



Palisades Nuclear Plant: 27780 Blue Star Memorial Highway, Covert, MI 49043

Thomas C. Bordine
Manager, Licensing

September 27, 1996

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555

DOCKET 030-13132 - LICENSE 21-08606-07 - PALISADES PLANT
RESPONSE TO NOTICE OF VIOLATION FOR TWO VIOLATIONS

NRC Letter dated August 15, 1996, transmitted Inspection Report No. 30-13132/96001 (DNMS) and a Notice of Violation which described two Severity Level IV Violations. The first violation concerned our shipping a depleted uranium slab which was not properly classed, described, packaged, marked nor labeled. The second violation concerned our removal of a sealed source from the source holder and the placement of the sealed source into a lead shipping pig. Our response to these violations is in Attachment 1.

Consumers Power Company (CPCo) agrees to the first violation but notes some factual errors in the written description. Those errors are identified in our response.

CPCo does not agree to the second violation and requests that it be withdrawn. Our reasons for refuting the violation are identified in Attachment 1.

A two week extension to the required 30 day response was authorized during a telephone call between CPCo (CSKozup) and NRC Region III (MPPhillips) on September 10, 1996.

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SUMMARY OF COMMITMENTS

This letter contains no new commitments and no revisions to existing commitments.

A handwritten signature in dark ink, appearing to read "Thomas C. Bordine". The signature is fluid and cursive, with the first name "Thomas" and last name "Bordine" clearly distinguishable.

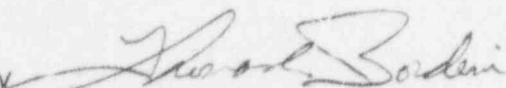
Thomas C. Bordine
Manager, Licensing

CC Administrator, Region III, USNRC
Project Manager, NRR, USNRC
NRC Resident Inspector - Palisades

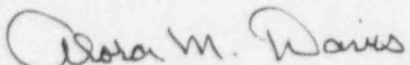
Attachment

CONSUMERS POWER COMPANY

To the best of my knowledge, the contents of this response to the two Level IV violations identified in Inspection Report No. 30-13132/96001(DNMS), are truthful and complete.

By 
Thomas C. Bordine
Manager, Licensing

Sworn and subscribed to before me this 27th day of September, 1996.


Alora M. Davis, Notary Public
Berrien County, Michigan
(Acting in Van Buren County, Michigan)
My commission expires August 26, 1999

[SEAL]

ATTACHMENT 1

**CONSUMERS POWER COMPANY
PALISADES PLANT
DOCKET 50-255**

**REPLIES TO THE TWO VIOLATIONS TO BYPRODUCT MATERIAL
LICENSE 21-08606-07 DESCRIBED IN THE NOTICE OF VIOLATION
TRANSMITTED BY NRC LETTER DATED AUGUST 15, 1996**

REPLY TO NOTICE OF VIOLATION TO BYPRODUCT LICENSE 030-13132

A.) NRC VIOLATION

- 1.) *10 CFR 71.5(a) requires that a licensee who transports licensed material outside of the confines of its plant or other place of use, or who delivers licensed material to a carrier for transport, comply with the applicable requirements of the regulations appropriate to the mode of transport of the Department of Transportation (DOT) in 49 CFR Parts 170 through 189. 49 CFR 171.2(a) states that no person may offer or accept a hazardous material for transportation in commerce unless that person complies with subpart G of part 107 of this chapter, and the hazardous material is properly classed, described, packaged, marked and labeled, and in condition for shipment as required or authorized by this subchapter (including §§171.11, 171.12, and 176.11). Pursuant to 49 CFR 172.101, radioactive material is classified as hazardous material.*

Contrary to the above, on February 27, 1996, the licensee offered a package containing a depleted uranium slab with greater than 15 grams of uranium-235 to a carrier for transport which was not properly classed, described, packaged, marked nor labeled.

This is a Severity Level IV violation.

CONSUMERS POWER COMPANY RESPONSE

Consumers Power Company (CPCo) agrees that the transport of the depleted uranium (DU) slab was in violation of 49 CFR 173.421-1 (new regulation is 49 CFR 173.422) which requires a notification to be included and 10 CFR 71.5 which requires compliance with 49 CFR 173.421-1. However, some factual errors exist in the Notice of Violation (NOV).

REASON FOR VIOLATION

This violation occurred due to the lack of a thorough pre-job brief. A thorough pre-brief would have informed the Palisades Supervisor and the two Rad Waste Handlers about the placement of the DU slab in one of the non-radioactive material packages and they would have removed it prior to the shipment.

