

# The Light company

Houston Lighting & Power

P.O. Box 1700 Houston, Texas 77001 (713) 228-9211

December 8, 1988

ST-HL-AE-2902

File No.: G09.13, E24.2

10CFR50

U. S. Nuclear Regulatory Commission  
Attention: Document Control Desk  
Washington, DC 20555

South Texas Project Electric Generating Station  
Unit 2  
Docket No. STN 50-499  
Additional Status of the  
Equipment Qualification Program

Reference: 1. Status of the Equipment Qualification Program,  
J. T. Westermeier, HL&P, Letter to the NRC Document  
Control Desk, ST-HL-AE-2864, dated December 1, 1988.

Reference 1 identified the new equipment added for STP Unit 2 but did not include transmittal of the System Component Evaluation Worksheets (SCEW) and the Seismic and Dynamic Qualification Summary and Status of Safety Related Equipment (SDS) for this equipment.

The SCEWs and SDSs for the new equipment added for STP Unit 2 are provided in the attachments.

The tag number of the chemical and volume control (CV) system limit switch C2CV-ZSC-0011A, identified on pages 2 & 4 of reference 1, should be corrected to read A2CV-ZSC-0011A. This discrepancy has no impact on the component's qualification.

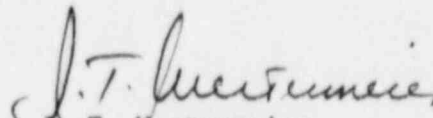
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A Subsidiary of Houston Industries Incorporated

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If you should have any questions on this matter, please contact Mr.  
A. W. Harrison at (512) 972-7298.



J. T. Westermeier  
General Manager  
South Texas Project

THC/pl

- Attachments: 1. System Component Evaluation Worksheets (SCEW) for  
the new equipment added for STP Unit 2.
2. Seismic and Dynamic Qualification Summary and Status  
of Safety Related Equipment (SDS) for new equipment  
added for Unit 2.

Houston Lighting & Power Company

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File No.: G09.13, E24.2  
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cc:

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Washington, DC 20555

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Revised 08/24/88

L4\nrc\ds.

ATTACHMENT 1

SYSTEM COMPONENT EVALUATION WORKSHEETS  
(SCEW) FOR THE NEW EQUIPMENT ADDED  
FOR STP UNIT 2

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: SOLENOID VALVE

TAG NUMBER: A2CC-FY -0864

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM)  
SAFETY FUNCTION: CONTAINMENT COOLING WATER SOLENOID VALVE

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150  
VENDOR NAME: POSI-SEAL  
MANUFACTURER: ASCO

SPECIFICATION: 4Z439ZS1007  
MODEL NUMBER: NP206-381-6F

QUALIFIED LIFE: 40 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M216 ELEVATION: 042 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	125	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	420	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	70	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	9.7E05	2.0E08	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

-----  
SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y  
-----

NOTES:

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC LOG NO. BF-43150-00012  
BXX
3. BEC CALC BF-43150-2

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSEEQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: A2CC-ZSC -0864

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
CLOSED SWITCH

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150

SPECIFICATION: 4Z439ZS1007

VENDOR NAME: POSI-SEAL

MODEL NUMBER: EA180

MANUFACTURER: NAMCO

QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB

ROOM NUMBER: M216

ELEVATION: 042 FT 00 IN

## ----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE DOC	
				REQD	QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	125	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	9.7E05	2.04E8	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

-----  
SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N  
-----

## NOTES:

## DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC LOG NO. BF-43150-00012-BXX
3. BEC CALC BF-43150-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSEEQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: A2CC-ZSD -0864

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
OPEN SWITCH

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150

SPECIFICATION: 4Z439ZS1007

VENDOR NAME: POSI-SEAL

MODEL NUMBER: EA180

MANUFACTURER: NAMCO

QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: HAB ROOM NUMBER: M216 ELEVATION: 042 FT 00 IN

## ----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****				
NORMAL ENVIRONMENT				
-TEMPERATURE (F) 104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG) SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%) 80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS) 1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT				
-TEMPERATURE (F) 125	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG) N/A	N/A	---	-	-
-HUMIDITY (%) N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT				
-TEMPERATURE (F) 125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG) 0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%) 100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS) 9.7E05	2.04E8	TEST/ANALYSIS	1	2
-OPERABILITY REQ 30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE N/A	N/A	---	-	-
-CHEMICAL SPRAY N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N

## NOTES:

## DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC LOG NO. BF-43150-00012-BXX
3. BEC CALC BF-43150-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: SOLENOID VALVE

TAG NUMBER: B2CC-FY -0862

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION: CONTAINMENT COOLING WATER SOLENOID VALVE

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150

SPECIFICATION: 42439ZS1007

VENDOR NAME: POSI-SEAL

MODEL NUMBER: NP206-381-6F

MANUFACTURER: ASCO

QUALIFIED LIFE: 40 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****				
NORMAL ENVIRONMENT				
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1 2
-PRESSURE (PSIG)	SLIGHTLY- ATM		TEST/ANALYSIS	1 2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1 2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1 2
ABNORMAL ENVIRONMENT				
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1 2,3
-PRESSURE (PSIG)	N/A	N/A	---	- -
-HUMIDITY (%)	N/A	N/A	---	- -
ACCIDENT ENVIRONMENT				
-TEMPERATURE (F)	125	420	TEST/ANALYSIS	1 2
-PRESSURE (PSIG)	0.3	70	TEST/ANALYSIS	1 2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1 2
-RADIATION (RADS)	3.5E05	2.0E08	TEST/ANALYSIS	1 2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1 2
-SUBMERGENCE	N/A	N/A	---	- -
-CHEMICAL SPRAY	N/A	N/A	---	- -

