TERA

BOILING WATER REACTOR LICENSEES

Docket No. 50-293
Pilgrim Unit 1

Docket No. 50-325
Brunswick Unit 1

Docket No. 50-324
Brunswick Unit 2

Docket No. 50-10
Dresden 1

Docket No. 50-237
Dresden 2

Docket No. 50-249
Dresden 3

Docket No. 50-254
Quad-Cities Unit 1

Docket No. 50-265
Quad-Cities Unit 2

Docket No. 50-155
Big Rock Point

Docket No. 50-409
Lacrosse

Docket No. 50-321
Edwin I. Hatch Unit 1

Docket No. 50-366
Edwin I. Hatch Unit 2

Docket No. 50-331
Duane Arnold

Docket No. 50-219
Oyster Creek

Docket No. 50-220
Nine Mile Point Unit 1

Docket No. 50-298
Cooper Station

Docket No. 50-245
Millstone Unit 1

Docket No. 50-263
Monticello

Docket No. 50-133
Humboldt Bay

Docket No. 50-277
Peach Bottom Unit 2

Docket No. 50-278
Peach Bottom Unit 3

Docket No. 50-333
FitzPatrick

Docket No. 50-259
Browns Ferry Unit 1

Docket No. 50-260
Browns Ferry Unit 2

Docket No. 50-296
Browns Ferry Unit 3

Docket No. 50-271
Vermont Yankee

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 10 1981

TO ALL BWR LICENSEES

SUBJECT: SAFETY CONCERNS ASSOCIATED WITH PIPE BREAKS IN THE BWR SCRAM SYSTEM

Yesterday, we discussed with your representatives the NRC's Office of Analysis and Evaluation of Operational Data report entitled, "Safety Concerns Associated with Pipe Break in the BWR Scram System." The Report describes a potential sequence of events which could result from a break in the BWR scram discharge piping during a scram condition concurrent with an inability to reclose the scram outlet valves. Concerns identified include the quality of the scram discharge volume piping, the ability to detect and isolate such a break, and potential water and steam degradation of available ECCS equipment as a result of the break. A number of recommendations were made in the report to remedy the potential concerns.

We are presently studying these issues and recommendations to determine whether BWR design basis accidents should be modified and as a consequence whether appropriate actions should be taken for operating BWR plants. The purpose of this letter is to provide to you the AEOD report so that you can evaluate its applicability to your plant and determine appropriate remedial measures, and to request information from you concerning your evaluation in order to assist in determining an appropriate course of action for the NRC.

Therefore, pursuant to 10 CFR 50.54(f) please provide us in writing, under oath or affirmation, within 45 days of your receipt of this letter, the following information:

1. A generic evaluation of the applicability of the indicated sequences of events in the report to the BWR plant design, your estimate of the probability of occurrence of such sequences, and the bases for these conclusions,

2. A generic evaluation of the applicability of the indicated safety concerns and findings in the report relative to BWR plant construction, design, and operation and the bases for these conclusions, and

3. A generic evaluation of the recommendations listed in the report discussing the degree to which the recommendations are being or have been implemented with bases why the recommendations should or should not be completely implemented on BWRs.

In addition, pursuant to 50.54(f) provide the following information in writing within 120 days of your receipt of this letter:

1. Provide an evaluation of the applicability of the 45 day generic evaluation to your plant. This evaluation should contain plant specific considerations related to system design, instrumentation, construction, operation, operator training, and emergency procedures for your plant.

2. In light of the AEOD report and the 45 day generic evaluation, provide a plant specific evaluation of your facility's Scram Discharge Volume System conformance to GDC 14, GDC 35, GDC 55, §50.2(v), 50.55a (including footnote 2), and §50.46 of the Commission's regulations. This evaluation should address which portions of the Scram Discharge Volume System are considered to be part of the reactor coolant pressure boundary, the quality group and safety class of the Scram Discharge Volume System, the codes and standards used for the design, fabrication and inservice inspection of this system, and your bases for the above classifications or groupings.

