

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9010260024 DOC.DATE: 90/10/12 NOTARIZED: NO DOCKET #
 FACIL:50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
 AUTH.NAME AUTHOR AFFILIATION
 ARBUCKLE,J.D. Washington Public Power Supply System
 BAKER,J.W. Washington Public Power Supply System
 RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-019-00:on 900912,presure suppression pressure limit
 curve in EOPs did not agree w/design calculation.W/901012
 ltr.

DISTRIBUTION CODE: IE22T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6
 TITLE: 50.73/50.9 Licensee Event Report (LER), Incident Rpt, etc.

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AEOD/ROAB/DSP	2 2	NRR/DET/ECMB 9H	1 1
NRR/DET/EMEB 7E	1 1	NRR/DLPQ/LHFB11	1 1
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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

G02-90-172

Docket No. 50-397

October 12, 1990

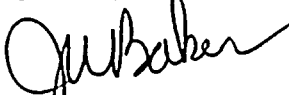
Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 90-019

Dear Sir:

Transmitted herewith is Licensee Event Report No. 90-019 for the WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the items of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,


J. W. Baker (M/D 927M)
WNP-2 Plant Manager

JWB:lr

Enclosure:
Licensee Event Report No. 90-019

cc: Mr. John B. Martin, NRC - Region V
Mr. C. Sorensen, NRC Resident Inspector (M/D 901A)
INPO Records Center - Atlanta, GA
Ms. Dottie Sherman, ANI
Mr. D. L. Williams, BPA (M/D 399)
NRC Resident Inspector - walk over copy

Carnd 1085602291
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ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

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

The PSPL curve in the EOP procedure did not agree with the design calculation that formed the basis for the curve. The procedural curve specified a wetwell pressure limit which was as much as 2.0 psi too high between 19.2 and 37.0 feet of Suppression Pool water level. This pressure is a function of primary containment water level and the limit is used during emergency situations to ensure that the pressure suppression function of the containment is maintained while the RPV is at pressure. The procedural discrepancy could have resulted in inappropriate operator action if a situation had occurred which required that the graph be used.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
Washington Nuclear Plant - Unit 2	0 5 0 0 0 3 9 7	9 0	— 0 1 9	— 0 0	0 2	OF 0 5	

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

As an immediate corrective action, the applicable procedure was changed to reflect the correct PSPL curve as specified by the design calculation. Further corrective action consisted of reviewing all curves in the Emergency Operating Procedures to verify accuracy with the corresponding design calculations. As a result of that review, it was discovered that the Heat Capacity Temperature Limit (HCTL) and Primary Containment Pressure Limit (PCPL) curves also did not agree with the calculational bases. The discrepancy in the HCTL curve was determined by engineering judgment to be within the conservatism of the design calculation and; therefore, would not have caused inappropriate operator action. The procedure for the HCTL curve was changed to reflect the correct information as specified in the design calculations. The error in the PCPL curve was conservative.

Although the root cause of this event is still in the process of being determined, preliminary causes appear to be less than adequate communication and less than adequate procedural review and verification. The formal root cause analysis of this event will be completed and the results, including any further related corrective actions, will be addressed in a supplemental report.

This event did not affect the health and safety of either the public or Plant personnel.

Plant Conditions

Power Level - 100%
Plant Mode - 1 (Power Operation)

Event Description

On September 12, 1990 at 1108 hours it was determined that a discrepancy with the Pressure Suppression Pressure Limit (PSPL) curve in the Emergency Operating Procedures (EOPs) was reportable as a condition alone that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. This discrepancy was discovered by an NRC Inspector during a recent NRC Team Inspection of the EOPs.

The PSPL curve in Plant Procedure (PPM) 5.0.1, "Emergency Operating Procedure Graphs," did not agree with the design calculation that formed the basis for the curve. Pressure Suppression Pressure is defined to be the lesser of either 1) the highest pressure suppression chamber pressure which can occur without steam in the chamber airspace, or 2) the highest suppression chamber pressure at which initiation of Reactor Pressure Vessel (RPV) depressurization will not result in exceeding the Primary Containment Pressure Limit before RPV pressure drops to the minimum RPV Flooding Pressure, or 3) the highest suppression chamber pressure which can be maintained without exceeding the suppression pool boundary design load if Safety Relief Valves are opened. This pressure is a function of primary containment water level and is used to ensure that the pressure suppression function of the containment is maintained while the RPV is at pressure.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)

DOCKET NUMBER (2)

LER NUMBER (6)

PAGE (3)

Washington Nuclear Plant - Unit 2

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YEAR SEQUENTIAL REVISION

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

In this particular situation, the PSPL curve in PPM 5.0.1 was nonconservative with regard to suppression chamber pressure. The procedural curve specified a wetwell pressure limit which was as much as 2.0 psi too high between 19.2 and 37.0 feet of Suppression Pool water level. This discrepancy could have resulted in inappropriate Plant Operator action if a situation had occurred which required that the graph be used.

