs to have a rigorous technical justification.
5. Licensees should be using pullout and run efficiencies for the applicable circumstances in lieu of stall efficiency.
6. Operability determination for any MOV should consider the available design margins in all of the variables in the standard thrust equation as a whole, not just individually. The NRC staff believes that it is not necessary or productive to define specific values for each of the parameters in the MOV thrust equation. The NRC would consider reasonable technical assumptions where appropriate technical justifications were provided.

The population of MOVs that CECO justified operability through utilization of the old stall capability methodology have been reviewed by the NRC utilizing their own methodology. No operability concerns were identified. However, CECO no longer uses the stall capability methodology as discussed with the NRC inspectors during the LaSalle MOV inspection.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION

Commonwealth Edison is no longer using the stall capability methodology as presented to the NRC during the LaSalle MOV inspection. Any future modification to CECO's methodology will be appropriately documented.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance has been achieved in that the previous stall capability methodology is no longer used at CECO to justify operability on MOVs.

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VIOLATION 2: (373/92023-02; 374/92023-02)

10 CFR 50.9 requires, in part, that information provided to the Commission by a licensee shall be complete and accurate in all material aspects.

Contrary to the above, the licensee provided incomplete and inaccurate information to the Commission during a meeting on November 18, 1992, by presenting a copy of the telephone conversation record dated February 6, 1991, between Bechtel and the vendor (Limitorque). The record was represented by the licensee as Limitorque's position and as justification for the licensee's use of the stall torque equation. This information was incomplete and inaccurate in that the licensee has prior knowledge that use of the stall torque equation for the purpose intended by the licensee was not Limitorque's position. In addition, the record directly conflicted with information previously issued by Limitorque and discussed with CECO technical representatives.

This is a Severity Level IV violation (Supplement I).

REASON FOR VIOLATION:

CECo's personnel involved in the LaSalle MOV inspection understood that the NRC Inspectors were concerned with the fact that there appeared to be no formal documentation supporting the licensee's use of the stall capability calculations, even on an interim basis. CECO personnel advised the NRC that CECO's use of the stall capability calculation was distinct from the Limitorque equation and was limited in scope and duration. CECO agrees that documentation justifying CECO's application of motor stall was not available in CECO's files for review by the NRC inspectors. Because of the NRC's concerns, the 2/6/91 telecon record was presented to the Inspectors. It was not expressly represented to be Limitorque's current corporate position on the issue. However, CECO agrees that by presenting the document, the implication was that it represented Limitorque's position.

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REASON FOR VIOLATION (Continued)

CECo was acquainted with the Limitorgue employee who signed the 2/6/91 telecon record as an Applications Engineer with a technical background associated with MOVs, not as a sales representative as characterized in the inspection report. The cover letter that accompanied the fax transmittal of the 2/6/91 telecon record from the Limitorgue representative to Bechtel makes reference to another engineer at Limitorgue in the Nuclear Support Group. This contributed to CECo's perception that the content of the 2/6/91 telecon record had been given some level of technical review within Limitorgue.

CECo did not intentionally represent the 2/6/91 telecon record as Limitorgue's corporate position on the use of motor stall in MOV sizing calculations. Nonetheless, CECo agrees that the inspector was not provided completely accurate information, in that the relationship between the 2/6/91 telecon and Limitorgue's position was not clearly communicated by CECo to the inspector. Therefore, CECo accepts the violation.

CORRECTIVE STEPS AND RESULTS ACHIEVED:

The events surrounding the meeting and the circumstances which led to presentation by CECo of the 2/6/91 telecon record and the subsequent Notice of Violation of 10 CFR 50.9 from the NRC were reviewed with the CECo personnel. The importance of providing complete and accurate information to the NRC during inspections is clear to all individuals involved in the event.

CORRECTIVE STEPS TAKEN TO AVOID FURTHER VIOLATION:

A Lessons Learned report will be distributed by May 31, 1993, describing the circumstances which contributed to the 10 CFR 50.9 violation and the importance of providing complete & accurate information.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

Full compliance is achieved with submittal of this response. Additional information to be used in lieu of the teleconference in question is not available.