Description of DU Slab Violation Events

The process of preparing the Thermoluminescent Dosimetry (TLD) Irradiator, the Irradiator source, and miscellaneous dosimetry processing equipment for shipment to Detroit Edison involved two trips by Palisades plant personnel to the Jackson Dosimetry Laboratory. On February 21, 1996, a Palisades Shipping Supervisor went to the Jackson Dosimetry Laboratory to remove the ^{137}Cs sealed source from the TLD Irradiator shield housing and place it into the original lead (Pb) shipping pig in which we had received the source on January 21, 1991. The shipping pig containing the ^{137}Cs source was placed inside the TLD Irradiator. However, the dose rates, as measured with a calibrated survey meter on the exterior surface of the TLD Irradiator, were higher than the desired maximum dose rate of 2 mrem/hr. Therefore, a Pb blanket was wrapped around the shipping pig as temporary shielding to lower the surface dose. In addition, a depleted uranium (DU) slab was also placed inside the TLD Irradiator as additional temporary shielding. The addition of the DU slab decreased the maximum dose rates to less than 2 mrem/hr.

A different (from the first trip in February 21, 1996) Palisades Shipping Supervisor made the trip to the Jackson Dosimetry Laboratory to prepare dosimetry equipment for shipment on March 26 and 27, 1996. That Supervisor and two Radwaste Handlers removed the shipping pig containing the ^{137}Cs sealed source from the TLD Irradiator and placed it into a Type A Shipping Package. Shipping papers were completed and the Type A Package was shipped on March 27, 1996. Following the packaging of the ^{137}Cs sealed source, nine (9) non-radioactive packages were shipped. These packages contained miscellaneous dosimetry processing equipment and the now "sourceless" TLD Irradiator. The Pb blanket used for temporary shielding had been removed from the TLD Irradiator before it was shipped. However, the depleted uranium slab was not noticed, and had not been removed. Dose rate surveys of each of the nine non-radioactive packages, including the TLD Irradiator with the DU slab inside, detected nothing above background.

Factual Errors

The violation stated that the DU slab contained greater than 15 grams of ^{235}U . However, 10 CFR 71.53 (b) and (d) are satisfied by the fact that it is a DU slab and it contains less than 1% ^{235}U and it is homogeneously distributed. Likewise, 49 CFR 173.421 (e) and 49 CFR 173.424 are also satisfied since the fissile material is the form of a manufactured article whose sole radioactive material content is depleted uranium. Therefore, for this package, the amount of ^{235}U is not pertinent.

The violation states the date that the DU Slab was shipped was February 27, 1996. The date of shipment was March 27, 1996.

It was also noted that the regulations cited were based on 10 CFR Part 71 and 49 CFR Parts 170 through 189 that went into effect on April 1, 1996. The regulations cited should have been based on the regulations in effect on March 27, 1996 when the shipment occurred. The only shipping regulation not met was 49 CFR 173.421-1 which requires a notice to be enclosed in or on the package stating the package included depleted uranium.

CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

No corrective actions have been taken. This violation occurred during the dismantling of the CPCo Dosimetry Laboratory in Jackson. These activities will not be repeated as CPCo no longer has any similar sealed sources. We are evaluating the withdrawal of this Byproduct License at a future date.

CPCo understands the lessons learned from this occurrence and the need to improve communications before and during work activities to prevent similar occurrences

CORRECTIVE ACTIONS REMAINING TO BE TAKEN TO AVOID FURTHER VIOLATIONS

No further corrective actions are planned.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

CPCo is now in full compliance.

B.) NRC VIOLATION

- 2.) *Condition 13 of NRC Byproduct Material License No. 21-08606-07 states that sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee.*

Contrary to the above, on February 21, 1996, the licensee's Chemistry and Radiological Services staff removed the cesium-137 sealed source from the source holder of the Williston Elin Model 2001PC TLD Irradiator and placed the sealed source into a shipping pig.

This is a Severity Level IV violation.

CONSUMERS POWER COMPANY RESPONSE

Consumers Power Company (CPCo) contests that a violation of Federal Requirements occurred. We do not consider the TLD Irradiator to be a source holder as intended by Condition 13 and, for this application, no source holder exists. Our interpretation, and our work practices for this activity maintained the health and safety of the public. Therefore, we request that this violation be withdrawn.

