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 FACIL: 50-269 Oconee Nuclear Station, Unit 1, Duke Power Co.      05000269  
 50-270 Oconee Nuclear Station, Unit 2, Duke Power Co.      05000270  
 50-287 Oconee Nuclear Station, Unit 3, Duke Power Co.      05000287

AUTH. NAME: TUCKER, H.B.      AUTHOR AFFILIATION: Duke Power Co.  
 RECIPIENT NAME: DENTON, H.R.      RECIPIENT AFFILIATION: Office of Nuclear Reactor Regulation, Director  
 STOLZ, J.F.      Operating Reactors Branch 4

SUBJECT: Requests NRC interpretation of requirements of 10CFR20.  
 Request prompted by IE Insp Repts 50-269/83-34, 50-220/83-34  
 & 50-287/83-34 & notice of violation.

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**DUKE POWER COMPANY**

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

April 25, 1984

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Attention: Mr. John F. Stolz, Chief  
Operating Reactors Branch No. 4

Subject: Oconee Nuclear Station  
Docket Nos. 50-269, -270, -287

Dear Sir:

The purpose of this letter is to request an NRC interpretation of the requirements of 10 CFR 20. This request is prompted by a recent IE Inspection and Notice of Violation for the Oconee Nuclear Station. Copies of the pertinent correspondence are attached and the history of the violation is discussed in the following paragraphs. Briefly, NRC Region II has cited Duke Power, Oconee Nuclear Station, for failure to post a pond located in an unrestricted area which contained greater than ten times 10 CFR 20, Appendix C quantities of licensed material. NRC Region II states that the posting requirements of 10 CFR 20.203(e) apply to collective concentrations of low activity, large volume areas, located in unrestricted areas as well as restricted areas. Duke Power disagrees with this interpretation of the regulations.

This apparent violation was found during the course of a routine NRC inspection in November 1983 and was documented in Inspection Report 50-269/83-34, 50-270/83-34 and 50-287/83-34, a copy of which is attached for your convenience. At the time of this violation, the area in question was not within the Oconee restricted area boundary. However, as a result of the 10 CFR 50, Appendix I reviews, it had been determined that it would be included and that the new restricted area boundary would be at the discharge of the pond. All downstream areas would be considered unrestricted areas. (These requirements were to become effective upon issuance of the Appendix I Technical Specifications.) Because of this, Duke originally agreed to post the pond during the period of the inspection.

By License Amendments 125, 125, and 122 dated January 16, 1984, the NRC issued the Appendix I Technical Specifications and fully established the restricted area boundaries as noted above. By letter dated January 6, 1984 (copy attached), Duke provided a response which denied the violation but stated that the area would be posted as it was included in the restricted area boundary as defined by the Appendix I reviews.

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Mr. Harold R. Denton, Director  
April 25, 1984  
Page 2

In response, NRC Region II stated, in a letter dated March 9, 1984 (copy attached), that they did not agree that areas found above 10 CFR 20 limits in unrestricted areas need not be posted. Rather, they stated that such areas are of even more concern than those in restricted areas and should be posted. Duke agrees with the NRC Region II statement that "If those concentrations are enough of concern to be posted in a restricted area, they are of even more concern in an unrestricted area." However, after further review of the circumstances surrounding this incident, Duke has found that whether the subject pond is located in a restricted or unrestricted area is not the main concern; the main concern is the applicability of the particular federal regulation that was cited as being violated. 10 CFR 20, §20.203(e) reads:

"(e) Additional Requirements. (1) Each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of this part [is required to] be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: 'Caution, Radioactive Material(s)' or 'Danger, Radioactive Material(s).'

Sediment core samples from Chemical Treatment Pond Number 3 (CTP3) were tested and their activity was multiplied by the estimated volume (2,200 cubic yards) of the pond sediment and a total activity was calculated. This was the value used to compare to the quantities specified in Appendix C of Part 20. If we are to assume that 20.203(e) applies to the 3.8 million gallon, 88,200 square feet Chemical Treatment Pond Number 3, the "area" would be the pond, more specifically, the pond bottom inventory. "Licensed material" would refer to the pond sediment, a "byproduct" due to the absorption of some of the radioactive material released into the pond water. This sediment would then be considered "stored" at the bottom of CTP3. Using this interpretation, any low activity material, for example, low activity topsoil, defined as a byproduct due to a certain amount of absorption of radioactivity, if taken in a large enough area, may exceed ten times the quantities listed in Appendix C, and would be subject to the posting requirements of 10 CFR 20, §20.203(e). It is our belief that these posting requirements were not intended for low activity radiation spread over a large area, whether in a restricted or non-restricted area. On the contrary, it would seem more logical to believe that the regulation was referring to a more centralized and possibly contained radioactive source in "any room, enclosure, or operating area" (these were areas referenced in 20.203(d) - Airborne Radioactivity Areas).