Immediate Corrective Action

Plant Procedure (PPM) 5.0.1, "Emergency Operating Procedure Graphs," was changed to reflect the correct PSPL curve as specified by the design calculation.

Further Evaluation and Corrective ActionA. Further Evaluation

1. This event is reportable under 10CFR50.73(a)(2)(v) as an event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.
2. There were no structures, systems or components that were inoperable at the start of the event that contributed to the event.
3. Although the root cause of this event is still in the process of being determined, preliminary causes appear to be less than adequate communication and less than adequate procedural review and verification. During preparation of the Emergency Operating Procedures, development of the design calculations and the associated procedural revisions were being performed concurrently by two separate groups. Supply System Engineering personnel were responsible for performing the calculations and Plant Operations personnel were responsible for the procedural development. In this particular situation, a preliminary calculation was initially used as the basis for the PSPL curve in the draft procedure. However, during the final review of the calculation, the results were changed and the new Wetwell pressure information from this final calculation was not incorporated into the procedure. This oversight was not discovered during the normal procedure review process, nor during a special review of the procedures by the Technical Assessment Group.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 500 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)				PAGE (3)			
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER					
		9 0	— 0 1 9	— 0 0	0 4	OF	0 5		

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

B. Further Corrective Action

1. A review of all curves in the Emergency Operating Procedures was performed to verify accuracy with the corresponding design calculations. As a result of this review, two additional problems were identified. The Heat Capacity Temperature Limit (HCTL) and Primary Containment Pressure Limit (PCPL) curves in the EOPs did not agree with the calculational bases. The HCTL curve, which is a function of RPV pressure and is used to preclude failure of the containment or equipment necessary for safe shutdown of the Plant, was nonconservative (by 3 - 5 degrees F.) with regard to Suppression Pool temperature limits. This discrepancy, which appears to be due to a drafting error, was determined by engineering judgment to be within the conservatism of the design calculation and; therefore, would not have caused inappropriate operator action.

The PCPL curve is a function of primary containment water level and is used to maintain primary containment pressure so that containment failure due to overpressurization does not occur. The error in the PCPL curve was conservative and would not have provided inappropriate direction to Plant Operators.

The HCTL curve in the EOPs was changed to reflect the correct information as specified in the design calculations.

2. The formal root cause analysis of this event will be completed and the results, including any further related corrective actions, will be addressed in a supplemental report.

Safety Significance

The purpose of the Emergency Operating Procedures, which function as an integrated set of symptom-oriented instructions, is to specify those operator actions necessary to mitigate the consequences of emergency situations. The EOPs are the procedures that govern Plant operation during these conditions, and which direct the operator actions required to bring the Plant to a shutdown condition.

It is believed that sufficient conservatism was included in the calculation for the PSPL curve such that design parameters would not have been exceeded if an emergency situation occurred during the event period. However, this cannot be positively stated without a comprehensive engineering analysis of the calculations that formed the bases for the curve. As a result, it is assumed that the discrepancy in the PSPL curve may have delayed those required Plant Operator actions if an emergency situation had occurred during the time-frame that the nonconservative direction was included in the procedures.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-630), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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Washington Nuclear Plant - Unit 2

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TEXT (If more space is required, use additional NRC Form 365A's) (17) -

However, since an emergency condition did not occur during this time and the procedures were not used, this event did not affect the health and safety of either the public or Plant personnel.

Similar Events

None.

EIIS InformationText ReferenceEIIS Reference
System Component

Primary Containment
Pressure Suppression Chamber/Wetwell
Safety Relief Valves

NH

NH

SN

RV

ACCELERATED DISTRIBUTION DEMONSTRATION SYSTEM

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR:9010260024 DOC.DATE: 90/10/12 NOTARIZED: NO DOCKET #
FACIL:50-397 WPPSS Nuclear Project, Unit 2, Washington Public Powe 05000397
AUTH.NAME AUTHOR AFFILIATION
ARBUCKLE,J.D. Washington Public Power Supply System
BAKER,J.W. Washington Public Power Supply System
RECIP.NAME RECIPIENT AFFILIATION

SUBJECT: LER 90-019-00:on 900912,pressure suppression pressure limit
curve in EOPs did not agree w/design calculation.