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y

NOTES:

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019N01009 REV 9
2. BEC LOG NO. BF-43150-00012  
BXX
3. BEC CALC BF-43150-2

DATE OF LAST UPDATE: 881202



DOCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: BF-43150  
 REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: B2CC-ZSC -0862

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
 SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
 OPEN SWITCH

NUREG-0588 CATEGORY: 2A ACCURACY - REQUIRED: N/A  
 ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150 SPECIFICATION: 4Z439ZS1007  
 VENDOR NAME: POSI-SEAL MODEL NUMBER: EA180  
 MANUFACTURER: NAMCO  
 QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****	*****	*****	*****	*****	*****
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY -	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	3.5E05	2.04E8	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N

NOTES:

- DOCUMENTATION REFERENCES:
1. BEC DES CRIT 4E019NQ1009 REV 9
  2. BEC LOG NO. BF-43150-00012-BXX
  3. BEC CALC BF-43150-1

DOCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: BF-43150  
 REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: B2CC-Z50 -0862

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
 SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
 OPEN SWITCH

NUREG-0588 CATEGORY: 2A ACCURACY - REQUIRED: N/A  
 ACCURACY - DEMONSTRATED: N/A  
 PURCHASE ORDER: BF-43150 SPECIFICATION: 4Z439ZS1007  
 VENDOR NAME: POSI-SEAL MODEL NUMBER: EA-180  
 MANUFACTURER: NAMCO  
 QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE DOC	
				REQD	QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	3.5E05	2.04E8	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

----- SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N -----

NOTES:

- DOCUMENTATION REFERENCES:
1. BEC DES CRIT 4E019NQ1009 REV 9
  2. BEC LOG NO. BF-43150-00012-BXX
  3. BEC CALC BF-43150-1

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSEEQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: SOLENOID VALVE

TAG NUMBER: C2CC-FY -0863

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION: CONTAINMENT COOLING WATER SOLENOID VALVE

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150

SPECIFICATION: 4Z439ZS1007

VENDOR NAME: POSI-SEAL

MODEL NUMBER: NP206-381-6F

MANUFACTURER: ASCO

QUALIFIED LIFE: 40 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT 00 IN

## ----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****	*****	*****	*****	*****	*****
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	420	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	70	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	3.5E05	2.0E08	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

-----  
SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y  
-----

## NOTES:

## DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC LOG NO. BF-43150-00012  
BXX
3. BEC CALC BF-43150-2

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCF NO.: BF-43150  
 REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CC-ZSC -0863

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
 SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
 CLOSED SWITCH

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
 ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150

SPECIFICATION: 4Z439ZS1007

VENDOR NAME: POSI-SEAL

MODEL NUMBER: EA-180

MANUFACTURER: NAMCO

QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****: ***** ***** ***** ***** *****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
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-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N

NOTES:

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019N01009 REV 9
2. BEC LOG NO. BF-43150-00012-  
BXX
3. BEC CALC BF-43150-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: BF-43150  
REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CC-ZSD -0863

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM  
SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
OPEN SWITCH

NUREG-0588 CATEGORY: 2A ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: BF-43150 SPECIFICATION: 42439ZS1007  
VENDOR NAME: POSI-SEAL MODEL NUMBER: EA-180  
MANUFACTURER: NAMCO  
QUALIFIED LIFE: 20 YEARS AT 104 DEGREES FARENHEIT

BUILDING: MAB ROOM NUMBER: M064 ELEVATION: 010 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****	*****	*****	*****	*****	*****
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	104/50	104	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	SLIGHTLY-	ATM	TEST/ANALYSIS	1	2
-HUMIDITY (%)	80/20	SEE ACC	TEST/ANALYSIS	1	2
-RADIATION (RADS)	1.0E03	SEE ACC	TEST/ANALYSIS	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	133	INCL NORM	TEST/ANALYSIS	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	125	340	TEST/ANALYSIS	1	2
-PRESSURE (PSIG)	0.3	119	TEST/ANALYSIS	1	2
-HUMIDITY (%)	100	100	TEST/ANALYSIS	1	2
-RADIATION (RADS)	3.5E05	2.04E8	TEST/ANALYSIS	1	2
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST/ANALYSIS	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

-----  
SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N  
-----

NOTES:

- DOCUMENTATION REFERENCES:
1. BEC DES CRIT 4E019NQ1009 REV 9
  2. BEC LOG NO. BF-43150-00012-BXX
  3. BEC CALC BF-43150-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/479  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8332  
REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0511A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)  
SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR AMSAC

NUREG-0588 CATEGORY: 2B ACCURACY - REQUIRED: +/- \*3  
ACCURACY - DEMONSTRATED: +/- \*4

PURCHASE ORDER: 4332 SPECIFICATION: 4Z019ZS1033  
VENDOR NAME: ROSEMOUNT INC MODEL NUMBER: 1153HD6PB  
MANUFACTURER: ROSEMOUNT INC  
QUALIFIED LIFE: 20 YEARS AT 110 DEGREES FARENHEIT \*2