Section 20.204(a) reads:

"(a) A room or area is not required to be posted with a caution sign because of the presence of a sealed source provided the radiation level twelve inches from the surface of the source container or housing does not exceed five millirem per hour."

If all of the activity in the sediment in CTP3 was concentrated in one spot, at twelve inches above a dried (assuming no water shielding) pond bed, the maximum exposure to an individual at that spot would be 3.8 millirem per hour. Using a more realistic approach, assuming the sediment was uniformly spread over the surface area of the pond (88,200 ft<sup>2</sup>), at twelve inches above the dried pond bed, the maximum radiation level, which would be found at the pond center, would be less than .001 mrem per hour. The material in this case is not contained in a "sealed source" but is shielded by the water in the pond. Even without the shielding, the radiation level would be considerably less than what is considered the maximum permissible level needed for exemption from posting.

Another reason we believe that 20.203(e) is not applicable in this particular instance is the existence of 10 CFR 20, §20.105 - Permissible levels of radiation in unrestricted areas. The control of radioactive materials and sources should be more restrictive in unrestricted areas than restricted areas due to the lessened degree of licensee control and the higher probability of public exposure; and, Part 20.105 is more restrictive than Part 20.203. Except with Commission Authorization, radiation levels in an unrestricted area cannot exist wherein if an individual were continuously present in that area, a resultant dose for that individual could be in excess of two millirems in any one hour or 100 millirems in any seven consecutive days. The maximum contact dose to someone in the center of the hypothetically dry CTP3 would be less than .002 millirem in one hour. The values measured in CTP3, when collectively taken, meet the criteria of the regulation governing radiation levels in unrestricted areas. Thus, the health and safety of the public are not jeopardized by the existence of this pond and its contents.

Questions were brought up in the March 9, 1984 NRC Region II response as to why the Chemical Treatment Ponds Numbers 1 and 2 were previously posted with radiation warning signs and Chemical Treatment Pond Number 3 was not. There is actual material storage (resin waste to settle out), smearable contamination at the water's edge, and associated measurable dose rate at CTPs 1 and 2. This is not true for CTP3. There had been no earlier justification to posting the pond area in question. The posting criteria for CTPs 1 and 2 did not, and do not now, apply to CTP3.

Mr. Harold R. Denton, Director  
April 25, 1984  
Page 4

Duke continues to believe that the health and safety of the public is our primary concern. Effluent releases will continue to be monitored and limited so as to comply with 10 CFR 20 regulations, Appendix I regulations, and Oconee Nuclear Station Technical Specifications. In addition, Duke is soon to propose to the NRC an alternate method of disposal of low activity wastes at Oconee which will decrease the activity released to all Chemical Treatment Ponds. All radioactivity releases, no matter how small, are of concern to us, and any unpredictable concentration of radioactivity is our concern whether in a restricted or non-restricted area.

Duke requests, pursuant to 10 CFR 20, §20.6, that the NRC issue an interpretation of 10 CFR 20 with respect to posting of large volume, low activity areas. Duke considers that the NRC Region II interpretation of regulation 20.203(e) is overly conservative and is not within the overall concept of 10 CFR 20. Should the NRC Region II interpretation be held as valid, we believe that it would create generic industry implications and would result in the need for NRC rulemaking to revise 10 CFR 20 to unambiguously state this new requirement.

As this continues to be an open item in that NRC Region II has requested additional corrective actions, an NRC response in a timely manner would be appreciated.

