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Company of Colorado

16805 WCR 19 1/2, Platteville, Colorado 80651

February 7, 1992  
Fort St. Vrain  
Unit No. 1  
P-92055

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Docket No. 50-267

SUBJECT: REPLY TO A NOTICE OF VIOLATION (50-267/91-18)

REFERENCE: NRC Letter, Beach to Crawford, dated January 8, 1992  
(G-92002)

Dear Sirs:

This letter conveys Public Service Company of Colorado's (PSC) response to the notice of violation and exercise weakness identified during the inspection of the Fort St. Vrain (FSV) Emergency Preparedness program and annual exercise during the period of November 18-22, 1991. This response is submitted in accordance with 10CFR2.201 and is specific to the concerns expressed in the referenced letter.

During the inspection conducted by Dr. D.B. Spitzberg and other accompanying personnel, an apparent violation of NRC requirements was identified. The violation involved the failure to maintain certain emergency equipment and supplies in the designated locations, and the failure to conduct emergency drills involving the county ambulance service as required by the emergency plan. In addition to the violation, one weakness was observed during the annual emergency exercise. The exercise weakness involves failure to demonstrate proper response to a contaminated/injured person.

NOTICE OF VIOLATION

- A. "Section 13 of the Defueling Emergency Response Plan lists emergency kits and protective equipment and supplies to support emergency response activities. Section 12 of the plan states, in part, that Procedure HPP-915, "Defueling Emergency Response Plan Inventory List," supplements the Defueling Emergency Response Plan.

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Contrary to the above the inspectors determined that:

- ° On November 19, 1991, only one of two first aid kits specified by HPP-915, Attachment HPP-915C to be located in the decontamination locker was found to be located in the locker.
- ° On November 21, 1991, ten low range dosimeters specified in Procedure HPP-915G2 to be located in the emergency kit at the independent spent fuel storage installation were found not to be located within the kit.
- ° On November 19, 1991, an emergency response kit specified to be assigned to the control room by Procedure HPP-915G was found instead to be located in the health physics office.
- ° On November 21, 1991, the trauma kit specified in Section 13 of the Defueling Emergency Response Plan to be located in the first aid equipment room on Level 5 was found instead to be located in the fire brigade locker on the turbine deck.
- ° On November 21, 1991, the first aid kit assigned to the control room in Procedures SR-TM-2-M and HPP-915, was found instead to be located in the fire brigade locker."

#### The Reason For The Violation

Part A. of the violation is admitted.

Section 13 of the Defueling Emergency Response Plan (DERP) contains listings of emergency kits, protective equipment, and supplies stored and maintained for emergency purposes. As stipulated on page 2 of Section 13, the listings of this section contain general categories of equipment and supplies available. The most current issue of HPP-915 provides specific information on the contents of the Emergency Kits. Therefore, DERP Section 13 is not relied upon as the steadfast listing of emergency equipment and supplies.

DERP Section 12 lists those procedures that implement or supplement the Plan. Among those listed is HPP-915, "DERP Inventory List." HPP-915 establishes the inventory frequency, method, and minimum inventory levels for radiological emergency supplies. SR-TR-2-M, "First Aid Room, Trauma Kit, and DERP First Aid Kits Monthly Inventory," also supplements HPP-915 relative to first aid kits. SR-TR-2-M provides for the periodic inventory of all site first aid kits, including those in the Emergency Response Kits.

Based on the above, HPP-915 (and not DERP Section 13) stipulates locations and inventories of emergency supplies. However, based on the NRC inspection findings and PSC's subsequent inventory of all Emergency Kits, inconsistencies were found between the actual inventories and those stipulated in HPP-915.

An inventory of the Emergency Response Kits and investigation were conducted following the NRC exit and findings of inventory problems. Recent operational, organizational, and personnel transitions at Fort St. Vrain (FSV) have resulted in some emergency response equipment relocations, without appropriate procedures updating. Specific procedural responsibility awareness also suffered during these transitions. Further, inconsistencies in techniques used by personnel during performance of the inventories contributed to this inventory problem and resulting violation.

#### The Corrective Steps That Have Been Taken And The Results Achieved

A complete inventory of all Emergency Response Kits was conducted on November 23, 1991, following NRC identification of the inventory problem. Any emergency supply discrepancies were immediately corrected, where possible. Requisitions were generated for any supplies that could not be immediately replaced, and follow-up actions to assure receipt and placement of those supplies were initiated.

The first aid kit which was missing from the decontamination locker has been properly located in the locker. The low range pocket dosimeters specified to be in the ISFSI Emergency Response Kit were replaced during the aforementioned Emergency Response Kit inventory effort. The Emergency Response Kit specified to be located in the control room has been relocated to the reactor building Level 7 health physics access area. This was determined to be the more appropriate location for the kit, and a procedure change was implemented to revise HPP-915 accordingly. The first aid kit specified to be located in the control room has been relocated to the fire brigade locker. This was also determined to be a more suitable location, and a procedure change to SR-TR-2-M has been generated. HPP-915 does not assign a first aid kit to the control room.

