

REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION: NBR: 8101220150 DOC. DATE: 81/01/14 NOTARIZED: NO
 FACIL: 50-250 Turkey Point Plant, Unit 3, Florida Power and Light C
 50-251 Turkey Point Plant, Unit 4, Florida Power and Light C
 AUTH. NAME: UHRIG, R.E. AUTHOR AFFILIATION: Florida Power & Light Co.
 RECIP. NAME: NOVAK, T.M. RECIPIENT AFFILIATION: Assistant Director for Operating Reactors

DOCKET #
 05000250
 05000251

SUBJECT: Submits info re proposed undervoltage protection sys design
 mod, in response to NRC 800818 ltr. Two GE Type IAV
 undervoltage relays will be installed on each 4160V bus.
 Proposed Tech Specs will be submitted upon completion.

DISTRIBUTION CODE: A0155 COPIES RECEIVED: LTR 3 ENCL 0 SIZE: 2
 TITLE: Onsite Emergency Power Systems

NOTES:

	RECIPIENT ID CODE/NAME		COPIES LTTR ENCL		RECIPIENT ID CODE/NAME		COPIES LTTR ENCL
ACTION:	VARGA, S.	04	7				
INTERNAL:	AEOD		1		GEN ISSUES BR13		1
	I&C SYS BR	09	1		I&E	06	2
	MPA	18	1		NRC PDR	02	1
	OELD	17	1		OP EX EVAL BR11		1
	OP ASSESS BR	12	1		POWER SYS BR 14		1
	REG FILE	01	1				
EXTERNAL:	ACRS	16	16	1	LPDR	03	1
	NSIC	05	1				

JAN 23 1981

TOTAL NUMBER OF COPIES REQUIRED: LTTR 37 ENCL 37

[illegible]

1. The first part of the document is a title page. It contains the title "THE HISTORY OF THE UNITED STATES OF AMERICA" and the author "BY JAMES M. SMITH".

2. The second part of the document is a table of contents. It lists the chapters and their corresponding page numbers.

3. The third part of the document is the main body of the text. It is divided into chapters, each covering a different period of American history.

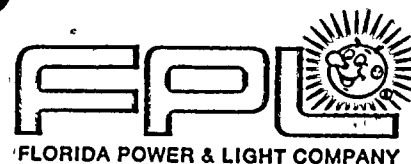
4. The fourth part of the document is a bibliography. It lists the sources used in the writing of the book.

5. The fifth part of the document is an index. It lists the names of people and places mentioned in the book, along with the page numbers where they are mentioned.

RECEIVED DISTRIBUTION
SERVICES UNIT

1981 JAN 21 PM 1 21

US NRC
DISTRIBUTION SERVICES
BRANCH



January 14, 1981
L-81-16

Office of Nuclear Reactor Regulation
Attention: Mr. Thomas M. Novak, Assistant
Director for Operating Reactors,
Division of Licensing
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Novak:

Re: Turkey Point Units 3 & 4
Docket No. 50-250, 50-251
ADEQUACY OF STATION
DISTRIBUTION SYSTEM VOLTAGES

In response to your letter dated August 18, 1980 concerning the above subject, we have prepared the following information to further describe the undervoltage protection system design modification which will be proposed for Turkey Point Units 3 & 4. This design, which is not yet finalized, will provide undervoltage protection at the 4160V and 480V levels.

In addition to the present loss-of-voltage relaying on the 4160V busses (described in FPL letter to NRC dated November 9, 1980), two General Electric Type IAV undervoltage relays will be installed on each 4160V bus. Operation of these relays is expected to be similar to the existing loss-of-voltage relays. The voltage setpoints will be chosen such that the relays begin to actuate when bus voltage decreases below that required to safely operate the running equipment. These relays have an inverse-time characteristic which allows faster actuation with decreasing voltage. No additional time delay will be used.

Two ITE Type 27H instantaneous undervoltage relays will be installed on each 480V Load Center. Actuation of both relays on a Load Center coincident with a Safety Injection Signal will initiate, after a fixed time of delay, the diesel starting sequence and disconnection of offsite power for the associated train. Setpoints for these relays will be chosen such that they actuate when bus voltage decreases below that required to safely start all safety loads. The fixed time delay will be chosen based on the acceleration line of the safety loads in order to prevent spurious trips and allow for proper safety equipment operation.

A015
3
3/0

8101220 150

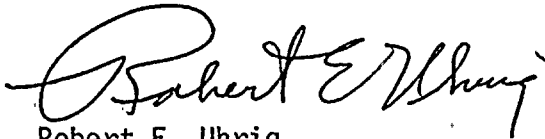
P

Spurious actuation of a single undervoltage relay (either on the 4160V or 480V busses) will not cause a trip of the offsite power sources. A failure of a single relay to detect an undervoltage condition will not result in less than the minimum safety equipment having sufficient voltage to start and run. Thus, the single failure criteria of IEEE 279-1971 is met.

The proposed undervoltage relays will be made inoperable once the busses are energized by onsite power. Closing of the diesel generator breaker on the 4KV bus will disable the undervoltage relays.

A proposal for Technical Specification changes concerning the proposed design modification will be provided when the design is completed and the voltage setpoints are determined.

Very truly yours,



Robert E. Uhrig
Vice President
Advanced Systems & Technology

REU/PLP/bc

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