Very truly yours,

*H. B. Tucker / BTU*

Hal B. Tucker

RLG/JCP/php

Attachment

cc: Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Ms. Helen Nicolaras  
Office of Nuclear Reactor Regulation  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303  
December 8, 1983

DEC 13 1983

DUKE POWER CO.  
NUCLEAR INSPECTION SERVICES

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-269/83-34, 50-270/83-34 AND 50-287/83-34

This refers to the routine, safety inspection conducted by Mr. B. T. Debs of this office on November 14-18, 1983, of activities authorized by NRC Operating License Nos. DPR-38, DPR-47 and DPR-55 for the Oconee facility. Our preliminary findings were discussed with Mr. J. E. Smith, Station Manager, at the conclusion of the inspection.

The inspection was an examination of the activities conducted under your license as they relate to radiation safety and to compliance with the Commission's rules and regulations and the conditions of your license. The inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations by the inspector.

During the inspection, it was found that certain activities under your license appear to violate NRC requirements. This item and references to pertinent requirements are listed in the Notice of Violation enclosed herewith as Appendix A. Elements to be included in your response are delineated in Appendix A.

In accordance with 10 CFR 2.790(a), a copy of this letter, its enclosures, and your reply will be placed in NRC's Public Document Room upon completion of our evaluation of the reply. If you wish to withhold information contained in the inspection report, please notify this office by telephone and include a written application, to withhold information contained therein, in your response. Such application must be consistent with the requirements of 2.790(b)(1).

The responses directed by this letter and the enclosures are not subject to the clearance procedures of the Office of Management and Budget as required by the Paperwork Reduction Act of 1980, PL 96-511.

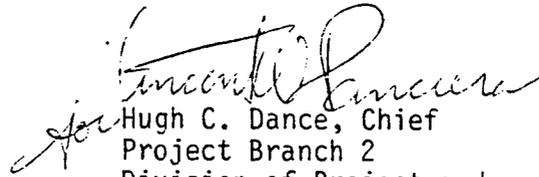
Duke Power Company

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December 8, 1983

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

  
Hugh C. Dance, Chief  
Project Branch 2  
Division of Project and  
Resident Programs

Enclosures:

1. Appendix A, Notice of Violation
2. Inspection Report Nos. 50-269/83-34,  
50-270/83-34 and 50-287/83-34

cc w/encls:

J. E. Smith, Station Manager

APPENDIX A

NOTICE OF VIOLATION

Duke Power Company  
Oconee

Docket Nos. 50-269, 50-270 and 50-287  
License Nos. DPR-38, DPR-47 and DPR-55

As a result of the inspection conducted on November 14-18, 1983, and in accordance with the NRC Enforcement Policy, 47 FR 9987 (March 9, 1982), the following violation was identified.

10 CFR 20.203(e) requires that each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of this part be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution, Radioactive Material" or "Danger, Radioactive Material".

Contrary to the above, on November 16, 1983, a pond located in an unrestricted area at the plant site, which contained greater than 10 times Appendix C quantities of licensed material, was not posted.

This is a Severity Level V Violation (Supplement IV).

Pursuant to the provisions of 10 CFR 2.201, you are hereby required to submit to this office within thirty days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violation; (2) the reasons for the violation if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved. Consideration may be given to extending your response time for good cause shown.

Date: December 8, 1983



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

Report Nos.: 50-269/83-34, 50-270/83-34, and 50-287/83-34

Licensee: Duke Power Company  
422 South Church Street  
Charlotte, NC 28242

Docket Nos.: 50-269, 50-270, and 50-287

License Nos.: DPR-38, DPR-47, and DPR-55

Facility Name: Oconee 1, 2, and 3

Inspection at Oconee site near Seneca, South Carolina

Inspector:

*R. L. Alby*  
for B. T. DeB...

12-2-83

Date Signed

Approved by:

*K. P. Barr*

12/2/83

Date Signed

K. P. Barr, Section Chief  
Operational Program Branch  
Division of Engineering and Operational Programs

#### SUMMARY

Inspection on November 14-18, 1983

#### Areas Inspected

This routine, unannounced inspection involved 31.5 inspector-hours on site in the areas of posting and labeling, radioactive material control, airborne radioactive material monitoring, radiation work permits, personnel contamination and exposure monitoring, unescorted access training, instruments and calibration, radioactive material shipping, high airborne radioactive material in Unit 2 containment and a radioactive spill.

#### Results

Of the nine areas inspected, no violations or deviations were identified in eight areas; one apparent violation was found in the other area.

