



Public Service

**Public Service
Company of Colorado**
P.O. Box 840
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June 15, 1990
Fort St. Vrain
Unit No. 1
P-90169

A. Clegg Crawford
Vice President
Nuclear Operations

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

ATTN: Mr. Seymour H. Weiss, Director
Non-Power Reactor, Decommissioning and
Environmental Project Directorate

Docket No. 50-267

SUBJECT: DEFUELING EMERGENCY RESPONSE PLAN

REFERENCE: (1) PSC letter, Crawford to Weiss, dated August 16,
1989 (P-89287)

Dear Mr. Weiss:

As a result of the permanent shutdown of Fort St. Vrain on August 29, 1989, Public Service Company of Colorado (PSC) has reevaluated the emergency response capabilities required by the Fort St. Vrain Radiological Emergency Response Plan (RERP). Based on this evaluation, PSC proposes the enclosed Defueling Emergency Response Plan (DERP), which will delete offsite emergency response capabilities.

The proposed Defueling Emergency Response Plan has been reviewed by the State and local governments, who are in agreement with PSC's plans to eliminate the need for offsite radiological emergency response.

The Defueling Safety Analysis Report (DSAR), submitted to the NRC for review in Reference (1), identified a greatly reduced spectrum of credible accidents and accident consequences which could occur after the permanent shutdown and during the defueling of Fort St. Vrain. The DSAR also concluded that, following a complete Loss of Forced Circulation (LOFC) with no Prestressed Concrete Reactor Vessel (PCR) liner cooling in operation, temperatures in the fuel, insulation covers, and PCRV liner and concrete would not exceed allowable limits for in excess of five days following the LOFC.

Based on the results of the DSAR and the guidance provided in NUREG-0654, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", PSC has determined that no accident will occur which will cause an emergency classification above the level of ALERT.

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In accordance with 10 CFR 50.12 and 10 CFR 50.54(q), PSC requests NRC approval of the attached exemption request from the requirement to maintain and perform all offsite emergency planning and preparedness activities as required by 10 CFR 50.47(b) and 10 CFR 50 Appendix E.

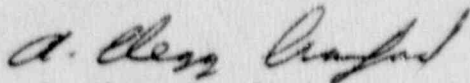
Additionally, since the proposed Defueling Emergency Response Plan has deleted requirements for offsite response to a Fort St. Vrain radiological emergency, the proposed Plan no longer complies with the criteria of 10 CFR 50.47(b) and 10 CFR 50 Appendix E and requires specific approval per the requirements of 10 CFR 50.54(q). Therefore, PSC requests NRC approval to implement the attached Defueling Emergency Response Plan.

The following attachments are provided in support of PSC's request:

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|--------------|---|
| Attachment 1 | Summary of Changes to PSC's Proposed Defueling Emergency Response Plan |
| Attachment 2 | Justification of Changes to PSC's Proposed Defueling Emergency Response Plan |
| Attachment 3 | Exemption Request to Cease Offsite Emergency Response and Preparedness Activities |
| Attachment 4 | Defueling Emergency Response Plan |

If you have any questions related to the proposed Defueling Emergency Response Plan or the exemption request, please contact Mr. M. H. Holmes at (303) 480-6960.

Very truly yours,



A. Clegg Crawford
Vice President
Nuclear Operations

ACC:CRB/cb

Attachments

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cc: Regional Administrator, Region IV
ATTN: Mr. J.B. Baird
Technical Assistant
Division of Reactor Projects

Mr. Robert Farrell
Senior Resident Inspector
Fort St. Vrain

Mr. Robert M. Quillin, Director
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ATTACHMENT 1 TO P-90169

DESCRIPTION OF CHANGES

**INCORPORATED IN THE PROPOSED FORT ST. VRAIN
DEFUELING EMERGENCY RESPONSE PLAN**

Table of Contents:

This section has been updated to reflect changes made to each section of the proposed Defueling Emergency Response Plan (DERP).

Introduction:

Reference to the Radiological Emergency Response Plan (RERP) has been changed to the DERP throughout the revised Plan. Included a statement indicating the end of operations date. Deleted the reference to NUREG-0654.

Section 1:

Revised the definition for the Emergency Planning Zone to reflect a new distance of 100 meters from the Reactor Building. Deleted Ingestion Exposure EPZ, Exclusion Area Boundary (EAB), Executive Command Post (ECP), Forward Command Post (FCP), Personnel Control Center (PCC), Population-at-Risk, State Emergency Operations Center (SEOC), and State RERP. Included definitions for Alert and Notification of Unusual Event.

