HOUSTON LIGHTING AND POWER COMPANY

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION UNIT ONE

LICENSE NO. NPF-76

SEMIANNUAL RADIOACTIVE EFFLUENT RELEASE REPORT

MARCH 8, THROUGH JUNE 30, 1988

Prepared by:	Chemical Operations and Analysis Manager	8/17/88 Date
Reviewed by:	Health Physics Manager	8/18/88 Date
Reviewed by:	Plant Engineering Manager	8/19/88 Date
Reviewed by:	Plant Operations Manager	8/22/88 Date
Approved by:	Technical Services Manager	8/18/88 Date
Approved by:	Plant Superintendent (Unit 1)	8/22/88 Date
Approved by:	Plant Manager	8/22/88 Date

IE48
1/1

TABLE OF CONTENTS

TABLE OF CONTENTS (CONT.)

TABLE OF CONTENTS (CONT.)

LIST OF TABLES

LIST OF APPENDICES

1.0 Introduction

This Semiannual Radioactive Effluent Release Report, for the period March 8, 1988, (initial criticality-Unit 1)to June 30, 1988 is submitted in accordance with Appendix A of License NPF-76. This report will not include data for Unit 2 which is under construction. Separate tables of releases and release totals are included where separate processing systems exist.

In accordance with Technical Specifications 6.9.1.4 the annual summary of hourly meteorological data collected over the previous year shall be included in the Semiannual Radioactive Effluent Release Report to be submitted within 60 days after January 1 of each year. This same report shall include an assessment of the radiation doses due to the radioactive liquid and gaseous effluents released from the unit or station and an assessment of the radiation doses from radioactive liquid and gaseous effluents to MEMBERS OF THE PUBLIC due to their activities inside the SITE BOUNDARY during the reporting period for the previous calendar year. Also included in this report shall be an assessment of radiation doses to the likely most exposed MEMBER OF THE PUBLIC from reactor releases and other nearby uranium fuel cycle sources, including doses from primary effluent pathways and direct radiation for the previous calendar year.

All assessments of radiation doses are performed in accordance with the STPEGS Offsite Dose Calculation Manual (ODCM).

2.0 Supplemental Information for Effluent and Waste Disposal

South Texas Project Electric Generating Station,
Houston Lighting and Power Co.

Unit Number 1	Cooling Water Source:
Type: PWR	Main Cooling Reservoir
Docket No. 50-498	Power (MWT)- 3817
	Initial Criticality-(March 8, 1988)

2.1 Regulatory Limits

2.1.1 Fission and activation gases

The air dose due to noble gases released in gaseous effluents, from each unit, to areas at and beyond the Site Boundary shall be limited to the following:

a. During any calendar quarter: Less than or equal to 5 mrads for gamma radiation and less than or equal to 10 mrads for beta radiation, and

b. During any calendar year: Less than or equal to 10 mrads for gamma radiation and less than or equal to 20 mrads for beta radiation.

2.1.2 Fission and activation gases, iodines, particulates, half-lives > 8 days.

The dose rate due to radioactive materials released in gaseous effluents from the site to areas at and beyond the Site Boundary shall be limited to the following:

a. For noble gases: Less than or equal to 500 mrems/yr to the whole body and less than or equal to 3000 mrems/yr to the skin and

b. For Iodine-131, for Iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to 1500 mrems/yr to any organ.

2.1.3 Iodines and Particulates, half-lives > 8 days

The dose to a Member of the Public from Iodine-131, Iodine-133, tritium, and all radionuclides in particulate form with half-lives greater than 8 days in gaseous effluents released, from each unit, to areas at and beyond the Site Boundary shall be limited to the following:

a. During any calendar quarter: Less than or equal to 7.5 mrems to any organ and,

b. During any calendar year: Less than or equal to 15 mrems to any organ.

2.1.4 Liquid Effluents

The dose or dose commitment to a Member of the Public from radioactive materials in liquid effluents released, from each unit, to Unrestricted Areas shall be limited to:

a. During any calendar quarter to less than or equal to 1.5 mrems to the whole body and to less than or equal to 5 mrems to any organ, and

b. During any calendar year to less than or equal to 3 mrems to the whole body and to less than or equal to 10 mrems to any organ.

2.2 Maximum Permissible Concentrations

2.2.1 Liquid Effluents

The concentration of radioactive material released in liquid effluents to Unrestricted Areas shall be limited to the concentrations specified in 10CFR Part 20, Appendix B, Table II, Column 2 for radionuclides other than dissolved or entrained noble gases. For dissolved or entrained noble gases the concentration shall be limited to 2.0E-04 micro curie/ml total activity.

2.3 Average Energy (MeV/Disintegration)

The Average Energy (or E-bar) is not used at STPEGS to calculate release limits.

2.4 Measurement and Approximations of Total Activity

The following discussions detail the methods used to measure and approximate total activity for the following:

a. Fission and Activation Gases
b. Iodines
c. Particulates
d. Liquid Effluents

Tables A3-1 and A4-1 of the STPEGS Offsite Dose Calculation Manual (ODCM) give sampling frequencies and minimum detectable concentration requirements for the analysis of liquid and gaseous effluent streams.

2.4.1 Gaseous Effluents

2.4.1.1 Fission and Activation Gases

The following noble gases are considered in evaluating gaseous airborne discharges:

Ar-41	Xe-131m
Kr-83m	Xe-133m
Kr-85m	Xe-133
Kr-85	Xe-135m
Kr-87	Xe-135
Kr-88	Xe-137
Kr-89	Xe-138
Kr-90	

2.4.1.2 Iodines and Particulates

The radioiodines and radioactive materials in particulate forms to be considered are:

Cr-51	Sb-124	H-3
Mn-54	I-131	C-14
Fe-59	I-133	Mo-99
Co-58	Cs-134	
Co-60	Cs-136	
Zn-65	Cs-137	
Sr-89	Ba-140	
Sr-90	Ce-141	
Zr-95	Ce-144	
Other nuclides with half-lives greater than 8 days		

2.4.1.3 Analytic Methods

a. Batch Gaseous Releases

Pre-release grab samples from the plant containment atmosphere and the RCS Vacuum Degassing System are analyzed on a Gamma Spectroscopy System utilizing high purity germanium detectors (HPGe) for noble gas, iodine and particulate activity. The particulate sample filters are also analyzed for gross alpha on a gas-flow proportional counter. The filter samples are chemically processed to separate strontium for analysis using a gas-flow proportional counter.

The radionuclide values obtained are used in conjunction with the gross noble gas release rate monitoring data collected by the radiation monitoring system to estimate the release rate of each radionuclide in the effluent streams.

b. Continuous Gaseous Releases

Periodic noble gas grab samples are taken from the continuous release points (i.e. the Unit vent and the condenser vacuum pump exhaust). Continuous sampling for particulates and iodine is also performed on the effluent streams. They are analyzed for gross alpha, for gamma radionuclides, and strontium as described above for batch releases.

2.4 2 Liquid Effluents

The radionuclides listed below are considered when evaluating liquid effluents:

H3	Y-90	I-133
C14	Y-91m	I-134
Na-24	Y-91	I-135
P-32	Y-92	Cs-134
Cr-51	Y-93	Cs-136
Mn-54	Zr-95	Cs-137
Mn-56	Zr-97	Cs-138
Fe-55	Nb-95	Ba-139
Fe-59	Mo-99	Ba-140
Co-58	Tc-99m	Ba-141
Co-60	Tc-101	Ba-142
Ni-63	Ru-103	La-140
Ni-65	Ru-105	La-142
Cu-64	Ru-106	Ce-141
Zn-65	Ag-110m	Ce-143
Zn-69	Te-125m	Ce-144
Br-83	Te-127m	Pr-143
Br-84	Te-127	Pr-144
Br-85	Te-129m	Nd-147
Rb-86	Te-129	W-187
Rb-88	Te-131m	Np-239
Rm-89	Te-131	.LIQ(unidentitied)*
Sr-89	Te-132	.ALPHA (Gross Alpha)
Sr-90	I-130	.Xe-133
Sr-91	I-131	.Xe-135
Sr-92	I-132	*includes other gamma peaks that are identified

2.4.2.1 Analytic Methods

2.4.2.1 a. Batch Liquid Releases

All liquid effluents are released as batches. Representative pre-release grab samples are taken and analyzed in accordance with Table A3-1 of the ODCM. Radionuclide analyses are performed using the Gamma Spectroscopy System. Aliquots of each pre-release sample are composited in accordance with the requirements in Table A3-1 of the ODCM. Strontium determinations are made by performing a chemical separation and counting the separated radionuclides using the Gas-Flow Proportional Counting System. Gross alpha determinations are made using the Gas-Flow Proportional Counting

System. Tritium concentrations are determined using Liquid Scintillation Counting techniques. Iron determinations are made by performing a chemical separation and counting the separated radionuclide using the Liquid Scintillation Counting System. Dissolved and entrained gases are determined by counting grab samples on the Gamma Spectroscopy System.

The radionuclide concentrations obtained are used with the flow total for each batch release. The error associated with the flow total is small in relation to the counting uncertainty of the radionuclide concentration analysis. The counting uncertainty associated with these measurements is accurate to the 5% significance level for the principle radionuclides released.

2.5 Batch Releases

		Quarter 1	Quarter 2
2.5.1	Liquid		
	a. Number of releases:	0	73
	b. Total time period for releases (min):	0	3980
	c. Maximum time period for a release (min):	0	68
	d. Average time period for a release (min):	0	55
	e. Minimum time period for a release (min):	0	7
2.5.2	Gaseous		
	a. Number of releases:	0	26
	b. Total time period for releases (min):	0	31479
	c. Maximum time period for a release (min):	0	10761
	d. Average time period for a release (min):	0	1211
	e. Minimum time period for a release (min):	0	6

2.6 Abnormal (Unplanned) Releases

		Quarter 1	Quarter 2
2.6.1	Liquid		
	a. Number of releases:	0	2
	b. Total activity released (curies):	0.000E+00	3.126E-02
2.6.2	Gaseous		
	a. Number of releases:	0	0
	b. Total activity released (curies):	0.000E+00	0.000E+00

2.7 Estimate of Total Error

2.7.1 Liquid

a. The maximum error associated with volume and flow measurements, based upon plant calibration practice is estimated to be +/- 0.08%.

b. The average error associated with counting uncertainty is accurate to the 5% significance level.

2.7.2 Gaseous

a. The maximum error associated with monitor readings, sample flow, vent flow, sample collection, monitor calibration and laboratory procedures are collectively estimated to be:

Fission and Activation Gases	Iodines	Particulates	Tritium
±25%	±25%	±25%	±25%

b. The average error associated with counting uncertainty is accurate to the 5% significance level for fission and activation gases, iodines, particulates and tritium.

2.7.3 Solid Radioactive Waste

To date there have been no radioactive waste shipments to offsite burial facilities. Therefore percent error is not applicable.

2.8 Solid Waste Shipments

No radioactive waste shipments were made during this reporting period.

2.9 Radiological Impact On Man

In accordance with Technical Specifications 6.9.1.4, this data shall be included in the Semiannual Radioactive Effluent Release Report to be submitted within 60 days after January 1 of each year.

2.10 Meteorological Data

In accordance with Technical Specifications 6.9.1.4, this data shall be included in the Semiannual Radioactive Effluent Release Report to be submitted within 60 days after January 1 of each year.

2.11 Lower Limit of Detection (LLD)

The LLD (an a priori limit) is defined as the smallest concentration of radioactive material in a sample that will yield a net count, above system background, that will be detected with 95% probability, and only a 5% probability of falsely concluding that a blank observation represents a "real" signal.

2.12 Dose to MEMBERS OF THE PUBLIC On Site

In accordance with Technical Specifications 6.9.1.4, this data shall be submitted within 60 days after January 1 of each year.

3.0 Technical Specifications Reporting Requirements

3.1 Radioactive Waste Treatment System Design Modification Description

The following is a list of Unit 1 liquid and solid radioactive waste treatment system design modifications initiated during this reporting period. No modifications were made to the gaseous radioactive waste treatment system. These descriptions are submitted to comply with Section 6.15 of the Technical Specifications.

3.1.1 Optional Use of Filter Elements in Influent to Waste Monitor Tanks (Appendix A)

3.1.2 Increase in Waste Evaporator Concentrates Operational Levels (Appendix B)

3.1.3 Addition of Local Sampling for Waste Monitor Tanks D, E, F (Appendix C)

3.1.4 Modification to Level Indication Equipment for Waste Evaporator Condensate Tanks (Appendix D)

3.1.5 Deletion of Vendor Supplied Flow and Pressure Switches on Liquid Waste Process System Pump Seal Water Skid (Appendix E)

3.1.6 Addition of an Isolok Sampler for Spent Resin [illegible] to Mobile Solidification Unit (Appendix F)

3.2 Inoperable Effluent Monitoring Instrumentation Explanation

There were no inoperable liquid or gaseous effluent monitoring instrumentation not corrected within the time specified in Sections 3.3.3.10 or 3.3.3.11 of Technical Specifications. This explanation is submitted to comply with reporting requirements of Section 6.9.1.4 of the Technical Specifications for Unit 1.

3.3 Gas Storage Tank Curie Limit Violation Description

The quantity of radioactive material in the RCS Vacuum Degassing System Storage Tank(s) did not exceed the limits set forth in Section 3.11.2.6 of Technical Specifications during this reporting period. This description is submitted to comply with Section 6.9.1.4 of the Technical Specifications for Unit 1.

3.4 Unprotected Outdoor Tank Curie Limit Violation Description

The quantity of radioactive material in the Unprotected Outdoor Tank(s) did not exceed the limit set forth in Section 3.11.1.4 of Technical Specifications during this reporting period. This description is submitted to comply with Section 6.9.1.4 of the Technical Specifications for Unit 1.

3.5 Abnormal (Unplanned) Release Description

The following is a list of abnormal releases of liquid waste from STPEGS Unit 1 to UNRESTRICTED AREAS that occurred during this reporting period.

Waste Monitor Tank 1E 05/30/88 23:00 - 05/30/88 23:08

Waste Monitor Tank 1D 06/07/88 18:28 - 06/07/88 18:35

A description of the abnormal release for Waste Monitor Tank 1E is provided in the attached STPEGS Problem Report, Appendix G. The supportive documentation for the problem report, which consisted of copies of logs, a copy of the surveillance package for the release and documentation of training, is not attached but shall be furnished on request. A description of the abnormal release for Waste Monitor Tank 1D is provided in the attached Licensee Event Report, Appendix H. These reports are submitted to comply with Section 6.9.1.4 of the Technical Specifications for Unit 1.

3.6 Radioactive Waste Process Control Program Changes

A HL&P initiated editorial change to the Radioactive Waste Process Control Program (PCP) procedure (HL&P procedure OPGP03-ZO-0017) was completed on February 26, 1988. The change substituted the word "noncompressible" for "noncompactible" in all references to "noncompactible" receptacles. This change was to reflect the wording used in the Dry Active Waste Collection, Sorting and Segregation Procedure (OPGP14-WS-0010) and on the DAW receptacles. Refer to attached copies of the Field Change Request and the Radioactive Waste Process Control Program Procedure pages 5 and 26 in Appendix I. The change did not reduce overall conformance of the solidified waste product to existing criteria for solid waste and because it was editorial in nature, it did not require PORC approval.

This notification of change is submitted to comply with Section 6.13.2 of the Technical Specifications for STPEGS Unit 1.

3.7 Offsite Dose Calculation Manual Change

No changes were made to the Offsite Dose Calculation Manual (ODCM) during this reporting period. This description is submitted to comply with Section 6.14.2 of the Technical Specifications.

3.8 New Land Use Census Location(s) Identification

No location(s) have been identified by the Land Use Census that yields a calculated dose or dose commitment greater than the values currently being calculated in accordance with Section 4.11.2.3 of the Technical Specification. This notification is submitted to comply with Section 3.12.2.a of the Technical Specification.

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS -- SUMMATION OF ALL RELEASES

	UNIT	QUARTER 1	QUARTER 2	EST. TOTAL ERROR, %
A. FISSION AND ACTIVATION GASES				
1. TOTAL RELEASE	CI	0.000E+00	0.971E+02	0.250E+02
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	0.000E+00	0.124E+02	
3. PERCENT OF TECHNICAL SPECIFICATION LIMIT	%	0.000E+00	0.458E-02	
B. IODINES				
1. TOTAL IODINE-131	CI	0.000E+00	0.000E+00	0.250E+02
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	0.000E+00	0.000E+00	
3. PERCENT OF TECHNICAL SPECIFICATION LIMIT	%	0.000E+00	0.000E+00	
C. PARTICULATES				
1. PARTICULATES WITH HALF-LIVES >8 DAYS	CI	0.000E+00	0.892E-01	0.250E+02
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	0.000E+00	0.113E-01	
3. PERCENT OF TECHNICAL SPECIFICATION LIMIT	%	0.000E+00	0.125E-01	
4. GROSS ALPHA RADIOACTIVITY	CI	0.000E+00	0.658E-01	
D. TRITIUM				
1. TOTAL RELEASE	CI	0.000E+00	0.163E+00	0.250E+02
2. AVERAGE RELEASE RATE FOR PERIOD	UCI/SEC	0.000E+00	0.207E-01	
3. PERCENT OF TECHNICAL SPECIFICATION LIMIT	%	0.000E+00	0.115E-04	

FFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 1 (UNIT VENT)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
1. FISSION GASES					
AR41	CI	0.000E+00	0.873E+02	0.000E+00	0.986E+01
KR83M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR87	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR88	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE131M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE135M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XW135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT.	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.873E+02	0.000E+00	0.986E+01

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 1 (UNIT VENT)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
2. IODINES					
I131	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3. PARTICULATES					
C14	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CR51	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN54	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FE59	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C058	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C060	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN65	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR95	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS136	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA140	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE141	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE144	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT	CI	0.000E+00	0.336E-01	0.000E+00	0.557E-01
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.336E-01	0.000E+00	0.557E-01

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 2 (MAIN STEAM LINE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
1. FISSION GASES					
AR41	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR83M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR87	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR88	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE131M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE135M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XW135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT.	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 2 (MAIN STEAM LINE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
2. IODINES					
I131	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3. PARTICULATES					
C14	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CR51	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN54	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FE59	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C058	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C060	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN65	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR95	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS136	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA140	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE141	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE144	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 3 (CONDENSER AIR REMOVAL)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
1. FISSION GASES					
AR41	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR83M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR85	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR87	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR88	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
KR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE131M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE135M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XW135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
XE138	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT.	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

GASEOUS EFFLUENTS - GROUND LEVEL RELEASE

RELEASE POINT: 3 (CONDENSER AIR REMOVAL)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
2. IODINES					
I131	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I133	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
3. PARTICULATES					
C14	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CR51	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
MN54	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FE59	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C058	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
C060	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN65	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR95	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SB124	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS134	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS136	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA140	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE141	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE144	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
UNIDENT	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS -- SUMMATION OF ALL RELEASES

	UNITS	QUARTER 1	QUARTER 2	EST. TOTAL ERROR, %
A. FISSION AND ACTIVATION PRODUCTS				
1. TOTAL RELEASE (EXCL. TRIT., GASES, ALPHA)	CI	0.000E+00	0.122E+00	0.500E+01
2. AVERAGE DILUTED CONC. DURING PERIOD	UCI/ML	0.000E+00	0.122E-07	
3. PERCENT OF APPLICABLE LIMIT	%	0.000E+00	0.609E+00	
B. TRITIUM				
1. TOTAL RELEASE	CI	0.000E+00	0.117+02	0.500E+01
2. AVERAGE DILUTED CONC. DURING PERIOD	UCI/SEC	0.000E+00	0.117E-05	
3. PERCENT OF APPLICABLE LIMIT	%	0.000E+00	0.389E-01	
C. DISSOLVED AND ENTRAINED GASES				
1. TOTAL RELEASE	CI	0.000E+00	0.857E-03	0.500E+01
2. AVERAGE DILUTED CONC. DURING PERIOD	UCI/SEC	0.000E+00	0.857E-10	
3. PERCENT OF APPLICABLE LIMIT	%	0.000E+00	0.429E-04	
D. GROSS ALPHA RADIOACTIVITY				
1. TOTAL RELEASE	CI	0.000E+00	0.000E+00	0.500E+01
E. VOLUME WASTE RELEASED (PRIOR TO DILUTION)	LITERS	0.163E+07	0.370E+07	0.800E-01
F. VOLUME DILUTION WATER USED DURING PERIOD	Liters	0.100E+11	0.100E+11	0.100E+02

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS FOR RELEASE POINT: 2 (LIQUID WASTE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
H3	CI	0.000E+00	0.000E+00	0.000E+00	0.117E+02
C14	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NA24	CI	0.000E+00	0.000E+00	0.000E+00	0.575E-05
P32	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CR51	CI	0.000E+00	0.000E+00	0.000E+00	0.175E-01
MN54	CI	0.000E+00	0.000E+00	0.000E+00	0.245E-02
MN56	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FE55	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
FE59	CI	0.000E+00	0.000E+00	0.000E+00	0.811E-03
C058	CI	0.000E+00	0.000E+00	0.000E+00	0.918E-01
C060	CI	0.000E+00	0.000E+00	0.000E+00	0.200E-02
NI63	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NI65	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CU64	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN65	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZN69	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR83	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR84	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BR85	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS FOR RELEASE POINT: 2 (LIQUID WASTE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
RB86	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB88	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RB89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR89	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
SR91	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y90	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y91M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y91	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y92	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Y93	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ZR95	CI	0.000E+00	0.000E+00	0.000E+00	0.353E-02
ZR97	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NB95	CI	0.000E+00	0.000E+00	0.000E+00	0.333E-02
MO99	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TC99M	CI	0.000E+00	0.000E+00	0.000E+00	0.194E-04
TC101	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS FOR RELEASE POINT: 2 (LIQUID WASTE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
RU103	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU105	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
RU106	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
AG110M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE125M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE127M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE127	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE129M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE129	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE131M	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE131	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
TE132	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I130	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I131	CI	0.000E+00	0.000E+00	0.000E+00	0.696E-04
I132	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I133	CI	0.000E+00	0.000E+00	0.000E+00	0.214E-04
I134	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
I135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS FOR RELEASE POINT: 2 (LIQUID WASTE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
LIQUID EFFLUENTS					
CS134	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS136	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS137	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CS138	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA139	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA140	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA141	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
BA142	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA140	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
LA142	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE141	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE143	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
CE144	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR143	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
PR144	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
ND147	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
W187	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00
NP239	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT

LIQUID EFFLUENTS FOR RELEASE POINT: 2 (LIQUID WASTE)

		CONTINUOUS MODE		BATCH MODE	
NUCLIDES RELEASED	UNITS	QUARTER 1	QUARTER 2	QUARTER 1	QUARTER 2
LIQUID EFFLUENTS					
.LIQ (unident.)	CI	0.000E+00	0.000E+00	0.000E+00	0.236E-03
TOTAL FOR PERIOD (ABOVE)	CI	0.000E+00	0.000E+00	0.000E+00	0.118E+02
XE-133	CI	0.000E+00	0.100E-25	0.000E+00	0.857E-03
XE-135	CI	0.000E+00	0.000E+00	0.000E+00	0.000E+00

EFFLUENT AND WASTE DISPOSAL REPORT
FROM 3/8/88 0:00 TO 6/30/88 23:00
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

No solid waste or irradiated fuel shipments were made during this reporting period.

A. SOLID WASTE SHIPPED OFF SITE FOR BURIAL OR DISPOSAL (NOT IRRADIATED FUEL)

1. TYPE OF WASTE	UNIT	6 MONTH PERIOD	EST. TOTAL ERROR %
A. SPENT RESINS, FILTER SLUDGES, EVAPORATOR BOTTOMS, ETC.	M^3 CI	0 0	N/A
B. DRY COMPRESSIBLE WASTE, CONTAMINATED EQUIP., ETC.	M^3 CI	0 0	N/A
C. IRRADIATED COMPONENTS, CONTROL RODS, ETC.	M^3 CI	0 0	N/A
D. OTHER	M^3 CI	0 0	N/A

2. ESTIMATE OF MAJOR NUCLIDE COMPOSITION (BY TYPE OF WASTE)

A.	1	%	
	2	%	
	3	%	
	4	%	
	5	%	
	6	%	
B.	1	%	
	2	%	
	3	%	
	4	%	
	5	%	
	6	%	
C.	1	%	
	2	%	
	3	%	
	4	%	
	5	%	
	6	%	
D.	1	%	
	2	%	
	3	%	
	4	%	
	5	%	
	6	%	

EFFLUENT AND WASTE DISPOSAL REPORT
FROM 3/8/88 0:00 TO 6/30/88 23:00
SOLID WASTE AND IRRADIATED FUEL SHIPMENTS

3. SOLID WASTE DISPOSITION (NOT IRRADIATED FUEL)

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
0	SHIP	N/A
0	AIR	

4. CLASS OF SOLID WASTE
N/A

5. TYPE OF CONTAINERS USED FOR SHIPMENT
N/A

6. SOLIDIFICATION AGENT
N/A

B. IRRADIATED FUEL SHIPMENTS (DISPOSITION)

NUMBER OF SHIPMENTS	MODE OF TRANSPORTATION	DESTINATION
0	SHIP	N/A
0	AIR	

APPENDIX A

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual releases for the period prior to when the changes are to be made.

APPENDIX A, ATTACHMENT 1

Opticnal Use of Filter Elements in Influent to Waste Monitor Tanks

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No FCR NO. HBM-01541 Revision No: 0

Title : LWPS FILTERS

Check one : ( ) Procedure (✓) Plant Modification ( ) Other

Check one : ( ) Quality Related (✓) Nonquality Related

1 Does the subject of this review involve a change to the facility as described in the FSAR?

S Khan — BEC Cognizant Engr Signature; 2/19/88 — Date; (✓) Yes ( ) No

2 Does the subject of this review involve a change to the procedures as described in the FSAR?

[signature] — HL&P Responsible Engr Signature; 22 Feb 1988 — Date; (✓) Yes ( ) No

3 Does the subject of this review conduct tests and or experiments not described in the FSAR?

S Khan — BEC Cognizant Engr Signature; 2/19/88 — Date; ( ) Yes (✓) No

4 Does the subject of this review require a change to the Technical Specifications?

[signature] — HL&P Responsible Engr Signature; 22 Feb 1988 — Date; ( ) Yes (✓) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change

THIS CHANGE IS REQUIRED TO PROVIDE FLEXIBILITY IN THE OPERATION OF THE LIQUID WASTE PROCESSING SYSTEM, THEREBY IMPROVING SYSTEM PERFORMANCE. FSAR SECTION 11.2 IS AFFECTED. SEE FSAR CHANGE REQUEST NO. 1226.

ATTACHMENT 1

HL&P 5889 12-85

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION INTERDEPARTMENTAL PROCEDURES 10CFR50.59 EVALUATIONS	NUMBER IP-3.200	REV. NO. 1
	PAGE 36 OF 41	
	EFFECTIVE DATE 11-20-87	

ATTACHMENT IP-3.200-3

10CFR50.59 EVALUATION FORM - TYPICAL
(Page 1 of 2)

DESCRIPTION

Unit # _____

☒ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. FCR No. HBM 01541 REV.NO. 0

TITLE LWPS FILTERS

DESCRIPTION Add notes to P&ID 7R309F9000 #1 & Vendor Document 4952-0101-ATY & 5EHD 10702-195EC48 Rev. C. "The installation of filter elements inside the filter housings of the FDT, LHST & CPRWCT filters is optional."

	Yes	No
Does the subject of this review involve a change to the facility as described in the safety analysis report?	☒	☐
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☒	☐
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒
Does the subject of this review require a change to the Plant Technical Specifications?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

(This form, when completed, shall be retained for the life of the plant.)

ATTACHMENT IP-3.200-3

10CFR50.59 EVALUATION FORM - TYPICAL
(Page 2 of 2)

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

BEC FSAR Change Request, Log No 1226

Prepared by: MJP Jack L Heiselbetz / 22 Feb 1988
Originator Date

Concurrence: MK Brannen for ACM / 23 Feb 1988
Department Manager Date

ATTACHMENT IP-3.200-4

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 1 of 4)

Unreviewed Safety Question Evaluation # 88-0029 Date Assigned 2/23/88

☒ Procedure Change ☒ Plant Modification ☐ Other

Originating Document: BEC FSAR Change Req. Log No 1226 FCR No. HBM-01541 Rev. # 0

TITLE: LWPS FILTERS

DESCRIPTION: Add notes to P&ID 7R309F9000 #1 & Vendor Documents 4052-0101-ATY & 5EHD 1072-195EC48 Rev C "The installation of filter elements inside the filter housings of the FDT, LHST & CPRWCT filters is optional." Delete FSAR references to FDT, LHST & CPRWCT filters

A. 1. Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report? ☐ YES ☒ NO

Bases: There are no accidents evaluated in the FSAR which require the Liquid Wast Processing System FDT, LHST or CPRWCT filters to be operable. There fore this does not increase the probability of occurance or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the FSAR.

ATTACHMENT IP-3.200-4 Evaluation No. 88-0029

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 2 of 4)

2. Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report? ☐ YES ☒ NO

Bases: The LWPS FDT, LHST or CPRWCT Filters do not impact the safe operability of the reactor nor does it provide a boundry to prevent an uncontrolled release of radioactivity to the environment. Therefore these items do not create the possibility for an accident of a different type than any previously evaluated in the FSAR.

3. Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification? ☐ YES ☒ NO

Bases: The LWPS FDT, LHST or CPRWCT Filters do not impact the safe operability of the reactor nor do they provide a boundry to prevent uncontrolled release of radioactivity to the environment. Procedures require that effluents from the FDT, LHST and CPRWCT be routed to a monitored tank and surveillance performed prior to release to the environment. Therefore this item does not reduce the margin of safety as defined in the basis for any Technical Specification

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license, and other license commitments made to the NRC.

ATTACHMENT IP-3.200-4 Evaluation No. 88-0029

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 3 of 4)

B. 1. ✓ All of the above questions were answered NO, therefore the originating document does not involve an unreviewed safety question.

2. _____ One or more of the above questions were marked YES, therefore the originating document involves an unreviewed safety question. The originating document, as presented, shall NOT be implemented without prior approval of the NRC. Provide a recommendation for disposition of the unreviewed safety question below.

RECOMMENDED DISPOSITION: _____

PREPARED BY: [signature] / 22 Feb 1988
ORIGINATOR / DATE

REVIEWED BY: [signature] / 23 Feb 1988
COGNIZANT MANAGER / DATE

APPROVED BY: [signature] / 2-23-88
PLANT MANAGER / DATE

REMARKS: _____

APPENDIX A, ATTACHMENT 2

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

The Liquid Waste Processing System collects and processes radioactive liquid waste generated during plant operation and reduces radioactivity and chemical content to acceptable levels for discharge or recycling.

The Liquid Waste Processing System consists of the Waste Holdup Tank, which collects radioactive liquid from the Reactor Coolant Drain Tank and the Reactor Containment Building sumps, the Floor Drain Tank, which collects liquids from floor drains in the Mechanical Auxiliary Building, and the Condensate Polishing Regenerative Waste Collection Tank, which collects radioactive laboratory drains, and serves as an alternate tank for floor drains. Also included in this system is the Laundry and Hot Shower Tank, which collects water from the hot shower facility.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum processing mode, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

The Liquid Waste Processing System waste evaporator also has the capability to produce reactor grade distillate which is collected in the Waste Evaporator Condensate Tank. This distillate may also be processed as radioactive waste and discharged. Concentrates from the waste evaporator are processed in the Solid Waste Processing System. Any gaseous effluents produced are processed by the Gaseous Waste Processing System.

The filters that were affected by this change were the Floor Drain Tank Filter, the Condensate Polishing Regenerative Waste Collection Tank Filter, and the Laundry and Hot Shower Tank filter. These filters are downstream of their respective tank pumps and allow most of the particulate to be removed prior to processing via demineralization or evaporation. Early in plant life, filtration is frequently not necessary, waste streams can be sent directly to the Waste Monitor Tanks prior to discharge, or processed via demineralization. The ability to process waste streams with or without filtration will allow a much greater flexibility in processing waste early in plant life.

APPENDIX A, ATTACHMENT 3

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

ATTACHMENT 3

PORC REVIEW COVER SHEET
OPGP03-ZA-0004-1
(Page 1 of 1)

Originating Document No. FCR 86 HBM 01541 Revision No. 0

TITLE LWPS Filters

The PORC has reviewed this item and has determined that (check as appropriate):

It___ does ✓ does NOT involve an UNREVIEWED SAFETY QUESTION.

It___ does ✓ does NOT require a change to the Technical Specifications or the Operating License.

It___ does ✓ does NOT deviate from the commitments made in the FSAR, SER, and other licensing documents.

It___ does ✓ does NOT adversely impact plant nuclear safety.

It___ does ✓ does NOT adversely impact the health and safety of plant personnel or the public.

It___ does ✓ does NOT require further review by the NSRB, the NRC, or other individuals/groups. ___ NSRB ___ NRC ___ other, specify below.

REMARKS

The PORC recommends this item for:

✓ APPROVAL ___ DISAPPROVAL ___ OTHER _____ PORC MEETING NO. 88-035

Completed by _____ DATE 2-23-88
PORC Secretary

This form, when completed, shall be retained in accordance with the retention requirements of the originating document.

APPENDIX A, ATTACHMENT 4

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

The Liquid Waste Processing System collects radioactive waste from various sources and processes this waste for discharge or recycle. Several different modes of processing waste streams are available including filtration, demineralization, and waste evaporation, and combinations of these three methods. The optimum processing method is selected in accordance with the Process Control Program. This program chooses methods based on solid content and radiochemistry of the selected waste stream.

In many cases, the waste stream does not require any method of processing prior to discharge. Early in plant life, many of the waste streams have low radioactivity concentrations and may be sent directly to the Waste Monitor Tanks for discharge. In order to extend filter life and provide more flexibility in processing, it is now allowable to process with or without filtration based on the characteristics of the waste stream. Changes were made to the Safety Analysis Report and the applicable Piping and Instrumentation Diagrams in order to allow Chemical Operations the choice of whether or not to use filtration downstream of the Floor Drain Tank, Condensate Polishing Regenerative Waste Collection Tank, and the Laundry and Hot Shower Tank. These changes are attached along with an overall flow diagram of the Liquid Waste Processing System. Also attached is the Engineering Support Request response that explains Support Engineering reasoning for this change.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No FSAR CHANGE REQUEST NO. 1226 Revision No: 0

Title : FSAR CHANGE REQUEST NO. 1226

Check one : ( ) Procedure (✓) Plant Modification ( ) Other

Check one : ( ) Quality Related (✓) Nonquality Related

1 Does the subject of this review involve a change to the facility as described in the FSAR?

S Khan — BEC Cognizant Engr Signature — 2/19/88 — Date — (✓) Yes ( ) No

2 Does the subject of this review involve a change to the procedures as described in the FSAR?

Joel L Dreesen — HL&P Responsible Engr Signature — 22 Feb 1988 — Date — (✓) Yes ( ) No

3 Does the subject of this review conduct tests and or experiments not described in the FSAR?

S Khan — BEC Cognizant Engr Signature — 2/19/88 — Date — ( ) Yes (✓) No

4 Does the subject of this review require a change to the Technical Specifications?

Joel L Dreesen — HL&P Responsible Engr Signature — 22 Feb 1988 — Date — ( ) Yes (✓) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change

THIS CHANGE IS REQUIRED TO PROVIDE FLEXIBILITY IN THE OPERATION OF THE LIQUID WASTE PROCESSING SYSTEM, THEREBY IMPROVING SYSTEM PERFORMANCE. FSAR SECTION 11.2 IS AFFECTED.

FSAR CHANGE REQUEST

1. DISCIPLINE: MECHANICAL
2. LOG NO: 1226
3. ORIGINATOR: STAN CHAN
4. DATE: 2/19/88
5. THE LCTS HAS BEEN REVIEWED: ☐ YES ☑ NO
6. PRE-OPERATIONAL TEST PROGRAM AFFECTED: ☐ YES ☑ NO
7. SUBMITTED BY (GROUP EGS) (DATE): N/A A. GUIDRY
8. AFFECTED SECTIONS OF FSAR (USE * TO INDICATE SECTIONS CONTAINING LCTS COMMITMENTS)

   11.2 THIS CHANGE REQUEST SUPERSEDES ALL CHANGES MADE IN H&P CHANGE NOTICE NO. 1291.
9. DESCRIPTION OF CHANGE: SECTION 11.2 OF THE FSAR STATES THAT THERE IS A FILTER ON THE DISCHARGE SIDE OF EACH OF THE FOLLOWING TANKS: 1. MAB FLOOR DRAIN TANK, 2. LAUNDRY AND HOT SHOWER TANK, 3. CONDENSATE POLISHING REGENERATION WASTE COLLECTION TANK. THIS CHANGE WILL MAKE THE USE OF THESE FILTERS OPTIONAL.
10. JUSTIFICATION

    BY MAKING THE USE OF THESE FILTERS OPTIONAL, THIS CHANGE WILL PROVIDE FLEXIBILITY IN THE OPERATION OF THE LIQUID WASTE PROCESSING SYSTEM, THEREBY IMPROVING SYSTEM PERFORMANCE.

11. DISCIPLINE REVIEW

		REVIEW DUE DATE	
STARTUP	N/A	MECH.	X N/A C E Tilt
ARCH.	NA	NUC	X N/A C E Tilt
CONTROLS	NA	PLANT DES.	NA
C/S	NA	PSSG	NA
ELECT.	NA	NSSS	NA
EQ	NA	OTHER	N/A

12. APPROVED BY _____ (Nuc Group Supv.) Date _____
13. APPROVED BY _____ (Dep Chief Eng) Date _____
14. APPROVED BY _____ (Nuc Chief Eng) Date _____
15. APPROVED BY C E Tilt (Proj Eng) Date 02/23/88
16. DATE SUBMITTED TO CLIENT: _____

The bulk of the radioactive liquids discharged by the Reactor Coolant System (RCS) can be processed and recycled by the Boron Recycle System (BRS). 41

Inputs into the LWPS from the BRS can be processed in the BRS prior to processing in the LWPS. The capability exists to route this waste to the condensate polishing regeneration waste collection tank (CPRWCT) or floor drain tank (FDT) because of either unacceptable water chemistry or for tritium control purposes. This waste is either off-quality refueling water or off-quality recycle holdup tank water. If the input is not processed in the BRS it will be processed in the LWPS and discharged. 53

The LWPS is designed to monitor and release sufficient tritiated water to control tritium buildup in the plant. Since the normal mode of the LWPS is process and discharge, there will be no tritium buildup in the LWPS. The majority of other inputs to the LWPS are normally low activity; therefore, the bulk of the processing requirements for the LWPS are based on generally low-activity wastes. 53 39

The capability for handling evaporator concentrates as well as handling and storing spent demineralizer resins is also provided in the system.

The capability exists to process high and low total dissolved solids (TDS) wastes from condensate polisher regeneration. Both low and high TDS wastes can be discharged directly through the LWPS and the effluent radiation monitor to the CWS if processing is not required. High TDS wastes are routed to the CPRWCT and may be processed through the waste evaporator and monitor tanks prior to discharge to the CWS. Normally no LWPS processing is required. LWPS processing is only required in the case of primary to secondary leakage. Normal CPRW processing is in the neutralization basin. 53 53

Instrumentation and controls necessary for the operation of the LWPS are located on a control board in the radwaste control room which is located within the Mechanical Auxiliary Building (MAB).

Component locations are shown on Figure 1.2-26, Sheets 3 and 4, and Figure 1.2-38. Radioactive equipment is generally isolated in individual cubicles. 53

Process flow diagrams and piping and instrumentation diagrams (P&IDs) are shown on Figures 11.2-1 through 11.2-12. 39

11.2.2.1.1 Process and Equipment Description: The LWPS is provided to collect and process BRS tritium control volume and non-reactor-grade liquid wastes. These include floor drains, equipment drains containing non-reactor-grade water, laundry and hot shower drains, contaminated wastes from the Condensate Polishing Regeneration System, and other non-reactor-grade sources. Equipment in the LWPS includes the reactor coolant drain tank (RCDT), the RCDT pumps and HX, the waste holdup tank (WHT), WHT filter, WHT pumps, WHT purification demineralizer and filter and two waste evaporator condensate tanks (WECT). A list of equipment is given in Table 11.2-3. The WHT can be processed through either the LWPS waste evaporator or the BRS recycle evaporator. The BRS recycle evaporator is used only in the event the LWPS waste evaporator is not operational. Additional equipment includes a FDT ~~and filter~~, laundry and hot shower tank (LHST) ~~and filter~~, CPRWCT ~~and filter~~, waste evaporator, waste evaporator condensate (WEC) demineralizer and strainer, and six waste monitor tanks (WMT) and pumps. 53 39 53

The WECTs provide extra storage capacity for the WMTs and can be discharged through the effluent radiation monitor to the CWS. Additional surge capacity is provided by two surge tanks located in the Fuel Handling Building (FHB). Processing consists of any of the following modes: 53

1. Filtration, evaporation, and demineralization

2. Filtration and evaporation 39

3. Filtration and demineralization

4. Filtration 53

The processing mode is determined by the quality of the liquid to be processed. The normal processing mode is expected to be one of the following combinations: filtration, filtration and/or evaporation or filtration, evaporation and/or demineralization. 55

The waste evaporator is a forced circulation crystallizer with a 30-gal/min distillate processing flowrate. In addition this evaporator can also be used as a backup to the BRS recycle evaporator. 53

The LWPS waste evaporator is designed to operate on a batch basis and the contents are concentrated to approximately 12 wt percent boric acid or 25 wt percent sodium sulphate.

The waste evaporator must be operated at a basic pH. Therefore the pH of the feed is adjusted as needed prior to transfer into the evaporator. Feed enters the discharge piping of the recirculation pump, is heated in the heating element and circulated through the vapor body. When the desired concentration is achieved, as indicated by the evaporator density instrumentation, the concentrate is pumped to the concentrate storage tank for eventual solidification, or directly to solidification bypassing the tanks. 39 53

Evaporator distillate is condensed and cooled in the distillate condenser and subcooler skid and further treated by the waste evaporator condensate demineralizer or WHT purification demineralizer before transfer to one of the waste monitor tanks. 53

The two largest sources of liquid volume to the LWPS are the Condensate Polishing System regeneration waste and the equipment floor drains. The equipment floor drains represents a relatively continuous source to the LWPS whereas the condensate polishing system regeneration waste is an infrequent high-volume, short-duration, batch source. The Condensate Polishing System regeneration waste is a source to the LWPS only during periods of off normal operations when there is above normal primary-to-secondary leakage, or excessive fuel defects. At these times the regeneration waste is directed to the CPRWCT as discussed in Section 10.4.6.2; during these periods the equipment and floor drains are directed to the FDT. Processing of this waste in the CPRWCT is identical to the processing specified for waste in the FDT. The system also provides the capability to discharge the condensate polishing regeneration waste directly to the CWS if processing is not required.

(FLOOR DRAIN TANK, LAUNDRY AND HOT SHOWER TANK AND THE)

Laundry and hot shower drains are normally ~~filtered and~~ released. However, the waste evaporator is capable of processing the laundry and hot shower waste after addition of an antifoaming agent, if treatment of these wastes is required prior to their release.

The RCDT collects deaerated, tritiated leakoffs from inside the Containment and the contents are transferred by [redacted] RCDT pumps through the RCDT heat exchanger (for cooling to less than 130°F) to the WHT. For the normal operating mode, a level band is maintained automatically in the RCDT and the system requires no operator action. In addition, the RCDT contents can be transferred directly to the BRS for processing. 39 39 39

11.2.2.3.1.2 Processing Operation - Inputs to the LWPS are segregated according to their chemical makeup: detergent wastes are routed to the LHST, Condensate Polishing System contaminated regeneration wastes are routed to the CPRWCT, and sumps and gravity drains are routed to the FDT.

Three parallel modes of operation are available in the LWPS:

1. High and low TDS waste streams from the Condensate Polishing System demineralizer regeneration are collected in the CPRWCT or FDT. The regenerants are processed through the ~~CPRWCT or FDT filter,~~ waste evaporator, and/or demineralizers, filters and sent to the WECTs or WMTs. Discharge is to the CWS; the effluent radiation monitor is used to verify acceptable activity levels. If the activity exceeds the setpoint, the flow is diverted back to the discharging tank for re-processing. During operation with no primary-to-secondary leakage, CPRW regenerants can be discharged directly to the CWS using the LWPS discharge header and effluent radiation monitor. The normal flow path for CPRW is to the netralization basin. (See Section 10.4.6.) 39 53

2. MAB floor drains and contents of the RCDT may be processed through the WHT and filter. Capability exists to process the low TDS waste and MAB floor drains in parallel. MAB floor drains are sent to the FDT and, IF NECESSARY, processed through the auxiliary demineralizer, the WECD, and the filter.

3. The contents of the LHST are normally transferred to a waste monitor tank (WMT) ~~through the LHST filter~~ after sampling. If sampling results show high radioactivity concentrations, the LHST contents can be processed through the waste evaporator after addition of an antifoaming agent. The contents of the FDT and CPRWCT can be transferred directly to the WMT, processed through the waste evaporator and the LWPS AD and WEC demineralizers and WEC filter. The distillate from the waste evaporator is routed to the WMTs or WECTs. 53 39

   The contents of the WMTs are discharged to the CWS after sampling. A discharge permit will be issued for each release. The water being discharged from the LWPS to the CWS is monitored for radioactivity level. In the event a higher radioactivity level than set is reached, the three-way valve in the discharge line will divert the flow back to the WMT being discharged. The contents of the WMTs can be recirculated through the auxiliary demineralizer and strainer if additional processing is required. 2 53 39

TABLE 11.2-3 (Continued)

EQUIPMENT PRINCIPAL DESIGN PARAMETERS

Special features: Cartridge replacement accomplished by remote handling system. Replacement criteria of either high differential pressure or time in service. |53

Materials:

Housing: SS
Filter element: EICF

Laundry and Hot Shower Tank Filter

Function: Removal of suspended solids from contents of LHST.

Number: 1

Type: Cartridge

Design pressure, psi: 150

Design temperature, °F: 200

Design flow, gal/min: 150

~~ΔP at design flow (clean) psi: 5~~ |39

~~Retention: 98% retention for particles 5 microns or larger~~ |2

Special features: Cartridge replacement accomplished by remote handling system. Replacement criteria of either high differential pressure or time in service. |53

~~Materials:~~ SPECIAL NOTE: THE FILTER CARTRIDGE MAY BE REMOVED FROM THE FILTER HOUSING IF FILTRATION IS NOT REQUIRED FOR THE PROPER PROCESSING OF TANK CONTENTS.

~~Housing: SS~~
~~Filter element: EICF~~

Floor Drain Tank Filter

Function: Removal of suspended solids from contents of FDT.

Number: 1

Type: Cartridge

Design pressure, psig: 150

Design temperature, °F: 200

Design flow, gal/min: 150

TABLE 11.2-3 (Continued)

EQUIPMENT PRINCIPAL DESIGN PARAMETERS

~~ΔP at design flow (clean), psi: 5~~

~~Retention: 98% retention for particles 5 microns or larger~~

Special features: Cartridge replacement accomplished by remote handling system. Replacement criteria of either high differential pressure or time in service.

~~Materials~~: SPECIAL NOTE: THE FILTER CARTRIDGE MAY BE REMOVED FROM THE FILTER HOUSING IF FILTRATION IS NOT REQUIRED FOR THE PROPER PROCESSING OF TANK CONTENTS.

~~Housing: SS~~

~~Filter element: EICF~~

Waste Holdup Tank Purification Demineralizer Filter

Function: Collection of resin fines from WHT purification demineralizer.

Number: 1

Type: Cartridge

Design pressure, psig: 150

Design temperature, °F: 200

Design flow, gal/min: 150

ΔP at design flow (clean), psi: 5

Retention: 98% retention for particles 5 microns or larger

Special features: Cartridge replacement accomplished by remote handling system. Replacement criteria of either high differential pressure time in service.

Materials:

Housing: SS
Filter elements: EICF

Condensate Polishing Regeneration Waste Collection Tank Filter

Function: Removal of suspended solids from contents of CPRWCT.

Number: 1

Type: Cartridge

Design pressure, psi: 150

TABLE 11.2-3 (Continued)

EQUIPMENT PRINCIPAL DESIGN PARAMETERS

Design temperature, °F: 200

Design flow, gal/min: 150 |39

~~ΔP at design flow (clean), psi: 5~~

~~Retention: 98% retention for particles 5 microns or larger~~ |53 |2

Special Features: Cartridge replacement accomplished by remote handling system. Replacement criteria of either high differential pressure or time in service. |53

SPECIAL NOTE: THE FILTER CARTRIDGE MAY BE REMOVED FROM THE FILTER HOUSING IF FILTRATION IS NOT REQUIRED FOR THE PROPER PROCESSING OF TANK CONTENTS.

~~Materials:~~
~~Housing: SS~~
~~Filter elements: SICF~~

STRAINERS

Pump Suction Strainers

Function: Duplex basket strainer to trap only large particles that could cause pump damage and excessive filter loading. Strainers are changed on high differential pressure and are not expected to contain significant concentrations of radioactivity. Are used on FDT, CPRWCT and LHST pumps. |39

Number: 3

Type: Basket

Design temperature, °F: 200

Design flow, gal/min: 100

ΔP at design flow (clean) psi: 0.5 |39

Nominal rating, microns: 840 (40 mesh)

Materials: SS

|53

0500031A (09/87)

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

ENGINEERING SUPPORT REQUEST

10544

1. PAGE 1 OF 12	2. DATE NOV. 23 '87
3. ESR NO. 87-WL-030	4. REV. NO. 1 Ø 2/22/88

5. UNIT/LOCATION	6. SYSTEM	7. QUALITY CLASS	8. MILESTONE/MODE
UNIT-1 / MAB 10' ELEV Room 71	WL	7	2/2

9. REQUESTED COMPLETION DATE	10. REQUESTOR/PHONE/ ORGANIZATION	11. SUPERVISOR'S APPROVAL/ DATE
DEC. 8 1987	P.C DAELLENBACH / 7091 NPOD / PED	ATTACHMENT 4

12. COMPONENT IDENTIFICATION (TAG NO. ETC.)
7R201NFR101A FLOOR DRAIN TANK FILTER

13. REFERENCE DOCUMENTS (INCLUDE REV. NO.)
7R309F9000 #1

14. ENG. SE V. ALBERT

15. RE/ORG C. FORTMAN

16. DUE DATE DEC. 11 1987

17. PROBLEM DESCRIPTION

THE 100 MICRON FDT FILTER PLUGS UP AFTER APPROXIMATELY 600 GALLONS OF FLOW.

RECEIVED
NOV 30 1987

18. SUGGESTED RESOLUTION

1. INSTALL SCREENS OR BAG FILTERS AT THE FLOOR DRAIN COVERS AS SOON AS POSSIBLE.
2. INSTALL STRAINER JUST DOWNSTREAM OF FDT PUMPS PRIOR TO MODE 2.
3. ADD NEW FILTER UPSTREAM OF EXISTING FDT FILTER - THIS FILTER SHOULD BE OF LESS EXPENCIVE TYPE -
4. AS LAST RESULTS - BYPASSING THE FDT FILTER ALL-TOGETHER AND REMOVE SOLID WASTES AT THE WASTE EVAPORATOR, THIS HOW SEQUOYAH AND CALLAWAY HAVE WORKED THERE SYSTEM.

19. ENGINEERING RESPONSE

SEE PAGE 2.

20.
UNIT APPLICABILITY 1
NCR REQD. NO
CARR REQD. NO PCN NO
BETTERMENT/MODIFICATION NO

21. ENGINEERING APPROVAL/DATE
C.E. Fortman 02/22/88

22. ENG. SUPERVISOR'S APPROVAL/DATE

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

ENGINEERING SUPPORT REQUEST CONTINUATION SHEET

1. PAGE 2 OF 2	2. DATE 2/19/88	3. ESR NO. 87-WL-030	4. REV. NO. 1

THE FOLLOWING PROVIDES THE REVISED ENGINEERING RESPONSE TO ESR 87-WL-030.