DISTRIBUTION CODE: IE23T COPIES RECEIVED:LTR 1 ENCL 1 SIZE: 6
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WASHINGTON PUBLIC POWER SUPPLY SYSTEM

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G02-90-172

Docket No. 50-397

October 12, 1990

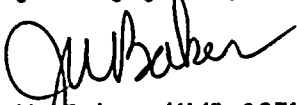
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Washington, D.C. 20555

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 90-019

Dear Sir:

Transmitted herewith is Licensee Event Report No. 90-019 for the WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the items of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,


J. W. Baker (M/D 927M)
WNP-2 Plant Manager

JWB:lr

Enclosure:
Licensee Event Report No. 90-019

cc: Mr. John B. Martin, NRC - Region V
Mr. C. Sorensen, NRC Resident Inspector (M/D 901A)
INPO Records Center - Atlanta, GA
Ms. Dottie Sherman, ANI
Mr. D. L. Williams, BPA (M/D 399)
NRC Resident Inspector - walk over copy

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LICENSEE EVENT REPORT (LER)

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2										DOCKET NUMBER (2) 0 5 0 0 0 3 9 7 1 0 0 5										PAGE (3) 1 OF 0 5	
TITLE (4) Pressure Suppression Pressure Limit (PSPL) Curve in the EOPs Did Not Agree With the Design Calculation Due to Inadequate Communication/Procedural Review and Verification																					
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)							
0	9	1	2	9	0	9	0	1	0	1	2	9	0	0 5 0 0 0							
OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)																			
POWER LEVEL (10)		20.402(b)				20.405(c)				50.73(a)(2)(iv)				73.71(b)							
1 0 0		20.405(a)(1)(i)				50.38(c)(1)				50.73(a)(2)(v)				73.71(c)							
		20.405(a)(1)(ii)				50.38(c)(2)				50.73(a)(2)(vii)				OTHER (Specify in Abstract below and in Text, NRC Form 366A)							
		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)(ix)											
LICENSEE CONTACT FOR THIS LER (12)																					
NAME J. D. Arbuckle, Compliance Engineer										TELEPHONE NUMBER AREA CODE 5 0 9 3 7 7 - 2 1 1 5											
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SUPPLEMENTAL REPORT EXPECTED (14)										EXPECTED SUBMISSION DATE (15)		MONTH	DAY	YEAR							
<input checked="" type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE)												0	1	1							
<input type="checkbox"/> NO												4	9	1							

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

On September 12, 1990 at 1108 hours it was determined that a discrepancy with the Pressure Suppression Limit (PSPL) curve in the Emergency Operating Procedures (EOPs) was reportable as a condition alone that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. This discrepancy was discovered by an NRC Inspector during a recent NRC Team Inspection of the EOPs.

The PSPL curve in the EOP procedure did not agree with the design calculation that formed the basis for the curve. The procedural curve specified a wetwell pressure limit which was as much as 2.0 psi too high between 19.2 and 37.0 feet of Suppression Pool water level. This pressure is a function of primary containment water level and the limit is used during emergency situations to ensure that the pressure suppression function of the containment is maintained while the RPV is at pressure. The procedural discrepancy could have resulted in inappropriate operator action if a situation had occurred which required that the graph be used.



14-00000

THE UNITED STATES OF AMERICA
DEPARTMENT OF JUSTICE
FEDERAL BUREAU OF INVESTIGATION
WASHINGTON, D. C. 20535

MEMORANDUM FOR THE DIRECTOR

DATE: 10/10/68
SUBJECT: [Illegible]

10/10/68

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 9 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
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TEXT (If more space is required, use additional NRC Form 366A's) (17)

As an immediate corrective action, the applicable procedure was changed to reflect the correct PSPL curve as specified by the design calculation. Further corrective action consisted of reviewing all curves in the Emergency Operating Procedures to verify accuracy with the corresponding design calculations. As a result of that review, it was discovered that the Heat Capacity Temperature Limit (HCTL) and Primary Containment Pressure Limit (PCPL) curves also did not agree with the calculational bases. The discrepancy in the HCTL curve was determined by engineering judgment to be within the conservatism of the design calculation and; therefore, would not have caused inappropriate operator action. The procedure for the HCTL curve was changed to reflect the correct information as specified in the design calculations. The error in the PCPL curve was conservative.

Although the root cause of this event is still in the process of being determined, preliminary causes appear to be less than adequate communication and less than adequate procedural review and verification. The formal root cause analysis of this event will be completed and the results, including any further related corrective actions, will be addressed in a supplemental report.

