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

NOV 25 1980

MEMORANDUM FOR: D. M. Crutchfield, Chief, Operating Reactors
Branch No. 5, DOL

FROM: James G. Keppler, Director

SUBJECT: BIG ROCK POINT: OFFSHIFT RADIATION PROTECTION STAFFING

In a letter dated November 14, 1980, Consumers Power Company responded to your letter dated September 5, 1980, regarding emergency preparedness information applicable to the Big Rock Point plant. Your letter had noted a Big Rock Point emergency plan deficiency regarding off-shift staffing of health physics and radiochemistry technicians. Consumers Power Company responded that Region III had accepted the addition of a training position to the plant staff "as a satisfactory solution to providing adequate radiation protection off-shift." That statement is incorrect.

Our position, as documented in letters to the licensee dated June 13, 1980, August 26, 1980, and September 24, 1980, is that, although our Health Physics Appraisal concluded that the licensee's off-shift radiation protection coverage needed upgrading, we had no regulatory basis to require off-shift staffing by radiation protection personnel. Our June 13, 1980, letter stated, "The individuals providing this coverage (radiation protection) must not be assigned other duties under the emergency organization which detract from their primary responsibility for radiation protection coverage." Our September 24, 1980, letter stated that "Our position remains ... that off-shift radiation protection coverage should be upgraded to ensure effective accident response."

In addition to the Health Physics Appraisal conclusion that off-shift radiation protection coverage needed upgrading, the licensee was cited for noncompliance with a technical specification requirement which requires staffing by individuals qualified in radiation protection procedures in accordance with specific criteria forwarded in a letter from NRR (Ziemann) dated March 15, 1977. Compliance with that requirement was achieved by additional training, but such training did not satisfy the Health Physics Appraisal concern for off-shift radiation protection coverage.

If you have any questions regarding this matter, please contact W. L. Fisher or A. B. Davis.

for James G. Keppler
Director

Enclosures:
1. Consumers Power Company ltr. dtd. 11/14/80
2. NRR ltr. dated 9/5/80
3. RIII ltr. dated 6/13/80
4. Consumers Power Company ltr. dtd. 7/18/80
5. RIII ltr. dated 8/26/80
6. RIII ltr. dated 9/24/80

cc w/encl:
H. D. Thornburg
A. B. Davis
W. L. Fisher
Central Files

Consumers Power Company

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • (517) 788-0550

November 14, 1980

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

DOCKET 50-155 - LICENSE DPR-6 -
BIG ROCK POINT PLANT - EMERGENCY
PLAN SUBMITTALS AND ADDITIONAL
INFORMATION AND REQUIREMENTS

In reference to your letter dated September 5, 1980 the following information is provided to answer your comments and requests, and to meet the requirements of NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Plans and Preparedness in Support of Nuclear Power Plants". Revision 60 to the Big Rock Point Plant Site Emergency Plan includes corrections for the deficiencies noted by the staff as indicated below and will be submitted and implemented by December 1, 1980 as agreed upon with Mr Walter Paulson of your staff.

COMMENT A

The letters of agreement with various offsite agencies have been updated and will be included in Revision 60.

COMMENT B

The Big Rock Point Plant Site Emergency Plan and, in particular, the plan's implementing procedures detail all immediate action assignments in the event of an emergency. In all cases we believe the present minimum shift complement is adequate to satisfy the immediate action needs of Table B-1 of NUREG 0654. For example, the Site Emergency Director is assigned communication responsibility and the Auxiliary Operators are assigned radiation monitoring duties pending the arrival of the dedicated communicator and chemical and radiation protection technicians. Further, neither the plan or its procedures contain any immediate action requirements that can not be performed by onsite personnel.

However, because of our relatively small off-shift complement as referenced by NRC, Region III letter to Consumers Power Company of June 13, 1980 transmitting the results of your Health Physics Appraisal and our subsequent response to Region III of July 18, 1980, Consumers Power Company has established a new supervisory training position at Big Rock Point. This individual is responsible, among other things, for providing additional detailed training in radiological

evaluation, particulary for offsite dose consequences under abnormal conditions, to the existing shift complement. By letter dated September 24, 1980, Region III accepted this additional training position as a satisfactory solution to providing adequate radiation protection off-shift.

COMMENT C

Corrected in Site Emergency Plan Revision 60.

COMMENT D

No action required at this time.

COMMENT E

Corrected in Site Emergency Plan Revision 60.

COMMENT F

A dedicated line has been installed from Big Rock Point Plant to the State On-scene Emergency Operating Center at the Michigan State Police Post in Petoskey. This is in addition to direct police radio communications.

COMMENT G

Public Information Program and News Media information will be incorporated in Site Emergency Plan Revision 60.

COMMENT H

No action required at this time.

COMMENT I

No action required at this time.

COMMENT J

Plant Implementation Procedure - 4A assigns a security officer to the beach to evacuate any fishermen or other persons and summons the US Coast Guard.

COMMENT L

No action required.

COMMENT M

Our present recovery plan is found in Appendix D No 22, "General Office Nuclear Emergency Implementation Procedure". These procedures will be submitted at a later date as required by NRC schedule.