The Corrective Steps That Will Be Taken To Avoid Further Violations

Emergency and first aid kit inventory requirements are being assessed. In conjunction with this assessment, DERP Section 12, DERP Section 13, HPP-915, SR-TR-2-M, and SR-TR-3-M, "Spill Kit and Fire Brigade Cabinets, Monthly Inventory and Halon Gas Analyzer Check," are being reviewed and updated as appropriate. Station procedures HPP-915, SR-TR-2-M, and SR-TR-3-M will be updated to describe the organization/unit with primary responsibility for accomplishing the provisions of the applicable procedure.

The organization that was primarily responsible for conducting the inventories associated with HPP-915 was counseled on the importance of emergency supplies, procedural performance consistency and adherence. Organizations with responsibilities delineated in HPP-915, SR-TR-2-M, and SR-TR-3-M have been made fully cognizant of their responsibilities.

The Date When Full Compliance Will Be Achieved

Emergency and first aid kit inventory upgrades, and associated Plan/procedure reviews and updates will be completed by March 31, 1992. Thus, full compliance will be achieved on March 31, 1992.

- B. "Section 8.1.2(b) of the Radiological Emergency Response Plan which was in effect until March 29, 1991, specified, in part, that medical emergency drills with the Weld County Ambulance Service for treatment of contaminated persons will be conducted on an annual basis. Drill performance will be critiqued by personnel acting as drill instructors. The Vice President, Nuclear Operations and station supervisory personnel are provided written evaluations of drill performance. When the Defueling Emergency Response Plan became effective on March 29, 1991, the commitment for ambulance drills was increased to a semiannual basis.



Contrary to the above, the inspectors determined that as of November 22, 1991, no drills with the county ambulance service had been conducted since 1989. On at least five occasions during this period an ambulance was summoned to the site for actual medical emergencies; however, the emergencies did not involve contaminated persons and were not critiqued afterwards.

This is a Severity Level IV problem (Supplement VIII) (267/9118-01)."

#### The Reason For The Violation

Part B. of the violation is admitted.

Section 8.1.2(a) of the current DERP states, in part, that Medical Emergency Drills with St. Luke's Hospital for treatment of contaminated persons are conducted on an annual basis, and that drills involving the Weld County Ambulance Service are conducted on a semiannual basis.

As the Defueling Emergency Response Plan was being written in mid 1990, the change to a semiannual local ambulance service drill requirement was intended to be a change to a biennial requirement. This was based on a mistaken interpretation of NRC regulations and guidance. PSC currently interprets regulatory guidance to require local ambulance service drills to be conducted annually, and that they should be performed concurrently with the annual Medical Emergency Drill.

SR-EP-9-Q, "Maintenance of Emergency Preparedness," provides a quarterly checklist of drills and other actions required to be performed per the Plan on an annual, semiannual, and quarterly basis. The surveillance step specifying an annual offsite Medical Emergency Drill does not identify the need to concurrently drill with the local ambulance service. Further, there is no other step stipulating the need to conduct a drill with the local ambulance service. This omission contributed to the violation.

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#### The Corrective Steps That Have Been Taken And The Results Achieved

The annual Fort St. Vrain Medical Emergency Drill was performed on December 13, 1991. The drill was coordinated with the Weld County Communications Center, Weld County Ambulance Service, and St. Luke's Hospital. The scenario called for an ambulance to respond to the site, enter the site protected area per station emergency procedures, and transport a simulated contaminated/injured victim from Fort St. Vrain to St. Luke's Hospital in Denver. A Health Physics representative and a Drill Controller/Observer rode in the ambulance with the simulated injury victim. The Health Physics representative discussed and illustrated proper Radcon practices and concerns with the ambulance crew. The ambulance crew was dismissed after they delivered the victim to St. Luke's Hospital personnel. The victim turnover to St. Luke's personnel was done with the ambulance crew still "acting out" the drill scenario. A written critique of this drill was generated and published to all Nuclear Operations personnel.

#### The Corrective Steps That Will Be Taken To Avoid Further Violations

DERP Section 8.1.2(a) will be revised to stipulate that Medical Emergency Drills involving the treatment of contaminated persons will be conducted annually with the local ambulance service and Presbyterian/St. Luke's Medical Center.

Surveillance procedure SR-EP-9-Q will be reviewed and revised, as necessary, to assure it includes required periodic Emergency Preparedness actions consistent with the DERP. Further, this procedure will be revised to include provisions for conducting emergency drills with the local ambulance service during the annual Medical Emergency Drill.

#### The Date When Full Compliance Will Be Achieved

The local ambulance service drill was conducted concurrently with the annual Medical Emergency Drill on December 13, 1991. The aforementioned Plan and procedure reviews and revisions will be completed by March 31, 1992. These revisions will stipulate the annual frequency for local ambulance service drills in the DERP. Full compliance will be achieved on March 31, 1992.

