GULF STATES UTILITIES COMPANY

RIVER BEND STATION POST OFFICE BOX 220 ST. FRANCISVILLE, LOUISIANA 70775

AREA CODE 504 635-6094 346-8651

July 19, 1985
RBG- 21,572
File No. G9.5

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Denton:

River Bend Station - Unit 1
Docket No. 50-458

Enclosed for your review are revisions to Gulf States Utilities River Bend Station Final Safety Analysis Report (FSAR) (Enclosure 1) and corresponding proposed Technical Specifications (Enclosure 2). These revisions are provided as a result of changes to the design specification data sheets and the installation of new Rosemount transmitters.

Sincerely,

J. E. Booker

J. E. Booker
Manager-Engineering,
Nuclear Fuels & Licensing
River Bend Nuclear Group

JEB/DWW/JEP/je

Enclosure (2)

A001
1/40

ENCLOSURE 1

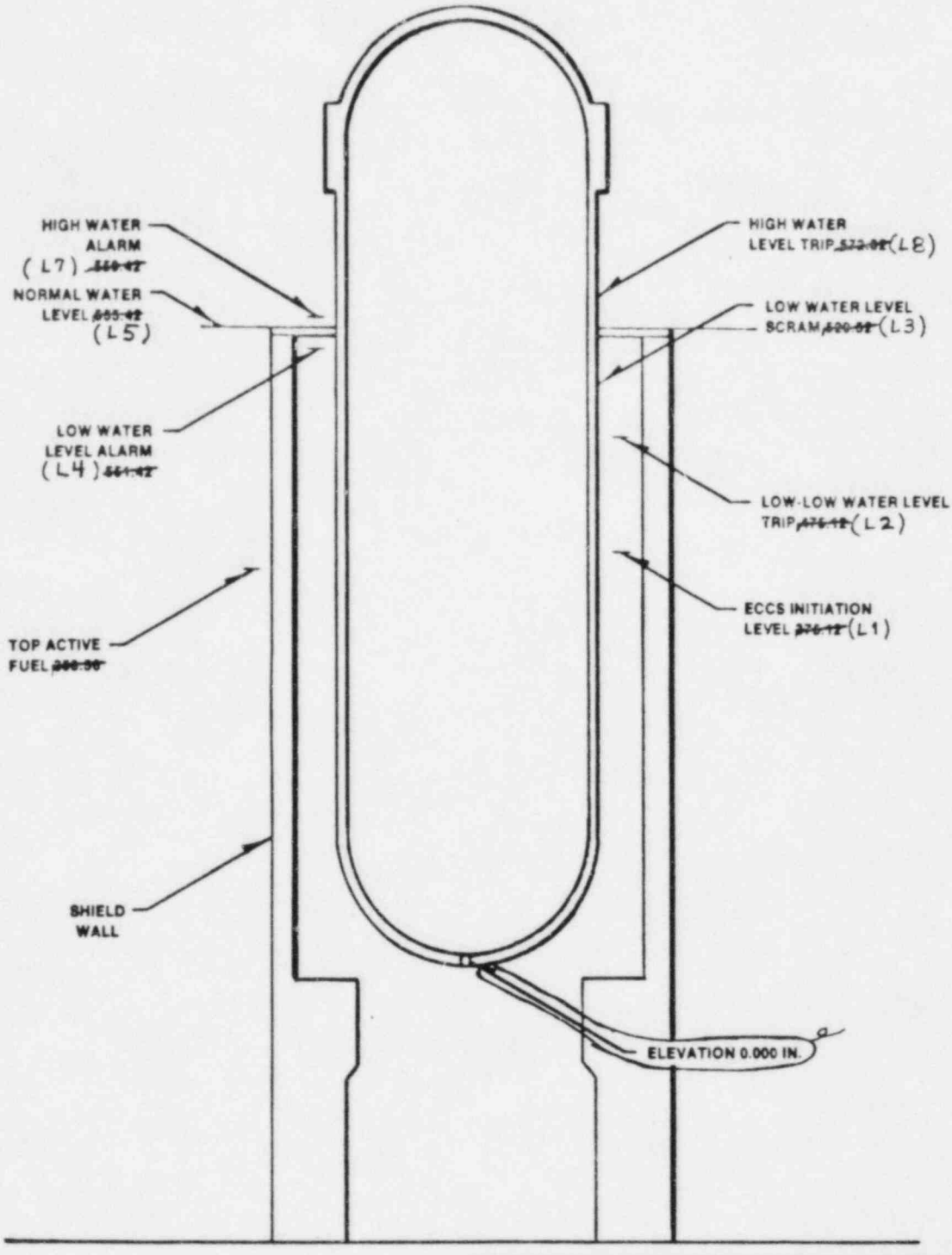


FIGURE 5.3-2

REACTOR VESSEL NOMINAL WATER LEVEL TRIP AND ALARM ELEVATIONS

