



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
RELATED TO AMENDMENT NOS. 122 AND 115 TO
FACILITY OPERATING LICENSE NOS. DPR-42 AND DPR-60
NORTHERN STATES POWER COMPANY
PRAIRIE ISLAND NUCLEAR GENERATING PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-282 AND 50-306

1.0 INTRODUCTION

By letter dated July 17, 1995, as supplemented October 16, 1995, and November 28, 1995, the Northern States Power Company (NSP or the licensee) requested amendments to the Technical Specifications (TSs) appended to Facility Operating License Nos. DPR-42 and DPR-60 for the Prairie Island Nuclear Generating Plant, Unit Nos. 1 and 2. The proposed amendments would revise the Prairie Island Radiological Effluent TSs and other sections relating to radiological controls to conform to NUREG-1431, "Standard Technical Specifications, Westinghouse Plants," Revision 1, and Generic Letter (GL) 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the Technical Specifications and the Relocation of Procedural Details of RETS to the Offsite Dose Calculation Manual or to the Process Control Programs." GL 89-01 suggests that licensees (1) implement programmatic controls for Radiological Effluent Technical Specifications (RETS) in the Administrative Controls section of TSs, and (2) relocate procedural details of RETS to the Offsite Dose Calculation Manual (ODCM) or to the Process Control Program (PCP).

By letter of October 16, 1995, NSP forwarded a copy of its revised ODCM to the NRC for use as a reference. This information did not change the licensee's amendment request nor the staff's initial proposed no significant hazards considerations determination. Therefore, renoticing was not warranted.

In proposed Specification 6.5.E.1.b and 6.5.H.3, the licensee had referred to 10 CFR 20.106. This section of Part 20 had automatically converted to 10 CFR 20.1302 when the new Part 20 became effective. The licensee changed the citation to refer to 10 CFR 20.1302 in its November 28, 1995, supplement. The use of the same reference, although by a different designation, did not change the TSs and thus did not affect the staff's no significant hazards consideration determination.

Specification 6.5.B.1.a(4), as submitted, could have been interpreted as permitting closed circuit TV cameras alone to provide exposure control in high as well as low level radiation areas. The licensee advised the staff that in high radiation areas, the intent was that closed circuit TV or transmitting radiation monitoring devices would not be used alone, but in conjunction with other controls to preclude overexposures. In the November 28, 1995, supplement, the licensee clarified this item by deleting the one sentence that had been proposed for 6.5.B.1.a(4), including the reference to this sub-item in 6.5.B.1.b, to conform with NUREG-1431. The presence or absence of this one sentence would not affect the staff's assessment of radiation controls in the staff's no significant hazards consideration determination.

In the July 17, 1995, submittal, the licensee stated in several places that it intended to continue to allocate the total effluent releases equally to each unit, which is acceptable. The NRC staff advised the licensee that the wording could be interpreted as limiting each unit to one-half the regulatory limit. In the November 28, 1995, supplement the licensee clarified this issue by adding the words "each unit" to TS 6.5.H, paragraphs 4, 8, and 9. This is a minor clarification and in no way affects the staff's initial no significant hazards consideration determination.

Proposed TS 6.7.C.1, Annual Radiological Environmental Monitoring Report, incorporated the wording in GL 89-01. The staff advised the licensee that since GL 89-01 was issued, the standard TSs had been developed. The requirements in 5.6.2 of NUREG-1431, Rev. 1, dated April 7, 1995, on this same subject contained additional requirements that were very similar to Specification 6.7.C.1, paragraphs (c) and (d) in the present Prairie Island TSs. The licensee had proposed to delete these two paragraphs and relocate them to the ODCM. In the November 28, 1995, supplement, the licensee stated that it would retain 6.7.C.1 (c) and (d) in the TSs. With this retention, there is no change to these paragraphs in the present TSs and no effect on the staff's no significant hazards consideration determination.

2.0 BACKGROUND

Section 182a of the Atomic Energy Act (the "Act") requires applicants for nuclear power plant operating licenses to state TSs to be included as part of the license. The Commission's regulatory requirements related to the content of TSs are set forth in 10 CFR 50.36. That regulation requires that the TSs include items in five specific categories, including (1) safety limits, limiting safety system settings and limiting control settings; (2) limiting conditions for operation; (3) surveillance requirements; (4) design features; and (5) administrative controls.

