January 22, 1998

Mr. W. R. McCollum
Vice President, Oconee Site
Duke Energy Corporation
P. O. Box 1439
Seneca, SC 29679

SUBJECT: TECHNICAL SPECIFICATION 3.4 BASES REVISION - OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

Dear Mr. McCollum:

By letter dated January 5, 1998, you informed the staff of a change to the Oconee Nuclear Station, Units 1, 2, and 3 Technical Specifications (TS) that only affects the Bases of TS 3.4. The change is to require both the emergency feedwater flow indication and the steam generator level indication to consider the flowpath to each steam generator operable.

The purpose of this letter is to distribute the enclosed revised TS page to the appropriate TS manual holders.

Sincerely,

ORIGINAL SIGNED BY:

David E. LaBarge, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270 and 50-287

Enclosure: Bases Change

cc w/encl: See next page

Distribution:
Docket File
PUBLIC
PDII-2 Rdg.
BBoger
GHill (6)
HBerkow
LBerry
DLaBarge
WBeckner
JJohnson, RII
ACRS
OGC
COgle, RII

DOCUMENT NAME: G:\OCONEE\BASCHG7.OCO

To receive a copy of this document, indicate in the box:
"C" = Copy without attachment/enclosure "E" = Copy with attachment/enclosure "N" = No copy

OFFICE	PDII-2/PM		PDII-2/LA				PDII-2/D	
NAME	DLaBarge:cn		LBerry				HBerkow	
DATE	1/22/98		1/27/98		1/ /98		1/27/98	

OFFICIAL RECORD COPY

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

January 22, 1998

Mr. W. R. McCollum
Vice President, Oconee Site
Duke Energy Corporation
P. O. Box 1439
Seneca, SC 29679

SUBJECT: TECHNICAL SPECIFICATION 3.4 BASES REVISION - OCONEE NUCLEAR STATION, UNITS 1, 2, AND 3

Dear Mr. McCollum:

By letter dated January 5, 1998, you informed the staff of a change to the Oconee Nuclear Station, Units 1, 2, and 3 Technical Specifications (TS) that only affects the Bases of TS 3.4. The change is to require both the emergency feedwater flow indication and the steam generator level indication to consider the flowpath to each steam generator operable.

The purpose of this letter is to distribute the enclosed revised TS page to the appropriate TS manual holders.

Sincerely,

David E. LaBarge, Senior Project Manager
Project Directorate II-2
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Docket Nos. 50-269, 50-270 and 50-287

Enclosure: Bases Change

cc w/encl: See next page

cc:
Mr. Paul R. Newton
Legal Department (PBO5E)
Duke Energy Corporation
422 South Church Street
Charlotte, North Carolina 28242

J. Michael McGarry, III, Esquire
Winston and Strawn
1400 L Street, NW.
Washington, DC 20005

Mr. Robert B. Borsum
Framatome Technologies
Suite 525
1700 Rockville Pike
Rockville, Maryland 20852-1631

Manager, LIS
NUS Corporation
2650 McCormick Drive, 3rd Floor
Clearwater, Florida 34619-1035

Senior Resident Inspector
U. S. Nuclear Regulatory
Commission
7812B Rochester Highway
Seneca, South Carolina 29672

Regional Administrator, Region II
U. S. Nuclear Regulatory Commission
Atlanta Federal Center
61 Forsyth Street, S.W., Suite 23T85
Atlanta, Georgia 30303

Max Batavia, Chief
Bureau of Radiological Health
South Carolina Department of Health
and Environmental Control
2600 Bull Street
Columbia, South Carolina 29201

County Supervisor of Oconee County
Walhalla, South Carolina 29621

Mr. J. E. Burchfield
Compliance Manager
Duke Energy Corporation
Oconee Nuclear Site
P. O. Box 1439
Seneca, South Carolina 29679

Ms. Karen E. Long
Assistant Attorney General
North Carolina Department of
Justice
P. O. Box 629
Raleigh, North Carolina 27602

L. A. Keller
Manager - Nuclear Regulatory
Licensing
Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28242-0001

Mr. Richard M. Fry, Director
Division of Radiation Protection
North Carolina Department of
Environment, Health, and
Natural Resources
3825 Barrett Drive
Raleigh, North Carolina 27609-7721

Bases

The Main Feedwater System and the Turbine Bypass System are normally used for decay heat removal and cooldown above 250°F. Feedwater makeup is supplied by operation of a hotwell pump, condensate booster pump, and a main feedwater pump.

Operability of the Emergency Feedwater System (EFW) assures the capability to remove decay heat and cool down the Reactor Coolant System to the operating conditions for switch over to decay heat removal by the Decay Heat Removal System, in the event that the Main Feedwater System is inoperable. The EFW system consists of a turbine driven pump (880 gpm), two motor driven pumps (450 gpm each), and associated flow paths to the steam generators.

The limiting transient requiring maximum EFW flow is the loss of main feedwater with offsite power available. For this transient, a minimum EFW flow rate equivalent to 400 gpm at 1050 psia and no more than 130°F is adequate. Each of the three EFW pumps is capable of delivering this flow.

A 100% flowpath is defined as: The flowpath to either steam generator including associated valves and piping capable of being supplied by either the turbine driven pump or the associated motor driven pump.

One flow indicator (total EFW header flow) and steam generator level indicator (extended startup) per steam generator is required to provide indication of emergency feedwater flow to the steam generators and to confirm emergency feedwater system operation. In the event that at least one flow and steam generator level indicator per steam generator is not available, then the flowpath to this steam generator is considered to be inoperable.

The EFW System is designed to start automatically in the event of loss of both main feedwater pumps as sensed by low hydraulic oil pressure. This specific automatic initiation logic is placed in service prior to criticality and may be bypassed when shutdown to present inadvertent actuation during startup and shutdown. All automatic initiation logic and control functions are independent from the Integrated Control System (ICS).

Normally, decay heat is removed by steam relief through the Turbine Bypass System to the condenser. Decay heat also can be also removed from the steam generators by steam relief through the main steam safety relief valves. The total relief capacity of the 16 main steam safety relief valves is 13,105,000 lbs./hr. In this case the minimum amount of water in the upper surge tank, condensate storage tank, and hotwell is sufficient to remove decay heat for at least 4 hours at hot shutdown conditions. This provides adequate time to establish normal flow through the condenser by restarting a Condenser Cooling Water (CCW) pump in a loss of station power events. The turbine bypass valves can then be utilized to relieve steam to the condenser and commence a cooldown of the RCS.

A 6 foot level in the upper surge tank will ensure that 30,000 gallons of water are available to the EFW pumps from that source. The 6 foot level setpoint includes an allowance for instrument error and for the depletion of inventory while switching to an alternate suction source.