LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Washington Nuclear Plant - Unit 2	50-397	1 OF 4

TITLE (4)

Voluntary Report on Use of Surveillance Requirement 3.0.3 Applicability for Reactor Coolant System Total Leakage Surveillance 3.4.5.1

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV. NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
09	06	97	97	010	0	11	7	97	FACILITY NAME	DOCKET NUMBER

OPERATING MODE		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more) (11)							
	1		20.402(b)		20.405(c)		50.73(a)(2)(iv)		73.71(b)
POWER LEVEL			20.405(a)(1)(i)		50.36(c)(1)		50.73(a)(2)(v)		73.71(c)
	100		20.405(a)(1)(ii)		50.36(c)(2)		50.73(a)(2)(vii)	X	OTHER Voluntary Report
			20.405(a)(1)(iii)		50.73(a)(2)(i)		50.73(a)(2)(viii)(A)		
			20.405(a)(1)(iv)		50.73(a)(2)(ii)		50.73(a)(2)(viii)(B)		
			20.405(a)(1)(v)		50.73(a)(2)(iii)		50.73(a)(2)(x)		

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER (Include Area Code)
J.E. Rhoads, Principal Engineer	(509) 377-4298

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS

SUPPLEMENTAL REPORT EXPECTED (14)			EXPECTED	MONTH	DAY	YEAR
YES (If yes, completed EXPECTED SUBMISSION DATE).	X	NO				

ABSTRACT: At 0800 on September 5, 1997, with the plant at 100 percent power, it was discovered that Technical Specification (TS) Surveillance Requirement (SR) 3.4.5.1 for the "Identified" portion of Reactor Coolant System (RCS) Total Leakage would not be able to be performed within the time limits of SR 3.0.2. Two methods are available to meet SR 3.4.5.1; a flow totaling instrument loop or a manual determination method. The reactor containment Equipment Drain (EDR) Flow Transmitter, EDR-FT-37, was declared inoperable at 0800 on 09/05/97. The manual method was performed at 1530, but not before the limits of SR 3.0.2 expired at 1100 on 09/05/97. The flow transmitter was declared inoperable because the flow totalizer was not responding to the actual low flow signals as expected, indicating below actual values. Performance of the manual method was delayed due to recovery actions from high sump area contamination levels, using the provisions of SR 3.0.3. This event is being reported as an item of generic interest to highlight differences in the reporting guidelines of NUREG 1022 and requirements of the Improved Technical Specifications.

The root cause for failure to perform the surveillance in accordance with SR 3.0.2 limits is that methods did not permit timely response to changing radiological conditions. At no time were the LCO 3.4.5 limits exceeded. Therefore, there is no safety significance associated with this event.

LICENSEE EVENT REPORT (LER)
Voluntary Report on Use of Surveillance Requirement 3.0.3 Applicability for
Reactor Coolant System Total Leakage Surveillance 3.4.5.1

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Washington Nuclear Plant Unit 2	50-397	97	010	0	2 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Event Description

At 0800 on September 5, 1997, with the plant at 100 percent power, it was discovered that Technical Specification (TS) Surveillance Requirement (SR) 3.4.5.1 for the "Identified" portion of Reactor Coolant System (RCS) Total Leakage would not be able to be performed within the time limits of SR 3.0.2. Two methods are available to meet SR 3.4.5.1; a flow totaling instrument loop or a manual determination method. The reactor containment Equipment Drain (EDR) Flow Transmitter, EDR-FT-37, was declared inoperable at 0800 on 09/05/97. The manual method was performed at 1530, but not before the limits of SR 3.0.2 expired at 1100 on 09/05/97. The flow transmitter was declared inoperable because the flow totalizer was not responding to the actual low flow signals as expected, indicating below actual values. Performance of the manual method was delayed due to recovery actions from high sump area contamination levels, using the provisions of SR 3.0.3.

Immediate Corrective Action

No immediate corrective action was required as the surveillance was being met at the time of discovery.

Further Evaluation

1. Total Reactor Coolant System [AD] Leakage, comprised of identified and unidentified portions, is required to be equal to or less than 25 gpm, averaged over a 24-hour period. Surveillance Requirement 3.4.5.1 verifies this on a 12-hour frequency interval. Concern over decreases in identified leakage flow indication initiated the manual leakage determination method at approximately 0530 on 09/04/97 to verify that the instruments were recording accurately. This was attempted and halted when clearing of debris occurred and an equipment operator was contaminated. Clean up of the sump area was initiated and a troubleshooting plan prepared to clear any further system blockage by flushing flow transmitter EDR-FT-37 [FT]. At about 1900 on 09/04/97, the manual method was reperformed resulting in a 2.73 gpm measurement, during which a second personnel contamination occurred. Flow rate recorder EDR-FRS-623 [FR] response increased to expected values after flushing.

