



**Consumers
Power
Company**

General Offices: 212 West Michigan Avenue, Jackson, MI 49201 • (517) 788-0880

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NRC

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COPY

September 16, 1982

Dennis M Crutchfield, Chief
Operating Reactors Branch No 5
Nuclear Reactor Regulation
US Nuclear Regulatory Commission
Washington, DC 20555

REGULATORY SERVICE
BRANCH

DOCKET 50-155 - LICENSE DPR-6 -
BIG ROCK POINT PLANT - STATUS REPORT
REGARDING REVISIONS TO SPENT FUEL RACK
ADDITION - CONSOLIDATED APPLICATION

This letter is to appraise you of the status of the committed revisions to our "Consolidated Application" for the Big Rock Point Plant Spent Fuel Pool Rack Addition. Consumers Power Company recognizes that publication of these revisions (via an amendment to our application and issuance of a supplement to your Safety Evaluation Report (SER)) must occur before the Spent Fuel Pool Hearing will be reconvened. The revisions concern the following two open issues with the NRC staff: 1) structural integrity of the spent fuel pool at boiling temperature; and, 2) seismic qualification of the 75-ton crane inside containment.

The first open issue, (initially identified as Appendix II of the application) was withdrawn by Consumers Power Company during the first phase of our hearing (reference pages 592-593 of the hearing record). An amended Appendix II addressing the quantitative thermal and stress analysis of the spent fuel pool structure is presently nearing completion and will be submitted by October 31, 1982. The revised finite element analysis will address structural integrity of the pool at temperatures up to 150°F. In lieu of a concrete thermal/stress analysis as a result of elevated pool boiling temperatures, Consumers Power Company will replace the existing make-up line with a larger one. This make-up line will serve the dual function of providing a means for remote delivery of make-up water to the pool as well as assuring that pool temperatures are kept below 150°F during the postulated transients and accidents. Design and installation of the makeup-line will include evaluation of maximum spent fuel pool temperature based on maximum heat load, minimum makeup rate and maximum makeup temperature. Excepting flow rate and pool discharge configuration considerations, the replacement makeup line will hold valid the makeup line description of record including seismic design to the Regulatory Guide 1.60 earthquake anchored at 0.12g. We are confident that installation of this larger spent fuel pool makeup-line will provide assurance that the integrity of the pool will still be maintained.

The second open issue is the seismic qualification of the 75-ton crane (O'Neill Contention II.C as recorded by the Board). Although the issue is addressed by our prefiled testimony, Consumers Power Company, in view of the comments received from the staff, has chosen to utilize the additional time between hearings to perform a detailed seismic reanalysis. As with the original analysis, the new analysis will also utilize Regulatory Guide 1.60 seismic response spectrum with a zero period acceleration of 0.12g. Consumers Power Company believes that this reanalysis which will be provided to you on October 31, 1982 will confirm that the 75-ton crane is seismically safe.

It is our expectation that with the advance status notification by this letter and a commitment due date of October 31, 1982, the staff will be able to respond with an appropriate supplement to the NRC SER within a thirty-day turnover period such that reconvening of the Big Rock Point Plant Spent Fuel Pool hearings can occur as soon as possible after the issuance of the SER Supplement.

Thomas C Bordine (Signed)

Thomas C Bordine
Staff Licensing Engineer

CC Administrator, Region III, USNRC
NRC Resident Inspector-Big Rock Point
oc0982-0008a142

Note to the Appeal Board:

This letter has been reproduced in its entirety, but has been photocopied in a manner that allows a two page letter to be printed on one sheet, as an economy.

John O'Neill II

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PDR ADDX 03000155
PDR

MHB TECHNICAL ASSOCIATES
Technical Consultants on Energy & the Environment

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Dale G. Bridenbaugh
Richard B. Hubbard
Gegory C. Minor

1723 Hamilton Avenue-Suite K
San Jose, California 95125
Phone: (408) 266-2716

December 23, 1981

Ms. JoAnne Bier
Concerned Citizens for Charlevoix
P.O. Box 222
Charlevoix, MI 49720

SUBJECT: BIG ROCK POINT
Spent Fuel Storage Expansion

Dear JoAnne:

I have reviewed the document package you sent me on the spent fuel storage expansion at Big Rock Point. I concentrated primarily on the Blanchard Affidavit as it addressed the changes that are being made to the cooling system. . .

