

Board Notification Distribution  
BN#82-59

DATE: JUNE 22 1982

ASLB: Callaway 1  
Comanche Peak 1 & 2  
Palo Verde 1, 2 & 3  
Pebble Springs 1 & 2  
Summer 1  
Waterford 3

ASLAB: San Onofre 2 & 3

STEAM GENERATOR TUBE RUPTURE

Distribution w/o enclosure

Document Control (STN 50-483, 50-445/446, 50-528/529/530, 50-514/515  
50-395, 50-382, 50-361/362)

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D. C. 20555

JUNE 22 1982

MEMORANDUM FOR: The Atomic Safety & Licensing Boards for:

Callaway Plant, Unit 1  
Comanche Peak Steam Electric Station, Units 1 & 2  
Palo Verde Nuclear Generating Station, Units 1, 2 & 3  
Pebble Springs, Units 1 & 2  
Virgil C. Summer Nuclear Station, Unit 1  
Waterford Steam Electric Station, Unit 3

and The Atomic Safety & Licensing Appeal Board for:

San Onofre Nuclear Generating Station, Units 2 & 3

FROM: Robert L. Tedesco, Assistant Director  
for Licensing  
Division of Licensing, ONRR

SUBJECT: BOARD NOTIFICATION - STEAM GENERATOR TUBE RUPTURE  
(Board Notification No. 82- 59)

In accordance with present NRC procedures regarding Board Notifications, the enclosed information is being provided for your information as constituting new information relevant and material to safety issues. This information is generic and may have applicability to all dockets with pressurized water reactors.

During the review of the recent Ginna steam generator tube rupture accident, it was determined that certain of the assumptions usually made in the staff's design basis accident calculations of off-site doses were non-conservative, at least for part of the accident. Notwithstanding the potentially non-conservative factors, the overall accident at Ginna resulted in off-site consequences that were extremely small fractions of the staff's calculated values. One reason for this was the low level of activity in the coolant at the time of the accident and the absence of an increase in radioiodine concentration resulting from the accident (that is there was no pre-existing iodine spike nor was one caused by the rupture event). However, the emergency operating procedures followed by the operators resulted in over-filling of the steam generators which caused large carry-over of contaminated water in the steam released to the environment. Delays in equalizing the primary and secondary pressures resulted in larger steam-water emissions from the secondary side than would have been experienced with a quicker reduction of the primary pressure to the set point pressure of the secondary relief valves. Therefore, the staff has required reduced radioiodine limiting conditions for operation for the Ginna primary coolant activity. These lower

Contact:  
J. D. Kerrigan, ONRR  
X29788


The Atomic Safety & Licensing Board            - 2 -  
The Atomic Safety & Licensing Appeal Board

limits will remain in effect until the questions of overfilling and delays in equalizing pressure are resolved. Furthermore, the staff is reviewing the overfilling and pressure equalization questions relative to other plants and may consider reduced limits for them also.

Since the specific issues discussed above are not the only issues raised in the reviews of steam generator tube rupture accidents, the entire Ginna restart Safety Evaluation Report is attached for your information.

Until the staff, licensees, vendors and contractors have completed reviews of emergency operating procedures, plant designs, and coolant activity limits, no final staff position can be formulated. However, it is the staff's judgment that this does not represent a compelling safety issue. This judgment is based not only on the experience of the Ginna tube rupture accident and the three others in U.S. plants, but also on the apparent implausibility of having all factors at their worst case levels at the same time. These factors include those determined by unrelated conditions in the plant (such as pre-existing high radioiodine levels in the primary system), plant design, and emergency operating procedures.

We are continuing to pursue this issue and will keep you informed.



Robert L. Tedesco, Assistant Director  
for Licensing  
Division of Licensing, ONRR

Enclosure:  
R. E. Ginna Safety Evaluation  
Report (NUREG-0916)

cc: Board Service List

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JUNE 22 1982

MEMORANDUM FOR: The Atomic Safety & Licensing Boards for:

Callaway Plant, Unit 1  
Comanche Peak Steam Electric Station, Units 1 & 2  
Palo Verde Nuclear Generating Station, Units 1, 2 & 3  
Pebble Springs, Units 1 & 2  
Virgil C. Summer Nuclear Station, Unit 1  
Waterford Steam Electric Station, Unit 3

and The Atomic Safety & Licensing Appeal Board for:

San Onofre Nuclear Generating Station, Units 2 & 3

FROM: Robert L. Tedesco, Assistant Director  
for Licensing  
Division of Licensing, ONRR

SUBJECT: BOARD NOTIFICATION - STEAM GENERATOR TUBE RUPTURE  
(Board Notification No. 82- 59)

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PDR ADOCK 05000361  
P PDR

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The Atomic Safety & Licensing Board - 2 -  
The Atomic Safety & Licensing Appeal Board

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Original signed by  
Robert L. Tedesco

Robert L. Tedesco, Assistant Director  
for Licensing  
Division of Licensing, ONRR

Enclosure:  
R. E. Ginna Safety Evaluation  
Report (NUREG-0916)

cc: Board Service List

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