

LICENSEE EVENT REPORT

CONTROL BLOCK

(PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

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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

CONT

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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

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES (10)

02 On July 25, 1981, during a controlled rapid power reduction of the Unit 2 reactor
03 due to secondary chemistry problems, the operator noticed that Tave was less than the
04 required lower limit of 541°F. Action statement 3.1.1.4 was entered at 1530 hours
05 on July 25, 1981.
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09 SYSTEM CODE 11 CAUSE CODE 12 CAUSE SUBCODE 13 COMPONENT CODE 14 COMP SUBCODE 15 VALVE SUBCODE 16
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17 LER NO. REPORT NUMBER 18 EVENT YEAR 19 SEQUENTIAL REPORT NO. 20 OCCURRENCE CODE 21 REPORT TYPE 22 REVISION NO. 23
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ACTION TAKEN 24 FUTURE ACTION 25 EFFECT ON PLANT 26 SHUTDOWN METHOD 27 HOURS 28 ATTACHMENT SUBMITTED 29 NPD-4 FORM SUB 30 PRIME COMP. SUPPLIER 31 COMPONENT MANUFACTURER 32
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CAUSE DESCRIPTION AND CORRECTIVE ACTIONS (27)

10 Operational transient - Tave was being lowered by xenon buildup, operator diluted at
11 full rate and pulled rods to present positive MTC level. Tave was less than 541°F
12 for six minutes. Tave restored, shutdown continued. Action statement 3.1.1.4.
13 was terminated at 1536 hours on July 25, 1981.
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15 FACILITY STATUS 26 % POWER 27 OTHER STATUS 30 METHOD OF DISCOVERY 31 DISCOVERY DESCRIPTION 32
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16 ACTIVITY CONTENT 33 RELEASED OF RELEASE 34 AMOUNT OF ACTIVITY 35 LOCATION OF RELEASE 36
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17 PERSONNEL EXPOSURES 37 NUMBER 38 TYPE 39 DESCRIPTION 40
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

18 PERSONNEL INJURIES 40 NUMBER 41 DESCRIPTION 42
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19 LOSS OF OR DAMAGE TO FACILITY 43 TYPE 44 DESCRIPTION 45
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20 PUBLICITY 44 ISSUED 45 DESCRIPTION 46
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

NRC USE ONLY

J. Varga

PHONE 609-935-5100

Report Number: 81-74/03X-1
Report Date: 8-21-81
Occurrence Date: 7-25-81
Facility: Salem Generating Station, Unit 2
Public Service Electric & Gas Company
Hancocks Bridge, New Jersey 08038

IDENTIFICATION OF OCCURRENCE:

Average Temperature Of The Reactor Coolant (Tave) Less Than 541 Degrees.
This report was initiated by Incident Report 81-285.

CONDITIONS PRIOR TO OCCURRENCE:

Mode 2 - Rx Power 1% - Unit Load 0 MWe

DESCRIPTION OF OCCURRENCE:

On July 25, 1981, during a controlled rapid power reduction of the Unit 2 reactor due to secondary chemistry problems, the operator noticed that Tave was less than the required lower limit of 541°F. Action statement 3.1.1.4 was entered at 1530 hours on July 25, 1981.

This occurrence constituted operation in a degraded mode in accordance with technical specification 6.9.1.9.b.

DESIGNATION OF APPARENT CAUSE OF OCCURRENCE:

Operational transient - with the rapid power reduction in progress the xenon concentration was rising rapidly adding negative reactivity and lowering Tave. The operator was diluting at full rate and raising the control rods adding positive reactivity to the system in an attempt to raise Tave. However, to prevent a positive moderator temperature coefficient condition, control rod bank D has a rod withdrawal limit at 1% power set at approximately 102 steps. The operator was diluting at full rate and pulled the rods to the full limit; however, until the positive reactivity addition overcame the xenon's effect, Tave dropped and for a period of six minutes Tave was less than 541°F.

ANALYSIS OF OCCURRENCE:

Action statement 3.1.1.4 states:

With a Reactor Coolant System operating loop temperature (Tave) less than 541°F, restore Tave to within its limit within 15 minutes or be in hot standby within the next 15 minutes.

CORRECTIVE ACTION:

Tave was restored to greater than or equal to 541°F within 6 minutes and the shutdown continued. Action statement 3.1.1.4 was terminated at 1536 hours on July 25, 1981.

FAILURE DATA:

Not Applicable

Prepared By J. Varga

SORC Meeting No. 81-80

H. J. [Signature]
Manager - Salem Generating Station