RIVER BEND STATION

FINAL SAFETY ANALYSIS REPORT

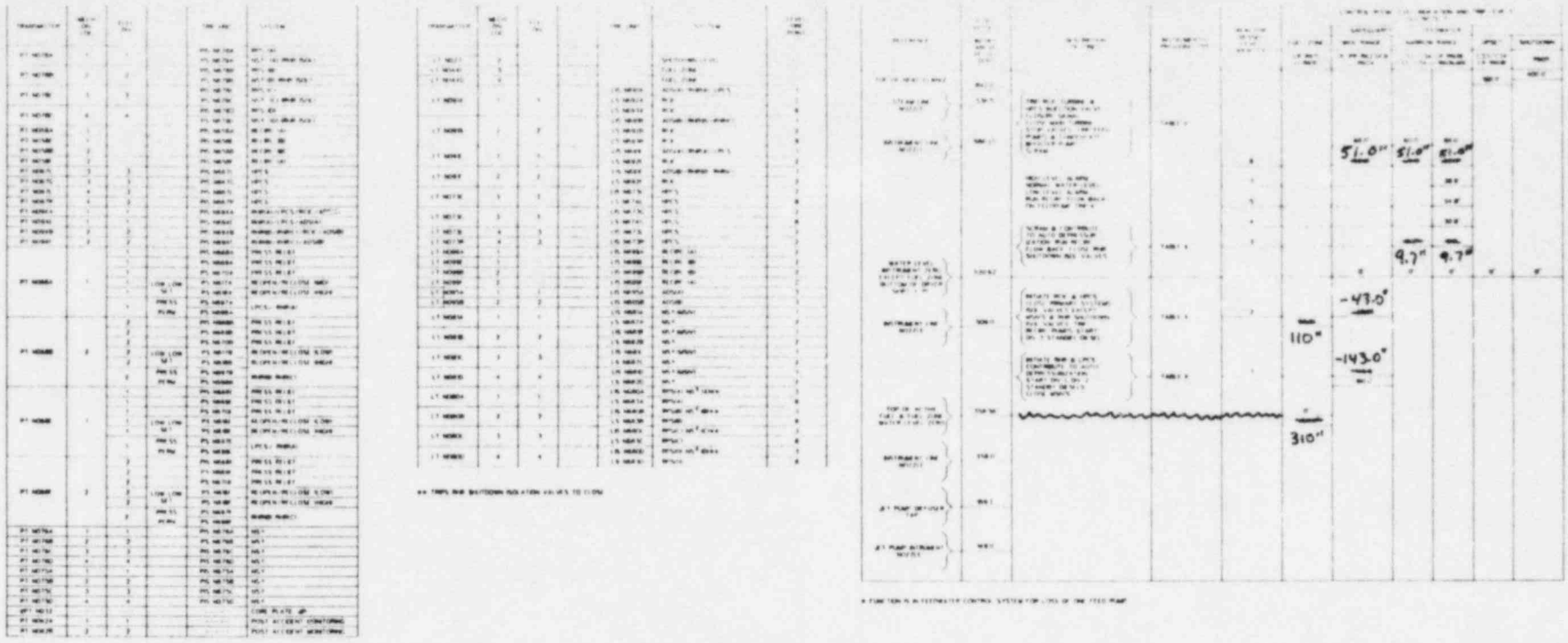


FIGURE 5.1-3b

SYSTEM 051
NUCLEAR BOILER INSTRUMENTATION
PAID 25-18

RIVER BEND STATION
FINAL SAFETY ANALYSIS REPORT

TABLE 3 SUFFIX LETTER ASSIGNMENTS FOR SAFETY/RELIEF VALVES AND ASSOCIATED EQUIPMENT

SAFETY/RELIEF VALVE		F041A	F041B	F041C	F041D	F041E	F041F	F041G	F041H	F041J	F041K	F041L	F041M	F041N	F041P	F041Q†	F041R†	F041S†
TEMP ELEMENT NO.		A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
ACCUMULATOR	N03H	A	—	—	—	—	F	G	—	J	—	L	M	N	—	—	—	—
	N03J thru N03S	—	B	C	D	E	—	—	H	—	K	—	—	—	—	—	—	S
CHECK VALVE	N03J thru N03S SEE A.C.T. 2A	—	—	—	—	—	—	—	—	—	—	—	—	—	P	Q	R	—
	F037	A	—	—	—	—	F	G	—	J	—	L	M	N	P	Q	R	—
	N03 F039	—	B	C	D	E	—	—	H	—	K	—	—	—	—	—	—	S
VACUUM BREAKER	F037	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
	F070	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
