

*Official Record  
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DEC 11 1984

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

Gentlemen:

SUBJECT: REPORT NOS. 50-269/84-20, 50-270/84-19, AND 50-287/84-21

Thank you for your response of October 25, 1984, to our Notice of Violation issued on September 27, 1984, concerning activities conducted at your Ocone facility.

With regard to Violation 1, we have examined your response and found it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions for Violation 1 during future inspections.

With regard to Violation 2, after careful consideration of the bases for your denial of Violation 2, we have concluded, for the reasons presented in the enclosure to this letter, that the violation occurred as stated in the Notice of Violation. Therefore, in accordance with 10 CFR 2.201(a), please submit to this office within 30 days of the date of this letter, a written statement describing steps which have been taken to correct Violation 2 and the results achieved, corrective actions which will be taken to avoid further violations, and the date when full compliance will be achieved. Further, based on your response, it appears that there may be a lack of understanding on the part of your staff of the purpose and intent of the regulations in this area. If that is the case, you should ensure that, as part of your corrective actions, appropriate staff are reinstructed in this regard.

The response directed by this letter is not subject to the clearance procedure of the Office of Management and Budget issued under the Paperwork Reduction Act, PL 96-511.

We appreciate your cooperation in this matter.

Sincerely,

James P. O'Reilly  
Regional Administrator

Enclosure:  
Staff Assessment of Licensee Response

cc w/encl:  
M. S. Tuckman, Station Manager

bcc w/encl: (See page 2)

8503060034 850205  
PDR ADOCK 05000269  
PDR  
Q

bcc w/encl:  
NRC Resident Inspector  
Document Control Desk  
State of South Carolina

RII  
*AW*  
REWeddington: bhg  
11/19/84

RII  
*LRJ*  
GRJenkins  
11/19/84

RII  
*DRJ*  
DMCollins  
11/29/84

RII  
*7*  
JMPuckett  
11/20/84

RII  
*JK*  
JPStonr  
11/29/84

RII  
*HD*  
HCDance  
11/30/84

RII  
*HCD*  
VLBrownlee  
11/30/84

RII  
*Jul*  
JAOshinski  
12/3/84

IE HQ  
*DRJ* \*  
12/10/84

\* Per telecon w/ Bob Paulus, 12/10/84

ENCLOSURE

STAFF ASSESSMENT OF LICENSEE RESPONSE

1. Licensee Comment

Duke Power Company considers that the intent of 10 CFR 20.203 is to provide caution signs, labels, signals, and controls appropriate in aiding individuals to minimize exposure to radiation or to radioactive material. 10 CFR 20.201 requires surveys to be performed which may be necessary for the licensee to comply with the regulations in this part, and are reasonable under the circumstances to evaluate the extent of radiation hazards that may be present.

NRC Response

10 CFR 20.203(f) requires that each container of licensed material shall bear a durable, clearly visible label identifying the radioactive contents. The label shall also provide sufficient information to permit individuals handling or using the containers, or working in the vicinity thereof, to take precautions to avoid or minimize exposures. As appropriate, the information will include radiation levels, kinds of material, estimate of activity, etc. The two containers described in the Notice of Violation were not properly labeled in that; in one example, no label was present and in the other example, the information on the label was not correct in regard to the radiation levels by a significant amount. The regulation clearly requires that each container be labeled and that the label contain appropriate descriptive information to permit precautions to be taken. The only exceptions to these requirements are given in 10 CFR 20.203(f)(3), none of which are applicable to this case.

2. Licensee Comment

The metal box in Example (a) was labeled with a dose rate which was accurate at the time of the associated survey. Although the arrangement of the box contents was subsequently changed, which also changed the dose rate, the increase in dose rate was not significant (assuming that there is negligible exposure from the bottom of a box  $\cong 7.75$  inches above the floor). The next scheduled survey of the area would have provided the information necessary to revise the labeling. The survey frequency in the area is considered adequate and reasonable under the circumstances. Since the box was in a room which is part of a Radiation Control Area, and the labeled dose rate was not significantly less than the actual dose rate, there was adequate information and access control to aid individuals in minimizing their exposure.

NRC Response

It was revealed during the inspection and documented in the subject inspection report that the change in radiation levels on the box in Example (a)

was caused by adding material to the box without health physics awareness. The licensee identified a pipe reducer reading in excess of 70 millirem per hour in an open, untagged poly bag that had caused the increase in radiation levels. The box was labeled as being less than two millirem per hour when it, in fact, had contact radiation levels to 48 millirem per hour on the bottom and 17 millirem per hour on the side of the box. We cannot agree that the increase in dose rate was not significant. The inspection did not reveal any inadequacies in the routine area surveys; rather the breakdown in controls occurred when the material was removed from a controlled area and placed in the box without health physics awareness. We would expect that, during the process of loading the container, a person knowledgeable of the material being loaded would be present. But, after loading, the warning tags, signs and labels should have been updated. We are concerned that appropriate controls were not in place to preclude transfer of material from controlled areas and to preclude causing changes of dose rates without health physics evaluation. Since the bag was open and untagged, reasonable and necessary precautions were not taken to inform the individuals transferring the bag and subsequently coming in contact with the container of the hazards present and to control the contamination hazard that may have been present. The fact that the box was in a Radiation Control Area is not relevant since the regulations require labeling of all containers. We do recognize that routine surveys made sometime after the radiological condition changes are an additional control, but these surveys should not be relied upon as the primary method of establishing radiological controls when radiological conditions are purposely changed by plant staff.

### 3. Licensee Comment

The wooden box in Example (b) was stacked on top of a similar labeled box inside a roped-off Radiation Control Zone (RCZ) which was within a Radiation Control Area. The labeled box, as noted in the report details, had radiation levels up to 600 millirem/hour at contact, while the unlabeled box read up to 80 millirems/hour. Although both boxes were initially surveyed and labeled, the label for the cited box apparently became detached during the subsequent period of movement and storage. Based on the labeling of the "hotter" box and the location within a plainly delineated RCZ, there again was sufficient information and access control to aid individuals in minimizing their exposures.

### NRC Response

The box in Example (b) was not labeled even though licensee records indicate that approximately 12 days prior that a label had been affixed. A similar box with a higher radiation level was labeled as stated. The regulations require that each container be labeled. We accept the statement that the label for one box apparently became detached during movement, but having a label on the container with the highest radiation level does not satisfy the labeling requirements of 10 CFR 20.203(f). The regulations require each container to be appropriately labeled. In addition, it appears that the box with the higher dose rate could just as easily have been the box without a

label, and, therefore, you should evaluate the permanence and effectiveness of your labels.

4. Licensee Comment

In summary, Duke Power Company considers that the present program of radiation surveys and labeling is sufficient to meet the intent of 10 CFR 20.201 and 10 CFR 20.203, especially when the areas in question are within the station Radiation Control Area. Access to this area is given only to trained individuals who know the potential for exposure in a radiation area, and are given sufficient information to keep their exposure as low as reasonably achievable.

NRC Response

10 CFR 20.203(f)(3) specifies exceptions to the labeling requirements of 20.203. None of the exceptions is applicable to this situation and, therefore, labeling of each container is required. The fact that an individual is a trained radiation worker and is aware of the potential for exposure in a radiation area does not relieve the licensee of the responsibility of providing additional information to the individual in the form of signs and labels to warn of specific radiation hazards. The violation is, therefore, correct as stated.