BUILDING: TGB ROOM NUMBER: TGB ELEVATION: 029 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQ	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	110	110	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	SLIGHTLY+ ATM	ATM	TEST & ANALYSIS	1,2	3
-HUMIDITY (%)	80/20	40/95	TEST & ANALYSIS	1,2	3
-RADIATION (RADS)	1.0E02	INC. ACC	TEST & ANALYSIS	1,2	3
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	147	INC. NORM	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	N/A	318	TEST	1,2	3
-PRESSURE (PSIG)	N/A	72	TEST	1,2	3
-HUMIDITY (%)	N/A	100	TEST	1,2	3
-RADIATION (RADS)	1.0E02	2.62E7	TEST	1,2	3
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST	1,2	3
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y

NOTES:

- \*1 DELETED
- \*2 COVER O-RING MUST BE REPLACED EACH TIME COVER IS REMOVED AND REPLACE AMPLIFIER & CALIB. CIRCUIT BOARD EVERY 10 YEARS
- \*3 +/-1.52%
- \*4 +/-1.52%

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC SPEC 4Z019ZS1033 REV 5
3. QUALIF REPORT BEC LOG # 14926-8332-00002-ARX
4. BEC CALC. E-8332-1

DATE OF LAST UPDATE: 881208

DOCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: 8332  
 REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0521A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)  
 SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
 SMSAC

NUREG-0588 CATEGORY: 2B  
 PURCHASE ORDER: 4332  
 VENDOR NAME: ROSEMOUNT INC  
 MANUFACTURER: ROSEMOUNT INC  
 QUALIFIED LIFE: 20 YEARS AT 110 DEGREES FARENHEIT \*2

ACCURACY - REQUIRED: +/- \*3  
 ACCURACY - DEMONSTRATED: +/- \*4  
 SPECIFICATION: 4Z019ZS1033  
 MODEL NUMBER: 1153HD6PB

BUILDING: TGB ROOM NUMBER: TGB ELEVATION: 029 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
***** ** ***** ***** ***** ***** *****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	110	110	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	SLIGH	+ ATM	TEST & ANALYSIS	1,2	3
-HUMIDITY (%)	80/20	40/95	TEST & ANALYSIS	1,2	3
-RADIATION (RADS)	1.0E02	INC. ACC	TEST & ANALYSIS	1,2	3
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	147	INC. NORM	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	N/A	318	TEST	1,2	3
-PRESSURE (PSIG)	N/A	72	TEST	1,2	3
-HUMIDITY (%)	N/A	100	TEST	1,2	3
-RADIATION (RADS)	1.0E02	2.62E7	TEST	1,2	3
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST	1,2	3
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y

NOTES:

- \*1 DELETED
- \*2 COVER O-RING MUST BE REPLACED EACH TIME COVER IS REMOVED AND REPLACE AMPLIFIER & CALIB. CIRCUIT BOARD EVERY 10 YEARS
- \*3 +/-1.52%
- \*4 +/-1.52%

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC SPEC 4Z019ZS1033 REV 5
3. QUALIF REPORT BEC LOG # 14926-8332-00002-ARX
4. BEC CALC. E-8332-1

DOCKET NO.: 50-498/499  
 BY: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: 8332  
 REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FW -0531A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)

SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
 AMSAC

NUREG-0588 CATEGORY: 2B

ACCURACY - REQUIRED: +/- \*3  
 ACCURACY - DEMONSTRATED: +/- \*4

PURCHASE ORDER: 4332

SPECIFICATION: 4Z019ZS1033

VENDOR NAME: ROSEMOUNT INC

MODEL NUMBER: 1153HD6PB

MANUFACTURER: ROSEMOUNT INC

QUALIFIED LIFE: 20 YEARS AT 110 DEGREES FARENHEIT \*2

BUILDING: TGB ROOM NUMBER: TGB ELEVATION: 029 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE DOC	
				REQD	QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	110	110	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	SLIGHTLY+	ATM	TEST & ANALYSIS	1,2	3
-HUMIDITY (%)	80/20	40/95	TEST & ANALYSIS	1,2	3
-RADIATION (RADS)	1.0E02	INC. ACC	TEST & ANALYSIS	1,2	3
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	147	INC. NORM	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	N/A	318	TEST	1,2	3
-PRESSURE (PSIG)	N/A	72	TEST	1,2	3
-HUMIDITY (%)	N/A	100	TEST	1,2	3
-RADIATION (RAJS)	1.0E02	2.62E7	TEST	1,2	3
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST	1,2	3
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y

NOTES:

- \*1 DELETED
- \*2 COVER O-RING MUST BE REPLACED EACH TIME COVER IS REMOVED AND REPLACE AMPLIFIER & CALIB. CIRCUIT BOARD EVERY 10 YEARS
- \*3 +/-1.52%
- \*4 +/-1.52%

DOCUMENTATION REFERENCES:

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC SPEC 4Z019ZS1033 REV 5
3. QUALIF REPORT BEC LOG # 1926-8332-00002-ARX
4. BEC CALC. E-8332-1

DATE OF LAST UPDATE: 881208



DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8332  
REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0541A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)  
SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
AMSAC

