Industry/TSTF Standard Technical Specification Change Traveler

Elimination of Requirements for a Post Accident Sampling System (PASS)

Classification: 3) Improve Specifications

NUREGs Affected: ☐ 1430 ☑ 1431 ☑ 1432 ☐ 1433 ☐ 1434

Description:

NUREG-1431, Rev.1

The proposed change modifies (which includes the addition of a Reviewer's Note) TS ACTIONS Bases 3.3.3, "PAM Instrumentation, " Required Action D.1 to indicate that with the implementation of WCAP-14986, Rev. 1, "Post Accident Sampling System Requirements: A Technical Basis," other core damage assessment capabilities may be used to provide information for operator decisions in lieu of the PASS as the basis for the 72 hour Completion Time.

The proposed change brackets Section 5.5.3, "Post Accident Sampling," and adds a Reviewer's Note to indicate that the program may be eliminated based on the implementation of WCAP-14986, Rev. 1, and the associated NRC safety evaluation dated June 14, 2000.

NUREG-1432, Rev. 1

The proposed change brackets Section 5.5.3, "Post Accident Sampling System," and adds a Reviewer's Note to indicate that the program requirements may be eliminated based on the implementation of Topical Report CE NPSD-1157, Revision 1, "Technical Justification for the Elimination of the Post-Accident Sampling System from the Plant Design and Licensing Basis for CEOG Utilities" and the associated NRC Safety Evaluation dated May 16, 2000.

Justification:

NUREG-1431, Rev.1
(Information Contact: Steve Wideman)

Background

WCAP-14986, Rev. 1, 'Post Accident Sampling System Requirements: A Technical Basis,' evaluated the post accident sampling system (PASS) requirements to determine their contribution to plant safety and accident recovery. The topical report considered the progression and consequences of core damage accidents and assessed the accident progression with respect to plant abnormal and emergency operating procedures, severe accident management guidance, and emergency plans. WCAP-14986, Rev. 1, concluded that the current PASS samples specified in NUREG-0737, 'Clarification of TMI Action Plan Requirements,' may be eliminated (i.e., remove the requirements to perform the sampling from the licensing basis).

Licensee's implementing WCAP-14986, Rev. 1, and the associated NRC safety evaluation dated June 14, 2000, may delete the program requirements of Section 5.5.3.

Justification

WCAP-14986, Rev. 1, provides the justification for the elimination of PASS. The NRC issued a safety evaluation dated June 14, 2000 approving WCAP-14986 with additional licensee required actions.

Additional Information/Comments Related to the Proposed Changes

With the elimination of PASS, plant specific TS Section 5.5.2, 'Primary Coolant Sources Outside Containment,' may also need to be revised. NUREG-1431, Rev. 1, Section 5.5.2, specifies the program to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. The NUREG further states: 'The systems included [Recirculation Spray, Safety Injection, Chemical and

Volume Control, gas stripper, and Hydrogen Recombiner]. Although NUREG-1431, Rev. 1, does not specifically call out in the brackets 'Nuclear Sampling System (Post Accident Sampling System only),' a number of plants have the PASS specified in Section 5.5.2. With the elimination of the PASS requirements, modifications may be performed such that the PASS system is isolated and would no longer have the capability to contain highly radioactive fluids. Therefore, if the PASS is isolated from the capability to contain highly radioactive fluids, it is acceptable to revise TS Section 5.5.2 to eliminate the PASS from the Primary Coolant Sources Outside Containment program.

TS Section 5.4.1b requires written procedures shall be established, implemented, and maintained covering (in part) the emergency operating procedures required to implement the requirements of NUREG-0737 and to NUREG-0737, Supplement 1, as stated in [Generic Letter 82-33]. NUREG-0737, Item I.C.1, 'Guidance for the Evaluation and Development of Procedures for Transients and Accidents,' as clarified by Supplement 1 to NUREG-0737 required licensees to perform analyses of transients and accident, prepare emergency procedure guidelines, and upgrade emergency operating procedures. There may be actions specified in emergency operating procedures based on NUREG-0737 and NUREG-0737, Supplement 1 requirements. However, the intent of this specification is only for establishing, implementing, and maintaining emergency operating procedures. As such, elimination of a NUREG-0737 requirement, such as the elimination of the requirement for a Post Accident Sampling System, does not impact the TS requirement associated with emergency operating procedures.

NUREG-1432, Rev. 1
(Information Contact: Tom Weber, (623)-393-5764, email address tweber01@apsc.com)

Background

Topical Report CE NPSD-1157, Revision 1, 'Technical Justification for the Elimination of the Post-Accident Sampling System from the Plant Design and Licensing Basis for CEOG Utilities' and the associated NRC Safety Evaluation dated May 16, 2000 provide the justification for this change.

Additional Information/Comments Related to the Proposed Changes

With the elimination of PASS, plant specific TS Section 5.5.2, 'Primary Coolant Sources Outside Containment,' may also need to be revised. NUREG-1432, Rev. 1, Section 5.5.2, requires a program be established to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident. Although NUREG-1432, Rev. 1, does not specifically call out 'Nuclear Sampling System (Post Accident Sampling System only),' a number of plants have PASS specified in Section 5.5.2. With the elimination of the PASS requirements, modifications may be performed such that the PASS system is isolated and would no longer have the capability to contain highly radioactive fluids. Therefore, if the PASS is isolated from the capability to contain highly radioactive fluids, it is acceptable to revise the plant specific TS Section 5.5.2 to eliminate the PASS from the Primary Coolant Sources Outside Containment program.