AS DISCUSSED DURING A MEETING BETWEEN HL&P (MILTON REJCEK, L. DUSEK, J. GABRIELSON, ETC.) AND BECHTEL (A. GUIDRY, S. CHAN) ON 2/18/88, A DESIGN CHANGE WILL BE MADE (FCR: HBM-08541) TO DELETE THE REQUIREMENT FOR FILTERS DOWNSTREAM OF THE FLOOR DRAIN TANK, LAUNDRY AND HOT SHOWER TANK AND CONDENSATE POLISHING REGENERATION WASTE COLLECTION TANK. THE INSTALLATION OF FILTER ELEMENTS INSIDE THE EXISTING HOUSINGS FOR THESE FILTERS WILL BE MADE OPTIONAL IN ORDER TO PROVIDE FLEXIBILITY IN THE OPERATION OF THE LIQUID WASTE PROCESSING SYSTEM. THIS DESIGN CHANGE WILL ALLOW PROCESSING OF WASTE FROM THE ABOVE TANKS IN THE FOLLOWING MANNER:

1. LIQUIDS WITH A LOW ENOUGH LEVEL OF RADIOACTIVITY WILL BE DISCHARGED DIRECTLY TO THE WASTE MONITOR TANKS WITHOUT FILTRATION OR OTHER PROCESSING.
2. CONTAMINATED LIQUIDS REQUIRING PROCESSING AND WHICH ALSO CONTAIN A HIGH LEVEL OF SOLIDS CAN BE PROCESSED BY THE WASTE EVAPORATOR. NO FILTRATION AT THE ABOVE FILTERS WOULD BE REQUIRED.
3. OTHER LIQUIDS CAN BE PROCESSED BY DEMINERALIZATION WITH OR WITHOUT FILTRATION BEFORE HAND AS DEEMED APPROPRIATE BY CHEM OPS.

THE ADDITION OF SCREENS OR BAG FILTERS AT FLOOR DRAINS WILL REQUIRE AN EVALUATION OF FLOODING IMPACT OR TEST TO DETERMINE FLOOR DRAIN BLOCKAGE. THEY ARE NOT EXPECTED TO ALLEVIATE THE FDT FILTER PROBLEM UNLESS VERY SMALL PORE SIZE IS USED.

S Ellen
2/22/88

APPENDIX A, ATTACHMENT 5

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

This change allows use of the Liquid Waste Processing System with or without the Floor Drain Tank Filter, the Laundry and Hot Shower Tank Filter, and the Condensate Polishing Regenerative Waste Collection Tank Filter. This simply allows flexibility in modes of processing waste streams and does not change the radiochemistry of these waste streams nor does it change the configuration of any plant equipment. Exposure to plant personnel should decrease as a result of this change, due to fewer filter changeouts required.

APPENDIX A, ATTACHMENT 6

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

This change allows flexibility in modes of processing radioactive waste streams, it does not change the amount of chemistry of liquid or gaseous waste streams in any way. Fewer filter changeouts will be required in the plant during periods where these three filters are not used in the plant, resulting in less solid waste. However, this reduction of solid waste will be balanced by the increased change of more resin replacements when high solid waste streams are seen by the demineralizers.

APPENDIX A, ATTACHMENT 7

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

This notification simply allows flexibility in processing waste streams generated by the plant. It does not affect the amount or radiochemistry of these waste streams. This modification will not result in a change to the expected maximum exposures to a member of the public in the UNRESTRICTED AREA and to the general population as previously estimated in the License application and amendments.

APPENDIX A, ATTACHMENT 8

Optional Use of Filter Elements in Influent to Waste Monitor Tanks

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX B

Increase in Waste Evaporator Concentrates Operational Levels

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual release for the period prior to when the changes are to be made.

APPENDIX B, ATTACHMENT 1

Increase in Waste Evaporator Concentrates Operational Levels

ATTACHMENT IP-3.20Q-3

ATTACHMENT 1

10CFR50.59 EVALUATION FORM
(Page 1 of 2)

DESCRIPTION

Unit # 1

☑ PROCEDURE ☐ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. CHANGE #1355 REV.NO. N/A

TITLE SAR 11.2.2.1.1, 11.4.1.2

DESCRIPTION CHANGE "APPROXIMATELY 12 WT. PERCENT BORIC ACID OR 25 WT. PERCENT SODIUM SULFATE" TO "OPTIMUM OPERATIONAL LEVELS AS SPECIFIED IN THE PROCESS CONTROL PROGRAM" ON PG. 11.1-3 OF THE SAR, AND CHANGE "UP TO 12 WT. PERCENT BORIC ACID OR 25 WT. PERCENT SODIUM SULFATE" TO "OPTIMUM OPERATIONAL LEVELS AS SPECIFIED IN THE PROCESS CONTROL PROGRAM" ON PG. 11.4-2 OF THE SAR.

	Yes	No
Does the subject of this review involve a change to the facility as described in the safety analysis report?	☐	☑
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☑	☐
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☑
Does the subject of this review require a change to the Plant Technical Specifications?	☐	☑
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☑

(This form, when completed, shall be retained for the life of the plant.)

ATTACHMENT IP-3.20Q-3

10CFR50.59 EVALUATION FORM
(Page 2 of 2)

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

SAR 11.2.2, 11.4

SYSTEMS DESCRIPTION MANUAL VOLUME III, ND 0104

PGP03-ZO-0017

PCP01-ZA-0021

H_3BO_3 SOLUBILITY CURVE

SAR, CHAPTER 15

Prepared by: [signature] / 041588
Originator / Date

Concurrence: KLP 4/15/88 WAH VRA [signature] / 4/19 5-2-88
Department Manager / Date

ATTACHMENT IP-3.200-4

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 1 of 4)

Unreviewed Safety Question Evaluation # 88-0055 Date Assigned 032188

☑ Procedure Change ☐ Plant Modification ☐ Other

Originating Document: CHANGE # 1355 Rev. # N/A

TITLE: SAR 11.2.2.1.1, 11.4.1.2, 2b.

DESCRIPTION: CHANGE "APPROXIMATELY 12 WT. PERCENT BORIC ACID OR 25 WT. PERCENT SODIUM SULFATE" TO "OPTIMUM OPERATIONAL LEVELS AS SPECIFIED IN THE PROCESS CONTROL PROGRAM" ON PG. 11.2-3 OF THE SAR, AND CHANGE "UP TO 12 WEIGHT PERCENT BORIC ACID OR 25 WEIGHT PERCENT SODIUM SULFATE" TO "OPTIMUM OPERATIONAL LEVELS AS SPECIFIED IN THE PROCESS CONTROL PROGRAM" ON PG. 11.4-2 OF THE SAR.

A. 1. Does the subject of this evaluation increase the probability of occurrence or the consequences of an accident or malfunction of equipment important to safety previously evaluated in the safety analysis report? ☐ YES ☑ NO

Bases: THIS CHANGE ALLOWS BATCH CONCENTRATIONS OF UP TO 16% $Na_2B_4O_7 \cdot 7H_2O$ IN THE CONCENTRATES STREAM WHICH IS TRANSFERRED FROM THE WASTE EVAPORATOR, THROUGH THE WASTE EVAPORATOR BOTTOM DISCHARGE PIPING TO THE CONCENTRATES STORAGE TANK, PUMPED BY THE CONCENTRATES TRANSFER PUMP 1A. THE CONTENTS OF THE CONCENTRATES STORAGE TANK ARE THEN PUMPED OUT BY CONCENTRATES TRANSFER PUMP 1B TO BE SOLIDIFIED. THERE ARE NO ACCIDENTS EVALUATED IN THE SAR WHICH THIS CHANGE WOULD IMPACT, THUS, THIS CHANGE DOES NOT INCREASE THE PROBABILITY OF OCCURRENCE OR THE CONSEQUENCES OF AN ACCIDENT OR MALFUNCTION OF EQUIPMENT IMPORTANT TO SAFETY PREVIOUSLY EVALUATED IN THE SAR.

ATTACHMENT IP-3.20Q-4 Evaluation No. 88-0055

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 2 of 4)

2. Does the subject of this evaluation create the possibility for an accident or malfunction of a different type than any evaluated previously in the safety analysis report? ☐ YES ☑ NO

Bases: THIS CHANGE, WHICH ALLOWS CONCENTRATES STREAMS OF UP TO 16% $Na_2B_4O_7 \cdot 7H_2O$ AND THE SUBSEQUENT TRANSFER OF THESE CONCENTRATES FROM THE WASTE EVAPORATOR BOTTOM DISCHARGE PIPING, THROUGH CONCENTRATES TRANSFER PUMP 1A TO THE CONCENTRATED STORAGE TANK, THROUGH CONCENTRATES TRANSFER PUMP 1A TO BE SOLIDIFIED, DOES NOT AFFECT ANY SAFETY RELATED SYSTEM, NOR DOES IT CREATE THE POSSIBILITY FOR AN ACCIDENT OR MALFUNCTION OF A DIFFERENT TYPE THAN ANY EVALUATED PREVIOUSLY IN THE SAFETY ANALYSIS REPORT.

3. Does the subject of this evaluation reduce the margin of safety as defined in the basis for any technical specification? ☐ YES ☑ NO

Bases: THIS CHANGE ALLOWS UP TO 16% $Na_2B_4O_7 \cdot 7H_2O$ IN THE CONCENTRATES STREAM FROM THE WASTE EVAPORATOR, THROUGH THE WASTE EVAPORATOR DISCHARGE PIPING AND CONCENTRATES TRANSFER PUMP 1A, TO THE CONCENTRATES STORAGE TANK, AND PUMPED OUT OF THE CONCENTRATES STORAGE TANK BY CONCENTRATES TRANSFER PUMP 1B TO BE SOLIDIFIED. THIS CHANGE ALLOWS CHEMICAL OPERATIONS TO OBTAIN OPTIMUM OPERATIONAL LEVELS AS SPECIFIED BY THE PROCESS CONTROL PROGRAM, AND DOES NOT AFFECT ANY TECHNICAL SPECIFICATION BASES, NOR DOES IT REDUCE THE MARGIN OF SAFETY AS DEFINED IN THE BASIS FOR ANY TECHNICAL SPECIFICATION.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license, and other license commitments made to the NRC.

ATTACHMENT IP-3.20Q-4

Evaluation No. 88-0055

UNREVIEWED SAFETY QUESTION EVALUATION FORM
(Page 3 of 4)

B. 1. X — All of the above questions were answered NO, therefore the originating document does not involve an unreviewed safety question.

2. _____ One or more of the above questions were marked YES, therefore the originating document involves an unreviewed safety question. The originating document, as presented, shall NOT be implemented without prior approval of the NRC. Provide a recommendation for disposition of the unreviewed safety question below.

RECOMMENDED DISPOSITION: _____

PREPARED BY: W.B. Markham ORIGINATOR / 041588 DATE

REVIEWED BY: 4/15/88 COGNIZANT MANAGER / 5-2-88 DATE

APPROVED BY: D.G. Tilton for K.J. Kevin PLANT MANAGER / 5-12-88 DATE

REMARKS: _____

APPENDIX B, ATTACHMENT 2

Increase in Waste Evaporator Concentrates Operational Levels

The Liquid Waste Processing System collects and processes radioactive liquid waste generated during plant operation and reduces radioactivity and chemical content to acceptable levels for discharge or recycling.

The Liquid Waste Processing System consists of the Waste Holdup Tank, which collects radioactive liquid from the Reactor Coolant Drain Tank and the Reactor Containment Building sumps, the Floor Drain Tank, which collects liquids from floor drains in the Mechanical Auxiliary Building, and the Condensate Polishing Regenerative Waste Collection Tank, which collects radioactive laboratory drains, and serves as an alternate tank for floor drains. Also included in this system is the Laundry and Hot Shower Tank, which collects water from the hot shower facility.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum processing mode, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

The Liquid Waste Processing System waste evaporator also has the capability of processing waste streams that have a high solid content. Concentrates collect in the bottom of the waste evaporator and are subsequently transferred to the Solid Waste Processing System for solidification. The waste evaporator can process concentrates streams with up to 50% solids, however, based on the solubility of sodium tetraborate and the limits of waste evaporator and associated piping heat tracing, sodium tetraborate concentrations are limited to 16%. This limit was originally 12%, as documented in the Safety Analysis Report. The new limit is well within the capabilities of the system and will allow more economical processing of solid waste streams in the future.

Also attached are copies of the changes to the Safety Analysis Report and the Process Control Program.

LICENSE COMPLIANCE REVIEW FORM
OPGP03-ZA-0003-1
(Page 1 of 1)

Originating Document No. Change No. 1355 Revision No. 0A

Title PSAR 11.2.2.1 & 11.4.1.2 3D

Check one: ( ) Procedure ( ) Plant Modification (X) Other _____
Check one: (X) Quality-Related ( ) Non Quality-Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?
   (X)no ( )yes
2. Does the subject of this review involve a change to the procedures as described in the FSAR?
   ( )no (X)yes
3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?
   (X)no ( )yes
4. Does the subject of this review require a change to the Technical Specifications?
   (X)no ( )yes

If any of the above questions (#1 through #4) are marked YES, complete and attach a 10CFR50.59 Safety Evaluation.

5. Does the subject of this review represent or create a potential fire hazard, affect fire protection training or administration, emergency lighting or communications, or protection of the methods for achieving and maintaining safe shutdown in the event of a fire?
   (X)no, ( )yes - attach a Fire Hazards Evaluation

6. Does the subject of this review represent or create a potential radiological hazard to the environment?
   (X)no, ( )yes - attach a Radiological Environmental Evaluation

7. Does the subject of this review represent or create a potential non-radiological hazard to the environment?
   (X)no, ( )yes - attach a Non-radiological Environmental Evaluation

8. Does the subject of this review represent or create a potential ALARA concern?
   (X)no, ( )yes - attach a ALARA Evaluation

9. Does the subject of this review represent or create a potential industrial safety hazard?
   (X)no, ( )yes - attach an Industrial Safety Evaluation

10. Does the subject of this review represent or create a potential to reduce the committments of the Nuclear Security Program?
    (X)no, ( )yes - attach a Nuclear Security Evaluation

PREPARED BY L. A. Scott II DATE March 17, 1988

REVIEWED BY T. Ehrhardt DATE 3/17/88

This FORM, when completed, shall be retained for the life of the plant.

ATTACHMENT IP-1.19Q-01

CHANGE NOTICES FOR LICENSED DOCUMENT FORM

Change No. 1355 (1)

Date 3/10/88 (2)

Originator (3)

William F. Scott, II

Organization

TS/CO&A

Referenced Section or Specification of FSAR, ER, FHAR, TS, EP, SP, ODCM, or PCP (4)

FSAR 11.2.2.1.1 & 11.4.1.2 2b

Change Required: (5)

The LWPS waste evaporator is designed to operate on a batch basis and the contents are concentrated to the optimum operational levels as specified in the Process Control Program.

Justification:

Concentrations specified in FSAR are not consistent with concentrations in OPCP01-ZA-0021 (Radioactive Waste Processing Guidelines) which is referenced as an implementing procedure in the Process Control Program. (6)

Reviewed and Approved by _____ Date _____
Supervising Engineer, Licensing (7)

or

Reviewed and Approved by _____ (8) Date _____ (8)
Manager, Enviromental Assessment/
Waste Management

Change Contained or Appoved in Amendment Number _____ (9)

Verified by _____ (10) Date _____ (10)

Justification continued

(6) To protect the integrity of the LWPS evaporator the pH of the concentrates is maintained in the range which produces sodium tetraborate, not boric acid.

The WECTs provide extra storage capacity for the WMTs and can be discharged through the effluent radiation monitor to the CWS. Additional surge capacity is provided by two surge tanks located in the Fuel Handling Building (FHB). Processing consists of any of the following modes: 53

1. Filtration, evaporation, and demineralization
2. Filtration and evaporation 39
3. Filtration eralization
4. Filtration 53

The processing m rmined by he quality of the liquid to be processed. The normal ing mode is expected to be one of the following combinations: filtration, filtration and/or evaporation or filtration, evaporation and/or demineralization. 55

The waste evaporator is a forced circulation crystallizer with a 30-gal/min distillate processing flowrate. In addition this evaporator can also be used as a backup to the BRS recycle evaporator. 53

The LWPS waste evaporator is designed to operate on a batch basis and the contents are concentrated to ~~approximately 12 wt percent boric acid or 25 wt percent sodium sulphate~~. OPTIMUM OPERATIONAL LEVELS AS SPECIFIED IN THE PROCESS CONTROL PROGRAM.

The waste evaporator must be operated at a basic pH. Therefore the pH of the feed is adjusted as needed prior to transfer into the evaporator. Feed enters the discharge piping of the recirculation pump, is heated in the heating element and circulated through the vapor body. When the desired concentration is achieved, as indicated by the evaporator density instrumentation, the concentrate is pumped to the concentrate storage tank for eventual solidification, or directly to solidification bypassing the tanks. 39 53

Evaporator distillate is condensed and cooled in the distillate condenser and subcooler skid and further treated by the waste evaporator condensate demineralizer or WHT purification demineralizer before transfer to one of the waste monitor tanks. 53

The two largest sources of liquid volume to the LWPS are the Condensate Polishing System regeneration waste and the equipment floor drains. The equipment floor drains represents a relatively continuous source to the LWPS whereas the condensate polishing system regeneration waste is an infrequent high-volume, short-duration, batch source. The Condensate Polishing System regeneration waste is a source to the LWPS only during periods of . normal operations when there is above normal primary-to-secondary leakage, or excessive fuel defects. At these times the regeneration waste is direc d to the CPRWCT as discussed in Section 10.4.6.2; during these periods the equipment and floor drains are directed to the FDT. Processing of this waste in the CPRWCT is identical to the processing specified for waste in the FDT. The system also provides the capability to discharge the condensate polishing regeneration waste directly to the CWS if processing is not required.

Laundry and hot shower drains are normally filtered and released. However, the waste evaporator is capable of processing the laundry and hot shower waste after addition of an antifoaming agent, if treatment of these wastes is required prior to their release.

e. Valves in contact with waste streams are of a design that minimizes pockets or crud traps. Remote operated valves are used, where necessary, in high radiation areas.

f. Piping is designed to provide a clean, free-flowing path. Bend radius is a minimum of five pipe diameters for all resin slurry piping. All resin slurry piping is provided with means for backflushing and is sloped, where possible, to prevent settling in the pipes.

g. Waste tanks have provisions for monitoring level and alarming potential overflow conditions.

h. Mixing and handling equipment are provided with redundant drives or with means for manual operation, where necessary, from low-radiation areas in the event of drive failures. 39

i. Remote control of the system and process is used to the maximum practicable extent. Control of the system is accomplished from a central control station.

j. Internal parts in contact with the waste streams are designed to withstand an integrated radiation exposure of 10^7 rads over the 40-year design life.

k. Provisions for operator surveillance during movement of waste containers are provided by use of closed-circuit television cameras and monitors. 49

l. In accordance with 10CFR50 App. A, General Design Criterion 63, radiation monitors are provided in the SWPS control area. (See Section 12.3 for further details.) 39 49

2. Types of Waste

The SWPS is designed to process these types of waste by solidification and encapsulation, packaging or compaction: 39

a. Expended bead-type ion exchanger resins

b. Evaporator concentrates containing ~~up to 12 weight percent boric acid or 25 weight percent sodium sulfate~~ optimum operational levels as specified in the Process Control Program.

c. Miscellaneous liquids resulting from decontamination, laboratory wastes, and system cleaning

d. Expended liquid and air filter elements

e. Miscellaneous dry wastes including plant equipment and/or parts thereof

3. Quality Group Classification

The SWPS is classified as Non-Nuclear Safety and meets the requirements of Branch Technical Position (BTP) ETSB11-1, Rev. 1. 49

3.2.4.2 The evaporator concentrates should not be allowed to exceed any of the following criteria prior to transfer to the Waste Evaporator Concentrates Tank:

a: Specific Activity: 0.2 uCi/cc as total gamma activity

b: Na_2SO_4: 25% by weight

c: $Na_2B_4O_7 \cdot 7H_2O$: 16% by weight

d. Cl: 2000 ppm

NOTE

Items b and c are guidelines of OPGP03-ZO-0017 (Radioactive Waste Process Control Program), item d is for protection of the evaporator.

3.2.4.3 If any of the above criteria stated in 3.2.4.2 are exceeded, dilution will be used in the Waste Evaporator Concentrates Tank.

4.0 References

4.1 1PSP07-WL-0001 Liquid Waste Effluent Releases, Rev. 2

4.2 1PCP13-WL-0006 Laundry and Hot Shower Tank Operation, Rev. 1

4.3 1PCP13-WL-0002 Condensate Polishing Regeneration Waste Collection Tank Operation, Rev. 1

4.4 1PCP13-WL-0032 Condensate Polishing Regeneration Waste Batch Release, Rev. 0

4.5 1PCP13-WL-0003 Floor Drain Tank Operations, Rev. 1

4.6 1PCP13-WL-0001 Waste Holdup Tank Operations, Rev. 1

4.7 1PCP13-WL-0009 Waste Surge Tank Operations, Rev. 0

4.8 OPGP03-ZO-0017 Radioactive Waste Process Control Program, Rev. 1

5.0 Support Documents

None

b. For resin dewatered in HICs, acceptance criteria shall be ≤ one percent (1%) of the internal volume of the HIC.

5.1.3.10 The implementing procedures for the processing and handling of contaminated resin are as follows:

a. OPCP01-ZA-0021 (Radioactive Waste Processing Guidelines)

b. OPCP10-ZR-0001 (Determination of Radioactive Waste Package Curie Content)

c. OPCP14-WS-0006 (Radioactive Waste Package Transfer to Storage)

5.1.4 Evaporator Concentrates

5.1.4.1 The Liquid Waste Processing System (LWPS) is designed to collect, transport, and process radioactive liquids either for release to the environment or for solidification. Liquid waste shall be concentrated in the LWPS evaporator prior to being transferred to a vendor for solidification. Evaporator influent consists principally of either:

a. Boric Acid (H_3BO_4) containing liquids

b. Sodium Sulfate (Na_2SO_4) containing liquids

5.1.4.2 Borated waste streams shall normally be processed through demineralizers for release to the environment. Alternately, borated waste streams may be processed by evaporation in the Sodium Tetraborate ($Na_2B_4O_7 \cdot 7H_2O$) form and transferred to a vendor for solidification. Borated waste streams may originate from the Floor Drain Tank, Waste Holdup Tank, Recycle Holdup Tank, or Laundry and Hot Shower Tank.

5.1.4.3 Condensate Polishing Demineralizer regeneration chemical wastes may be required to be processed through the LWPS in the event of primary to secondary leakage. These regeneration solutions shall be transferred to the Condensate Polishing Regeneration Waste Collection Tank and subsequently concentrated in the LWPS Evaporator to the Sodium Sulfate form.

5.1.4.4 Each batch of evaporator concentrates shall be sampled and analyzed to provide isotopic curie content in accordance with 1PCP07-ZS-0005 or 2PCP07-ZS-0005 (Local Sampling in MAB, FHB and RCB). Total activity of each processed container shall be calculated in accordance with OPCP10-ZR-0001 (Determination of Radioactive Waste Package Curie Content).

5.1.4.5 In accordance with Technical Specifications Requirements, in at least one (1) out of every ten (10) batches a test solidification is performed. The concentrates are transferred to the Vendor Solidification System. If the test solidification is acceptable as per Section 5.6 the concentrates are processed in accordance with the Vendor Process Control Program Manual.

5.1.4.6 Following solidification, the container shall be classified and labeled in accordance with OPCP01-ZA-0026 (Classification and Shipment of Solid Radioactive Waste). Verification that container contents form a free standing monolith, shall be performed in accordance with the Vendor Process Control Program Manual. Following this verification the container shall be weighed and placed in storage per OPCP14-WS-0006 (Radioactive Waste Package Transfer to Storage).

5.1.4.7 A flow chart of the evaporator concentrates process path is shown in Addendum 4. A description and diagram of the solidification process system and component process parameters (i.e. flow, temperature, etc.) is provided in the Vendor Process Control Program Manual.

5.1.4.8 The implementing procedures for processing evaporator concentrates are as follows:

a. OPCP01-ZA-0021 (Radioactive Waste Processing Guidelines)

b. OPCP10-ZR-0001 (Determination of Radioactive Waste Package Curie Content)

c. OPCP14-WS-0006 (Radioactive Waste Package Transfer to Storage)

d. OPCP14-WS-0007 (Waste Transfer to the Portable Solidification System)

APPENDIX B, ATTACHMENT 3

Increase in Waste Evaporator Concentrates Operational Levels

ATTACHMENT 3

Plant Operations Review Committee

PORC REVIEW COVER SHEET
OPGP03-ZA-0004-1
(Page 1 of 1)

Originating Document No. USQE 88-0055 Revision No. —

TITLE Change #1355, SAR 1.2.2.1.1, 11.4.1.2.2b

The PORC has reviewed this item and has determined that (check as appropriate):

It___ does ___✓ does NOT involve an UNREVIEWED SAFETY QUESTION.

It___ does ___✓ does NOT require a change to the Technical Specifications or the Operating License.

It___ does ___✓ does NOT deviate from the commitments made in the FSAR, SER, and other licensing documents.

It___ does ___✓ does NOT adversely impact plant nuclear safety.

It___ does ___✓ does NOT adversely impact the health and safety of plant personnel or the public.

It___✓ does ___ does NOT require further review by the NSRB, the NRC, or other individuals/groups. ___✓ NSRB ___ NRC ___ other, specify below.

REMARKS

The PORC recommends this item for:

___✓ APPROVAL ___ DISAPPROVAL ___ OTHER ___ PORC MEETING NO. 88-080

Completed by [signature] DATE 5-10-88
PORC Secretary

This form, when completed, shall be retained in accordance with the retention requirements of the originating document.

APPENDIX B, ATTACHMENT 4

Increase in Waste Evaporator Concentrates Operational Levels

Houston Lighting & Power Company

OFFICE MEMORANDUM

To W.H. Humble April 14, 1988

From W.D. Markham

Subject SAR Change #1355: Sodium Tetraborate Concentrations
SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

A SAR Change Request has been made involving a change in allowable sodium tetraborate concentrations in the waste evaporator concentrate stream from to 12% to 16%. The waste evaporator concentrates flowpath is as follows:

The concentrates in the bottom of the waste evaporator are discharged by the operator using the automatic Horton Process sequencer. This allows the operator to first, send the water remaining in the discharge piping from the last flush to the floor drain tank, second, the bottom concentrates are transferred to the concentrates storage tank by the concentrates transfer pump, third, the discharge piping is flushed with demin water to the floor drain tank,lastly, the discharge piping is refilled with water and left on standby.

During this process, the following factors must be considered in order to evaluate the proper operation of the system with up to 16% sodium tetraborate:

The waste evaporator is not affected by the concentration of sodium tetraborate. The elements necessary for safe operation are, pH maintained at 7-9, and chlorides kept within specification. At this pH the equilibrium equation for boron shifts to the sodium tetraborate side of the equation, which is desired in the waste evaporator. The waste evaporator is capable of processing slurries of up to 50% concentrate. The discharge piping from the waste evaporator and including the concentrates storage tank is heat traced to 165 degrees F. This temperature is capable of supporting up to 16% sodium tetraborate with no solubility problems (see attached solubility curve). Chem-Nuclear can solidify concentrates up to 20% sodium tetraborate with existing equipment.

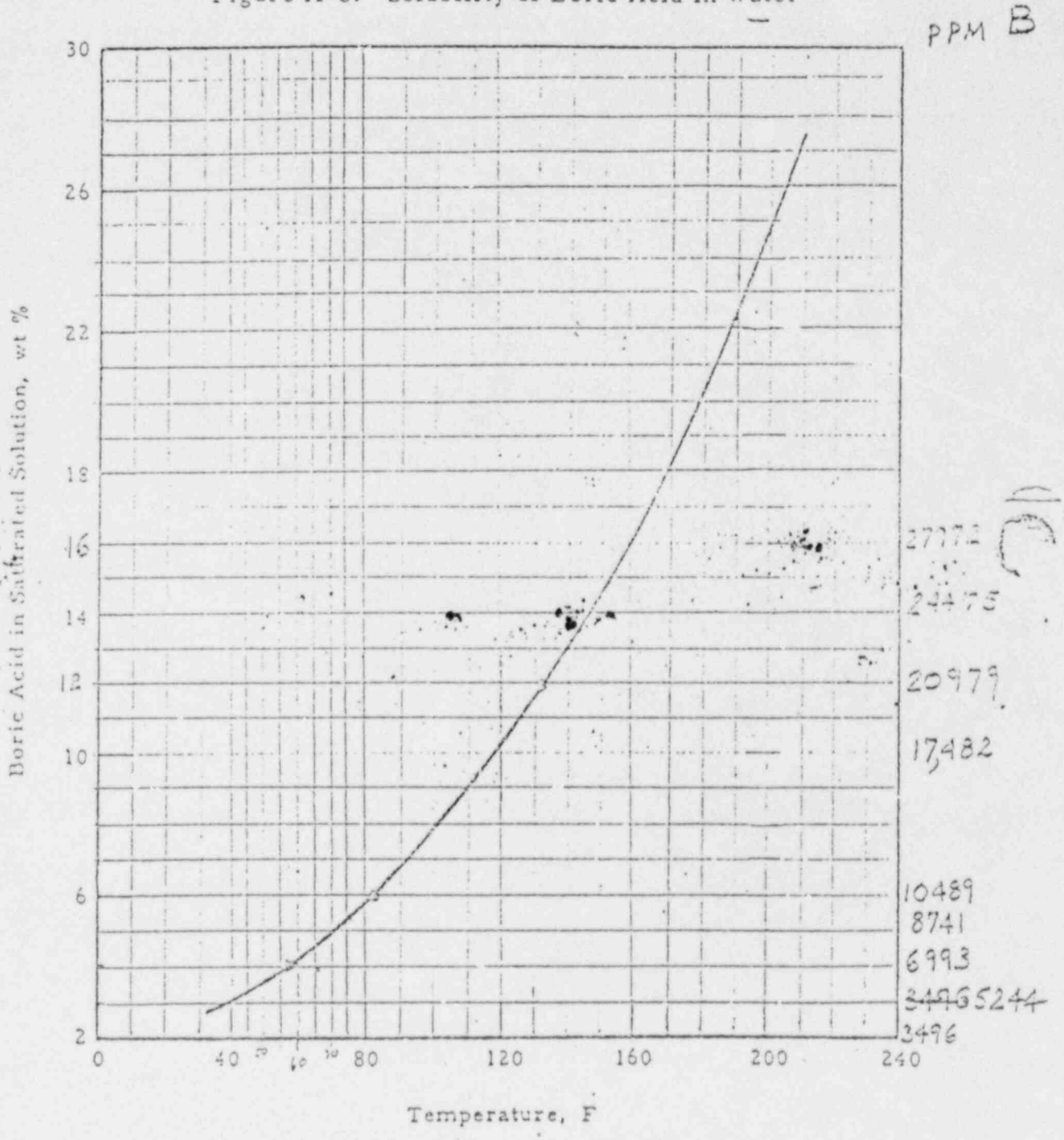
The original 12% sodium tetraborate limit in the SAR appears to be taken from the system description manual, ~~and is one of several examples of over-description in the SAR.~~ The 16% limit is a safe one, and will also allow us to process solid waste more economically in the future.

$[B](5.72 \times 10^{-4}) = \%\ BA$

$\therefore [B] = \frac{\%\ BA}{5.72 \times 10^{-4}}$

H_3BO_3

Figure A-8. Solubility of Boric Acid in Water



APPENDIX B, ATTACHMENT 5

Increase in Waste Evaporator Concentrates Operational Levels

This change allows batching of concentrates in the waste evaporator as specified by the process control program. This allows more economical processing of waste streams that are processed through the waste evaporator. This change will allow batching of up to 16% sodium tetraborate vice 12% originally allowed by the safety analysis report. This change will not affect operation of any plant equipment. Solidification of these waste streams should not result in any additional exposure to plant personnel. The radiation levels in the concentrates storage tank may increase due to the increased concentration of sodium tetraborate but the decreased number of transfers will offset any additional exposure that might result from this. No additional exposure to plant personnel will result due to this modification.

APPENDIX B, ATTACHMENT 6

Increase in Waste Evaporator Concentrates Operational Levels

During processing of radioactive waste by waste evaporation, the ability to process concentrates of up to 16% sodium tetraborate vice 12% as previously required by the SAR will allow more economical processing and may reduce the total amount of solid waste produced over the life of the plant.

APPENDIX B, ATTACHMENT 7

Increase in Waste Evaporator Concentrates Operational Levels

This change allows up to 16% sodium tetraborate in the concentrates stream produced by the waste evaporator. This allows more economical processing of solid waste over the life of the plant. This change does not change expected maximum exposures to individuals in the UNRESTRICTED AREA and the general population from those previously estimated in the License application and amendments.

APPENDIX B, ATTACHMENT 8

Increase in Waste Evaporator Concentrates Operational Levels

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX C

Addition of Local Sampling for Waste Monitor Tanks D, E, F

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual releases for the period prior to when the changes are to be made.

APPENDIX C, ATTACHMENT 1

Addition of Local Sampling for Waste Monitor Tanks D, E, F

A 10CFR50.59 Determination Review Form was completed by Support Engineering. It was determined that there were no unreviewed safety questions and no further action was required.

10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. HBM-01607 REV. —

TITLE FCR

DESCRIPTION OPERATIONS REQUESTED THAT LOCAL SAMPLING BE PERFORMED FOR THE LIQUID WASTE SYSTEM IN THE YARD AREA

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

9/14/88

(This form, when completed, shall be retained for the life of the plant.)

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

4361PW777 SA/02

4362PW777 SA/02

Prepared by: [signature] 4/14/88 [signature] 4/14/88
Originator Date

Concurrence: [signature] 4-21-88
Department Manager Date

0191b/0106b

10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. HBM-01601 REV. _____

TITLE FCR TO P&ID 9F40021 #1

DESCRIPTION ADD VALVES FOR LOCAL SAMPLING

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

(This form, when completed, shall be retained for the life of the plant.)

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

FSAR

Prepared by: [signature] 4/14/88 / Michael F. Hutchins / 4/19/88
Originator Date

Concurrence: W. J. Berg / 4/19/88
Department Manager Date

0191b/0106b

APPENDIX C, ATTACHMENT 2

Addition of Local Sampling for Waste Monitor Tanks D, E, F

The Liquid Waste Processing System collects and processes radioactive liquid waste generated during plant operation and reduces radioactivity and chemical content to acceptable levels for discharge or recycling.

The Liquid Waste Processing System consists of the Waste Holdup Tank, which collects radioactive liquid from the Reactor Coolant Drain Tank and the Reactor Containment Building sumps, the Floor Drain Tank, which collects liquids from floor drains in the Mechanical Auxiliary Building, and the Condensate Polishing Regenerative Waste Collection Tank, which collects radioactive laboratory drains, and serves as an alternate tank for floor drains. Also included in this system is the Laundry and Hot Shower Tank, which collects water from the hot shower facility.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum processing mode, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum mode for processing, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

This change involved Waste Monitor Tanks D, E, and F. These tanks are located outdoors in the plant yard. Sampling these tanks was performed via three one inch drain valves, and contamination of personnel was likely. A sample sink with three common sample valves connected to these drain valves as an aid to sampling and to help reduce the likelihood of personnel contamination. See attached Field Change Requests and 10CFR50.59 Review Determination Forms for detail.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

JOB NO. 14926

FIELD CHANGE REQUEST

2A START-UP NUMBER: 1-WL01

2B IS ADDED FOR TEST / NOT REQ'D FOR TEST

1 PAGE 1 OF 3

2 NO. HFCR-01609

2B BUILDING YARD

3 QCL	4 DWG OR SPEC	5 I	N/I	5 REV	6 UNIT	3 QCL	4 DWG OR SPEC	5 I	N/I	5 REV	6 UNIT
7	7R309F90021 # 1	■		9	1 & 2						

7 REASON FOR REQUEST: NEED TO HAVE NEW ISOLATION VALVES ADDED AT THE LOCAL SAMPLE SINK.

7A THIS FCR SUPERSEDES FCR-S: N/A JPV

8 PROPOSED CHANGE

REVISE P&ID NO. 7R309F90021 #1 REV. 9 TO MAKE THE FOLLOWING CHANGES:

* ISOLATION VALVES WL-1006, WL-1007 AND WL-1008 WHICH WERE CLOSED ARE NOW TO BE ~~LOCKED~~ OPEN. DELETED PER TELECON WITH T.P. VOLLMAR, ~~04255~~ ~~CONFIRMATION~~ 04255 JPV
* ADD NEW ISOLATION VALVES WL-1376, WL-1377 AND WL-1378 AT THE LOCAL SAMPLE AND DRAIN SINK. MIKE HUTCHESON AND MIKE BERG WO matter 042558

SEE PAGES 2 AND 3 OF THIS HFCR.

TURNOVER STATUS

8A SYSTEM (DOC)	8B SYSTEM (PHY)	8C AREA (DOC)	8D AREA (PHY)
■ YES ☐ NO	■ YES ☐ NO	■ YES ☐ NO	■ YES ☐ NO

9E WORK AUTHORIZATION ☐ YES ■ NO

JIM VOLLMAR JPV X-8345 3-29-88
9 INITIATOR DATE

10. FIELD ACCEPTANCE: N/A JPV
ACCEPTOR DATE

10A. S.U. CONCURRENCE: P.P. Hunsh 3/31/88
CONCURRENCE DATE

11 PROJECT ENGINEERING DECISION ☒ APPROVED ☐ DISAPPROVED

12 LOSE: N/A JPV DATE 4-12-88

12A. EOE: N/A JPV DATE 4/14/88

13 PQAE: DATE 4/19/88

14. PE: DATE

15 HLEP ENG: DATE

16. HLEP OF QA: DATE

17. NPOD: DATE 4/25/88

REMARKS: TUBING, ISOLATION VALVE AND SINK TO BE INSTALLED BY NPCD UNIT #2 COORDINATION VIA INTERFACE TRAVELER #159

COORDINATION REQ'D ☐ YES ■ NO CIVIL __ ELEC __ I&C __ MECH __ P/D __ P/B __ CODES __

CALC REQ'D/APP ☐ YES ■ NO CALC NO. N/A JPV

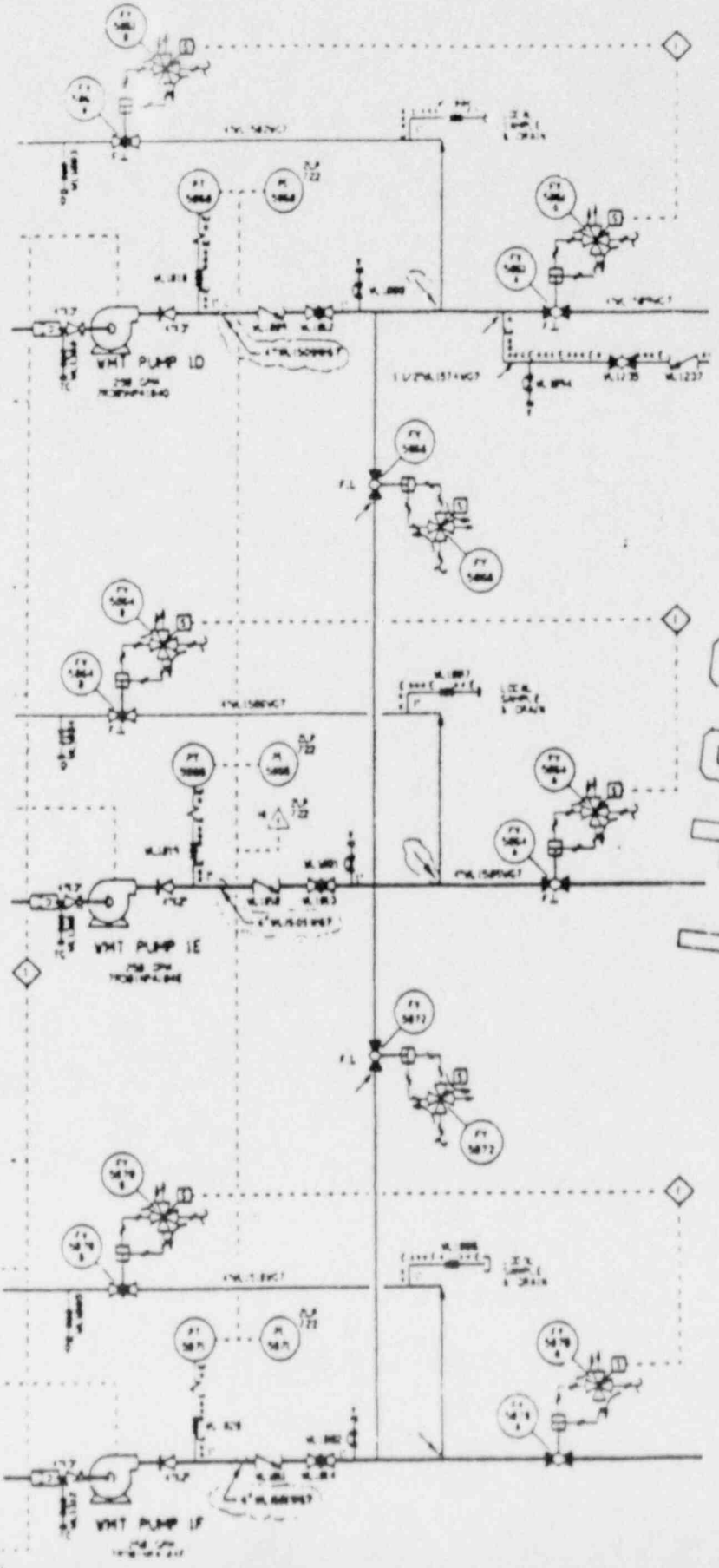
CAPR REQ'D. ■ YES ☐ NO CAPR NO. 1960

FSAR CR REQ'D ☐ YES ■ NO CR NO.: N/A JPV

CONCURRENCE N/A JPV

CS-AD-1988 R2 (10/1487)

BEFORE



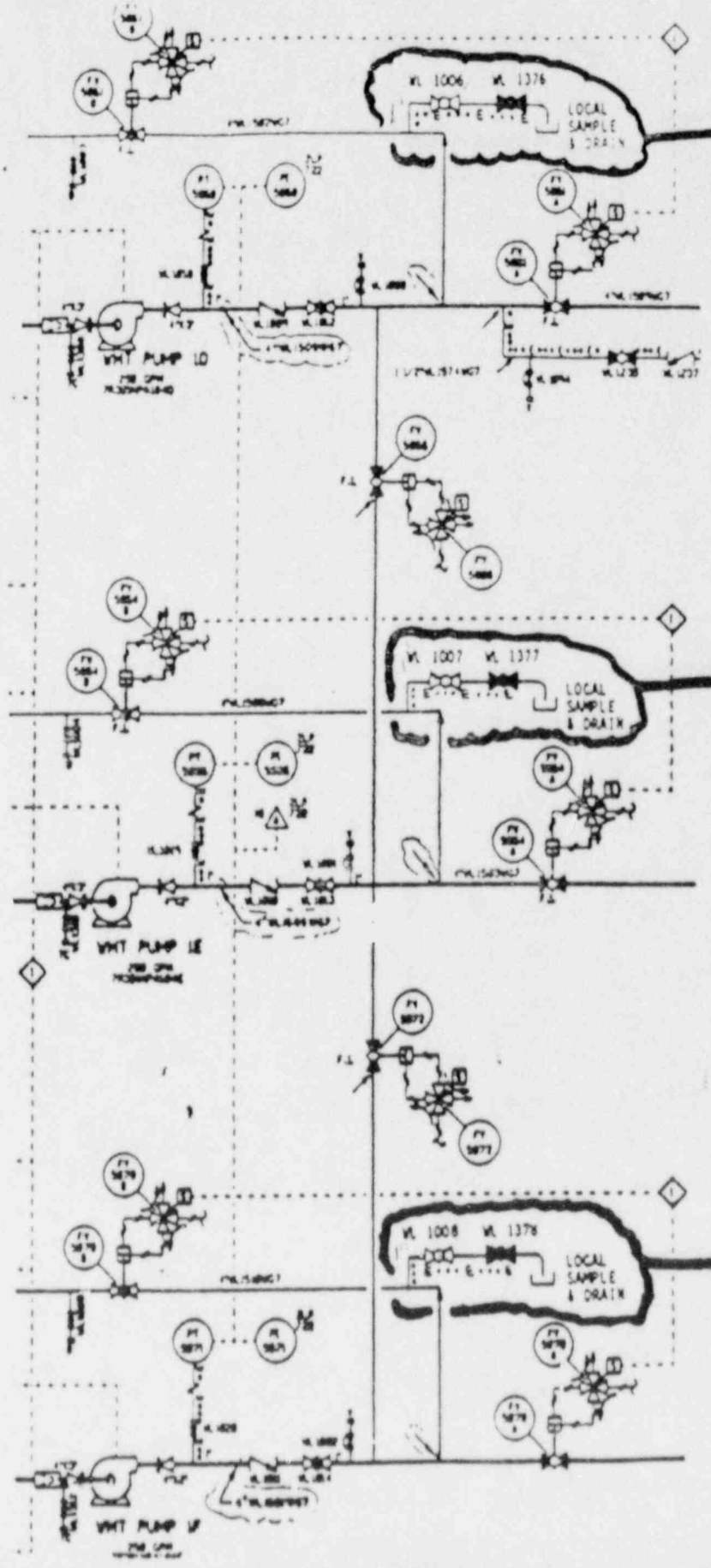
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14626

PAGE 3 OF 3

HBM-01609

FIELD CHANGE REQUEST
CONTINUATION SHEET

AFTER



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COPY

10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. HBM-01607 REV. —

TITLE FOR

DESCRIPTION OPERATIONS REQUESTED THAT LOCAL SAMPLING BE PERFORMED FOR THE LIQUID WASTE SYSTEM IN THE YARD AREA

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

9/14/88

(This form, when completed, shall be retained for the life of the plant.)

0191b/0106b

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

4361PW777 SH 02

4362PW777 SH 02

Prepared by: [signature] 4/14/88 [signature] 4/14/88
Originator Date

Concurrence: [signature] 4-21-88
Department Manager Date

0191b/0106b

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST

2A START UP NUMBER: 1-WL01

RELEASED FOR TEST ☐ NOT RELEASED FOR TEST ☐

1 PAGE 1 OF 2

2 NO HBM-016077

2a BUILDING YARD

3 O.C.L.	4. DWG. OR SPEC.	1	N/I	5. REV	6. UNIT	3 O.C.L.	4. DWG. OR SPEC.	1	N/I	5. REV	6. UNIT
7	7Y361PWL777 SHT.02	■		1	1						
7	7Y362PWL777 SHT.02	■		XO	2						

7 REASON FOR REQUEST

OPERATIONS REQUESTED THAT LOCAL SAMPLING BE PERFORMED FOR THE LIQUID WASTE (WL) SYSTEM IN THE YARD AREA.

7A THIS FCR SUPERSEDES FCR(S) N/A JPV

8 PROPOSED CHANGE

REVISE DRAWINGS LISTED IN BLOCK 4 AS SHOWN ON PAGE 2 OF THIS FCR.

TURNOVER STATUS

8A SYSTEM (DOC)	8B SYSTEM (PHY)	8C AREA (DOC)	8D. AREA (PHY)
■ YES ☐ NO	■ YES ☐ NO	■ YES ☐ NO	■ YES ☐ NO

8E WORK AUTHORIZATION ☐ YES ■ NO

10. FIELD ACCEPTANCE: N/A JPV

10A. S.U. CONCURRENCE: P.D. Hanahan

JIM VOLLMAR JPV	X-8345	3-30-88
9 INITIATOR		DATE

ACCEPTOR	DATE

CONCURRENCE	DATE

11 PROJECT ENGINEERING DECISION ☒ APPROVED ☐ DISAPPROVED

12 LOSE N/A JPV	DATE 4-14-88	13A. EQE N/A JPV	DATE
12 EQAE	DATE	14 PE	DATE 4/19/88
15 HL&P ENG	DATE 4-21-88	16. HL&P QA N/A	DATE
		17. NPOD W H Humbach	DATE 4/25/88

REMARKS: DISCUSSED WITH GERRY STAUBER OF PLANT DESIGN SEO

TUBING, VALVES AND SINK TO BE INSTALLED BY NPOD

COORDINATION REQ'D ☐ YES ■ NO CIVIL ___ ELEC ___ I&C ___ MECH ___ P/D ___ P/S ___ CODES ___

CALC REQ'D/AFF ☐ YES ■ NO CALC NO. N/A JPV

CAPR REQ'D. ■ YES ☐ NO CAPR NO 1960

FSAR CR REQ'D ☐ YES ■ NO CR NO. N/A JPV

CONCURRENCE N/A JPV

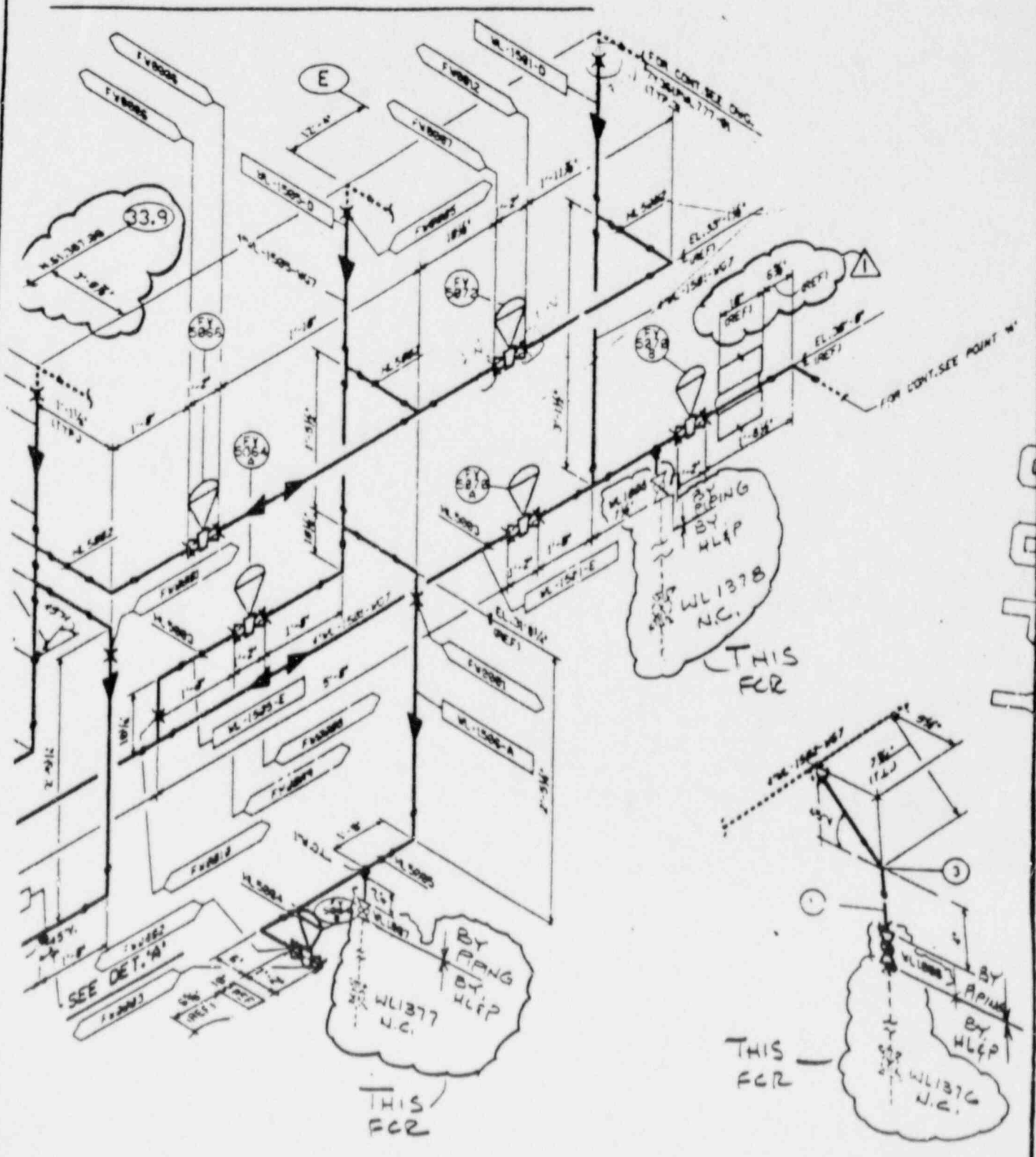
CS-AD-1988 R2 (10-14-87)

SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14626

PAGE 2 OF 2

NO HBM- 01607

FIELD CHANGE REQUEST
CONTINUATION SHEET



DETAIL "A"

10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. HBM-01601 REV. _____

TITLE FCR TO P&ID 9F9002I #1

DESCRIPTION ADD VALVES FOR LOCAL SAMPLING

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

(This form, when completed, shall be retained for the life of the plant.)

