

LICENSEE EVENT REPORT

LER 80-18/1T

CONTROL BLOCK: (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

LICENSEE CODE: V T V Y S 1 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5

REPORT SOURCE: L 6 0 5 0 0 0 2 7 1 7 0 6 1 1 8 0 8 0 6 2 5 8 0 9

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

During a planned drywell entry to investigate suspected reactor coolant leaks, operators observed that leakage had developed in one of the feedwater lines. An orderly plant shutdown to cold conditions was immediately initiated. Further investigation of the leak revealed that a significant portion of it was flowing directly into the Torus via the vent header. Since this flow path bypasses the drywell leakage detection system, it was determined that this situation constitutes a condition not specifically considered in the Safety Analysis Report or the Technical Specifications.

SYSTEM CODE: C I 11 CAUSE CODE: B 12 CAUSE SUBCODE: A 13 COMPONENT CODE: X X X X X X 14 COMP. SUBCODE: Z 15 VALVE SUBCODE: Z 16

LER RO REPORT NUMBER: 17 8 0 EVENT YEAR: 8 0 SEQUENTIAL REPORT NO.: 0 1 8 OCCURRENCE CODE: 0 1 REPORT TYPE: T REVISION NO.: 0

ACTION TAKEN: X 18 X 19 EFFECT ON PLANT: A 20 SHUTDOWN METHOD: A 21 HOURS: 0 0 3 0 ATTACHMENT SUBMITTED: Y 23 NPRD-4 FORM SUB.: N 24 PRIME COMP. SUPPLIER: N 25 COMPONENT MANUFACTURER: G 0 8 0 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

The cause of the event is attributed to an apparent inadequacy in the design of the drywell leakage detection system. The immediate corrective action will be to administratively reduce the Tech. Spec. limits to allow only 2 1/2 gpm unidentified leakage and 12 1/2 gpm total reactor coolant system leakage. Plant leak detection capabilities and the Tech. Spec. bases are being evaluated. (CONTINUED ON ATTACHED SHEET.)

FACILITY STATUS: D 28 % POWER: 0 3 5 29 OTHER STATUS: NA 30 METHOD OF DISCOVERY: A 31 DISCOVERY DESCRIPTION: Operator Observation 32

ACTIVITY CONTENT RELEASED OF RELEASE: Z 33 Z 34 AMOUNT OF ACTIVITY: NA 35 LOCATION OF RELEASE: NA 36

PERSONNEL EXPOSURES NUMBER: 0 0 0 37 TYPE: Z 38 DESCRIPTION: NA 39

PERSONNEL INJURIES NUMBER: 0 0 0 40 DESCRIPTION: NA 41

LOSS OF OR DAMAGE TO FACILITY TYPE: Z 42 DESCRIPTION: NA 43

PUBLICITY ISSUED: Y 44 DESCRIPTION: Status Phone 45

NAME OF PREPARER: Warren P. Murphy PHONE: (802) 257-7711

30070 10 285 405

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (CONTINUED)

The cause of this event is attributed to an apparent inadequacy of the drywell leak detection system to detect certain types of leaks in the manner in which it was designed. Vermont Yankee has evaluated the capabilities of plant equipment to detect drywell leaks, the bases for the leakage limits contained in the FSAR and Tech. Spec. bases and the adequacy of the administrative leakage limits instituted immediately after the event as described in LER 80-18/1P.

The results of this evaluation have indicated a need to increase drywell leakage surveillance as follows:

1. Drywell floor drains will be monitored as required by Tech. Spec. Section 3.6.C. The administrative limits which were reduced in half to 2.5 gpm of unidentified leakage and 12.5 gpm of total leakage will be continued,
2. Drywell equipment and floor drains will be monitored and an administrative action limit of 2 gpm increase above normal levels in any 8 hour period will be imposed,
3. A torus volume monitoring program will be established along with investigative action limits. This will be designed to detect and require action for an increase in torus volume which could be indicative of the 5 gpm reactor coolant leakage required by Tech. Specs.,
4. Drywell air temperature will be monitored to check for an unexpected rise of 6°F within any 24 hour period.

The Containment Air Monitor (CAM) will continue to be used to monitor for airborne gaseous and particulate radioactivity.

In addition, the need for physical modifications to prevent bypassing of the drywell sumps will be evaluated, and if deemed necessary, will be installed by the end of the 1980 refueling outage.

If a permanent physical modification is made to correct the problem, we will return to the leakage monitoring program stipulated in the Technical Specifications.

The above surveillance which will be fully implemented by July 3, 1980, provides adequate assurance that leakage from the reactor coolant pressure boundary can be adequately detected in a timely fashion.