Section 2:

No changes.

Section 3:

Deleted reference to FEMA/NRC emergency planning regulations and guidelines. Deleted reference to State RERP. Updated section references to reflect current contents per the DERP.

Section 4:

Revised to reflect that under current conditions, the highest emergency classification achievable would be an Alert. Revised Emergency Action Levels to be consistent with current defueling conditions.

Section 5:

Revised to reflect normal shift organization. Deleted all references to the ECP, SEOC, FCP, and PCC. Combined necessary FCP and PCC functions with TSC functions. Deleted reference to emergency classifications higher than an Alert. Revised the TSC staffing and

functions to incorporate necessary functions of the PCC. Added a brief description of the PSC Media Center. Deleted all references to the offsite emergency response organization. Deleted reference to the five mile plume exposure EPZ and the towns of Platteville, Johnstown and Gilcrest. Deleted the normal station organization attachment. Revised Attachments 5.1, 5.2, 5.3, and 5.4 to reflect current conditions. Deleted the following attachments: FCP Organization; SEOC Organization; ECP Organization; State and County Emergency Functions and Responsibilities; and Summary of State/Local Involvement. Updated Local Agency and Contract Support Services attachment.

Section 6:

Deleted reference to any emergency classification higher than an Alert. Updated TSC functions to reflect the deletion of the FCP and consolidation of the PCC. Eliminated the need for evacuation and updated access control. Deleted reference to the Tone Alert radios and Platteville Siren and the need for notification of the public in the surrounding area. Deleted reference to the need and use of Potassium Iodide (KI). Deleted the reference to CDH field monitoring teams. Changed references of the PCC to the TSC.

Section 7:

Deleted references to the ECP, SEOC, PCC and FCP. Updated communication systems to reflect deletion of offsite centers and the need for continuous information flow to the State and county. Reduced dedicated emergency response vehicles to one vehicle. Updated Attachment 7.1 to reflect current communication links. Revised Attachment 7.2 to reflect equipment currently in service during defueling.

Section 8:

Updated training requirements for participating agencies. Deleted reference to annual public information mailings. Eliminated joint emergency planning with the state and county. Deleted reference to specific surveillance numbers.

Section 9:

Updated to reflect a defueling/decommissioning mode of operation. Updated guidelines to reflect the deletion of the SEOC, emergency classification higher than an Alert, and the Corporate Emergency Director. In the formal Recovery Organization, eliminated the Design and Construction Support Manager, the Technical Support Manager, and the Scheduling/Planning Manager.

Section 10.A

This section now becomes Section 10. Eliminated letters of agreement with Proto Power Corporation, the First United Methodist Church, and Mr. Grady B. Matheney.

Section 10.B:

This section has previously been deleted.

Section 10.C:

This section now becomes Section 11. Revised map of the EPZ. Deleted the following maps: Evacuation Traffic Routes; Estimated Sector Evacuation Times; Site Exclusion Area Boundary; Ingestion Pathway EPZ; and Geographical Area Identification Designations. Deleted the table identifying FSV's evacuation capabilities.

Section 10.D:

This section now becomes Section 12. Updated to reflect current procedures.

Section 10.E:

This section now becomes Section 13. Updated to reflect the consolidation of the PCC into the TSC. Updated to reflect locations of emergency kits, protective equipment and supplies currently available in the emergency response facilities.

Section 10.F:

This section is being deleted. Cross reference to NUREG-0654 is no longer applicable.

ATTACHMENT 2 TO P-90169

JUSTIFICATION OF CHANGES

**INCORPORATED IN THE PROPOSED FORT ST. VRAIN
DEFUELING EMERGENCY RESPONSE PLAN**

A. BACKGROUND AND PURPOSE OF THE PROPOSED CHANGE:

Fort St. Vrain was permanently shutdown on August 29, 1989. The Defueling Safety Analysis Report (DSAR), submitted to the NRC on August 16, 1989 (P-89287), identified a greatly reduced spectrum of credible accidents and accident consequences which could occur after the permanent shutdown and during the defueling of FSV.