0191b/0106b

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

FSAR

Prepared by: 4/14/88 Michael F Hutton / 4/8/88
Originator Date

Concurrence: M. J. Bem / 4/19/88
Department Manager Date

0191b/0106b

APPENDIX C, ATTACHMENT 3

Addition of Local Sampling for Waste Monitor Tanks D, E, F

A PORC Review was not required for this design change.

APPENDIX C, ATTACHMENT 4

Addition of Local Sampling for Waste Monitor Tanks D, E, F

The Liquid Waste Processing System (LWPS) Waste Monitor Tanks provide a final collection point prior to discharge to insure all applicable limits are met. There are six Waste Monitor Tanks, three are located in the Mechanical Auxiliary Building, three are located in the plant yard. Sampling of the outdoor tanks was difficult to perform due to the sample points consisting of 1" drain valves. Control of flow rate from these valves was difficult and the chances of personnel contamination was increased. A sample sink located on the catwalk above the Waste Monitor Pump Skid was added with three sample valves connected with stainless steel piping to the drain valves. This sink was much easier to access, provided reasonable flow rates for sampling, and greatly decreased the chances of personnel contamination. Each outdoor tank may be sampled from a single point from a much safer location.

APPENDIX C, ATTACHMENT 5

Addition of Local Sampling for Waste Monitor Tanks D, E, F

This change added a sample sink at the Waste Monitor Tank D, E, and F Pump Skid which allowed easier sampling and decreased the chances of personnel contamination. This change will not create any additional exposure to plant personnel as a result.

APPENDIX C, ATTACHMENT 6

Addition of Local Sampling for Waste Monitor Tanks D, E, F

This change added a sample sink at the Waste Monitor Tank D, E, and F Pump skid and it does not change the amount of chemistry of any waste stream in the Liquid Waste Processing System. This modification does not change the amount of liquid and gaseous effluents, and solid waste prediction in the License application and amendments.

APPENDIX C, ATTACHMENT 7

Addition of Local Sampling for Waste Monitor Tanks D, E, F

This modification added a sample sink at the Waste Monitor Tank D, E, F Pump Skid and does not affect the amount or radiochemistry of any waste stream. This modification will not result in a change to the expected maximum exposures to a member of the public in the UNRESTRICTED AREA and to the general population as previously estimated in the License application and amendments.

APPENDIX C, ATTACHMENT 8

Addition of Local Sampling for Waste Monitor Tanks D, E, F

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX D

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual release for the period prior to when the changes are to be made.

APPENDIX D, ATTACHMENT 1

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

A 10CFR50.59 Determination Review Form was completed by Support Engineering. It was determined that there were no unreviewed safety questions and no further action was required. See attached forms for detail.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. FCR HBZ-01949 Revision No. 0

Title FCR 1 FOR DWG. # 5M159E00110

Check one: ( ) Procedure ( ) Plant Modification (✓) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Gregory Kaiser — 1/5/88 — ( ) Yes (✓) No

EEC Cognizant Engr. Signature — Date

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Vincent C. Jones — 1/11/88 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?

Gregory Kaiser — 1/5/88 — ( ) Yes (✓) No

EEC Cognizant Engr. Signature — Date

4. Does the subject of this review require a change to the Technical Specifications?

Vincent C. Jones — 1/11/88 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and/or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. HBM-01481 Revision No. 0

Title FCR FOR 7R309F05023 #1 & #2

Check one: ( ) Procedure ( ) Plant Modification (✓) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Gregory Kaiser — 1/4/88 — Date — ( ) Yes (✓) No

BEC Cognizant Engr. Signature

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

[signature] — 1/11/88 — Date — ( ) Yes (✓) No

HL&P Responsible Engr. Signature

3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?

Gregory Kaiser — 1/4/88 — Date — ( ) Yes (✓) No

BEC Cognizant Engr. Signature

4. Does the subject of this review require a change to the Technical Specifications?

[signature] — 1/11/88 — Date — ( ) Yes (✓) No

HL&P Responsible Engr. Signature

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and/or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. FCR HBP-03831 Revision No. —

Title VENT Header CONNECTIONS

Check one: ( ) Procedure (X) Plant Modification ( ) Other

Check one: ( ) Quality Related (X) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Ken Smith — EEC Cognizant Engr. Signature
1/8/88 — Date
( ) Yes (X) No

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Cindy Hall — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (X) No

3. Does the subject of this review conduct tests and or experiments not described in the FSAR?

Ken Smith — EEC Cognizant Engr. Signature
1/8/88 — Date
( ) Yes (X) No

4. Does the subject of this review require a change to the Technical Specifications?

Cindy Hall — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (X) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

APPENDIX D, ATTACHMENT 2

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

The Liquid Waste Processing System collects and processes radioactive liquid waste generated during plant operation and reduces radioactivity and chemical content to acceptable levels for discharge or recycling.

The Liquid Waste Processing System consists of the Waste Holdup Tank, which collects radioactive liquid from the Reactor Coolant Drain Tank and the Reactor Containment Building sumps, the Floor Drain Tank, which collects liquids from floor drains in the Mechanical Auxiliary Building, and the Condensate Polishing Regenerative Waste Collection Tank, which collects radioactive laboratory drains, and serves as an alternate tank for floor drains. Also included in this system is the Laundry and Hot Shower Tank, which collects water from the hot shower facility.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum processing mode, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum mode for processing, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

This change involved the level indication equipment for the Waste Evaporator Condensate Tanks. These tanks collect distillate from the waste evaporator and this water may be further processed as reactor makeup water or disposed of as liquid waste. Originally, the instruments were attached to atmosphere on the low pressure side of the transmitter, with the high pressure side connected to the tank bottom. Pressure changes in the vapor space at the top of the tank due to condensation in the plant vent header caused erroneous readings. The arrangement was modified to connect the low pressure side of the level transmitter to the vapor space at the top of the tank, thus eliminating the effect of any pressure variations that might occur.

Attached are copies of the Field Change Requests that authorized this change, along with the respective 10CFR50.59 Determination Review Form.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST

2A START UP NUMBER: 1WL02
U-1 ☑ RELEASED FOR TEST
U-2 ☑ NOT RELEASED FOR TEST
1 PAGE 1 OF 2
2 NO HBZ-01949
2B BUILDING MAB

3 QCL	4 DWG OR SPEC	5	N/I	5 REV	6 UNIT	3 QCL	4. DWG OR SPEC.	5	N/I	5 REV	6 UNIT
5	5M159Z00110	✓		11	1						

7 REASON FOR REQUEST: LEVEL TRANSMITTER INSTALLATIONS ON WASTE EVAP. COND. TANKS ARE CAUSING ERRONEOUS READINGS

REF. CAR # 2119

7A THIS FCR SUPERSEDES FCR #: N/A

8 PROPOSED CHANGE

CONNECT LOW PRESSURE SIDE OF WECT 1A, AND 1B LEVEL TRANSMITTERS, NIWL-LT-4012 AND NIWL-LT-4006 RESPECTIVELY, INTO VENT HEADERS FROM EACH TANK. SEE PAGES 2 & 3

UNIT 2 CHANGES TO BE DONE BY CCP# 2-J-FST-0609

TURNOVER STATUS

8A SYSTEM (DOC)	8B SYSTEM (PHY)	8C AREA (DOC)	8D AREA (PHY)
☑ YES ☐ NO	☑ YES ☐ NO	☑ YES ☐ NO	☑ YES ☐ NO

RE WORK AUTHORIZATION ☐ YES ☑ NO

9 INITIATOR	DATE	10. FIELD ACCEPTANCE	DATE	10A. S.U. CONCURRENCE	DATE
Greg Kaiser x7210	1/5/88	N/A		N/A	

11 PROJECT ENGINEERING DECISION ☒ APPROVED ☐ DISAPPROVED

12 LDSE	DATE	12A SQE	DATE
JPV 1-7-88 T. Kladden	01-07-88	N/A	
N/A		Bruce D. Monta	1-8-88

13 NSAP ENG	DATE	16. NSAP OF QA	14 PE	DATE	17. NPOO	DATE
☑ POAE Vincent C. Jones	1/11/88	N/A	VCJ 1/11/88			2/17/88

REMARKS

COORDINATION REQ'D ☐ YES ☑ NO CIVIL __ ELEC __ I&C __ MECH __ P/D __ P/S __ CODES __

CALC REQ'D/AFF ☐ YES ☑ NO CALC NO. _____

CAPR REQ'D: ☑ YES ☐ NO CAPR NO. 2119

ASAR CR REQ'D: ☐ YES ☑ NO

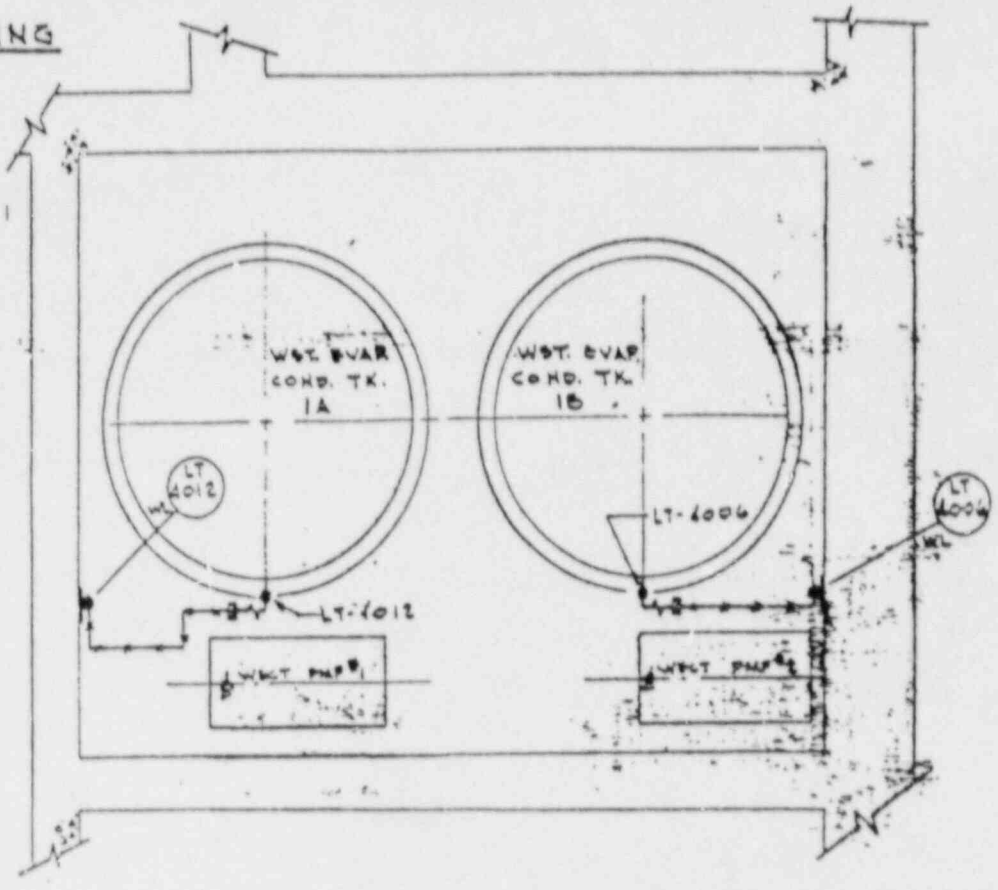
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14928

1. PAGE 2 OF 2

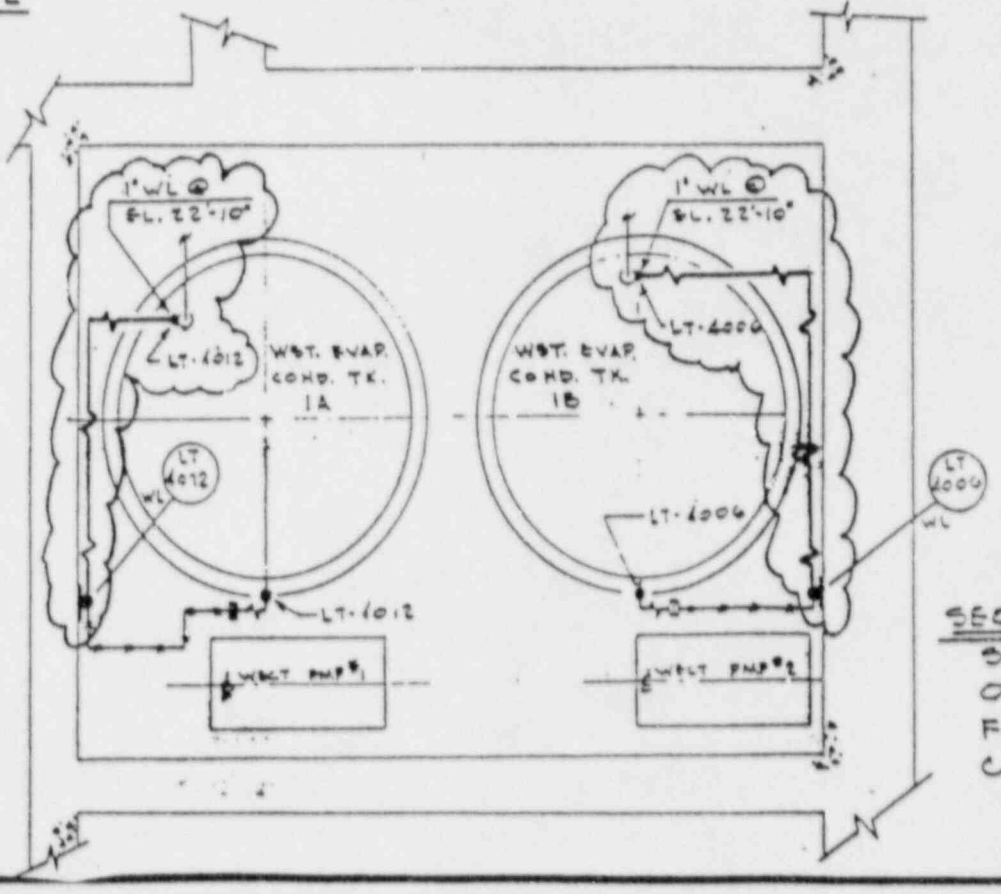
2
NO HBZ-01949

FIELD CHANGE REQUEST
CONTINUATION SHEET

EXISTING



CHANGE



SEO NOTE
SOME INFO OMITTED FOR CLARITY

STP 9418 2734

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. FCR HBZ-01949 Revision No. 0

Title ECR 1 FOR DWG. # 5M159Z00110

Check one: ( ) Procedure ( ) Plant Modification (✓) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Gregory Kaiser — 1/5/88 — ( ) Yes (✓) No

SEC Cognizant Engr. Signature — Date

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Vincent C. Jones — 1/11/88 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

3. Does the subject of this review conduct tests and or experiments not described in the FSAR?

Gregory Kaiser — 1/5/88 — ( ) Yes (✓) No

SEC Cognizant Engr. Signature — Date

4. Does the subject of this review require a change to the Technical Specifications?

Vincent C. Jones — 1/11/88 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST

41
42

2A START UP NUMBER: 1WL02
[ ] CLEARED FOR FIT
[ ] NOT RELEASED FOR FIT

1 PAGE 1 OF 3
2 NCR BM-01481
2B BUILDING MAB

3 DCL	4 DWG. OR SPEC.	I	N/I	5 REV	6 UNIT	3 DCL	4. DWG OR SPEC.	I	N/I	5 REV	6 UNIT
7	7R309F05023#1	V		13	1						
~~7~~	~~7R309F05023#2~~	~~V~~		~~13~~	~~1~~		--				
	CJSX 1/6/88										

7 REASON FOR REQUEST: CARR# 2119

LEVEL TRANSMITTERS ON WASTE EVAP. COND. TKS. GIVING ERRONEOUS READINGS

7A THIS FCR SUPERSEDES F.C.R.S: N/A

8 PROPOSED CHANGE

CONNECT LOW PRESSURE SIDE OF WEST. 1A, AND 1B LEVEL TRANSMITTERS, NIWL-LT-4012 AND NIWL-LT-4006 RESPECTIVELY, INTO VENT HEADERS FROM EACH TANK

SEE PAGES 2 & 3

UNIT 2 CHANGES TO BE DONE BY CCP# 2-J-FST-0609

TURNOVER STATUS

8A SYSTEM (DOC)	8B SYSTEM (PHY)	8C AREA (DOC)	8D AREA (PHY)
[X] YES [ ] NO	[X] YES [ ] NO	[X] YES [ ] NO	[X] YES [ ] NO

8E WORK AUTHORIZATION: [ ] YES [X] NO

9 INITIATOR: GREG KAISER X7210 — DATE: 12/24/87

10. FIELD ACCEPTANCE: N/A — ACCEPTOR: — DATE:

10A. S.U. CONCURRENCE: N/A — CONCURRENCE: — DATE:

11 PROJECT ENGINEERING DECISION: [X] APPROVED [ ] DISAPPROVED

11. PE: JRV T. Harrow 1-7-88 — DATE: 01-07-88

12 LOSE: N/A — DATE:

12A EQE: N/A — DATE:

13 PQAE: ~~N/A~~ MJB 11/12/88 — DATE:

13. MLAP ENG: N/A MJB 1/12/88 — DATE:

14. PE: Robert D Morton — DATE: 1-8-88

15. MLAP OF QA: — DATE:

17. NPOO: — DATE: 2/17/88

REMARKS

COORDINATION REQ'D [Y] YES [ ] NO CIVIL __ ELEC __ I&C __ MECH Y P/O Y P/S __ CODES __

CALC REQ'D/AFF [ ] YES [Y] NO CALC NO: NA

CARR REQ'D: [Y] YES [ ] NO CARR NO: 2119

FSAR CR REQ'D [ ] YES [Y] NO CR NO: NA

W CONCURRENCE: N/A

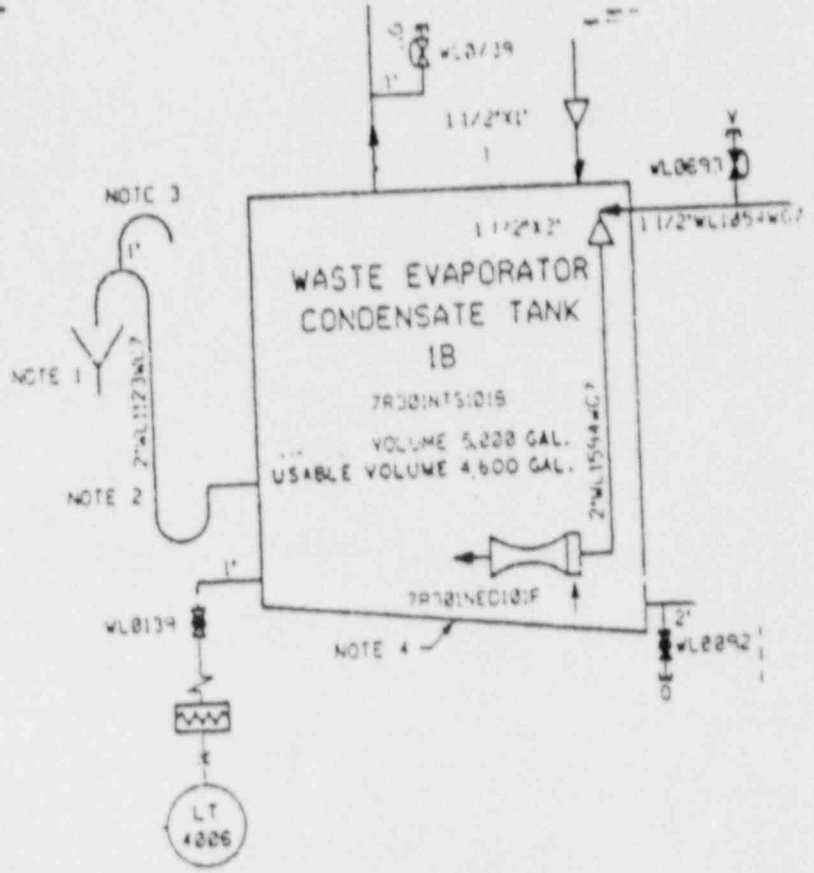
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14928

1. PAGE 2 OF 3

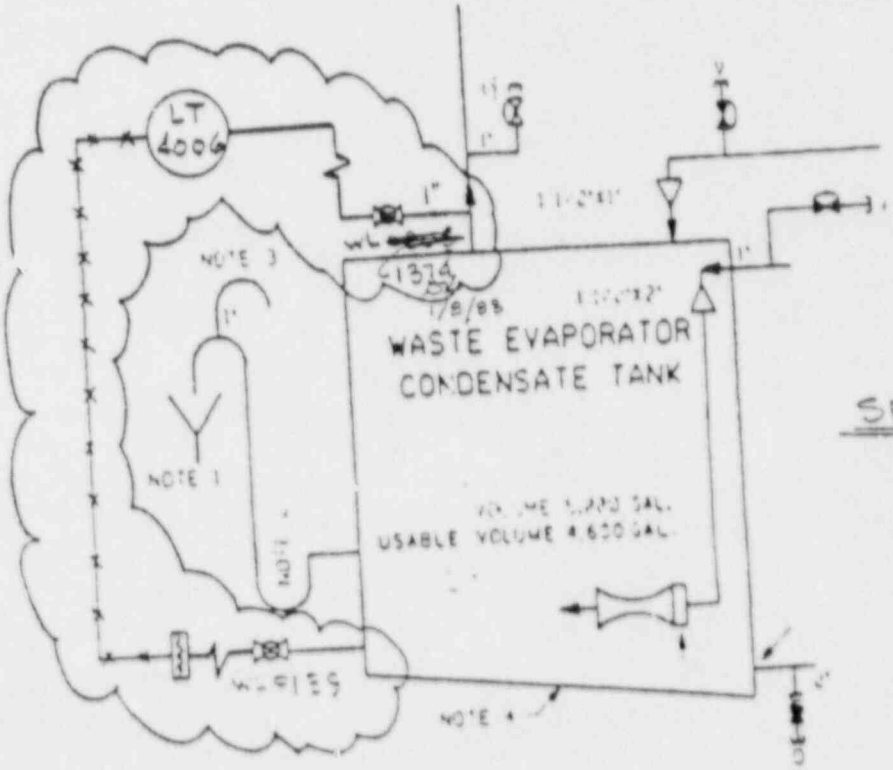
2 NO. HBM-01481

FIELD CHANGE REQUEST
CONTINUATION SHEET

EXISTING



CHANGE



SEO-NOTE
SOME
INFO OMITTED
FOR CLARITY

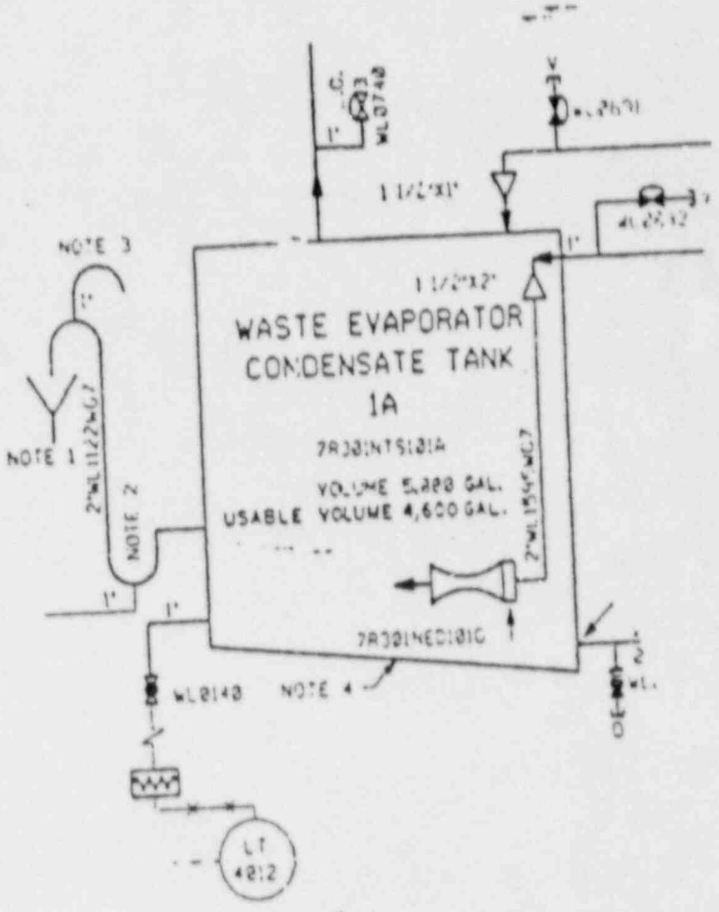
SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14928

1. PAGE 3 OF 3

2. NO HBM-01481

FIELD CHANGE REQUEST
CONTINUATION SHEET

EXISTING



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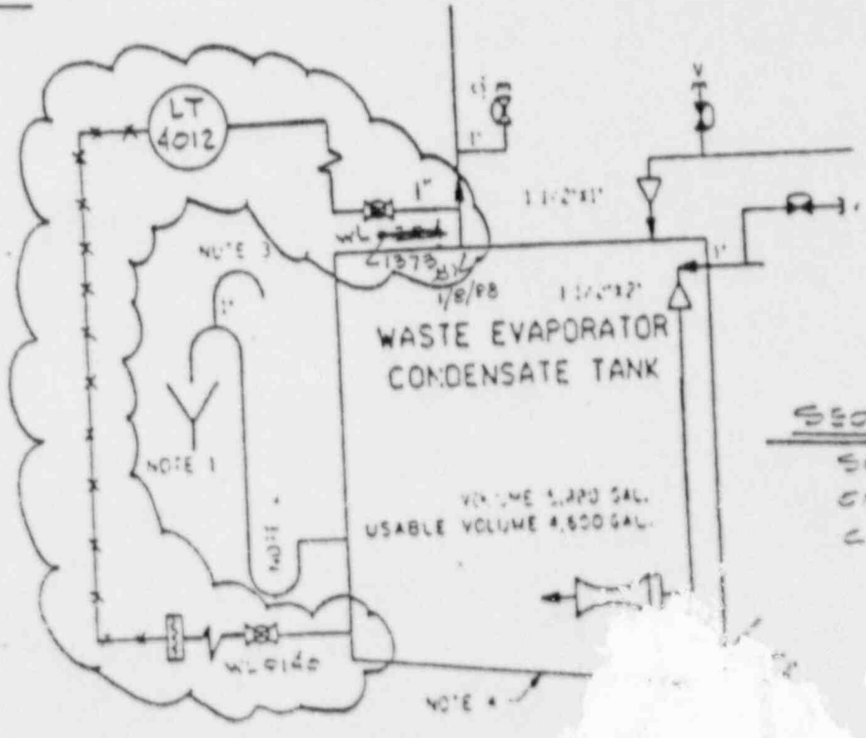


SEO NOTE

SOME INFO OMITTED FOR CLARITY

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. HBM-01481 Revision No. 0

Title FCR FOR 7R309F05023#1 & #2

Check one: ( ) Procedure ( ) Plant Modification (✓) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Gregory Kaiser — BEC Cognizant Engr. Signature
1/4/88 — Date
( ) Yes (✓) No

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

[signature] — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (✓) No

3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?

Gregory Kaiser — BEC Cognizant Engr. Signature
1/4/88 — Date
( ) Yes (✓) No

4. Does the subject of this review require a change to the Technical Specifications?

[signature] — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (✓) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST

2A START UP NUMBER: 1 WL 02
U-1 RELEASED FOR TEST
U-2 NOT RELEASED FOR TEST

1 PAGE 1 OF 5
2 NO HBP-03831
2B BUILDING MAB

3. Q.CL.	4. DWG OR SPEC.	I	N/I	5. REV	6. UNIT	3. Q.CL.	4. DWG. OR SPEC.	I	N/I	5. REV	6. UNIT
7	7M369PWL277-A47	■		3	1&2						
7	7M369PWL277-A47A	■		1	1&2						

7 REASON FOR REQUEST: Provide connection with valve on vent Header of waste Evaporator Condensate Tank 1A & 1B

7A THIS FCR SUPERSEDES FCR(S): N/A

8 PROPOSED CHANGE

Connect Low Pressure side of Level Transmitters NIWL-LT-4012 & NIWL-LT-4006 into vent Header System.

See Attached details.

TURNOVER STATUS

8A SYSTEM (DOC)	8B SYSTEM (PHY)	8C. AREA (DOC)	8D. AREA (PHY)
☑ YES ☐ NO	☑ YES ☐ NO	☑ YES ☐ NO	☑ YES ☐ NO

8E WORK AUTHORIZATION: ☐ YES ☑ NO

9 INITIATOR	DATE	10. FIELD ACCEPTANCE	DATE	10A. S.U. CONCURRENCE	DATE
Ken Smith 7188	1/8/88	N/A ACCEPTOR		N/A CONCURRENCE	

11 PROJECT ENGINEERING DECISION: ☑ APPROVED ☐ DISAPPROVED

11. LOSE	DATE	12A. EQE	DATE
[signature]	01-08-88	NA [signature]	1-8-88

13. PQAE	DATE	14. PE	DATE	17. NPOD	DATE
NA [signature]	1/11/88	N/A [signature] 1/11/88		[signature]	2/11/88

15. MLBP ENG'R DATE — 16. MLBP OR QA DATE

REMARKS

COORDINATION REQ'D: ☑ YES ☐ NO CIVIL __ ELEC __ I&C ✓ MECH __ P/D __ P/S __ CODES __

CALC REQ'D/AFF ☐ YES ☑ NO CALC NO. __

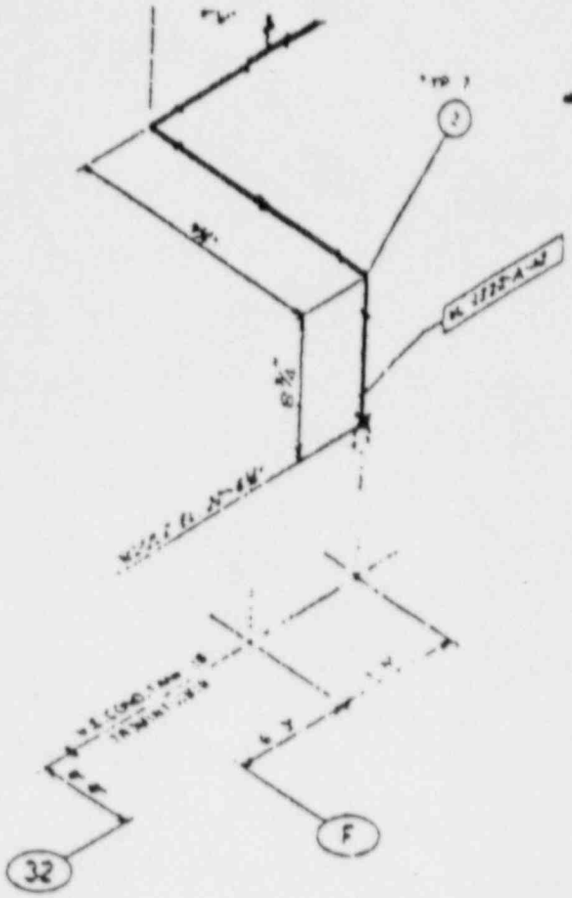
CAPR REQ'D.: ☑ YES ☐ NO CAPR NO 2119

FSAR CR REQ'D: ☐ YES ☑ NO CR NO.: __

W CONCURRENCE N/A

FIELD CHANGE REQUEST
CONTINUATION SHEET

Before



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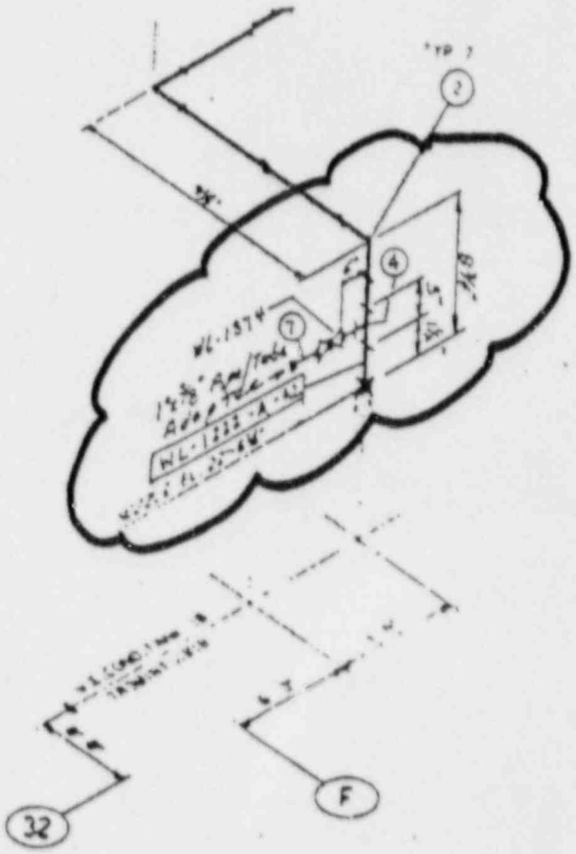
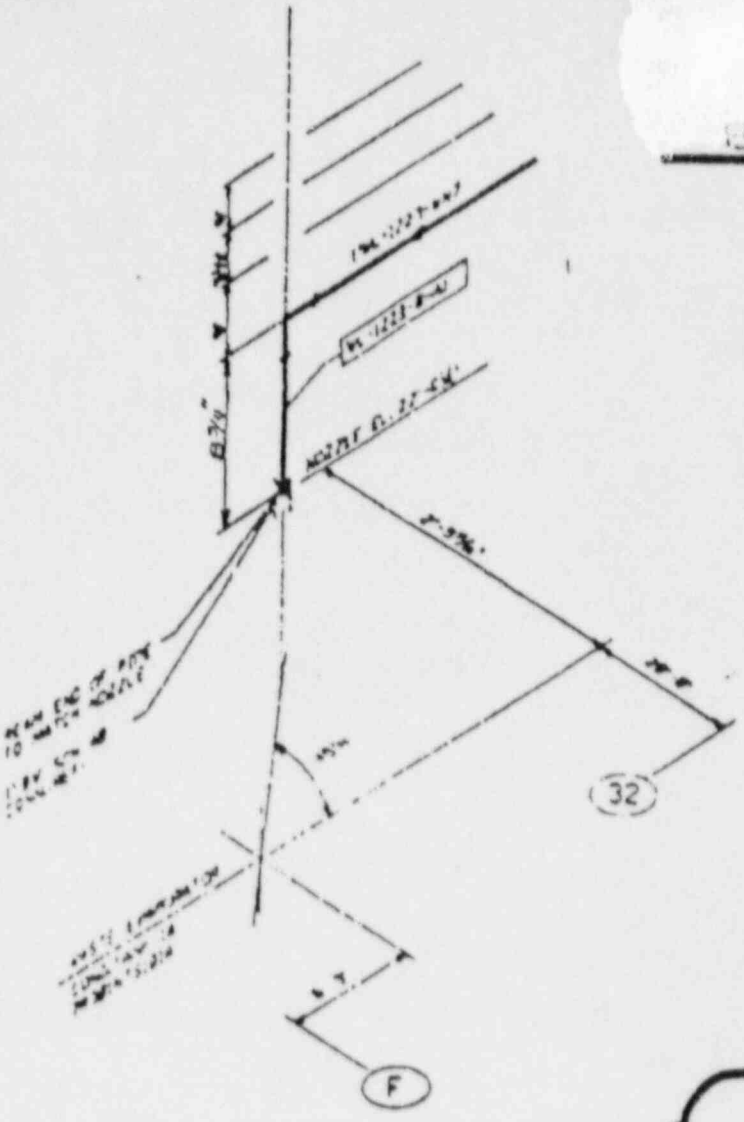


FIELD CHANGE REQUEST
CONTINUATION SHEET

BEFORE



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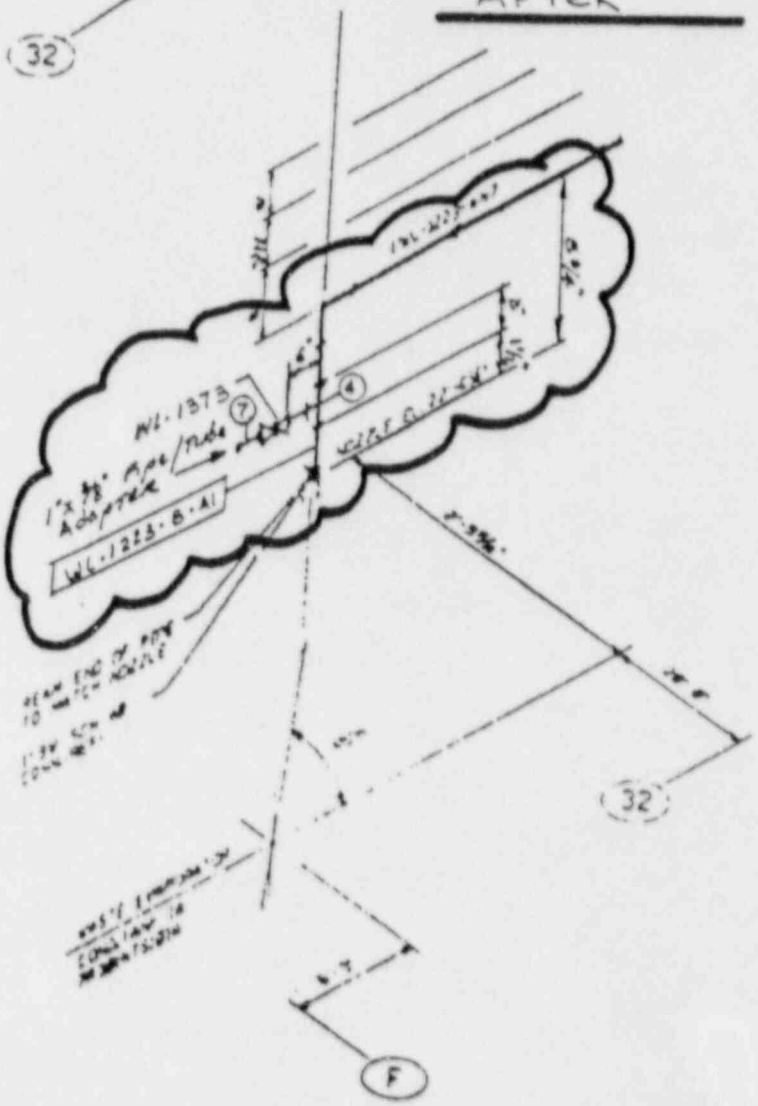


C

LOOSE SHIELD TIE REPORT

X3165 BOM SHT 1 OF 1

DATE : 25-SEP1-1984

ITEM NO	LENGTH Ft In 1/8 QNTY	RUN OR LGE SZ	BRCH OR 2nd SZ	RUN SCH WT WALL	2nd SCH WT WALL	RATING	END CON 1st	END CON 2nd	ITEM DESCRIPTION	MATERIAL SPECIFICATION	SPEC CLASS	HEA NO
1	53' -0 3/8	1		80					PIPE	ASTM A-106 GR B SMLS	WN7	
2	7	1				3000#	SOCW	SOCW	90 DEG ELL	ASTM A-105	WN7	
3	1	1				3000#	SOCW	SOCW	45 DEG ELL	ASTM A-105	WN7	
4	8	1				3000#	SOCW	SOCW	TEE	ASTM A-105	WN7	
5	2	1				3000#	SCRD		CAP	ASTM A-105	WN7	
6	1	1 (UNIT 2)				3000#	SOCW	SOCW	COUPLING	ASTM A-105	WN7	

Before

FIELD CHANGE REQUEST
CONTINUATION SHEET

UNIT 1 or 2

This BOM dwg no. supersedes the following BOM dwg no.'s

Drawing no.	SHT	REV	Drawing no.	SHT	REV
N / A					

1 REVISED AS NOTED

0 ISSUED FOR CONSTRUCTION

SIGNATURES ON FILE

REV	REVISION	DFT	CAR	QI	FOR	PIM	DATE
							20DE3

BECHTEL ENERGY CORPORATION
Houston, Texas

HOUSTON LIGHTING and POWER
South Texas Project

JOB NO. 14926

SYSTEM ISOMETRIC DRAWING NUMBER	SHEET NO.	SPEC
7M369FWL277	A47	WN7
BILL OF MATERIAL DRAWING NUMBER	SHEET NO.	REV
7M369FWL277	A47A of A47A	1

1. PAGE 4 OF 5

CB NO. 1413

WHSP-0383V

ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST
CONTINUATION SHEET

1. PAGE 5 OF 5

40HBP-03831

LOOSE SHIPPED ITEM REPORT

X3165 BOM SHT 1 OF 1

DATE : 25-SEPT-1984

ITEM NO	LENGTH OR QNTY	RUN OR LGE SZ	BRCH OR 2nd SZ	RUN SCH WT WALL	2nd SCH WT WALL	RATING	END CON 1st	END CON 2nd	ITEM DESCRIPTION	MATERIAL SPECIFICATION	SPEC CLASS
1	53' -0 5/8	1		80					PIPE	ASTM A-106 OR B SMLS	WN7
2	7	1				3000#	SOCW	SOCW	90 DEG ELL	ASTM A-105	WN7
3	10	1				3000#	SOCW	SOCW	45 DEG ELL	ASTM A-105	WN7
4		1				3000#	SOCW	SOCW	TEE	ASTM A-105	WN7
5		1				3000#	SCRD		CAP	ASTM A-105	WN7
6	1	1	(UNIT 2)			3000#	SOCW	SOCW	COUPLING	ASTM A-105	WN7
7	2	1	3/8				SOCW	Tube	Pipe/Tube Adapt.		

AFTER

UNIT 1 or 2	This BOM dwg no. supersedes the following BOM dwg no.'s			
Drawing no.	SHT REV	Drawing no.	SHT REV	
N / A				

REV	REVISION	DFT	CKR	QL	FOS	PEM	DATE
1	REVISED AS NOTED		JWL				10-3
0	ISSUED FOR CONSTRUCTION	SIGNATURES ON FILE					20DE

BECHTEL ENERGY CORPORATION
Houston, Texas

HOUSTON LIGHTING and POWER
South Texas Project

JOB NO.	SYSTEM ISOMETRIC DRAWING NUMBER	SHEET NO.	SPEC
	7M369PWL277	A47	WN7
	BILL OF MATERIAL DRAWING NUMBER	SHEET NO.	REV
14926	7M369PWL277	A47A of A47A	1

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No: ECR HBP-03831 Revision No: —

Title: VENT HEADER CONNECTIONS

Check one: ( ) Procedure (X) Plant Modification ( ) Other

Check one: ( ) Quality Related (X) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

KEN SMITH — BEC Cognizant Engr. Signature
1/8/88 — Date
( ) Yes (X) No

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Cindy Hall — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (X) No

3. Does the subject of this review conduct tests and or experiments not described in the FSAR?

KEN SMITH — BEC Cognizant Engr. Signature
1/8/88 — Date
( ) Yes (X) No

4. Does the subject of this review require a change to the Technical Specifications?

Cindy Hall — HL&P Responsible Engr. Signature
1/11/88 — Date
( ) Yes (X) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

25. PAGE 1 OF 2

CONTRACTOR WORK REQUEST

WCC 8721261

1PGP03-ZE-0027-1, REV. 5 (PAGE 1 OF 2)

28. C002567

28a. CWR REV. No.

1. UNIT No.	2. SYSTEM / AREA No.	3. SYSTEM / AREA DESCRIPTION	4. BLDG. LOC.	5. ROOM No.	6. REF. DOCUMENTS	39. PFN No.
1	WL / MAB	WC / MAB 10' RM. 59	MAB	59	TR309 F05023 SM1592 C0110 HB2-01949, HBP-02357, HBM-01481	Z12

7. TPNS / ITEM No.	8. ITEM DESCRIPTION	9. QUALITY CLASS 7	10. ASME CODE ☒ NO ☐ YES	11. WORK ASSIGNED TO
N1WL-LT-4006 N1WL-LT-4012	W.E.C.T. 1A & 1B LEVEL TRANSMITTERS	NSR ☒ SR ☐	SECTION ☐ I ☐ III ☐ VIII ☐ XI	CUI

13. DESCRIPTION OF WORK:

CONNECT LOW PRESSURE SIDE OF LEVEL TRANSMITTERS N1WL-LT-4012 N1WL-LT-4006 TO VENT HEADER FROM W.E.C.T. 1A, 1B PER FCRs HB2-01949, ~~HBP-02357~~ ~~HBP-02358~~ HBM-01481

~~Stub~~

12. MCL ITEM No. 88006795 CL.

29. WORK PACKAGE No. C02567-CUI-01

RECOMMENDED PLANT MODE	TECH.SPEC. REQD.	TECH.SPEC.SECTIONS	EQUIP.STATUS CODE
1 2 3 4 5 6 (ALL)	☒ NO ☐ YES	N/A	OD

26. REQUESTOR (NAME-PRINT)	DATE	PH. EXT.	ORG.	27. NPOD / NC ENGINEER	DATE	PH. EXT.	ORG.	NPOD / NC SUPERVISOR	DATE
WD Markham	2/25/88	8557	PED	WD MARKHAM	02/25/88	8557	PED		2/25/88

30. APPROVAL	31. APPROVAL	32. APPROVAL
CONTRACTOR REPRESENTATIVE: SIGNATURE	NPOD OUTAGE MANAGEMENT: SIGNATURE	NPOD / NC ENGINEER: WD Markham SIGNATURE
DATE: 3/28/88	DATE: 2/26/88	DATE: 03/29/88

33. IMPLEMENTATION APPROVAL

SHIFT SUPV. OR CHEM. OPS. FOREMAN: SIGNATURE DATE: 4/1/88

COMMENTS:

34. WORK ACCEPTANCE	36a. HL&P QC REVIEW & ACCEPTANCE	37. FINAL ACCEPTANCE
CONTRACTOR REPRESENTATIVE: SIGNATURE	NON-QUALITY RELATED RECORDS (REVIEW): NOT REQ. SIGNATURE	NPOD / NC ENGINEER: WD Markham SIGNATURE
DATE: 4/7/88	DATE: 3/28/88	DATE: 04/08/88
35. WORK ACCEPTANCE	36b. QUALITY RELATED RECORDS REVIEW & ACCEPTANCE: N/A SIGNATURE	38. ACCEPTANCE:
NPOD / NC ENGINEER: WD Markham SIGNATURE	DATE	SHIFT SUPV. OR CHEM. OPS. FOREMAN: SIGNATURE
DATE: 04/08/88		DATE: 4/11/88

THIS F[illegible], WHEN COMPLETE, SHALL BE RETAINED FOR THE LIFE THE PL[illegible]

CS AD 2217A (6-18-87) R1 (10-15-87) 92 (12-7-87) R3 (1-11-88)

[illegible] 3-29-88

[illegible] Clerk 3-30

APPENDIX D, ATTACHMENT 3

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

A PORC Review was not required for this design change.

APPENDIX D, ATTACHMENT 4

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

The ste Evaporator Condensate Tank Condensate level instrument was or[illegible]nally installed with the low pressure side of the transmitter connected to atmosphere. This transmitter was calibrated based on atmosphere, however the vapor space at the top of the tank experiences pressure variations due to condensation of liquid in the plant vent header that is connected to this tank. This design change added piping to connect the low pressure side of the level transmitter to the vapor space of the tank, thus eliminating the effect of any pressure variations that might occur in the tank. Two new isolation valves, one for each low pressure side line was also added. This change was documented in the applicable Field Change Request.

APPENDIX D, ATTACHMENT 5

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

This change allows proper level indication in the Waste Evaporator condensate Tank and will cause no additional exposure to plant personnel.

APPENDIX D, ATTACHMENT 6

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

This change allows proper level indication in the Waste Evaporator Condensate Tank and it does not change the amount or chemistry of any waste stream in the Liquid Waste Processing System. This modification does not change the amount of liquid and gaseous effluents, and solid waste predicted in the License application and amendments.

APPENDIX D, ATTACHMENT 7

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

This modification allows proper level indication in the Waste Evaporator Condensate Tanks and does not affect the amount or radiochemistry of any waste stream. This modification will not result in a change to the expected maximum exposures to a member of the public in the UNRESTRICTED AREA and to the general population as previously estimated in the License application and amendments.

APPENDIX D, ATTACHMENT 8

Modification to Level Indication Equipment for
Waste Evaporator Condensate Tanks

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX E

Deletion of Vendor Supplied Flow and Pressure Switches on Liquid Waste Process System Pump Seal Water Skid

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual release for the period prior to when the changes are to be made.

APPENDIX E, ATTACHMENT 1

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

A 10CFR50.59 Determination Review Form was completed by Support Engineering. It was determined that there were no unreviewed safety questions and no further action was required. See attached forms for detail.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. 1-S-EST-0485 Revision No. 00

Title DELETE VENDOR SUPPLIED FLOW & PRESSURE SWITCHES

Check one: ( ) Procedure (✓) Plant Modification ( ) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Peter A. deSouza PD — 10/29/87 — BEC Cognizant Engr. Signature / Date — ( ) Yes (✓) No

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Vincent C. Jones — 11/17/87 — HL&P Responsible Engr. Signature / Date — ( ) Yes (✓) No

3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?

Peter A. deSouza PD — 10/29/87 — BEC Cognizant Engr. Signature / Date — ( ) Yes (✓) No

4. Does the subject of this review require a change to the Technical Specifications?

Vincent C. Jones — 11/17/87 — HL&P Responsible Engr. Signature / Date — ( ) Yes (✓) No

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and/or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

DESIGN CHECKLIST (DCL)

Initiating Change Document No. 1-J-FST-0465

Title Doc.: DELETE VENDOR SUPPLIED FLOW & PRESSURE SWITCHES

Rev. 00 Page 1 Of 2

Start-up System: WL05 Title: LIQUID WASTE SYSTEM

This checklist must be attached to the initiating change document during the entire review and approval process up to the point of issuance by Project Document Control. Reference PED-041.

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REVISION (Must provide specific Reference No.) DOCUMENT NO. (OR SECTION)	REV.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
☐	☑	Licensing Documents				
☐	☑	FSAR				
☐	☑	FHAR				
☐	☑	ER				
☐	☑	Technical Specifications (Plant)				
☐	☑	Deficiency Evaluation Report (DER)				
☐	☑	Design Criteria				
☐	☑	System Descriptions				
☐	☑	Design Calculations				
☐	☑	Specifications				
☐	☑	ASME Design Specifications				
☐	☑	Stress Report				
☐	☑	N-5 Package (Piping & Supports)				
☐	☑	Penetration Seals				
☐	☑	Design Drawings				

ORIG. [signature] Date 10/21/87 EGS T. Wade DATE 10/29/87 PE [signature] DATE 11/16/87

APPENDIX E, ATTACHMENT 2

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

The Liquid Waste Processing System collects and processes radioactive liquid wastes generated during plant operation and reduces radioactivity and chemical content to acceptable levels for discharge or recycling.

The Liquid Waste Processing System consists of the waste Holdup Tank, which collects radioactive liquid from the Reactor Coolant Drain Tank and the Reactor Containment Building sumps, the Floor Drain Tank, which collects liquids from floor drains in the Mechanical Auxiliary Building, the Condensate Polishing Regenerative Waste Collection Tank, which collects radioactive laboratory drains, and serves as an alternate tank for floor drains. Also included in the system is the Laundry and Hot Shower Tank, which collects water from the hot shower facility.

These tanks are all equipped with eductors to ensure proper mixing prior to transfer. The liquid collected in these tanks may be processed in accordance with the Process Control Program. This program selects the optimum mode for processing, filtration, demineralization, evaporation, or a combination of the three. After processing by one of these methods, the liquid is then collected in one of six Waste Monitor Tanks and analyzed prior to discharge.