## REPORT DETAILS

### 1. Persons Contacted

#### Licensee Employees

- \*J. E. Smith, Station Manager
- \*E. Brown Jr., Assistant Health Physics Supervisor
- \*C. Harlin, Health Physics Coordinator
- \*T. C. Matthews, Compliance Specialist
- \*R. J. Brackett, Senior QA Engineer
- \*R. P. Rogers, OSRG

Other licensee employees contacted included three construction craftsmen, five technicians, four security force members and three office personnel.

#### NRC Resident Inspectors

- J. Bryant
- D. Falconer

### 2. Exit Interview

The inspection scope and findings were summarized on November 18, 1983, with those persons indicated in paragraph 1 above.

### 3. Licensee Action on Previous Enforcement Matters

Not inspected.

### 4. Unresolved Items

Unresolved items were not identified during this inspection.

### 5. Posting and Labeling

The inspector selectively inspected the posting of high radiation areas, radiation areas, contamination areas and radioactive material storage areas at the licensee's facility. The inspector performed independent measurements of radiation levels of selected radiation control areas and concluded that the posting and labeling appeared to be adequate with one exception discussed in Section 6.

### 6. Radioactive Material Control

The inspector reviewed the licensee's last two semi-annual source leak tests and inventories. No anomalies were observed. The inspector observed that the licensee's records associated with the sources were complete and accurate.

The inspector obtained two sediment samples from the licensee's No. 3 Chemical Treatment Pond (CTP). Isotopic analysis of these samples performed by the licensee qualitatively indicated the presence of Cobalt-60, Cesium 134 and 137. Licensee representatives indicated that in calendar year 1982, six core samples had been obtained from this pond. Concentrations of Cobalt-60 ranged from  $2.38 \text{ E}2$  to  $2.24 \text{ E}3$  picocuries per kilogram (wet weight). Concentrations of Cesium 134 ranged to  $5.25 \text{ E}4$  picocuries per kilogram (wet weight) and Cesium 137 to  $4.47 \text{ E}4$  picocuries per kilogram. These values represent concentrations as high as 2,143 percent of the concentration found in environmental control samples taken across the lake. The inspector observed that due to the size of the pond, and the observed concentrations of licensed material throughout the pond, the pond's inventory of licensed material exceeded the ten times the quantity of such material specified in Appendix C of 10 CFR 20 and therefore should be posted as containing radioactive material in accordance with 10 CFR 20.203(e). The licensee concurred and took immediate action to post the pond properly. The inspector informed licensee management that prior failure to properly post the pond was a violation of 10 CFR 20.203(e) (83-34-01).

#### 7. Airborne Radioactive Material Monitoring

The inspector reviewed selected health physics operational logs and counting data associated with high volume air samples taken by the licensee. The inspector observed that adequate air samples appear to be taken, however, the inspector expressed concern that apparently there was a one to one and a half hour turnaround time between the acquisition of the sample and the time the results are reported back to the job site. The inspector also observed that the licensee does not employ constant air monitors (CAMs). Licensee management acknowledged the inspector's concerns. The inspector was informed that the licensee is evaluating state of the art CAMs. Additionally, thought is being given to the use of portable count rate meters to obtain initial air sample data before the sample is taken to chemistry. No violations or deviations were noted.

#### 8. Radiation Work Permits (RWPs)

The inspector reviewed selected active Radiation Work Permits for adequacy and completeness which included No. 250 - Reactor Building No. 2, HP Survey Initial and Routine; No. 276 - Reactor Building No. 2, Personnel and Equipment Hatch Staging and Removing Supplies, Tools, Equipment, etc.; No. 268 Reactor Building No. 2, Miscellaneous Valve Work. The inspector also observed compliance with the radiological requirements of the RWP's. No violations or deviations were noted.

#### 9. Personnel Contamination and Exposure Monitoring

The inspector reviewed personnel contamination reports for November 1983 and the tracking and trending information for calendar year 1983 and 1982. The inspector observed that the licensee performs a detailed evaluation of each skin contamination event in accordance with station procedure

HP/O/03/1005/11, however, tracking and trending data does not reflect a significant reduction in personnel contaminations over the reviewing period.

The inspector observed selected personnel performing whole body contamination frisks. All observed frisks were performed in accordance with station directives.