This event did not affect the health and safety of either the public or Plant personnel.

Plant Conditions

Power Level - 100%

Plant Mode - 1 (Power Operation)

Event Description

On September 12, 1990 at 1108 hours it was determined that a discrepancy with the Pressure Suppression Pressure Limit (PSPL) curve in the Emergency Operating Procedures (EOPs) was reportable as a condition alone that could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident. This discrepancy was discovered by an NRC Inspector during a recent NRC Team Inspection of the EOPs.

The PSPL curve in Plant Procedure (PPM) 5.0.1, "Emergency Operating Procedure Graphs," did not agree with the design calculation that formed the basis for the curve. Pressure Suppression Pressure is defined to be the lesser of either 1) the highest pressure suppression chamber pressure which can occur without steam in the chamber airspace, or 2) the highest suppression chamber pressure at which initiation of Reactor Pressure Vessel (RPV) depressurization will not result in exceeding the Primary Containment Pressure Limit before RPV pressure drops to the minimum RPV Flooding Pressure, or 3) the highest suppression chamber pressure which can be maintained without exceeding the suppression pool boundary design load if Safety Relief Valves are opened. This pressure is a function of primary containment water level and is used to ensure that the pressure suppression function of the containment is maintained while the RPV is at pressure.

THE UNIVERSITY OF CHICAGO

THE UNIVERSITY OF CHICAGO

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 60.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 9 7	LER NUMBER (6)			PAGE (3)		
		YEAR 9 0	SEQUENTIAL NUMBER — 0 1 9 —	REVISION NUMBER 0 0		OF 0 3	

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

In this particular situation, the PSPL curve in PPM 5.0.1 was nonconservative with regard to suppression chamber pressure. The procedural curve specified a wetwell pressure limit which was as much as 2.0 psi too high between 19.2 and 37.0 feet of Suppression Pool water level. This discrepancy could have resulted in inappropriate Plant Operator action if a situation had occurred which required that the graph be used.

Immediate Corrective Action

Plant Procedure (PPM) 5.0.1, "Emergency Operating Procedure Graphs," was changed to reflect the correct PSPL curve as specified by the design calculation.

Further Evaluation and Corrective ActionA. Further Evaluation

1. This event is reportable under 10CFR50.73(a)(2)(v) as an event or condition that alone could have prevented the fulfillment of the safety function of structures or systems that are needed to mitigate the consequences of an accident.
2. There were no structures, systems or components that were inoperable at the start of the event that contributed to the event.
3. Although the root cause of this event is still in the process of being determined, preliminary causes appear to be less than adequate communication and less than adequate procedural review and verification. During preparation of the Emergency Operating Procedures, development of the design calculations and the associated procedural revisions were being performed concurrently by two separate groups. Supply System Engineering personnel were responsible for performing the calculations and Plant Operations personnel were responsible for the procedural development. In this particular situation, a preliminary calculation was initially used as the basis for the PSPL curve in the draft procedure. However, during the final review of the calculation, the results were changed and the new Wetwell pressure information from this final calculation was not incorporated into the procedure. This oversight was not discovered during the normal procedure review process, nor during a special review of the procedures by the Technical Assessment Group.



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ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 50.0 HRS. FORWARD COMMENTS REGARDING BURDEN ESTIMATE TO THE RECORDS AND REPORTS MANAGEMENT BRANCH (P-530), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0104), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

FACILITY NAME (1) Washington Nuclear Plant - Unit 2	DOCKET NUMBER (2) 0 5 0 0 0 3 9 7	LER NUMBER (6)			PAGE (3)		
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER			
		9 0	— 0 1 9	— 0 0	0	4	OF 0 5

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

B. Further Corrective Action

1. A review of all curves in the Emergency Operating Procedures was performed to verify accuracy with the corresponding design calculations. As a result of this review, two additional problems were identified. The Heat Capacity Temperature Limit (HCTL) and Primary Containment Pressure Limit (PCPL) curves in the EOPs did not agree with the calculational bases. The HCTL curve, which is a function of RPV pressure and is used to preclude failure of the containment or equipment necessary for safe shutdown of the Plant, was nonconservative (by 3 - 5 degrees F.) with regard to Suppression Pool temperature limits. This discrepancy, which appears to be due to a drafting error, was determined by engineering judgment to be within the conservatism of the design calculation and; therefore, would not have caused inappropriate operator action.

