

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8010070551 DOC. DATE: 80/10/02 NOTARIZED: NO DOCKET #
 FACIL: 50-261 H. B. Robinson Plant, Unit 2, Carolina Power and Light 05000261
 AUTH. NAME: STARKEY, R.B. AUTHOR AFFILIATION: Carolina Power & Light Co.
 RECIP. NAME: RECIPIENT AFFILIATION: Region 2, Atlanta, Office of the Director

SUBJECT: LER 80-021/OLT-0: on 800918 containment spray piping analyses per IE Bulletin 79-14 indicated pipe stresses under BE conditions over allowable. (Caused by differences between design as seismically analyzed & as constructed.

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	MECH ENG BR 33	1	1	MPA	3	3
	NRC PDR 02	1	1	OP EX EVAL BR34	3	3
	OR ASSESS BR 35	1	1	POWER SYS BR 36	1	1
	RAD ASSESS BR39	1	1	REACT SYS BR 40	1	1
	REG FILE 01	1	1	REL & RISK A 41	1	1
	SFTY PROG EVA42	1	1	STRUCT ENG BR44	1	1
	SYS INTERAC B45	1	1			
EXTERNAL:	ACRS 46	16	16	LPDR 03	1	1
	NSIC 05	1	1	TERA: DOUG MAY	1	1

LICENSEE EVENT REPORT

CONTROL BLOCK: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 S C H B R 2 0 0 - 0 0 0 0 0 - 0 0 3 4 1 1 1 1 4 5
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EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

0 2 On September 18, 1980, the A/E performing the analyses in accordance with IEB 79-14

0 3 notified Carolina Power and Light Company that computer analyses of the Containment

0 4 Spray Piping inside Containment indicated that pipe stresses under DBE conditions

0 5 were over allowable. Based on results of the review, operability of the piping system

0 6 could not be assured under DBE conditions. No adverse consequences have resulted from

0 7 this condition. This constitutes a reportable occurrence per Technical Specification

0 8 6.9.2.a.(2).

0 9 SYSTEM CODE S B 11 CAUSE CODE B 12 CAUSE SUBCODE C 13 COMPONENT CODE S U P P O R T 14 COMP. SUBCODE B 15 VALVE SUBCODE Z 16

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

17 LER/RO REPORT NUMBER 8 0 21 EVENT YEAR 8 0 22 SEQUENTIAL REPORT NO. 0 2 1 24 OCCURRENCE CODE 0 1 28 REPORT TYPE T 30 REVISION NO. 0 32

ACTION TAKEN F 18 Z 19 FUTURE ACTION Z 20 EFFECT ON PLANT Z 21 SHUTDOWN METHOD Z 22 HOURS 0 0 0 0 22 ATTACHMENT SUBMITTED Y 23 NPRD-4 FORM SUB. N 24 PRIME COMP. SUPPLIER A 25 COMPONENT MANUFACTURER E 0 6 5 26

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

1 0 The overstress condition identified on September 18, 1980 was caused by a difference

1 1 in the design as originally seismically analyzed and the actual constructed design of

1 2 seismic restraints and anchors. A new design for the restraints and anchors has been

1 3 developed and is currently being installed during the current refueling outage. All

1 4 seismic Class I piping systems have been reanalyzed in accordance with IEB 79-14 with

satisfactory results. Therefore no further corrective action is required.

1 5 FACILITY STATUS H 28 % POWER 0 0 0 29 OTHER STATUS NA 30 METHOD OF DISCOVERY D 31 DISCOVERY DESCRIPTION Notification by A/E 32

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 6 ACTIVITY CONTENT Z 33 Z 34 AMOUNT OF ACTIVITY NA 35 LOCATION OF RELEASE NA 36

1 7 PERSONNEL EXPOSURES NUMBER 0 0 0 37 TYPE Z 38 DESCRIPTION NA 39

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 8 PERSONNEL INJURIES NUMBER 0 0 0 40 DESCRIPTION NA 41

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 9 LOSS OF OR DAMAGE TO FACILITY TYPE Z 42 DESCRIPTION NA 43

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

2 0 PUBLICITY ISSUED N 44 DESCRIPTION NA 45

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

8010070551

NAME OF PREPARER

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NRC USE ONLY

SUPPLEMENTAL INFORMATION

FOR

LICENSEE EVENT REPORT 80-021

Cause Description and Analysis

On September 18, 1980 during the refueling shutdown, review of the types and locations of Containment Spray System seismic supports revealed major deviations between as-built and original design configurations. The review was in accordance with NRC IE Bulletin 79-14. Subsequent reanalysis of the as-built pipe and support configuration on September 18, 1980, indicated that pipe stresses at locations within the portion of the system being analyzed could exceed the maximum allowable under Design Basis Earthquake (DBE) conditions. Under DBE conditions, therefore, system operability could not be assured. Operability of the Containment Spray portion of the Safety Injection System is required by Technical Specification 3.3.2.1.d and is therefore reportable per Technical Specification 6.9.2.a.(2).

The deviations were the result of improper installation of restraints and anchors during the construction of HBR Unit No. 2. The function of the restraints installed differed from those specified in the original seismic analysis. This fact was uncovered during the as-built verifications required by IEB 79-14. These deviations resulted in the pipe stresses being over allowable values during DBE conditions.

Corrective Action

The piping system restraints have been redesigned and modifications are presently being performed. All modifications will be completed during the current refueling outage. Reanalysis of the piping system with the modified restraints has been completed and has indicated that the modified piping system is adequately supported during a DBE.

Corrective Action To Prevent Recurrence

All other Seismic Class I piping systems have been reanalyzed using as-built system configurations in accordance with IEB 79-14. Analyses have indicated that all systems, including the modified Containment Spray System, are acceptable as installed. Therefore, further corrective action is not considered necessary.