This change involved the seal water system which supplies seal water to the pumps in the Liquid Waste Processing System. Vendor supplied flow and pressure switches were supplied with the seal water pump and tank skid. These switches supplied alarm functions that were redundant to pressure indication and flow indication and control provided in the remainder of the system. As a result, nuisance alarms were received at the Radwaste Control Panel whenever the system was operated. In order to solve this problem, the control and alarm functions of these vendor supplied switches were deleted. (See attached work documentation and 10CFR50.59 Review Determination Form)

COMMERCIAL OPERATIONS
IMPLEMENTATION SCHEDULE

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
COVER SHEET

CCP NO.	1-J-FST-0482
00	
REV NO.	ISSUE DATE

ORIGINATING DISCIPLINE: CONTROLS TREND CODE: E-12

RESPONSIBLE ENGINEER: A. de Souza DATE: 4/10/87

SEISMIC CAT: N/A Q-CLASS OF WORK TO BE PERFORMED: 9

FSAR CHANGE REQUIRED: ☐ YES ☒ NO BUILDING AREA: MAB

STARTUP SYSTEMS/SUB SYSTEMS AFFECTED: WL05

BASIS OF CHANGE: ☑ CARR ~~DCAR~~ NO. 1358 ☒ PCN NO. FL 3597

☐ SUPPLIER N/A ☒ PUNCH LIST NO. WL01-103

☐ CLIENT N/A ☐ OTHER N/A

CHANGE CATEGORY: ☐ BACK CHARGE NA ☐ OTHER N/A

TITLE OF CHANGE: DELETION OF ALARM FUNCTION FROM VENDOR SUPPLIED FLOW SWITCHES AND PRESSURE SWITCHES ON THE LWPS PUMP SEAL WATER SKID.
WORK TO BE DONE BY NPOD.

PARTIAL PACKAGE: ☐ YES ☒ NO SEQUENCE: NONE

DISCIPLINE COORDINATION

Mohan Bab	10/30/87	N/A	
ELECTRICAL ECS	DATE	CIVIL ECS	DATE
N/A		[signature]	11-9-87
NUCLEAR ECS	DATE	MECHANICAL ECS	DATE
N/A		T. Klaustow	7-15-87
PLANT DESIGN ECS	DATE	CONTROLS ECS	DATE
N/A		N/A	
EQ ECS	DATE	PSSG ECS	DATE

APPROVALS:

ORIGINATING DISCIPLINE ECS T. Ward DATE 10-28-87

Vincent C. Jones 11/17/87
~~PROJECT ENGINEER~~ [signature] DATE 11/16/87

REV HL&P DATE
~~14926-001~~

[signature]
CONFIGURATION CONTROL COORDINATOR
(Includes site coordination)
DATE 11-17-87

FIELD NOTIFICATION OF CHANGE COMPLETION:

ORGANIZATION SIGNATURE DATE

REFERENCE FOR PARTIAL COMPLETION:

ENGINEERING CLOSE-OUT:

ORIGINATING DISCIPLINE ECS DATE

UNIT 2 EQUIVALENT:
2-J-FST-0486

STP 1279 (10/86) D-30

0 [signature] 2/?/88
REV NPOD DATE
...01

CCP NO. 1-J-FST-0485 REV. 00

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
CONTENTS

	REQUIRED THIS REV.	
1. DESIGN CHANGE BASIS	YES ☒	NO ☐
2. FSAR CHANGE REQUEST PACKAGE	YES ☐	NO ☒
3. MATERIALS SHEET	YES ☐	NO ☒
4. DOCUMENTATION LIST	YES ☒	NO ☐

X-FCR'S INCORPORATED INTO THIS PACKAGE:

X-FCR NOS.: N/A _____, _____, _____,

SOUTH TEXAS PROJECT

DESIGN CHANGE BASIS

CCP NO. 1-J-FST-0485

CCP REV. 00

DESCRIPTION OF CHANGE

Information provided in the Design Change Basis is provided for information only to enhance the definition of the design change as provided in the attached drawings. Installation and QC verification is to be accomplished in accordance with the drawings only. No XFCR's will be accepted against the Design Change Basis.

THIS CCP IS TO DELETE THE CONTROL AND ALARM FUNCTIONS OF THE FOLLOWING VENDOR SUPPLIED INSTRUMENTS ON THE LWPS PUMP SEAL WATER SKID:

NIWL-FIS-4928
4930
4932
4934
4936
4938
4940
4942
4944

NIWL-PIS-4929
4931
4933
4935
4937
4939
4941
4943
4945

THE FLOW SWITCHES ARE TO BE DETERMINATED AT THE SWITCHES AS EXPLAINED LATER. THE PRESSURE SWITCHES ARE TO BE DETERMINATED AT THE ANNUNCIATOR WINDOW 9B ON ZLP-189.

SOUTH TEXAS PROJECT

DESIGN CHANGE BASIS

CCP NO. 1-J-FST-0485

CCP REV. 00

DESCRIPTION OF CHANGE

ELECTRICAL

1. REF. EE580 INTERIM DATA BASE
   DELETE CABLES, DETERMINATE BOTH ENDS, TAPE AND TAG "SPARE".

2. REF. IDCN TO DWG 4089-00120-DIC
   A) DETERMINATE WIRE #966 (DESIGNATED W2A-9) FROM TB29-66.
   B) TERMINATE NEW WIRE #966 (DESIGNATED FU57-2) TO TB29-66.

3. REF. IDCN TO DWG 4089-00121-DIC
   A) DETERMINATE WIRES #727, 966, 726, 797 AND 713A FROM RELAY 20X/FIS4942 CONTACT PTS' # 1, 3, 2, 4 & 6 RESPECTIVELY.
   B) DETERMINATE WIRES #966 & #713A FROM RELAY 20X/FIS4938 CONTACT PTS #3 & #6 RESPECTIVELY.
   C) DETERMINATE WIRE #713A (DESIGNATED 20X/FIS4938-6) FROM RELAY 20X/PA105 CONTACT PT. #6.
   D) TERMINATE NEW WIRE #713A (DESIGNATED SLUG 53-2) TO RELAY 20X/PA105 CONTACT PT. #6.
   E) DETERMINATE WIRE #726 (DESIGNATED 20X/FIS4942-3) FROM RELAY 20X/FV5013 CONTACT PT. #5.
   F) DETERMINATE WIRE #797 (DESIGNATED 20X/FIS4942-4) FROM RELAY 20X/FV5098 CONTACT PT. #5.

4. REF IDCN TO DWG 4089-0122-EIC
   A) DETERMINATE WIRE #727 (DESIGNATED 20X/FIS4942-1) FROM FU39-2.
   B) TERMINATE NEW WIRE #727 (DESIGNATED 62/PA105-2) TO FU39-2.

C) DETERMINATE WIRE # 701 (DESIGNATED Z7-1) FROM FU53-2

D) DETERMINATE WIRE # 713A (DESIGNATED 20X/FIS4942-6) FROM SLUG 53-2.

E) TERMINATE NEW WIRE # 713A (DESIGNATED 20X/PA105-6) TO SLUG 53-2.

F) DETERMINATE WIRE # 966 (DESIGNATED 20X/FIS4938-3) FROM FU57-2.

G) TERMINATE NEW WIRE # 966 (DESIGNATED Z9-66) TO FU57-2.

H) DETERMINATE WIRE # 798 (DESIGNATED 20X/FIS 4942-3) FROM FU58-2.

I) TERMINATE NEW WIRE # 798 (DESIGNATED 62/PA105-8) TO FU58-2.

5. REF IOCN TO DWG 4089-00124-EIC

A) DETERMINATE WIRE #727 (DESIGNATED 20X/FIS4942-1) FROM RELAY 62/PA105 CONTACT PT. # 2.

B) TERMINATE NEW WIRE #727 (DESIGNATED FU39-2) TO RELAY 62/PA105 CONTACT PT. #2.

C) DETERMINATE WIRE # 798 (DESIGNATED 20X/FIS4942-3) FROM RELAY 62/PA105 CONTACT PT. #8.

D) TERMINATE NEW WIRE # 798 (DESIGNATED FU58-2) TO RELAY 62/PA105 CONTACT PT. #8.

6. REF IOCN TO DWG 4089-00124 EIC

A) DETERMINATE WIRE #701 (DESIGNATED FU53-2) FROM Z7-1.

SOUTH TEXAS PROJECT

DESIGN CHANGE BASIS

CCP NO. 1-J-FST-0485

CCP REV. 00

DESCRIPTION OF CHANGE

7. REF IDCN TO DWG. 4089-00127-DIC
   A) DETERMINATE WIRES #966 & 967 FROM TBW2A-9 & W2A-10 RESPECTIVELY.

8. REF IDCN TO DWG. 4089-00128-DIC
   A) DETERMINATE WIRE #8119 (DESIGNATED W2-87) AND WIRE #8120 (DESIGNATED W2-88) FROM TB 28-119 & TB 28-120 RESPECTIVELY.

9. REF IDCN TO DWG. 4089-00129-EIC
   A) DETERMINATE WIRES #8119 & 8120 FROM FROM TBW2-87 & W2-88 RESPECTIVELY.

10. REF IDCN TO DWG. 4089-00131-DIC
    A) DETERMINATE WIRE #967 (DESIGNATED W2A-10) FROM RELAY 20X/FV-5039 CONTACT PT #5.

NOTE: 1. FIELD MAY RE-USED DETERMINATED WIRES IF POSSIBLE. OTHERWISE TAPE BOTH ENDS IF CANNOT BE DISCARDED.

BASIS OF CHANGE

These switches are not interlocked with thier corresponding pump and therefore cause nuisance alarms. The switches are also redundant to other pressure and flow switches in the system.

EQ CHECKLIST IMPACT YES ___ NO XX

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
DOCUMENTATION LIST

CCP NO.	1-I-FST-0485
REV.	00
PAGE	1 OF 3

DOCUMENTS ASSOCIATED WITH CHANGE			TITLE	IN CCP		I N F O	O N L Y	REMARKS	CLOSURE ACTION (If none, enter N/A)
COMPLETE DOC. NO. (If Vendor-Incl. Sub + AC)	REV. (BC)	AMEND. (I) NO.		YES	NO				
7R309F90017 #1	~~5~~ 6	U-0051	P&ID - LWPS PUMP SEAL WATER SKID	✓				IDCN (K)	
6R309Z42251	2		WL LOGIC DIAGRAM	✓				IDCN (K)	
6R309Z42252	2		WL LOGIC DIAGRAM	✓				IDCN (K)	
6R309Z42253	2		WL LOGIC DIAGRAM	✓				IDCN (K)	
6R309Z42257	5		WL LOGIC DIAGRAM	✓				IDCN (K)	
6R309Z42260	3		WL LOGIC DIAGRAM	✓				IDCN (K)	
6R309Z42292	2		WL LOGIC DIAGRAM	✓				IDCN (K)	
7R311Z47502	5		LOCAL ANNUNCIATOR LIST	✓				IDCN (K)	
5Z010Z48001	26		INSTRUMENT SETPOINT LIST	✓				IDCN (K)	

1

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
DOCUMENTATION LIST

CCP NO.	1-J-FST-0485
REV.	00
PAGE 2	OF 3

DOCUMENTS ASSOCIATED WITH CHANGE			TITLE	IN CCP		I N F O	O N L Y	REMARKS	CLOSURE ACTION (If none, enter N/A)
COMPLETE DOC. NO. (If Vendor-Incl. Sub + AC)	REV. (BC)	AMEND. (I) NO.		YES	NO				
9-E-WL02-02	2			✓				IDCN (K)	
9-E-WL07-02	2			✓				" (K)	
9-E-WL46-01	4			✓				" (K)	
9-E-WL47-01	3			✓				" (K)	
9-E-WL82-01	3			✓				" (K)	
9-E-WL84-02	1			✓				" (K)	
9-E-WL85-01	1			✓				" (K)	
9-E-WL50-01	4			✓				" (K)	
								"	
4089-00118-IC	D			✓				"	
4089-00120-IC	D			✓				"	
4089-00121-IC	D			✓				"	
4089-00122-IC	E			✓				"	
4089-00123-IC	E			✓				"	
4089-00124-IC	E			✓				"	
4089-00127-IC	D			✓				"	
4089-00128-IC	D			✓				"	

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
DOCUMENTATION LIST

CCP NO.	1-J-FST-0485
REV.	00
PAGE	3 OF 3

DOCUMENTS ASSOCIATED WITH CHANGE			TITLE	IN CCP		INFO ONLY	REMARKS	CLOSURE ACTION (If none, enter N/A)
COMPLETE DOC. NO. (If Vendor-Incl. Sub + AC)	REV. (BC)	AMEND. (I) NO.		YES	NO			
4089-00129-IC	E			✓			IDCN	
4089-00131-IC	D			✓			IDCN	
EE-580 DATED 4-4-87			INTERIM DATA BASE PRINTOUT	✓			PAGES 1 thru 4	

SOUTH TEXAS PROJECT

CCP NO. 1-J-ST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
7R309F900174		6		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 3

STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES. (REF. CARRS 1358 AND 1595).

DESCRIPTION OF CHANGE

(1) DELETE NOTE 5.

(2) ABANDON THE FLOW AND PRESSURE SWITCHES AS SHOWN ON PAGE 2.

(3) ADD THE FOLLOWING NOTE:

NOTE 12. THE SWITCH FUNCTIONS ON THESE INSTRUMENTS HAVE BEEN DELETED.

0 Vincent C. Jones 11/17/87
REV HL&P DATE
14926-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza 11/16/87			

Rev 0 [signature] 2/10/88
NPOD

11/16/87
DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

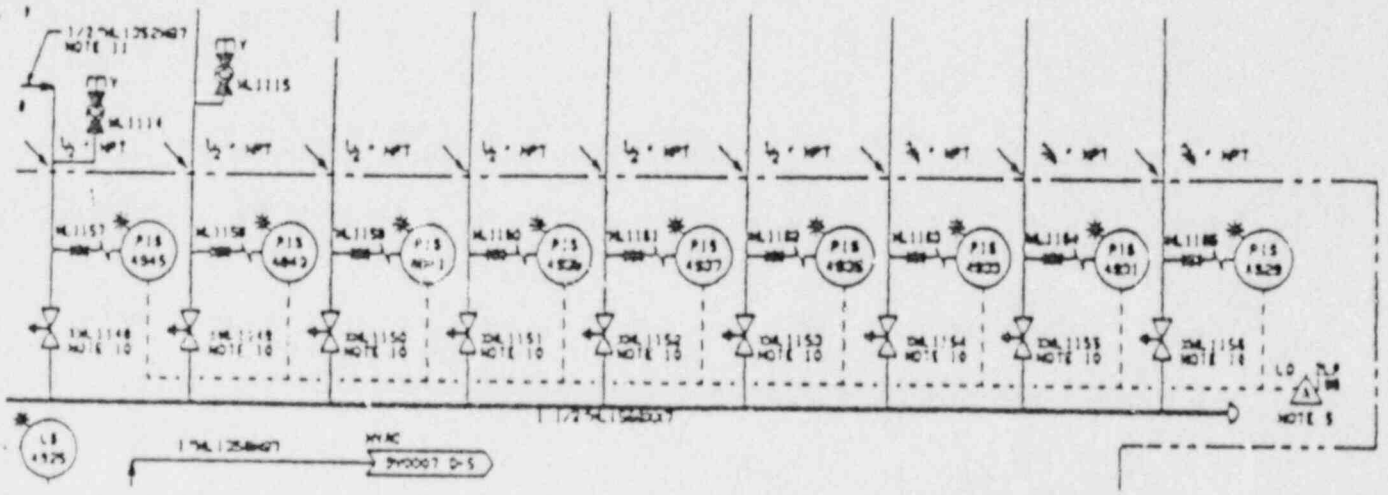
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DOC. REV.	DCN NO.
7R309F900171 ***		6		

IDCN NUMBER _____ ISSUED DATE _____

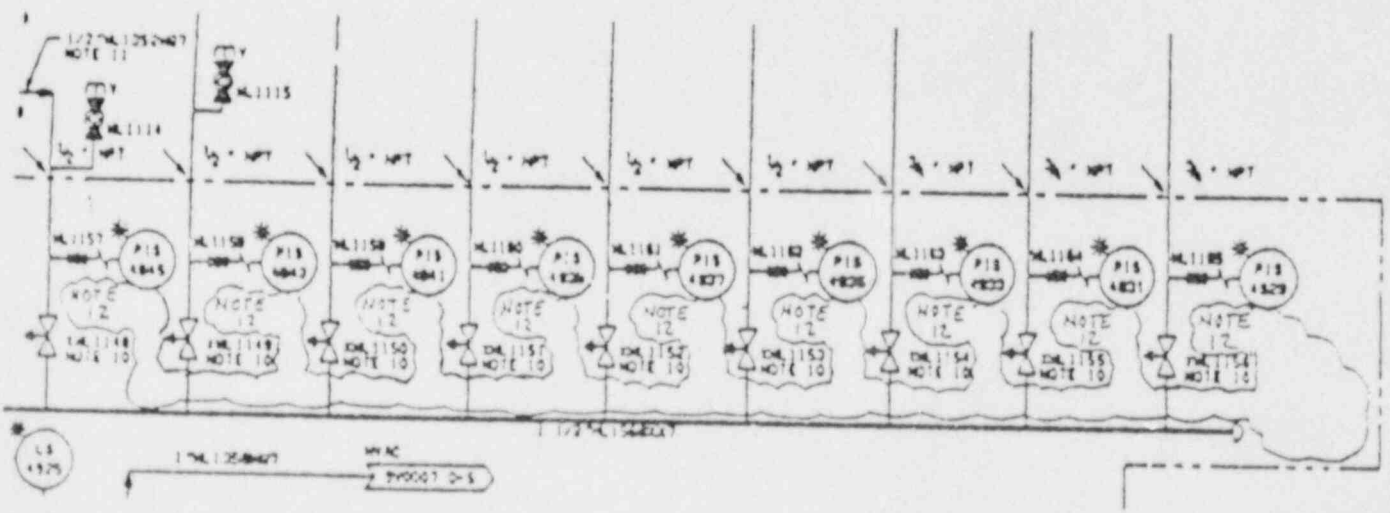
JOB NO. 14926 PAGE 2 OF 3

DESCRIPTION OF CHANGE:

BEFORE:



AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

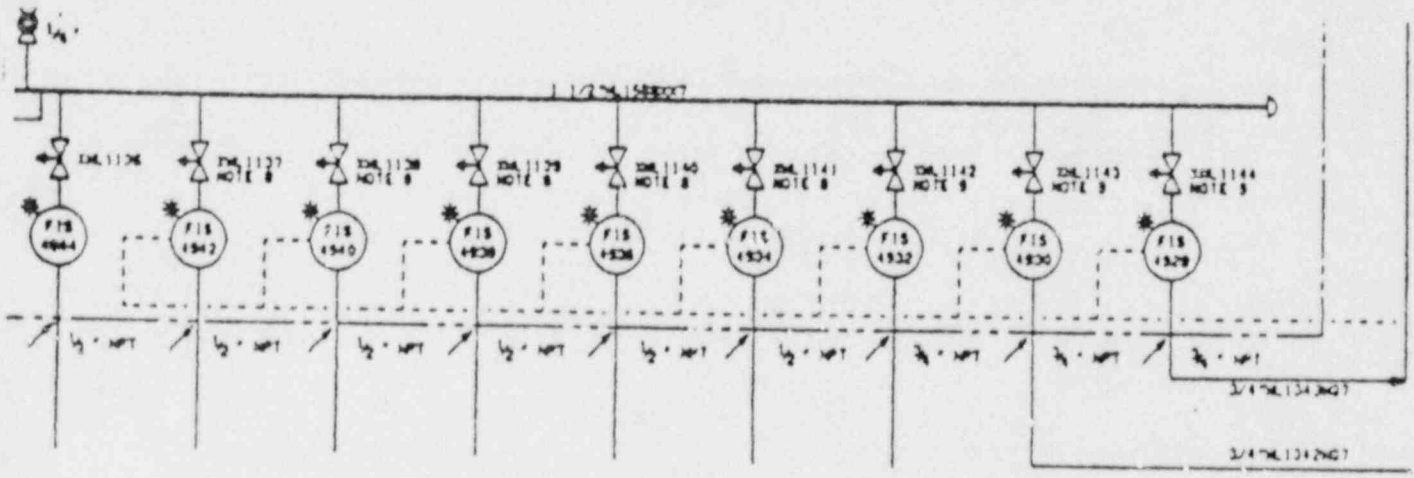
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
7R309F90017 #1		6		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 3 OF 3

DESCRIPTION OF CHANGE:

BEFORE:



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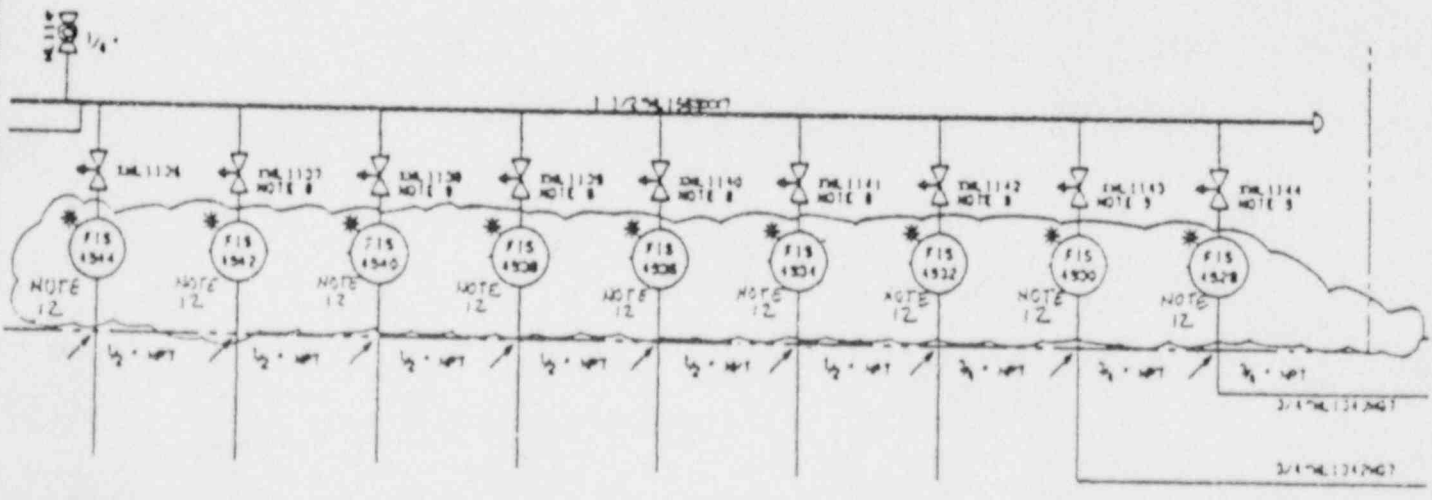


SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	OCN CONV. DATE: DWG. REV.	OCN CONV. DATE: OCN NO.
6R309Z42251		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

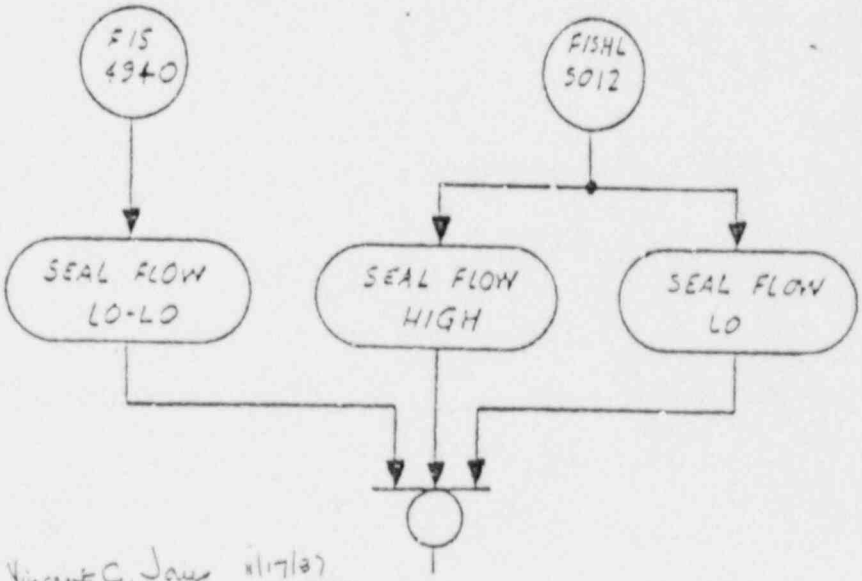
STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE & FLOW SWITCHES. (REF. CARRS 1358 & 1595.)

DESCRIPTION OF CHANGE

BEFORE:



O Vincent C. Jones 11/17/87
REV HL&P DATE

14626.601

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de SOUZA TDS 7/16/87	T. Black	T. Black	[illegible]

for O [signature] 2/10/88
NPED

11/16/87
DATE

STP 1294 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

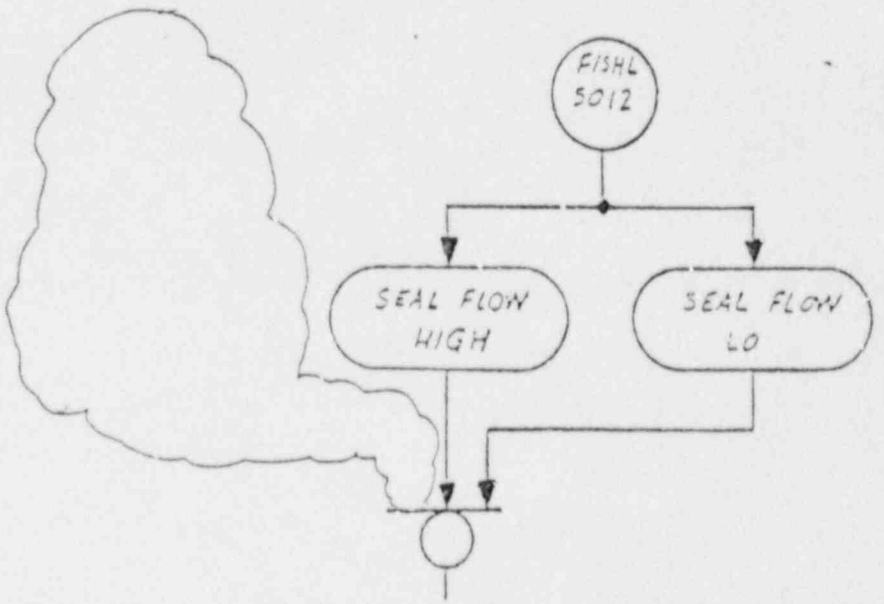
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309E42251		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
6R309E42252		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

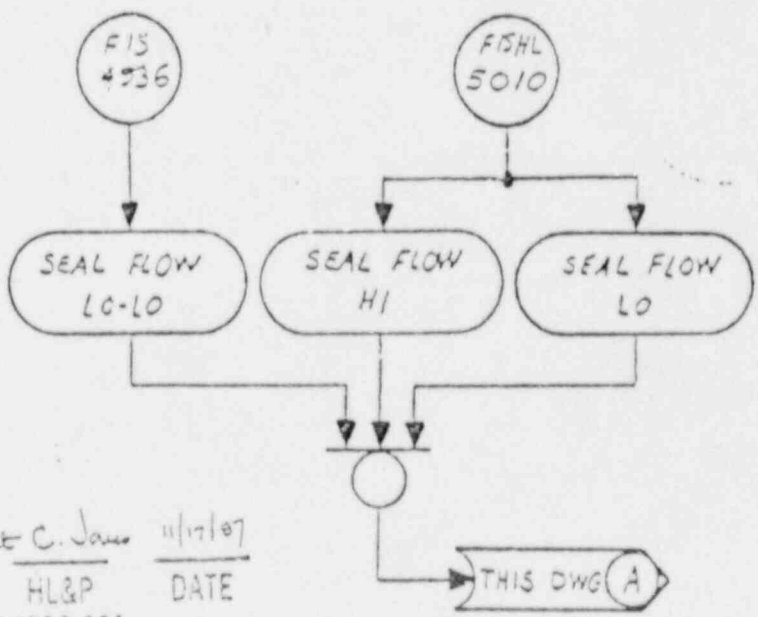
STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE & FLOW SWITCHES. (REF. CARRS 1358 & 1595.).

DESCRIPTION OF CHANGE

BEFORE:



0 Vincent C. Jaso 11/17/87
REV HL&P DATE
14326-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza 11/16/87			

Leo D [signature] 2/10/88
NFOD

11/16/87
DATE

STP 1234 (11/85) 0-30

SOUTH TEXAS PROJECT

DCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

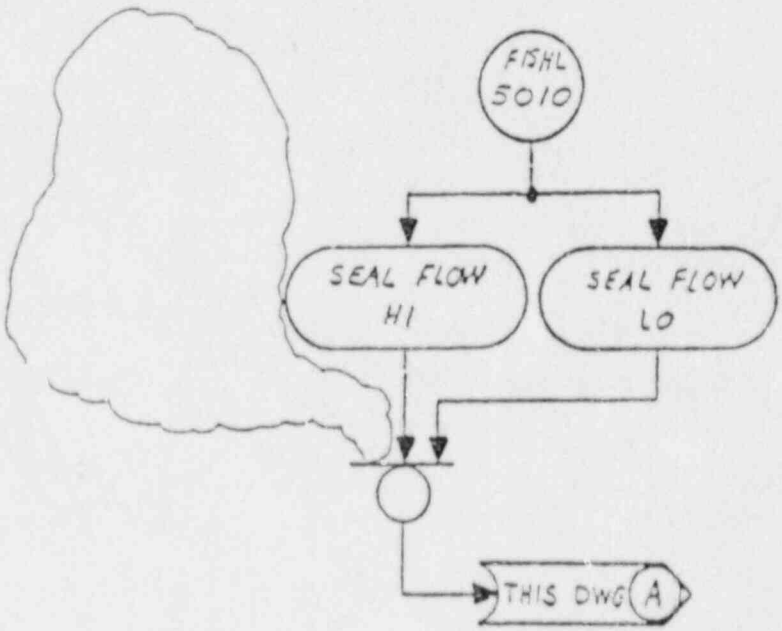
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309Z42252		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309Z42253		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 7

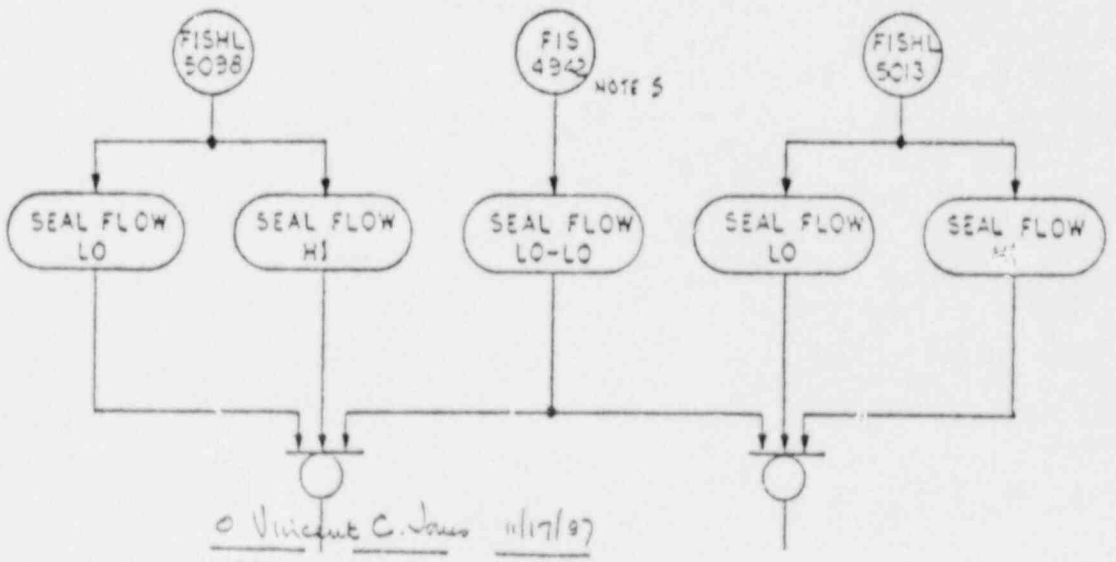
STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES. (REF. CARRS 1358 & 1595).

DESCRIPTION OF CHANGE

BEFORE:



o Vincent C. Jones 11/17/87
REV HL&P DATE
14926-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de SOUZA 11/6/87			

Rev.0 2/10/88 NPD

11/16/87
DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

DCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

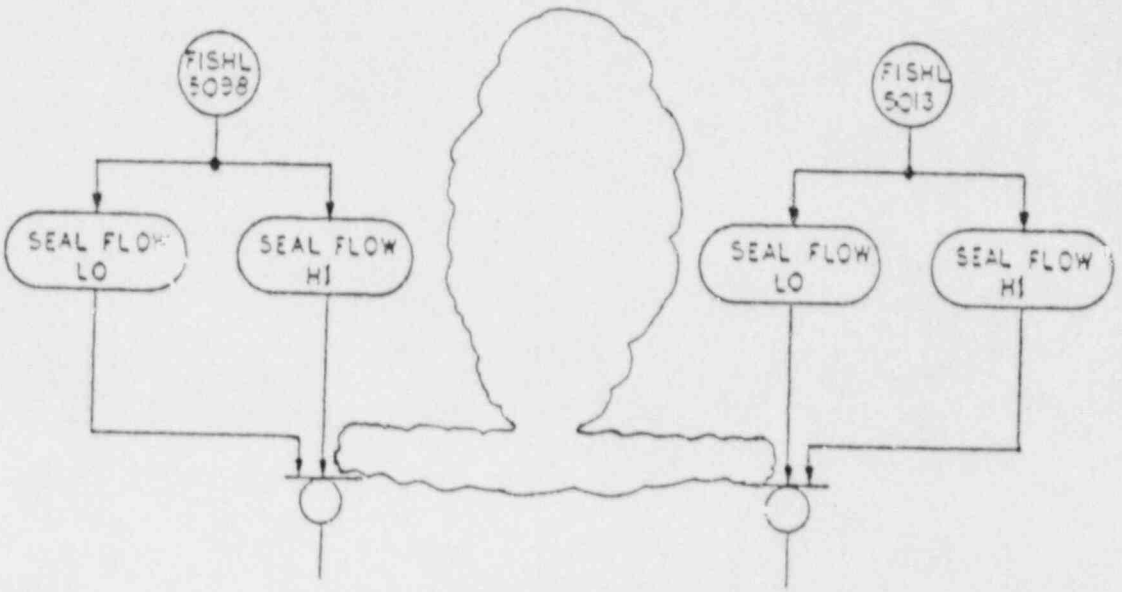
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN COMV. DATE: DUC. REV.	DCN NO.
6R309242253		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
6R309Z42257		5		

IDCN NUMBER _____ ISSUED DATE _____

JCN NO. 14926 PAGE 1 OF 2

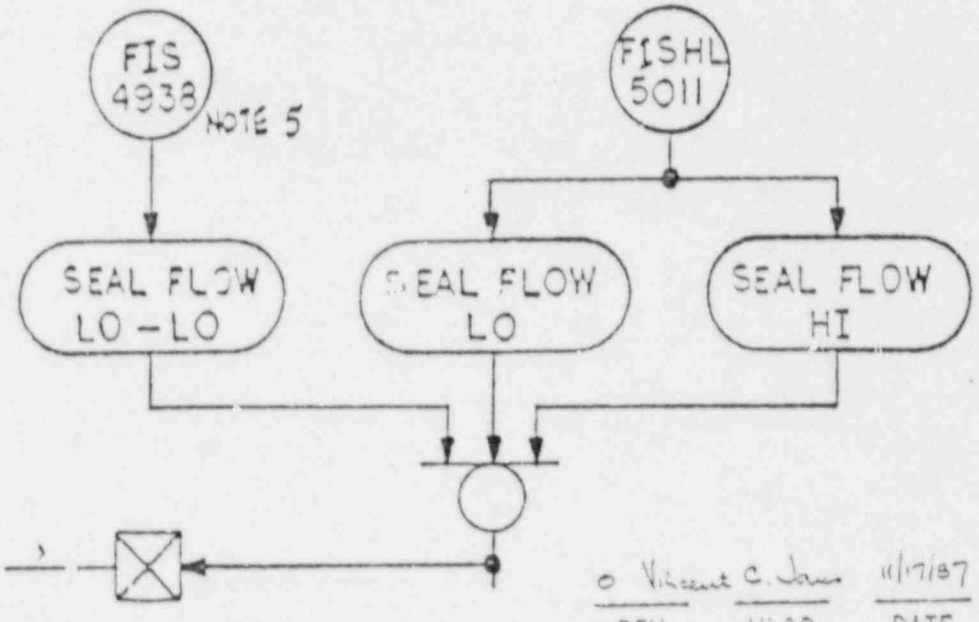
STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES. (REF. CARIRS 1358 & 1595).

DESCRIPTION OF CHANGE

BEFORE:



0 Vincent C. Jones 11/17/87
REV HL&P DATE
14926.001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza TRS 2/16/87			

Rev. 0 2/10/88
NAB

11/16/87
DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

DCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

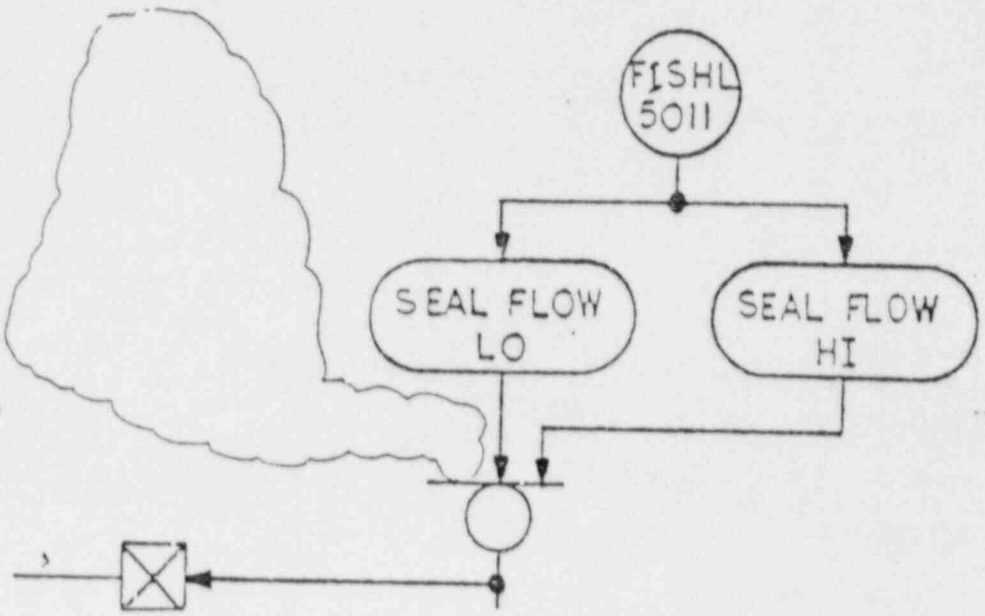
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: CHG. REV.	DCN NO.
6R309Z42257		5		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R305242260		3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

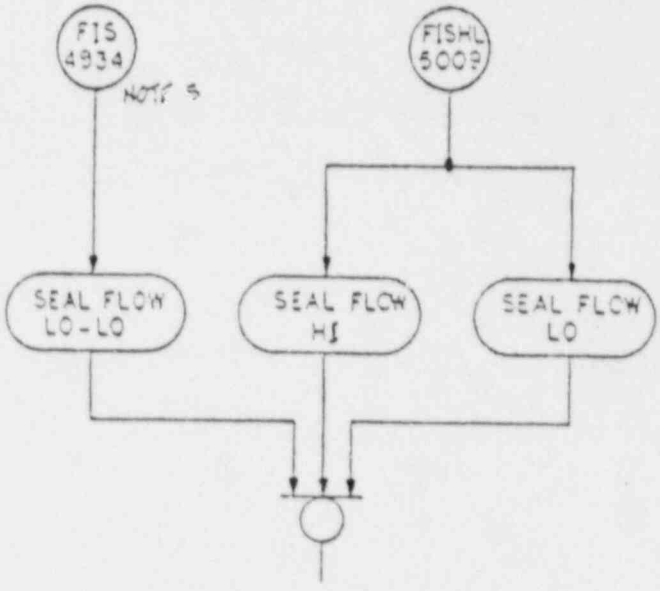
STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE & FLOW SWITCHES. (REF. CARRS 1358 & 1595).

DESCRIPTION OF CHANGE

BEFOR.



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza 7/16/87			

O Vincent C. Jones 1/17/87
REV HL&P DATE

14926-001
11 16 87
DATE

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STP 1294 (11/85) 0-30

SOUTH TEXAS PRO' T

CCP NO. 1-J-STF0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309Z42260		3		

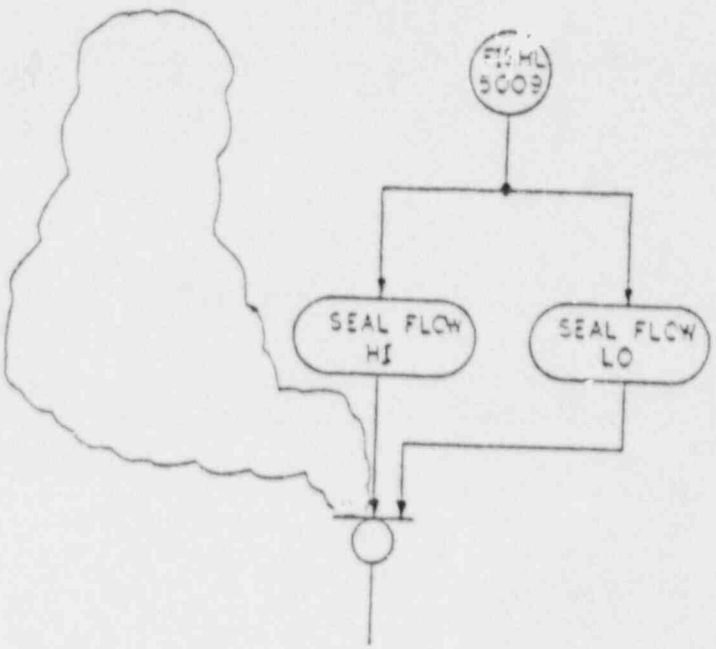
IDCN NUMBER

ISSUED DATE

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
6R309E42292		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 4

STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES. (REF CARRS 1358 & 1595).

DESCRIPTION OF CHANGE

SEE PAGES 2, 3 & 4.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de SOUZA 2/16/87			

0 Vincent C. Jones 11/17/87
REV HL&P DATE

14926-001
11/16/87
DATE

NRD Rev. 0 2/10/88

STP 1284 (1 ' , 3-)1

SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

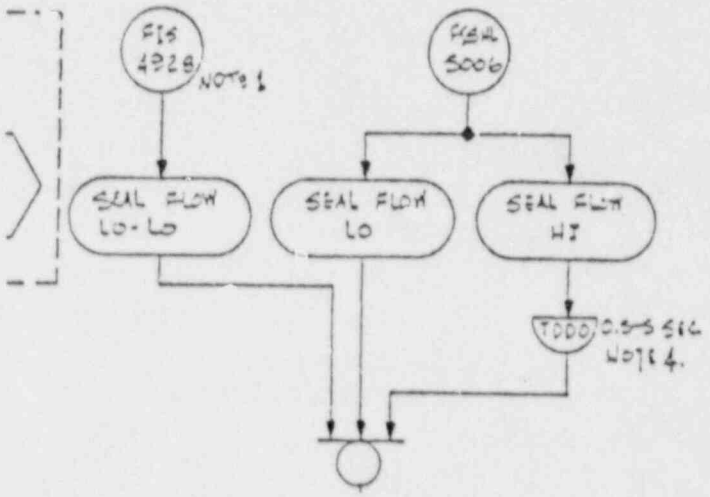
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309242292		2		

IDCN NUMBER _____ ISSUED DATE _____

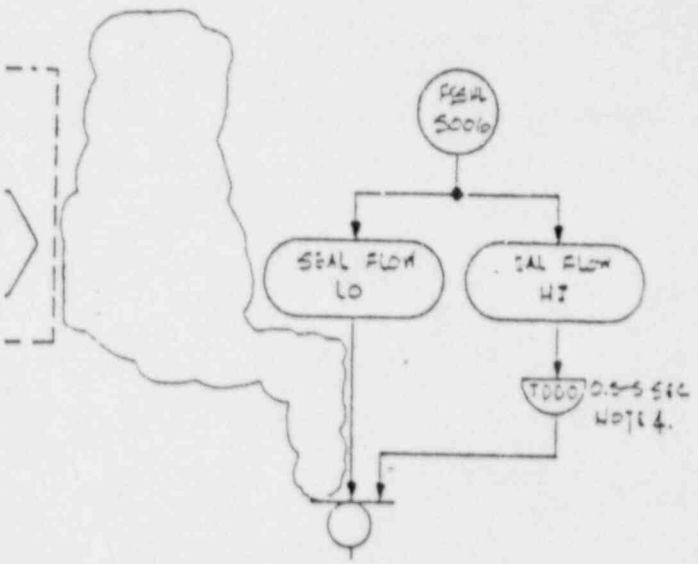
JOB NO. 14926 PAGE 2 OF 4

DESCRIPTION OF CHANGE:

BEFORE:



AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

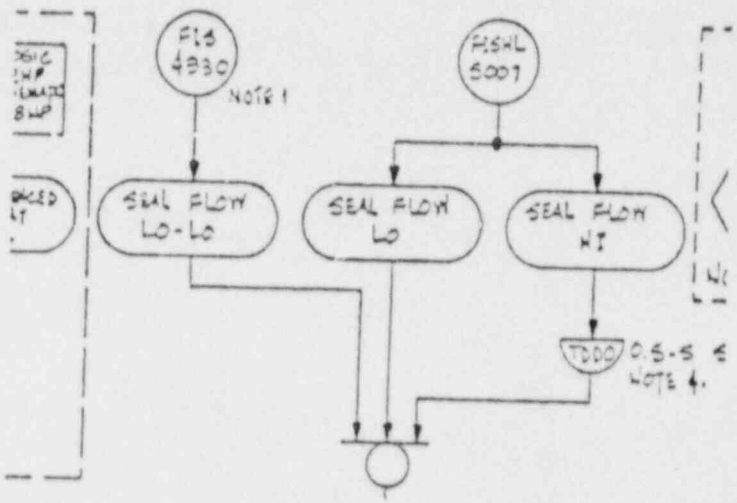
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN COMV. DATE: DWG. REV.	DCN NO.
6R309E42292		2		

IDCN NUMBER _____ ISSUED DATE _____

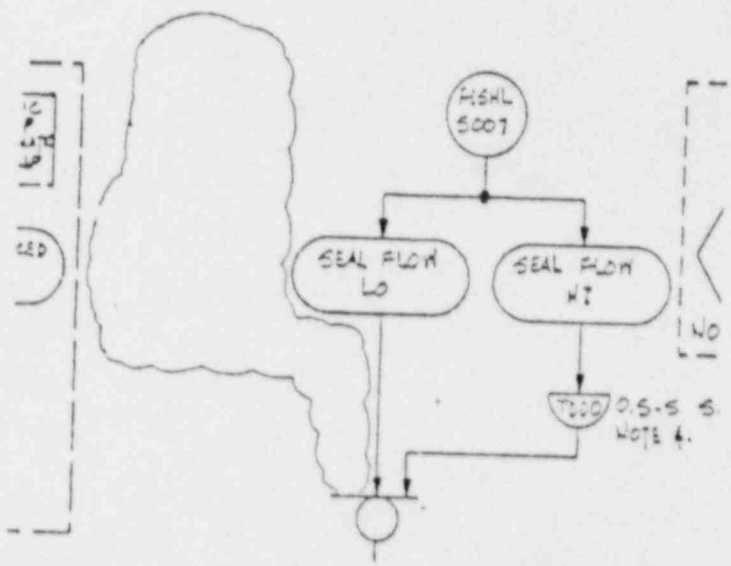
JOB NO. 14926 PAGE 3 OF 4

DESCRIPTION OF CHANGE:

BEFORE:



AFTER:



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

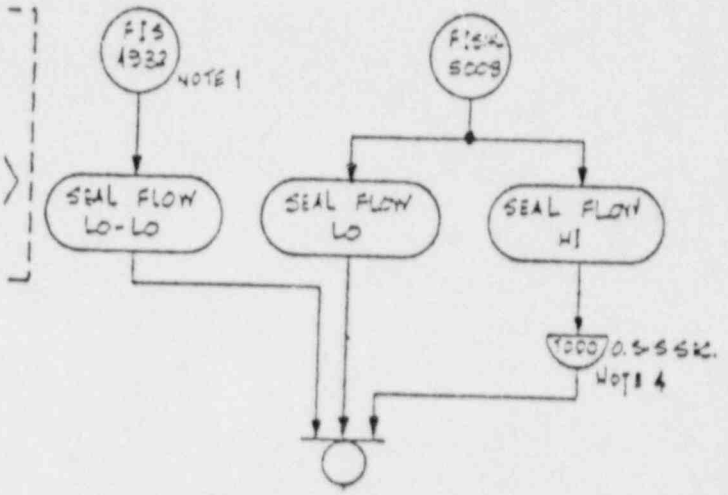
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R309Z42292		2		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 4 OF 4

DESCRIPTION OF CHANGE:

BEFORE:



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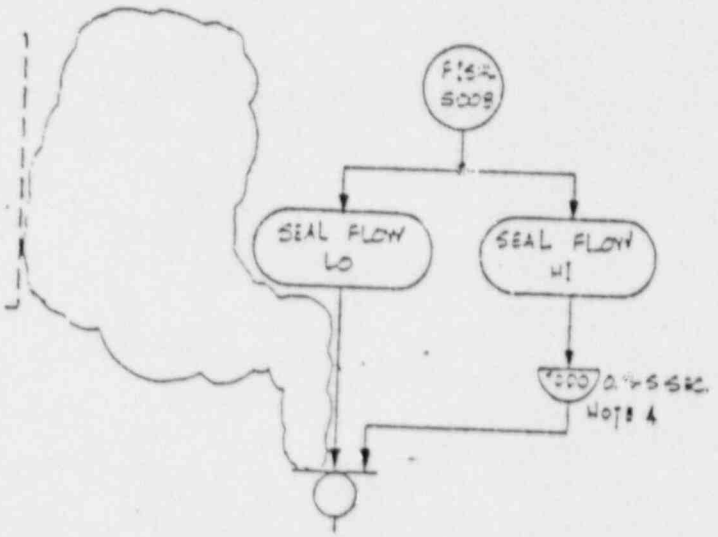


SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	OCN CONV. DATE: DWG. REV.	OCN CONV. DATE: OCN NO.
7Z311Z47502		5		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 12

STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE & FLOW SWITCHES. (REF. CARRS 1358 & 1595).

DESCRIPTION OF CHANGE

SEE PAGE 2.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza 11/16/87			

0 REV — Vincent C. Jones HL&P 14926-001 — 11/17/87 DATE

11/16/87 DATE

NPOD Rev. 0 2/10/88

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-JFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV NO.	DCN CONV. DATE: DAC. REV.	DCN NO.
7E3117A7502		5		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

BEFORE:

REV	WINDOW DESCRIPTION:	LAMP BOX COL ROW	TAG NO. ELEC DWG	P&ID LOGIC DIAGRAM	LOCAL CAB TRM LOCAL BOX TRM REMARKS	CCP NO REV NO	VENDOR DWG
05	BRS RCYL EVAP STM COND RET CNDCT HI	1 189 - 09 A	N1-WL-CIS 4020	F05027 Z42264	22-125,126 1-9F,FC	J-ST-0207 00	4089-0145IC
03	LWPS PUMPS SEAL WATER PRESS LO	1 189 - 09 B	N1-WL-SEE REMARK 9-E-WL47-01	F90017 N/A	22-143,144 2-9F,FC PIS 4928,31,33,35,37,39,41,43 45	J-ST-0207 00	4089-0145IC
05	WASTE EVAP STM COND RET CNDCT HIGH	1 189 - 09 C	N1-WL-CIS 4021 9-E-WL23-01	F05027 Z42264	22-176,177 3-9F,FC	J-ST-0207 00	4089-0145IC
03	LWPS PUMPS DISCH PRESS HI	1 189 - 09 D	N1-WL-SEE REMARK	F90000 N/A	22-197,201 4-9F,FC PI4052,4044,4043	J-ST-0207 00	4089-0145IC

AFTER:

REV	WINDOW DESCRIPTION:	LAMP BOX COL ROW	TAG NO. ELEC DWG	P&ID LOGIC DIAGRAM	LOCAL CAB TRM LOCAL BOX TRM REMARKS	CCP NO REV NO	VENDOR DWG
05	BRS RCYL EVAP STM COND RET CNDCT HI	1 189 - 09 A	N1-WL-CIS 4020	F05027 Z42264	22-125,126 1-9F,FC	J-ST-0207 00	4089-0145IC
03	[redacted]	1 189 - 09 B	[redacted]		22-143,144 2-9F,FC	JFST-0485 00	4089-0145IC
05	WASTE EVAP STM COND RET CNDCT HIGH	1 189 - 09 C	N1-WL-CIS 4021 9-E-WL23-01	F05027 Z42264	22-176,177 3-9F,FC	J-ST-0207 00	4089-0145IC
03	LWPS PUMPS DISCH PRESS HI	1 189 - 09 D	N1-WL-SEE REMARK	F90000 N/A	22-197,201 4-9F,FC PI4052,4044,4043	J-ST-0207 00	4089-0145IC

SOUTH TEXAS PROJECT

CCP NO. 1-JFFST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
5Z010Z48001		26		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 3

STARTUP SYSTEMS AFFECTED: WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES. (REF. CARRS 1358 & 1595).

