RC FORM 195		U.S. NU	ICLEAR REGULATORY COMMIS	80-269 02 70/28
NRC DIS	TEIBUTION FOR PA	RT 50 DOCKET	MATERIAL	
D:		FROM:		DATE OF DOCUMENT
Mr. Edson G. Case		Duke Power Company Charlotte, North Carolina William O. Parker, Jr.		1/4/70
				DATE RECEIVED
LETTER	NOTORIZED	PROP	INPUT FORM	NUMBER OF COPIES RECEIVED
CAIGINAL	UNCLASSIFIED			1 3:0000
			ENCLOSURE	a synce
			Att. 1) Proposed O System Mod Att. 2) Electrical	verpressure Protection ification- Diagrams-
		(2 - P)	(2-P)+(12-P)	
PLANT NAME: Ocor RJL	nee Units 1-2-3 1/11/78		Dist. Per S.	Shepparo 1-11-7
OTC LTR	ONLY UND	FOR ACTION	INFORMATION	Reco
BRANCH CHIEF. (7) 604	ule de ev	T	
BRANCH CHILF.	1 350	Wengel		
Canton	NUT THAT I THE REAL PROPERTY OF			
a contraction of the second se	>>	INTERNAL	DISTRIBUTION	
REG FILE	ENGL			
NRC PDR				
T & E (2)				
DELD				
HANAUER				
CHECK				
EISENHUT				
SHAO				
BAER				
BUTTLER				
BRIMES				
J. COLLINS				
J. MCGOUCH				
A CONTRACTOR			1	
	EVTERA	AL DISTRIBUTION	1	CONTROL NUMBER
1000.1.101.1	EX I EHN	AL DISTRIBUTION	1 1	Contribent
LPDR: WALK	AUR, S.C.			
ric .				
NSIC	-			780110162
ACRS 16 CYS SEN	T CATEGORY B			
				111

DUKE POWER COMPANY

Power Building 422 South Church Street, Charlotte, N. C. 28242

January 4, 1978

VILLIAM O. PARKER, JR. VICE PRESIDENT STEAM PRODUCTION

TELEPHONE: AREA 704 373-4083

Mr. Edson G. Case, Acting Director Office of Nuclear Reactor Regulation U. S. Nuclear Regulatory Commission Washington, D. C. 20555

Attention: Mr. A. Schwencer, Chief Operating Reactors Branch #1

Reference: Oconee Nuclear Station Docket Nos. 50-269, -270, -287

Dear Mr. Case:

Your letter dated November 10, 1977 stated that the overpressure protection system for Oconee Nuclear Station does not meet all the criteria established by the NRC. You requested that we propose system modifications that will provide overpressure protection in full conformance with NRC criteria, and that we provide a valueimpact assessment on schedule and cost to make all necessary hardware changes.

In my earlier submittals, the analysis of the overpressure transient caused by the initiation of high pressure injection did not include letdown flow. This flow reduces the total mass addition rate into the reactor coolant system by approximately 60 gpm and increases the time until operator action is required to terminate the overpressurization transient. With an initial system pressure of 100 psig, the time until overpressurization would occur is approximately nine minutes; with an initial pressure of 225 psig, the time is approximately five minutes. While these new times do not meet the arbitrary NRC criteria which does not allow credit for operator intervention for ten minutes, we feel that there is sufficient time for operators to take timely and appropriate action.

However, in compliance with your request, a proposed overpressure protection system modification, including a cost estimate and implementation schedule is provided in Attachment 1. The letter also requested electrical circuit and logic diagrams which are provided in Attachment 2.



Mr. Edson G. Case, Acting Director Page Two January 4, 1978

It continues to be our conclusion that the design and operation of the Oconee Nuclear Station are adequate to mitigate the consequences of a postulated reactor vessel overpressurization incident. In addition, the requirements related to the maintenance of the power operated relief valve and the testing of the high pressure injection valve are more appropriately included in station maintenance procedures than in the Technical Specifications. As such, no proposed Technical Specifications are being submitted.

Very truly yours,

U.Ta.ke William O. Parker, Jr.

RLG:ge

Attachment

ATTACHMENT 1

.

PROPOSED OVERPRESSURE PROTECTION SYSTEM MODIFICATION

ATTACHMENT 1

PROPOSED OVERPRESSURE PROTECTION SYSTEM MODIFICATION

The simplest method is to install a pressure switch that will trip the high pressure injection pumps when a reactor coolant system pressure of approximately 550 psig is exceeded. This pressure switch, with two isolation values and a vent value, would be installed downstream of the injection value HP-26. A key-lock switch would be provided in the control room to enable the operator to de-energize this circuit when operating above the minimum temperature for which the vessel can be fully pressurized in order to prevent an inadvertent trip of the HP injection pumps.

The estimated total cost for the installation of this proposed modification on all three Oconee units is \$25,000. It is estimated that six months after project initiation would be required to intall this modification depending on unit availability



.

ATTACHMENT 2

1

-

÷

. .

ELECTRICAL DIAGRAMS