

LICENSEE EVENT REPORT

CONTROL BLOCK: (1) (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

01 | P | A | T | M | I | 1 | 2 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 3 | 4 | 1 | 1 | 1 | 1 | 4 | 5  
7 8 9 LICENSEE CODE 14 15 LICENSE NUMBER 25 26 LICENSE TYPE 30 57 CAT 58

CON'T  
01 | REPORT SOURCE | X | 6 | 0 | 5 | 0 | 0 | 0 | 2 | 8 | 9 | 7 | 0 | 7 | 0 | 2 | 8 | 1 | 8 | 0 | 7 | 0 | 8 | 8 | 1 | 9  
7 8 60 61 DOCKET NUMBER 68 69 EVENT DATE 74 75 REPORT DATE 80

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 | During long term shutdown, inspection results from I. E. Bulletins 79-02/14  
03 | indicated that numerous pipe supports had been located or oriented improperly  
04 | when installed. Majority of nonconformances were minor "out of tolerance"  
05 | supports. Reanalysis indicates that public health and safety were and are not  
06 | affected.  
07 |  
08 |

09 | SYSTEM CODE | X | X | 11 | CAUSE CODE | B | 12 | CAUSE SUBCODE | C | 13 | COMPONENT CODE | S | U | P | O | R | T | 14 | COMP SUBCODE | X | 15 | VALVE SUBCODE | Z | 16 |  
7 8 9 11 12 13 14 15 16  
17 | LER/RO REPORT NUMBER | 8 | 1 | 21 | 22 | SEQUENTIAL REPORT NO. | 0 | 0 | 7 | 24 | 26 | OCCURRENCE CODE | 9 | 9 | 28 | 29 | REPORT TYPE | X | 30 | REVISION NO. | 0 | 32 |  
18 | ACTION TAKEN | F | 18 | FUTURE ACTION | F | 19 | EFFECT ON PLANT | Z | 20 | SHUTDOWN METHOD | Z | 21 | HOURS | 0 | 0 | 0 | 0 | 22 | ATTACHMENT SUBMITTED | Y | 23 | NPD-4 FORM SUB. | N | 24 | PRIME COMP. SUPPLIER | A | 25 | COMPONENT MANUFACTURER | G | 1 | 5 | 0 | 26 |  
33 34 35 36 37 40 41 42 43 44 47

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 | During construction pipe supports were installed out of tolerance in violation  
11 | of construction specification. As a result, existing supports (i.e. hangers,  
12 | springs, snubbers are being modified to meet design criteria as established  
13 | by recent reanalysis of affected systems.  
14 |

15 | FACILITY STATUS | X | 28 | % POWER | 0 | 0 | 0 | 29 | OTHER STATUS | NRC Order | 30 | METHOD OF DISCOVERY | D | 31 | DISCOVERY DESCRIPTION | IE Bulletins 79-02 and 79-14 | 32 |  
7 8 9 10 11 12 13 44 45 46 80

15 | ACTIVITY CONTENT RELEASED OF RELEASE | Z | 33 | Z | 34 | AMOUNT OF ACTIVITY | N/A | 35 | LOCATION OF RELEASE | N/A | 36 |  
7 8 9 10 11 44 45 80

17 | PERSONNEL EXPOSURES NUMBER | 0 | 0 | 0 | 37 | TYPE | Z | 38 | DESCRIPTION | N/A | 39 |  
7 8 9 10 11 12 13 80

18 | PERSONNEL INJURIES NUMBER | 0 | 0 | 0 | 40 | DESCRIPTION | N/A | 41 |  
7 8 9 10 11 12 80

19 | LOSS OF OR DAMAGE TO FACILITY TYPE | Z | 42 | DESCRIPTION | N/A | 43 |  
7 8 9 10 11 12 80

20 | PUBLICITY ISSUED DESCRIPTION | N | 44 | 8107280354 810717 PDR ADOCK 05000289 PDR  
7 8 9 10 11 12 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

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## LICENSEE EVENT REPORT

### NARRATIVE REPORT

TMI-1  
LER 81-007

#### I. CURRENT ACTIVITIES AT THE TIME OF THE OCCURRENCE

TMI-Unit 1 was in long term cold shutdown condition.

- II. At the conclusion of the inspection stage of our efforts to comply with the inspection, analysis and reporting requirements of I.E. Bulletin 79-02 and 79-14, a variety of nonconformances were discovered. An extremely conservative approach was embarked upon (since the plant was shut down), wherein the systems which had these nonconformances were completely reanalyzed using the "as built" support location and piping routings just verified. When reanalyzed, some of the nonconformances precipitated a number of piping system support changes.

It is our judgment from simplified calculations and by inspection that although there were nonconformances identified, the system would and will perform their intended functions. However, we are continuing our efforts in modifying the systems' supports in accordance with the piping analysis and support calculations now in progress.

This Licensee Event Report is generic in its applicability to the non-complying supports at TMI-1. Attached is a list of these supports with safety factors less than two. These supports are being modified to satisfy the design criteria as determined by the recent re-analyses.

