684

(2)

UNITED STATES OF AMERICA April 16, 1984

NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD
Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

In the Matter of CAROLINA POWER AND LIGHT CO. et al. (Shearon Harris Nuclear Power Plant, Units 1 and 2)	Docket 50-400 OL ASLBP No. 82-468-01 OL

Wells Eddleman's Supplement re Effect of Cancelling Harris 2 on 2.758 Petition of 6-30-83

Under the Board's oral order of 3-8-84 (transcribed conference call) I hereby file this response before May 1 to let the other parties look at it before the prehearing conference of May 1.

Without unit 2, the Harris project can be expected to produce about half as much power in total. But the power that can be saved (i.e., made available for other uses) by the alternatives described in the Reeves and Eddleman affidavits filed 6-30-83 is not reduced.

That means the alternatives provide more than twice as much ability to meet demand (i.e. they reduce it more than twice as much as one 900-MW Harris unit could contribute to meeting peak). Moreover, the alternatives will save the kilowatt-hours Harris 1 could reasonably be expected to produce. Dr. Reeves identified savings equal to the Harris 1 output at 56% DER capacity factor. Dr. John O. Blackburn identified (p.2 of his affidavit submitted 3/7/84) an additional 475 GWH which could be saved by use of efficient refrigerators. This equals another 6% DER capacity factor for Harris. The total is 62% of the DER capacity of 900 MWe The NRC Staff (who are responsible for analyzing the environmental costs and benefits of harris) in their FES (at pp 6-2 and 6-3) used 868 MW for Harris output and 55%CF

D503

CP&L's cancellation of units 2, 3 and 4 are implicit admissions that improved efficiency in energy use, conservation and load management, and more use of energy alternatives, are in fact reasonable alternatives (superior in 3 of 4 cases, i.e. units 2, 3 and 4) to the Harris construction authorized 1-27-78 or thereabouts at the CP stage in this docket.

CP&L's 3-16-84 letter to Harold R Denton of Nuclear Reactor Regulation (CP&L serial number NLS 84-073) asking extension from June 1, 1984 to March 1, 1986 as the "latest date for completion" of Harris 1 cites(end of 2d paragraph) the following as "major factors contributing to the delays" in Harris 1:"(1) revised energy and load forecasts reflecting a slower rate of growth in customer demand than previously projected, and (2) CP&L's expanded conservation and load management program". Thus, in CP&L's own words lower load forecasts and expanded conservation and load management are the only reasons construction of Harris 1 has been delayed. (Letter is signed by M.A. MacDuffie, Senior VP of Nuclear Generation. CP&L says (3d paragraph) that these factors are "good cause" to delay Harris 1 completion.

I say if they are good cause for delaying unit 1 and scrapping 3 other units, they are good cause to re-examine whether unit 1 is needed, cost-effective, and/or environmentally preferable to present alternatives to its operation.

In sum, CP&L's actions admit that there are environmentally and economically preferable alternatives to Harris 2,3 and 4. Cancelling these units admits as much. That leaves Harris 1, but Dr. Reeves' & my affidavits show environmentally superior alternatives can displace 2½ times its 900 MWe maximum contribution to peak demand (virtually 3 times the Staff 868 MWe: Reeves shows 2,600 MW saving), and all its output (56% C.F. at 900 MWe, vs. Staff's 55% C.F. at 868 MWe) of electritity. Dr. Blackburn's information would only strengthen this case further. But the original 6-30-83 filing as corrected by Dr. Reeves 9/83 is a prima facie case that environmentally and economically superior alternatives to Harris operation exist. The net savings are very large without Harris 2's projected fuel savings to offset. CP&L's ER Amendment 5, Sec. 8, shows that no Harris 2 drops fuel savings about $1 billion.