



Commonwealth Edison
Dresden Nuclear Power Station
6500 North Dresden Road
Morris, Illinois 60450
Telephone 815/942-2920

January 20, 1994

GFSLTR 94-0032

U.S. Nuclear Regulatory Commission
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Washington, D. C. 20555

Licensee Event Report 93-030, Docket 050237 is being submitted as required by Technical Specification 6.6, NUREG 1022 and 10 CFR 50.73(a)(2)(ii)(B).

Gary F. Spedl for 1-20-94
Gary F. Spedl
Station Manager
Dresden Station

GFS/cfq

Enclosure

cc: J. Martin, Regional Administrator, Region III
NRC Resident Inspector's Office
File/NRC
File/Numerical

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LICENSEE EVENT REPORT (LER)

Form Rev 2.0

Facility Name (1) Dresden Nuclear Power Station, Unit 2 & 3										Docket Number (2) 0 5 0 0 0 2 3 7				Page (3) 1 of 0 4			
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Title (4)
Station Procedure for Containment Purging Allow Venting Through the RBVS Which is Not in Accordance With the UFSAR and May Not Agree With the ODCM

Event Date (5)			LER Number (6)				Report Date (7)			Other Facilities Involved (8)													
Month	Day	Year	Year	Sequential Number	Revision Number	Month	Day	Year	Facility Names	Docket Number(s)													
1	2	2	9	3	0	3	0	0	1	2	2	1	9	3	N/A	0	5	0	0	0	2	4	9

OPERATING MODE (9) N
THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIRMENTS OF 10CFR (Check one or more of the following) (11)

POWER LEVEL (10) 0 9 9	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	Other (Specify in Abstract below and in Text)
	20.405(a)(1)(iii)	50.73(a)(2)(i)	50.73(a)(2)(viii) (A)	
	20.405(a)(1)(iv)	X 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)		

LICENSE CONTACT FOR THIS LER (12)

NAME T. S. Kriz, SEC Engineering	TELEPHONE NUMBER			
	AREA CODE 8 1 5	9 4 2 - 2 9 2 0		

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)

Yes (If yes, complete EXPECTED SUBMISSION DATE)	X	NO	Expected Submission Date (15)	Month	Day	Year

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

On December 22, 1993 with Units 2&3 operating it was determined that Dresden was outside its Design Basis due to a discrepancy between operating procedures and the UFSAR. Previously an engineering review to rebase the UFSAR identified an open item in which containment venting through the Reactor Building Ventilation (RBV) system during normal operation was allowed. This conflicts with UFSAR section 6.8.3.2 (rebased UFSAR section 6.2.5.3.1) which requires venting during normal operation to be accomplished via the Standby Gas Treatment (SBGT) system. The cause of the UFSAR discrepancy which appeared in the first UFSAR in 1982 is unknown. Venting through the RBV system is consistent with station operating procedures retrievable to 1975 and docketed correspondence to the NRC. The safety significance of this discrepancy is minimal due to procedural atmospheric sampling requirements, automatic isolation features and existing analysis which determined that the 10CFR100 limits would not be exceeded prior to isolation during a LOCA while purging. The immediate corrective action consisted of restricting containment venting operations to SBGT. It has been determined that the discrepancy described above is the result of a past update to the UFSAR which did not reflect the licensing basis.

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TEXT Energy Industry Identification System (EIIIS) codes are identified in the text as [XX]

PLANT AND SYSTEM IDENTIFICATION:

General Electric-Boiling Water Reactor-2527 Mwt rated core thermal power.

Nuclear Tracking System (NTS) tracking code numbers are identified in the text as (XXX-XXX-XX-XXXXX)

EVENT IDENTIFICATION:

Station Procedure for Containment Purging Allow Venting Through the RBVS Which is Not in Accordance With the UFSAR and May Not Agree With the ODCM

A. CONDITIONS PRIOR TO EVENT:

Unit: 2(3) Event Date: 12/22/93 Event Time: 1635 hrs
 Reactor Mode: N (N) Mode Name: Run (Run) Power Level: 99% (82%)
 Reactor Coolant System (RCS) Pressure: 1000 psig (995 psig)

B. DESCRIPTION OF EVENT:

At approximately 1635 on December 22, 1993 with Unit 2 at 99% power and Unit 3 at 82% power it was determined that venting and purging containment through the Reactor Building Vent (RBV) system may be outside the design basis. This was determined during a review to rebaseline the Updated Final Safety Analysis Report (UFSAR). Dresden Operating Procedures (DOP) 1600-01 "Normal Venting of the Drywell or Torus", 1600-05 "Primary Containment Inerting and Atmosphere Control During Operation" and 1600-07 "Primary Containment Deinerting" allow the containment to be vented/purged through the RBV system or Standby Gas Treatment (SBGT) [VB] system, depending upon sample analysis results. This conflicts with UFSAR section 6.8.3.2 (rebaselined UFSAR section 6.2.5.3.1) which requires containment venting/purging during normal operation to be accomplished via the SBGT system. The DOPs were also in conflict with the Offsite Dose Calculation Manual (ODCM) section 6.2.1 which states that the standard Radiological Effluent Technical Specifications (RETS), section 3.11.2.8, require that drywell purging for a Mark I or II containment be through SBGT system. This event is independent of the operational status of any other plant equipment.