DESCRIPTION OF CHANGE

DELETE THE FOLLOWING SWITCHES AS SHOWN ON PAGES 2 & 3.

NIWL-PIS-4929
-4931
-4933
-4935
-4937
-4939
-4941
-4943
-4945

NIWL-PIS-4928
-4930
-4932
-4934
-4936
-4938
-4940
-4942
-4944

.0 Vincent C Jones 11/17/87

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. de Souza 8/5/87	T. Uhrich	T. Uhrich	[illegible]

REV | HL&P 14926-001 | DATE

11/16/87

NPSD Rev. 0 [signature] 2/10/88 DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-JTFST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN) (Cont'd)

IDCN NUMBER _____ ISSUED DATE _____

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
5Z010Z48001		26		

DESCRIPTION OF CHANGE:

BEFORE:

TAG NUMBER	SU	SERVICE DESCRIPTION	RANGE	SETPOINT	ACC	SOURCE DOC
NIWL-FISML-5098	1	IWLOS LWPS POT 1B SEAL WTR SUPP HI-FLW	0-0.7 GPM	0.625 GPM INC	NA	5Z44720582
NIWL-FISML-5098	2	IWLOS LWPS POT 1B SEAL WTR SUPP LO-FLW	0-0.7 GPM	.25 GPM DEC	NA	5R305MC5545
NIWL-LSML -4925	1	IWLOS LWPS PMP SEAL WTR SYS SEAL WTR TK LVL HI		70% INC	NA	5R305MC5545
NIWL-LSML -4925	2	IWLOS LWPS PMP SEAL WTR SYS SEAL WTR TK LVL LO		30% DEC	NA	5R305MC5545
NIWL-PIS -4929		IWLOS LWPS WEP RECIRC PMP SEAL WTR RTN BCK PRES	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4931		IWLOS LWPS WEP CONC XFER PMP SEAL STR BCK PRESS	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4933		IWLOS LWPS WEP AUX FD PMP SEAL WTR TRN BCK PRES	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4935		IWLOS LWPS CRWCT PMP SEAL WTR RTN BCK PRESS	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4937		IWLOS LWPS LHST PMP SEAL WTR RTN BCK PRESS	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4939		IWLOS LWPS SHST SLUICE PMP SEAL WTR RTN BCKPRES	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4941		IWLOS LWPS WHT PMP SEAL WTR RTN BCK PRESS	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4943		IWLOS LWPS POT PMP SEAL RTN BCK PRESS	0-300 PG	27 PSIG DEC	NA	5R305MC5545
NIWL-PIS -4945		IWLOS LWPS RC FLRZP PMP SEAL WTR RTN BCK PRESS	0-300 PG	100 PG DEC	NA	PCR 92-00910
NIWL-PSL -5004		IWLOS LWPS SEAL WATER PUMP DISCH LO PRESS	10-300 PG	40 PSIG DEC	NA	5R305MC5545

AFTER:

TAG NUMBER	SU	SERVICE DESCRIPTION	RANGE	SETPOINT	ACC	SOURCE DOC
NIWL-FISML-5098	1	IWLOS LWPS POT 1B SEAL WTR SUPP HI-FLW	0-0.7 GPM	0.625 GPM INC	NA	5Z44720582
NIWL-FISML-5098	2	IWLOS LWPS POT 1B SEAL WTR SUPP LO-FLW	0-0.7 GPM	.25 GPM DEC	NA	5R305MC5545
NIWL-LSML -4925	1	IWLOS LWPS PMP SEAL WTR SYS SEAL WTR TK LVL HI		70% INC	NA	5R305MC5545
NIWL-LSML -4925	2	IWLOS LWPS PMP SEAL WTR SYS SEAL WTR TK LVL LO		30% DEC	NA	5R305MC5545

DELETED

NIWL-PSL -5004		IWLOS LWPS SEAL WATER PUMP DISCH LO PRESS	10-300 PG	40 PSIG DEC	NA	5R305MC5545

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
5Z010Z48001		26		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 3 OF 3

DESCRIPTION OF CHANGE:

BEFORE:

TAG NUMBER	SU	SERVICE DESCRIPTION	RANGE	SETPOINT	ACC	SOURCE DOC
N1WL-PIS -4928	1	WLCS LWPS WEP RECIRC PMP SEAL WTR SUPP-LO FLW	0-2.5 GPM	1.2 GPM DEC	NA	5R309MC5545
N1WL-PIS -4930	1	WLCS LWPS WEP CONC TRANSF PMP SEAL SUPP LO-LO	0-2.5 GPM	1.2 GPM DEC	NA	5R309MC5545
N1WL-PIS -4932	1	WLCS LWPS WEP AUX FD PMP SEAL WTR SUPP LO FLW	0-2.5 GPM	1.2 GPM DEC	NA	5R309MC5545
N1WL-PIS -4934	1	WLCS LWPS CPRLCT PMP SE: P SUPP LO-LO FL	0-2.5 GPM	.25 GPM DEC	NA	5R309MC5545
N1WL-PIS -4936	1	WLCS LWPS LMST PMP SEAL WTR SUPP LO-LO FLW	0-2.5 GPM	.25 GPM DEC	NA	5R309MC5545
N1WL-PIS -4938	1	WLCS LWPS SRST SLUICE PMP SEAL WTR LO-LO FLW	0-2.5 GPM	.25 GPM DEC	NA	5R309MC5545
N1WL-PIS -4940	1	WLCS LWPS WHT PMP SEAL WTR LO-LO FLW	0-2.5 GPM	.25 GPM DEC	NA	5R309MC5545
N1WL-PIS -4942	1	WLCS LWPS FDT PMP SEAL SUPP LO-LO SEAL FLW	0-2.5 GPM	.25 GPM DEC	NA	5R309MC5545
N1WL-PIS -4944	1	WLCS LWPS RC FLRP PMP JCKT COOL WTR LO-LO FLW	0-2.5 GPM	2.0 GPM DEC	NA	5R309MC5545
N1WL-PISHL-5006 1	1	WLCS LWPS WEP RECIRC PMP SEAL WTR HI-FLW	0-3 GPM	2.5 GPM INC	NA	92447205E0
N1WL-PISHL-5006 2	1	WLCS LWPS WEP RECIRC PMP SEAL WTR LO-FLW	0-3 GPM	1.2 GPM DEC	NA	5R309MC5545
N1WL-PISHL-5007 1	1	WLCS LWPS WEP CONC TRANSF PMP SEAL WTR HI-FLW	0-3 GPM	2.5 GPM INC	NA	92447205E0
N1WL-PISHL-5007 2	1	WLCS LWPS WEP CONC TRANSF PMP SEAL WTR LO-FLW	0-3 GPM	1.2 GPM DEC	NA	5R309MC5545

AFTER:

TAG NUMBER	SU	SERVICE DESCRIPTION	RANGE	SETPOINT	ACC	SOURCE DOC
DELETED						
N1WL-PISHL-5006 1	1	WLCS LWPS WEP RECIRC PMP SEAL WTR HI-FLW	0-3 GPM	2.5 GPM INC	NA	92447205E0
N1WL-PISHL-5006 2	1	WLCS LWPS WEP RECIRC PMP SEAL WTR LO-FLW	0-3 GPM	1.2 GPM DEC	NA	5R309MC5545
N1WL-PISHL-5007 1	1	WLCS LWPS WEP CONC TRANSF PMP SEAL WTR HI-FLW	0-3 GPM	2.5 GPM INC	NA	92447205E0
N1WL-PISHL-5007 2	1	WLCS LWPS WEP CONC TRANSF PMP SEAL WTR LO-FLW	0-3 GPM	1.2 GPM DEC	NA	5R309MC5545

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
9-E-WL02	02	2		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: 1&WL05

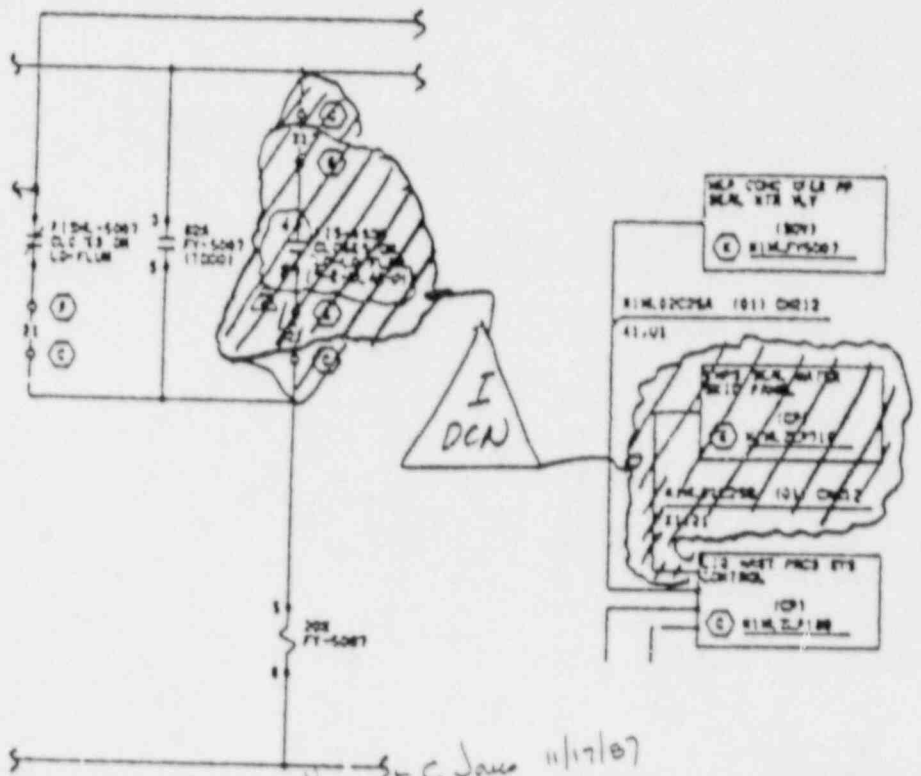
JOB NO. 14926 PAGE 1 OF 1

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE



C. Jones 11/17/87

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EQS	PE
C. Ayrton 7-25-87	E Crump	H.B.S	

REV HL&P 14926-001 DATE

Ver. O 2/19/88 NRDD

11/16/87
DATE

STP 1284 (11/85) B-30

SOUTH TEXAS PROJECT

CCP. NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WL07	02	2		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: 1WL05

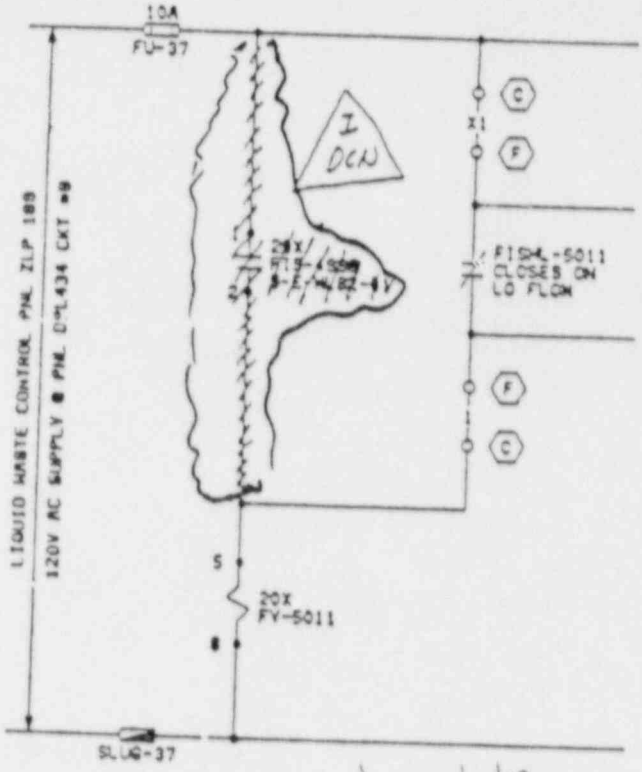
JOB NO. 14926 PAGE 1 OF 1

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF. CARR #1358 & #1595

DESCRIPTION OF CHANGE



R. Vincent C. Jones 11/17/87

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. Ayran 7-25-87	ECStang	H Bob	

REV HL&P 14926-001 DATE

Rev 0 [signature] 2/10/88
NRCD

11/16/87
DATE

STP 1294 (11/85) D-30

SOUTH TEXAS PROJECT — CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DUC. REV.	DCN NO.
9-E-WL46	01	4		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

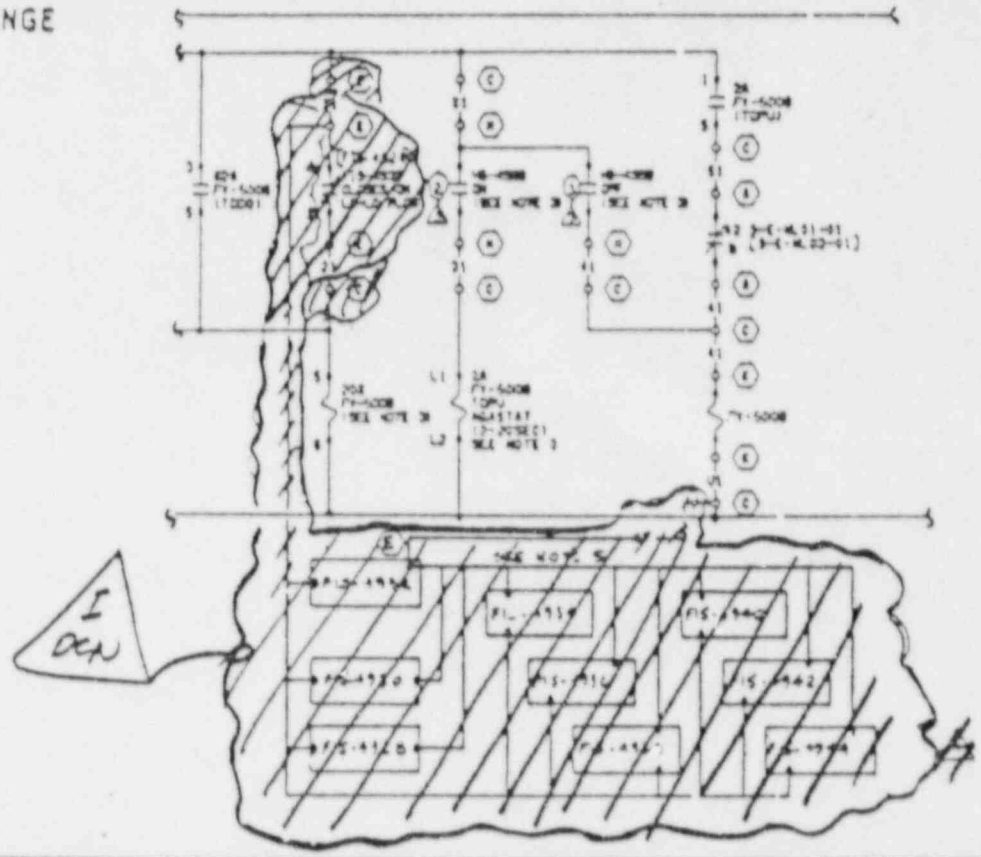
STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF. CAR # 1358 & 1595

DESCRIPTION OF CHANGE



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. Bryan 7-25-87			

O Vikant C. Jain 11/17/87
REV HL&P DATE
14926-001

Rev. 0 NPED 2/10/88

11/16/87
DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

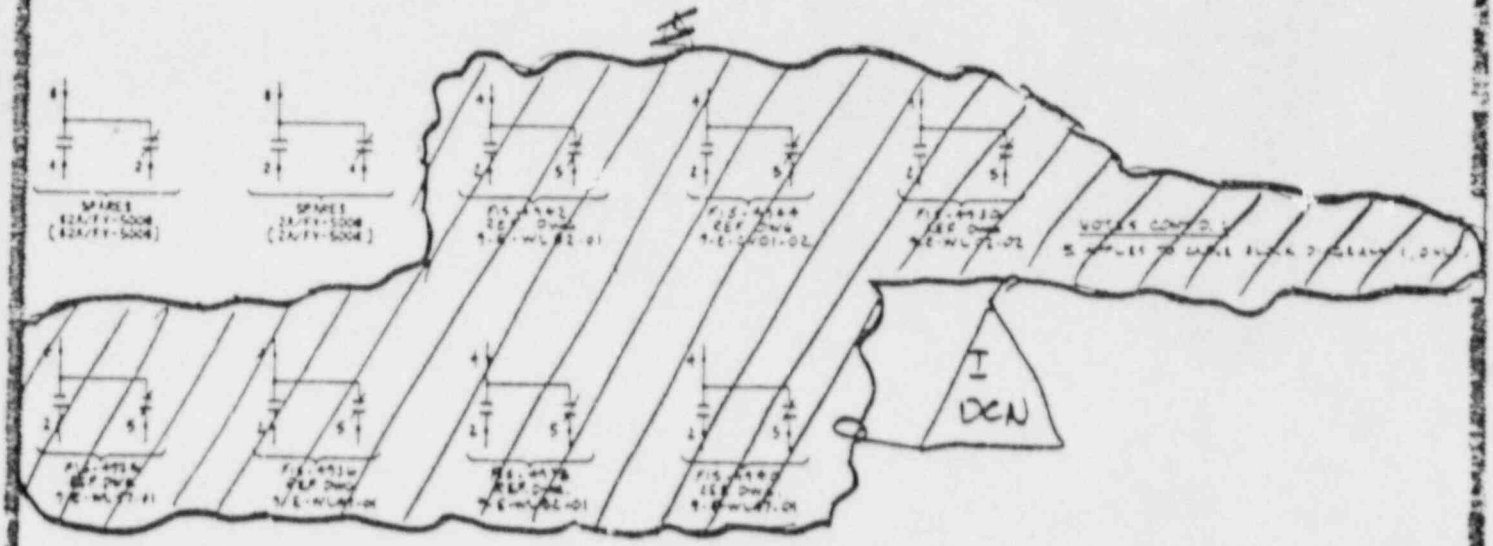
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

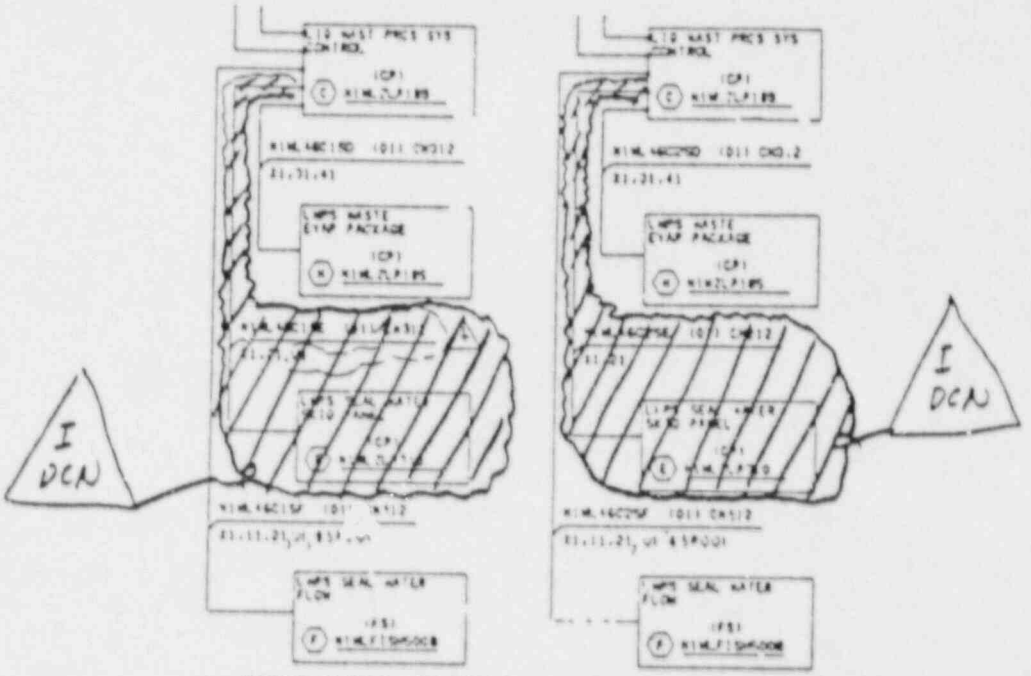
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WL46	01	4		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:





CABLE BLOCK DIAGRAM 1

CABLE BLOCK DIAGRAM 2

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
9-E-WL47	01	3		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: IWL05

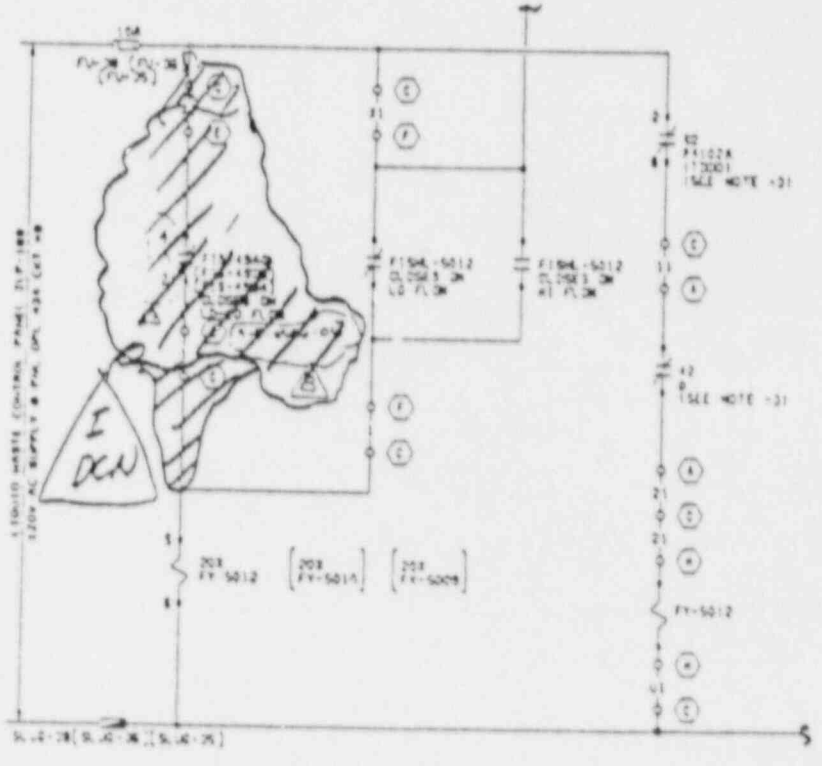
JOB NO. 14926 PAGE 1 OF 2

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CAQR #1358 & #1595

DESCRIPTION OF CHANGE



BECHTEL ENGINEERING APPROVALS				REV
ORIGINATOR	CHECKER	EGS	PE	
C. Bynam 7-24-87				0

Vincent C. Jones 11/17/87
HL&P DATE

14926-001
11/16/87
DATE

Rev. 0 NRC 2/19/88

STP 1284 (11/85) B-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

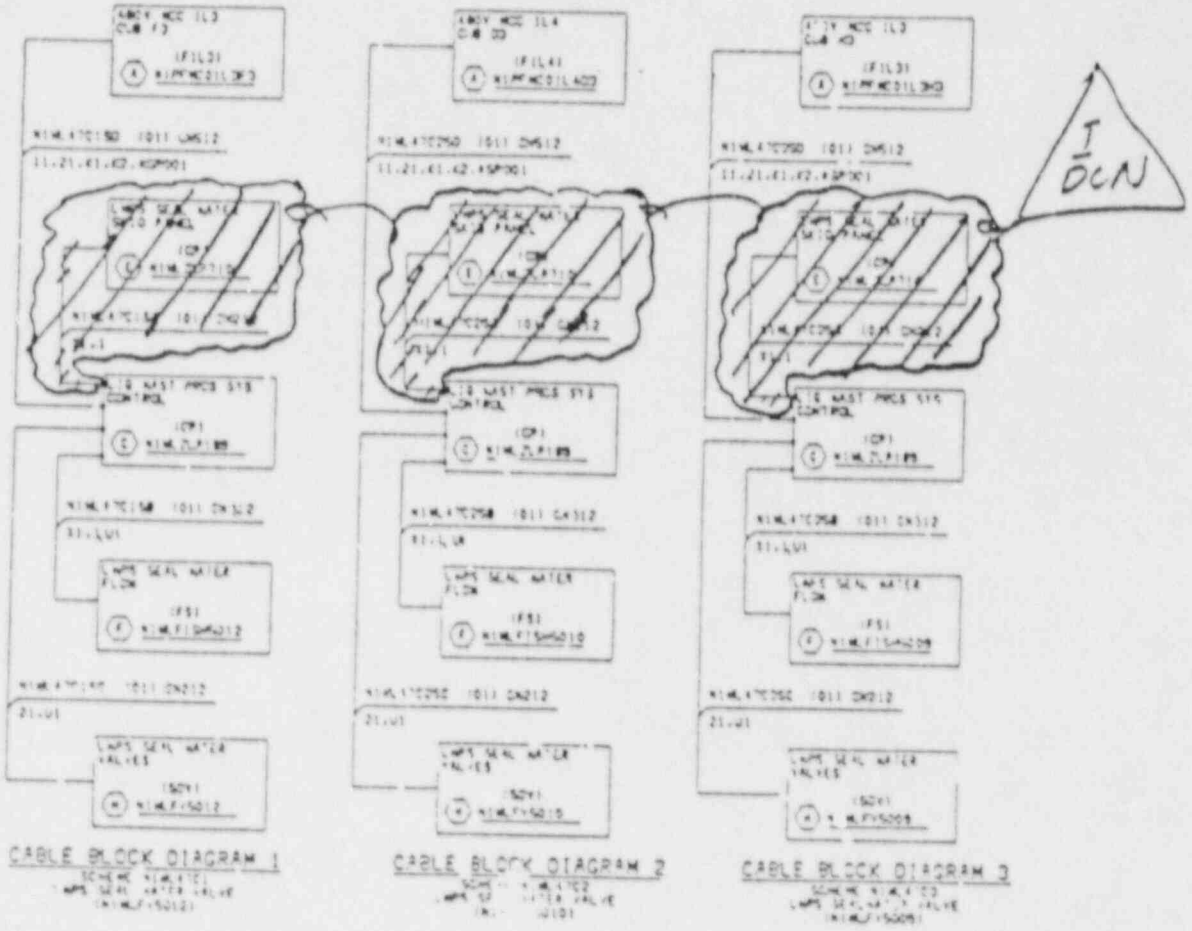
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WL47	01	3		

IDCN NUMBER

ISSUED DATE

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE: --



CABLE BLOCK DIAGRAM 1

CABLE BLOCK DIAGRAM 2

CABLE BLOCK DIAGRAM 3

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
9-E-WL82	01	3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CMR # 1358 & # 1595

DESCRIPTION OF CHANGE

(SEE PAGE 2)

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. Ayres 7-25-87		M.B.S.	

O. Vincent C. Jones 11/7/87
REV HL&P DATE
14926-001
11/16/87
DATE

Rev. 0 [signature] 2/10/88
NFOD

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

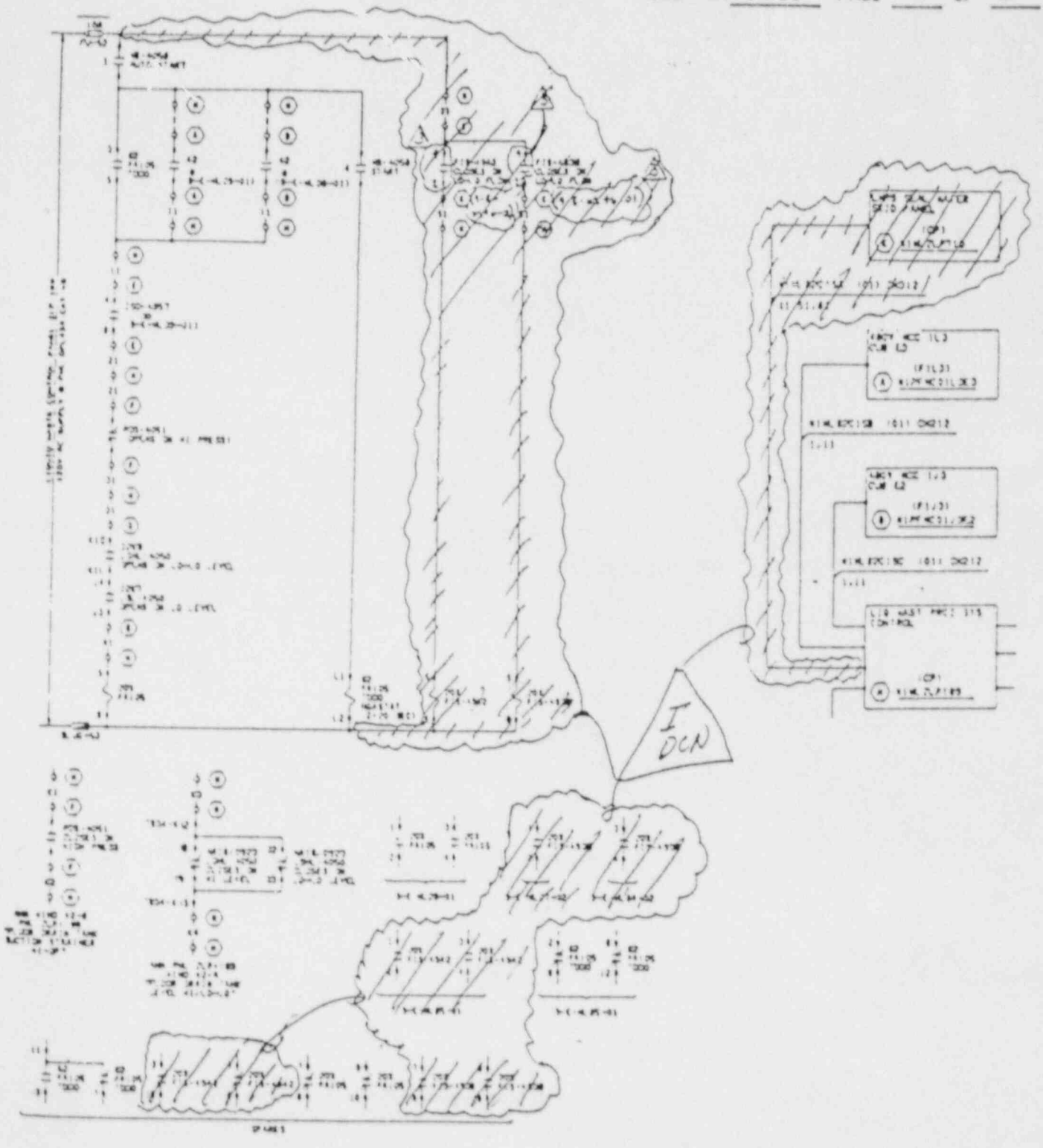
DCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WL82	01	3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WLB4	02	1		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 1

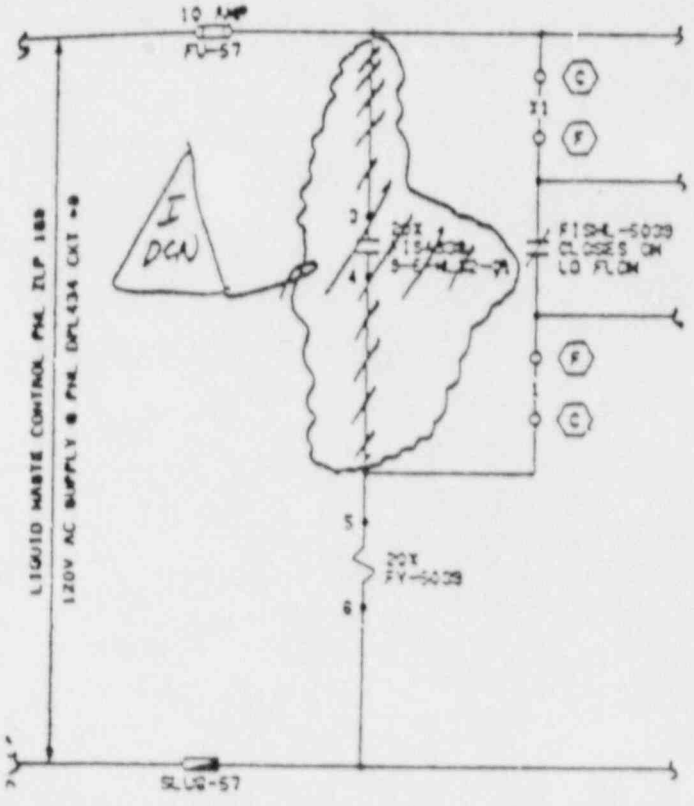
STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EQS	PE
C. Ayran 7-23-87	[illegible]	M. Bas	[illegible]

0 Vincent C James 11/17/87
REV HL&P DATE
14926-001

Rev. 0 [signature] 2/10/88
NRCD

11/16/87
DATE

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
9-E-WL85	01	1		

IDCN NUMBER ____________ ISSUED DATE ____________

JOB NO. 14926 PAGE 1 OF 1

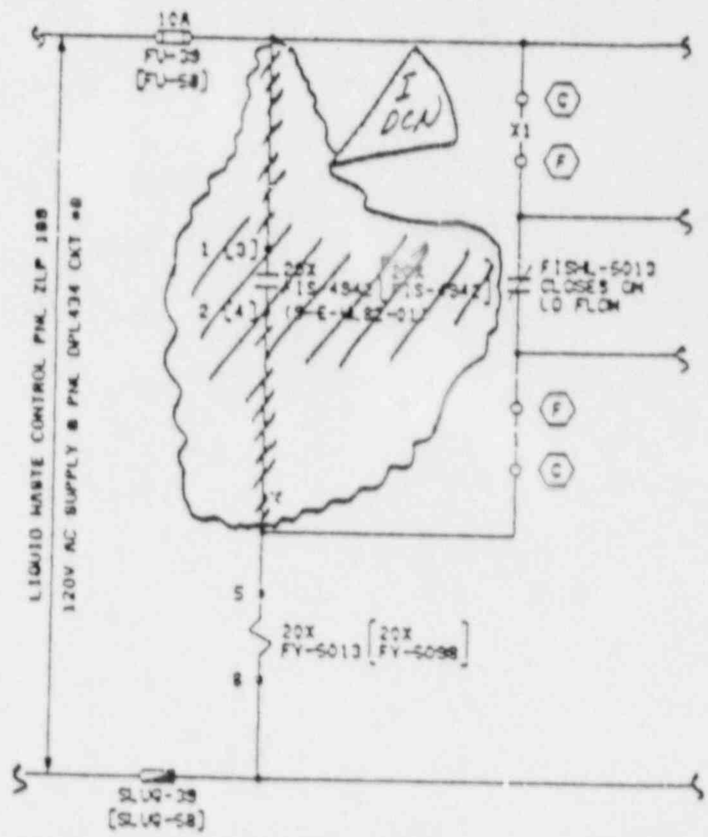
STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. Ayran 7-25-87	E Crampo	M. Ros	C E Tilton

0 | Vincent C. Jones | 11/17/87 | Rev. 0 NPOD [signature] 2/10/88
REV | HL&P 14926-001 | DATE

11/16/87
DATE

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
9-E-WL50	01	4		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 1

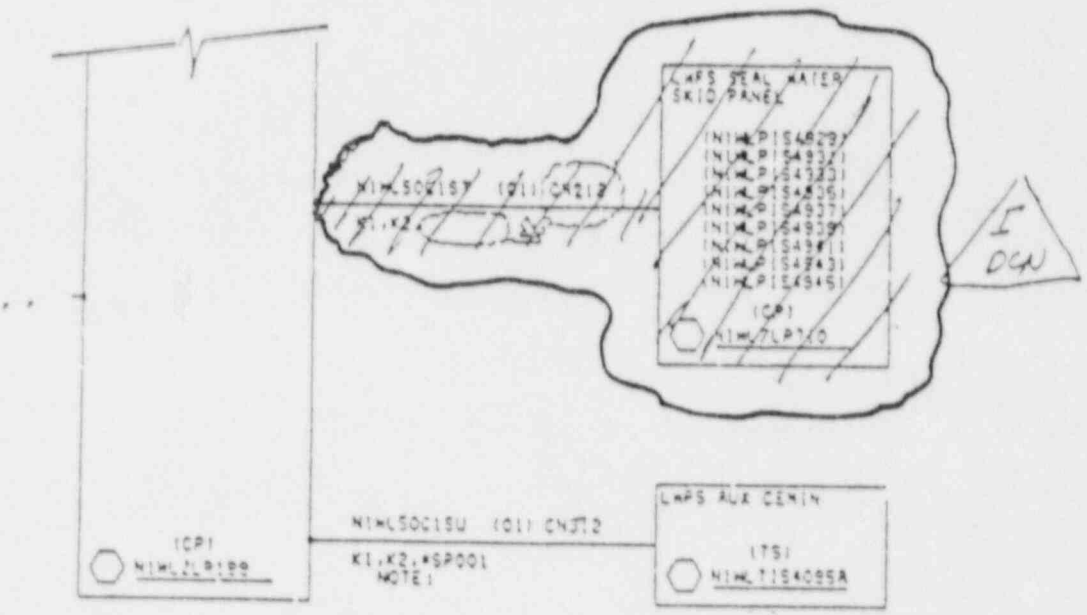
STARTUP SYSTEMS AFFECTED: IWL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CAR # 1358 & # 1595

DESCRIPTION OF CHANGE DELETE CABLE "NIWL50CIST."



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EOS	PE
C. AYRAN			

0 REV Vincent C. Jones 11/17/87 HL&P DATE

14926-001 11/16/87 DATE

NPED Rev. 0 2/10/88

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00118-IC		D		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: IWL05

JOB NO. 14926 PAGE 1 OF 2

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE

DELETED CABLES "NIWL47C1SA" & "NIWL47C2SA", AS SHOWN ON PAGE 2.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EQE	PE
C. AYRAN 8-3-87		M.B.S.	

O Vincent C. Jones 11/17/87
REV HL&P DATE
14926-001

NPSD Rev. 0 2/16/88

11/16/87
DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

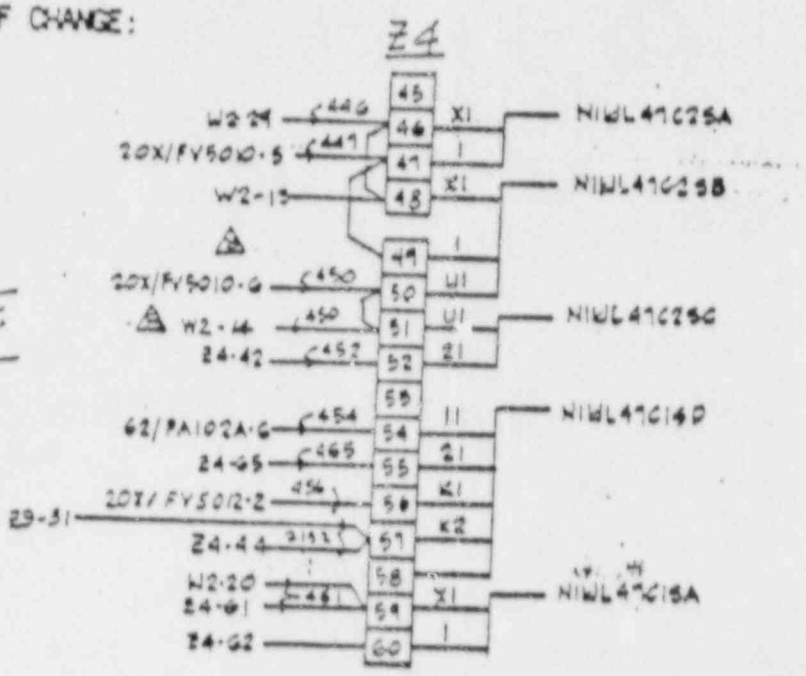
IDCN NUMBER	ISSUED DATE

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00118-IC		D		

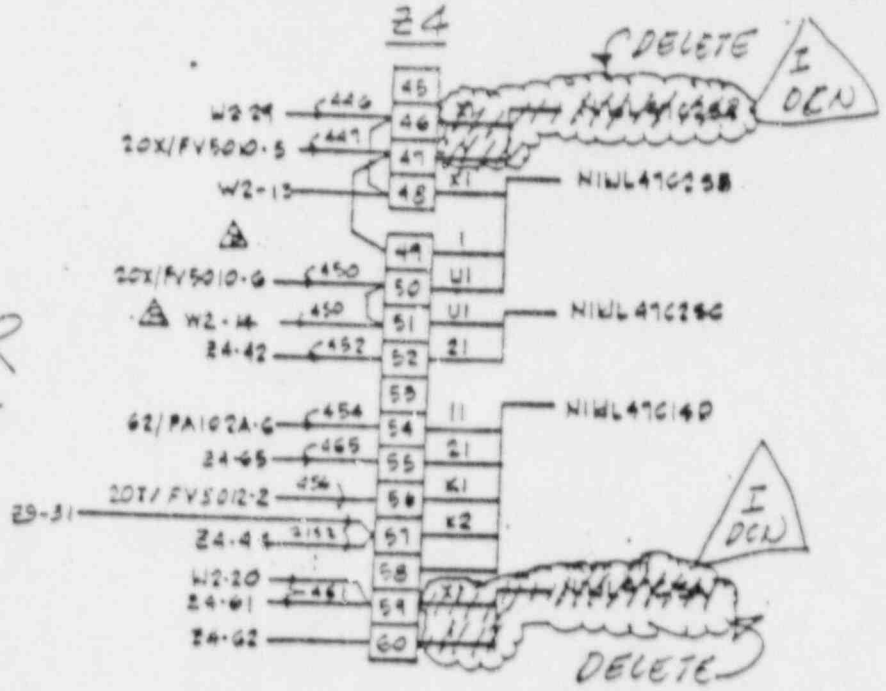
JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

BEFORE



AFTER



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST 0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00120-IC	-	D		

______________ IDCN NUMBER

______________ ISSUED DATE

STARTUP SYSTEMS AFFECTED: 1WL05

JOB NO. 14926 PAGE 1 OF 3

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CARR #1358 & #1095

DESCRIPTION OF CHANGE

1) DELETED CABLES "N1WL46C1SE" & "N1W46C2SE," AS SHOWN ON PAGEE 2 AND "N1WL02C2SB" SHOWN ON PAGE 3.

2) REVISED WIRE DESIGNATION ON TB Z9-66 FROM 'W2A-9' TO 'FU57-2" AS SHOWN ON Pg. 3.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	ECS	PE
C. Ayran 8-3-87	E. Crangi	M. Bas	C. [signature]

0 Vincent C. Jones 11/17/87
REV HL&P DATE

14926-001
11/16/87
DATE

Rev. 0 [signature] NPD 2/10/88

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

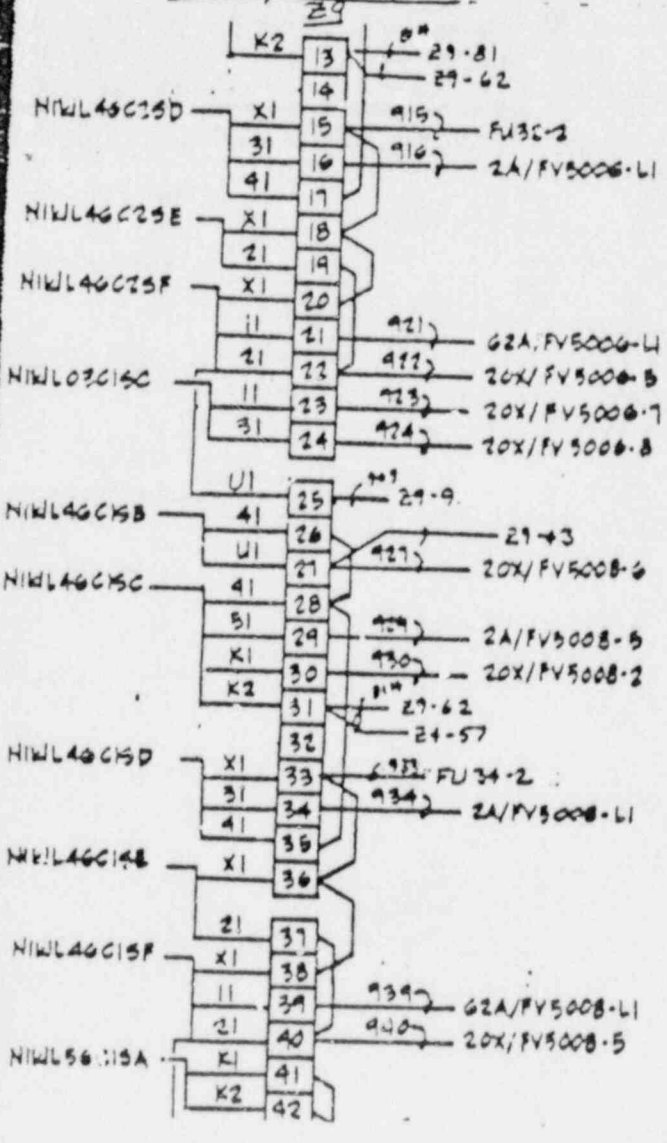
IDCN NUMBER	ISSUED DATE

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
4089-00120-IC	-	D		

JOB NO. 14926 PAGE 2 OF 3

DESCRIPTION OF CHANGE:

BEFORE



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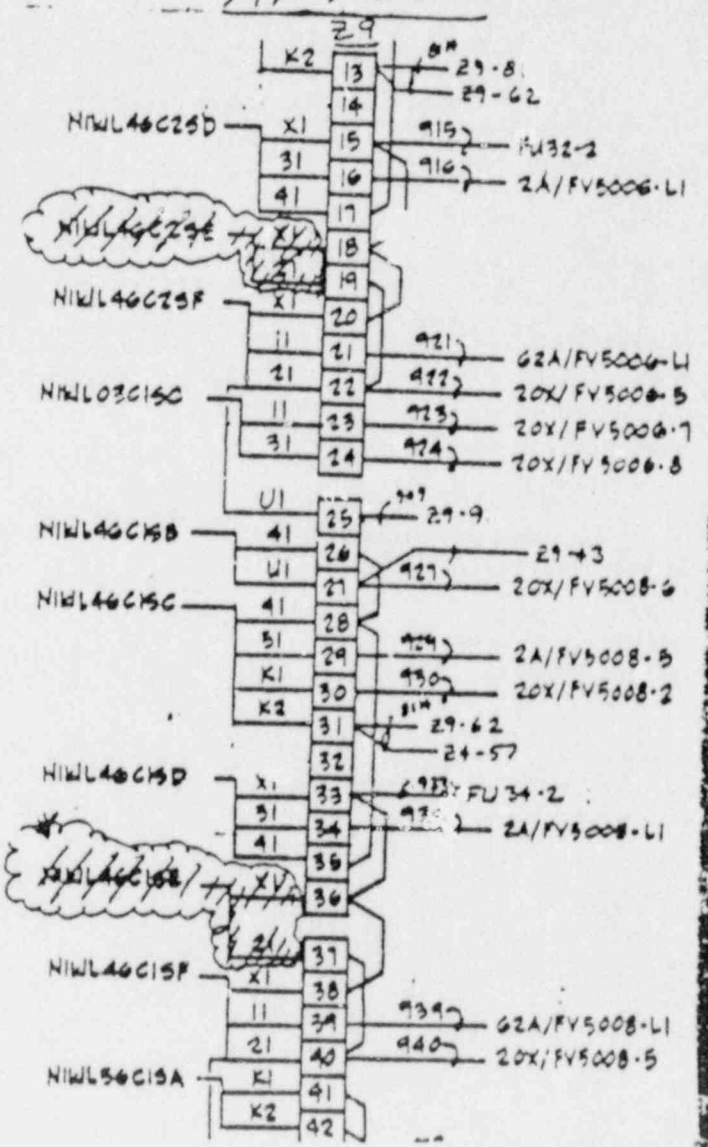


SOUTH TEXAS PROJECT

DCP NO. L-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

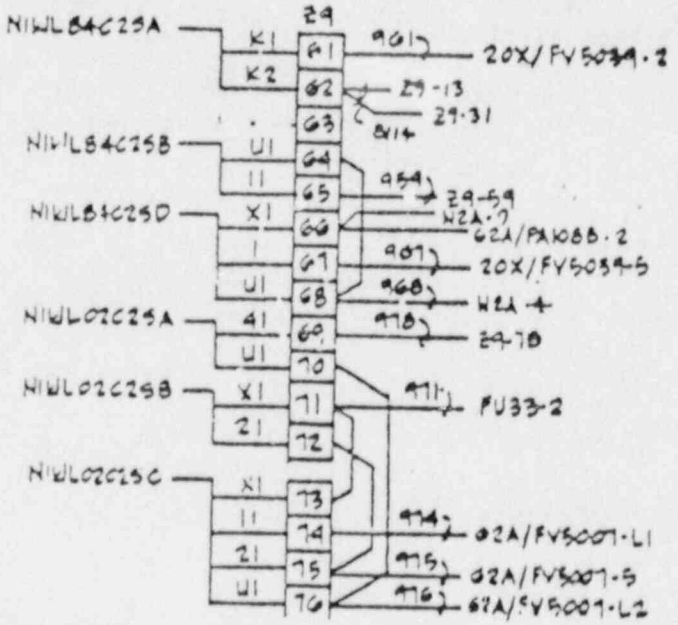
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00120-IC	-	D		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 3 OF 3

DESCRIPTION OF CHANGE:

BEFORE



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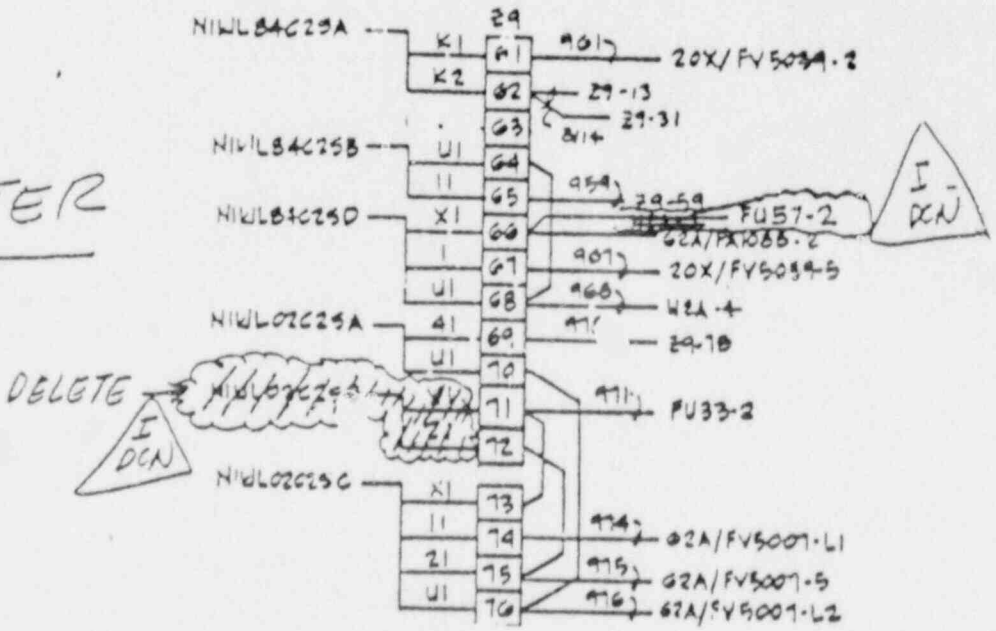


SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00121-IC	-	D		

IDCN NUMBER ______ ISSUED DATE ______

JOB NO. 14926 PAGE 1 OF 3

STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE

REVISE TERMINATIONS ON RELAYS AS SHOWN ON PAGE 3.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRON 8-3-87	E [signature]	H. B[signature]	K E [signature]

0 Vincent C. Jones 11/17/87
REV HL&P DATE
14926-001

Rev. 0 [signature] NPOD 2/10/88

11/16/87
DATE

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

DCP NO. 1-J-FST-0485 REV. 00

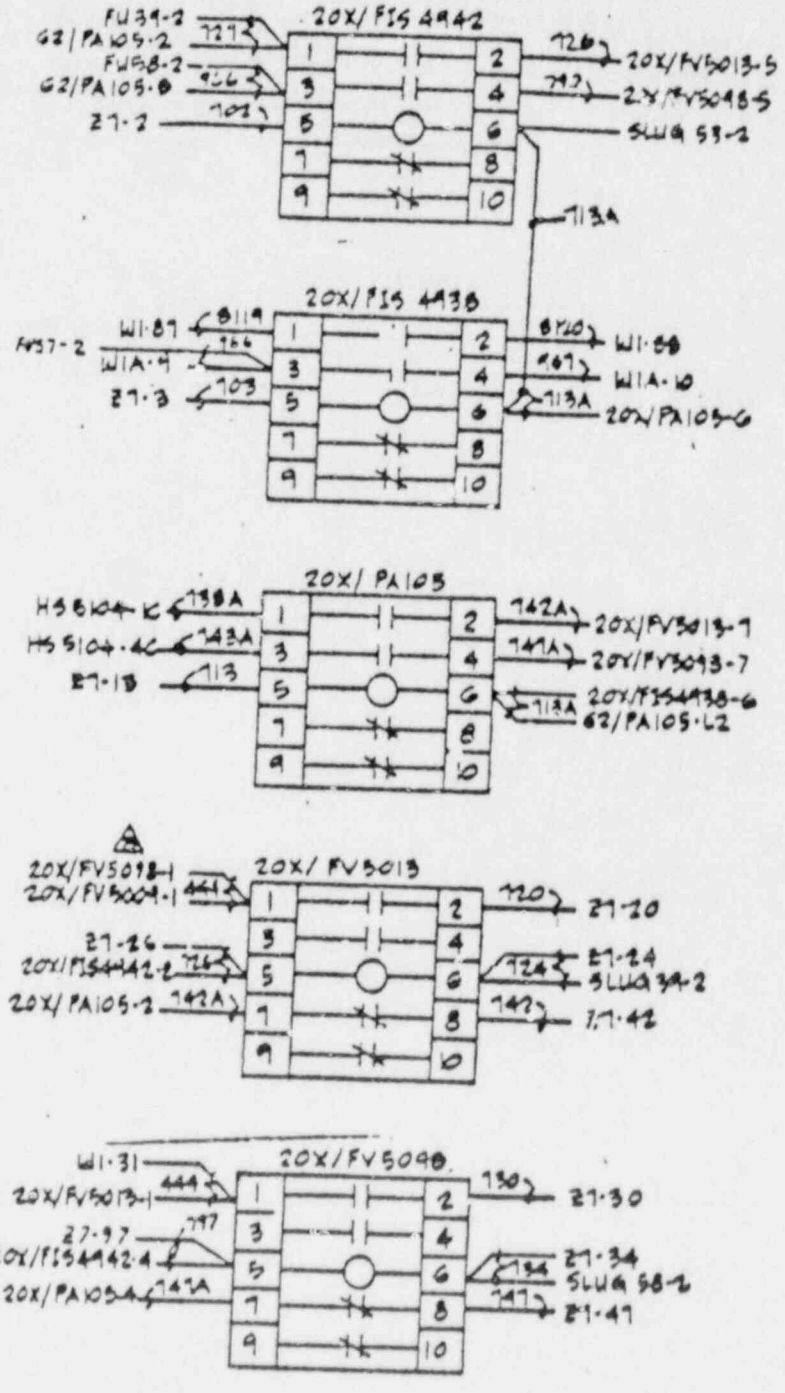
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DOC. REV.	DCN NO.
4089-00121-IC	-	D		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 3

DESCRIPTION OF CHANGE: BEFORE



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00121-IC	-	D		

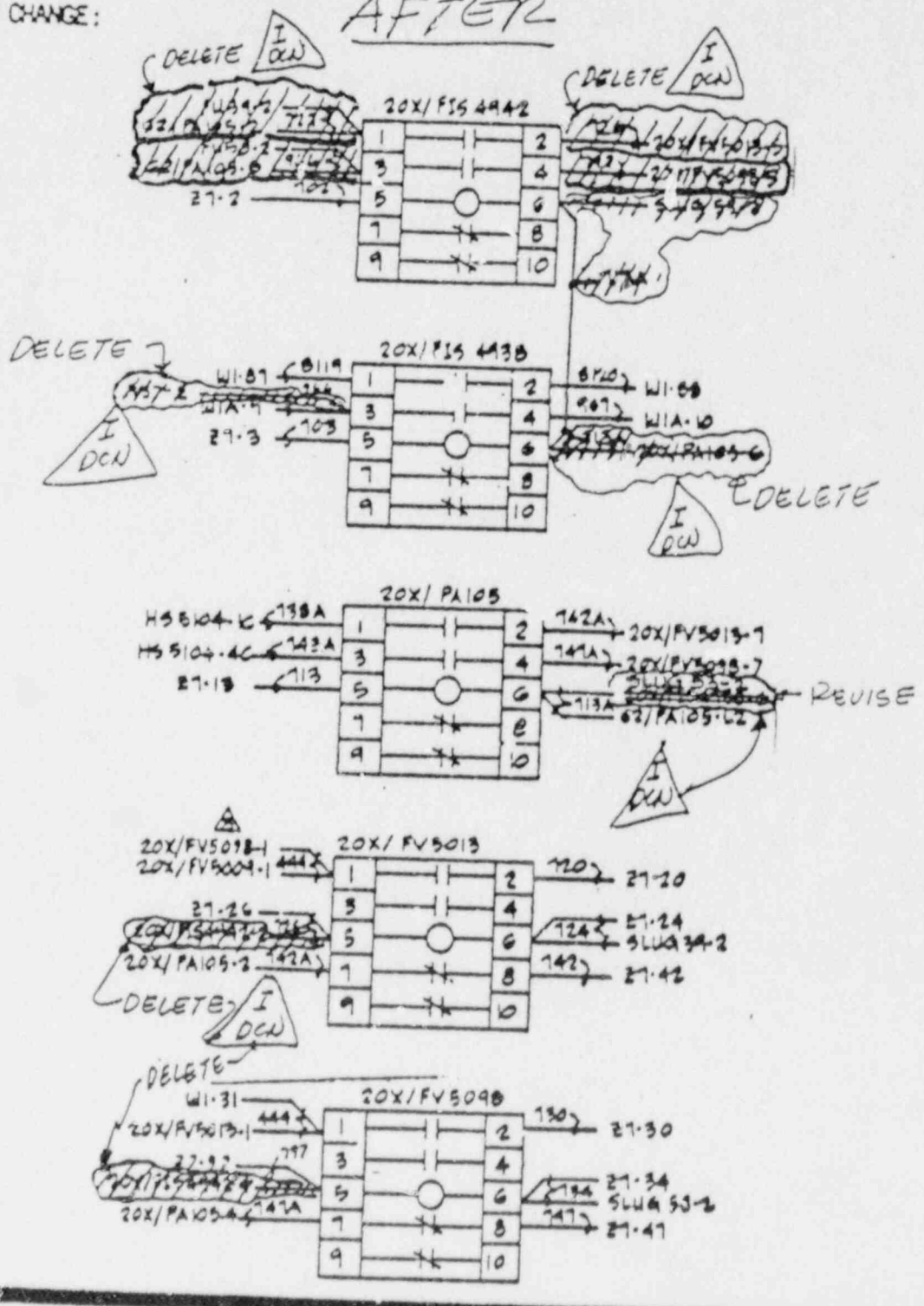
IDCN NUMBER

ISSUED DATE

JOB NO. 14926 PAGE 3 OF 3

DESCRIPTION OF CHANGE:

AFTER



SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00122-IC	-	E		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: 1WL05

JOB NO. 14926 PAGE 1 OF 3

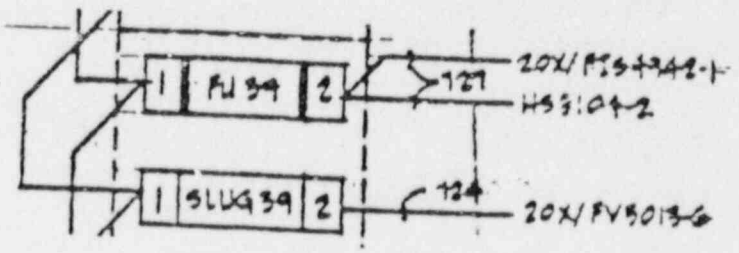
FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CMR #1358 & #1595

DESCRIPTION OF CHANGE REVISE AS SHOWN:

BEFORE



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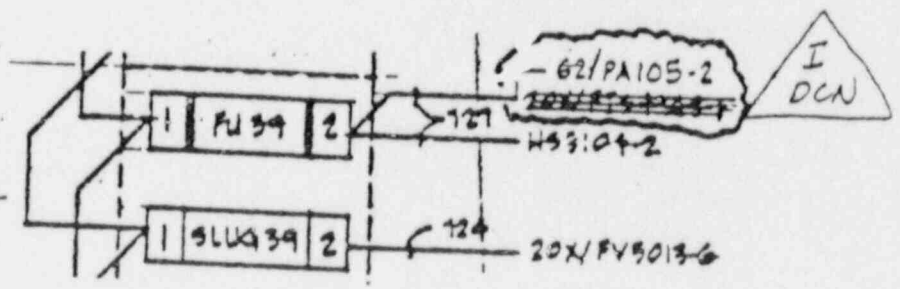


BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87	E Craig	M. Bell	K. Gilbert

0 Vincent C. Jones 11/17/87
REV. HL&P DATE
14926-C01

Rev.0 Approved 2/10/88
NRC

11/16/87
DATE

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

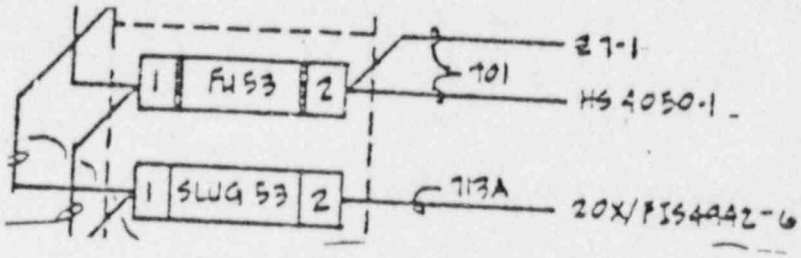
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00122-IC	-	E		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 3

DESCRIPTION OF CHANGE: REVISE AS SHOWN.

BEFORE



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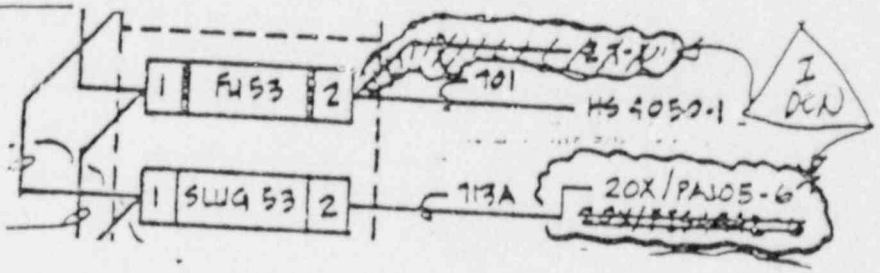


SOUTH TEXAS PROJECT

DCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DOC. REV.	DCN NO.
4089-00122-IC	-	D		

IDCN NUMBER

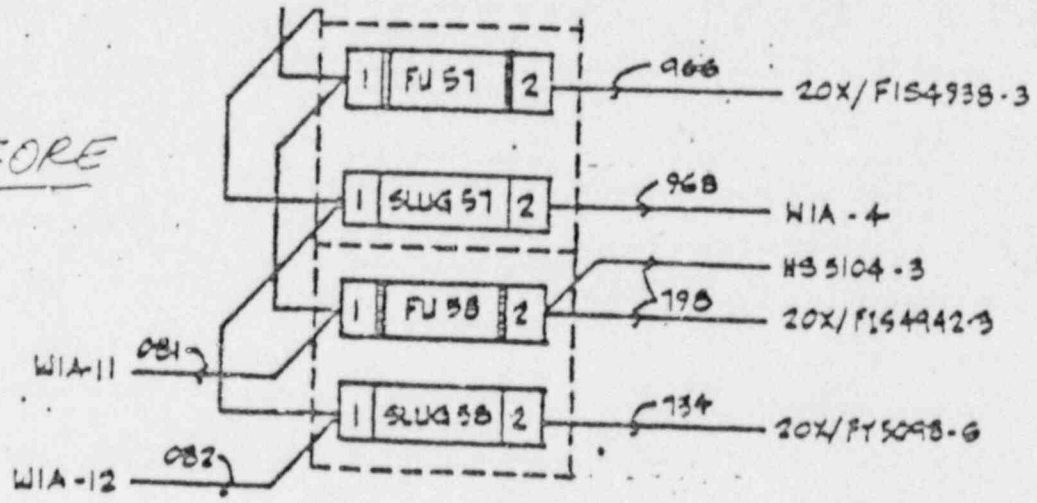
ISSUED DATE

JOB NO. 14926 PAGE 3 OF 3

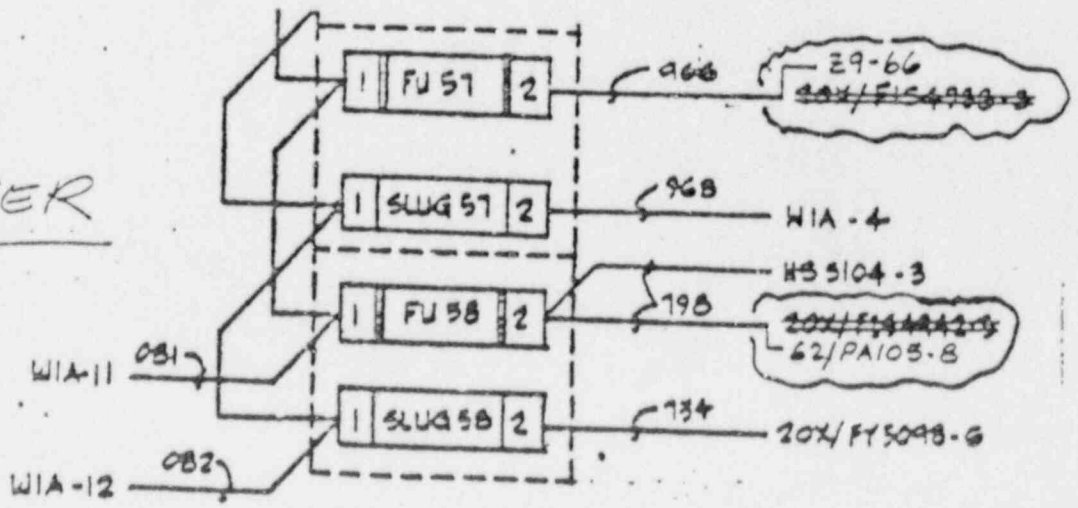
DESCRIPTION OF CHANGE:

REVISE AS SHOWN.

BEFORE



AFTER



SOUTH TEXAS PROJECT CCP NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN COMP. DATE: DWG. REV.	DCN NO.
4089-00123-IC	-	E		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: IWL05

JCC NO. 14926 PAGE 1 OF 2

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE

DELETED CABLE "NIWL47C3SA" AS SHOWN ON PAGE 2.

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87			

REV 0 Vincent C. Jones 11/7/87 HL&P DATE

14926-001 11/16/87 DATE

Rev. 0 NRC 2/10/88

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

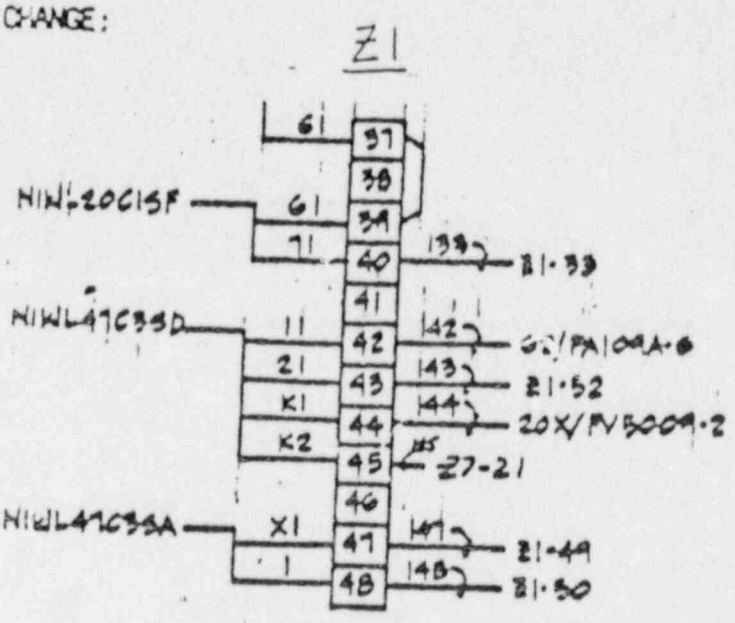
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00123-IC	-	E		

IDCN NUMBER ISSUED DATE

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

BEFORE



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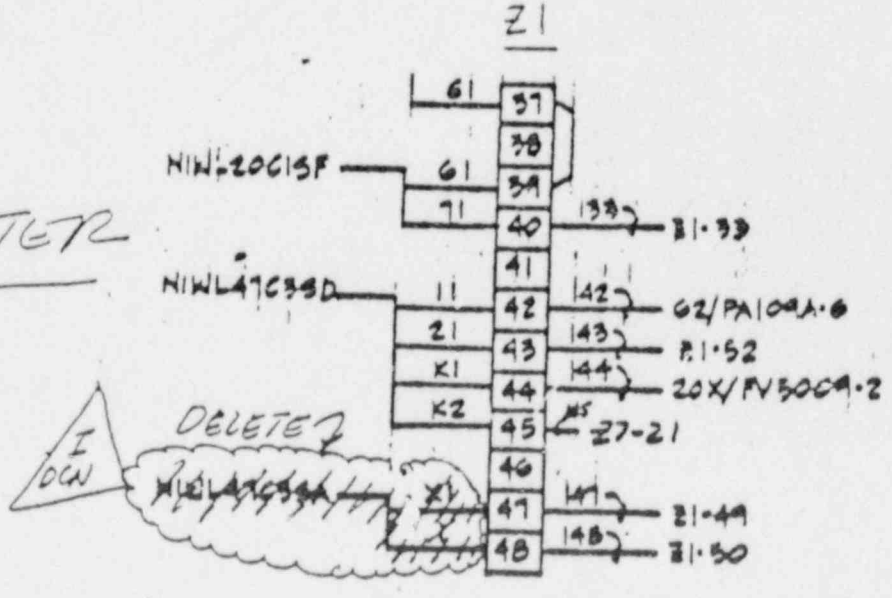


SOUTH TEXAS PROJECT

CCP. NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00124-IC	-	E		

IDCN NUMBER ______ ISSUED DATE ______

JOB NO. 14926 PAGE 1 OF 2

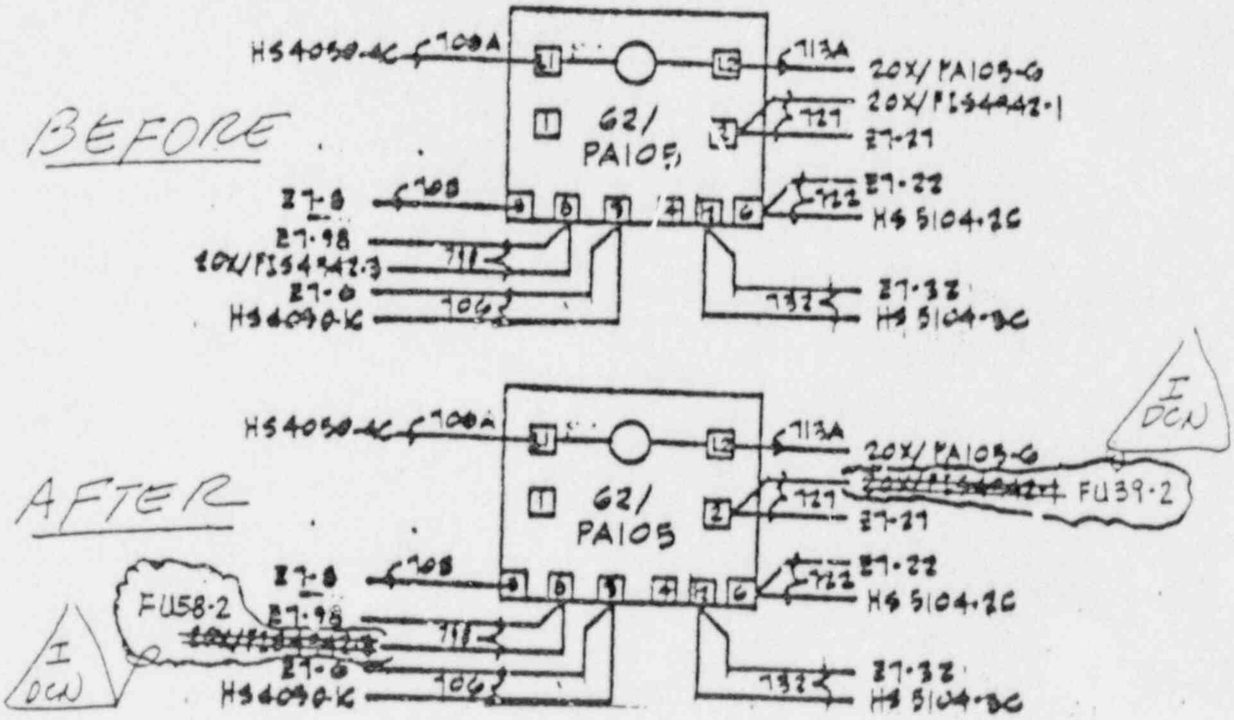
STARTUP SYSTEMS AFFECTED: 1WL05

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE REVISE TERMINATIONS AS SHOWN.



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87	[signature]	M. [signature]	[signature]

0 Vincent C. Jones 11/17/87
REV HL&P DATE

14926-001
11/16/87
DATE

Rev. 0 [signature] NPOD 2/10/88

STP 1284 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

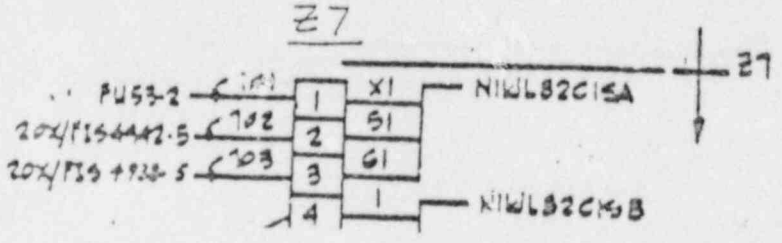
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

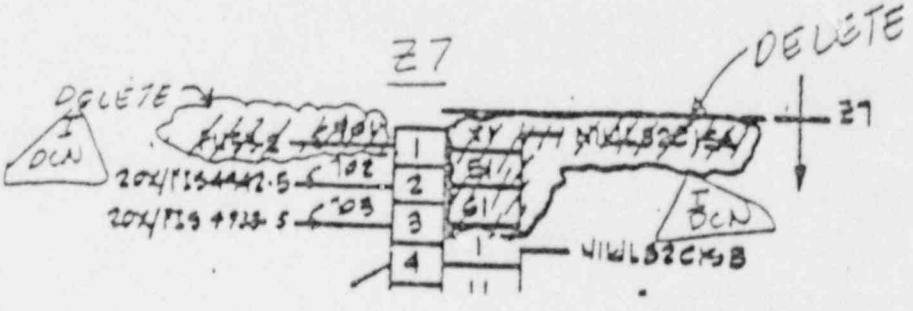
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00124-IC	-	E		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE: REVISE TERMINATION AND DELETE CABLE "NIWL82C1SA" AS SHOWN.





SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00127-IC	–	D		

IDCN NUMBER ______ ISSUED DATE ______

JOB NO. 14926 PAGE 1 OF 1

STARTUP SYSTEMS AFFECTED: 1WL05

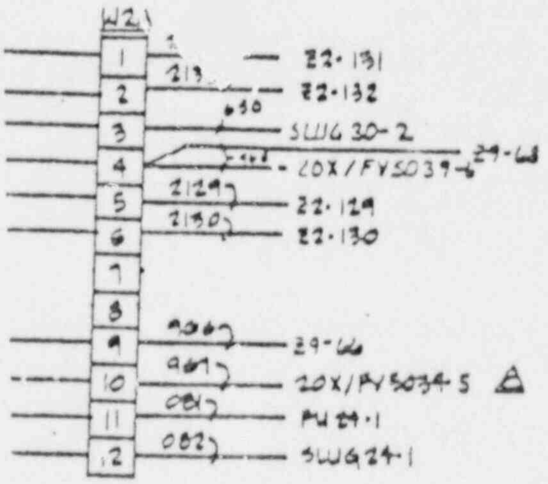
FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

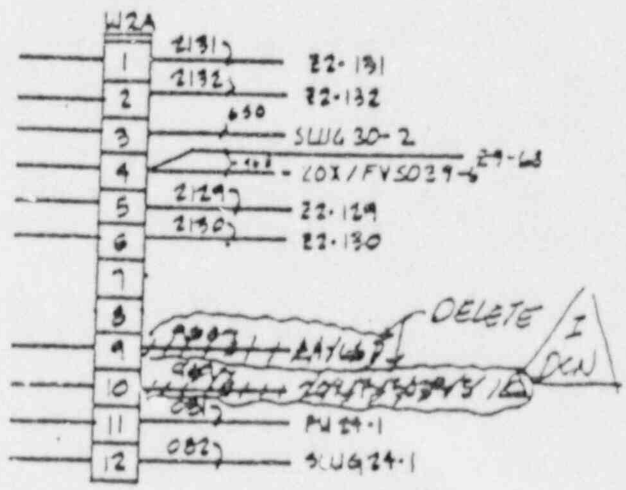
REF CARR #1358 & #1595

DESCRIPTION OF CHANGE REVISE TERMINATION AS SHOWN.

BEFORE



AFTER



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87	E. Crump	M. Reid	C.E. Fil...

0 Vincent C. Jones 11/17/87

REV HL&P 14926-001 DATE

11/16/87

DATE

NPOD Rev. 0 [signature] 2/10/88

STP 1254 (11/85) D-30

SOUTH TEXAS PROJECT

CCP. NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
4089-00128-IC	-	D		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: 1WL05

JOB NO. 14926 PAGE 1 OF 1

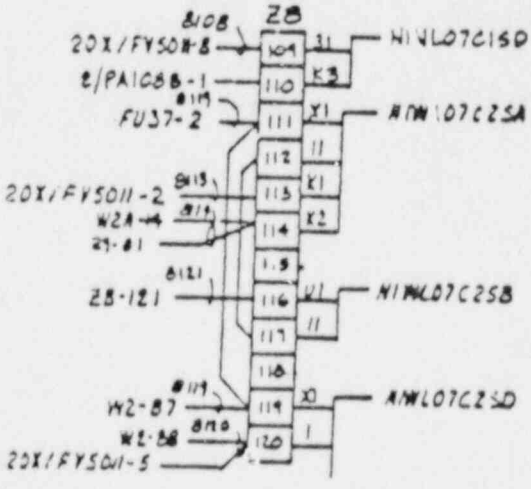
FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

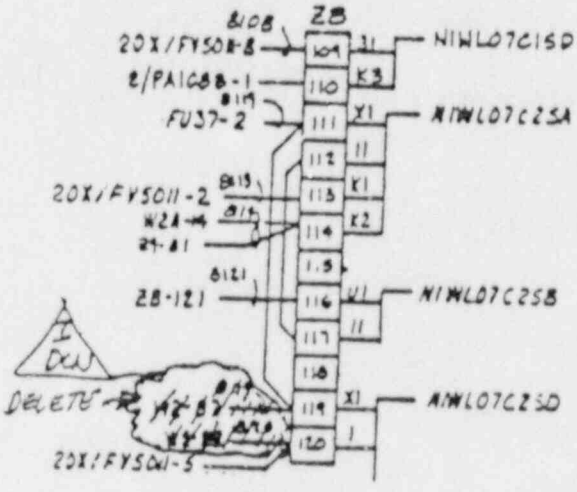
REF. CARR # 1358 & 1595

DESCRIPTION OF CHANGE REVISE TERMINATIONS AS SHOWN.

BEFORE



AFTER



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87			

REV 0 Vincent C. Jones 11/17/87 HL&P DATE

14926-097 11/16/87 DATE

Rev 0 NPSD 2/10/88

STP 1284 (11/85) 0-30

127

SOUTH TEXAS PROJECT CCP NO. 1-J-FST-0485 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
4089-00129-IC	-	E		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: IWL05

JOB NO. 14926 PAGE 1 OF 1

FSAR CHANGE REQUIRED? YES ☐ NO ☒

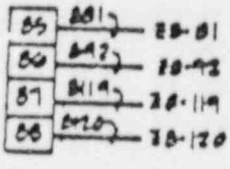
REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES

REF CARR #1358 & #1595

DESCRIPTION OF CHANGE REVISE TERMINATIONS AS SHOWN:

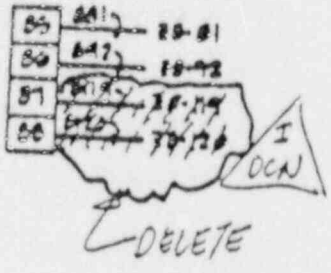
BEFORE

W2



AFTER

W2



BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
C. AYRAN 8-3-87	E Ramos	M. Bob	

O Vincent C. Jones 11/17/87
REV HL&P DATE
14926-001

Rev. 0 NTCD 2/10/88

11/16/87
DATE

SOUTH TEXAS PROJECT

CCP NO. 1-J-FST-0485 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
4089-00131-IC	-	D		

IDCN NUMBER _____ ISSUED DATE _____

STARTUP SYSTEMS AFFECTED: IWL05

JOB NO. 14926 PAGE 1 OF 1

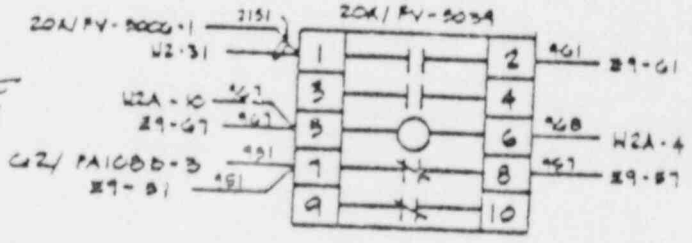
FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) NUISANCE ALARMS GENERATED BY SKID MOUNTED PRESSURE AND FLOW SWITCHES.

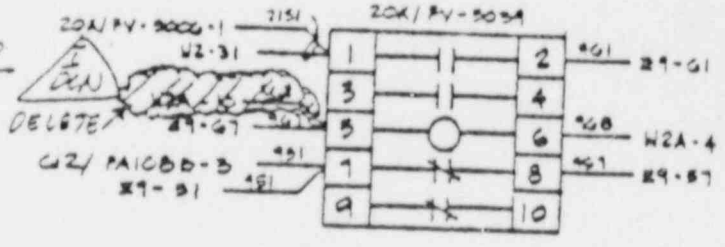
PER CAR #1358 & #1595

DESCRIPTION OF CHANGE REVISE AS SHOWN.

BEFORE



AFTER



RECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EQS	PE
C. AYRES 8-3-87			

O Vincent C Jones 11/17/87
REV HL&P DATE
14926-001

Rev. 0 [signature] 2/19/88
NTOD

11/16/87
DATE

STP 1284 (11/85) 0-30

121

CCP NUMBER: 1JFST0485 REV: 00 DATE INITIATED: 080487 INITIATED BY: C.CYRAN RESPONSIBLE ENTITY: CONTROLS

MILESTONE 1 : 000000 NEW COMPONENTS ADDED TO EE580 DATA BASE
MILESTONE 2 : 080487 M8 PLACED AGAINST ALL AFFECTED COMPONENTS IN EE580 DATA BASE
MILESTONE 3 : 080537 ALL AFFECTED COMPONENTS COPIED FROM EE580 DATA BASE TO CCP FILE
MILESTONE 4 : 080587 CCP FILE UPDATED TO REFLECT CHANGES
MILESTONE 5 : 000000 RESPONSIBLE ENTITY IDENTIFIED BY JOBSITE; ENGINEERING NOTIFIED
MILESTONE 6 : 000000 WORK ORDER RECEIVED BY ENGINEERING
MILESTONE 7 : 000000 EE580 DATA BASE UPDATED
MILESTONE 8 : 000000 CCP VOIDED

14926-001
CCP-1-J-FST-0485
CCP NO. _____ REV. 00

+ +
+ +
+ CABLES WITH ASSOCIATED VIAS & NOTES +
+ +
+ +

REV HL&P DATE
14926-001 11-17-87

SELECTED BY: M81JFST0485

N1WL02C2SB 06 SR *C N S WL 9EWL0202 00 C= 488 01 CN212 N1WLZLP189 N1WLZLP710 N1WL02C2SB 1 N1WL02C2SB 2
1JFST0485 RV DR XXXXXX *HLP OPS AC*
CD MM
NI
V DELETED N1XM3DTS88 N1XM3DTS8C N1XM3DTS8G N1XM3DTSAA N1XM3DTSVA N1XM1DTSVB N1XM1DTSAG
V N1XM1DTSAC N1XM1DTS8E N1XM1DTS8F N1XM1DTS8G N1XM1DTSAT N1XM1DTSAS N1XM1DTSAV N1XM1DTSAU
V N1XM1CTSAN N1XM1CTSAD N1XM1CTSAB N1XM1CTSAC N1XM1HTSAE N1XM1HTSAF N1XM1HTSAG N1XM1NTSAB
V N1XM1NTSAC N1XM1HTSAF N1XM1MRS023 DELETED-1
1 SPARE --- SEE TERMINATION CARD
2 CHANGED PER CCT 3365

N1WL46C1SE 04 SR *C N S WL 9EWL4601 04 C= 488 01 CN312 N1WLZLP189 N1WLZLP710 N1WL46C1SE 1 N1WL46C1SE 2
1JFST0485 RV DR XXXXXX *HLP OPS AC*
CD MM
NI
V DELETED N1XM3DTS88 N1XM3DTS8C N1XM3DTS8G N1XM3DTSAA N1XM3DTSVA N1XM1DTSVB N1XM1DTSAG
V N1XM1DTSAQ N1XM1DTS8E N1XM1DTS8F N1XM1DTS8G N1XM1DTSAT N1XM1DTSAS N1XM1DTSAV N1XM1DTSAU
V N1XM1CTSAN N1XM1CTSAD N1XM1CTSAB N1XM1CTSAC N1XM1HTSAE N1XM1HTSAF N1XM1HTSAG N1XM1NTSAB
V N1XM1NTSAC N1XM1HTSAF N1XM1MRS023 DELETED-1
1 SPARE --- SEE TERMINATION CARD
2 CHANGED PER CCT 3365,FCR SE0953

N1WL46C2SE 07 SR *C N S WL 9EWL4601 01 C= 488 01 CN212 N1WLZLP189 N1WLZLP710 N1WL46C2SE 1 N1WL46C2SE 2
1JFST0485 RV DR XXXXXX *HLP OPS AC*
CD MM
NI
V DELETED N1XM3DTS88 N1XM3DTS8C N1XM3DTS8G N1XM3DTSAA N1XM3DTSVA N1XM1DTSVB N1XM1DTSAG
V N1XM1DTSAQ N1XM1DTS8E N1XM1DTS8F N1XM1DTS8G N1XM1DTSAT N1XM1DTSAS N1XM1DTSAV N1XM1DTSAU
V N1XM1CTSAN N1XM1CTSAD N1XM1CTSAB N1XM1CTSAC N1XM1HTSAE N1XM1HTSAF N1XM1HTSAG N1XM1NTSAB
V N1XM1NTSAC N1XM1HTSAF N1XM1MRS023 DELETED-1
1 SPARE --- SEE TERMINATION CARD
2 CHANGED PER CCT 3365

N1WL47C1SA 10 SR *C N S WL 9EWL4701 01 C= 488 01 CN212 N1WLZLP189 N1WLZLP710 N1WL47C1SA 1 N1WL47C1SA 2
1JFST0485 RV DR XXXXXX *HLP OPS AC*
CD MM
NI
V DELETED N1XM3DTS88 N1XM3DTS8C N1XM3DTS8G N1XM3DTSAA N1XM3DTSVA N1XM1DTSVB N1XM1DTSAG
V N1XM1DTSAQ N1XM1DTS8E N1XM1DTS8F N1XM1DTS8G N1XM1DTSAT N1XM1DTSAS N1XM1DTSAV N1XM1DTSAU
V N1XM1CTSAN N1XM1CTSAD N1XM1CTSAB N1XM1CTSAC N1XM1HTSAE N1XM1HTSAF N1XM1HTSAG N1XM1NTSAB
V N1XM1NTSAC N1XM1HTSAF N1XM1MRS023 DELETED-1
1 SPARE --- SEE TERMINATION CARD

14926-001

CCP NO. 4-5-FST-0485 REV. 00

```
                2 CHANGED PER CCT 3365
  N1WL47C2SA   07 SR *C N S WL  9EWL4701 01 C= 438 01 CN212  N1WLZLP189   N1WLZLP710   N1WL47C2SA 1 N1WL47C2SA 2
    1JFST0485     RV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
                  V DELETED       N1XM3DTS8A   N1XM3DTS8C   N1XM3DTS8G   N1XM3DTSAA   N1XM3DTSVA   N1XM1DTSVB   N1XM1DTSAG
                  V N1XM1DTSAQ    N1XM1DTS8E   N1XM1DTS8F   N1XM1DTS8G   N1XM1DTSAT   N1XM1DTSAS   N1XM1DTSAV   N1XM1DTSAU
                  V N1XM1CTSAN    N1XM1CTSAD   N1XM1CTSAB   N1XM1CTSAC   N1XM1HTSAE   N1XM1HTSAF   N1XM1HTSAG   N1XM1NTSAB
                  V N1XM1NTSAC    N1XM1MTSAF   N1XM1MRS023  DELETED-1
                  1 SPARE --- SEE TERMINATION CARD
                  2 CHANGED PER CCT 3365
  N1WL47C3SA   07 SR *C N S WL  9EWL4701 01 C= 439 01 CN212  N1WLZLP189   N1WLZLP710   N1WL47C3SA 1 N1WL47C3SA 2
    1JFST0485     RV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
                  V DELETED       N1XM3DTS8B   N1XM3DTS8C   N1XM3DTS8G   N1XM3DTSAA   N1XM3DTSVA   N1XM1DTSVB   N1XM1DTSAG
                  V N1XM1DTSAQ    N1XM1DTS8E   N1XM1DTS8F   N1XM1DTS8G   N1XM1DTSAT   N1XM1DTSAS   N1XM1DTSAV   N1XM1DTSAU
                  V N1XM1CTSAN    N1XM1CTSAD   N1XM1CTSAB   N1XM1CTSAC   N1XM1HTSAE   N1XM1HTSAF   N1XM1HTSAG   N1XM1NTSAB
                  V N1XM1NTSAC    N1XM1MTSAF   N1XM1MRS023  DELETED-1
                  1 SPARE --- SEE TERMINATION CARD
                  2 CHANGED PER CCT 3365
  N1WL50C1ST   11 SR *C N S WL  9EWL5001 04 C= 488 01 CN212  N1WLZLP189   N1WLZLP710   N1WL50C1ST 1 N1WL50C1ST 2
    1JFST0485     RV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
                  V DELETED       N1XM3DTS8B   N1XM3DTS8C   N1XM3DTS8G   N1XM3DTSAA   N1XM3DTSVA   N1XM1DTSVB   N1XM1DTSAG
                  V N1XM1DTSAQ    N1XM1DTS8E   N1XM1DTS8F   N1XM1DTS8G   N1XM1DTSAT   N1XM1DTSAS   N1XM1DTSAV   N1XM1DTSAU
                  V N1XM1CTSAN    N1XM1CTSAD   N1XM1CTSAB   N1XM1CTSAC   N1XM1HTSAE   N1XM1HTSAF   N1XM1HTSAG   N1XM1NTSAB
                  V N1XM1NTSAC    N1XM1MTSAF   N1XM1MRS023  DELETED-1
                  1 SPARE --- SEE TERMINATION CARD
                  2 CHANGED PER CCT 3365,FCR SE0953
  N1WL82C1SA   07 SR *C N S WL  9EWL8201 00 C= 488 01 CN312  N1WLZLP189   N1WLZLP710   N1WL82C1SA 1 N1WL82C1SA 2
    1JFST0485     RV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
                  V DELETED       N1XM3DTS8B   N1XM3DTS8C   N1XM3DTS8G   N1XM3DTSAA   N1XM3DTSVA   N1XM1DTSVB   N1XM1DTSAG
                  V N1XM1DTSAQ    N1XM1DTS8E   N1XM1DTS8F   N1XM1DTS8G   N1XM1DTSAT   N1XM1DTSAS   N1XM1DTSAV   N1XM1DTSAU
                  V N1XM1CTSAN    N1XM1CTSAD   N1XM1CTSAB   N1XM1CTSAC   N1XM1HTSAE   N1XM1HTSAF   N1XM1HTSAG   N1XM1NTSAB
                  V N1XM1NTSAC    N1XM1MTSAF   N1XM1MRS023  DELETED-1
                  1 SPARE --- SEE TERMINATION CARD
                  2 CHANGED PER CCT 3365
END OF THE REPORT

+ + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + +
+                                                                               +
+            TERMS WITH ASSOC LOCATIONS,CCNO.,BLK&PTS & NOTES                   +
+                                                                               +
+ + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + + +

SELECTED BY: H81JFST0485
  N1WL02C2SB 1 03 SR *C N S WL  9EWL0202 00 C=   2 01 CN212  N1WLZLP189   N1WL02C2SB
    1JFST0485     TV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
                X1   BK           21      WH
                  1 SPARE --- DISCONNECT ALL WIRES
  N1WL02C2SB 2 03 SR *C N S WL  9EWL0202 00 C=   2 01 CN212  N1WLZLP710   N1WL02C2SB
    1JFST0485     TV DR      XXXXXX      *HLP OPS AC*
                     CD      MM
                     NI
```

14926-001

CCP NO. 1-JFST-0485 REV. 00

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                X1      BK              21      WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL46C1SE 1 05 SR *C N S WL  9EWL4601 04 C=    2 01 CN312  N1WLZLP189   N1WL46C1SE
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              21      WH              U1      RD
                  1 SPARE --- DISCONNECT ALL WIRES
                  2 CHANGED PER FCR SE00953,SU REQ 86-388
N1WL46C1SE 2 05 SR *C N S WL  9EWL4601 04 C=    2 01 CN312  N1WLZLP710   N1WL46C1SE
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              21      WH              U1      RD
                  1 SPARE --- DISCONNECT ALL WIRES
                  2 CHANGED PER FCR SE00953,SU REQ 86-388
N1WL46C2SE 1 03 SR *C N S WL  9EWL4601 01 C=    2 01 CN212  N1WLZLP189   N1WL46C2SE
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              21      WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL46C2SE 2 03 SR *C N S WL  9EWL4601 01 C=    2 01 CN212  N1WLZLP710   N1WL46C2SE
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              21      WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C1SA 1 06 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP189   N1WL47C1SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              1       WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C1SA 2 08 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP710   N1WL47C1SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              1       WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C2SA 1 03 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP189   N1WL47C2SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              1       WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C2SA 2 03 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP710   N1WL47C2SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              1       WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C3SA 1 03 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP189   N1WL47C3SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
                  CD          MM
                  NI
                X1      BK              1       WH
                  1 SPARE --- DISCONNECT ALL WIRES
N1WL47C3SA 2 03 SR *C N S WL  9EWL4701 01 C=    2 01 CN212  N1WLZLP710   N1WL47C3SA
  1JFST0485       TV DR       XXXXXX      *HLP OPS AC*
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14926-001

CCP NO. L-J-FST-0485 REV. 00

```
                CO      MM
                NI
              K1        BK            1       WH
                1 SPARE --- DISCONNECT ALL WIRES
N1WL50C1ST 1 07 SR *C N S WL  9EWL5001 04 C=    3 01 CN212  N1WLZLP189   N1WL50C1ST
  1JFST0485     TV DR       XXXXXX      *HLP OPS AC*
                CO      MM
                NI
              K1        BK            K2      WH
                1 SPARE --- DISCONNECT ALL WIRES
                2 CHANGED PER FCR SE00953,SU REQ 86-388
N1WL50C1ST 2 0o SR *C N S WL  9EWL5001 04 C=    3 01 CN212  N1WLZLP710   N1WL50C1ST
  1JFST0485     TV DR       XXXXXX      *HLP OPS AC*
                CO      MM
                NI
              K1        BK            K2      WH
                1 SPARE --- DISCONNECT ALL WIRES
                2 CHANGED PER FCR SE00953,SU REQ 86-388
N1WL82C1SA 1 03 SR *C N S WL  9EWL8201 00 C=    3 01 CN312  N1WLZLP189   N1WL82C1SA
  1JFST0485     TV DR       XXXXXX      *HLP OPS AC*
                CO      MM
                NI
              K1        BK            51      WH          61      RD
                1 SPARE --- DISCONNECT ALL WIRES
N1WL82C1SA 2 03 SR *C N S WL  9EWL8201 00 C=    3 01 CN312  N1WLZLP710   N1WL82C1SA
  1JFST0485     TV DR       XXXXXX      *HLP OPS AC*
                CO      MM
                NI
              K1        BK            51      WH          61      RD
                1 SPARE --- DISCONNECT ALL WIRES
END OF THE REPORT
```

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
10CFR50.59 DETERMINATION REVIEW FORM

Originating Document No. 1-S-FST-0425 Revision No. 00

Title DELETE VENDOR SUPPLIED FLOW & PRESSURE SWITCHES

Check one: ( ) Procedure (✓) Plant Modification ( ) Other

Check one: ( ) Quality Related (✓) Nonquality Related

1. Does the subject of this review involve a change to the facility as described in the FSAR?

Peter A deSouza PD — 10/29/87 — ( ) Yes (✓) No

BEC Cognizant Engr. Signature — Date

2. Does the subject of this review involve a change to the procedures as described in the FSAR?

Vincent C. Jones — 11/17/87 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

3. Does the subject of this review conduct tests and/or experiments not described in the FSAR?

Peter A deSouza PD — 10/29/87 — ( ) Yes (✓) No

BEC Cognizant Engr. Signature — Date

4. Does the subject of this review require a change to the Technical Specifications?

Vincent C. Jones — 11/17/87 — ( ) Yes (✓) No

HL&P Responsible Engr. Signature — Date

Note: If response to one (1) or more of questions 1 thru 4 are affirmative, the cognizant Engineer shall provide technical justification for the proposed change(s) and delineate the section(s) of the Safety Analysis Report and/or Plant Technical Specification(s) affected by the proposed change(s).

Justification for Proposed Change:

DESIGN CHECKLIST (DCL)

Title Doc.: DELETE VENDOR SUPPLIED FLOW & PRESSURE SWITCHES

Initiating Change Document No. 1-J-FST-0485

Rev. 00 Page 1 Of 2

Start-up System: WL05 Title: LIQUID WASTE SYSTEM

This checklist must be attached to the initiating change document during the entire review and approval process up to the point of issuance by Project Document Control. Reference PED-041.

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REVISION (Must provide specific Reference No.) DOCUMENT NO. (OR SECTION)	REV.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
		Licensing Documents				
	✓	FSAR				
	✓	FHAR				
	✓	ER				
	✓	Technical Specifications (Plant)				
	✓	Deficiency Evaluation Report (DER)				
	✓	Design Criteria				
	✓	System Descriptions				
	✓	Design Calculations				
	✓	Specifications				
	✓	ASME Design Specifications				
	✓	Stress Report				
	✓	N-5 Package (Piping & Supports)				
	✓	Penetration Seals				
	✓	Design Drawings				

ORIG. [signature] Date 10/23/87 EGS [signature] DATE 10/24/87 PE [signature] DATE 11/16/87

STP 1332 (11/86)

APPENDIX E, ATTACHMENT 3

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

A PORC Review was not required for this design change.

APPENDIX E, ATTACHMENT 4

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

The Liquid Waste Processing System (LWPS) seal water system supplies seal water to the following pumps in the LWPS: Waste Evaporator Recirculation Pump, Waste Evaporator Auxiliary Feed Pump, Waste Evaporator Concentrates Transfer Pump, Condensate Polishing Regenerative Waste Collection Tank Pump, Laundry and Hot Shower Tank Pump, Spent Resin Sluice Pump, Waste Holdup Tank Pump, Spent Resin Transfer Pump, Floor Drain Tank Pump, Low Activity Spent Resin Transfer Pump, and the Low Activity Spent Resin Sluice Pump. Vendor supplied flow switches provided a low flow alarm and pump cutoff, and vendor supplied pressure switches supplied a low pressure alarm. The low flow pump cutoff was already controlled by field installed flow switches, the low pressure alarms were unnecessary. This arrangement resulted in nuisance alarms each time the system was secured. Adequate protection is provided by these field installed pressure switches making the vendor supplied switches unnecessary. These switches were removed by the associated work document.

APPENDIX E, ATTACHMENT 5

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

This change deletes nuisance alarms associated with flow and pressure switches in the LWPS seal water system. Adequate protection is still provided by field installed flow switches. This change will not result in an additional exposure to plant personnel.

APPENDIX E, ATTACHMENT 6

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

This change deletes nuisance alarms associated with the LWPS seal water system and it does not change the amount or chemistry of any waste stream in the Liquid Waste Processing System. Adequate protection is still provided by field installed flow switches in this system. This modification does not change the amount of liquid and gaseous effluents, and solid waste predicted in the License application and amendments.

APPENDIX E, ATTACHMENT 7

Deletion Vendor Supplied Flow and Pressure Switches on Liquid Waste Process System Pump Seal Water Skid

This modification deletes nuisance alarms associated with the LWPS seal water system and does not affect the amount or radiochemistry of any waste stream. Adequate protection is provided by field installed flow switches in this system. This modification will not result in a change to the expected maximum exposures to a member of the public in the UNRESTRICTED AREA and to the general population as previously estimated in the License application and amendments.

APPENDIX E, ATTACHMENT 8

Deletion of Vendor Supplied Flow and Pressure Switches
on Liquid Waste Process System Pump Seal Water Skid

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX F

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

a. Attachment 1 - A summary of the evaluation that led to the determination that the change could be made in accordance with 10CFR50.59.

b. Attachment 2 - A detailed description of the equipment, components, and processes involved and the interfaces with other plant systems.

c. Attachment 3 - Documentation of the fact that the change was reviewed and approved by the Plant Operations Review Committee (PORC).

d. Attachment 4 - Sufficient detailed information to totally support the reason for the change without benefit of additional or supplemental information.

e. Attachment 5 - An estimate of the exposure to plant personnel as a result of the change.

f. Attachment 6 - An evaluation of the change, which shows the predicted release of radioactive materials in liquid and gaseous effluents and/or quantity of solid waste that differ from those previously predicted in the License application and amendments.

g. Attachment 7 - An evaluation of the change, which shows the expected maximum exposure to a member of the public in the UNRESTRICTED AREA and to the general population that differ from those previously estimated in the License application and amendments.

h. Attachment 8 - A comparison of the predicted releases of radioactive materials, in liquid and gaseous effluents and solid waste, to the actual release for the period prior to when the changes are to be made.

