Docket No. 50-266

LICENSEE: Wisconsin Electric Power Company

FACILITY: Point Beach Unit 1

SUBJECT: SUMMARY OF MEETING WITH WISCONSIN ELECTRIC POWER COMPANY REGARDING

FRACTURE MECHANICS ANALYSIS OF A FLAW INDICATION IN POINT BEACH

UNIT 1

An emergency meeting was held with Wisconsin Electric Power Company (WEPCo) in Bethesda, Maryland, on May 30, 1987. A list of those attending the meeting is enclosed as Enclosure 1. Point Beach Unit 1 was scheduled for startup the afternoon of Friday, May 29, 1987. However, as a result of ultrasonic testing a flaw indication was observed in a reactor vessel nozzle-to-shell weld for the safety injection system. The flaw size was greater than code allowable. Consequently, startup of Point Beach Unit 1 was delayed pending a review by the staff of the licensee's assessment of the flaw indication.

WEPCo (Steve Pullins) reviewed data concerning the flaw size with the staff. No indication was detected in this particular location in the preoperational inspection. An indication appeared in an inspection conducted in 1976. In 1976, however, there was insufficient data to size the indication. The most recent inspection, conducted in 1987, utilized equipment more sensitive than that previously used and showed one indication 1.44" x 2.25" (all other indications were within the code). The 1987 indication was detected by two transducers. Three different peaks were found when traversing the flaw. WEPCo stated that this was an indication that the flaw may not be continuous but broken up into three smaller segments. The analyses were performed, however, assuming the flaw was continuous.

Mr. Warren Bamford (Westinghouse) discussed the Westinghouse fracture mechanics analysis of the flaw. The analyses assumed the flaw was in the worst location (involved peak stress). The analysis evaluated all the design basis transients. It did not include an LTOP faulted transient condition. For all transients evaluated, the flaw met the fracture mechanics criteria of ASME Code Section XI. Mr. Barry Elliot of the staff indicated that, based on the information provided by Mr. Bamford, he had done a very quick hand calculation and concluded that the flaw indication would meet the fracture mechanics criteria of ASME Code Section XI if an LTOP event, similar to that occurring in November 1981 at Turkey Point, had been analyzed.

The staff concluded, based on the the information presented, that the flaw indication satisfied the fracture mechanics criteria in ASME Code Section XI and Point Beach Unit I could restart. However, WEPCo was requested to submit on the docket information presented at the meeting which the NRC staff used to

reach this conclusion. This information is to include:

- LTOP analyses (using Turkey Point);
 - probability of exceeding LTOP setpoints; and
 - fracture mechanics evaluation assuming a Turkey Point type transient;
- 2. Flaw characterization based on welding procedure, and inspection test results:
- Description of the methods of compensating for beam spread; 3.
- 4. Codes and addenda used and referenced in the inspection and flaw sizing; and
- UT examination information presented at the meeting. 5.

The above information must be sent via express service so that NRC will have it at the start of business Wednesday morning and will be able to produce a safety evaluation by the end of the week.

Theodore R. Quay, Project Manager Project Directorate III-3 Division of Reactor Projects

Office: Date:

Surname: TQuay/tg 06/5 /87

DWigginton 06/5 /87

Mr. C. W. Fay Wisconsin Electric Power Company Point Beach Nuclear Plant Units 1 and 2

cc: Mr. Bruce Churchill, Esq. Shaw, Pittman, Potts and Trowbridge 2300 N Street, N.W. Washington, DC 20037

Mr. James J. Zach, Manager Point Beach Nuclear Plant Wisconsin Electric Power Company 6610 Nuclear Road Two Rivers, Wisconsin 54241

Town Chairman Town of Two Creeks Route 3 Two Rivers, Wisconsin 54241

Chairman
Public Service Commission
of Wisconsin
Hills Farms State Office Building
Madison, Wisconsin 53702

Regional Administrator, Region III U.S. Nuclear Regulatory Commission Office of Executive Director for Operations 799 Roosevelt Road Glen Ellyn, Illinois 60137

Resident Inspector's Office U.S. Nuclear Regulatory Commission 6612 Nuclear Road Two Rivers, Wisconsin 54241

MEETING ON FRACTURE MECHANICS ANALYSIS FOR POINT BEACH UNIT 1

ATTENDANCE LIST

NAME

ORGANIZATION

11

C. Y. Cheng NRC/NRR/EMTB Warren Hazelton

Keith Wichman

Barry Elliot

Ted Quay NRC/NRR/PD3-3 Steve Pullins Wisconsin Electric Power Company

Chuck Krause Mike Moylan

Warren Bamford Westinghouse GISD

Steve Richter SWRI Hector Diaz SWRI Distribution
Docket Files
NRC PDR
Local PDR
PDIII-3 r/f
PDIII-3 s/f
DWigginton
TQuay
CYCheng
WHazelton
KWichman
BElliot
OGC-Bethesda
EJordan
JPartlow
ACRS (10)
NRC Participants
(cc: Licensee and Plant Service List)