** COMPUTER INPUT		B21 NC025	B21 NC026	B21 NC027	B21 NC028	B21 NC029	B21 NC030	B21 NC031	B21 NC032	B21 NC033	B21 NC034	B21 NC035	B21 NC036	B21 NC037	B21 NC038	B21 NC039	B21 NC040	B21 NC041
SPRING SET PRESSURE PSIG		1165	1165	1165	1165	1165	1165	1165	1160	1160	1160	1160	1160	1160	1160	1160	1160	1160
RELIEF SET PRESSURE PSIG		1123	1123	1123	1123	1123	1123	1123	1112	1112	1112	1112	1112	1112	1112	1112	1112	1112
PRESSURE INDICATING SWITCH	N068A																	
PRESSURE SWITCH	N063																	
	N063A																	
	N063B																	
	N063C																	
	N063D																	
	N063E																	
LOW-LOW SET RELIEF PRESSURE PSIG		—	—	—	—	—	—	—	—	—	—	—	946	946	936	936	946	
LOW-LOW SET RESEAL PRESSURE PSIG		—	—	—	—	—	—	—	—	—	—	—	943	943	933	933	943	

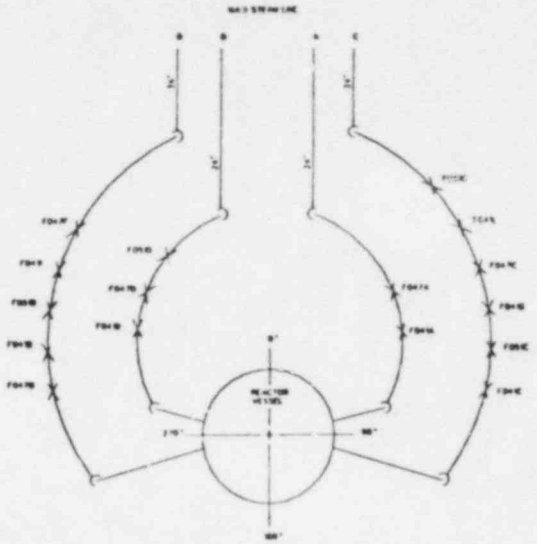
** COMPUTER INPUTS FOR VALVE POSITION (SUPPL DOC 29)