3. Provide by analysis or reference a demonstration that a break located anywhere in the Scram Discharge Volume System could meet the requirements of §50.46 of the Commission's regulations, taking into account the environmental and flooding aspects of such a break.

This request for information was approved by GAO under a blanket clearance number R0072 which expires November 30, 1983. Comments on burden and duplication may be directed to the U.S. General Accounting Office, Regulatory Reports Review, Room 5106, 441 G Street, N.W., Washington, D.C. 20548.

Sincerely,

Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Enclosure:
As stated

cc: Service List with Enclosure

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

APR 3 1981

MEMORANDUM FOR: Harold R. Denton, Director
Office of Nuclear Reactor Regulation

FROM: Carlyle Michelson, Director
Office for Analysis and Evaluation of
Operational Data

SUBJECT: AEOD SAFETY CONCERNS ASSOCIATED WITH
PIPE BREAKS IN THE BWR SCRAM SYSTEM

Since our earlier investigations, prompted by the Browns Ferry 3 control rod insertion failure on June 28, 1980, AEOD has continued to study other potential safety concerns associated with the BWR scram system. As a result of this further review, important additional and possibly generic issues and safety concerns have been raised. Our concerns address the adequacy of the isolation arrangements and operation of the ECC systems for postulated pipe breaks in the scram discharge volume (SDV) system. Additionally, we are concerned that the current basis for assuring mechanical integrity of important SDV system reactor pressure boundary components may be inadequate in view of the potentially important public health and safety risks associated with pipe breaks within this system. Because of the specific concerns and perceived risks, we recommend that NRR immediately begin to take steps to determine whether breaks in the scram system are to be postulated as part of the BWR design basis. At the same time, we would recommend that appropriate actions be quickly initiated to upgrade the apparently inadequate SDV system mechanical integrity assurance basis which currently exists at most operating BWRs.

Enclosed is a copy of our report on this subject. Included in the report is an Executive Summary of our investigations, as well as detailed findings and recommendations which appear in Sections 3 and 4.

Should your staff have questions or require clarification of any of the contents of this report, the author would welcome the opportunity to attend a meeting arranged for this purpose. If we can provide additional assistance, please contact me.

Carlyle Michelson

Carlyle Michelson, Director
Office for Analysis and Evaluation
of Operational Data

Enclosure:
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NUREG-0785
DRAFT

SAFETY CONCERNS ASSOCIATED WITH PIPE BREAKS IN THE BWR SCRAM SYSTEM

by the

OFFICE FOR ANALYSIS AND EVALUATION

OF OPERATIONAL DATA

March 1981

Prepared by: Stuart D. Rubin
Lead Reactor
Systems Engineer

NOTE: This report documents results of studies performed by the Office for Analysis and Evaluation of Operational Data. The findings and recommendations contained in this report are provided in support of other ongoing NRC activities and do not represent the position or requirements of the responsible program offices of the Nuclear Regulatory Commission.

Appendix B

INSPECTION REPORT FOR LaSALLE COUNTY STATION

AEOD

UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
799 ROOSEVELT ROAD
GLEN ELLYN, ILLINOIS 60137

MAR 3 1981

Docket No. 50-373
Docket No. 50-374

Commonwealth Edison Company
ATTN: Mr. Cordell Reed
Vice President
Post Office Box 767
Chicago, IL 60690

Gentlemen:

Thank you for your letter dated February 3, 1981, informing us of the steps you have taken to correct the noncompliance which we brought to your attention in Inspection Report No. 50-373/80-48; 50-374/80-30 forwarded by our letter dated January 9, 1981. We will examine these matters during a subsequent inspection.

In your letter you requested us to reconsider (1) whether the meeting of January 29, 1981 should be classified as an Enforcement Conference and (2) the Severity Level of the noncompliance. We have reconsidered the matter and continue to believe the Severity Level selection is correct and the meeting was an Enforcement Conference.