#### III. DESCRIPTION

After inspections and analyses of pipe supports were completed, the supports identified in the attachment were determined to have safety factors less than two (2) and that thereby they could fail prior to the application of the full calculated design load. This is being reported as a special report.

#### IV. RESULTANT EVENTS

Since there have been no safety related piping system failures due to inadequate or non-conforming pipe supports since TMI-1 has been in operation, there are no significant resultant events to report.

#### V. PREVIOUS EVENTS OF A SIMILAR NATURE

There have not been any events of a similar nature.

## VI. ROOT CAUSE

The supports listed in the attachment were determined to have safety factors less than two (2) due to the improper location of one or more of the supports in the system during the construction phase. The nonconforming supports identified in our various reports to the NRC on this subject were apparently not inspected adequately prior to operation.

## VII. IMMEDIATE CORRECTIVE ACTION

Upon discovery of the nonconformances a program to re-analyze the effected systems was started. Since the plant was shut down there was no need for an expeditious justification of system operability to maintain continued operation.

## VIII. LONG TERM CORRECTIVE ACTION

Approximately 40% of the supports with safety factors less than two (2) have been modified. Prior to restart all the remaining pipe supports currently or subsequently identified with safety factors less than two (2) will be modified. At the conclusion of these modifications the Commission will be notified. Pipe support units (excluding structural members designed to AISC) with safety factors greater than two (2) and less than five (5) will be modified either during operation or during our next refueling outage, as determined by the supports' accessibility. A concluding statement of completion will be submitted when these modifications are finished.

Supports with safety factors greater than five (5) will not be modified in compliance with the bulletin criteria.

Procedures are being implemented which will preclude the improper installation for pipe supports in the future.

## IX. COMPONENT FAILURE DATA

Since no components failed, no data is included.

## ATTACHMENT

<u>SYSTEM</u>	<u>SUPPORT NO.</u>	
Intermediate Cooling	ICE-25	
Condensate	COE-12	
Building Spray	SPSH-24	
Building Spray	SPWH-32	
Make-up Cooling Water	MCH-32	MCH-63
Pressurizer Relief	PR-9	
Reactor Building Spray	RBE-42	RBE-150
	RBE-39	RBE-40
	RBE-157	RBE-163
Feedwater	FW-89	FW-74
Main Stream	MS-201	MS-59
	MS-60	MS-244
River Water	RWE-10	RWH-55
	RRH-2	
Emergency Feedwater	EF-3	EF-6
	EF-8	EF-72
Decay Heat	DHH-213	DHH-184
	DH-23	DH-34
	DCH-13	DHH-33
	DHH-117	DCH-18
	DCH-60/61	DH-30
	DH-31	DHH-135
	DHH-199	DHH-218
	DHH-198	
Emergency Feedwater	EF-125	
Reactor Bldg. Spray	RBE-147	
Reactor Coolant	RC-32	
Makeup & Purification	MUH-184	MUH-185
	MUH-191	MUH-317
	MUH-320	MUH-65
	MUH-66	MUE-2
	MUE-4	MUH-237
	MUH-245	MUH-251
	MUH-254	MUH-258
	MUE-10	MUE-11

SYSTEM

SUPPORT NO.

Makeup & Purification (cont.)

MUE-12	MUH-287	MUH-284
MUH-288	MUH-282	MUH-292
MUH-122	MUH-123	MUH-126
MUH-341	MUH-343	MUH-166
MUH-171	MUH-172	MUH-173
MUH-356	MUH-128	MUH-199
MUH-344	MUH-346	MUH-354
MUH-138	MUH-78	MUH-198
MUE-47	MUE-36	MUH-353

Spent Fuel

SFE-30	SFH-123	SFH-162
SFH-130	SFH-132	SFE-11
SFE-2	SFH-13	SFH-19/12
SFH-64	SFE-13	SFE-15
SFE-16	SFH-45	SFH-15
SFE-1	SFE-3	SFH-77
SFH-170	SFH-41	SFE-19
SFH-86	SFE-17	SFE-37
SFE-38	SFE-39	SFE-40
SFH-51	SFH-52	SFH-157
SFE-24	SFE-23	SFE-7
SFH-104		

Nuclear Services

NSH-3	NSE-276	NSH-52
NSH-54A	NSH-57	NSH-62
NSH-99	NSH-132	NSH-71
NSH-90	NSH-86	NSH-156
NSE-54	NSE-134	NSE-136
NSH-301	NSH-343	NSH-345
NSH-107	NSH-75	NSE-94
NSH-204	NSE-70	NSE-273
NSH-349	NSE-69	NSH-235
NSH-274	NSE-264	NSH-260
NSH-262	NSH-264	NSE-59
NSE-265	NSH-267	NSE-268
NSH-252	NSH-253	NSH-253A
NSE-66	NSH-242	NSH-243
NSH-244	NSE-272	NSH-295
NSH-312	NSH-318	NSH-320
NSH-325	NSH-327	NSH-328/330
NSE-147	NSE-263	NSH-279
NSH-290	NSH-313	NSH-128
NSE-56	NSH-335	NSH-339
NSH-342	NSH-17	NSH-395
NSH-75	NSE-113	NSE-57
NSE-58	NSH-357	NSH-27