The inspector reviewed the licensee's computer generated exposure printout which is published twice daily. The Alert Exclusion list of this printout indicated that no individuals had been brought above the site's administrative exposure limits. The inspector reviewed Ocone Station Directive No. 3.8.12 (TS) "Control of Airborne (Internal) Radiation Exposure" and had no further questions.

The inspector observed that the licensee did not have a formal Beta radiation evaluation procedure. Licensee management indicated that a procedure was being developed by the corporate office and that interim employment of face shields, goggles, respirators and protective clothing should be adequate to attenuate the Beta radiation at the energies encountered with their three units. The inspector had no further questions. In the aforementioned areas, no violations or deviations were noted.

#### 10. Unescorted Access Training

The inspector attended the site specific portion of the licensee's General Employee training and found it to be adequate.

#### 11. Instruments and Equipment

The inspector observed a variety of radiological instruments (portable survey instruments, portal monitors, personnel friskers) in use and available for use. The inspector checked calibration stickers, performed battery checks for selected portable instruments in the health physics office, and response checked selected portable instruments for proper operation. The inspector discussed the radiation survey instrument calibration program with licensee representatives. The inspector had no further questions.

#### 12. Radioactive Material Shipping

Ocone spent fuel shipment number 31 arrived at the McGuire Nuclear Station on July 30, 1983. Upon arrival, McGuire personnel discovered that one security seal to be mislocated on the rear impactor of the shipping cask. Investigation revealed that the security seal discrepancy originated at the source (Ocone) and not enroute to McGuire.

Fuel handling personnel erroneously inserted the security seal connecting a rear impactor bolt head to the cask.

No violations or deviations were identified.

13. High Airborne Radioactive Material in Unit 2 Containment

On October 29, 1983, an 11:48 a.m. air sample indicated an airborne concentration of 18 times MPC inside the Unit 2 containment equipment hatch. The equipment hatch was open at this time. Flame heating of the 2A2 Reactor Coolant Pump impeller had just been secured after approximately one hour of heating. An air sample taken immediately outside the hatch, but inside a weather tent around the hatch, indicated 0.85 MPC. Air samples outside the tent indicated less than 0.25 MPC. At the time of the event, the containment building should have been under a negative pressure by mini-purge. Past event smoke tests performed at the hatch indicated a vortex current which caused smoke to exit the containment hatch at the top and roll down the hatch opening and reenter the bottom of the opening. The licensee has determined that the contamination released did not exceed any technical specification values or 10 CFR 20 limits. The licensee is attempting to determine the cause for the ineffectiveness of the mini-purge. No violations or deviations were noted by the inspector.

14. Radioactive Spill

At 2:30 a.m. hours on November 4, 1983, approximately 5 gallons of contaminated water containing  $1.4E-5$  microcuries per milliliter were spilled from a 2B steam generator pulse lance surge tank which was located on a trailer bed outside the Unit 2 containment building. Approximately 2.5 gallons of this water entered a yard storm drain which drains to No. 3 Chemical Treatment Pond (CTP). Analysis of the composite sample which is taken at the No. 3 CTP discharge prior to entry to the Keowee River indicated no detectable activity.

Large area smears in the spill area indicated contamination less than 200 disintegrations per minute. It has been determined that no release limits were exceeded. The cause of the overflow was an electrical failure to the surge tank level indication. There was a catch pan below the tank, however, the drain plug had been removed from the pan. No violations or deviations were noted.

DUKE POWER COMPANY

P.O. BOX 33189

CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

January 6, 1984

TELEPHONE  
(704) 373-4531

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

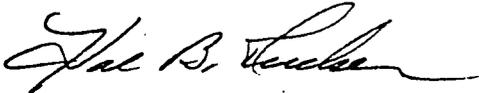
Subject: Oconee Nuclear Station  
IE Inspection Report  
50-269/83-34  
50-270/83-34  
50-287/83-34

Dear Sir:

In response to your letter dated December 8, 1983 which transmitted the subject Inspection Report, the attached response to the cited item of non-compliance is provided.

I declare under penalty of perjury that the statements set forth herein are true and correct to the best of my knowledge on January 6, 1984.

