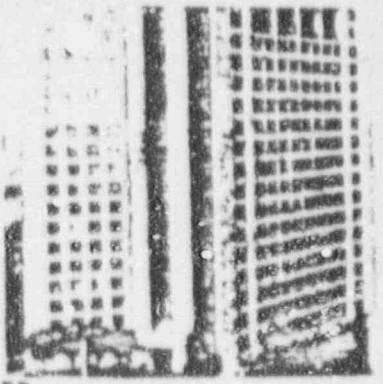
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555



FAX NO'S 301 - FTS - 492-0259, 492-0260, 492-1137

VERIFICATION NO. 301 - FTS - 492-0262 MAY 18 92

LOCAL ( ) OR FTS ( )
PLEASE CHECK ONE

PLEASE TYPE OR USE BOLD FELT TIP PIN. TELECOPIES WILL NOT BE RETURNED.

	TO	LOCATION
1.	JACK FOX	SAN JOSE
	FAX # 408-925-1687	VERIFICATION ---
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OF PAGES 7 AND COVER SHEET COMMENTS ON GE's RESPONSE TO GL's AND SER's

FROM SON NINH PHONE EXT. 301-504-1125

MAIL STOP 11H3

GE Nuclear Energy

GET COPY FOR CHET

ABWR

Date 4/8/92

To BUTCH BURTON 8D1 Fax No. _____

This page plus 2 page(s)

From JACK FOX Mail Code 782
175 Curtner Avenue
San Jose, CA 95125

Phone (408) 925- 4824 FAX (408) 925-1193
or (408) 925-1687

Subject YOUR REQUEST PERTAINING TO GL's and IEB's

Message

COMMENTS ON SELECTED ITEMS FROM TABLE 1.8-22 EXPERIENCE INFORMATION APPLICABLE TO ABWR

GL 81-38 Storage of Low-Level Radioactive Wastes at Sites

The NRC, reviewing Utility considerations for waste storage expansion, issued the guidance "Radiological Safety Guidance for Onsite Contingency Storage Capacity".

ABWR - Interface for Applicant guidance.

GL 83-08 Modification of Vacuum Breakers on Mark I Containments

Due to breaker damage by test, the NRC requested plant specific calculations and modifications if required.

ABWR - Not applicable - Experience is not a generic consideration for design, only background information.

GL 83-13 Clarification of Surveillance Requirements for HEPA Filters and Charcoal Adsorbers Units in Standard Technical Specifications (STS) on ESF Cleanup Systems

Component failures were mitigated by changes to the STS.

ABWR - Applicable - The experience is reflected in the STS and need not be listed. The surveillance requirements for the standby gas treatment system HEPA filters and charcoal adsorbers are applied in Subsection 16A.9.4.3.

GL 83-26 Clarification of Surveillance Requirements for Diesel Fuel Impurity Level Tests

Fuel impurities were mitigated by changes to the STS.

ABWR - Not applicable - The experience is reflected in the changes to the STS and therefore not listed. The surveillance requirements for the diesel fuel oil are applied in Subsection 16.11.3.

Since groundwater table is higher than bottom of FO9T2, removing water from FO9T2 should be done every 31 days

IEB 80-01 Operability of ADS Valve Pneumatic Supply

Due to potential inoperable gas supply, the NRC requested BWR's report use of hard-seat check valve, inadequate accumulator leak test, seismic qualification of system and establish operability.

ABWR - Applicable - Experience assisted in the selection of a safety related high pressure nitrogen gas supply system described in Subsection 6.7

IEB 80-03 Loss of Charcoal From Standard Type II, 2 Inch, Tray Adsorber Cells

Screens retaining the charcoal were not securely attached in the pre 1974 fabrication. The NRC requested inspection, repair and operability tests.

ABWR - Applicable - Experience assisted in the selection of a welded housing for SGTS filter train as described in Subsection 6.5.1.3.3(1)

IEB 80-10 Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment

A temporary intersystem heating hose to a radioactive source and a heating element leak in the auxiliary boiler caused a release to environment.

ABWR - Interface - Applicant precautions for temporary connections to radioactive sources.

IEB 80-24 Prevention of Damage Due to Water Leakage Inside Containment

Service water flooded reactor vessel several feet in the containment pit without the knowledge of the operators, due to failed equipment and instrumentation, which resulted in many short term corrective actions.

ABWR - Applicable, NUREG CR-4524 "Closeout of IE Bulletin 80-24": Associated generic corrective action provides considerations for the lower drywell flooder system described in Subsection 9.5.12

OPERATING EXPERIENCE (SPLB)

[MAKE SURE THAT PM HAS A COPY OF THIS FAX , THAT ALL BULLETINS AND GENERIC LETTERS ARE ADDRESSED IN THE APPROPRIATE FSER SECTIONS, AND BE SURE THAT I HAVE ALL THE INPUT FROM THE TECH SPEC BRANCH]

BULLETINS

80-01 OPERABILITY OF ADS VALVE PNEUMATIC SUPPLY

Staff requested GE to indicate whether the check valves closest to the ADS accumulators will contain a hard or soft seat. A soft seat is preferred because experience with hard seats has resulted in excessive fluid leakage.

GE response (fax dated 4/8/92) states that this issue is applicable to the ABWR and is resolved as a result of the use of the High Pressure Nitrogen (HPIN) system to supply nitrogen to safety-related equipment in containment. This response is inadequate. The SSAR does not indicate whether the check valves used in the HPIN system use soft or hard seats. GE will need to clarify this in the SSAR.

Staff requested GE to determine if periodic leak tests will be performed on the ADS accumulator systems to assure an emergency pneumatic supply for the required number and duration of valve operations.

