

WOLF CREEK

NUCLEAR OPERATING CORPORATION

Bart D. Withers
President and
Chief Executive Officer

September 30, 1988

WM 88-0248

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Mail Station P1-137
Washington, D. C. 20555

Subject: Docket No. 50-482: Environmental Impact of Increased
Fuel Enrichments and Burnups

Gentlemen:

The purpose of this letter is to document Wolf Creek Nuclear Operating Corporation's (WCNOC) conclusion that the environmental effects of the operation of Wolf Creek Generating Station (WCGS) at fuel enrichments of up to 5.0 weight percent U-235 and fuel irradiations of up to 60 GWD/MT are bounded by the impacts reported in Table S-4 of 10 CFR Part 51.

As requested by the Staff, WCNOC has compared the future operation of WCGS at fuel enrichments up to those allowed by Amendment No. 16 (4.5 weight percent U-235) with the NRC assessment of the environmental effects resulting from extended fuel enrichment and irradiation, related to the operation of Carolina Power & Light Company's Shearon Harris Nuclear Power Plant (53PR30355). The Staff's assessment concluded that, "The Environmental Impacts summarized in Table S-4 of 10 CFR 51.52 for the burnup level of 33 GWD/MT are conservative and bound the corresponding impacts for burnup level up to 60 GWD/MT and Uranium-235 enrichments up to five percent by weight". In addition, the Staff also concluded that, "There are no significant adverse radiological or non-radiological impacts associated with the use of extended fuel burnup and/or increased enrichment, and that this case will not significantly affect the quality of the Human Environment". WCNOC concurs with this assessment.

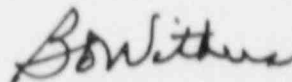
WCNOC's review has concluded that future operation of WCGS with fuel enrichments of up to 5 weight percent and burnup levels up to 60 GWD/MT is bounded by the impacts reported in Table S-4 of 10 CFR Part 51. This conclusion is based on a review of the Staff's Notice of Environmental Assessment and Finding of No Significant Impact for Extended Burnup Fuel Use in Commercial LWRs (53PR6040); NUREG/CR-5009, "Assessment of the Use of Extended Burnup Fuel in Light Water Power Reactors"; and the Staff's Environmental Assessment related to the operation of the Shearon Harris Nuclear Power Plant.

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If you have any questions concerning this matter, please contact me or Mr. O. L. Maynard of my staff.

Very truly yours,



Bart D. Withers
President and
Chief Executive Officer

BDW/jad

cc: B. L. Bartlett (NRC)
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