APPENDIX F, ATTACHMENT 1

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

A 10CFR50.59 Determination Review Form was completed by Support Engineering. It was determined that there were no unreviewed safety questions and no further action was required.

10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. CCP 1-M-FST-0249 REV. 0

TITLE ADDITION OF ISOLOK SAMPLER FOR SPENT RESIN DISCHARGE, AND REPLACEMENT OF QUICK DISCONNECT HOSE CONNECTION WITH BLIND FLANGES

DESCRIPTION PROVIDE SAMPLING CAPABILITY FOR SOLID WASTES BEING DISCHARGED TO THE MOBILE SOLIDIFICATION UNIT.

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒ QOJ 3-28-88
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒ QOJ 3-28-88
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

(This form, when completed, shall be retained for the life of the plant.)

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

FSAR SECT. 10.4.8, 11.3 NRC QUESTIONS & ANSWERS QOD 3/28/88

Prepared by: QOD 3/28/88 Michael F. Hutchins / 4/12/88
Originator Date

Concurrence: Glenn D Marcus / 4-21-88
Department Manager Date

0191b/0106b

DESIGN CHECKLIST (DCL)

Initiating Change Document No: CCP 1-M-FST-0249

Title Doc.: ADDITION OF ISOLOK SAMPLER

Rev. 0 Page 1 of 2

Start-up System: 1WS01 Title: SOLID WASTE SYSTEM

This checklist must be attached to the initiating change document during the entire review and approval process up to the point of issuance by Project Document Control. Reference PED-041.

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REV (Must provide specific reference no.) DOCUMENT NO. (OR SECTION)	REV	OTHER AFFECTED DISC.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
☐	☒	Licensing Documents					
☐	☒	FSAR					
☐	☒	FHAR (Appendix B)*					
☐	☒	ER					
☐	☒	Technical Specifications (Plant)					
☐	☒	Deficiency Evaluation Report (DER)					
☐	☒	Design Criteria					
☐	☒	System Descriptions					
☐	☒	Design Calculations					
☐	☒	Specifications					
☐	☒	ASME Design Specifications					
☐	☒	Stress Report					
☐	☒	N-5 Package (Piping & Supports)					
☐	☒	Penetration Seals					
☒	☐	Design Drawings	6R329F05048 #1	8			
			7M369WS278 SHT #10	3			
			WS-1035-HF5009	B	7 DCN INCLUDED IN CCP		
			WS-1035-HF5010	A			
			~~6~~ 5M15-9-3-46054	6			

* Programmatic Review Required

Orig AOttesby Date 3-29-88 EGS AOttesby Date 3-29-88 PE C.E. Fitt Date 03/30/88

CS-AD 2274A (8-18-87)

DESIGN CHECKLIST (DCL) Continued

Initiating Change Document No. _____

Rev. _____ Page 2 of 2

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REV. (Must provide specific reference no.) DOCUMENT NO. (OR SECTION)	REV.	OTHER AFFECTED DISC.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
☐	☒	Instrument Index					
☒	☐	Equipment Index					
☒	☒	Valve Master File	SL549T60302	2.3	10CN INCLUDED IN DCP.		
☐	☒	Setpoint List					
☐	☒	Supplier Dwgs. Inst. Manuals, etc.					
☐	☒	Configuration Control Packages					
☐	☒	Design Verification Reports					
☐	☒	HELBA *					
☐	☒	ALARA					
☐	☒	Tornado Missile					
☐	☒	Flooding Analyses *					
☐	☒	Internal Missile *					
☐	☒	Equipment Qualification *					
☐	☒	Pre Operational Texting Procedures Results					
☐	☒	Start up Testing Procedures Results					
☐	☒	EE580 Data Base					
☐	☒	Other (Specify)					

* Programmatic Review Required

050092A (05/88)
OEP-3.15Q

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

10CFR50.59 EVALUATION FORM - TYPICAL

(PAGE 1 OF 2)

UNIT # 1

ORIGINATING DOCUMENT (FCR) NO. HXDP-07365/CCP-1-1M-PST-0299 REV. 0

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ ECN ☐ OTHER _____

TITLE FCR

DESCRIPTION Modify Piping To Avoid Possible Interference w/ Resin Tank

	YES	NO
1. DOES THE SUBJECT OF THE REVIEW INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
2. DOES THE SUBJECT OF THIS REVIEW INVOLVE A CHANGE TO THE PROCEDURES AS DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
3. DOES THE SUBJECT OF THIS REVIEW PROPOSE THE CONDUCT OF TESTS OR EXPERIMENTS NOT DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
4. DOES THE SUBJECT OF THIS REVIEW REQUIRE A CHANGE TO THE PLANT TECHNICAL SPECIFICATIONS?	☐	☒
5. DOES THE PROPOSED CHANGE, ALTHOUGH NOT DESCRIBED IN THE SAFETY ANALYSIS REPORT, AFFECT ITEMS OR ACTIVITIES THAT ARE DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒

IF ANY ANSWER IS AFFIRMATIVE, PERFORM AN UNREVIEWED SAFETY QUESTION EVALUATION.

IF ALL ANSWERS ARE NEGATIVE, NO UNREVIEWED SAFETY QUESTION EVALUATION IS REQUIRED.

0500928 (05/88)

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

10CFR50.59 EVALUATION FORM - TYPICAL

(PAGE 2 OF 2)

UNIT# 1

ORIGINATING DOCUMENT NUMBER COP-1-M-FST-0149 REV. 0

DOCUMENTATION OF THIS REVIEW MUST BE RETAINED WITH THE REVIEW PACKAGE FOR THE DURATION OF THE STATION LICENSE.

NOTE: "SAFETY ANALYSIS REPORT" INCLUDES THE FSAR, SAFETY ANALYSES SUBMITTED TO THE NRC IN SUPPORT OF THIER REVIEW OF THE APPLICATION FOR AN OPERATING LICENSE AND SUBSEQUENT AMENDMENTS TO THE OPERATING LICENSE AND OTHER LICENSE COMMITMENTS MADE TO THE NRC.

DOCUMENTS REVIEWED:

FCR HXDP-07365

FSAR (no applicable [illegible])

INTERDISCIPLINE COORDINATION REQUIRED? ☐ YES ☒ NO

IF YES, CIRCLE APPROPRIATE DISCIPLINE, THEN OBTAIN THEIR CONCURRENCE (INITIAL)

________ CIVIL ________ MECH ________ ELEC ________ I&C ________ EQ ________ OTHER

IMPACT TO OTHER DEPARTMENT? ☐ YES ☒ NO

IF YES, THEN IDENTIFY: ________

PREPARED BY: [signature] (BEC) [signature] / 6/21/88 6/20/88

RESPONSIBLE ENGINEER — DATE

CONCURRENCE: [signature] / 6/22/88

MANAGER, SUPPORT ENGINEERING — DATE

APPENDIX F, ATTACHMENT 2

Addition of an Isolok Sampler for Spent Res n Discharge
to Mobile Solidification Unit

The Solid Waste Processing System collects and processes radioactive spent resins and concentrates from liquid waste streams generated during plant operations, and solidifies these wastes for shipment and burial.

The Solid Waste Processing System consists of the Concentrates Storage Tank which stores evaporator concentrates, Spent Resin Storage Tank which receives spent resins from various plant demineralizers, resin and concentrates transfer pumps which pump spent resins and concentrates streams to vendor solidification equipment.

This change involved addition of an Isolok sampler on the resin discharge piping to sample spent resins for activity prior to dewatering. Sampling was originally done by grab samples which afforded a greater possibility for personnel contamination and exposure. Attached is the work documentation and the 10CFR50.59 Review Determination Form.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

CONFIGURATION CONTROL PACKAGE COVER SHEET

Milestone 5.0/Priority 4
IMPLEMENTATION SCHEDULE (MILESTONE)

CCP NO.	1-M-FST-0249
00	
REV NO.	ISSUE DATE

ORIGINATING DISCIPLINE: Mechanical

RESPONSIBLE ENGINEER: Stan Chan /Kishin Madhav EXT. 7603 DATE: 3-1-88

SEISMIC CAT NA Q-CLASS OF WORK TO BE PERFORMED: 7

FSAR CHANGE REQUIRED ☐ YES ☒ NO BUILDING AREA MAB Truck Bay

STARTUP SYSTEMS/SUB SYSTEMS AFFECTED 1WS01

BASIS OF CHANGE: ☒ CAR NO. 1524,2176 ☒ PCN NO. FL-3514 (Approved)

☐ SUPPLIER NA ☒ PUNCH LIST NO. 10212

☐ CLIENT NA ☐ OTHER ESR 87-XX-026

CHANGE CATEGORY: ☐ BACK CHARGE NA ☐ OTHER NA

TITLE OF CHANGE: Addition of an isolok sampler for spent resin discharge, and replacing quick disconnect hose connections with blind flanges. Work to be done by ECI.

PARTIAL PACKAGE: ☐ YES ☒ NO SEQUENCE: None

EA Mohan Bala

DISCIPLINE COORDINATION

ELECTRICAL EGS	3/28/88	CIVIL EGS N/A	DATE
PSSG EGS	DATE 3/18/88	MECHANICAL EGS	DATE 3-14-88
PLANT DESIGN EGS NA	DATE 3/18/88	CONTROL EGS	DATE 3-16-88
EQ EGS	DATE	NUCLEAR EGS NA	DATE

APPROVALS:

ORIGINATING DISCIPLINE EGS DATE 3-28-88

PROJECT ENGINEER DATE 04/01/88

CONFIGURATION CONTROL COORDINATOR (Includes site coordination)

DATE

FIELD NOTIFICATION OF CHANGE COMPLETION:

ORGANIZATION SIGNATURE DATE REFERENCE FOR PARTIAL COMPLETION

ENGINEERING CLOSE-OUT:

ORIGINATING DISCIPLINE EGS DATE

UNIT 2 EQUIVALENT: 2-M-FST-0259

SAD-2273 (8-12-87)
REPLACES STP 1279

CCP 1-M-FST-0244 Rev 00 REV W.H. Kinsolving NPOD 4/22/88 DATE 00 REV 4/15/88

CCP NO. 1-M-FSI-0249 REV. 00

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
CONTENTS

	REQUIRED THIS REV.	
1. DESIGN CHANGE BASIS	YES [X]	NO [ ]
2. FSAR CHANGE REQUEST PACKAGE	YES [ ]	NO [XX]
3. MATERIALS SHEET	YES [X]	NO [ ]
4. DOCUMENTATION LIST	YES [X]	NO [ ]

X-FCR'S INCORPORATED INTO THIS PACKAGE: N/A

X-FCR NOS.: _____, _____, _____,

DESIGN CHANGE BASIS

CCP NO. 1-M-FST-0249

CCP REV 00

PAGE 1 OF 3

BASIS OF CHANGE

The installation of an isolok sampler in the MAB truck bay will provide the capability to obtain representative resin samples prior to solidification. This sampling capability is required by the NRC.

DESCRIPTION OF CHANGE

Information provided in the Design Change Basis is provided for information only to enhance the definition of the design change as provided in the attached drawings. Installation and QC verification is to be accomplished in accordance with the drawings only. No XFCR's will be accepted against the Design Change Basis.

1. Replace each quick disconnect fitting at the discharge of Valves WS-0036 and WS0042 with 1 1/2" flanges and matching blind flanges per IDCN's to P&ID 9F05048 #1 and Isometric 7M369PWS278, Sht. A10.

2. Modify and extend the existing piping at the discharge of Valve WS-0041 per IDCN's to P&ID 9F05048 #1 and Isometric 7M369PWS278, Sht. A10.

3. Modify existing pipe support for Line 1 1/2" WS-1035-WG7 per IDCN to Drawing WS-1035-HF5009. Add new support per IDCN to Drawing WS-1035-HF5010.

4. Refer to vendor drawing; Bechtel Log No. BF41002-00006-AXX and weld the flange connections to the adapter as per IDCN #7M369PWS278, Sht. A10. Assemble sampler and adapter per vendor drawing; Bechtel Log No. BF41002-00001-AXX.

5. Mount Isolok Control Station HK-4151 (Ref. vendor drawing; Bechtel Log No. BF41002-00003-AXX) on the truck bay wall per IDCN to drawing 5M15-9Z-46054 and drawing 5Z01-9Z-45080, Sht. 68.

EQ CHECKLIST IMPACT ☐ YES ☒ NO

DESIGN CHANGE BASIS (Cont.)

CCP NO 1-M-FST-0249

CCP REV 00

DESCRIPTION OF CHANGE

5. (Cont'd)
   A. Install vendor supplied yellow and black tubes per vendor drawing; Bechtel Log No. BF41002-00001-AXX from sampler to control station.

   B. No permanent instrument or station air connection shall be installed for the control station.

6. Refer to vendor drawings Bechtel Log No. BF41002-00005-AXX and BF41002-00003-AXX to provide the 115 VAC-1PH-60HZ, 1/2 AM electric supply to controller.

NOTE: All existing material-quick disconnecting hose connections and welded pipe stubs - removed by this CCP shall be scrapped

DESIGN CHANGE BASIS (Cont.)

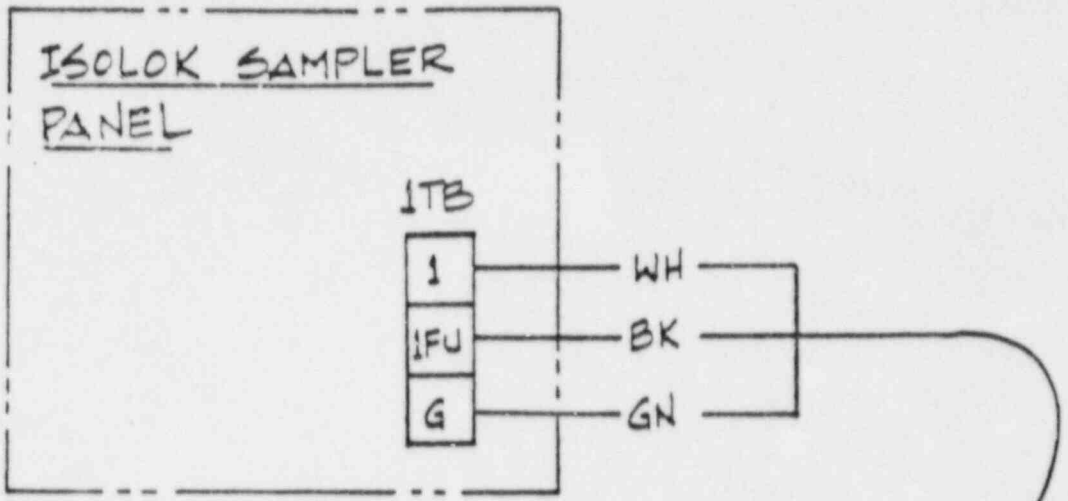
CCP NO. 1-M-FST-0249

CCP REV. 00

PAGE 3 OF 3

DESCRIPTION OF CHANGE

7. WIRE POWER SUPPLY TO CONTROLLER #HK 4151 AS FOLLOWS:



3/C #12 AWG, (UNSCHEDULED) FIELD TO PROVIDE A 6'-0" ± 2" LONG CABLE & FABRICATE A MOUNTING BRACKET TO SUPPORT THE COILED CABLE WHEN NOT IN USE.

3 POLE, 3 WIRE GROUNDING PLUG, STRAIGHT BLADE 15A., 120 V. AC., HUBBELL CAT. NO. 5266-C OR APPROVED EQUAL.

NOTE: PER SYSTEM ENGINEER NPOD (M. RENCEK) EXTENSION CORD TO BE USED FOR POWER IN AREA OF SAMPLER.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

CONFIGURATION CONTROL PACKAGE
MATERIAL SHEET

CCP No.	1-M-FST-0249
REV.	ϕϕ
PAGE	1 OF 3

CHG. CAT. No.	DESCRIPTION AND MATERIAL TYPE	UNIT OF MEASURE-MENT	SIZE	QTY.	PROCUREMENT RESPONSIBILITY (ENG/CONST)	*SPEC No.	ADD'L REV	MATERIAL REQUISTION* NUMBER	ITEM No.	REV.	REQUESTED DELIVERY DATE
N/A	ISOLOK SAMPLER ASSBLY		2"	1	ENG.	FMX # FM-01953	0	P.O.# BF-41002	1	0	LOCATION C10A15
	PIPE										
	S.S. ASTM A-312 GRADE TP316										
	OR 316L SMLS SCH. 40	4'-0"	2"		CONST.			7MPE9N04-02			
	S.S. ASTM A-312 GRADE TP.316L										
	OR 316 SCH 80	6"	3/4"		CONST			7MPE9P04-00-3/4			
	FLANGES										
	150# S.S. FORGED W.N. R.F. ASTM										
	A-182 F-316 OR F-316L SCH. 40		2"	2	CONST			7MFBBND2-02			
	2"x3/4 W.O.L SCH 40 S.S. BVL ASTM		2"x3/4	1	CONST			7MWI9ND4-02x06-3/4			
	A-403 WP 316 OR 316L SMLS										
	150# S.S. FORGED W.N. F.F. ASTM										
	A-182 F-316 OR F-316L SCH. 40		1 1/2	3	CONST.		FF	7MFCBND4-01-1/2			
	150# S.S. FORGED BLD FLG F.F.						RF	7MFBBND4-01-1/2 F316L			
	A-182 F-316 OR F-316L		1 1/2	3	CONST.		BLIND	7MFAB9D4-01-1/2			
	GASKETS										
	SPIRAL WOUND TYPE 304 WIND-		2"	1	CONST			5GAABABA-02x.175			
	ING WITH ASBESTOS FILLER C.S. OUTER		1 1/2"	3	CONST.			5GAABABA-01-1/2x.175			
	RING FLEXITALLIC STYLE "CG" API										
	601										

CSAD 2[illegible] (7-17-87)

NOTE: COLUMNS SHOULD INDICATE N/A IF NOT APPLICABLE

EDP 4 72

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

CONFIGURATION CONTROL PACKAGE MATERIAL SHEET

CCP No.	1-M-FST-0249
REV.	ΦΦ
PAGE 2 OF 3	

CHG. CAT. No.	DESCRIPTION AND MATERIAL TYPE	UNIT OF MEASUREMENT	SIZE	QTY.	PROCUREMENT RESPONSIBILITY (ENG/CONST)	*SPEC No.	ADD/REV	MATERIAL REQUISITION* NUMBER	ITEM No.	REV.	REQUESTED DELIVERY DATE*
NA	BOLTS										
	5/8" Φ x 3" LONG		5/8"	4.	CONST.			7BBPB9AG 00-	5/8X03		W/6F NUTS
	ASTM A-193 GRADE B6 S.S.										
	STUD BOLTS										
	1/2" Φ x 2 3/4 LONG ASTM A-193										
	GRADE B6 S.S. STUD BOLTS		1/2"	12	CONST.			7BBPB9A9 00-	1/2 X 02 3/4	W/NUTS	(6F NUTS)
	NUTS										
	ASTM A-194 GRADE 6 FTP 416 OR		5/8" Φ	8	CONST.				X03	W/NUTS	"
	GRADE 6 TP 410 S.S. HEXAGON		1/2" Φ	24	CONST.			W/6 F NUTS	SEE	BOLT	ABOVE
	SEMI-FINISHED ANSI B18.2.2							"	"	"	"
	FITTINGS										
	90° LONG RAD. B.W. ELBOWS		2"	2	CONST.			7MWA9NE2-02			
	S.S. ASTM A-403 WP-316 OR 316L		1 1/2"	1	CONST.			7MWA9NE4-	01 1/2		
	45° LONG RAD. B.W. ELBOW		2"	2	CONST.			7MWB9NE4-	02		
	SS. ASTM A-403 WP-316 OR 316L										
	CONC. RED SCH 40 W.R. S.S. ASTM		2x1 1/2	2	CONST.			7MWS9NE2-	02X01-1/2		
	A-403 WP 316 OR 316L		1 1/2x1"	1	CONST.			7MWS9NE4-	01 1/2 X 1		
	3/4" THR'D CAP S.S. SCH. 80		3/4"	1	CONST.			7MTFN9D4-00	3/4 6000#		
	WP-316, OR 316L										
↓	PLUG VALVE 3/4" PH-12BG-1CJ		3/4"	1	ENG.			P.O-6375	46		Location D25 B22 ~~D23 B22~~

CS-AD-2282 (7-17-87)

NOTE: COLUMNS SHOULD INDICATE N/A IF NOT APPLICABLE

EOP 4.72

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

CONFIGURATION CONTROL PACKAGE
MATERIAL SHEET

CCP No.	1-M-FST-0299
REV	00
PAGE 3	OF 3

CHG. CAT. No.	DESCRIPTION AND MATERIAL TYPE	UNIT OF MEASUREMENT	SIZE	QTY.	PROCUREMENT RESPONSIBILITY (ENG/CONST)	*SPEC No.	ADD/REV	MATERIAL REQUISITION* NUMBER	ITEM No.	REV.	REQUESTED DELIVERY DATE*
	SUPPORT MATL										
NA	UH-6A 031.1 A-36		2"	1	CONST			2HASU8AD02	(3/8X02)		
	L3x3x3/8 x 1'-0" LG AISC A-36			1	CONST			4SAA003 03X03			
	TS 4x4x1/4 x 2'-6 LG AISC A500 GR. B			1	CONST			4STR002 04X04			
	BP-1 AISC A-36			1	CONST			4SPA003 00-3/4			
	HILTI-KWIK BOLTS 3/4"ϕ X 0'-7" LG			4	CONST			4BDAA999 00-3/4X07			
	MOUNTING BRACKET FOR CABLE COIL			1	CONST	FIELD		TO FABRICATE			
	PL 1/4 x 4 1/2 x 4 1/2			1	CONST			4SPA003 00-1/4			
	AISC A-36										
	MOUNTING PLATE FOR			1	CONST			4SPA003-00-3/8			
	INST. PANEL SEE										
	DWG 5Z-01-9Z45080										
	SHT 98										
1	EXISTING MAT'L		COUPLING & PIPE	3 LOTS	CONST						
NA	3-WIRE, 3 POLE			1	CONST			9EWD012	PLUG		
	STRAIGHT BLADE GROUNDING PLUG										
	HUBBELL AT NO										
	5266-C,			EA 3/C-88 6'-0"							
	3/C #12 AWG		#12 AWG	1'-0"	CONST			CN312 CABLE			

CSAD 2.2 (7-17-87)

NOTE: COLUMNS SHOULD INDICATE N/A IF NOT APPLICABLE.

EDP 4.72

SOUTH TEXAS PROJECT
CONFIGURATION CONTROL PACKAGE
DOCUMENTATION LIST

CCP NO.	1-M-FST-0249
REV.	00
PAGE	1 OF 1

DOCUMENTS ASSOCIATED WITH CHANGE			TITLE	IN CCP		I O M F L O Y	REMARKS	CLOSURE ACTION (If none, enter N/A)
COMPLETE DOC. NO. (If Vendor-Incl. Sub + AC)	REV. (BC)	AMEND. (I) NO.		YES	NO			
5L549T60002	23		VALVE LIST	✓			IDCN	
6R329F05048 #1	8		P&ID	✓			IDCN (1)	
7M369PWS278 SH. A10	3		ISOMETRIC	✓			IDCN	
WS-1035-HF5009	B		HANGER DETAILS	✓			IDCN	
WS-1035-HF5010	0		HANGER DETAILS	✓			INTERIM DWG.	
5M15-9-2-46054	6		INST. LOCATION DRAWING	✓			IDCN	
62-01-9E-45080 SH. 68	1		INST. SUPPORT PLATE		X	X	MOUNTING PLATE FOR HK-4151	
BF41002-00001-AXX				✓			INSTALLATION AND PARTS LIST.	
BF41002-00002-AXX				✓		✓	SAMPLER	
BF41002-00003-AXX				✓			CONTROLLER N(WS-HK-4151	
BF41002-00004-AXX				✓		✓	AIR CONTROLLER	
BF41002-00005-AXX				✓			SCHEMATIC FOR CONTROLLER	
BF41002-00006-AXX				✓			ADAPTER	
BF41002-00008-AXX				✓		✓	ISOLOK SAMPLER	

SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-0249 REV. 00

INTERIM DRAWING CHANGE NOTICE (IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
5L549TG0002	–	23		

IDCN NUMBER ______ ISSUED DATE ______

JOB NO. 14926 PAGE 1 OF 2

STARTUP SYSTEMS AFFECTED: WS01

FSAR CHANGE REQUIRED? YES ☐ NO ☑

REASON FOR CHANGE (Please be specific) PROVIDE SAMPLING AT TRUCK LOADING ; ADD VALVE TO LIST.

DESCRIPTION OF CHANGE

SEE SHEET 2

23 REV   [signature] HL&P 14926-001   4/12/88 DATE

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A.J. MUNGUIA	K Smith	[signature]	[signature]

CCP 1-M-FST-0249 Rev 00 [signature] 4/14/88 REV NFOD Date

3/18/88 DATE

STP 1204 (11/85) D-30

SOUTH TEXAS PROJECT

CCP NO 1-M-FST-0249 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
5L549T60002	-	23		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

TAG NUMBER	GENERIC I.D.	F N C	P&ID	LINE NO.	MAT'L CLASS	SPEC.	VSS#	VENDOR DATA	P.O.#	P.O. ITEM #	VENDOR
1R321T HS0068	3/4"PA42BBALJ		F5048	1035	HG7				6575	46	

TP 1284-A (9/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-249 REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R329F05048#1		8		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

STARTUP SYSTEMS AFFECTED: 1WS01

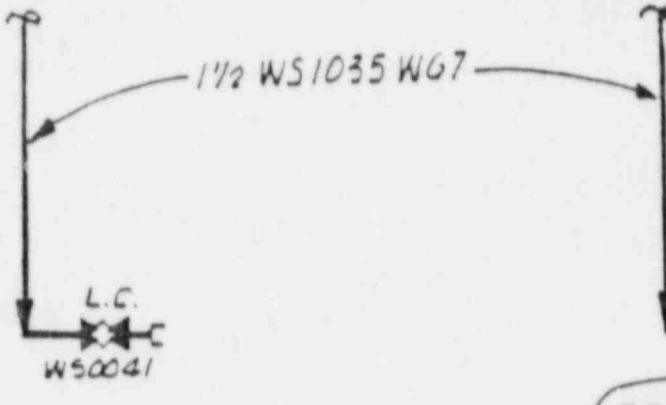
FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) ADD ISOLOK SAMPLER TO LINE 1½ WS1035 WG7 FOR SPENT RESIN DISCHARGE AND REPLACE QUICK DISCONNECT HOSE CONNECTIONS AT THE DISCHARGE SIDE OF VALVES WS0036 AND WS0042 WITH 1½" FLAT FACE FLANGES FOR COMPATIBILITY WITH VENDOR CAREA 1524 AND #2176

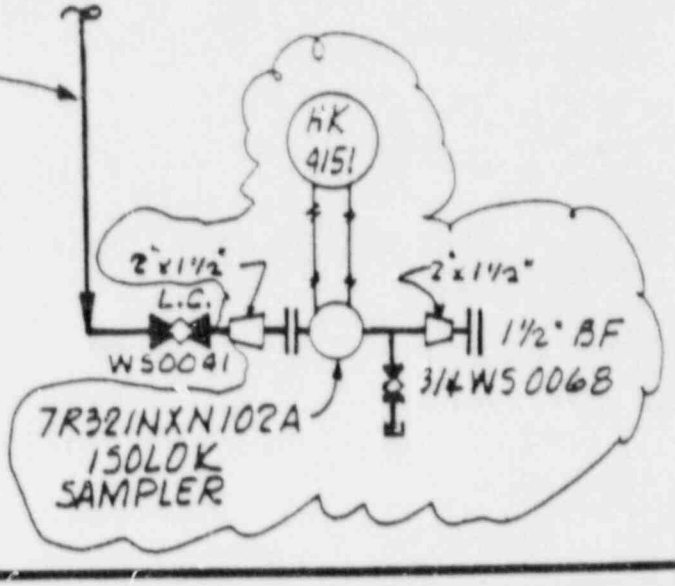
DESCRIPTION OF CHANGE

COORD. E 1

BEFORE



AFTER



8 REV | HL&P 14926-001 | 4/1/88 DATE

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A.J. MUNGUIA			

3/1/88

CCP 1-M-FST-249 Rev 00 WH Arnold 3/29/88 REV NPOD DATE

03/30/88 DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-249 REV. ØØ

INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
6R329F050481		8		

IDCN NUMBER _____ ISSUED DATE _____

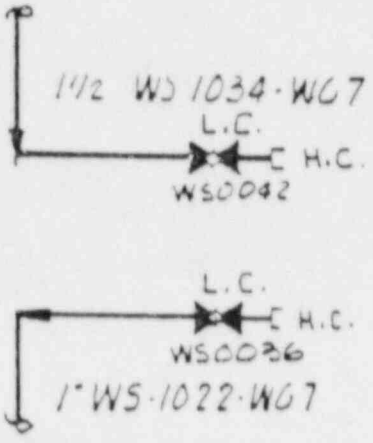
JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:

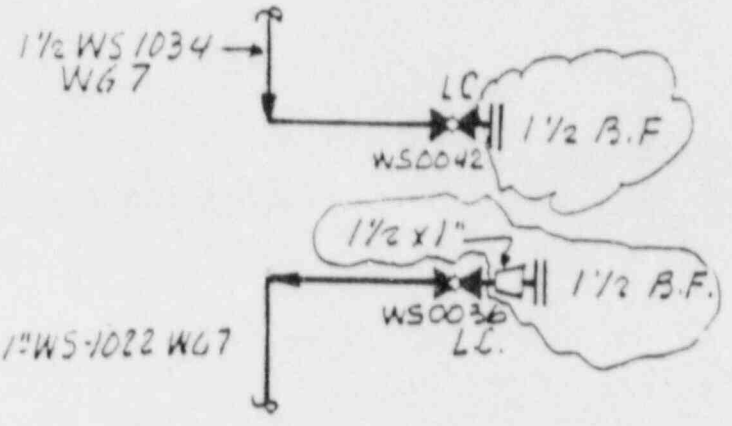
REPLACE QUICK DISCONNECT HOSE CONNECTIONS WITH FLAT FACE FLANGES.

COORD E1

BEFORE



AFTER



SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-0459 (2nd 4/11/89) REV. 00

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
7M369PW5278	A10	3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 3

STARTUP SYSTEMS AFFECTED: WS-01

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific)

PROVIDE SAMPLING AT TRUCK LOADING.

DESCRIPTION OF CHANGE

SEE SHEET "2" & "3"

3 REV | HL&P | 4/12/89 DATE

14926-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
A. J. MUNGUIA	A. SMITH		

CCP 1-M-FST-0249 Rev 00 W.M. Hamblen 4/12/89 Rev NPOD Date

3/18/88 DATE

STP 1284 (11/85) 0-30

SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-0249 REV. 00

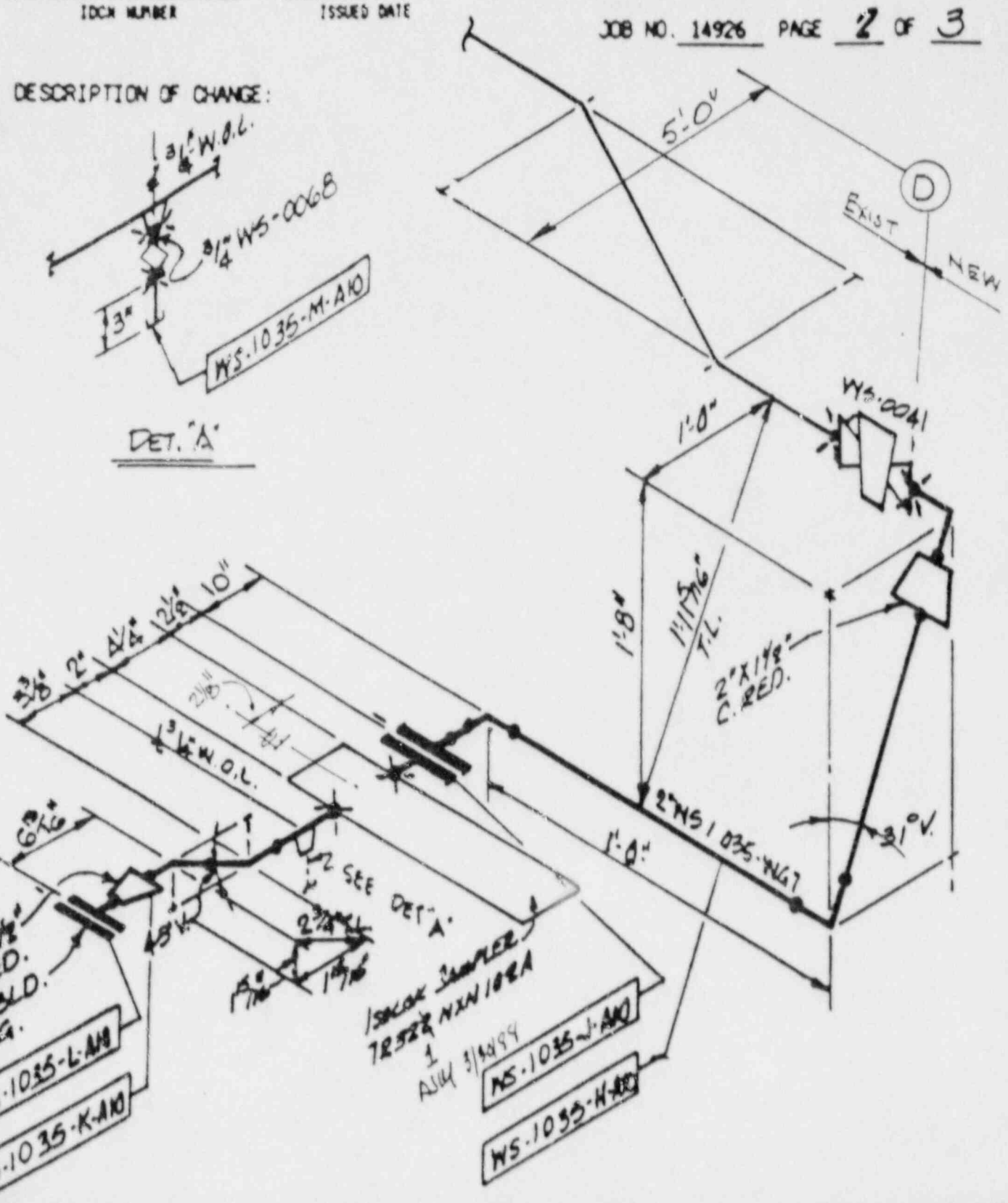
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DUC. REV.	DCN NO.
7M369PWS 278	A10	3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 2 OF 3

DESCRIPTION OF CHANGE:



SOUTH TEXAS PROJECT

DCP NO. 1-M-FST-0249 REV. 00

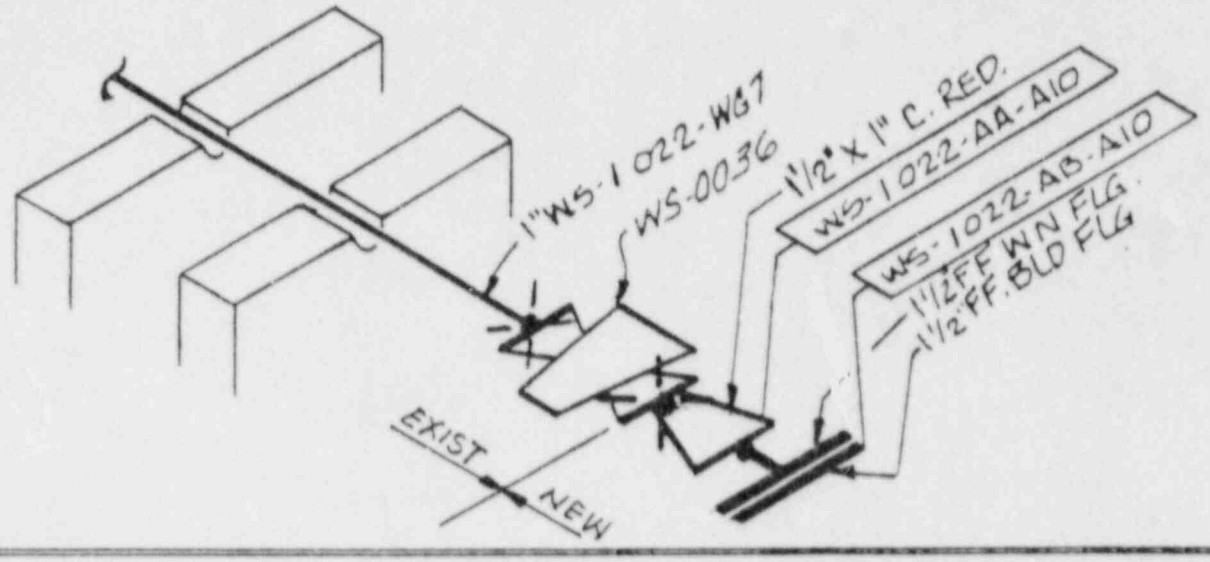
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

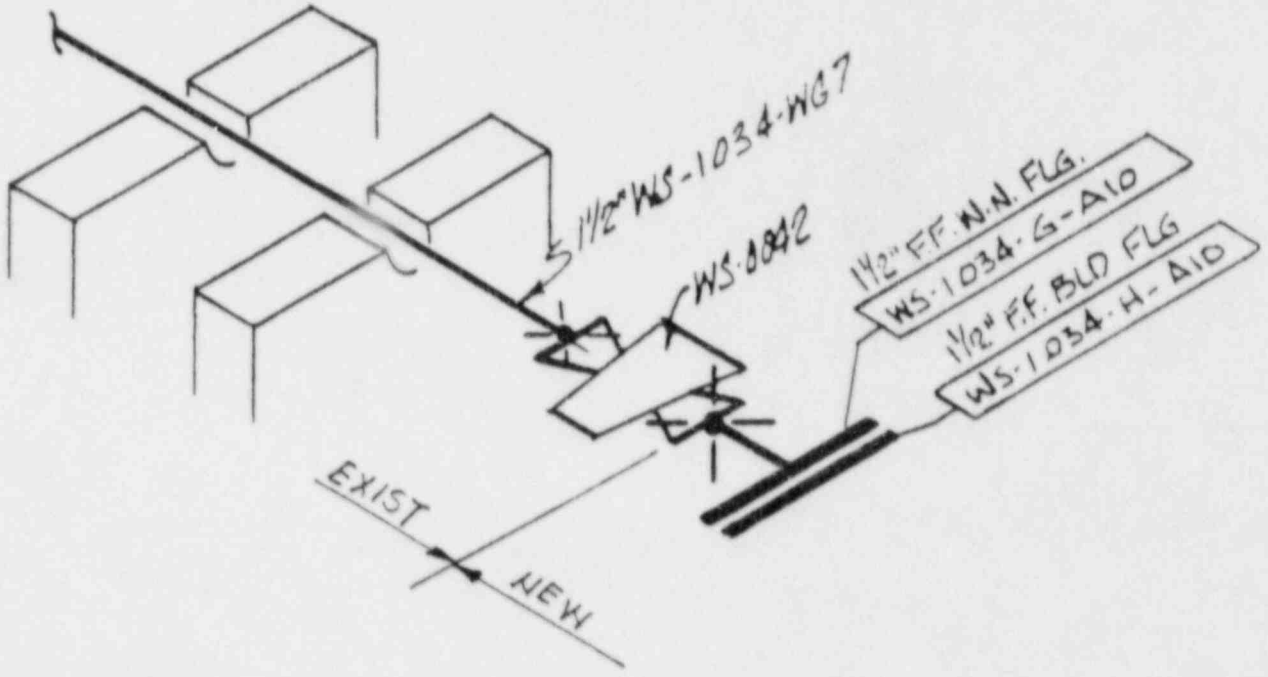
DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
7M969PWS278	A10	3		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 3 OF 3

DESCRIPTION OF CHANGE:





SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-0249 REV. 0

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN NO.
WS-1035-HF5009	—	B		

IDCN NUMBER _____ ISSUED DATE _____

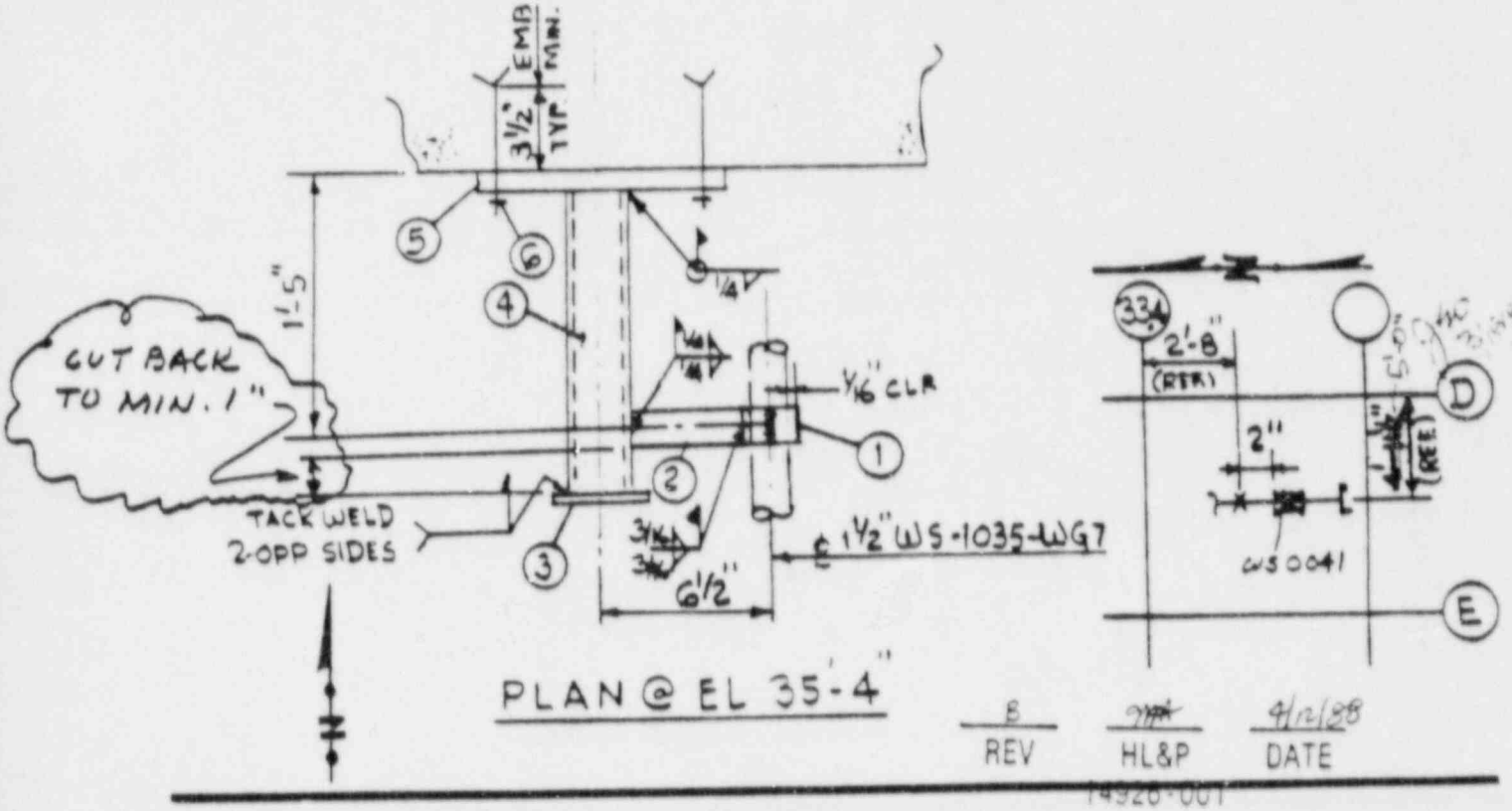
JOB NO. 14926 PAGE 1 OF 1

STARTUP SYSTEMS AFFECTED: _____

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) ADD ISOLOK SAMPLER TO LINE 1½-WS-1035-WG7 – TRIM ITEM 4

DESCRIPTION OF CHANGE



PLAN @ EL 35'-4"

B REV | HL&P | 4/12/88 DATE

14926-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
MUNGUIA	K. SMITH		

REV _____ NPOD _____ 4/21/88 DATE

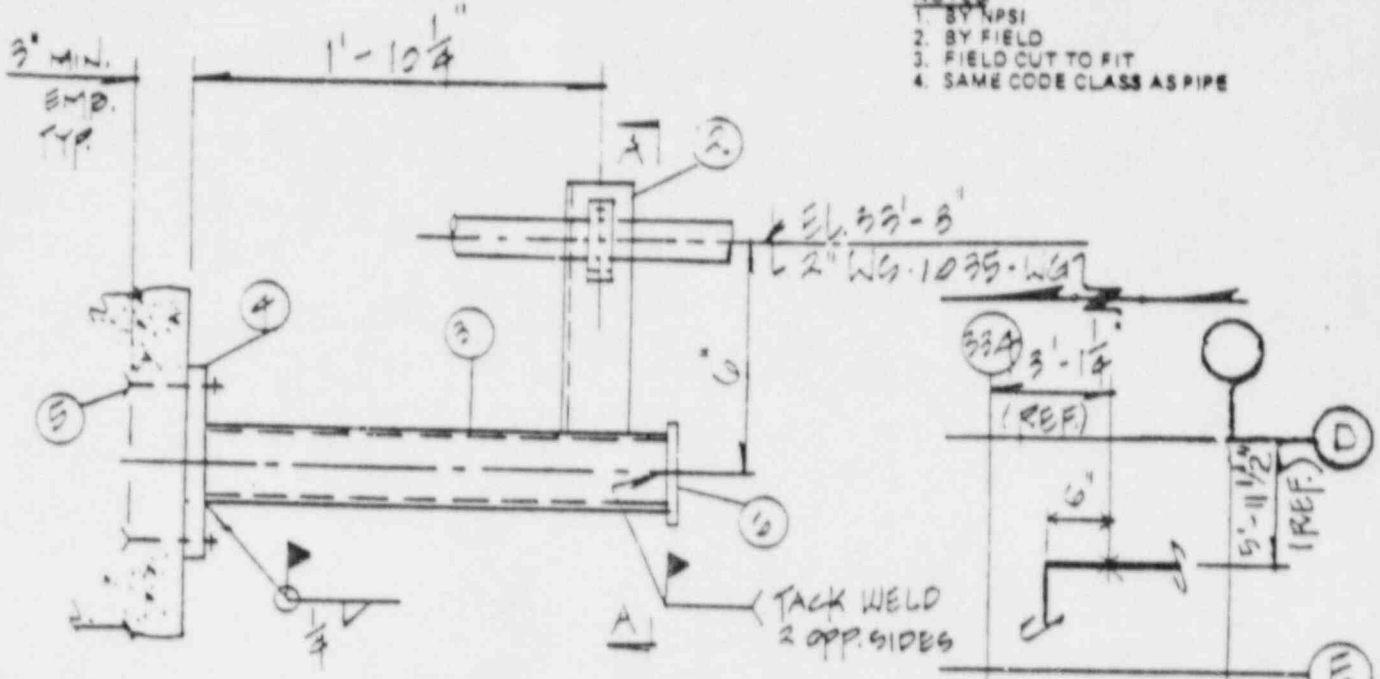
3/18/88 DATE

STP 1284 (11/85) D-30

BILL OF MATERIAL

ITEM NO	NO REQ'D	DESCRIPTION	CODE	MATERIAL	UNIT NOTES	UNIQ NOTE
1	1	UH-GA U-STRAP	B31.1	A-36	2	—
2	1	L 3 x 3 x 3/8 x 1'-0" LG.	AISC	A-36	2	—
3	1	TS 4 x 4 x 1/4 x 2'-6" LG.	AISC	A500 GR. B	2,3	—
4	1	BP-1 BASEPLATE	AISC	A-36	2	—
5	4	HILTI KWIK BOLTS 3/4" ø x 3'-7" LG.	—	—	2	—
6	1	PL 1/4 x 4 1/2 x 0'-4 1/2" LG.	AISC	A-36	2	—

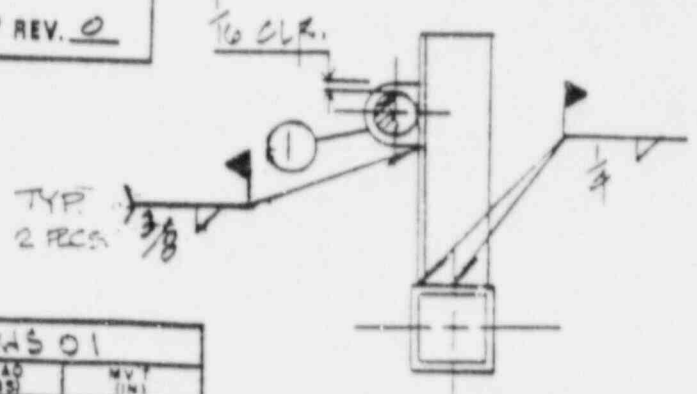
NOTES:
1. 35 KSI
2. BY FIELD
3. FIELD CUT TO FIT
4. SAME CODE CLASS AS PIPE



ELEV. LKG. EAST

INTERIM DOCUMENT ISSUED FOR

CCP 1-M-FST-0249 REV. 0



SECTION A-A

SUS.	WS01	
	LOAD (LBS)	MVT (IN)
X	—	—
Y	250 ↑↓	—
Z	250 E-W	—

LOCATION PLAN

BLDG MEAB AREA 2B

PSDS NO WS-9035 DS0397 SHT 2

CODE CLASS B31.1 Q CLASS 1

UNIT 1 MK NO WS-1035-HF5010

UNIT 2 MK NO —

ACTIVITY PKG NO 1554228

FAB/SYSTEM ISO NO JM369PHS278AK

STEEL REF DWG NO —

SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION

WS-1035-HF5010 —

NO	DATE	REVISIONS	DWG	CHK	EGL	EQS	PE
0		ISSUED FOR CONSTRUCTION	HGH				

BECHTEL ENERGY CORPORATION
HOUSTON, TEXAS

00 4/25/88 4/28/88

SOUTH TEXAS PROJECT

CCP NO. 1-M-FST-0249 REV. 0

INTERIM
DRAWING CHANGE NOTICE
(IDCN)

DRAWING NUMBER	SHEET NO.	REV. NO.	DCN CONV. DATE: DWG. REV.	DCN CONV. DATE: DCN NO.
5M-15-9-Z-46054	-	6		

IDCN NUMBER _____ ISSUED DATE _____

JOB NO. 14926 PAGE 1 OF 2

STARTUP SYSTEMS AFFECTED: 1WSC1

FSAR CHANGE REQUIRED? YES ☐ NO ☒

REASON FOR CHANGE (Please be specific) ADD ISOLOK SAMPLER ~~TO LINE 1½-WS-1035-WG7~~ CONTROL STATION WWS-HK-4151.