Very truly yours,



Hal B. Tucker

PFG:dyh

Attachment

### Violation

10 CFR 20.203(e) requires that each area or room in which licensed material is used or stored and which contains any radioactive material (other than natural uranium or thorium) in an amount exceeding 10 times the quantity of such material specified in Appendix C of this part be conspicuously posted with a sign or signs bearing the radiation caution symbol and the words: "Caution, Radioactive Material" or "Danger, Radioactive Material".

Contrary to the above, on November 16, 1983, a pond located in an unrestricted area at the plant site, which contained greater than 10 times Appendix C quantities of licensed material, was not posted.

This is a Severity Level V Violation (Supplement IV).

### Response

1) Admission or denial of the alleged violation:

Duke denies the alleged violation. The regulations in 10 CFR 20 control the possession, use and transfer of licensed material by the license to limit the exposures of individuals to the radiation protective standards of this part.

The regulations governs control of radioactive materials in restricted areas and release of radioactive materials to unrestricted areas. Duke interprets the regulation as only requiring posting (§20.203(e)) in restricted areas. Posting of unrestricted areas is not required as the radioactivity contained therein has been released in a controlled manner from a restricted area in accordance with §20.106.

In this instance, sediment samples from Chemical Treatment Pond No. 3 (CTP-3) did indicate the presence of certain radionuclides. However, based on previous NRC findings, this area was considered to be an unrestricted area. Furthermore, it is to be expected that sediment samples collected from any effluent release unrestricted area of a receiving water body will contain a significant fraction of the total amount of radioactive material released. (This process is described in IAEA Safety Series #36, Disposal of Radioactive Wastes into Rivers, Lakes, and Estuaries, Vienna 1971.)

Previously, in NRC Inspection Report 50-287/79-33, the Oconee Sewage Treatment System as well as CTP-3 were considered to be outside the restricted area. The sources of activity in CTP-3 are from releases from CTP's 1 and 2 and the turbine building sumps. All activity has been accounted for to meet effluent release reporting requirements and has been assumed released to the environment.

The newly revised Oconee radiological effluent Technical Specifications (RETS), NRC approval pending, considers CTP-3 inside the restricted area for effluent releases. At the time of the violation the RETS was not in place and based on the previous NRC position noted above Duke's subsequent

treatment of CTP-3 and downstream areas as unrestricted areas, the provisions of 10 CFR 20 §20.203(e) as cited are not considered to be applicable.

- 2) Reasons for the violation if admitted:

Not applicable; see (1) above.

- 3) Corrective steps which have been taken and the results achieved:

Notwithstanding the statements provided above, CTP-3 was posted per 10 CFR 10.203(3) during the inspector's visit. Since CTP-3 now is inside the restricted area boundary for liquid effluents per the new RETS, and since this pond can under special circumstances be used to collect liquid effluents and delay their release, that area will remain posted as a conservative interpretation of 10 CFR 20.203(e). However, all areas downstream from the outlet of CTP-3 are still not considered to be storage areas per 10 CFR 20.203(e) and are thus not required to be posted.

- 4) Corrective steps which will be taken to avoid further violations:

As stated in (3) above, under the new RETS requirements and conservative interpretation of 10 CFR 20.203(e), CTP-3 will remain posted and will be periodically surveyed.

- 5) Date when full compliance will be achieved:

All corrective action is complete.



UNITED STATES  
NUCLEAR-REGULATORY COMMISSION

REGION II  
101 MARIETTA STREET, N.W.  
ATLANTA, GEORGIA 30303

MAR 14 1984

MAR 09 1984

DUKE POWER CO.  
DUKE POWER CO.

Duke Power Company  
ATTN: Mr. H. B. Tucker, Vice President  
Nuclear Production Department  
422 South Church Street  
Charlotte, NC 28242

Gentlemen:

SUBJECT: REPORT NOS. 50-269/83-34, 50-270/83-34 AND 50-287/83-34

Thank you for your response of January 6, 1984, to our Notice of Violation issued on December 8, 1983, concerning activities conducted under NRC License Nos. DPR-38, DPR-47 and DPR-55 for the Oconee facility.

In paragraph 1 of your response, you admitted that sediment samples from Chemical Treatment Pond No. 3 (CTP-3) did indicate the presence of certain radionuclides. However you denied the violation on the basis that the posting requirements of 10 CFR 20.203(e) apply only to restricted areas and that CTP-3 is in an unrestricted area. You further noted that the radioactivity in CTP-3 had been properly accounted for as an effluent and that a previous NRC Inspection Report, No. 50-287/79-33, had considered the Oconee Sewage Treatment System and CTP-3 to be outside the restricted area.

