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October 24, 2000

Susan L. Uttal, Esq.
Office of the General Counsel
Mail Stop O-15 B18
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Re: Carolina Power & Light (Shearon Harris Nuclear Power Plant)
Docket No. 50-400-OLA, ALSBP No. 99-762-02-LA

Dear Ms. Uttal:

Enclosed are the following three (3) pages of the FSAR which were inadvertently omitted from the documents provided to you:

15.1.4-2 (#112569A)
15.1.4-4 (#122571A)
15.1.5-2 (#112554A)

Please contact me if you have any questions regarding the enclosed.

Sincerely,

Steven Carr
Associate General Counsel

SC/cfh
Enclosures
c: John O'Neill

Template
O6C002

ERIDS06C01

b. Safety injection system actuation derived from two out of three low steam line pressure signal in any one main steam line (above Permissive P-11).

c. High negative steam pressure rate indication from two out of three signals in any one main steam line (below Permissive P-11).

Plant systems and equipment which are available to mitigate the effects of the accident are also discussed in Section 15.0.8 and listed in Table 15.0.8-1.

15.1.4.2 Deleted by Amendment No. 48.

15.1.4.3 Deleted by Amendment No. 48.

15.1.4.4 Event Disposition for SPC Analysis.

Mode 1: The maximum steam flow through a single steam dump, power operated relief, or safety valve drives a thermal load increase less than that considered in Event 15.1.3. Ultimate reactor power level and the potential challenge to SAFDLs is greater for Event 15.1.3. The event is therefore bounded by Event 15.1.3.

Mode 2: The reactor will achieve a steady state power level equal to its initial power plus the additional load imposed by the steam flow through the failed valve. Because the initial power level is less than 5% of rated, and the additional load is less than 10% of rated power, the reactor power will not rise to a level at which a significant challenge to SAFDLs is posed. Event 15.1.4 is bounded in Mode 2 by the "Off-site Power Available" Case analyzed for Mode 2 of Event 15.1.5, "Steamline Break". The thermal load increase associated with the latter event is significantly greater than encountered here and the "Off-site Power Available" Steamline Break Cases continue to meet the Condition II acceptance criteria.

Mode 3: The event will proceed as described for Mode 2, except that the reactor is subcritical by at least 1000 pcm at event initiation for Mode 3. The initial margin to criticality for Mode 3 will slow the evolution of the event relative to Mode 2. Time available for operator response is greater than in Mode 2. Event 15.1.4 is bounded in Mode 3 by the "Off-site Power Available" Case analyzed for Mode 2 of Event 15.1.5, "Steamline Break". The thermal load increase associated with the latter event is significantly greater than encountered here and the "Off-site Power Available" Steamline Break Cases continue to meet the Condition II acceptance criteria.

Modes 4, 5, and 6: The reactor coolant temperature and secondary pressure are significantly reduced relative to Mode 3 for these modes. Thus, the potential cooldown is smaller than that in Mode 3 due to the decreased steam flow through the affected valve in these modes. The challenge to SAFDLs is reduced directly by the lower coolant temperatures. The Mode 3 event, therefore, bounds the event in Modes 4, 5, and 6. In Modes 5 and 6, the event cannot occur with consequences because the primary and secondary temperatures are below saturation at atmospheric pressure.

Page 15.1.4-4 was deleted by Amendment No. 48

c. For an MSLB with the equilibrium iodine concentration for continued full power operation in combination with an assumed accident initiated iodine spike and without the stuck rod, the calculated doses should not exceed a small fraction of the 10CFR100, Section 11 values, i.e. 10 percent or 2.5 rem and 30 rem, respectively, for the whole-body and thyroid doses.

Effects of minor secondary system pipe breaks are bounded by the analysis presented in this section. Minor secondary system pipe breaks are classified as ANS Condition III events, as described in Section 15.0.1.3.

The following functions provide the protection for a steam line rupture:

1. Safety Injection System actuation from any of the following:

a. Two out of three low pressurizer pressure signals.

b. Two out of three Hi-1 Containment pressure signals.

c. Two out of three low steam line pressure signals in any one main steam line.

2. The overpower reactor trips (neutron flux and ΔT), low pressurizer pressure reactor trip, and the reactor trip occurring in conjunction with receipt of the safety injection signal.

3. Redundant isolation of the main feedwater lines - Sustained high feedwater flow would cause additional cooldown. Therefore, in addition to the normal control action which will close the main feedwater valves after a reactor trip, a safety injection signal will rapidly close all feedwater control valves and backup feedwater isolation valves, trip the main feedwater pumps, and close the feedwater pump discharge valves.

4. Trip of the fast acting main steam line isolation valves (designed to close in less than 7 seconds) on:

a. Hi-2 Containment pressure.

b. Safety Injection System actuation derived from two out of three low steam line pressure signals in any one main steam line (above P-11).

c. High negative steam pressure rate indication from two signals in any main steam line (below Permissive P-11).

Fast-acting isolation valves are provided in each main steam line; these valves will fully close within five seconds of actuation following a large break in the steam line. For breaks downstream of the isolation valves, closure of all valves would completely terminate the blowdown. For any break, in any location, no more than one steam generator would experience an uncontrolled blowdown even if one of the isolation valves fails to close. A description of steam line isolation is included in Chapter 10.