

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

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ACCESSION NBR:8004080452 DOC.DATE: 80/04/04 NOTARIZED: NO DOCKET #  
 FACIL:50-250 Turkey Point Plant, Unit 3, Florida Power and Light C 05000250  
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C 05000251  
 AUTH.NAME AUTHOR AFFILIATION  
 UHRIG,R.E. Florida Power & Light Co.  
 RECIP.NAME RECIPIENT AFFILIATION  
 SCHWENCER,A. Operating Reactors Branch 1

SUBJECT: Provides response to NUREG-0578 short-term requirements re  
 subcooled margin, plant shielding review & technical support  
 ctr data display. Detailed info on ability of digital data  
 processing sys to supply subcooling data encl.

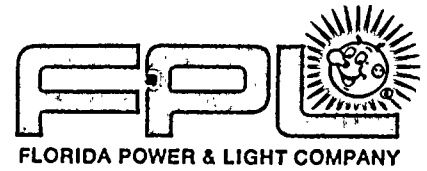
DISTRIBUTION CODE: A039S COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 6  
 TITLE: Resp to Lesson Learn Task Force - Westinghouse

NOTES: \_\_\_\_\_

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ACTION:	10 BC ORB #1	7 7		
INTERNAL:	01 REG FILE	1 1	02 NRC PDR	1 1
	05 OLSHINSKI, J.	1 1	06 KERRIGAN, J.	1 1
	07 BURDION, J.	1 1	08 WILLIS, C.	1 1
	17 I. & E	2 2	20 CORE PERF BR	1 1
	21 ENG BR	1 1	22 REAC SFTY BR	1 1
	23 PLANT SYS BR	1 1	24 EEB	1 1
	25 EFLT TRT SYS	1 1	ANDERSON, N.	1 1
	FIELDS, M.	1 1	O'REILLY, P.	1 1
	OELD	1 0	TELFORD, J. T.	2 2
EXTERNAL:	03 LPDR	1 1	04 NSIC	1 1
	26 ACRS	16 16		

APR 9 1980





April 4, 1980  
- L-80-115

Office of Nuclear Reactor Regulation  
Attention: Mr. A. Schwencer, Chief  
Operating Reactors Branch #1  
Division of Operating Reactors  
U. S. Nuclear Regulatory Commission  
Washington, D. C. 20555

Dear Mr. Schwencer:

Re: Turkey Point Units 3 & 4  
Docket Nos. 50-250 & 50-251  
NUREG-0578 Short Term Requirements

This letter provides the following information regarding implementation of NUREG-0578 short term requirements at Turkey Point Units 3 & 4:

(1) Subcooled Margin

Detailed information on the ability of the plant's Digital Data Processing System (DDPS) computer to supply subcooling data is attached.

(2) Plant Shielding Review

The approximate completion date for the review of equipment environmental qualification (in connection with short term requirement 2.1.6.b) is August 29, 1980.

(3) TSC Data Display

Parametric information will be transmitted from the Control Room to the Technical Support Center (TSC) by using the DDPS. Two CRTs and one on-line printer, with the capability of accessing the DDPS, will be installed in the TSC.

The DDPS contains approximately 500 channels for each nuclear unit. Approximately 450 channels per unit are in use. Each channel has the capability of monitoring one parameter. Since all DDPS channels are accessible from the TSC, all parameters that can be displayed in the Control Room can also be displayed (and printed out) in the TSC.

The TSC Display System described above will be installed

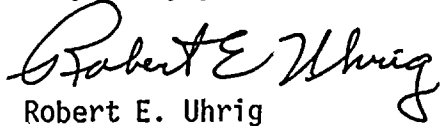
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and operational by July 1, 1980, pending delivery of  
the CRTs and on-line printer.

Very truly yours,

A handwritten signature in cursive script, reading "Robert E. Uhrig". The signature is written in dark ink and is positioned above the printed name and title.

Robert E. Uhrig  
Vice President  
Advanced Systems & Technology

REU/MAS/RJA/ah

Attachment

cc: J. P. O'Reilly, Region II  
Harold F. Reis, Esquire



## DDPS BACK-UP SUB-COOLED MARGIN

### CALCULATOR:

Data-General 800 Series Computer with core and disk memory systems. Multiplexers and main frame supplied AC power from one of three sources (see Attachment 1).

### INPUT:

In-core temperatures are "K" Type Thermocouples, total of fifty-one inputs divided into two junction boxes with reference temperature corrections (RTD's). Reference temperature can be read on recorder in control room. Also thermocouples can be read in control room on same recorder.

DDPS (Plant Computer) parallels the recorder for thermocouple and reference junction readouts. DDPS uses a constant reference junction temperature when calculating temperature from in-core thermocouples inputs.

### OUTPUT:

Output of thermocouples and RTD's in reference junction can be read in control room on recorder, printed on DDPS line printer or displayed on CRT in control room.