The DSAR and Fort St. Vrain Final Safety Analysis Report (FSAR) have been reviewed to determine the consequences of the remaining credible accidents which can occur with FSV permanently shutdown and undergoing defueling. Results of this review indicate the following:

1. The worst case accident is the drop of a loaded spent fuel shipping cask, resulting in a two-hour exposure of 0.19 mrem whole body gamma (WBG) at 100 meters.
2. Based on the consequences of this worst-case accident, the highest emergency classification that can be achieved is an Alert.
3. Following a complete Loss of Forced Circulation (LOFC) without Prestressed Concrete Reactor Vessel (PCR) liner cooling, temperatures in the fuel, insulation covers, and the PCRV liner and concrete will not exceed allowable limits for in excess of five days following the LOFC.
4. The extended LOFC will allow ample time for corrective action, including recovery planning and shipment to the site of equipment necessary to restore shutdown cooling, if necessary.

The present Fort St. Vrain Radiological Emergency Response Plan (RERP) contains requirements in excess of those necessary to support emergency preparedness during the defueling of Fort St. Vrain. This conclusion is based on the reduced scope of credible accidents which may occur during defueling, the reduced accident consequences including negligible offsite exposure, and the extended period of time available following an accident to stabilize and restore cooling to the reactor core. PSC has evaluated the RERP and identified the revisions listed in the following sections to be warranted to downgrade the RERP, while remaining responsive to the emergency preparedness needs of Fort St. Vrain during the defueling period.

B. PROPOSED DEFUELING EMERGENCY RESPONSE PLAN REVISIONS AND JUSTIFICATION:

1. Reduction of the Maximum EAL to an ALERT:

a. Accident/Emergency Classification Evaluation:

Following evaluation of the credible defueling accidents, the reduced accident consequences were compared with the emergency classification tables contained in EP-CLASS and the guidance contained in NUREG-0654 Appendix 1 (Emergency Action Level Guidelines for Nuclear Power Plants) and the EPA Protective Action Guidelines.

The worst case defueling accident has been identified to be a drop of a loaded spent fuel shipping cask in the reactor building. This accident, as evaluated in FSAR Section 14.6.3.3, will result in a two-hour radiological exposure of 0.15 mrem WBG at the Exclusion Area Boundary (EAB) boundary, located 590 meters from the Reactor Building. In order to determine the accident consequences at the revised 100-meter Emergency Planning Zone (EPZ) boundary, a scaling factor of 1.25 was determined from FSAR Figure 14.12-1 "Short-Term Dilution Factors", as the ratio of dilution factors at the 590-meter EAB boundary and the revised 100-meter EPZ boundary. Consequently, the revised maximum exposure at the 100-meter EPZ boundary is projected to be 0.19 mrem (two-hour exposure) WBG for this worst case accident.

Therefore, since no accident condition will exceed the NUREG-0654 guidelines for an Alert, reduction of the scope of Fort St. Vrain's emergency preparedness plan is appropriate while still maintaining the emergency response capabilities necessary for onsite response to an Alert emergency classification.

It is noted that the present RERP classifies a drop of a loaded spent fuel shipping cask to be a Site Area Emergency. However, the maximum projected exposure from the worst case accident at 100 meters from the Reactor Building will not exceed a two-hour exposure of 0.19 mrem WBG, which is 0.02% of the EPA guidelines for a Site Area Emergency. This projected radiation level will be "limited to small fractions of the EPA Protective Action Guideline exposure levels", which meets the definition of an Alert emergency classification per the guidance of NUREG-0654. Therefore, PSC's previous classification of this accident was overly conservative, and reclassifying the drop of a loaded spent fuel cask as an Alert classification is consistent with NUREG-0654 guidance.

b. Tritium Exposure Evaluation:

Although not required to be evaluated during or following a radiological emergency by the requirements of 10 CFR 50.47(b) or 10 CFR 50 Appendix E, PSC has evaluated the potential radiological exposure from tritium following any credible accident. EPA

guidelines assume that the predominant exposure after a nuclear reactor accident will be from whole body gamma radiation. This assumption is not fully justified in the case of Fort St. Vrain, since there are no detectable noble gases or radioiodines in the primary coolant following the permanent shutdown condition. PSC's evaluation indicates that the tritium concentration at 100 meters following a credible accident release will remain below the 10 CFR 20 limits for the maximum permissible concentration of tritium in air in unrestricted areas. Therefore, there is no concern regarding this exposure following an accident.

c. Evaluation of Security Events Above an Alert:

Security events under Site Area Emergency and General Emergency were also evaluated for feasibility; it is PSC's position that the imminent or actual loss of physical control of the facility due to a security breach is an incredible event of extremely remote probability, given that NRC-approved physical security and fire protection programs will be maintained during defueling.