On July 19, 1995, the Commission published revisions to 10 CFR 50.36 specifying what must be included in limiting conditions for operation in the TSs (60 FR 36953). The new Final Rule identified four criteria to be used in determining whether a particular matter is required to be included in the TSs, as follows: (1) Installed instrumentation that is used to detect, and indicate in the control room, a significant abnormal degradation of the

reactor coolant pressure boundary; (2) a process variable, design feature, or operating restriction that is an initial condition of a design-basis accident or transient analysis that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (3) a structure, system, or component that is part of the primary success path and which functions or actuates to mitigate a design-basis accident or transient that either assumes the failure of or presents a challenge to the integrity of a fission product barrier; (4) a structure, system, or component which operating experience or probabilistic safety assessment has shown to be significant to public health and safety. As a result, existing TS requirements which fall within or satisfy any of the criteria in the Final Policy Statement must be retained in the TSs, while those TS requirements which do not fall within or satisfy these criteria may be relocated to other, licensee-controlled documents.

3.0 EVALUATION

The staff has reviewed the licensee's proposed changes to the TSs and finds that the request to relocate the RETS is consistent with the guidance provided in GL 89-01 and with the standard TSs in NUREG-1431. The line-item improvements in GL 89-01 allow (1) the relocation of the existing procedural details of the current RETS to the plant's ODCM or PCP, as appropriate, and (2) the incorporation of programmatic controls for radioactive wastes in the administrative controls section of the TSs. The staff considers that any future changes to the relocated RETS will be adequately controlled by 10 CFR 50.59, and, therefore, the radiological effluents control program at a licensee facility does not need to be controlled by the plant TSs. Additionally, should the licensee determine that any future change to plant design involves any unreviewed safety question, because of either (1) an increase in the probability or consequences of accidents or malfunctions of equipment important to safety, (2) the creation of a possibility for an accident or malfunction of a type different from any evaluated previously, or (3) a reduction in the margin of safety, then NRC approval and a license amendment would be required before implementation of the change. The NRC inspection and enforcement programs also enable the staff to monitor facility changes and licensee adherence to its commitments in the updated final safety analyses report (UFSAR) and to take any remedial action that may be appropriate.

The specific changes to the TSs are addressed below:

1. The amendments revise the Table of Contents to reflect the deletion of TS Sections 3.9, 4.10, 4.11, 4.17, 5.5, Bases 3.9, 4.10, 4.11, 4.17 and associated tables and figures. The revisions also reflect the inclusion of new subsections. The revisions also correct the spelling of "security" in 6.5.F of the Table of Contents. These are administrative and editorial changes and are acceptable.
2. In Section 1.0, Definitions, the amendments delete the definitions of gaseous radwaste treatment system, members of the public, offsite dose calculation manual, process control program, purge-purging, site boundary,

solidification unrestricted area, ventilation exhaust treatment system and venting. The definition of the offsite dose calculation manual has been relocated to Section 6.5. The other definitions have been relocated to the ODCM or PCP in accordance with the guidance in GL 89-01. The proposed changes are acceptable.