NUREG-0588 CATEGORY: 2B ACCURACY - REQUIRED: +/- \*3  
ACCURACY - DEMONSTRATED: +/- \*4  
PURCHASE ORDER: 4332 SPECIFICATION: 42019ZS1033  
VENDOR NAME: ROSEMOUNT INC MODEL NUMBER: 1153HD6PB  
MANUFACTURER: ROSEMOUNT INC  
QUALIFIED LIFE: 20 YEARS AT 110 DEGREES FARENHEIT \*2

BUILDING: TGB ROOM NUMBER: TGB ELEVATION: 029 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****	*****	*****	*****	*****	*****
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	110	110	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	SLIGHTLY+ ATM	ATM	TEST & ANALYSIS	1,2	3
-HUMIDITY (%)	80/20	40/95	TEST & ANALYSIS	1,2	3
-RADIATION (RADS)	1.0E02	INC. ACC	TEST & ANALYSIS	1,2	3
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	147	INC. NORM	TEST & ANALYSIS	1,2	3,4
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	N/A	318	TEST	1,2	3
-PRESSURE (PSIG)	N/A	72	TEST	1,2	3
-HUMIDITY (%)	N/A	100	TEST	1,2	3
-RADIATION (RADS)	1.0E02	2.62E7	TEST	1,2	3
-OPERABILITY REQ	30 DAYS	30 DAYS	TEST	1,2	3
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	N/A	N/A	---	-	-

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): Y

NOTES:

DOCUMENTATION REFERENCES:

- \*1 DELETED
- \*2 COVER O-RING MUST BE REPLACED EACH TIME COVER IS REMOVED AND REPLACE AMPLIFIER & CALIB. CIRCUIT BOARD EVERY 10 YEARS
- \*3 +/-1.52%
- \*4 +/-1.52%

1. BEC DES CRIT 4E019NQ1009 REV 9
2. BEC SPEC 42019ZS1033 REV 5
3. QUALIF REPORT BEC LOG # 14926-8332-00002-ARX
4. BEC CALC. E-8332-1

DUCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-2/5)  
 REV. NO.: 003

DESCRIPTION: SOLENOID VALVE FOR LETDOWN VALVE

TAG NUMBER: C2CV-FY -0011

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM)  
 SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN SOLENOID VALVE

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
 ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: RPD 30088  
 VENDOR NAME: WESTINGHOUSE  
 MANUFACTURER: ASCO

SPECIFICATION: BY WEST  
 MODEL NUMBER: NP831654E

QUALIFIED LIFE: 8 YEARS AT 140 DEGREES FARENHEIT

BUILDING: RCB ROOM NUMBER: C307 ELEVATION: 037 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	120	140	TYPE TEST	1	2
-PRESSURE (PSIG)	0.3	-6.7/+2.3	TYPE TEST	1	2
-HUMIDITY (%)	70/0	80	TYPE TEST	1	2
-RADIATION (RADS)	3.5E04	INC ACC	TYPE TEST	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	168	INC NORM	TYPE TEST & ANALY	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	323	400	TYPE TEST	1	2
-PRESSURE (PSIG)	48.4	57	TYPE TEST	1	2
-HUMIDITY (%)	100	100	TYPE TEST	1	2
-RADIATION (RADS)	1.4E08	2.0E08	TYPE TEST	1	2
-OPERABILITY REQ	30 DAYS	365 DAYS	TYPE TEST	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	*1	*2	TYPE TEST	1	2

-----  
 SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N  
 -----

NOTES:

- \*1 2000-4000 PPM H3BO3 W/ NAOH TO MAINTAIN 7.5-10.5 PH
- \*2 2500 PPM, BORON W/NAOH PH 10.5

DOCUMENTATION REFERENCES:

1. REC DES CRIT 4E019NQ1009 REV 9
2. EQDP-HE-2/HE-5 REV 5 REC LOG # 14926-9999(2)-00043-DWN
3. REC CALC #E-4000-HE-2-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSEEQCP NO.: 8000(HE-3/6)  
REV. NO.: 003

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: A2CV-ZSC -0011A

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )  
SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE CLOSED SWITCH  
TRAIN A

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/APURCHASE ORDER: 8000  
VENDOR NAME: WESTINGHOUSE  
MANUFACTURER: NAMCOSPECIFICATION: BY WEST  
MODEL NUMBER: EA180

QUALIFIED LIFE: 10 YEARS AT 120 DEGREES FARENHEIT

BUILDING: ROOM NUMBER: C307 ELEVATION: 037 FT 00 IN

## ----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	120	120	TYPE TEST	1	2
-PRESSURE (PSIG)	0.3	-6.7/+2.3	TYPE TEST	1	-
-HUMIDITY (X)	70/0	80	TYPE TEST	1	2
-RADIATION (RADS)	3.5E04	INCL ACC.	TYPE TEST	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	168	INCL NORM	TYPE TEST/ANALY	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (X)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	323	450	TYPE TEST	1	2
-PRESSURE (PSIG)	48.4	70	TYPE TEST	1	2
-HUMIDITY (X)	100	100	TYPE TEST	1	2
-RADIATION (RADS)	1.4E08	2.04E08	TYPE TEST	1	2
-OPERABILITY REQ	30 DAYS	365 DAYS	TYPE TEST	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	*1	*2	TYPE TEST	1	2