COMMENT N

Exercise and drill information will be included in Site Emergency Plan Revision 60.

COMMENT O

Training program information will be included in Site Emergency Plan Revision 60.

COMMENT P

No action required.

David P Hoffman (Signed)

David P Hoffman
Nuclear Licensing Administrator

CC Director, Region III, USNRC
NRC Resident Inspector - Big Rock Point

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

September 5, 1980

Docket No. 50-155

Mr. R. B. DeWitt
Vice President
Consumers Power Company
1945 Parnell Road
Jackson, Michigan 49201

Dear Mr. DeWitt:

The staff has completed its review of your emergency plan submittals dated October 29, 1979, March 11, 1980, June 9, 1980, and June 12, 1980 (Appendix M only) which relate to prompt improvement of emergency preparedness. Your emergency plan was reviewed against the criteria stated in NUREG 0654, "Criteria for Preparation and Evaluation of Radiological Emergency Plans and Preparedness in Support of Nuclear Power Plants."

Our review has indicated that additional information and commitments are required before the staff can conclude that your onsite emergency preparedness program meets the afore-mentioned criteria. Enclosed is a list of comments. Your emergency plan should be revised to address these comments and a revision to the plan should be provided to us within 60 days of receipt of this letter.

In our view, your emergency plan dated June 9, 1980 reflects improvement over your existing plan and gives a greater margin for public health and safety. Since the revised plan does not downgrade the effectiveness of your emergency preparedness, you should begin to implement this revision.

We would be pleased to discuss or clarify any of the information requested, if you so desire.

Sincerely,

Thomas V. Wambach

for Dennis M. Crutchfield, Chief
Operating Reactors Branch #5
Division of Licensing

Enclosure:
As stated

cc: See next page

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SEP 29 1980

ENCLOSURE

Comments on Big Rock Point Emergency Plan

The following deficiencies are categorized in NUREG-0654 format.

A. Assignment of Responsibility (Organization Control)

Written Letters of Agreement (LOA) with various offsite support agencies are out of date. The following LOA's from Appendix A of the Site Emergency Plan need to be updated.

Charlevoix Fire Department
Charlevoix City Hospital
Little Traverse City Hospital
Emmet County Sheriff's Office
United States Coast Guard - Charlevoix
Charlevoix, MI

B. Onsite Emergency Organization

The plan does not indicate that the minimum shift staffing requirements as per Table B-1 of the criteria will be established. Specifically, only six qualified individuals are available on a 24 hour/day basis. They include: one Shift Supervisor; two Control Room Operators; two Auxiliary Operators; and one Shift Technical Advisor.

The following four additional shift positions must be manned on a 24 hour/day basis: one Health Physics Technician; one Rad/Chem Technician; one dedicated person for notification and communications; and one Shift Foreman or equivalent Senior Reactor Operator.

C. Emergency Response Support and Resources

The plan identifies radiological laboratories which could be used in

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JUN 13 1980

Docket No. 50-155

Consumers Power Company
ATTN: Mr. R. B. DeWitt
Vice President
Nuclear Operations
212 West Michigan Avenue
Jackson, MI 49201

Gentlemen:

Subject: Health Physics Appraisal

The NRC has identified a need for licensees to strengthen the health physics programs at nuclear power plants and has undertaken a significant effort to ensure that action is taken in this regard. As a first step in this effort, the Office of Inspection and Enforcement is conducting special team appraisals of the health physics programs, including the health physics aspects of radioactive waste management and onsite emergency preparedness, at all operating power reactor sites. The objectives of these appraisals are to evaluate the overall adequacy and effectiveness of the health physics program at each site and to identify areas of weakness that need to be strengthened. We will use the findings from these appraisals as a basis not only for requesting individual licensee action to correct deficiencies and effect improvements but also to improve NRC requirements and guidance. This effort was identified to you in a letter dated January 22, 1980, from Mr. Victor Stello, Jr., Director, NRC Office of Inspection and Enforcement.

During the period March 3 to March 14, 1980, the NRC conducted the special appraisal of the health physics program at the Big Rock Point Nuclear Plant. Areas examined during this appraisal are described in the enclosed report (50-155/80-04). Within these areas, the appraisal team reviewed selected procedures and representative records, observed work practices, interviewed personnel, and performed independent measurements. We request that you carefully review the findings of this report for consideration in improving your health physics program.

Findings of this appraisal indicate that several significant weaknesses exist in your health physics program. These include, among others, staffing levels, training, procedure adherence, personal contamination control, ALARA formalization, and clarification of the authority delegated to the Health Physics Organization. These items are set forth in Appendix A, "Significant Appraisal Findings." Your past performance

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in personal exposure and radiological effluent controls has been acceptable but we believe that the identified weaknesses require correction to enable you to perform equally well in future normal and abnormal situations. Your present health physics program is considered adequate to support continued operation while achieving acceptable corrective action for the identified weaknesses.