2. Restricting the EPZ to Within 100 Meters of the Reactor Building:

Based on evaluation of the DSAR and FSAR accident consequences, there will be no credible means for offsite exposures in excess of a small fraction of EPA Protective Action Guidelines. Based on DSAR and FSAR review, there are no credible accidents which will create the need for either a plume exposure or an ingestion pathway planning zone, and therefore the EPZ may be reduced to an area within 100 meters of the Reactor Building, which is within the owner controlled fence. PSC will conduct perimeter monitoring of this onsite EPZ following any potential radiological release as required by the emergency situation to confirm that there will be no offsite radiological releases above those determined in the PSC analyses.

The 100-meter boundary is sufficient for PSC to control access to the onsite EPZ, but will allow unrestricted use of Weld County Road 19-1/2. Use of such a boundary and restricting the EPZ to owner controlled areas will eliminate the need for activation of the law enforcement/security provisions in either the State or Weld County RERP to control access to Weld County Road 19-1/2.

3. Eliminate Offsite Emergency Response by State/Local Governments:

NUREG-0696 "Functional Criteria for Emergency Response Facilities", Section 1.4, provides the following guidance regarding activation of ERF's:

- "(2) Activation of the onsite TSC and OSC [PCC] is optional for a Notification of Unusual Event emergency class, and is required for ALERT and higher classes.
- (3) Activation of the nearsite EOF [FCP] is optional for Notification of Unusual Event and Alert emergency classes, and is required for Site Area Emergency and General Emergency classes."

For the remaining credible Fort St. Vrain accidents and accident consequences, activation of only the onsite ERF's is responsive to the guidance of NUREGs 0654 and 0696, since no offsite consequences have been identified which would warrant activation of those offsite facilities. Overall control of the remaining credible accidents is provided by the Emergency Coordinator, located in either the Control Room or the Technical Support Center (TSC).

Limiting the EPZ to onsite areas will eliminate the need for offsite response by State or local governments, including elimination of State radiological monitoring teams who will no longer be needed to monitor the plume exposure pathway.

Since the highest emergency classification is an Alert, no offsite emergency response is required by either the State or local governments, including offsite radiological monitoring teams, law enforcement, rumor control, media relations, and notification and evacuation support. Other PSC agreements with local agencies requiring onsite support will remain in effect, including agreements for response to fire and medical emergencies. Periodic media briefings and familiarization regarding radiological emergencies will continue to be offered.

With the negligible potential for offsite radiological consequences, there is no need to supply State and local government organizations with continuous information on accident conditions. PSC will perform initial notification of State and local governments and will inform them of the nature and status of the emergency. Periodic (but not continuous) updates of accident status and recovery activities will be provided.

4. Eliminate PSC Offsite Response Capabilities:

Elimination of the need for offsite response will eliminate requirements for offsite ERF's, including the Forward Command Post (FCP), the Executive Command Post (ECP), and will allow elimination of the position of the Corporate Emergency Director (CED), since command and control of the emergency will be restricted to onsite control by the Emergency Coordinator. Deletion of these ERF's and management positions is consistent with the guidance of NUREGs 0654 and 0696, which state that the TSC will perform the functions of the EOF [FCP] during an Alert.

Additionally, PSC will continue to perform initial notification of the State and local governments (via the Weld County Communications Center and the Colorado Department of Health), as well as provide both organizations with periodic status updates. However, PSC will no longer dispatch PSC personnel to the SEOC in response to activation of the Fort St. Vrain Defueling Emergency Response Plan (DERP).

5. Eliminate Dissemination of Emergency Plan Information to Local Residents:

With the negligible potential for offsite radiological consequences, the need for annual dissemination of basic emergency planning information to the public located within the five-mile radius (the current approved EPZ) will no longer be necessary and will not be a requirement of the DERP.

6. Eliminate the Need for the Offsite Emergency Warning System:

Since there is negligible potential for offsite radiological consequences following a Fort St. Vrain radiological emergency, the Emergency Warning System (consisting of cone-alert radios and the Platteville siren), to warn local residents of protective actions, will no longer be maintained as part of the DERP.