### INPUT ITEMS:

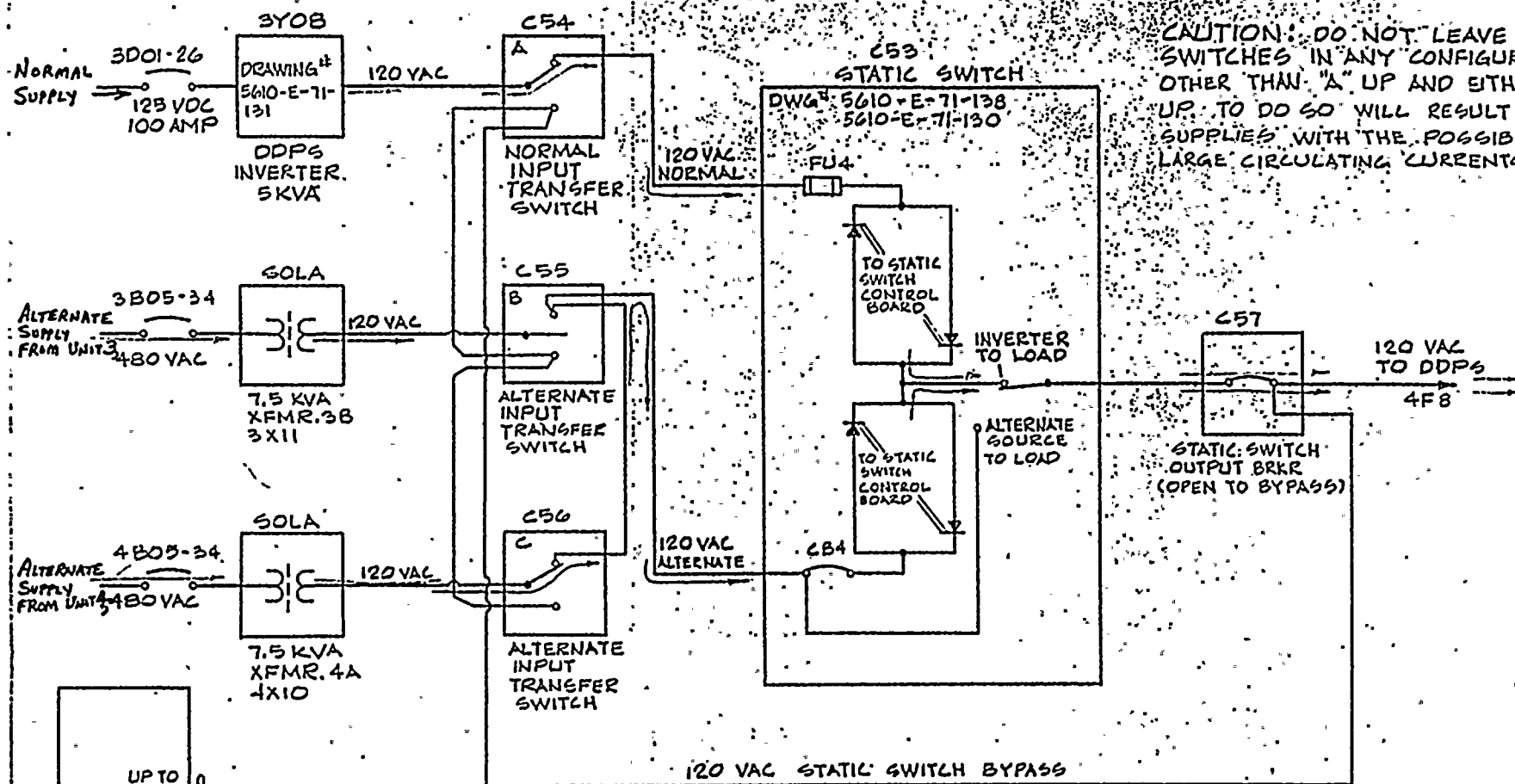
"K" thermocouples 0-2500°F (IPTS 1968)  
RTD's three wire platinum 127.48  $\Omega$  @ 160°F.

### OUTPUT RANGES:

DDPS:	500°F - 1200°F (Incore TC. Limit of Curve-Fit)
Recorder:	550°F - 650°F (Incore TC)
	100°F - 200°F (RTD)

QUALIFICATIONS:

- Recorder - Non 1E class component seismic class 1.
- DDPS - Powered from vital AC power non-safety grade calculation and inputs (system reliability is > 95%).
- Incore TC - Units purchased "Q" list quality class 1. Reference junctions non-1E class. Powered from non-vital power at present (upgrade in consideration for using vital power).
- Accuracy - TC Input  $\pm 2.0^{\circ}\text{F}$  0-530 $^{\circ}\text{F}$   
 $\pm 2.6\%$  of reading 530 $^{\circ}\text{F}$  - 700 $^{\circ}\text{F}$
- RTD Inputs  $\pm 3.0^{\circ}\text{F}$  (Based on resistance tolerance at 160 $^{\circ}\text{F}$ )
- Recorder  $\pm 0.25\%$  Scale
- DDPS  $\pm 3.0^{\circ}\text{F}$  (Curve fit)



**NORMAL OPERATION:** 1) "A" IN UP POSITION (NORMAL INPUT TO STATIC SWITCH)  
 2) "B" OR "C" IN UP POSITION (ONE ALTERNATE SOURCE TO STATIC SWITCH)  
 3) "B" OR "C" (DEPENDING ON 2) IN OFF POSITION (ONE ALTERNATE SOURCE OFF)

**CASUALTY OPERATION:** 1) OPEN C57 STATIC SWITCH OUTPUT BRKR.  
 (STATIC SWITCH) 2) TURN "A", "B", OR "C" TO DOWN POSITION (BYPASS TO DDPs).

FOR STATIC SWITCH OPERATION, SEE 5610-E-71-140

UP TO  
STATIC SW.  
OFF  
DOWN  
BYPASS  
TO DDPs

TYP. C54, C55, C56

# C53 DDPs STATIC SWITCH

