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Ted C. Feigenbaum
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October 2, 1992

United States Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Document Control Desk

References: Facility Operating License No. NPF-86, Docket No. 50-443

Subject: Facility Operating Report (LER) 92-15-00: Scuppers on the Service Water
Pumphouse Roof

Gentlemen:

Enclosed please find Licensee Event Report (LER) No. 92-15-00 for Seabrook Station. This submittal documents a condition that was identified on September 2, 1992. This condition is being reported pursuant to 10 CFR 50.73(a)(2)(v)(D).

Very truly yours,

Ted C. Feigenbaum

TCF:JES/jes

Enclosures: NRC Forms 366, 366A

cc: Mr. Thomas T. Martin
Regional Administrator
U.S. Nuclear Regulatory Commission
Region I
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LICENSEE EVENT REPORT (LER)

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| FACILITY NAME (1) SEABROOK STATION | DOCKET NUMBER (2) 0 5 0 0 0 4 4 3 | PAGE (3) 1 OF 0 3 |
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TITLE (4)
SCUPPERS ON THE SERVICE WATER PUMPHOUSE ROOF

| 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 | 0 | 2 | 9 | 2 | 0 | 1 | 5 | 0 | 0 | 1 | 0 | 0 | 2 | 9 | 2 | | 0 5 0 0 0 |
| THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR 5. (Check one or more of the following) (11) | | | | | | | | | | | | | | | | | | |

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| OPERATING MODE (8) 1 | POWER LEVEL (10) 0 9 8 | 20.402(b) | 20.406(a)(1)(i) | 20.406(a)(1)(ii) | 20.406(a)(1)(iii) | 20.406(a)(1)(iv) | 20.406(a)(1)(v) | 20.406(a)(1)(vi) | 20.406(e) | 50.73(a)(2)(i) | 50.73(a)(2)(ii) | 50.73(a)(2)(iii) | 50.73(a)(2)(iv) | 50.73(a)(2)(v) | 50.73(a)(2)(vi) | 50.73(a)(2)(vii)(A) | 50.73(a)(2)(vii)(B) | 50.73(a)(2)(ix) | 72.71(b) | 72.71(c) | OTHER (Specify in Abstract below and in Text, NRC Form 366A) |
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LICENSEE CONTACT FOR THIS LER (12)

| | |
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| NAME Mr. Allen L. Legendre, Lead Engineer Compliance, extension 2373 | TELEPHONE NUMBER AREA CODE: 6 0 3 NUMBER: 4 7 4 - 9 5 2 1 |
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COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

| CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPROS | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO NPROS |
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SUPPLEMENTAL REPORT EXPECTED (14)

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| <input type="checkbox"/> YES (If yes, complete EXPECTED SUBMISSION DATE (15)) <input checked="" type="checkbox"/> NO | EXPECTED SUBMISSION DATE (15) MONTH: DAY: YEAR: |
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ABSTRACT (Limit to 1400 spaces, i.e., approximately seven single-space typewritten lines) (16)

During a walkdown for the Individual Plant Examination for External Events (IPEEE) it was identified that scuppers (drain holes) in the Service Water Pumphouse (KE) roof parapet were covered by roofing material. The interior roof surface drains, however, were not covered by the roofing material and were therefore available to drain impounded water. The Service Water Pumphouse roof is designed with a 3.5 foot tall parapet around its perimeter. The parapet design includes scuppers at a height of approximately 15 inches, every 10 feet around the perimeter of the building. The function of the scuppers is to allow drainage in the event that the normal roof surface drains become blocked. The scupper height ensures that the roof will not exceed the design loading conditions specified in the UFSAR during periods of local intense rainfall. North Atlantic conservatively concludes that this condition is reportable pursuant to 10 CFR 50.73(a)(2)(v)(D).

There were no adverse safety consequences as a result of this event. Analysis shows that the Service Water Pumphouse roof is capable of withstanding the worst case impounded water load if both the interior surface drains and the scuppers were unavailable.