#### EXERCISE WEAKNESS

"(During performance of the annual exercise) The inspectors observed that licensee response teams failed to demonstrate the exercise objectives to properly handle a contaminated injured victim, assess the extent of injuries, and make a proper comparison of injury threat to that of contamination/radiological hazards, and apply effective first aid. The following examples of licensee performance in these areas form the basis of this conclusion:

- ° When the person injured near the fire scene was examined, the examination was conducted entirely by asking the individual his condition. According to the scenario, this individual was in a dazed condition. No vital signs were taken, and no examination of the injuries themselves was made or simulated.
- ° The person injured near the warehouse was removed from the immediate scene for examination by a qualified emergency medical technician located near the temporary contamination boundary. The simulated broken arm and injured ankle were not initially examined for severity and were not immobilized prior to movement of the individual. The individual was assisted in walking away from the scene, despite his injuries, prior to being examined by the emergency medical technician. A stretcher which was available at the scene was not used for this individual.
- ° The health physics technician was not present at the scene of the injured victim located near the warehouse to perform surveys in order to assess the relative radiological hazard to the injured victim. The person was removed from an area with relatively low radiological hazard, after the fire was out, with no comparison of the relative hazard by the individuals responsible for making such assessments.

The failure of emergency response teams to demonstrate effective handling of contaminated injured victims was identified as an exercise weakness (267/9118-02)."

#### Response To Exercise Weakness

As a point of clarification, the injured man by the fire scene (near the warehouse) was conscious and coherent per the exercise scenario. Message #7 of the scenario states in part, "[Upon examination or questioning him] He has a broken arm (simple fracture) and a sprained ankle. He is coherent but in mild pain. He cannot move by his own power." The other injured persons located in the chiller and helium storage buildings were simulated to be dazed after they were brought back to consciousness.

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However, a valid point is made in the observed weakness relating to the lack of an injury survey of the victim and handling of the injuries. It became self-evident that he was conscious when responding personnel arrived at the scene of the injured victim. The victim informed the responders of his injuries and of the events that had happened (missile impact). The responding personnel should have surveyed the victim's body to verify the extent of his injuries, and checked vital signs. The hazards of the scenario were no longer of such a considerable threat that warranted the immediate removal of the patient from the area. Further, his injuries should have been immobilized and a stretcher should have been used to transport the patient away from the scene.

In PSC's opinion, there was very good health physics coverage at the scene during the fire fighting evolutions. Searching for any "hot particles" and controlling the spread of contamination was of paramount importance to the players during the exercise. When the injured victim was found near the warehouse, health physics personnel performed an initial survey of the area and victim. However, as previously stated the rescue team chose to immediately remove the patient from the area, although the radiological hazards were low.

A meeting was held between FSV representatives from Nuclear Training, Nuclear Operations, the Office of the Program Manager, and Emergency Planning on January 23, 1992, to discuss a future training curriculum for the fire brigade. Specific problems encountered during FOSAVEX-91 were discussed. Input was obtained from fire brigade members, and related during the meeting. Future fire brigade training will include academic lessons and walk-through practices on fire fighting, rescue, and first aid in radiation areas. Emphasis will be placed on patient handling, use of the stretcher, incident command and fire brigade accountability responsibilities. Periodic drills specific to the fire brigade will continue to be held, with written critiques following and documenting the drills. Lessons on emergency response implementing procedures which are specifically applicable to the fire brigade (team deployment and emergency exposure guidelines) will be added to the fire brigade training. The fire brigade training program will be revised to reflect these actions during the first quarter of 1992.



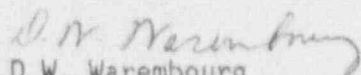
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If you have any questions concerning this response, please contact Mr. M.H. Holmes at (303) 620-1701.

Sincerely,



D.W. Warembourg  
Manager, Nuclear Operations  
Fort St. Vrain Nuclear  
Generating Station

DDW/GMK:lh

cc: Chief, Vendor Inspector Branch  
Division of Reactor Inspection and Safeguards  
Office of Nuclear Reactor Regulation

Regional Administrator, Region IV

Mr. J.B. Baird  
Senior Resident Inspector  
Fort St. Vrain

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of the attached Reply To     )  
A Notice Of Violation                     )  
Public Service Company of Colorado     )     Docket No. 50-267  
Fort St. Vrain Unit No. 1                 )

AFFIDAVIT

D. W. Warembourg being first duly sworn, deposes and says:  
That he is Manager, Nuclear Operations, of Public Service Company  
of Colorado, the Licensee herein, that he has read the information  
presented in the attached letter and knows the contents thereof,  
and that the statements and matters set forth therein are true and  
correct to the best of his knowledge, information and belief.

D. W. Warembourg  
D. W. Warembourg  
Manager, Nuclear Operations

STATE OF Colorado )  
COUNTY OF Weld )

Subscribe and sworn to before me, a Notary Public on this  
7<sup>th</sup> day of February, 1992.

Margaret D. Collins  
Notary Public

My commission expires 11-14, 1992.