3. Section 3.9 on "Radioactive Effluents" is being deleted in its entirety. The contents of Section 3.9 will be relocated to the ODCM or PCP, as appropriate, with additional programmatic controls being added to the Administrative Controls Section of the TSs in Section 6.5. The requirements in this section do not meet any of the four criteria in 10 CFR 50.36 and can be removed and relocated to a licensee controlled document, in this case the ODCM or PCP. The change is also consistent with the new standard TSs.
4. Section 4.10 on "Radiation Environmental Monitoring Program" is being deleted in its entirety. The contents of Section 4.10 will be relocated to the ODCM or PCP as appropriate with additional programmatic controls added to Section 6.5. The latter requires that changes to the ODCM be submitted for NRC review, thus maintaining NRC input to radiation environmental monitoring activities. The proposed changes are acceptable.
5. Section 4.11 on "Radioactive Source Leakage Test" is being deleted in its entirety. The requirements in this section do not meet any of the four criteria in 10 CFR 50.36 and can be removed and relocated to a licensee controlled document, in this case the ODCM or PCP. The change is acceptable.
6. Section 4.17 on "Radioactive Effluents Surveillance" is being deleted in its entirety. The contents of this section will be relocated to the ODCM or PCP, as appropriate. Additional programmatic controls are being added to Section 6.5. The change is acceptable.
7. Section 5.5 on "Radioactive Waste Systems" is being deleted in its entirety. This section currently describes the design objectives and functions of the liquid, gaseous and solid radwaste processing systems and the process and effluent radiological monitoring system. The section does not specify any limits or requirements on plant operation or the radwaste processing system. The requirements on the latter are in the UFSAR or NRC regulations (e.g., 10 CFR Part 20). In accordance with the revised 10 CFR 50.36, the discussion of the systems in this section is material that does not have to be in the TSs and the proposed deletion is acceptable.
8. Section 6.5 of the TSs describes the requirements on "Plant Operating Procedures." This section is being expanded from four to eight pages to cover the new requirements. Section 6.5B applies to control of high radiation areas in the plant. This is being changed to incorporate the revised 10 CFR Part 20 section number references. Section 6.5D currently describes the process for making changes to the PCP. This program ensures compliance with 10 CFR Part 20, 10 CFR Part 61, and 10 CFR Part 71 which

regulate the processing and packaging of solid radioactive waste. Since the PCP compliance is already mandated by existing regulations, this subsection is being deleted and relocated to plant procedures. The descriptive material in this section does not meet any of the four criterion in 10 CFR 50.36. The material can be removed and relocated to a licensee controlled document (e.g., UFSAR or plant procedures). Section 6.5E describes the process for changing the ODCM. This subsection is being revised to include the new programmatic controls associated with relocation of the RETS Limiting Conditions for Operation (LCOs) and Surveillance Requirements from the TSs to the ODCM. A new subsection "H" (i.e., 6.5H) is being added to describe the "Radiological Effluent Controls Program." The subsection describes limitations and monitoring requirements. The subsection notes that the program shall allocate releases equally to each unit. A new subsection "I" on "Explosive Gas and Storage Tank Radioactivity Monitoring Program," is being added. This subsection specifies limits, surveillance requirements, and controls on potentially explosive gas mixtures contained in the waste gas holdup system, the quantity of radioactivity contained in gas storage tanks, and the quantity of radioactivity contained in unprotected outdoor liquid storage tanks. The revised requirements proposed by the licensee provide adequate control over the various monitoring programs and are acceptable.

9. Section 6.7 of the TSs specifies reporting requirements. Subsection 6.7.A.4 currently specifies what is to be included in the annual radioactive effluent reports. Most of the prescriptive material is being relocated to the ODCM. The revised wording specifies that the material in the calendar year report shall be consistent with the objectives outlined in the ODCM and in conformance with 10 CFR 50.36a and 10 CFR Part 50, Appendix I, Section IV.B.1. The proposed changes are acceptable.
10. Subsections 6.7.C.1 and 2 specify the material to be included in the annual radiological environmental monitoring report and environmental special reports. In accordance with the guidelines in GL 89-01, the specific report requirements are relocated to the ODCM and subsection 6.7.C.2 is deleted. The proposed changes are acceptable.
11. The BASES for Sections 3.9, 4.10, 4.11, and 4.17 are being deleted in their entirety. Since the sections which these BASES support have been deleted, the BASES themselves are no longer relevant and should be deleted.
12. The changes in the November 28, 1995, supplement provided clarification or conformance to the new standard TSs and are acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Minnesota State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

The amendments change requirements with respect to installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and change surveillance requirements. The NRC staff has determined that the amendments involve no significant increase in the amounts, and no significant change in the types, of any effluents that may be released offsite, and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that the amendments involve no significant hazards consideration and there has been no public comment on such finding (60 FR 52933). Accordingly, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). The amendments also change recordkeeping, reporting, or administrative procedures or requirements. Accordingly, with respect to these items, the amendments must meet the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of the amendments.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

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