We recognize that an explicit regulatory requirement pertaining to each significant weakness identified in Appendix A may not currently exist. However, to determine whether adequate protection will be provided for the health and safety of workers and the public, you are requested to submit a written statement within twenty (20) days of your receipt of this letter, describing your corrective action for each significant weakness identified in Appendix A, including: (1) steps which have been taken; (2) steps which will be taken; and (3) a schedule for completion of action. This request is made pursuant to Section 50.54(f) of Part 50, Title 10, Code of Federal Regulations.

During this appraisal, it was also found that certain of your activities do not appear to have been conducted in full compliance with NRC requirements, as set forth in the Notice of Violation enclosed as Appendix B. The items of noncompliance in Appendix B have been categorized into the levels of severity as described in our Criteria for Enforcement Action dated December 13, 1974. Section 2.201 of Part 2, Title 10, Code of Federal Regulations, requires you to submit to this office, within twenty (20) days of your receipt of this notice, a written statement or explanation in reply, including: (1) corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further items of noncompliance; and (3) the date when full compliance will be achieved.

You should be aware that the next step in the NRC effort to strengthen health physics programs at nuclear power plants will be a requirement by the Office of Nuclear Reactor Regulation (NRR) that each licensee develop, submit to the NRC for approval, and implement a Radiation Protection Plan. Each licensee will be expected to include in the Radiation Protection Plan sufficient measures to provide lasting corrective action for significant weaknesses identified during the special appraisal of the current health physics program. Guidance for the development of this plan will incorporate pertinent findings from all special appraisals and will be issued by NRR in the fall of this year.

In accordance with Section 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and the enclosures will be placed in the NRC's Public Document Room. If this material

OFFICE	RIII	RIII	RIII	RIII	RIII	RIII
SURNAME	Greger Hueter	Greer Wright	Fisher Easig	Davis	Noonan	Keppler
DATE	6/11/80			6/13/80		6/20/80

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contains any information that you believe to be proprietary, it is necessary that you make a written application within 20 days to this office to withhold such information from public disclosure. Any such application must be accompanied by an affidavit, executed by the owner of the information, which identifies the document or part sought to be withheld and which contains a statement of reasons which addresses with specificity the items which will be considered by the Commission as listed in Subparagraph (B)(4) of Section 2.790. The information sought to be withheld shall be incorporated as far as possible into a separate part of the affidavit. If we do not hear from you in this regard within the specified period, this letter and the enclosures will be placed in the Public Document Room.

We will gladly discuss any questions you have concerning this inspection.

Sincerely,

James G. Keppler
Director

Enclosures:
1. Appendix A, Significant Appraisal Findings
2. Appendix B, Notice of Violation
3. IE Inspection Report No. 50-155/80-04

cc w/encls:
Mr. D. P. Hoffman, Nuclear Licensing Administrator
Mr. C. J. Hartman, Plant Superintendent
Central Files
Reproduction Unit NRC 20b
PDR
Local PDR
NSIC
TIC
Ronald Callen, Michigan Public Service Commission

Appendix A

SIGNIFICANT APPRAISAL FINDINGS

Consumers Power Company License No. DPR-6

Based on the Health Physics Appraisal conducted March 3-14, 1980, the following items appear to require corrective actions. (Section references are to the Details portion of the enclosed Inspection Report.)

1. Technician and professional staffing within the Chemistry and Radiation Protection Department is not sufficient to allow adequate training of personnel, to provide reasonable assurance that personnel loss will not adversely affect essential Chemistry and Radiation Protection Department functions, and to allow adequate performance of assigned responsibilities under routine and anticipated nonroutine conditions. (Section 3.b)

2. Offshift radiation protection coverage requires upgrading to assure that necessary measurements can be made and actions taken in accident or other anomalous situations to evaluate radiological hazards and effect appropriate radiological precautions. The individuals providing this coverage must not be assigned other duties under the emergency organization which detract from their primary responsibility for radiation protection coverage. (Section 3.a)

3. The ALARA program requires significant improvement, especially in the areas of program formalization and Chemistry and Radiation Protection staff authority. (Sections 3.c and 10)

4. The training program requires significant improvement, especially in the areas of Chemistry and Radiation Protection Technician training and RWP-exempt training. (Sections 4.a and b, and 12.a)

5. The RWP-exempt program, in its present form, has significant weaknesses in training of personnel and in basic format. (Sections 4.b and 8.b)

6. Personal contamination monitoring practices require significant improvement in the areas of equipment sensitivities, formal procedures describing equipment calibrations and alarm setpoints, and enforcement of procedures for use of personal contamination equipment. (Sections 8.c and 9.c and d)

7. Airborne effluent controls require improvements in noble gas quantification methods, laboratory ventilation release determinations, and HEPA filter changeout and testing criteria. (Section 11.b)

8. Although not indicative of broad problem areas, significant weaknesses requiring corrective actions were identified in the following areas:

High radiation area access controls. (Section 8.d)
Supply of stand-off (extendible probe), high range survey instruments and survey instrument operability checks before use. (Section 9.a)
Procedure coverage and adherence. (Section 6)
Temporary storage of low-level radioactive trash. (Section 11.c)