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N

## NOTES:

- \*1. 2000-4000 PPM H3BO3 W/ NAOH TO MAINTAIN 7.5/10.5 PH
- \*2. 2500 PPM H3BO3 W/ NAOH TO MAINTAIN 10.5 PH

## DOCUMENTATION REFERENCES:

- 1. REC DES CRIT 4E019NQ1009 REV 9
- 2. EQDP-ESE HE-3/HE-6 REC LOG # 14926-9999(2)-00041-EWN
- 3. CALC. NO. E-4000/8000 HE-6-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
 A/E: BECHTEL ENERGY CORP.  
 NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-3/6)  
 REV. NO.: 003

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CV-ZSD -0011

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )  
 SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE OPEN SWITCH

NUREG-0588 CATEGORY: 2A ACCURACY - REQUIRED: N/A  
 ACCURACY - DEMONSTRATED: N/A  
 PURCHASE ORDER: 8000 SPECIFICATION: BY WEST  
 VENDOR NAME: WESTINGHOUSE MODEL NUMBER: EA180  
 MANUFACTURER: NAMCO  
 QUALIFIED LIFE: 10 YEARS AT 120 DEGREES FARENHEIT

BUILDING: RCB ROOM NUMBER: C307 ELEVATION: 037 FT 00 IN

----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE REQD	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	120	120	TYPE TEST	1	2
-PRESSURE (PSIG)	0.3	-6.7/+2.3	TYPE TEST	1	2
-HUMIDITY (%)	70/0	80	TYPE TEST	1	2
-RADIATION (RADS)	3.5E04	INCL ACC.	TYPE TEST	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	168	INCL NORM	TYPE TEST/ANALY	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	323	450	TYPE TEST	1	2
-PRESSURE (PSIG)	48.4	70	TYPE TEST	1	2
-HUMIDITY (%)	100	100	TYPE TEST	1	2
-RADIATION (RADS)	1.4E08	2.04E08	TYPE TEST	1	2
-OPERABILITY REQ	30 DAYS	365 DAYS	TYPE TEST	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	*1	*2	TYPE TEST	1	2

-----  
 SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N  
 -----

NOTES:

- \*1. 2000-4000 PPM H3B03 W/ NAOH TO MAINTAIN 7.5/10.5 PH
- \*2. 2500 PPM H3B03 W/ NAOH TO MAINTAIN 10.5 PH

DOCUMENTATION REFERENCES:

- 1. BEC DES CRIT 4E019NQ1009 REV 9
- 2. EQDP-ESE HE-3/HE-6 BEC LOG # 14926-9999(2)-00041-EWN
- 3. CALC. NO. E-4000/8000 HE-6-1

DATE OF LAST UPDATE: 881202

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSEEQCF NO.: 8000(HE-3/6)  
REV. NO.: 003

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CV-ZSC -0011

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )  
SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE CLOSED SWITCH

NUREG-0588 CATEGORY: 2A

ACCURACY - REQUIRED: N/A  
ACCURACY - DEMONSTRATED: N/A

PURCHASE ORDER: 8000

SPECIFICATION: BY WEST

VENDOR NAME: WESTINGHOUSE

MODEL NUMBER: EA180

MANUFACTURER: NAMCO

QUALIFIED LIFE: 10 YEARS AT 120 DEGREES FARENHEIT

BUILDING: RCB ROOM NUMBER: C307 ELEVATION: 037 FT 00 IN

## ----- ENVIRONMENTAL CONDITIONS AND QUALIFICATIONS -----

SERVICE CONDITIONS	REQUIRED	QUALIFIED	METHOD OF QUALIFICATION	REFERENCE DOC REQD	DOC QUAL
*****					
NORMAL ENVIRONMENT					
-TEMPERATURE (F)	120	120	TYPE TEST	1	2
-PRESSURE (PSIG)	0.3	-6.7/+2.3	TYPE TEST	1	2
-HUMIDITY (%)	70/0	80	TYPE TEST	1	2
-RADIATION (RADS)	3.5E04	INCL ACC.	TYPE TEST	1	2
ABNORMAL ENVIRONMENT					
-TEMPERATURE (F)	168	INCL NORM	TYPE TEST/ANALY	1	2,3
-PRESSURE (PSIG)	N/A	N/A	---	-	-
-HUMIDITY (%)	N/A	N/A	---	-	-
ACCIDENT ENVIRONMENT					
-TEMPERATURE (F)	323	450	TYPE TEST	1	2
-PRESSURE (PSIG)	48.4	70	TYPE TEST	1	2
-HUMIDITY (%)	100	100	TYPE TEST	1	2
-RADIATION (RADS)	1.4E08	2.04E08	TYPE TEST	1	2
-OPERABILITY REQ	30 DAYS	365 DAYS	TYPE TEST	1	2
-SUBMERGENCE	N/A	N/A	---	-	-
-CHEMICAL SPRAY	*1	*2	TYPE TEST	1	2

SPECIAL EQ RELATED MAINTENANCE REQUIREMENTS (Y/N): N

## NOTES:

- \*1. 2000-4000 PPM H3B03 W/ NAOH TO MAINTAIN 7.5/10.5 PH
- \*2. 2500 PPM H3B03 W/ NAOH TO MAINTAIN 10.5 PH

## DOCUMENTATION REFERENCES:

- 1. BEC DES CRIT 4E019NQ1009 REV 9
- 2. EQDF-ESE HE-3/HE-6 BEC LOG # 14926-9999(2)-00041-EWN
- 3. CALC. NO. E-4000/8000 HE-6-1

