

TEXAS UTILITIES GENERATING COMPANY
SKYWAY TOWER • 400 NORTH OLIVE STREET, L.B. 81 • DALLAS, TEXAS 75201

Log # TXX-4092
File # 903.6

January 5, 1984

Director of Nuclear Reactor Regulation
Attention: Mr. B. J. Youngblood, Chief
Licensing Branch No. 1
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION
DOCKET NOS. 50-445 AND 50-446
HIGH/MODERATE ENERGY PIPE BREAK ANALYSIS

Dear Sir:

This letter provides additional details and clarifications of Texas Utilities letter TXX-4048 dated September 13, 1983. As per the telephone conversation with Auxiliary Branch Reviewer, Ernest Sylvester on December 19, 1983, the following concerns are addressed:

1. The moderate energy break of the Safeguards Building auxiliary feedwater pipe supplied by the Condensate Storage Tank was not required to be postulated because the pipe stresses are less than the threshold level specified in BFP MFB 3-1. The limiting break was determined to be in the 12" safety injection supply line from the Reactor Water Storage Tank (RWST). The break was postulated to occur between the tank and supply valve 1SI-048. The break flow rate was calculated to be .2457 ft³/sec with termination of the Safeguards Building flooding occurring after eight hours. Termination was by operator action placing sand bags in the pipe tunnel to divert flow. Flooding affected rooms 53, 54, 55, 56-1, 56-2, 57, 58, 59, 61 and 62, with flooding depths ranging from 8" to 103". With the exception of a local control station for the ESF fan coil unit to the RHR pumps, no safe shutdown equipment was affected by the flooding. The local control station was relocated.
2. All high energy lines located in safety related structures are designed to seismic category I requirements.
3. Analyses of flooding effects for the AFW pump rooms and charging pump rooms were performed assuming complete blockage of floor drains. The flooding from the limiting break in each room is as follows:

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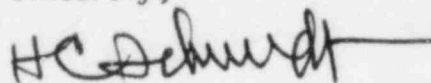
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	Room	Line	Leak Rate (CFS)	Flooding depth (inches)	Accident termination (min.)
Charging	199	3"-CS-1-83	.227	9.6"	30
pump	200	4-CS-1-076	1.23 fwd .13 reverse	71"	30
	201	4-CS-1-085	1.23 fwd .13 reverse	85"	30
Aux. Feed	72	6"-AF-1-036	2.28 fwd .524 reverse	136"	30
pump	73	6"-AF-1-009	2.28 fwd .524 reverse	144"	30
	74	8"-AF-1-011	.524 fwd 3.74 reverse	79"	30

Flooding into adjacent compartments via the common drain header is not analyzed because passive failures (such as drain pipe rupture, or failure of normally closed back water drain valves) are not postulated in conjunction with the original pipe break.

Should you have additional questions in this matter, please contact this office.

Sincerely, .



H. C. Schmidt

BSD/grr