7. Consolidate the PCC and TSC under the Control of the TSC Director:

PSC has evaluated onsite emergency response manpower requirements as a result of the reduced consequences of remaining accidents and the elimination of offsite ERF's, and determined that onsite manpower may be reduced and onsite ERF's consolidated. Changes will be made to ERF staffing assignments to reflect the reduced communication requirements with offsite ERF's.

Based on this evaluation, the TSC and Personnel Control Center (PCC) functions have been consolidated in the TSC under the direction of the TSC Director. Consolidating the PCC into the TSC is acceptable for the following reasons: (1) onsite radiological consequences are significantly reduced, which should allow controlled access to all areas in and around the Reactor Building within the 100-meter EPZ; (2) elimination of offsite communication responsibilities reduces minimum staffing requirements; (3) based on minimum staffing levels for an Alert, this consolidation will not cause congestion in the TSC; and (4) consolidation will allow the Emergency Coordinator (TSC Director) direct control of onsite activities, including field and in-plant surveys, search and rescue, and plant recovery teams dispatched to control and mitigate accident consequences.

As the onsite Emergency Coordinator, the TSC Director has always been ultimately responsible for the function of the PCC, although the PCC Director performed oversight and implementation of these duties. In consolidating the PCC into the TSC, the need for a PCC Director will be eliminated, communications will be handled more directly and effectively, and the potential for miscommunication will be decreased.

With the decrease in severity of remaining credible radiological emergencies, the demands on the TSC Director will be proportionally decreased. This in turn will allow the TSC Director the opportunity to assume direct oversight of duties once performed by the PCC without decreasing the effectiveness of the emergency response organization. Consolidation of the teams into the TSC will allow the TSC Director more direct control of corrective actions, while the reduction in minimum staffing will prevent this consolidation from interfering with the onsite command and control responsibilities of the TSC.

8. Eliminate the EPZ field team:

In the current RERP, two field teams are dispatched to perform radiological surveys offsite. The Exclusion Area Boundary (EAB) field team surveys the area within 590 meters of the Reactor Building. The EPZ field monitoring team is initially dispatched to track and follow the radiological plume. They are responsible for tracking the plume exposure pathway until the State radiological monitoring teams are activated and begin monitoring. Once the State field teams have assumed responsibility for radiological monitoring, the EPZ team provides support for the State teams.

Based on the revised accident and radiological consequences, there will be negligible offsite radiological consequences. The EAB field monitoring team will continue to conduct radiological surveys, but will conduct these surveys in the immediate vicinity of the Reactor Building, within the 100-meter EPZ. Since the offsite consequences are negligible and there is no need for State radiological monitoring, there is no need for the EPZ radiological field monitoring team and it has been eliminated.

9. Eliminate Distribution of KI Tablets Both Onsite and Offsite:

With the EPZ limited to onsite areas and with negligible short term offsite radiological consequences, there is no longer any need to stock and/or issue KI tablets to local area residents within the five-mile radius of the plant. Additionally, all I-131 in the primary coolant has undergone well over five half-lives of radioactive decay since the permanent shutdown of Fort St. Vrain and would be non-existent in any future radiological release from Fort St. Vrain. Therefore, there is no need to maintain and administer the KI tablets to either onsite or offsite personnel.

10. Revise the Formal Recovery Organization and Procedures:

The extended LOFC period will allow ample time for corrective action, including recovery planning and restoration of decay heat removal. PCRV liner cooling and Fuel Storage Well cooling are sufficient to prevent damage to any of the fission product boundaries. Several redundant water sources are available which can supply these cooling requirements.

The formal recovery procedures required by regulations have been revised to reflect: (1) reduction in the number of operating systems needed to maintain permanently shutdown conditions; (2) reduction in the severity of possible accident consequences and possible radiological emergencies; (3) longer accident recovery periods (in excess of five days to restore cooling to the PCRV and the reactor core); and (4) reduced minimum staffing of the onsite emergency response organization.

ATTACHMENT 3 TO P-90169

REQUEST FOR EXEMPTION

FROM 10 CFR 50.54(q)
FOR THE
FORT ST. VRAIN NUCLEAR GENERATING STATION

I. REQUEST FOR EXEMPTION

Pursuant to 10 CFR 50.12(a), Public Service Company of Colorado (PSC) hereby applies to the Nuclear Regulatory Commission (NRC) for an exemption from the provisions of 10 CFR 50.54(q) which require offsite emergency response planning and response to accidents at the Fort St. Vrain Nuclear Generating Station.