† CONTROL PROVIDED IN REMOTE SHUTDOWN SYSTEM (SUPPL DOC 17)

TABLE 4 ELEVATION CORRELATION CHART

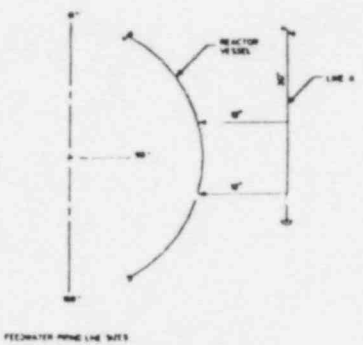
REFERENCE	REACTOR VESSEL INCHES ABOVE VESSEL ZERO	DESCRIPTION OF TRIPS	INSTRUMENTS PROVIDING TRIP	REACTOR VESSEL LEVEL IDENTITY (SEE SUPPL DOC 33)	CONTROL ROOM WATER LEVEL INDICATION AND TRIP LEVELS (SEE NOTE 29)					
					FUEL ZONE	SAFE/CONDS WIDE RANGE	SAFE/CONDS NARROW RANGE	FEEDWATER	UPSET	SHUTDOWN
					LR INCHES LI N4-0	LR INCHES REFERENCED LI N4-0A	C33 LT N4-0A C33 LI N4-0A,B,C		LR INCHES	LI N4-0
TOP OF HEAD FLANGE	840.0									
STEAM LINE NOZZLE	838.3									
INSTRUMENT LINE NOZZLE	586.25	TRIP RCIC TURBINE AND HPCS INJECTION VALVE CLOSURE (SIGNAL CLOSE MAIN TURBINE STOP VALVES, TRIP FEED PUMPS AND CONDENSATE BOOSTER PUMPS, SCRAM REACTOR	TABLE 2 SUPPL DOC 3	8		60.5"	60.5"	60.5"		
						51.0"	51.0"	51.0"		
		HIGH LEVEL ALARM	SUPPL DOC 3	7				38.5"		
		NORMAL WATER LEVEL	SUPPL DOC 3	5				31.5"		
		LOW LEVEL ALARM PLUS RECIRC FLOW RUN BACK ON FEEDPUMP TRIP	SUPPL DOC 3	4				30.5"		
		SCRAM & CONTRIBUTE TO AUTO DEPRESSURIZATION PLUS RECIRC FLOW RUNBACK CLOSE TRIP & BYPASS FLOW VALVES	TABLE 2 SUPPL DOC 3	3			9.7"	9.7"		
WATER LEVEL INSTRUMENT ZERO (EXCEPT FUEL ZONE) BOTTOM OF DRYER SKIRT	520.62					0"	0"	0"	0"	0"
INSTRUMENT LINE NOZZLE	509.0	INITIATE RCIC & HPCS CLOSE PRIMARY SYSTEMS N36 VALVES, ISOLATE VENTS AND TRIP SHUTDOWN N36 VALVES, TRIP RECIRC PUMPS, START DIV 3 STANDBY DIESEL	TABLE 2	2		-43.0"				
					-110"					
						-143.0"				
TOP OF ACTIVE FUEL AND FUEL ZONE WATER LEVEL ZERO	338.16	INITIATE RHR AND HPCS, CONTRIBUTE TO AUTO DEPRESSURIZATION, START DIV 1 & DIV 2 STAND BY DIESELS, CLOSE VENTS	TABLE 2	1		-166.0"				
INSTRUMENT NOZZLE	318.0									
					-310"					
JET PUMP DIFFUSER TAP	69.2									
JET PUMP INSTRUMENT NOZZLE	44.0									

* FUNCTION IS IN FEEDWATER CONTROL SYSTEM (SUPPL DOC 3) FOR LOSS OF ONE PUMP



SAFETY/RELIEF VALVE ORIENTATION AND STEAM PIPING LINE SIZES

FIG 1



FEEDWATER PIPING LINE SIZES

FIG 2

FIGURE 5.2-6

NUCLEAR BOILER SYSTEM P&ID DATA

SOURCE: 789E505AA, SH. 6, REV. 0

RIVER BEND STATION
FINAL SAFETY ANALYSIS REPORT

ENCLOSURE 2

Changes to Technical Specification 2.2
Reactor Protection System Instrumentation Setpoints

Setpoint Modifications

Table 2.2.1-1

1. - Item 4, change Trip Setpoint (TS) and Allowable Value (AV) to $\geq$ 9.7 inches and $\geq$ 8.7 inches.