There is an opportunity to improve the safety of the existing facility. The connection to the spent fuel pool of the ECCS makeup line would provide a capability not now present. It could be made more effective by designing it so as to withstand a single failure challenge. The schematic shown in Blanchard's Figure 2 indicates a single line taken off the core spray header inside the containment for delivering a 2 gpm bypass flow to the pool. It is controlled by a single valve. I have calculated the size of the orifice required to restrict the pool flow to about 2 gpm and find it is quite small. Assuming a core spray header pressure of approximately 150 psig, the orifice (or throttled valve) would be only about 0.1 inch in diameter. Since this system would be used for the recirculation mode, there is a good chance that the coolant will contain a lot of dirt and debris. It would be partially protected by the core spray suction strainers, but 0.1 inch is a small hole and it could easily plug, making it non-functional. The solution would be to put in a redundant flow control path and to locate the valves and orifices outside the containment to assure operability. (See attached copy of marked-up Figure 2 for a possible improvement.) They would have to be properly designed as they would become part of the containment boundary, but that can be done if proper codes and standards are followed.

I have no objection to your reading the above recommendation into the record if you wish. . .

Yours very truly

(signed)

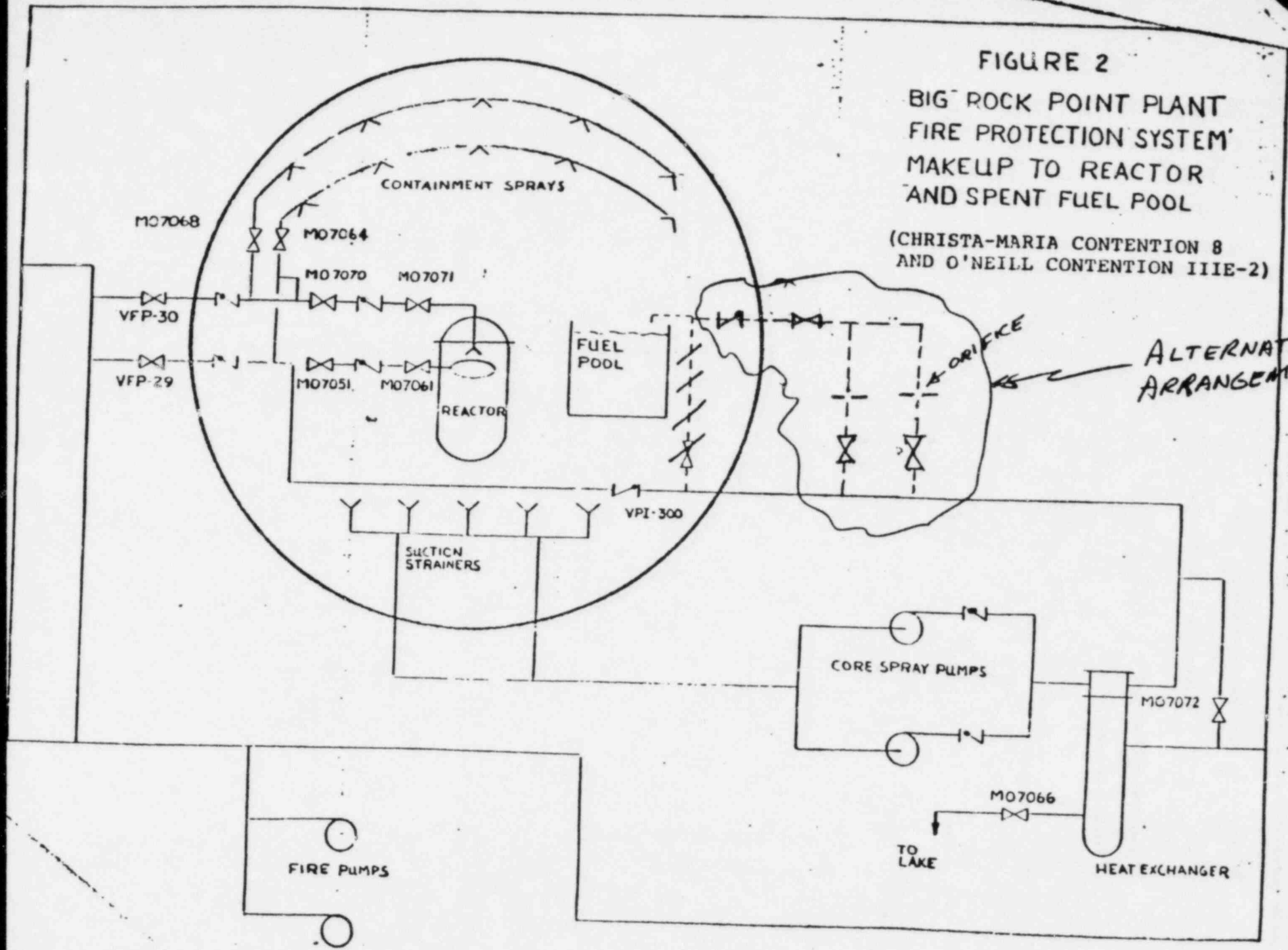
Dale G. Bridenbaugh

Relevant portions of Dale G. Bridenbaugh's letter regarding the pool make up line. Nothing concerning the make up line has been omitted. Emphasis added.

FIGURE 2
 BIG ROCK POINT PLANT
 FIRE PROTECTION SYSTEM
 MAKEUP TO REACTOR
 AND SPENT FUEL POOL

(CHRISTA-MARIA CONTENTION 8
 AND O'NEILL CONTENTION III E-2)

ALTERNATE
 ARRANGEMENT.



CHARLEVOIX PUBLIC SCHOOLS NEWSLETTER

NON-PROFIT ORGANIZATION
U.S. Postage Paid
Charlevoix, MI 49720
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Charlevoix Public Schools
Charlevoix, Michigan 49720

RESIDENT
Charlevoix,
Michigan
49720

CHARLEVOIX PUBLIC SCHOOLS

MARCH 1983

CHARLEVOIX, MICHIGAN 49720

SOURCES.

This year the Charlevoix School District has been confronted with a pay-back to the State of \$28,147 and a second of approximately \$28,000 to the Chicago Club. The School District has joined with the city in appealing the Chicago Club decision.

Every effort will be made to maintain the present millage level, Mr. VanWieren said.

CHARLEVOIX BOARD OF EDUCATION

Max Novak	President
Elaine Martin	Vice President
Kenneth Boss	Secretary