As a result of the decreased scope of the Fort St. Vrain Defueling Emergency Response Plan, which is consistent with the plant's permanently shutdown status, PSC proposes to: (1) eliminate the offsite response capabilities, including emergency response facilities and training requirements; and (2) eliminate the annual dissemination of basic emergency planning information to the public located within the five-mile radius (formerly the Emergency Planning Zone (EPZ)) of Fort St. Vrain.

II. BACKGROUND

Fort St. Vrain was permanently shutdown on August 29, 1989. The Defueling Safety Analysis Report (DSAR), submitted to the NRC on August 16, 1989 (P-89287), identified a greatly reduced spectrum of credible accidents and accident consequences which could occur after the permanent shutdown and during the defueling of Fort St. Vrain. The following conclusions are based on the DSAR analysis results:

- o no accident will occur which will necessitate the classification of an emergency above the level of Alert.
- o Fort St. Vrain can withstand a complete Loss Of Forced Circulation (LOFC) with no Prestressed Concrete Reactor Vessel (PCRV) liner cooling for in excess of five days following the LOFC, without exceeding temperature limits in the fuel, insulation covers, and PCRV liner and concrete.
- o the worst case accident is a drop of a loaded spent fuel shipping cask within the reactor building, which could result in a release and two-hour whole body gamma (WBG) exposure of 0.19 mrem at 100 meters from the Reactor Building.

The proposed Plan has been reviewed by the State and local governments, who are in agreement with PSC's plans to eliminate the need for offsite radiological emergency response planning.

PSC has performed a review of the proposed changes to the Plan in accordance with 10 CFR 50.54(q) and determined that, for the remaining credible accidents, the proposed Plan does not represent a reduction in effectiveness to adequately protect the health and safety of the general public.

However, 10 CFR 50.54(q) also requires that a licensee authorized to possess or operate a nuclear power plant "*follow and maintain in effect emergency plans which meet the standards of 50.47(b) and the requirements in Appendix E*" of 10 CFR 50. Since PSC proposes to make changes to the emergency response plan which will delete offsite emergency response requirements, an exemption request pursuant to 10 CFR 50.12 is required. Proposed changes to the emergency response capabilities will allow PSC to: (1) eliminate the offsite response capabilities, including emergency response facilities and training requirements; and (2) eliminate the annual dissemination of basic emergency planning information to the public located within the five-mile radius (the current approved Emergency Planning Zone) of Fort St. Vrain.

III. REGULATORY PROVISIONS

A. GENERAL EXEMPTION CRITERIA

The following paragraphs provide PSC's justification that this exemption request is consistent with the general exemption criteria of 10 CFR 50.12(a)(1).

Authorized by Law:

The requested exemption is fully authorized by law. The Commission has granted exemptions from certain emergency preparedness requirements to Carolina Power & Light and Cleveland Electric Illuminating Company. (Carolina Power & Light Co., 24 NRC 769 (1986), 51 Fed. Reg. 41035 (1986))

No Undue Risk to the Public Health and Safety:

The requested exemption presents no undue risk to the public health and safety. A review of Fort St. Vrain's DSAR accident consequences indicates that no radiological emergency greater than an Alert classification is credible and exposure outside the revised Emergency Planning Zone will be well below the limits of the EPA Protective Action Guidelines. In addition, Fort St. Vrain is permanently shutdown and PSC has notified the NRC that the plant will never again be operated. The NRC has acknowledged PSC's intent through issuance of a Confirmatory Order, dated May 1, 1990, prohibiting PSC from operating the plant. Therefore, the risk that criticality would or could ever be achieved is remote.

Consistent with the Common Defense and Security:

The requested exemption is consistent with the common defense and security and no proposed action would adversely impact those considerations. PSC proposes no changes to the NRC-approved Fort St. Vrain physical security or fire protection programs which could compromise the safeguarding of the remaining fuel.

B. SPECIAL CIRCUMSTANCES

The following paragraphs provide PSC's justification that special circumstances exist for granting the requested exemption, as set forth in 10 CFR 50.12(a)(2)(ii), (iii) and (iv).

