



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

May 14, 1990

MEMORANDUM: Sholly Coordinator

FROM: Peter B. Erickson, Project Manager  
Non-Power Reactors, Decommissioning and  
Environmental Project Directorate  
Division of Reactor Projects - III,  
IV, V and Special Projects

SUBJECT: REQUEST FOR PUBLICATION IN BIWEEKLY FR NOTICE - NOTICE  
OF CONSIDERATION OF ISSUANCE OF AMENDMENT TO FACILITY  
OPERATING LICENSE AND PROPOSED NO SIGNIFICANT HAZARDS  
CONSIDERATION DETERMINATION AND OPPORTUNITY FOR A HEARING

Public Service Company of Colorado, Docket No. 50-267, Fort St. Vrain  
Nuclear Generating Station, Weld County, Colorado

Date of amendment request: April 26, 1990

Description of amendment request: This proposed amendment would delete requirements for shutdown margin assessments when nine or less fueled regions remain in the core during reactor defueling.

Basis for proposed no significant hazards consideration determination: The Commission has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92(c). A proposed amendment to an operating license for a facility involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not: (1) involve a significant increase in the probability or consequences of an accident previously evaluated; or (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety.

9005170259 900514  
PDR AD0CK 05000267  
P FCC

DF01  
'10

The Public Service Company of Colorado (PSC) has submitted a no significant hazards consideration analysis in accordance with the requirements of 10 CFR Parts 50.91 and 50.92. PSC's analysis of significant hazards consideration is summarized as follows:

The proposed amendment deletes requirements to perform shutdown margin assessments during defueling after nine fueled regions or less remain in the core.

$k(\text{eff})$  has been calculated to equal 0.95 when nine fueled regions remain in the core, assuming all control rods are fully withdrawn. However, during the remainder of the defueling process, a maximum of two control rod pairs will be removed from fueled regions at any one time in preparation for defueling those regions. The remainder of the control rod pairs will be fully inserted in the fueled regions. This results in a calculated  $k(\text{eff})$  below 0.81. Therefore, the probability of an inadvertent criticality is not increased by elimination of shutdown margin assessment when nine fueled regions or less remain in the core.

Proposed changes to TS for Reactor Core Design Features will allow additional neutron sources to be installed after nine fueled regions or less remain in the core. This will enable a count rate indication above background noise levels to be maintained on the Startup Channel instrumentation. This aids in assuring Startup Channel operability. The maximum count rate seen by the Startup Channel detectors from these sources is limited by proposed TS to 50 counts per second. This ensures that any unexpected reactor criticality will be indicated on the Startup Channel instrumentation.

Based on the above evaluation, PSC concludes that the proposed changes will not involve a significant increase in the probability or consequences of an accident previously evaluated, create the possibility of a new or different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety.

The staff has reviewed the licensee's no significant hazards consideration determination and based on its review proposes to determine that the proposed changes do not involve significant hazards considerations.

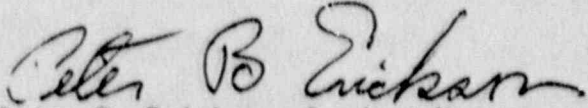
Local Public Document Room location: Greeley Public Library, City Complex Building, Greeley, Colorado

Sholly Coordinator

- 3 -

Attorney for licensee: J. K. Tarpey, Public Service Company Building, Room 900,  
550 15th Street, Denver, Colorado 80202

NRC Project Director: Seymour H. Weiss

  
Peter B. Erickson, Project Manager  
Non-Power Reactors, Decommissioning and  
Environmental Project Directorate  
Division of Reactor Projects III, IV,  
V and Special Projects



May 14, 1990

Sholly Coordinator

- 3 -

Attorney for licensee: J. K. Tarpey, Public Service Company Building, Room 900, .  
550 15th Street, Denver, Colorado 80202

NRC Project Director: Seymour H. Weiss

Original signed by:

Peter B. Erickson, Project Manager  
Non-Power Reactors, Decommissioning and  
Environmental Project Directorate  
Division of Reactor Projects III, IV,  
V and Special Projects

DISTRIBUTION:

Docket File  
PDNP r/f

EHylton  
PERickson

OGC  
Sholly Coordinator

NRC PDR Local PDRs

[FSV LONG VERSION SHOLLY]

PDNP:AA  
EHylton  
5/8/90

RSB  
L. Kopp  
5/10/90  
OK  
L. Kopp  
Dam FSV  
5/10/90  
MJE

PDNP:PM  
PERickson:dmg  
5/8/90

SHW  
PDNP:D  
SWeiss  
5/14/90