DESCRIPTION OF CHANGE

SEE SHEET 2 OF 2

6 REV | [signature] HL&P | 4/1/88 DATE
14926-001

BECHTEL ENGINEERING APPROVALS			
ORIGINATOR	CHECKER	EGS	PE
MUNGUIA	[signature]	[signature]	[signature]

05 REV | WH Humble Jr HL&P NPED | 4/26/88 DATE

04/01/88 DATE

STP 1264 (11/87) D-30

SOUTH TEXAS PROJECT

DCP NO. 1-M-FST-0249 REV. 00

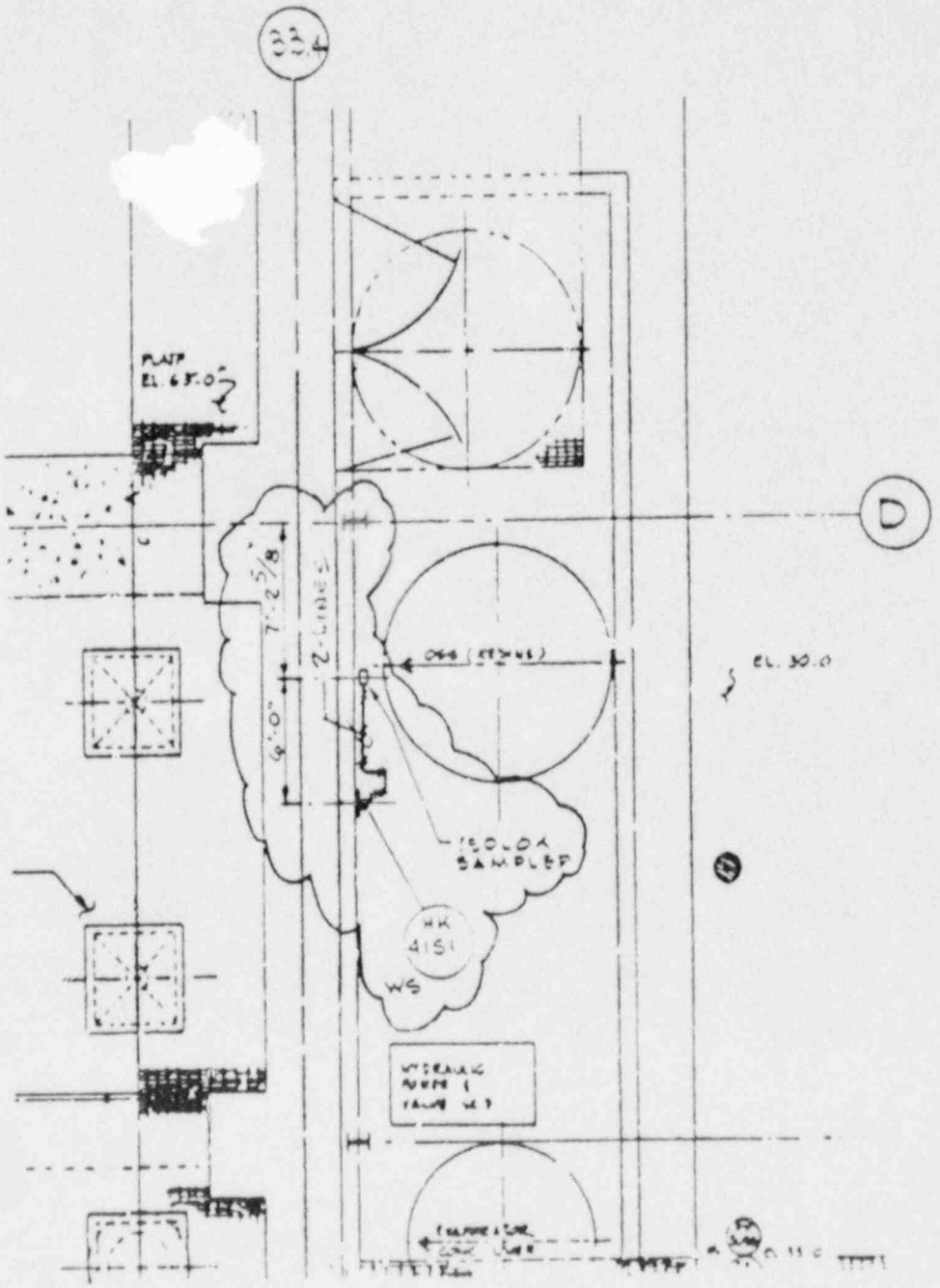
INTERIM
DRAWING CHANGE NOTICE
(IDCN) (Cont'd)

DRAWING NUMBER	SHEET NO.	REV NO.	DCN COPY DATE: DUC. REV.	DCN NO.
5M159Z46054	—	6		

IDCN NUMBER ISSUED DATE

JOB NO. 14926 PAGE 2 OF 2

DESCRIPTION OF CHANGE:



10CFR50.59 EVALUATION FORM - TYPICAL

DESCRIPTION

Unit # 1

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ OTHER _____

ORIGINATING DOCUMENT NO. CCP 1-M-FST-0249 REV. 0

TITLE ADDITION OF ISOLOK SAMPLER FOR SPENT RESIN DISCHARGE, AND REPLACEMENT OF QUICK DISCONNECT HOSE CONNECTIONS WITH BLIND FLANGES

DESCRIPTION PROVIDE SAMPLING CAPABILITY FOR SOLID WASTES BEING DISCHARGED TO THE MOBILE SOLIDIFICATION UNIT

	Yes	No
Does the subject of the review involve a change to the facility as described in the safety analysis report?	☐	☒ QDO 3-28-88
Does the subject of this review involve a change to the procedures as described in the safety analysis report?	☐	☒
Does the subject of this review propose the conduct of tests or experiments not described in the safety analysis report?	☐	☒ QDO 3-28-88
Does the subject of this review require a change to the Plant Technical Specification?	☐	☒
Does the proposed change, although not described in the safety analysis report, affect items or activities that are described in the safety analysis report?	☐	☒

(This form, when completed, shall be retained for the life of the plant.)

10CFR50.59 EVALUATION FORM - TYPICAL

If any answer is affirmative, perform an Unreviewed Safety Question evaluation.

If all answers are negative, no Unreviewed Safety Question evaluation is required.

Documentation of this review must be retained with the review package for the duration of the station license.

Note: "Safety analysis report" includes the FSAR, safety analyses submitted to the NRC in support of their review of the application for an operating license and subsequent amendments to the operating license and other license commitments made to the NRC.

Documents Reviewed:

FSAR SECT. 10.4.8, 11.3 NRC QUESTIONS & ANSWERS QOD 3/28/88

Prepared by: QOD 3/28/88 Michael F Hutchins / 4/12/88
Originator Date

Concurrence: Glenn D Marcus / 4-21-88
Department Manager Date

0191b/0106b

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

DESIGN CHECKLIST (DCL)

Initiating Change Document No: CCP 1-M-FST-0249

Title Doc.: ADDITION OF ISOLOK SAMPLER

Rev. 0 Page 1 of 2

Start-up System: 1WS01 Title: SOLID WASTE SYSTEM

This checklist must be attached to the initiating change document during the entire review and approval process up to the point of issuance by Project Document Control. Reference PED-041.

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REV (Must provide specific reference no.) DOCUMENT NO. (OR SECTION)	REV	OTHER AFFECTED DISC.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
☐	☒	Licensing Documents					
☐	☒	FSAR					
☐	☒	FHAR (Appendix B)*					
☐	☒	ER					
☐	☒	Technical Specifications (Plant)					
☐	☒	Deficiency Evaluation Report (DER)					
☐	☒	Design Criteria					
☐	☒	System Descriptions					
☐	☒	Design Calculations					
☐	☒	Specifications					
☐	☒	ASME Design Specifications					
☐	☒	Stress Report					
☐	☒	N-5 Package (Piping & Supports)					
☐	☒	Penetration Seals					
☒	☐	Design Drawings	6R329F05048 #1	B			
			7M364WS278 SH1 & 10	3			
			WS-1035-HF5009	B	1DCN INCLUDED IN CCP		
			WS-1035-HF5010	A			
			~~6-7~~ 5M15-9-3-46054	6			

* Programmatic Review Required

Orig AOstrosky Date 3-29-88 EGS AOstrosky Date 3-29-88 PE C.C. Tilt Date 03/30/88

CS AD 2274A (8 18 87)

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

DESIGN CHECKLIST (DCL) Continued

Initiating Change Document No. _____

Rev. _____ Page 2 of 2

AFFECTED YES	AFFECTED NO	POTENTIALLY AFFECTED DOCUMENTS	AFFECTED DOCUMENTS WHICH REQUIRE REV (Must provide specific reference no.) DOCUMENT NO. (OR SECTION)	REV.	OTHER AFFECTED DISC.	TURNED OVER TO HL&P Y	TURNED OVER TO HL&P N
☐	☒	Instrument Index					
☒	☐	Equipment Index					
☒	☒	Valve Master File	SL549T60002	2-3	IDCN INCLUDED IN CCP		
☐	☒	Setpoint List					
☐	☒	Supplier Dwgs., Inst. Manuals, etc.					
☐	☒	Configuration Control Packages					
☐	☒	Design Verification Reports					
☐	☒	HELBA *					
☐	☒	ALARA					
☐	☒	Torn Missile					
☐	☒	Flooding Analyses *					
☐	☒	Internal Missile *					
☐	☒	Equipment Qualification *					
☐	☒	Pre Operational Texting Procedures Results					
☐	☒	Start-up Testing Procedures Results					
☐	☒	EE580 Data Base					
☐	☒	Other (Specify)					

* Programmatic Review Required

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION
JOB NO. 14926

FIELD CHANGE REQUEST

2A START-UP NUMBER: 1WS01
RELEASED FOR TEST
NOT RELEASED FOR TEST

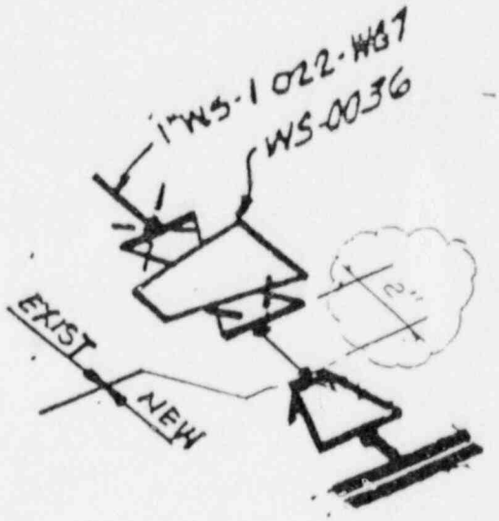
1 PAGE 1 OF 2
2. NO HXDP-07365
2B. BUILDING MAB

3. O.CL.	4. DWG. OR SPEC.	I	N/I	5. REV	6. UNIT	3. O.CL.	4. DWG. OR SPEC.	I	N/I	5. REV.	6. UNIT
7	CCP 1-M-FST-0249	X		0	1						

7. REASON FOR REQUEST: DUE TO POSSIBLE INTERFERENCE WITH RESIN TANK 1'-0" DIMENSION FOR 2"W1035 CHANGED TO 1'-6". TWO INCH NIPPLE LEFT ON WS0041, WS0042 AND WS0036 TO PROTECT VALVE INTERNAL DURING WELDING

7A. THIS FCR SUPERSEDES FCR(S): N/A { CWR WP# CO2942-C2P-01

8. PROPOSED CHANGE:



TURNOVER STATUS

8A. SYSTEM (DOC)	8B. SYSTEM (PHY)	8C. AREA (DOC)	8D. AREA (PHY)
☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO	☒ YES ☐ NO

8E. WORK AUTHORIZATION: ☐ YES ☒ NO

9. INITIATOR: Joe Centers Ext. 6960 — DATE: 6-14-88

10. FIELD ACCEPTANCE: Carlos J Mangles — ACCEPTOR — DATE: 6/14/88

10A. S.U. CONCURRENCE: N/A — CONCURRENCE — DATE

11. PROJECT ENGINEERING DECISION: ☒ APPROVED ☐ DISAPPROVED

12. CDSE: NA — DATE: 6-20-88

12A. EQE: NA — DATE: 6/20/88

13. PQAE: — DATE: 6/21/88

14. PE: — DATE: 6-28-88

15. HL&P ENG. FOR M.J. BERG — DATE:

15. HL&P OP QA — DATE:

17. NPOO: W.H. Hillman Jr. — DATE: 7-5-88

REMARKS: UNIT 2 TRAVELER NOT REQ'D. REF TO UNIT 1 COP ONLY.

COORDINATION REQ'D.: ☐ YES ☒ NO CIVIL ___ ELEC ___ I&C ___ MECH ___ P/D ___ P/S ___ CODES ___

CALC. REQ'D/AFF: ☐ YES ☒ NO CALC NO. ___

CARR REQ'D.: ☐ YES ☒ NO CARR NO. ___

FSAR CR REQ'D.: ☐ YES ☒ NO CR NO.: ___

W CONCURRENCE: N/A

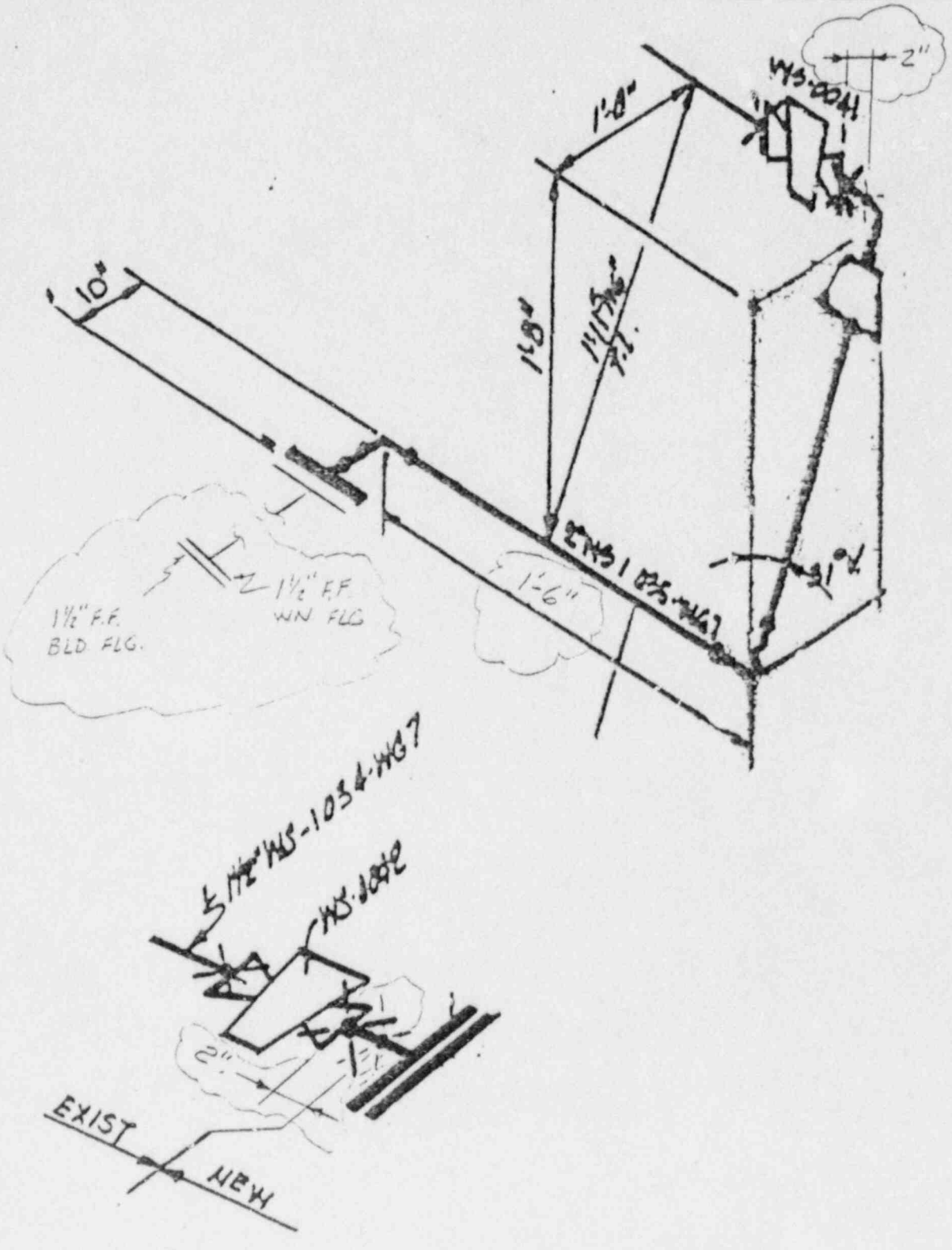
CS-AD-1969 R2 (10-14-87)

SOUTH TEXAS PROJECT
ELECTRIC GENERATING STATION
JOB NO. 14926

1. PAGE 2 OF 2

2. NO HXDP-07365

FIELD CHANGE REQUEST
CONTINUATION SHEET



050074 (02/88)
OEP-2.02Q

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

DESIGN VERIFICATION FORM

DOCUMENT TYPE/TITLE FIELD CHANGE REQUEST

DOCUMENT NO. FCR HXDP-07365 REV. NO. — MOD NO. N/A (IF APPLICABLE)

VERIFICATION METHOD ☒ DESIGN REVIEW ☐ ALTERNATE CALC. ☐ QUALIFICATION TESTING

ITEM NO.	COMMENTS	RESPONSE AND/OR RESOLUTION
1	No Comments	N/A

DESIGN VERIFIER	DATE	RESPONSIBLE ENGINEER	DATE	DV CONCURRENCE	DATE
[signature] (Elec)	6/20/88	[signature]	6/20/88	[signature]	6/20/88

050092A (05/88)
OEP-3.15Q

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

10CFR50.59 EVALUATION FORM - TYPICAL

(PAGE 1 OF 2)

UNIT # 1

ORIGINATING DOCUMENT (FCR) NO. HXDP-07365/CCP-1-IM-FST-0249 REV. 0

☐ PROCEDURE ☒ PLANT MODIFICATION ☐ ECN ☐ OTHER _____

TITLE FCR

DESCRIPTION Modify Piping to Avoid Possible Interference w/ Resin Tank

		YES	NO
1.	DOES THE SUBJECT OF THE REVIEW INVOLVE A CHANGE TO THE FACILITY AS DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
2.	DOES THE SUBJECT OF THIS REVIEW INVOLVE A CHANGE TO THE PROCEDURES AS DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
3.	DOES THE SUBJECT OF THIS REVIEW PROPOSE THE CONDUCT OF TESTS OR EXPERIMENTS NOT DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒
4.	DOES THE SUBJECT OF THIS REVIEW REQUIRE A CHANGE TO THE PLANT TECHNICAL SPECIFICATIONS?	☐	☒
5.	DOES THE PROPOSED CHANGE, ALTHOUGH NOT DESCRIBED IN THE SAFETY ANALYSIS REPORT, AFFECT ITEMS OR ACTIVITIES THAT ARE DESCRIBED IN THE SAFETY ANALYSIS REPORT?	☐	☒

IF ANY ANSWER IS AFFIRMATIVE, PERFORM AN UNREVIEWED SAFETY QUESTION EVALUATION.

IF ALL ANSWERS ARE NEGATIVE, NO UNREVIEWED SAFETY QUESTION EVALUATION IS REQUIRED.

THIS FORM, WHEN COMPLETED, SHALL BE RETAINED FOR THE LIFE OF THE PLANT.

SOUTH TEXAS PROJECT ELECTRIC GENERATING STATION

10CFR50.59 EVALUATION FORM - TYPICAL

UNIT # 1

ORIGINATING DOCUMENT NUMBER CCP-1-M-FST-0149 REV. 0

DOCUMENTATION OF THIS REVIEW MUST BE RETAINED WITH THE REVIEW PACKAGE FOR THE DURATION OF THE STATION LICENSE.

NOTE: "SAFETY ANALYSIS REPORT" INCLUDES THE FSAR, SAFETY ANALYSES SUBMITTED TO THE NRC IN SUPPORT OF THIER REVIEW OF THE APPLICATION FOR AN OPERATING LICENSE AND SUBSEQUENT AMENDMENTS TO THE OPERATING LICENSE AND OTHER LICENSE COMMITMENTS MADE TO THE NRC.

DOCUMENTS REVIEWED:

FCR WXDP-07365

FSTC (NO APPLICABLE PARAGRAPH)

INTERDISCIPLINE COORDINATION REQUIRED? ☐ YES ☑ NO

IF YES, CIRCLE APPROPRIATE DISCIPLINE, THEN OBTAIN THEIR CONCURRENCE (INITIAL)

_____ CIVIL _____ MECH _____ ELEC _____ I&C _____ EQ _____ OTHER

IMPACT TO OTHER DEPARTMENT? ☐ YES ☑ NO

IF YES, THEN IDENTIFY: _____

PREPARED BY: [signature] / 6/21/88

RESPONSIBLE ENGINEER DATE

CONCURRENCE: [signature] / 6/22/88

MANAGER, SUPPORT ENGINEERING DATE

APPENDIX F, ATTACHMENT 3

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

A PORC Review was not required for this design change.

APPENDIX F, ATTACHMENT 4

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

The Solid Waste Processing System Isolok Sampler samples spent resin activity prior to dewatering. This sampler was installed at the request of Chemical Operations to decrease chances of personnel contamination and exposure. Previously, grab samples were taken to determine resin activity. This sampler is located in the new truck bay convenient to transfer operations.

APPENDIX F, ATTACHMENT 5

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

This change added an Isolok sampler in the new truck bay to sample spent resin prior to dewatering. Previously, sampling was accomplished via grab samples, a method which afforded a greater possibility for personnel contamination and exposure. This change will decrease the chances of contamination and reduce exposure in the sampling process.

This change will result in increased maintenance activities in the Mechanical Auxiliary Building in order to properly maintain the Isolok sampler, this added exposure will be offset by the ability to sample resin in a safer and more time efficient manner. The number of resin transfers and operation of plant equipment will not be affected by this change. No additional exposure will occur as a result of this modification.

APPENDIX F, ATTACHMENT 6

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

This change added an Isolok sampler which provides a safer method of sampling spent resin prior to solidification. This modification does not change the amount of liquid and gaseous effluents, and solid waste predicted in the License application and amendments.

APPENDIX F, ATTACHMENT 7

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

This modification added an Isolok sampler on the resin discharge piping to facilitate sampling of spent resin prior to solidification for shipment and burial. This modification will not result in a change to the expected maximum exposures to a member of the public in the UNRESTRICTED AREA and to the general population as previously estimated in the License application and amendments.

APPENDIX F, ATTACHMENT 8

Addition of an Isolok Sampler for Spent Resin Discharge
to Mobile Solidification Unit

This item is not applicable. This is the initial reporting period for the South Texas Project Electric Generating Station.

APPENDIX G

STATION PROBLEM REPORT REGARDING
PROBLEM REPORT NO. 880197

UNPLANNED RELEASE OF WMT 1E
on May 30, 1988

June 13, 1988

Prepared by:

William F. Scott, II

and

Peggy Lofton Travis

Table of Contents

I. Description of Event

At the time of the event on May 30, 1988, described in the following report, the South Texas Project Electric Generating Station was in Mode 5 at 150°F and approximately 400 psig. On this date at the time of the occurrence, Waste Monitor Tanks (WMT) 1D and 1E were in recirculation in accordance with 1PCP13-WL-0005 (Waste Monitor Tank (WMT) Operations). WMT 1F was being filled from the Floor Drain Tank. The surveillance data package for WMT 1D was received at 2255 hours by the Radwaste Control Room for the release of WMT 1D as required by 1PSP07-WL-0001 (Liquid Waste Effluent Rerlease).

At approximately 2300 hours, the Chemical Operations Radwaste Control Room Operator (RWO) accidently placed WMT 1E Pump Discharge Valve Hand Switch (1-WL-FV-5064A) in the "Discharge" position instead of the WMT 1D Pump Discharge Valve Hand Switch (1-WL-FV-5061A) as called for in the procedure. This then allowed for the inadvertent discharge of WMT 1E instead of WMT 1D when the RWO placed the LWPS Discharge Header 3-Way Valve (1-WL-FV-4077) in "Discharge" in accordance with 1PCP13-WL-0005 (Waste Monitor Tank (WMT) Operations). At 2308 hours, after the Radwaste Control Room Operator trainee had observed the incorrect Hand Switch in "Discharge", the RWO secured the discharge of WMT 1E. WMT 1E had been sampled in accordance with 1PSP07-WL-0001 (Liquid Waste Effluent Releases) prior to the discharge; however, the surveillance package had not been completed at that time.

Approximately seven hundred ninety-nine (799) gallons of water from WMT 1E were discharged to the Main Cooling Reservoir (MCR). The surveillance data package was subsequently completed in accordance with 1PSP07-WL-0001 (Liquid Waste Effluent Releases) after the discharge had occurred. Samples met the acceptance criteria established in Section 6.0 of 1PSP07-WL-0001 (Liquid Waste Effluent Releases). Analysis results were as follows:

Integrated Release by Nuclide

	uCi		uCi
H-3	4.87E+04	Cr-51	3.66E+01
Mn-54	5.81E+00	Fe-59	2.30E+00
Co-58	2.74E+02	Co-60	5.26E+00
Zr-95	3.02E+00	Nb-95	2.19E+00

The post-release off-site dose calculations for the inadvertent release of WMT 1E were within Technical Specification limits and were as follows:

Liquid Effluent Doses (mrem)

Whole Body:	0.0000
Highest Organ:	0.0000
Organ:	Adult's GI-Track
Receptor:	Little Robbins Slough

No adverse impact to the environment occurred. The health and safety of the general public were not adversely affected.

II. Cause of Event

Approximately 799 gallons of water from WMT 1E were inadvertently discharged to the MCR without the required sampling being completed prior to discharge when the RWO accidentally placed WMT 1E Pump Discharge Valve Hand Switch (1-WL-FV-5064A) into "Discharge" instead of the WMT 1D Pump Discharge Valve Hand Switch (1-WL-FV-5061A) as per 1PCP13-WL-0005 (Waste Monitor Tank (WMT) Operations). A representative sample had been obtained for the 799 gallons that were inadvertently discharged to the MCR although the analysis had not been completed at that time.

The major causative factor for this occurrence was cognitive personnel error. Although the RWO had an approved procedure at hand, it was inadequately followed. The RWO is a utility-nonlicensed operator. Contributing to the major cause was the fact that there were two (2) WMT's in recirculation simultaneously; thereby, allowing less visual distinction between the operating and non-operating trains and facilitating the possibility of an error on the part of the operator.

III. Analysis of Event

The discharge of 799 gallons from WMT 1E without the completed surveillance data package constituted an unplanned release as defined in Regulatory Guide 1.21 and, as such, will be included in the next Semi-Annual Radioactive Effluent Release Report as per OPGP03-ZX-0007 (Preparation of the Semi-Annual Radioactive Effluent Release Report). Although analysis is required "a priori" in Table A3-1 of the Off-Site Dose Calculation Manual as referenced in Technical Specification 4.11.1.1.1, quantification of the WMT 1E release was completed shortly after discharge.

This occurrence did not involve any plant safety systems; therefore, no safety consequences resulted from the event. Subsequent monitoring of the situation by plant personnel determined that no adverse impacts to the environment occurred nor was the health and safety of the general public adversely affected.

IV. Corrective Actions

Upon discovery, the RWO secured the discharge of WMT 1E and notified the Chemical Operations Foreman. The required surveillance data package for WMT 1E was completed after the discharge had occurred. No further remedial action is required.

The responsible RWO on watch received individual counseling concerning the unmonitored release. This action was completed June 3, 1988. Crew briefings were initiated and subsequent corrective action items were assigned following a second occurrence on June 7, 1988. They are as follows:

> All Chemical Operations personnel shall receive an incident briefing in subsequent shift turnover meetings. This is the responsibility of the Chemical Operations & Analysis Manager, T. E. Underwood, and shall be completed no later than June 20, 1988. Procedures 1PCP13-WL-0005 (Waste Monitor Tank (WMT) Operations)and 1PSP07-WL-0001 (Liquid Waste Effluent Releases) have been revised to clarify requirements for independent valve lineup verification for all Waste Monitor Tank discharges and to provide additional control of WMT's in recirculation or discharging to minimize the consequences of line-up errors. These revisions were approved by PORC on June 11, 1988, and pending comment resolution will become effective no later than June 17, 1988. This action shall be the responsibility of the CO&A Manager, T. E. Underwood

The aforementioned Division Manager assigned the above corrective action items has agreed to the action and the due date committed.

V. Additional Information

No similar previous events have occurred.

The NPRDS history data base reveals no previous items. The item was not applicable to NPRDS and was not reported in NPRDS.

Supportive documentation is attached.

APPENDIX H

NRC Form 366
(9 83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO 3150-0104
EXPIRES 8/31/88

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
South Texas, Unit 1	0 5 0 0 0 4 9 8	1 OF 0 5

TITLE (4)

Unmonitored Release of Radioactive Effluent Due to a Personnel Error

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
0 6	0 7	8 8	8 8	0 3 6	0 0	0 7	0 5	8 8		0 5 0 0 0

OPERATING MODE (9)	THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR § (Check one or more of the following) (11)			
5	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
POWER LEVEL (10) 0 0 0	20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
	20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
	20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
	20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
	20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
Charles A. Ayala - Supervising Licensing Engineer	AREA CODE 5 1 2 9 7 2 1 - 3 6 2 8

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)

		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

At approximately 1828 hours on June 7, 1988, with the plant in cold shutdown (Mode 5), an unmonitored release of 1504 gallons of liquid effluent occurred due to an operator (utility - nonlicensed) inadvertently discharging the wrong Waste Monitor Tank (WMT). A subsequent analysis showed the release to be within procedural and Technical Specification requirements. The root cause of the event was personnel error. The responsible individual was counseled, and the incident was reviewed with others involved in radioactive effluent processing. Procedures have been revised to require independent verification of the valve lineup. An investigation into the need for human factors engineering of the related control panels will be performed.

NL.LER88036

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas, Unit 1	0 5 0 0 0 4 9 8	8 8	— 0 3 6	— 0 0	0 2 OF 0 5

TEXT (If more space is required, use additional NRC Form 366A's) (17)

DESCRIPTION OF EVENT:

On June 7, 1988, with the unit in cold shutdown (Mode 5), Waste Monitor Tanks (WMT) 1D, 1E and 1F were in recirculation in accordance with the WMT Operations procedure. Two independent surveillance data packages were received at 1815 hours by the Radwaste Control Room for the release of WMT 1E as required by the Liquid Waste Effluent Release procedure. At this time, the Liquid Waste Effluent Radiation Monitor (LWERM) was not operable due to internal contamination of the sample chamber. The Liquid Waste Effluent Release procedure and Technical Specification 3.3.3.10 permit effluent releases to continue with the LWERM inoperable, provided that the following actions are taken prior to the release:

1. At least two independent samples are analyzed in accordance with Technical Specification 4.11.1.1.1, and

2. At least two technically qualified members of the facility staff independently verify the release rate calculations and discharge line valving.

At 1824 hours, the Mechanical Auxiliary Building Roving Operator (MAB Rover) opened the manual isolation valves on the common discharge line in accordance with the procedure. The Radwaste Control Room Operator (RWO) then inadvertently placed the WMT 1D Pump Discharge Valve handswitch in the "Discharge" position instead of the WMT 1E Pump Discharge Valve handswitch, as required by the procedure. At 1828 hours the RWO placed the discharge header three-way valve handswitch in "Discharge", which resulted in a discharge from WMT 1D. After the MAB Rover returned to the Radwaste Control Room, it was discovered that the wrong tank was lined up for discharge. The discharge was terminated at 1835 hours.

A total of 1504 gallons of water from WMT 1D was discharged to the Main Cooling Reservoir. Samples were collected from WMT 1D for analysis at 1856 and 1857 hours. Although these samples were obtained after the discharge had occurred, since the tank had been in continuous recirculation since 0838 hours that day, they were representative of the water that had just been discharged from WMT 1D. Subsequent analysis of the samples met the acceptance criteria of the Liquid Waste Effluent Release procedure.

DESCRIPTION OF EVENT (Cont.):

The results of the analysis were as follows:

Integrated Release by Nuclide

	Sample 1		Sample 2	
H-3	2.09E+03	microCi	1.93E+03	microCi
Mn-54	3.02E+03	microCi	1.73E+03	microCi
Co-58	8.60E+01	microCi	5.48E+01	microCi
Zr-95	6.83E+00	microCi	5.69E+00	microCi
Cr-51	2.93E+01	microCi	2.32E+01	microCi
Fe-59	1.98E+00	microCi	not detected	
Co-60	2.32E+00	microCi	1.80E+00	microCi
Nb-95	6.03E+00	microCi	5.11E+00	microCi

The post-release off-site dose calculations for the inadvertent release of WMT 1D were within Technical Specification limits and were as follows:

Liquid Effluent Doses (mrem)

Whole Body:	0.0000
Highest Organ:	0.0000
Organ:	Adult's GI-Track
Receptor:	Little Robbins Slough

The NRC was notified of the event at 0010 hours on June 8, 1988.

CAUSE OF EVENT:

The primary root cause of this occurrence was cognitive personnel error. Although the RWO had an approved procedure at hand, it was inadequately followed. The RWO is a utility-nonlicensed operator.

A contributing factor was the fact that there were three WMT's in recirculation simultaneously, allowing less visual distinction between the operating and non-operating trains. This increased the potential for an error on the part of the operator.

The inoperability of the LWERM created delays in the discharge of the WMT's and was partly responsible for the three tanks being in recirculation at the same time. The inoperability of the LWERM also created the condition, as a result of Technical Specification requirements, that required two independent sample analyses and independent verifications of the release rate calculations and flowpath lineup prior to discharge. These requirements had not been met for WMT 1D.

NL.LER88036

CAUSE OF EVENT(Cont.):

While the liquid waste effluent release procedure included the sampling and verification requirements for a release with the LWERM out of service, the method for verification of the valve lineup was not clear. The WMT operations procedure did not address these requirements.

ANALYSIS OF EVENT:

1504 gallons of liquid waste was discharged from WMT 1D while the Liquid Waste Effluent Radiation Monitor was inoperable, without first completing two sample analyses and independently verifying the flow path lineup. This constituted a violation of Technical Specifications and, as such, is reportable under 10CFR50.73(a)(2)(i)(B).

Subsequent analysis of the contents of WMT 1D by plant personnel determined that the release was within procedural and Technical Specification limits. Therefore, there was no adverse impact to the environment nor to the health and safety of the public.

CORRECTIVE ACTION:

1. The discharge from WMT 1D was terminated immediately upon discovery. Representative samples of the tank contents were obtained, and the required analyses were performed.

2. The RWO received individual counseling concerning the unmonitored release.

3. Personnel involved in the release of radioactive effluents received a briefing on the incident.

4. In order to minimize the potential for valve lineup errors, the WMT operations and liquid waste effluent release procedures have been revised to require independent valve lineup verification for WMT discharges, and to provide additional control of WMT's while in recirculation or discharge. The procedure revision also incorporates an improved method for backflushing the LWERM. This should enhance and increase the availability of the instrument for effluent discharges.

5. An investigation into the need for human factors engineering of the related Radwaste Control Room panels will be completed by September 30, 1988.

NL.LER88036

FACILITY NAME (1)	DOCKET NUMBER (2)	LER NUMBER (6)			PAGE (3)
		YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	
South Texas, Unit 1	0 5 0 0 0 4 9 8	8 8	— 0 3 6	— 0 0	0 5 OF 0 5

ADDITIONAL INFORMATION:

A similar event occurred on May 30, 1988, when an RWO inadvertently released effluent from the wrong WMT. On that occasion, the LWERM was in service so there was no violation of Technical Specifications, and the incident was not reportable to the NRC. Corrective actions for that event were in progress but had not been completed when the event described in this LER occurred.

HL&P is conducting a separate investigation into the problem of inoperability of the LWERM.

NL.LER88036

APPENDIX I

FIELD CHANGE REQUEST FORM
OPGP03-ZA-0002-4
(Page 1 of 1)

FIELD CHANGE NO. 88-0399 Unit Designator [ ] 1 [ ] 2 [X] Common
Is this a One-Time-Only Field Change [X] No [ ] Yes
Expiration Date N/A

SECTION A - DESCRIPTION

Procedure No. OPGP03-ZO-0017 Revision No. 1
Procedure Title RADIOACTIVE WASTE PROCESS CONTROL PROGRAM
QUALITY CLASSIFICATION: [X] QUALITY-RELATED [ ] NON QUALITY-RELATED
APPROVAL CLASSIFICATION: [X] STATION [ ] DIVISION
Description of Change(s): CHANGE "~~NON~~ COMPACTIBLE" TO "NONCOMPRESSIB" RECEPTACLES

Reason for Change(s): TO CORRESPOND TO WORDING USED IN OPGP14-WS-0010 (DRY RADWASTE COLLECTION, SORTING AND SEGREGATION)

Do you recommend a Permanent Change? [ ] No [X] Yes
This is the 1ST FCR against the current revision, other than "One-Time-Only" FCRs.

Prepared by Rhonda L. Stone Date 2/25/88

SECTION B - APPROVAL

*Approved [signature] On Duty Shift Supervisor Date 2.26.88

Approved [signature] Date 2/25/88
Authorized Individual (See Addendum 3)

SECTION C - FINAL REVIEW AND APPROVAL

NOTE: Cognizant DM review shall be completed within 14 calendar days of approval in Section B.

Permanent Change [ ] NO [ ] YES, Automatic Incorporation [ ] NO [ ] YES
Satisfactory [ ] NO [ ] YES

** Reviewed by _____ Date _____
Cognizant DM

ø Approved by _____ Date _____
Plant Manager or Cognizant DM

* This signature is not required for field changes to NON Q Procedures
** This signature not required for Division Procedures.
ø Plant Manager signature required for Station Procedures, Department Manager signature required for Division Procedures.

This FORM, when completed, shall be retained for the life of the plant.

5.0 Procedure

5.1 Process Description

5.1.1 Dry Active Waste

5.1.1.1 Dry Active Waste (DAW) is segregated upon collection into trash receptacles equipped with poly bags, marked as potentially contaminated, potentially noncontaminated or ~~noncompactible~~ noncompressible. When full, the waste is transported to the sorting area and handled in accordance with OPCP14-WS-0010 (Dry Active Waste Collection, Sorting and Segregation). FCR 88-

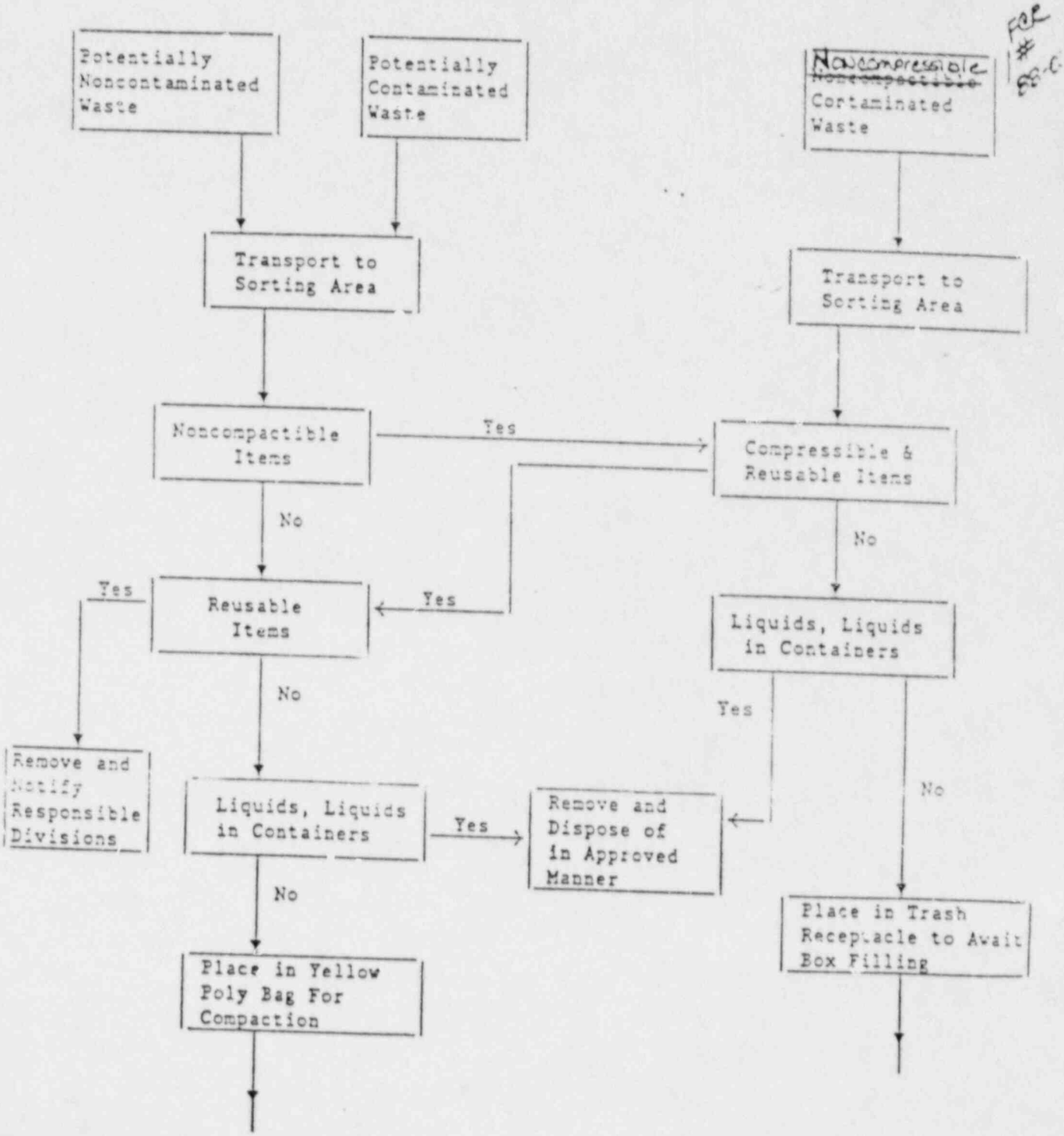
5.1.1.2 In the sorting area, noncompactible items, liquids and containers of liquids shall be removed from the potentially contaminated and the potentially uncontaminated waste. Liquids shall be handled in accordance with OPCP10-ZO-0002 (Disposal of Radioactive Waste Liquid). Reusable items shall be placed in containers and the responsible divisions notified. Noncompactible items shall be placed in ~~noncompactible~~ noncompressible trash receptacles. The compactible waste is then bagged for compaction.

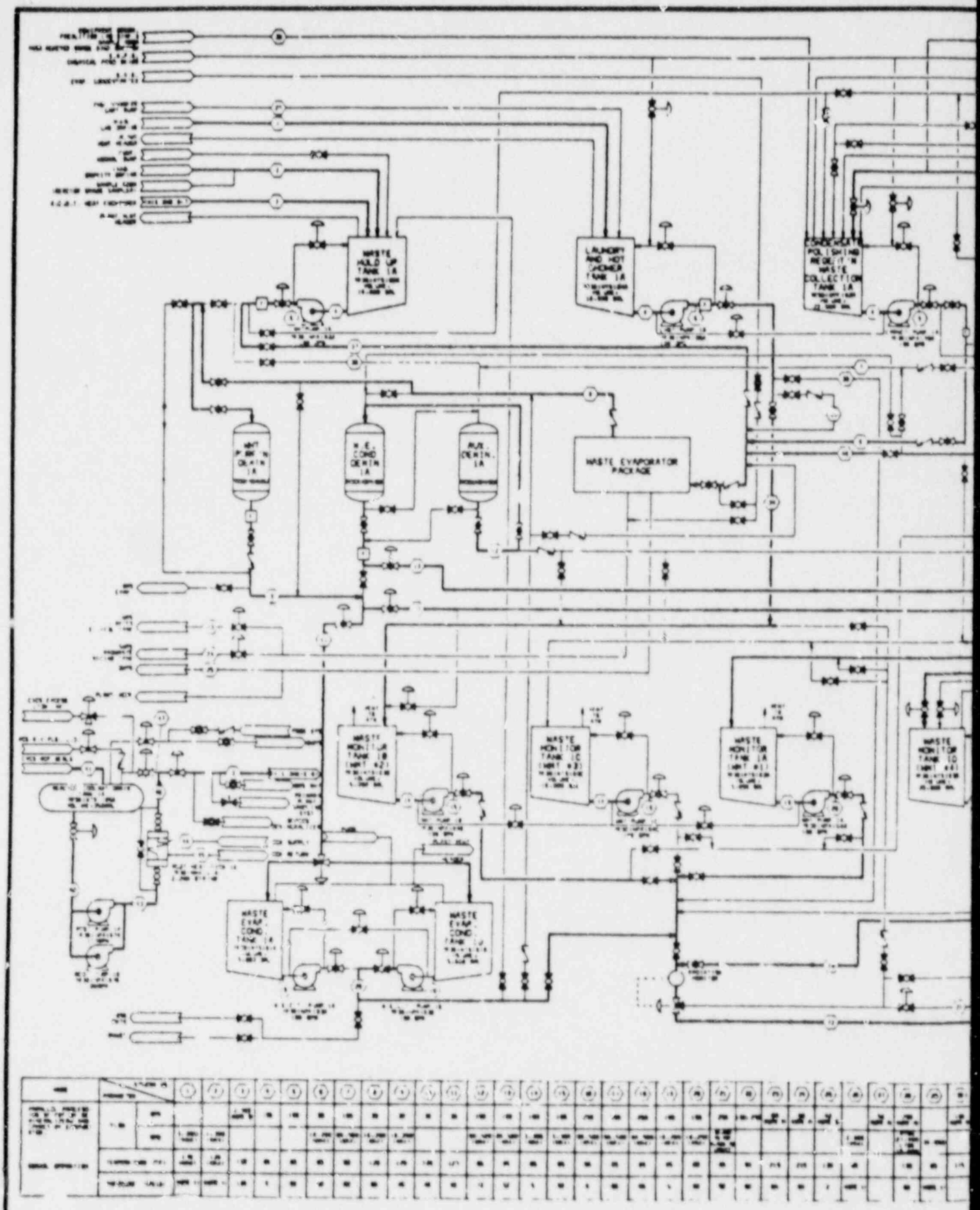
a. Compactible Waste

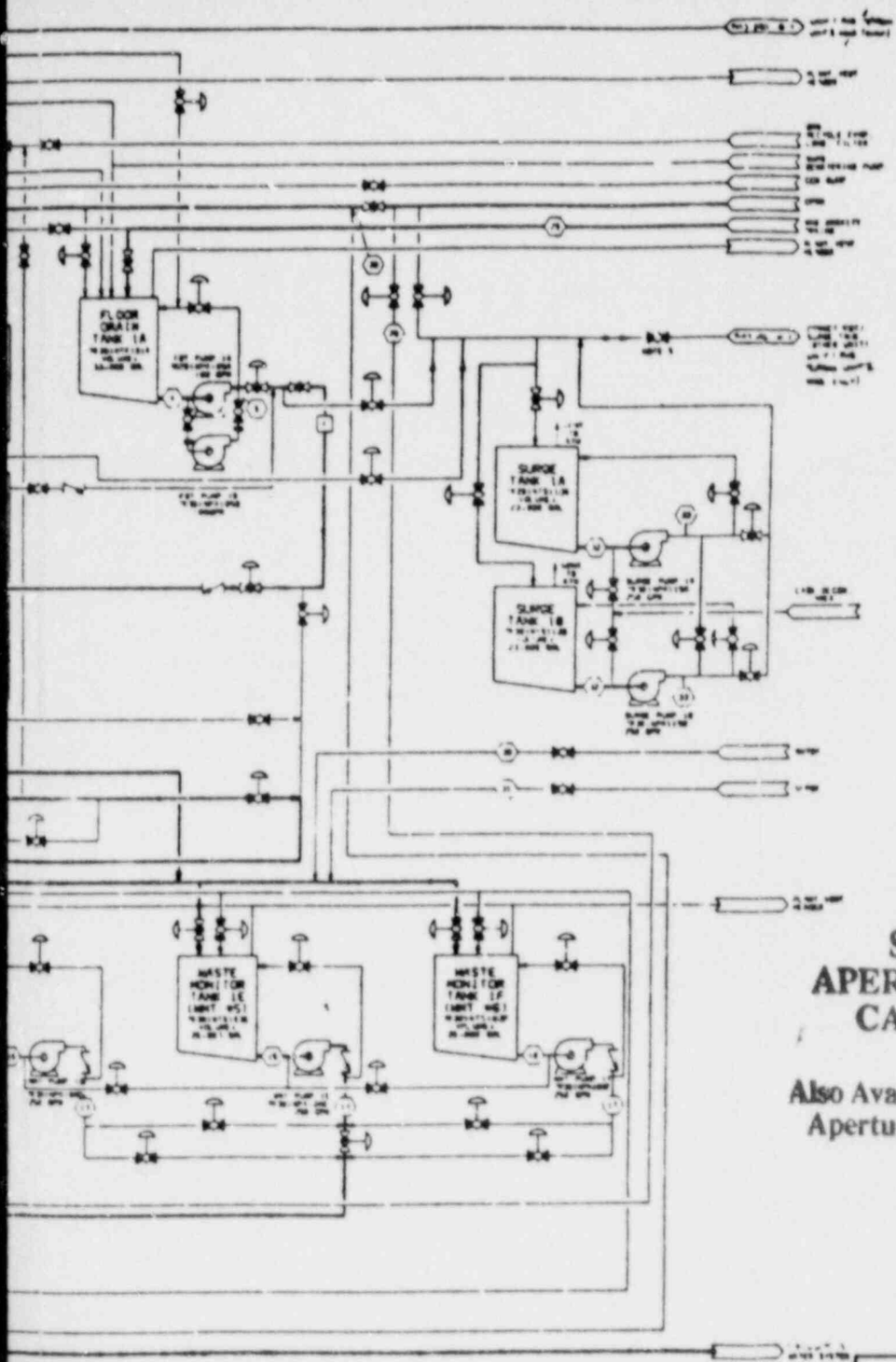
All contaminated or potentially contaminated compactible waste shall be taken to a designated area, compressed into approved strong tight containers, sealed, labeled, weighed and surveyed in accordance with OPCP14-WS-0004 (Dry Radioactive Waste Operations) and then placed in storage in accordance with OPCP14-WS-0006 (Radioactive Waste Package Transfer to Storage).

5.1.1.3 In the sorting area, compactible and reusable items, liquids and liquids in containers shall be removed from the ~~noncompactible~~ noncompressible receptacle. Liquids shall be handled in accordance with OPCP10-ZO-0002 (Disposal of Radioactive Waste Liquids). Reusable items shall be placed in containers and the responsible divisions notified. Compactible waste is then bagged for compaction. Noncompactible waste is placed in trash receptacles. FCR 88-03

ADDENDUM 1
DAW FLOW CHART
(Page 1 of 2)




WASTE HOLD UP TANK 1A
LAUNDRY AND HOT SHOWER TANK 1A
CONDENSATE POLISHING REGEN'N WASTE COLLECTION TANK 1A
HOT P.W.R'N DEMIN 1A
N.E. COND DEMIN 1A
AUX. DEMIN. 1A
WASTE EVAPORATOR PACKAGE
WASTE MONITOR TANK 1B
WASTE MONITOR TANK 1C
WASTE MONITOR TANK 1A
WASTE MONITOR TANK 1D
WASTE EVAP. CONDS. TANK 1A
WASTE EVAP. CONDS. TANK 1B

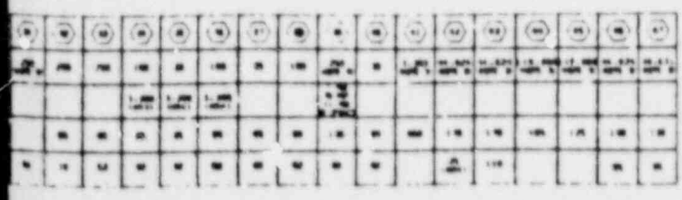


SI
APERTURE
CARD

Also Available On
Aperture Card

6. THE INSTALLATION OF FILTER ELEMENTS INSIDE THE FILTER HOUSINGS OF THE FDT, LHST AND CPRWCT FILTERS IS OPTIONAL.

8808310047-01



SOUTH TEXAS PROJECT
UNITS 1 & 2

FLOW DIAGRAM
LIQUID WASTE PROCESSING
SYSTEM

Dwg. No. 7R30-9-F-90023 Rev. 0

Figure 11.2-12

Amendment 51

The Light company
Houston Lighting & Power

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

August 23, 1988
ST-HL-AE-2769
File No.: G02
10CFR50.36a

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

South Texas Project Electric Generating Station
Unit 1
Docket No. STN 50-498
Semiannual Radioactive Effluent
Release Report for the First Half of 1988

Pursuant to the South Texas Project Electric Generating Station (STPEGS) Unit 1 Operating License NPF-76 Appendix A Technical Specification 6.9.1.4 and 10CFR50.36a, attached is the Semiannual Radioactive Effluent Release Report for the first half of 1988. The report covers the period from March 8, 1988 (date of initial criticality) to June 30, 1988.

If you should have any questions on this matter, please contact Mr. C.A. Ayala at (512) 972-8628.

G. E. Vaughn
Vice President
Nuclear Plant Operations

GEV/CAA/nl

Attachment: Semiannual Radioactive Effluent
Release Report for the First Half
of 1988.

IE48
1/1

cc:

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Nuclear Regulatory Commission
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Arlington, TX 76011

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