   At 1956, the system engineer recommended monitoring the performance of the flow transmitter and flow totalizer FDR-FQ-38 [FQI] to verify that the average calculated leak rate would correspond to the manual method test results. The flow transmitter was returned to service in an operable condition based on improved response from the flow rate recorder. The night Shift Manager initiated action for cleaning the sump area. After monitoring flow totalizer values the remainder of the shift, the off-going Shift Manager indicated during turnover that the totalizer did not seem to be responding. At 0800 on 09/05/97, EDR-FT-37 was declared inoperable. Subsequently, a work request and Problem Evaluation Request (PER) 297-0749 were initiated. Operations personnel believed that SR 3.0.3 allowed 12-hours from when EDR-FT-37 was declared inoperable to perform the manual method test and was proceeding to meet that end.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Washington Nuclear Plant Unit 2	50-397	97	010	0	3 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Their first priority was to reduce the potential for another contamination event. Factors that delayed the ability to perform the manual method test included sump area contamination levels, sampling apparatus design, and dress out requirements. The sampling apparatus was redesigned, parts were obtained and assembled, dress-out requirements were upgraded, decontamination of the sump area was completed, and a post-decontamination survey was performed. At 1330 the Control Room Supervisor held a prejob brief and the manual method test was successfully completed at 1530.

At that time, the Control Room staff believed that they had 12-hours to perform the surveillance from the time the equipment was inoperable, pursuant to the provisions of SR 3.0.3. However, the Operations staff was not aware that application of SR 3.0.3 would require meeting certain limitations established in the Technical Specification Bases and documentation of actions to be taken in the event the delay time was exceeded. The following day after questioning by the NRC Resident Inspector, it was determined that the limits of SR 3.0.2 and LCO 3.4.5 had been exceeded. Pursuant to NUREG 1022, Section 3.2.2, this condition would be identified as a condition prohibited by Technical Specifications.

However, Improved Technical Specifications requirement SR 3.0.1 establishes that failure to perform a surveillance within the specified frequency shall be failure to meet the LCO, except as provided by SR 3.0.3. Thus, successful performance of the surveillance within the delay period allowed by SR 3.0.3 maintains compliance with the Technical Specifications. Therefore, reporting this event under 10 CFR 50.73 (a)(2)(i)(B),"Any operation or condition prohibited by the plant's Technical Specifications," is not appropriate. Further, this event does not represent a substantial breakdown in the surveillance testing program.

2. This event would have been reportable under Standard Technical Specification 4.0.3 pursuant to 10 CFR 50.73 (a)(2)(i)(B),"Any operation or condition prohibited by the plant's Technical Specifications," in accordance with NUREG 1022, "Event Reporting Guidelines 10 CFR 50.72 and 50.73." The interval between successive performances of SR 3.4.5.1 exceeded the limit of SR 3.0.2, plus the completion time for LCO 3.4.5.A. However, the event is not reportable under the Improved Technical Specifications because changes to SR 3.0.1 and SR 3.0.3 no longer result in the plant being in a condition prohibited by Technical Specifications due to exceeding SR 3.0.2 limits alone.

Root Cause

The root cause for failure to perform the surveillance in accordance with SR 3.0.2 limits is that methods did not permit timely response to changing radiological conditions and impacted operator ability to perform the manual method test. Changing contamination levels because of poor sampling methods and apparatus design, and less than adequate dress-out requirements contributed to not being ready for prompt performance of the manual method test. Accordingly, alternate methods or contingency plans should have been available.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
Washington Nuclear Plant Unit 2	50-397	97	010	0	4 OF 4

TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

A contributing cause to this event was a weak understanding on application of TS SR 3.0.3 provisions. Training was provided to operators on the SR Applicability rules; however, sufficient case study training was not provided. Thus, operator understanding of the application of the SR Applicability was weak and led to failure to document appropriate decisions in the operator logs or the PER.

Further Corrective Action

A completed interim action notified all Shift Managers and Control Room Supervisors that although this event was appropriate for use of SR 3.0.3 provisions, management's expectations are that Operations management and Licensing participate in the decision, that it be logged appropriately to assure subsequent actions required by Technical Specifications are performed in a timely manner, and that the use of SR 3.0.3 must not be for operational convenience.

A second alternate method of meeting SR 3.4.5.1 has been established which uses sump instrumentation and sump pump run times. This method does not require contaminated area entry.

Surveillance Requirement Applicability training using hands-on case studies for initial and continuing operator training will be performed. This training will improve understanding of the proper use of SR 3.0.3 when emerging plant conditions impact the timely performance of a surveillance.

Assessment of Safety Consequences

During the event period, flow recorder EDR-FRS-623 was correctly indicating EDR flow rates and at no time was any LCO limit approached. Therefore, there is no safety significance associated with this event.

Similar Events

LER 97-009 reported that inservice testing for exercising Traversing Incore Probe Check Valve TIP-V-6 had not been performed within the limits of SR 3.0.2. Inadequate procedures inappropriately allowed use of local leak rate testing, which resulted in crediting completion of the surveillance. The corrective actions taken in response to LER 97-009 would not have precluded this event, as it was not related to use of the provisions of SR 3.0.3.

Additionally, under the provisions of STS 4.0.3, LER 96-003 and LER 96-005 reported missed surveillances during plant startup due to inadequate procedures. The corrective actions taken in response to these LERs would not have precluded this event, as they were related to inadequate procedures and not use of the provisions of SR 3.0.3.