The SSAR does not identify the number and duration of ADS valve operations. Assuming the 1 scfh leakage per valve, how many ADS valve actuations can be expected with the pneumatic supply? What periodic leak tests will be done to ensure this is met?

Review the seismic requirements of the ADS pneumatic supply systems from the accumulator system isolation check valves to the ADS valve operator and from the isolation valve outside containment up to the ADS accumulator check valve.

In GEs response to RAI question 430.210, it is stated that the safety related portions of the HPIN system are seismic category 1, Safety Class 3, and Quality Group C except for the piping and valves for the containment and drywell penetrations which are seismic Category 1, Safety Class 2, and Quality Group B. These classifications satisfy the intent of the bulletin.

80-03 LOSS OF CHARCOAL FROM STANDARD TYPE II, 2 INCH, TRAY ADSORBER CELLS

Staff requested GE to provide information on the ABWR features which would prevent the escape of charcoal from adsorber cells

GEs response 'fax dated 4/8/92) states that this issue is applicable to the ABWR and is addressed in SSAR section 6.5.1.3.3 (1).

GE has indicated that the filter housing is made of full-welded construction. This will prevent escape of charcoal from adsorber cells.

80-05 VACUUM CONDITION RESULTING IN DAMAGE TO CHEMICAL AND VOLUME CONTROL SYSTEM (CVCS) HOLDUP TANKS

Staff requested GE to provide information on low pressure tanks in the ABWR design which may contain reactor coolant and be susceptible to damage as a result of vacuum conditions developing in the tanks. This information should include a discussion of the features which will mitigate the results of any tank damage.

[GE HAS NOT RESPONDED TO THIS ISSUE. CHECK TO MAKE SURE THAT THEY KNOW ABOUT IT]

80-10 CONTAMINATION OF NONRADIOACTIVE SYSTEMS AND RESULTING POTENTIAL FOR UNMONITORED, UNCONTROLLED RELEASE OF RADIOACTIVITY TO THE ENVIRONMENT

The ABWR design appears to adequately address the prevention of contamination of nonradioactive systems either through design (which will be verified by ITAACs) or through COL Action Items/Interface Requirements for the applicant.

[GE IDENTIFIED AN INTERFACE FOR PRECAUTIONS FOR TEMPORARY CONNECTIONS TO RADIOACTIVE SOURCES IN ITS FAX. CHECK TO BE SURE THIS IS ADDRESSED AS AN INTERFACE OR (MORE LIKELY) AS A COL ACTION ITEM]

80-24 PREVENTION OF DAMAGE DUE TO WATER LEAKAGE INSIDE CONTAINMENT

GE stated in its response (fax dated 4/8/92) that NUREG CR-4524, "Closeout of IE Bulleting 80-24" provides considerations for the Lower Drywell Flooder system (see SSAR section 9.5.12.

The SSAR section 9.5.12 (Lower Drywell Flooder) doesn't specifically address how wetting of the lower vessel will be prevented. It is implied that because the system is ~10 meters below the bottom of the vessel, that wetting will not occur. I don't know that this is true. Instead, an argument should be made that if the LDF actuates, the level at which the water in the drywell equalizes with the water in the suppression pool is below the bottom of the vessel.

In addition, SSAR section 5.2.5 discusses features to detect and isolate leakage. CHECK THIS

GENERIC LETTERS

81-38 STORAGE OF LOW-LEVEL RADIOACTIVE WAS[illegible]T SITES

The ABWR has on-site storage capacity for six-months production of radwaste in the form of drummed solid waste. Temporary storage of High-Integrity Containers (HICs) is available but GE has not yet identified the maximum number of HICs to be in temporary storage.

GEs response to this issue (fax dated 4/8/92) states that this issue will be addressed by the applicant.

CHECK WITH GE TO MAKE SURE THAT THE TEMPORARY STORAGE MEASURES ARE NOT THOSE INTENDED IN THE GL. ALSO, BE SURE THAT IF IT IS TO BE ADDRESSED BY THE APPLICANT, THAT IT IS IDENTIFIED AS A COL ACTION ITEM.

83-08 MODIFICATION OF VACUUM BREAKERS ON MARK I CONTAINMENTS

GE should provide information on the susceptibility of the ABWR vacuum breakers to damage during the chugging and condensation oscillation phases of blowdown during a LOCA.

GEs response (fax dated 4/8/92) stated that this was not applicable to the ABWR - that experience is not a generic consideration for design, only background information. I don't understand this response. Besides, since this response, GE has provided more information on the vacuum breakers and the containment's response to a LOCA. The vacuum breakers are located above the froth zone created during the blowdown phase. In addition, part of the vacuum breaker access grating will be made of a solid steel plate which would provide protection from water which might otherwise damage the breaker.

83-13 CLARIFICATION OF SURVEILLANCE REQUIREMENTS FOR HEPA FILTERS AND CHARCOAL ADSORBER UNITS IN THE STANDARD TECH SPECS (STS) ON THE ESF CLEANUP SYSTEMS

GEs response (fax dated 4/8/92) states that this issue is applicable to the ABWR and that the STS contain the requirements. It also states that the SGTS HEPA filters and charcoal adsorbers are applied in SSAR Subsection 16A.9.4.3 (p. 16A.9-55). I have decided to let the Tech Spec Branch handle this. However, Subsection 16A.10.3 (p. 16A.10-11) should also be reviewed.

83-26 CLARIFICATION OF SURVEILLANCE REQUIREMENTS FOR DIESEL FUEL IMPURITY LEVEL TESTS

GEs response (fax dated 4/8/92) states that STSs subsection 16.11.3 (p. 16.11-22) provides requirements for these tests and the ABWR will follow this testing schedule. I have decided to let the Tech Spec Branch handle this. However, Subsection 16A.11.3 (p. 16A.11-23) should also be reviewed.