DATE OF LAST UPDATE: 881202

ATTACHMENT 2

SEISMIC AND DYNAMIC QUALIFICATION  
SUMMARY AND STATUS OF SAFETY RELATED  
EQUIPMENT (SDS) FOR NEW EQUIPMENT  
ADDED FOR UNIT 2

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 1  
DATE: 12/07/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-3/6)  
REV. NO.: 003

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: A2CV-ZSC -0011A

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM)

SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE CLOSED SWITCH  
TRAIN A

SUPPLIER: NSSS MODEL NUMBER: EA180

MANUFACTURER: NAMCO

EQUIPMENT TYPE: SWITCH QUANTITY: 001

QUAL. REPORT NO: 14926-9999(2)-00041-EWN

LOCATION ..... BUILDING:  
ELEVATION: 037 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 3.2 / 3.2  
SSE H/V (G): 4.0 / 4.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/R (HZ): >33  
S/S (HZ): >33  
V (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: D

RRS ..... FIGURE REF.: N/A

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REMARKS: ELEVATION IDENTIFIED IS FLOOR ELEVATION

DATE OF LAST UPDATE: 881207

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 2  
DATE: 12/07/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-3/6)  
REV. NO.: 003

DESCRIPTION: LIMIT SWITCH  
TAG NUMBER: C2CV-ZSC -0011  
SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )  
SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE CLOSED SWITCH

SUPPLIER: NSSS MODEL NUMBER: EA180  
MANUFACTURER: NAMCO  
EQUIPMENT TYPE: SWITCH QUANTITY: 000

QUAL. REPORT NO: 14926-9999(2)-00041-EWN

LOCATION ..... BUILDING: RCB  
ELEVATION: 037 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... DBE H/V (G): 3.2 / 3.2  
SSE H/V (G): 4.0 / 4.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): >33  
S/S (HZ): >33  
U (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: A  
RRS ..... FIGURE REF.: N/A

-----  
REMARKS: ELEVATION IDENTIFIED IS FLOOR ELEVATION

DATE OF LAST UPDATE: 881207



E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 3  
DATE: 12/07/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-3/6)  
REV. NO.: 003

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CV-ZSD -0011

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )

SAFETY FUNCTION: CHEMICAL VOLUME LETDOWN VALVE OPEN SWITCH

SUPPLIER: NSSS MODEL NUMBER: EA180

MANUFACTURER: NAMCO

EQUIPMENT TYPE: SWITCH QUANTITY: 001

QUAL. REPORT NO: 14926-9999(2)-00041-EWN

LOCATION ..... BUILDING: RCB  
ELEVATION: 037 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 3.2 / 3.2  
SSE H/V (G): 4.0 / 4.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/R (HZ): >33  
S/S (HZ): >33  
V (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: N/A

-----  
REMARKS: ELEVATION IDENTIFIED IS FLOOR ELEVATION

DATE OF LAST UPDATE: 881207



E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 1  
DATE: 12/08/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8000(HE-2/5)  
REV. NO.: 003

DESCRIPTION: LETDOWN ORIFICE HEADER ISOL VALVE

TAG NUMBER: C2CV-FV -0011

SAFETY SYSTEM: CV (CHEMICAL AND VOLUME CONTROL SYSTEM )

SAFETY FUNCTION: ISOLATES CVCS LETDOWN LINE WHEN LOW PRESSURIZER  
WATER LEVEL OR ESF SIGNAL IS PRESENT

SUPPLIER: NSSS MODEL NUMBER: D-100-160 ACT

MANUFACTURER: COPES-VULC

EQUIPMENT TYPE: VALVE QUANTITY: 001

QUAL. REPORT NO: SEE NOTE 1

LOCATION ..... BUILDING: RCB  
ELEVATION: 037 FT 00 IN  
MOUNTING: LM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZFA) ..... OBE H/V (G): 3.2 / 3.2  
SSE H/V (G): 4.0 / 4.0

QUALIFICATION METHOD ..... ANALYSIS: X TEST FREQUENCY: N/A  
TEST DIRECTION: N/A

LOWEST NATURAL FREQUENCY ... F/B (HZ): F1  
S/S (HZ): F1  
U (HZ): F1

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: N/A

REMARKS: WESTINGHOUSE VALVE ID NO. 3IA88R2A

\*1. WESTINGHOUSE HAVE NOT ASSIGNED THE REPORT NUMBER.

ALL DATA PROVIDED HEREIN CAME FROM THE DEM COPES-VULCAN  
AVAILABLE AT WESTINGHOUSE UNDER W P.O. # 292187.