BAISIS FOR DISPUTING THE VIOLATION

License Condition 13 states, "Sealed sources or detector cells containing licensed material shall not be opened or sources removed from source holders by the licensee." We believed that License Condition 13 is a generic statement that is placed in all licenses that prohibits licensees from physically breaking into, or removing source material from a source holder. We interpreted source holders to be structures that are mechanically sealed (e.g., welded, bolted, etc.) containers that must be physically forced, pried, or otherwise broken open to get to the source material. The TLD Irradiator application does not meet this criteria because it is not a source holder as defined above.

License Condition 13 contains three criteria separated by an "or". First, "Sealed sources...shall not to be opened". Second, "...detector cells...shall not to be opened". Third, "... sources (shall not be) removed from source holders...." Since these are separated by an "or" only one of the criteria applies for a given situation. In the case of the TLD Irradiator, only the first condition applies. It would be redundant to apply the first and third criteria and it is not the application intended by the actual wording of License Condition 13.

In this application, the source holder would have been considered to be the metal encapsulation around the cesium material. This was discussed by telephone with the NRC On call Licensing Reviewer on or about March 9, 1996. The Radiological Safety Officer (RSO), gave his interpretation of License Condition 13 and described the activity that occurred on February 21, 1996. It was the RSO's understanding that the NRC On call Licensing Reviewer concurred with the RSO's interpretation of License Condition 13, and agreed that we could transfer the ^{137}Cs sealed source. After this call, the RSO instructed our shipping personnel that they could continue with the source transfer to Detroit Edison. This interpretation was faxed to the Lead NRC Inspector on June 14, 1996, and discussed with him by telephone on July 22, 1996.

It appears that at the time of the shipment under discussion, the NRC On call Licensing Reviewer agreed that the Palisades interpretation of Condition 13 was acceptable, however, at a time after the shipment the NRC staff began to use the "Registry of Radioactive Sealed Sources and Devices Safety Evaluation of Source No. NR-136-S-232-S" to define a source holder. In that safety evaluation, the NRC staff has concluded that a metal source capsule is not the source holder, and that the source holder is any lead shield or chamber where the ^{137}Cs capsule source is contained. Thus, the NRC now considers the TLD Irradiator as the source holder.

CPCo understands the NRC interpretation, however, we do not agree that it applies for this application. By this interpretation, the Pb shipping pig must also be considered a source holder. We believe that the intent of License Condition 13 is for one, and only one source holder.

Description of Events

The process of preparing the TLD Irradiator, the Irradiator source, and miscellaneous dosimetry processing equipment for shipment to Detroit Edison involved two trips to the Jackson Dosimetry Laboratory. On February 21, 1996, a Palisades Shipping Supervisor went to Jackson to remove the ^{137}Cs sealed source from the TLD Irradiator shield housing and place it into the original lead (Pb) shipping pig in which we received the source on January 21, 1991. The individual performing this activity was under the direct supervision of an Authorized User.

The CPCo RSO was concerned that License Condition 13 may prohibit this transfer. Therefore, the RSO conferred with the previous License RSO and two other knowledgeable people within the Chemical & Radiological Services Department. After discussing License Condition 13's purpose and intent, there was agreement that this condition did not apply to a sealed source used within the TLD Irradiator Shield Housing. Therefore, the RSO allowed the Palisades Shipping Supervisor to complete his work assignment, but also stated that he did not want any other activities to proceed until he had a chance to review License Condition 13 with the NRC.

The Authorized User supervising the transfer had witnessed the original installation and communicated the method to be used to the Palisades Shipping Supervisor. The source was successfully removed from the TLD Irradiator and placed into the Pb shipping pig. The shipping pig containing the ^{137}Cs source was then left inside the TLD Irradiator. The Electronic Dosimetry (ED) results indicated less than 1 mrem was received for this activity.

CORRECTIVE ACTIONS TAKEN AND RESULTS ACHIEVED

We now understand the NRC's current interpretation of a source holder, but we do not agree that it applies in this application. Therefore, no corrective actions have been taken.

The activities at issue occurred during the dismantling of the CPCo Dosimetry Laboratory in Jackson. These activities will not be repeated as CPCo no longer has any similar sealed sources. We are evaluating the withdraw of this Byproduct License at a future date.

CORRECTIVE ACTIONS REMAINING TO BE TAKEN TO AVOID FURTHER VIOLATIONS

No corrective actions are planned.

DATE WHEN FULL COMPLIANCE WILL BE ACHIEVED

CPCo is in full compliance.