   Changes are necessary due to revisions in G.E. Design Specification Data Sheets.

2. - Item 5, change TS and AV to $\leq$ 51 inches and $\leq$ 52.1 inches.

   Changes are necessary because of the installation of a new Rosemount transmitter.

3. - Item 9.a, reformat as follows:

		TS	AV
Level transmitter	- LISN601A and B	$\leq$ 49"	$\leq$ 53"
	- LISN601C and D	$\leq$ 49"	$\leq$ 51.7"

   - Item 9.b, change TS and AV for A and B to $\leq$ 47.32 inches and $\leq$ 53.50 inches. Change the TS and AV for C and D to $\leq$ 45.44 inches and $\leq$ 49.00 inches.

   These setpoint changes are required because of revisions to the Stone & Webster Setpoint Data Sheets.

Changes for Technical Specification 3/4.3.1
Reactor Protection System Instrumentation

Setpoint Modifications

Table 3.3.1-1

1. - Footnote (h), replace $\leq$ 209 psig with $\leq$ 187 psig.

   - Footnote **, replace with: "To allow for instrumentation accuracy, calibration and drift, a setpoint of $\leq$ 177 psig turbine first stage pressure shall be used."

   Changes are necessary to be in accordance with G.E. Design Specification Data Sheet.

Changes to Technical Specification 3/4.3.2
Isolation Actuation Instrumentation

Setpoint Modifications

Table 3.3.2-2

1. - Item 1.a, change Trip Setpoints (TS) and Allowable Value (AV) to $\geq$ -43 inches and $\geq$ -47 inches.

   - Item 2.a, change TS and AV to $\geq$ -143 inches and $\geq$ -147 inches.

   - Item 3.a, change TS and AV to $\geq$ -43 inches and $\geq$ -47 inches.

   - Item 4.e, change TS and AV to $\geq$ -43 inches and $\geq$ -47 inches.

   - Item 6.d, change TS and AV to $\geq$ -143 inches and $\geq$ -147 inches.

   Change necessary because of the installation of new Rosemount transmitters.

2. - Item 4.b. Change TS to $\leq$ 45 seconds.

   Editorial.

3. - Item 5.a, add a "**" footnote to both the TS and the AV.

   Addition necessary to ensure a setpoint modification will be made if necessary.

4. - Item 5.i, change Allowable Value to NA.

   An Allowable Value is not appropriate for a Setpoint of 0 seconds.

5. - Item 6.c, change TS and AV to $\geq$ 9.7 inches and $\geq$ 8.7 inches.

   Change necessary due to revisions in G.E. Design Specification Data Sheet.

Changes to Technical Specification 3/4.3.3
Emergency Core Cooling System Actuation Instrumentation

Setpoint Modifications

Table 3.3.3-2

1. - Items A.1.a and A.2.a, change Trip Setpoints (TS) and Allowable Value (AV) to $\geq$ -143 inches and $\geq$ -147 inches.

   - Items B.1.a and B.2.a, change TS and AV to $\geq$ -143 inches and $\geq$ -147 inches.

   - Item C.1.a, change TS and AV to $\geq$ -43 inches and $\geq$ -47 inches.

   - Item C.1.c, change TS and AV to $\leq$ 51 inches and $\leq$ 55 inches.

   Changes are necessary because of the installation of new Rosemount transmitters.

2. - Item A.1.d, change AV to $\geq$ 472 psig, $\leq$ 502 psig.

