CP&L
Carolina Power & Light Company

MAY 04 1982

Office of Nuclear Reactor Regulation
ATTN: Mr. D. B. Vassallo, Chief
Operating Reactors Branch No. 2
United States Nuclear Regulatory Commission
Washington, D.C. 20555

BRUNSWICK STEAM ELECTRIC PLANT, UNIT NOS. 1 AND 2
DOCKET NOS. 50-325 AND 50-324
LICENSE NOS. DPR-71 AND DPR-62
INTERPRETATION OF TECHNICAL SPECIFICATIONS

Dear Mr. Vassallo:

SUMMARY

In anticipation of the upcoming refueling operations on Brunswick Unit No. 2, Carolina Power & Light Company (CP&L) reviewed the applicable Technical Specifications (TS) regarding source range monitors (SRMs) and fuel loading chambers (FLCs) as set forth in TS 3.9.2 and 4.9.2. We have discussed the interpretation of the TS with NRC as detailed below.

DISCUSSION

During a spiral unload, the core is unloaded by first removing the fuel from the outermost control cells (four bundles surrounding a control blade). Unloading continues in a spiral fashion by removing fuel from the outermost periphery to the interior of the core, symmetric about the SRMs, except for two diagonal fuel bundles around each of the four SRMs. Our interpretation of the aforementioned TS is that during spiral unloading the SRMs may drop below the TS count rate of three (3) counts per second (cps) when the eight remaining fuel bundles are removed from around the SRMs.

In a telephone conversation on April 30, 1982 with the Brunswick NRC Project Manager, CP&L discussed this interpretation of the current TS. Agreement was reached that unloading the eight remaining fuel bundles from around the SRMs with the concomitant loss of three (3) cps was acceptable. This is conservative since a General Electric analysis has demonstrated that sixteen or more uncontrolled fuel assemblies must be loaded together to achieve criticality. As there will be only two diagonal fuel assemblies in each array, with adequate water gap, criticality would be even more unlikely.

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During spiral core reloading, NRC and CP&L also agreed on the interpretation that current TS would allow a count rate below three (3) cps until two diagonally adjacent fuel assemblies are loaded around each SRM. A spiral reload is the reverse of a spiral unload. Except for two diagonal fuel bundles around each of the four SRMs, the fuel in the interior of the core, symmetric to the SRMs, is loaded first.

Should you have any questions regarding this interpretation of Technical Specifications, please contact our staff.

Yours very truly,

R. W. Howe

P. W. Howe
Vice President
Technical Services

MSG/lr (n-46)

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