

MAR 3 1984

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Docket Nos. 50-348
and 50-364

Mr. F. L. Clayton
Senior Vice President
Alabama Power Company
Post Office Box 2641
Birmingham, Alabama 35291

Dear Mr. Clayton:

The Commission issued Amendment Nos. 37 and 27 to Facility Operating License Nos. NPF-2 and NPF-8 for the Joseph M. Farley Nuclear Plant Units 1 and 2 on December 30, 1983. Upon review of the issued amendments your staff noted two typographical errors made in your October 13, 1983 application. These errors are unrelated to the approved changes in the amendments.

On that basis, you requested reissuance of the two corrected pages for both units. You also requested our action as soon as possible to support the Unit 1 startup from the current refueling outage. Enclosed are corrected Technical Specification pages 3/4 2-8 and 3/4 2-9 which you should use to replace the pages issued on December 30, 1983. The pages are identified as "corrected page," Amendment No. 37 and No. 27, as appropriate.

Sincerely,

/s/ Edward A. Reeves

Edward A. Reeves, Project Manager
Operating Reactors Branch No. 1
Division of Licensing

Enclosure:
As stated

cc w/enclosure:
See attached list

ORB #1
EReves/jm
3/8/84

ORB #1
C. Varga
3/8/84

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P PDR

Mr. F. L. Clayton
Alabama Power Company

Joseph M. Farley Nuclear Plant
Units 1 and 2

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Executive Vice President
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ATTN: State Health Officer
State Office Building
Montgomery, Alabama 36104

Regional Radiation Representative
EPA Region IV
345 Courtland Street, N.E.
Atlanta, GA 30308

TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

NOTATION

NOTE 1: Overtemperature $\Delta T \leq \Delta T_0 [K_1 - K_2 \frac{1 + \tau_1 S}{1 + \tau_2 S} (T - T') + K_3 (P - P') - f_1 (\Delta I)]$

where: ΔT_0 = Indicated ΔT at RATED THERMAL POWER

T = Average temperature, °F

T' \leq 577.2°F (Maximum Reference T_{avg} at RATED THERMAL POWER)

P = Pressurizer pressure, psig

P' = 2235 psig (Nominal RCS operating pressure)

$\frac{1 + \tau_1 S}{1 + \tau_2 S}$ = The function generated by the lead-lag controller for T_{avg} dynamic compensation

τ_1 & τ_2 = Time constants utilized in the lead-lag controller for T_{avg} $\tau_1 = 30$ secs, $\tau_2 = 4$ secs.

S = Laplace transform operator, sec^{-1} .

Operation with 3 Loops

$K_1 = 1.22$

$K_2 = 0.0154$

$K_3 = 0.000635$

Operation with 2 Loops

$K_1 =$ (values blank pending |

$K_2 =$ NRC approval of |

$K_3 =$ 2 loop operation) |

and $f_1 (\Delta I)$ is a function of the indicated difference between top and bottom detectors of the power-range nuclear ion chambers; with gains to be selected based on measured instrument response during plant startup tests such that:

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TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

NOTATION continued

- (i) for $q_t = q_b$ between -35 percent and +9 percent, $f_1 (\Delta I) = 0$ (where q_t and q_b are percent RATED THERMAL POWER in the top and bottom halves of the core respectively, and $q_t = q_b$ is total THERMAL POWER in percent of RATED THERMAL POWER).
- (ii) for each percent that the magnitude of $(q_t - q_b)$ exceeds -35 percent, the ΔT trip setpoint shall be automatically reduced by 1.37 percent of its value at RATED THERMAL POWER.
- (iii) for each percent that the magnitude of $(q_t - q_b)$ exceeds +9 percent, the ΔT trip setpoint shall be automatically reduced by 1.60 percent of its value at RATED THERMAL POWER.

Note 2: Overpower $\Delta T \leq \Delta T_0 [K_4 - K_5 \frac{\tau_3 S}{1 + \tau_3 S} - K_6 (T - T'') - f_2 (\Delta I)]$

where: ΔT_0 = Indicated ΔT at RATED THERMAL POWER

T = Average temperature, °F

T'' = Reference T_{avg} at RATED THERMAL POWER (Calibration temperature for ΔT instrumentation, $\leq 577.2^\circ\text{F}$)

$K_4 = 1.08$

$K_5 = 0.02/^\circ\text{F}$ for increasing average temperature and 0 for decreasing average temperature

$K_6 = 0.00109/^\circ\text{F}$ for $T > T''$; $K_6 = 0$ for $T \leq T''$

$\frac{\tau_3 S}{1 + \tau_3 S}$ = The function generated by the rate lag controller for T_{avg} dynamic compensation

TABLE 2.2-1 (Continued)

REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

NOTATION

NOTE 1: Overtemperature $\Delta T \leq \Delta T_0 [K_1 - K_2 \frac{1 + \tau_1 S}{1 + \tau_2 S} (T - T') + K_3 (P - P') - f_1 (\Delta I)]$

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REACTOR TRIP SYSTEM INSTRUMENTATION TRIP SETPOINTS

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