(ii) Application Is Not Necessary to Achieve Underlying Purpose:

Granting the requested exemption will continue to serve the underlying purpose of the rule. Fort St. Vrain is permanently shutdown and the reactor core is in a partially defueled condition. The remaining credible accidents require no greater response than an Alert classification, and procedures to notify State and other organizations in the case of a Notification of Unusual Event or an Alert remain part of the plan. Potential offsite exposures are well below the limits of the EPA Protective Action Guidelines, and protection of onsite personnel and implementation of onsite response procedures remain part of the emergency response plan.

Therefore, retaining offsite emergency response provisions are unnecessary and serve no purpose where there is negligible offsite exposure. The proposed Defueling Emergency Response Plan serves the underlying purpose of the regulation in that it maintains provisions to respond to remaining credible accidents and continues to provide for the protection of the health and safety of those persons who would be affected by the resulting radiological release. The proposed Plan is directed toward mitigating the consequences of credible accidents and provides reasonable assurance that appropriate measures can and will be taken to protect the health and safety of affected persons in the event of an emergency (See 44 Fed. Reg. 54308, Sept. 19, 1979).

Additionally, the NRC acknowledges (10 CFR 50 Appendix E, Paragraph I) that during fuel loading or low power operations up to 5% of rated power:

"no NRC review, findings or determinations concerning the state of offsite emergency preparedness or the adequacy of and the capability to implement State and local offsite emergency plans... are required prior to the issuance of such a license."

Therefore, current NRC regulations recognize a reduced concern regarding offsite emergency preparedness for fully fueled reactors operating at power levels up to 5% of full power. Existence of a Confirmatory Shutdown Order for Fort St. Vrain in its present partially defueled condition is directly comparable to the fuel loading and low power operational status identified above, where the NRC has acknowledged a reduced concern regarding the existence of State or local emergency plans.

Therefore, in this instance, special circumstances exist such that strict compliance with the rule is not necessary to achieve the underlying purpose of the rule.

(iii) Undue Hardship:

Compliance with the regulation presents an undue hardship to PSC in that it requires expenditures in excess of those contemplated when the regulation was adopted and expenditures significantly in excess of those incurred by plants similarly situated. Offsite response capabilities (including facilities, support equipment, procedures and inspections), as well as personnel training and periodic exercises, are expensive and unnecessary, based on the remaining credible accidents.

Costs for maintaining offsite response capabilities of the current emergency response program, which would not be activated under the DERP, will be in excess of those originally contemplated when the regulation was adopted. The underlying purpose of the regulation was to respond to radiological emergencies at an operating plant which resulted in offsite consequences. The regulation does not consider or address emergencies at shutdown, non-operating facilities where criticality and offsite exposure are remote possibilities.

In addition, this burden would be imposed almost exclusively on the present PSC shareholders. As a result of a 1986 Settlement Agreement between PSC, the Colorado Public Utilities Commission (CPUC) and consumer groups, Fort St. Vrain was removed from the rate base. The removal of Fort St. Vrain from the regulatory rate base has left PSC shareholders responsible for the costs to operate and maintain the plant until decommissioning is completed and the 10 CFR 50 license is terminated.

The costs PSC would incur without the exemption significantly exceed the costs to plants similarly situated. Analogous plants are those which have requested exemptions from the regulation concerning certain aspects of their emergency plans. Such exemptions relieved those licensees of costs associated with compliance with inapplicable or unnecessary requirements of the regulation.

Such a hardship represents special circumstances as contemplated in 10 CFR 50.12(a)(2)(iii).

(iv) Benefit to Public Health and Safety:

Granting this exemption would benefit the public by reducing required state and FEMA participation in training exercises and emergency response and, consequently, reducing government expenditures. Discussions with the State of Colorado and local county officials indicate that they are in agreement with PSC's plans to eliminate the need for offsite response for radiological emergencies at Fort St. Vrain. Relieving these organizations from response requirements, especially in the case of the State of Colorado, would allow more efficient use of limited state government resources to monitor and respond to other emergencies within the state, thereby contributing to the overall benefit of the public health and safety.

IV. CONCLUSION

Based on the information presented in Sections II and III of this request, the Defueling Emergency Response Plan proposed by PSC for Fort St. Vrain is in accordance with the general exemption criteria of 10 CFR 50.12(a)(1), and special circumstances exist which justify approval of an exemption request, as required by 10 CFR 50.12(a)(2). Therefore, this exemption to the requirements of 10 CFR 50.54(q) is fully justified, and PSC requests that the Commission grant this exemption request.