DATE OF LAST UPDATE: 881208



E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 2  
DATE: 12/06/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
PSSS: WESTINGHOUSE

EQCP NO.: BF-43150-U2  
REV. NO.: 000

DESCRIPTION: SOLENOID VALVE  
TAG NUMBER: A2CC-FY -0864  
SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION: CONTAINMENT COOLING WATER SOLENOID VALVE

SUPPLIER: A/E MODEL NUMBER: NP206-381-6F

MANUFACTURER: ASCO

EQUIPMENT TYPE: SOLENOID QUANTITY: 001

QUAL. REPORT NO: 14926-BF43150-00014-AXX

LOCATION ..... BUILDING: MAB  
ELEVATION: 042 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 1.5 / 1.0  
SSE H/V (G): 3.0 / 2.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): 15.8\*  
S/S (HZ): 133\*  
V (HZ): 18.9\*

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: N/A

REMARKS: \*- FREQUENCY IS FOR THE WHOLE VALVE ASSEMBLY

DATE OF LAST UPDATE: 881206



DOCKET NO.: 50-498/499                      EQCP NO.: BF-43150-U2  
A/E: BECHTEL ENERGY CORP.                      REV. NO.: 000  
HSSS: WESTINGHOUSE

DESCRIPTION:                      LIMIT SWITCH  
TAG NUMBER:                      A2CC-ZS0 -0864  
SAFETY SYSTEM:                      CC (COMPONENT COOLING WATER SYSTEM )  
SAFETY FUNCTION:                      COMPONENT COOLING WATER CONTAINMENT ISOLATION  
OPEN SWITCH  
SUPPLIER:                      A/E                      MODEL NUMBER: EA180  
MANUFACTURER:                      NAMCO  
EQUIPMENT TYPE:                      SWITCH                      QUANTITY: 001

QUAL. REPORT NO: 14926-BF-43150-00014-AXX

LOCATION ..... BUILDING:                      MAR  
ELEVATION:                      042 FT 00 IN  
MOUNTING:                      EM

LOADS CONSIDERED..... SEISMIC: X                      OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 1.5 / 1.0  
SSE H/V (G): 3.0 / 2.0

QUALIFICATION METHOD ..... ANALYSIS: N/A                      TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): 15.8\*  
S/S (HZ): 133\*  
V (HZ): 18.9\*

STATUS ..... QUALIFICATION: A                      INSTALLATION: A

RRS ..... FIGURE REF.: N/A

REMARKS: \*- FREQUENCY IS FOR THE WHOLE VALVE ASSEMBLY.

DATE OF LAST UPDATE: 881205





E/O SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 6  
DATE: 12/06/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
RSSS: WESTINGHOUSE

EQCP NO.: BF-43150-U2  
REV. NO.: 000

DESCRIPTION: SOLENOID VALVE

TAG NUMBER: B2CC-FY -0862

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )

SAFETY FUNCTION: CONTAINMENT COOLING WATER SOLENOID VALVE

SUPPLIER: A/E MODEL NUMBER: NP206-381-8F

MANUFACTURER: ASCO

EQUIPMENT TYPE: SOLENOID QUANTITY: 001

QUAL. REPORT NO: 14926-BF43150-00014-AXX

LOCATION ..... BUILDING: MAB  
ELEVATION: 010 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 1.5 / 1.0  
SSE H/V (G): 3.0 / 2.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): 15.8\*  
S/S (HZ): 133\*  
V (HZ): 18.9\*

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: N/A

REMARKS: \*- FREQUENCY IS FOR THE WHOLE VALVE ASSEMBLY

DATE OF LAST UPDATE: 881206









E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 11  
DATE: 12/06/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQUIP. NO.: BF-43150-U2  
REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CC-2SC -0863

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM)

SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
CLOSED SWITCH

SUPPLIER: A/E MODEL NUMBER: EA-180

MANUFACTURER: NAMCO

EQUIPMENT TYPE: SWITCH QUANTITY: 003

QUAL. REPORT NO: 14926-BF-43150-00014-AXX

LOCATION ..... BUILDING: MAB  
ELEVATION: 010 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 1.5 / 1.0  
SSE H/V (G): 3.0 / 2.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: 5F  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): 15.8\*  
S/S (HZ): 133\*  
V (HZ): 18.9\*

STATUS ..... QUALIFICATION: A INSTALLATION: A

RKS ..... FIGURE REF.: N/A

REMARKS \*- FREQUENCY IS FOR THE WHOLE VALVE ASSEMBLY.

DATE OF LAST UPDATE: 881205

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 12  
DATE: 12/06/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSF: WESTINGHOUSE

EQCP NO.: BF-43150-U2  
REV. NO.: 000

DESCRIPTION: LIMIT SWITCH

TAG NUMBER: C2CC-ZSQ -0863

SAFETY SYSTEM: CC (COMPONENT COOLING WATER SYSTEM )

SAFETY FUNCTION: COMPONENT COOLING WATER CONTAINMENT ISOLATION  
OPEN SWITCH

SUPPLIER: A/E MODEL NUMBER: EA-180

MANUFACTURER: NAMCO

EQUIPMENT TYPE: SWITCH QUANTITY: 001

QUAL. REPORT NO: 14926-BF-43150-00014-AXX

LOCATION ..... BUILDING: NAB  
ELEVATION: 010 FT 00 IN  
MOUNTING: EM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 1.5 / 1.0  
SSE H/V (G): 3.0 / 2.0

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: SF  
TEST DIRECTION: SD

LOWEST NATURAL FREQUENCY ... F/B (HZ): 15.8\*  
S/S (HZ): 133\*  
V (HZ): 18.9\*

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: N/A

REMARKS: \*- FREQUENCY IS FOR THE WHOLE VALVE ASSEMBLY.