TS Section 5.4.lb requires written procedures shall be established, implemented, and maintained covering (in part) the emergency operating procedures required to implement the requirements of NUREG-0737 and to NUREG-0737, Supplement 1, as stated in [Generic Letter 82-33]. NUREG-0737, Item I.C. 1, 'Guidance for the Evaluation and Development of Procedures for Transients and Accidents,' as clarified by Supplement 1 to NUREG-0737 required licensees to perform analyses of transients and accident, prepare emergency procedure guidelines, and upgrade emergency operating procedures. There may be actions specified in emergency operating procedures based on NUREG-0737 and NUREG-0737, Supplement 1 requirements. However, the intent of this specification is only for establishing, implementing, and maintaining emergency operating procedures. As such, elimination of a NUREG-0737 requirement, such as the elimination of the requirement for a Post Accident Sampling System, does not impact the TS requirement associated with emergency operating procedures.

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NRC Contact: Schulten, Carl 301-415-1192 css1@nrc.gov

Revision History

OG Revision 0 **Revision Status: Active** **Next Action: NRC**

Revision Proposed by: WOG & CEOG

Revision Description:
Original Issue

Owners Group Review Information

Date Originated by OG: 02-Jul-00

Owners Group Comments
(No Comments)

Owners Group Resolution: Approved Date: 02-Jul-00

TSTF Review Information

TSTF Received Date: 02-Jul-00 Date Distributed for Review 13-Jul-00

OG Review Completed: ☑ BWOG ☑ WOG ☑ CEOG ☑ BWROG

TSTF Comments:
(No Comments)

TSTF Resolution: Approved Date: 13-Jul-00

NRC Review Information

NRC Received Date: 20-Jul-00

NRC Comments:
(No Comments)

Final Resolution: NRC Action Pending Final Resolution Date:

Incorporation Into the NUREGs

File to BBS/LAN Date: TSTF Informed Date: TSTF Approved Date:

NUREG Rev Incorporated:

Affected Technical Specifications

5.5.3	Post Accident Sampling System	NUREG(s)- 1431 1432 Only
Action 3.3.3.D Bases	PAM Instrumentation	NUREG(s)- 1431 Only

INSERT 1

---------- Reviewer's Note ----------
This program may be eliminated based on the implementation of WCAP-14986, Rev. 1, "Post Accident Sampling System Requirements: A Technical Basis," and the associated NRC Safety Evaluation dated June 14, 2000.

INSERT 2

---------- Reviewer's Note ----------
Implementation of WCAP-14986, Rev. 1, "Post Accident Sampling System Requirements: A Technical Basis," and the associated NRC Safety Evaluation dated June 14, 2000, allows other core damage assessment capabilities in lieu of the Post Accident Sampling System.

INSERT 3

---------- Reviewer's Note ----------
This program may be eliminated based on the implementation of Topical Report CE NPSD-1157, Rev. 1, "Technical Justification for the Elimination of the Post-Accident Sampling System from the Plant Design and Licensing Basis for CEOG Utilities," and the associated NRC Safety Evaluation dated May 16, 2000.

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5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

5.5.2 Primary Coolant Sources Outside Containment

This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include [Recirculation Spray, Safety Injection, Chemical and Volume Control, gas stripper, and Hydrogen Recombiner]. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at refueling cycle intervals or less.

C 5.5.3 Post Accident Sampling Insert 1

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

a. Training of personnel;

b. Procedures for sampling and analysis; and

c. Provisions for maintenance of sampling and analysis equipment. J

5.5.4 Radioactive Effluent Controls Program

This program conforms to 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to members of the public from radioactive effluents as low as reasonably achievable. The program shall be contained in the ODCM, shall be implemented by procedures, and shall include remedial actions to

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BASES

ACTIONS

C.1 (continued)

of one inoperable channel of the Function limits the risk that the PAM Function will be in a degraded condition should an accident occur. Condition C is modified by a Note that excludes hydrogen monitor channels.

D.1

Insert 2

Condition D applies when two hydrogen monitor channels are inoperable. Required Action D.1 requires restoring one hydrogen monitor channel to OPERABLE status within 72 hours. The 72 hour Completion Time is reasonable based on the backup capability of the Post Accident Sampling System to monitor the hydrogen concentration for evaluation of core damage and to provide information for operator decisions. Also, it is unlikely that a LOCA (which would cause core damage) would occur during this time.

or other core damage assessment capabilities available

E.1

Condition E applies when the Required Action and associated Completion Time of Condition C or D are not met. Required Action E.1 requires entering the appropriate Condition referenced in Table 3.3.3-1 for the channel immediately. The applicable Condition referenced in the Table is Function dependent. Each time an inoperable channel has not met any Required Action of Condition C or D, and the associated Completion Time has expired, Condition E is entered for that channel and provides for transfer to the appropriate subsequent Condition.

F.1 and F.2

If the Required Action and associated Completion Time of Conditions C or D are not met and Table 3.3.3-1 directs entry into Condition F, the unit must be brought to a MODE where the requirements of this LCO do not apply. To achieve this status, the unit must be brought to at least MODE 3 within 6 hours and MODE 4 within 12 hours.

The allowed Completion Times are reasonable, based on operating experience, to reach the required unit conditions

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5.5 Programs and Manuals

5.5.1 Offsite Dose Calculation Manual (ODCM) (continued)

the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (i.e., month and year) the change was implemented.

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This program provides controls to minimize leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to levels as low as practicable. The systems include [Recirculation Spray, Safety Injection, Chemical and Volume Control, gas stripper, and Hydrogen Recombiner]. The program shall include the following:

a. Preventive maintenance and periodic visual inspection requirements; and

b. Integrated leak test requirements for each system at refueling cycle intervals or less.

5.5.3 Post Accident Sampling Insert 3

This program provides controls that ensure the capability to obtain and analyze reactor coolant, radioactive gases, and particulates in plant gaseous effluents and containment atmosphere samples under accident conditions. The program shall include the following:

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