In reviewing the regulations and the circumstances surrounding this event, we continue to believe the violation and severity level to be appropriate. While we acknowledge that areas required to be posted per 10 CFR 20.203(e) are most commonly encountered in restricted areas, we do not agree that areas found above 10 CFR 20 limits in unrestricted areas may be ignored. There is nothing in the regulations which limits such posting to restricted areas. If those concentrations are enough of concern to be posted in a restricted area, they are of even more concern in an unrestricted area.

In regard to your taking credit for releases to the Chemical Treatment Pond as an effluent, we concur that it is proper for you to consider this a release pathway and to then provide the appropriate monitoring and accounting controls for the releases. However we do not believe that considering the radioactivity as a released effluent relieves you of other requirements as discussed above. We have also noted that you account for the radioactivity as an effluent when it is discharged into Chemical Treatment Pond No. 1. However, it was noted that CTP-1 and 2 were posted per 10 CFR 20.203(e) at the time of the inspection indicating to us that failure to post CTP-3 was attributable to a weakness in your surveillance program. Also the NRC Inspection Report you cited, 50-287/79-33, in paragraph 6c did discuss the Oconee Sewage Treatment System Sump as being in an unrestricted area; however, the concern expressed was that radioactivity concentrations above 10 CFR 20, Appendix B limits were present and there were no warning postings, labels or other radiological controls. This is the same basic concern of our current notice of violation.

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In regard to your statement in paragraph 3 of your response, that all areas downstream from the outlet of CTP-3 are still not considered to be storage areas per 10 CFR 20.203(e) and are thus not required to be posted, we have a continued concern as to the adequacy of your surveillance program and your plans to control the buildup of radioactivity in the areas between CTP-3 and the lake. Since your response does not adequately address further corrective actions as required by 10 CFR 2.201, you should provide a supplemental response dealing with this item within 30 days of the date of this letter. //

We appreciate your cooperation in this matter.

Sincerely,

  
James P. O'Reilly  
Regional Administrator

cc: J. Ed Smith, Station Manager

DUKE POWER COMPANY

P.O. BOX 33189  
CHARLOTTE, N.C. 28242

HAL B. TUCKER  
VICE PRESIDENT  
NUCLEAR PRODUCTION

TELEPHONE  
(704) 373-4531

April 9, 1984

Mr. James P. O'Reilly, Regional Administrator  
U. S. Nuclear Regulatory Commission  
Region II  
101 Marietta Street, NW, Suite 2900  
Atlanta, Georgia 30303

Subject: Oconee Nuclear Station  
IE Inspection Report 50-269/83-34,  
50-270/83-34, and 50-287/83-34

Dear Sir:

By letter dated March 9, 1984, NRC/Region II requested a supplemental response relative to the Duke response of January 6, 1984 to the violation identified in the subject inspection report.

The corrective actions needed to eliminate the cited item of non-compliance with 10 CFR 20.203(e) have been taken; however, after reviewing the bases of your conclusion that unrestricted areas with activities in excess of 10 CFR 20 limits should be posted, we continue to disagree with the interpretation of that regulation and believe that such an interpretation has broad generic implications to the nuclear industry.

Accordingly, Duke is, under separate cover letter, requesting that NRC/ONRR provide an interpretation, pursuant to 10 CFR 20, §20.6, of the requirements relative to this issue. Pending receipt of a response from ONRR, Duke will hold in abeyance any further corrective actions relative to this violation.

Very truly yours,

*Hal B. Tucker /g/*  
Hal B. Tucker

RLG/php

bcc: P. H. Barton	P. F. Guill	N. A. Rutherford
R. T. Bond ONS	W. A. Haller	A. V. Carr
R. J. Brackett	G. W. Hallman	A. C. Thies
J. C. Bryant ONS (NRC)	M. L. Birch	E. L. Thomas
K. S. Canady	W. O. Henry	M. S. Tuckman ONS
R. C. Futrell	S. A. Holland	G. E. Vaughn
<del>J. C. Petty</del>	T. C. McMeekin	Group File: OS-801.02
		Group File: OS-815.01