DATE OF LAST UPDATE: 881205

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 1

DATE: 12/08/88

DOCKET NO.: 50-498/499

EQCP NO.: 8332

A/E: BECHTEL ENERGY CORP.

REV. NO.: 006

NSSS: WESTINGHOUSE

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0511A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)

SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
AMSAC

SUPPLIER: A/E

MODEL NUMBER: 1153HD6PB

MANUFACTURER: ROSEMOUNT INC

EQUIPMENT TYPE: TRANSMITTER

QUANTITY: 001

QUAL. REPORT NO: 14926-8332-00002-ARX

LOCATION ..... BUILDING: TGB  
ELEVATION: 029 FT 00 IN  
MOUNTING: IM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (Z/A) ..... OBE H/V (G): 0.4 / 0.25  
SSE H/V (G): 0.8 / 0.5

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: M7  
TEST DIRECTION: BD

LOWEST NATURAL FREQUENCY ... F/B (HZ): >33  
S/S (HZ): >33  
V (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: 4N169S-39176 4N169S-39178  
4N169S-39177  
4N169S-39179

REMARKS: THE RRS ARE ENVELOPED RRS FOR THE PLANT

DATE OF LAST UPDATE: 881208



E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 2  
DATE: 12/08/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCF NO.: 8332  
REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0521A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)

SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
AMSAC

SUPPLIER: A/E MODEL NUMBER: 1153HD6PB

MANUFACTURER: ROSEMOUNT INC

EQUIPMENT TYPE: TRANSMITTER QUANTITY: 001

QUAL. REPORT NO: 14926-8332-00002-ARX

LOCATION ..... BUILDING: TGB  
ELEVATION: 029 FT 00 IN  
MOUNTING: IM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 0.4 / 0.25  
SSE H/V (G): 0.8 / 0.5

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: MF  
TEST DIRECTION: BD

LOWEST NATURAL FREQUENCY ... F/B (HZ): >33  
S/S (HZ): >33  
C (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: 4N169S-39176 4N169S-39178  
4N169S-39177  
4N169S-39179

REMARKS: THE RRS ARE ENVELOPED RRS FOR THE PLANT

DATE OF LAST UPDATE 881208

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 3  
DATE: 12/08/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
N/SS: WESTINGHOUSE

EQCP NO.: 8332  
REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0531A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM )

SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
AMSAC

SUPPLIER: A/E MODEL NUMBER: 1153HD6PB

MANUFACTURER: ROSEMOUNT INC

EQUIPMENT TYPE: TRANSMITTER QUANTITY: 001

QUAL. REPORT NO: 14926-8332-00002-ARX

LOCATION ..... BUILDING: TGB  
ELEVATION: 029 FT 00 IN  
MOUNTING: IM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 0.4 / 0.25  
SSE H/V (G): 0.8 / 0.5

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: MF  
TEST DIRECTION: BD

LOWEST NATURAL FREQUENCY ... F/B (HZ): >33  
S/S (HZ): >33  
V (HZ): >33

STATUS ..... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: 4N169S-39176 4N169S-39179  
4N169S-39177  
4N169S-39179

REMARKS: THE RRS ARE ENVELOPED RRS FOR THE PLANT

DATE OF LAST UPDATE: 881208

E/Q SYSTEM

HOUSTON LIGHTING AND POWER COMPANY  
SMITH TEXAS PROJECT ELECTRIC GENERATING STATION  
SEISMIC AND DYNAMIC QUALIFICATION SUMMARY (SDS)  
AND STATUS OF SAFETY RELATED EQUIPMENT

PAGE NO.: 4  
DATE: 12/08/88

DOCKET NO.: 50-498/499  
A/E: BECHTEL ENERGY CORP.  
NSSS: WESTINGHOUSE

EQCP NO.: 8332  
REV. NO.: 006

DESCRIPTION: ELECTRONIC TRANSMITTER (NUCLEAR SERVICES)

TAG NUMBER: N2FW-FT -0541A

SAFETY SYSTEM: FW (FEEDWATER SYSTEM)

SAFETY FUNCTION: STEAM GENERATOR AUXILIARY FEEDWATER FLOW FOR  
AMC/CAC

SUPPLIER: A/E MODEL NUMBER: 1153HD6PB

MANUFACTURER: ROSEMOUNT INC

EQUIPMENT TYPE: TRANSMITTER QUANTITY: 001

QUAL. REPORT NO: 14926-8332-00002-ARX

LOCATION ..... BUILDING: TGB  
ELEVATION: 029 FT 00 IN  
MOUNTING: IM

LOADS CONSIDERED..... SEISMIC: X OTHER DYNAMIC: N/A

REQUIRED INPUT (ZPA) ..... OBE H/V (G): 0.4 / 0.25  
SSE H/V (G): 0.8 / 0.5

QUALIFICATION METHOD ..... ANALYSIS: N/A TEST FREQUENCY: MF  
TEST DIRECTION: BD

LOWEST NATURAL FREQUENCY ... F/B (HZ): >33  
S/S (HZ): >33  
V (HZ): >33

STATUS ... QUALIFICATION: A INSTALLATION: A

RRS ..... FIGURE REF.: 4N169S-39176 4N169S-39178  
4N169S-39177  
4N169S-39179

REMARKS: THE RRS ARE ENVELOPED RRS FOR THE PLANT

DATE OF LAST UPDATE: 881208