

DMB



**Consumers  
Power  
Company**

General Offices: 1945 West Parnall Road, Jackson, MI 49201 • (517) 788-0550

December 22, 1982

James G Keppler, Administrator  
Region III  
US Nuclear Regulatory Commission  
799 Roosevelt Road  
Glen Ellyn, IL 60137

DOCKET 50-255 - LICENSE DPR-20 -  
PALISADES PLANT - 10 CFR 21 REPORT DEFECTION 1000PPM BORON STANDARD

The attached 10 CFR 21 Report provides information regarding a defective 1000ppm Boron Standard which is used for standardization of sodium hydroxide which in turn is used to determine the primary coolant system boron concentration. As a result of an evaluation of the deviation, it was determined that the occurrence is reportable in accordance with 10 CFR 21, "Reporting of Defects and Noncompliances".

A 1000ppm Boron Standard from another supplier which meets applicable specifications and Quality Assurance specifications has been used for the sodium hydroxide standardization. Additional corrective actions planned call for he return to the supplier of the entire lot of 1000ppm Boron Standards from which the defective standards were taken.

This correspondence confirms a telecon report made to a member of your staff on December 20, 1982 and, thus, conforms with the notification criteria of 10 CFR 21.21 (b2).

David J VandeWalle  
Nuclear Licensing Administrator

CC Director, Office of Nuclear Reactor Regulation  
Director, Office of Inspection and Enforcement  
NRC Resident Inspector - Palisades

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TITLE: 10CFR21 REPORT

The following information should be provided to the Nuclear Licensing Administrator when a deficiency is considered to be reportable under Part 21:

- 1) Name and Address of Individual informing the Commission.

Brian D Johnson, P-24-606  
Consumers Power Company  
1945 West Parnall Road  
Jackson, Michigan, 49201

- 2) Facility identification, activity or basic component which fails to comply or contains defects is:

Palisades Nuclear Plant  
500 ml 'Baker Instra-Analyzed'  
Boron 1000 ppm, Atomic Spectral Standard  
Boric Acid Solution, in water  
Lot 1331107

- 3) The firm constructing facility or supplying the basic component which failed to comply or contained defect is:

J .T. Baker Chemical Co.  
Phillipsburg, New Jersey 08865

- 4) a. Nature of defect or failure to comply is:

Titration analysis results of the 1000 ppm standard were 896 ppm boron. The boron standard is used for standardization of sodium hydroxide. The sodium hydroxide, in turn, is used to determine the primary coolant system boron concentration for reactor power control.

- b. The safety hazard which was or could be created is:

Use of the sodium hydroxide standardized with a lower than expected boron concentration would over-estimate the boron concentration in the primary coolant system. Over-estimation of the primary coolant system concentration could reduce the capability to shutdown the reactor and maintain the plant in a safe condition.

TITLE: 10CFR21 REPORT (continued)

- 5) The date when information of defect or failure to comply was obtained is:

December 14, 1982

- 6) In the case of a basic component which contains a defect or fails to comply the number and location of all such components in use at, supplied for or being supplied for one or more facilities or activities subject to Part 21 is:

There are 23 500 ml bottles of standard involved. All 23 are on Quality Control hold in the facility storeroom.

- 7) a. The corrective action planned or taken is:

See attached sheet.

- b. The name of the individual/organization responsible is:

Palisades Administrative Department

- c. The length of time required to complete action was or is estimated to be:

The material will be returned to J. T. Baker Chemical Co by December 24, 1982.

- 8) Any advice related to the defect of failure to comply about the facility, activity, or basic component that has been, is being, or will be given to purchasers or licensees:

J. T. Baker Co.

Prepared By Brian D. Johnson Date 12/22/82

Approved: YES  NO  David J. Vandewalle Date 12/20/82  
Nuclear Licensing Administrator

(Report Clock Starts)

ATTACHMENT

10CFR21 REPORT

The 1000 ppm boron standard, Baker lot number 133107, was analyzed by titration at 0930, 12/14/82 and the result was 896 ppm boron. The Chemistry Supervisor was contacted and a different 1000 ppm standard, Mallinckrodt lot KPAR, was analyzed using the same sodium hydroxide titrant. The analytical result was 1000 ppm boron. The Quality Control department was notified of the unacceptability of the Baker standard and the standard lot number. All Baker boron standards in the storeroom with the lot number 133107 were removed from the storeroom shelf and placed on Quality Control hold for disposition. At 1200, 12/15/82, two (2) bottles of Baker boron standard lot 133107 were randomly chosen and conditionally released from the Quality Control hold for titration analysis to verify the concentration of the standard lot. The bottles of Baker standard were taken to the Chemistry Laboratory, under direct surveillance by plant Quality Control personnel and analyzed for boron concentration by the titration method. The analytical results were 898 ppm and 896 ppm. The J T Baker Chemical Company was contacted by telephone about the concentration deficiency of the boron standard lot number 133107 by the General Office Purchasing Department. The two boron standards which were analyzed for verification were returned to the storeroom for Quality Control hold for disposition. The boron standard in the possession of the Chemistry Department was returned to the storeroom on 12/15/82 for Quality Control hold. The plant Quality Control department will issue a Non-Conforming Material Report for the boron standard lot number 133107 on 12/16/82 and the standards will be returned to the J T Baker Chemical Company by December 24, 1982.