The PCPL curve is a function of primary containment water level and is used to maintain primary containment pressure so that containment failure due to overpressurization does not occur. The error in the PCPL curve was conservative and would not have provided inappropriate direction to Plant Operators.

The HCTL curve in the EOPs was changed to reflect the correct information as specified in the design calculations.

2. The formal root cause analysis of this event will be completed and the results, including any further related corrective actions, will be addressed in a supplemental report.

Safety Significance

The purpose of the Emergency Operating Procedures, which function as an integrated set of symptom-oriented instructions, is to specify those operator actions necessary to mitigate the consequences of emergency situations. The EOPs are the procedures that govern Plant operation during these conditions, and which direct the operator actions required to bring the Plant to a shutdown condition.

It is believed that sufficient conservatism was included in the calculation for the PSPL curve such that design parameters would not have been exceeded if an emergency situation occurred during the event period. However, this cannot be positively stated without a comprehensive engineering analysis of the calculations that formed the bases for the curve. As a result, it is assumed that the discrepancy in the PSPL curve may have delayed those required Plant Operator actions if an emergency situation had occurred during the time-frame that the nonconservative direction was included in the procedures.

100

1. The first part of the report is a general introduction to the subject of the study. It discusses the importance of the study and the objectives of the research. It also provides a brief overview of the methodology used in the study.

2. The second part of the report is a detailed description of the study area. It includes information about the location of the study area, the population of the study area, and the characteristics of the study area.

3. The third part of the report is a description of the data collection process. It includes information about the sources of data, the methods used to collect data, and the time period over which data was collected.

4. The fourth part of the report is a description of the data analysis process. It includes information about the statistical methods used to analyze the data and the results of the analysis.

5. The fifth part of the report is a conclusion and a discussion of the findings of the study. It includes a summary of the main findings of the study and a discussion of the implications of the findings.

6. The sixth part of the report is a list of references. It includes a list of all the sources of information used in the study.

7. The seventh part of the report is an appendix. It includes any additional information that is relevant to the study but that does not fit into the main body of the report.

8. The eighth part of the report is a glossary. It includes definitions of all the terms used in the report.

9. The ninth part of the report is a list of figures and tables. It includes a list of all the figures and tables included in the report.

10. The tenth part of the report is a list of abbreviations. It includes a list of all the abbreviations used in the report.

11. The eleventh part of the report is a list of acknowledgments. It includes a list of all the people and organizations that have helped in the study.

12. The twelfth part of the report is a list of footnotes. It includes any additional information that is relevant to the study but that does not fit into the main body of the report.

13. The thirteenth part of the report is a list of appendices. It includes any additional information that is relevant to the study but that does not fit into the main body of the report.

14. The fourteenth part of the report is a list of references. It includes a list of all the sources of information used in the study.

15. The fifteenth part of the report is an appendix. It includes any additional information that is relevant to the study but that does not fit into the main body of the report.

16. The sixteenth part of the report is a glossary. It includes definitions of all the terms used in the report.

17. The seventeenth part of the report is a list of figures and tables. It includes a list of all the figures and tables included in the report.

18. The eighteenth part of the report is a list of abbreviations. It includes a list of all the abbreviations used in the report.

19. The nineteenth part of the report is a list of acknowledgments. It includes a list of all the people and organizations that have helped in the study.

20. The twentieth part of the report is a list of footnotes. It includes any additional information that is relevant to the study but that does not fit into the main body of the report.

LICENSEE EVENT REPORT (LER)
TEXT CONTINUATION

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However, since an emergency condition did not occur during this time and the procedures were not used, this event did not affect the health and safety of either the public or Plant personnel.

Similar Events

None.

EIIS InformationText ReferenceEIIS Reference
System Component

Primary Containment
Pressure Suppression Chamber/Wetwell
Safety Relief Valves

NH ---
NH ---
SN RV

10/10/52

TO: SAC, NEW YORK (100-38861) FROM: SAC, BOSTON (100-108861) (P)

RE: JAMES EARL RAY, AKA; ALLEGED ATTEMPT TO OBTAIN PASSPORT FOR TRIP TO EUROPE; BOSTON, MASSACHUSETTS, OCTOBER 10, 1952. BOSTON OFFICE ADVISED THAT RAY HAD BEEN ADVISED BY AN INDIVIDUAL WHO OFFERED HIM \$5000 TO OBTAIN A PASSPORT FOR TRIP TO EUROPE. RAY REFUSED THE OFFER.

BUFILE 100-38861
BOSTON 100-108861

ALL INFORMATION CONTAINED
HEREIN IS UNCLASSIFIED

DATE 10-10-52 BY SP-5 JED/STP