The scuppers on the roof of the Service Water Pumphouse were covered during the initial roof installation by a roofing contractor. The date that this occurred is not known but is believed to have been during the construction period in the early 1980's. The root cause for this condition is indeterminate due to the time frame that this condition occurred.

Immediate corrective actions for this occurrence included removing the roofing material covering the scuppers on the Service Water Pumphouse. Other corrective actions included performing walkdowns of other buildings to determine if similar conditions existed.

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TEXT (IF MORE SPACE IS REQUIRED, USE ADDITIONAL NRC Form 386A (11))

Description of Event

During a walkdown for the Individual Plant Examination for External Events (IPEEE) it was identified that scuppers (drain holes) in the Service Water Pumphouse [KE] roof parapet were covered by roofing material. The interior roof surface drains, however, were not covered by the roofing material and were therefore available to drain impounded water. At that time it was unknown whether the scuppers were relied upon to ensure the integrity of the Service Water Pumphouse roof during periods of local intense rainfall.

The Service Water Pumphouse roof is designed with a 3.5 foot tall parapet around its perimeter. The parapet design includes scuppers at a height of approximately 15 inches, every 10 feet around the perimeter of the building. The function of the scuppers is to allow drainage in the event that the normal roof surface drains become blocked. The scupper height ensures that the roof will not exceed the design loading conditions specified in the UPSAR during periods of local intense rainfall.

On September 2, 1992, at 1422 EDT, North Atlantic made a four-hour report to the NRC on this condition. This report was made pursuant to 10 CFR 50.72(b)(2)(iii)(D), since it was believed that this condition could have prevented the fulfillment of the safety function of a structure or system that is needed to mitigate the consequences of an accident. The basis for this determination was that this condition could have caused the collapse of the Service Water Pumphouse roof under the conservative assumption that the roof drains were also unavailable during the design basis precipitation event, and hence render the Service Water System inoperable. Subsequently it was determined that this condition could not have caused the Service Water Pumphouse roof to collapse. Specifically, structural analysis shows that the roof and building can adequately support over 3.5 feet of impounded water. Additional water could not accumulate since it would spill over the top of the 3.5 foot tall parapet. Therefore, this condition could not have prevented the fulfillment of a safety function of a structure or system needed to mitigate the consequences of an accident.

Notwithstanding the aforementioned determination that this condition did not actually present the potential for the collapse of the Service Water Pumphouse roof, North Atlantic conservatively concludes that this condition is reportable pursuant to 10 CFR 50.73(a)(2)(v)(D).

Safety Consequences

There were no adverse safety consequences as a result of this event. The primary means of roof drainage for the Service Water Pumphouse are the interior roof drains. The scuppers are only relied upon to provide drainage in the event that the interior roof drains become blocked. Since the interior roof drains were found to be functional, this condition did not cause any potential for impoundment of excessive quantities of water, and hence, there was no potential for excessive roof loading.

Even if the interior drains became blocked there was no potential for the collapse of the Service Water Pumphouse roof. Structural analysis shows that the Service Water Pumphouse is capable of withstanding the load exerted by impounded water at a depth of over 3.5 feet. Additional water could not accumulate on the roof since it would spill over the top of the 3.5 foot tall parapets. This represents the worst case roof loading scenario. Based on the foregoing, this event did not present the potential for any adverse safety consequences.

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TEXT (If more space is required, use additional NRC Form 366A 2) (17)

Root Cause

The scuppers on the roof of the Service Water Pumphouse were covered during the initial roof installation by a roofing contractor. The date that this occurred is not known but is believed to have been during the construction period in the early 1980's. The root cause for this condition is indeterminate due to the time frame that this condition occurred.

Corrective Actions

Immediate corrective actions for this occurrence included removing the roofing material covering the scuppers on the roof of the Service Water Pumphouse.

Other corrective actions included performing walkdowns of other buildings to determine if similar conditions existed. This review indicated that the scuppers on other buildings were open as required.

Plant Conditions

At the time of discovery of this event, the plant was in MODE 1, at 98 percent power, with a Reactor Coolant System temperature of 587 degrees Fahrenheit and pressure of 2235 psig.

This is the first occurrence of this type at Seabrook Station.