The Severity Level of these violations was not increased for repeating a previous violation. It was our determination that the problems related to control rod drive pipe suspension systems resulted from degradation of management control systems designed to assure proper plant construction (Severity Level IV). Although a close call, we believed it was not a Severity Level III violation, i.e., lack of quality assurance program implementation related to a single work activity as shown by multiple program implementation violations that were not identified and corrected by more than one quality assurance/quality control checkpoint relied upon to identify such violations.

The meeting is considered an Enforcement Conference because of your noncompliance history related to large and small bore pipe suspension systems. Had the new enforcement policy not been in effect at the time of this inspection, these items would have been infractions and your history would have prompted an Enforcement Conference. Under the new policy we continue to look at past history, so the same conclusion was reached. Although we took the position that the "clock started" at the time of issuance of the revised enforcement policy with respect to counting multiple violations of Severity Level I, II, or III items of noncompliance, it is necessary that the history before issuance of the Policy be considered in the determination of when to hold an Enforcement Conference.

You have stated a desire to meet with us to discuss enforcement. We will contact you in the near future to arrange such a meeting.

Sincerely,

James G. Keppler
Director

cc w/ltr dtd 2/3/81:

cc w/encl:
J. S. Abel, Director
of Nuclear Licensing
L. J. Burke, Site
Construction Superintendent
T. E. Quaka, Quality
Assurance Supervisor
R. H. Holyoak, Station
Superintendent
P. B. Stephenson
Project Manager
Central Files
Reproduction Unit NRC 20b
AEOD
Resident Inspector, RIII
PDR
Local PDR
NSIC
TIC
Dean Hansell, Office of
Assistant Attorney General

I.T. Yin (815) 338-4260

RIII	RIII	RIII	RIII	RIII	RIII	RIII
Yin/jp	Danielson	Spessard	Reimann	Norelius	Davis	Keppler
2/25/81	Duane H.		3-26-81		4/2	

Commonwealth Edison
One First National Plaza Chicago Illinois
Address Reply to: Post Office Box 767
Chicago, Illinois 60690

February 3, 1981

Mr. James G. Keppler, Director
Directorate of Inspection and
Enforcement - Region III
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: LaSalle County Station
NRC Inspection Report
50-373/80-48 and 50-374/80-30
NRC Docket Nos. 50-373/374

Dear Mr. Keppler:

In response to the subject inspection report transmitted by your letter dated January 9, 1981, attached are replies to the apparent items of noncompliance in the Notice of Violation. The attached replies include our evaluation of quality assurance program and management control system improvements which will be implemented to preclude further violations of this type.

The primary reason for the violation was inadequate followup of corrective actions identified in our reply to your previous inspection report 50-373/80-20 and 50-374/80-13. This inadequate followup occurred because the LaSalle County Project Construction Management did not recognize their responsibility to followup their contractor's design control corrective actions. This was the only LaSalle County Construction Management controlled contractor with extensive design and analysis responsibility. Design and analysis are normally handled by contractors controlled by the LaSalle County Project Engineering organization; therefore, Construction Management incorrectly assumed the design and analysis corrective actions would be followed by Project Engineering. This lack of responsibility for control of contractor design activities is unique to this specific contractor.

We agree that our followup was not adequate to assure timely corrective actions to deficiencies identified in the vendor quality assurance program by the NRC. As we stated in our meeting on January 29, 1981, Commonwealth Edison had performed an audit of the vendor in May, 1980, in which deficiencies were identified and had scheduled a reaudit of the vendor in November, 1980 to take steps to correct his inadequate response to date. Although our followup was not timely, it did not represent a breakdown in our Quality Assurance program.

FEB 06 1981

Your Inspection Report does not discuss the basis you used to determine the severity level of this violation; however, in a meeting on January 29, 1981, you explained the severity level was increased for repeating a previous violation. We stated in the January 29, 1981 meeting that in our opinion the noncompliance cited should not be considered a repeat noncompliance under the new enforcement policy because it was the first occurrence during the period of applicability of the new enforcement policy. Therefore, we respectfully request your reconsideration of considering the January 29, 1981, meeting as an enforcement meeting and the appropriate reassignment of severity level.

Very truly yours,

C. Reed

C. Reed
Vice President