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The Charlevoix Board of Education meets at the High School Study Hall at 7:30 P.M., every first and third Monday of the month.

Emergency Services plan

The Emergency Services plan for the evacuation of the Charlevoix area in the event of an emergency include those to be implemented should the emergency occur during the time when the community's school-age population is in school.

In the event of such an emergency, parents are advised that their students will be transported to the East Jordan School,

Charlevoix school officials have announced following completion of the plan.

A procedure for notifying principals, teachers and bus drivers in an emergency has been established as part of the total emergency procedure for the Charlevoix Public and St. Mary's Parochial Schools.

The drivers were recently briefed as to the procedure including notification and routing.

In such an emergency, parents are advised not to call the schools or make an attempt to pick up their children at the various school buildings. Problems in communications and traffic congestion would result should this happen, school officials said, adding that keeping telephone lines open and traffic at a minimum are mandatory if the evacuation of the students in a prompt manner is to be safely and successfully implemented.

The emergency evacuation plan for students is the result of a cooperative study of alternatives by Charlevoix School officials and Emergency Services personnel.

Deadline for filing petitions is April 11

The deadline for filing nominating petitions for the Charlevoix Board of Education is 4 p.m., Monday, April 11.

The term of Robert Drenth will expire June 30.

Nominating petitions may be obtained at the business office at 208 Clinton St.

Again, let me remind you to call my office if you have any questions regarding any of the issues in this newsletter. The office phone number is 547-6573 and my home phone is 547-2195. I am looking forward to hearing from you!!!

Gordon VanWieren

BULLETIN

The annual Kindergarten Round-up of children who will be eligible to enroll in Kindergarten beginning in September, has been scheduled for Tuesday and Wednesday, April 12 and 13.

The child must be five years old by September 1. This is a decision of the Charlevoix Board of Education.

When a parent brings the child to school to register, a birth certificate and current health record are necessary.

The parent is also asked to bring only the child to be registered.

If anyone has questions regarding registration, they may be directed to the K-5 office at 547-6583 or the Central office at 547-6575.