The Operations Department was notified and a Problem Identification Form (PIF) was initiated per Dresden Administration Procedure (DAP) 2-27, Integrated Reporting Process. The immediate corrective action was for the Operations Department to initiate Temporary Procedure Changes (TPC) to DOPs 1600-1, 1600-5 and 1600-7 to restrict containment venting/purging to be only through the SBGT system.

This LER review has concluded that the discrepancy described above is the result of a past update to the UFSAR which did not reflect the licensing basis of the plant. It was identified as an open item during the rebaseline of the UFSAR and conservatively reported as an LER until the review was completed. A Safety Evaluation issued by the NRC on February 28, 1986 found that CECO had demonstrated purge and vent valve operability against containment pressure in the event of a design basis LOCA. Additionally, it determined that the radiological

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consequences of a LOCA during purging would be acceptable since they would be within 10CFR Part 100 dose guideline values.

C. APPARENT CAUSE OF EVENT:

This report is being submitted in accordance with 10CFR Part 50.73(a)(2)(ii)(B) which requires the reporting of any operation or condition outside the Design Bases of the plant.

The cause of the UFSAR discrepancy with the Station operating procedures is unknown. The original FSAR did not specify detailed venting and purging system lineup requirements for specific operational conditions. A review of the DOPs reveals that the option of venting/purging through the SGBT system or alternately through the RBV system has existed at least since 1975. The historical regulatory trail of documents provided by CECO to the NRC on venting/purging consistently describes the Vent and Purge operation at Dresden with the utilization of the RBV system valves. The requirement to vent to only via SGBT system during normal operations appeared in the first issue of the UFSAR section 6.8.3.2 in 1982 (In the current UFSAR this information is in section 6.2.5.3.1). This change may have been made in anticipation of RETS and ODCM guidelines, however the background documentation has not been located.

The initial description of this event presented in the ENS notification and PIF conservatively determined that the procedure option of venting/purging through the RBVS was in conflict with the generic section of the ODCM. However, after discussions with the Emergency Preparedness Group and the Licensing Department it has been determined that venting/purging through SGBT is not a generic ODCM commitment for CECO. Rather, it is a recommendation statement in the standard RETS format. This will be clarified by CECO in the next revision to the ODCM.

D. SAFETY ANALYSIS OF EVENT:

The safety significance of venting/purging the Containment through RBV instead of via the SGBT system was considered to be minimal since venting through the RBV system only occurs if the containment atmospheric sample results for iodine 131 and Beta/Gamma are within procedurally prescribed limits. The Containment Vent and Purge valves are part of the Group II Isolation [JM] logic which auto closes the valves on High Drywell pressure, Low Reactor water level or High Drywell radiation. Furthermore, CECO has demonstrated the ability of the Containment Vent & Purge isolation valves to close from the fully open position against containment pressure in the event of a DBA/LOCA. This was reviewed by the NRC and determined to be acceptable in a letter from J. Zwolinski to D. Farrar, dated February 28, 1986, transmitting Safety Evaluation on Demonstration Of Containment Purge And Vent Valve Operability. This document also states that the radiological consequences of a LOCA during venting/purging would be within the 10CFR part 100 dose guideline values.

Inerting and deinerting during normal operation with the RBV system supports the requirements for differential pressure between the Drywell and Torus, reduces containment oxygen concentration and reduces containment pressure. This mode of operation is necessary at Dresden to meet Technical Specification requirements, mitigate the consequences of postulated accidents, allow containment access during operation and

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to avoid spurious SCRAM and ECCS initiation. This is consistent with the Branch Technical Position (BTP) CSB 6.4 Position B.4 Amplification which describes some venting as acceptable if needed and justified for safety purposes.

E. CORRECTIVE ACTIONS:

The immediate corrective action was for the Operations Department to initiate TPCs to DOPs 1600-1, 1600-5 and 1600-7 to allow containment venting/purging only through the SGBT system. Also the Regulatory Assurance Department immediately began a review of licensing documents to determine the requirements of venting/purging the containment through the RBV system and the SGBT system. The review determined that containment venting/purging through the RBV is permissible and documented this in On Site Review 94-006. As part of this On Site Review a UFSAR revision (section 6.2.5.3.1) and 10CFR50.59 Safety Evaluation were performed. The On Site Review was completed on January 13 and on January 14 the TPCs to the DOPs were cancelled.

As a long term corrective action the Health Physics Department will ensure that section 6.2.1 of the ODCM will be clarified as to CECO commitment to the standard RETS section 3.11.2.8 for containment venting/purging. This clarification will be incorporated during the next ODCM revision (237-180-93-03001).

F. PREVIOUS OCCURRENCES:

There are no known occurrences where the station procedures are discrepant with the rebaselined UFSAR. However, open items were generated during the UFSAR rebaseline project which require further review.

G. COMPONENT FAILURE DATA:

This concern is not applicable since this discrepancy does not involve equipment.