   Change necessary as per G.E. Design Specification Data Sheet.

3. - Item A.2.d, change TS and AV to $\geq$ 9.7 inches and $\geq$ 8.7 inches.

   - Item A.2.e, change AV to $\geq$ 130 psig.

   - Item A.2.f, change TS and AV to $\geq$ 135 psig and $\geq$ 120 psig.

   - Item B.2.d, change TS and AV to $\geq$ 9.7 inches and $\geq$ 8.7 inches.

   - Item B.2.e, change TS and AV to $\geq$ 135 psig and $\geq$ 120 psig.

   Changes are necessary due to revisions in G.E. Design Specification Data Sheets.

4. - Item B.1.c, change AV to $\geq$ 472 psig, $\leq$ 502 psig.

   Change necessary as per G.E. Design Specification Data Sheet.

Changes to Technical Specification 3/4.3.4
ATWS Recirculation Pump Trip System Instrumentation

Setpoint Modification

Table 3.3.4.1-2

1. - Item 1, change Trip Setpoint and Allowable Value to $\geq$ -43 inches and $\geq$ -47 inches.

   Change necessary because of the installation of new Rosemount transmitters.

Changes for Technical Specification 3/4.3.4

End-of-Cycle Recirculation Pump Trip System Instrumentation

Setpoint Modifications

Table 3.3.4.2-1

1. - Footnote (b), replace 209* psig with 187* psig.

   - Footnote *, replace with: "To allow for instrumentation accuracy, calibration, and drift, a setpoint of $\leq$ 177 psig turbine first stage pressure shall be used."

   Changes are necessary to be in accordance with G.E. Design Specification Data Sheet.

Changes for Technical Specification 3/4.3.5
Reactor Core Isolation Cooling System Actuation Instrumentation

Setpoint Modifications

Table 3.3.5-2

1. - Item 1, change the Trip Setpoint (TS) and Allowable Value (AV) to $\geq$ -43 inches and $\geq$ -47 inches.

   - Item 2, change the TS and AV to $\leq$ 51 inches and $\leq$ 55 inches.

   Changes are necessary because of the installation of a new Rosemount transmitter.

Changes to Technical Specification 3/4.3.6
Control Rod Block Instrumentation

Setpoint Modifications

Table 3.3.6-2

1. - Item 5.a, reformat as follows:

	TS	AV
Water Level-High - LISN602A	$\leq$ 18.00"	$\leq$ 21.12"
- LISN602B	$\leq$ 18.00"	$\leq$ 21.60"

These setpoint changes are required because of revisions to the Stone & Webster Setpoint Data Sheets.

Changes to Technical Specification 3/4.3.7.1
Radiation Monitoring Instrumentation

Setpoint Modifications

Table 3.3.7.1-1

1. - Items 1.a and 1.b, change the Alarm/Trip Setpoints to $\leq 0.97 \times 10^{-5}$ Ci/cc.

   Change to reflect Stone & Webster Setpoint Data Sheet.

Changes to Technical Specification 3/4.3.9
Plant Systems Actuation Instrumentation

Setpoint Modifications

Table 3.3.9-2

1. - Item 1.b, change the Trip Setpoint (TS) and Allowable Value (AV) to -11.98 $\pm$ 0.22 and -11.98 + 0.31, -0.27.

   Range format for setpoint is applicable to the system's function and is consistent with the approved setpoint data sheet.

2. - Item 1.c, change the TS and AV to $\geq$ -143 inches and $\geq$ -147 inches.

   - Item 2.a, change the TS and AV to $\leq$ 51 inches and $\leq$ 52.5 inches.

   Changes are necessary because of the installation of new Rosemount transmitters.

Changes to Technical Specification 3/4.4.3.2
Reactor Coolant System Operational Leakage

Setpoint Modifications

Table 3.4.3.2-2

For LPCS pump discharge pressure high, change Alarm Setpoint to $\leq$ 580.

Change necessary as per G.E. Design Specification Data Sheet.