

July 20, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD



In the Matter of)

CAROLINA POWER & LIGHT COMPANY)
AND NORTH CAROLINA EASTERN)
MUNICIPAL POWER AGENCY)

(Shearon Harris Nuclear Power)
Plant, Units 1 and 2))

Docket Nos. 50-400 OL
50-401 OL

RESPONSE TO EDDLEMAN CONTENTION 15-AA

Applicants Carolina Power & Light Company and North Carolina Eastern Municipal Power Agency hereby respond to Intervenor Wells Eddleman's proposed contention 15-AA, which alleges as follows:

The Staff has overestimated the operating capacity factor of the Harris nuclear plants in its draft environmental impact statement, thus exaggerating the benefits of this power being produced by nuclear energy, and distorting the NEPA cost-benefit balance at the operating license stage. The Staff also calculated the output at 55% too high even for the design rating.

Applicants oppose admission of Contention 15-AA. Mr. Eddleman has failed to plead a litigable contention with basis and specificity.^{1/} The statements offered as basis are in large part factually inaccurate. The only arguments advanced by Mr. Eddleman as basis for Contention

^{1/} Applicants' statement of the law regarding basis and specificity is found at "Applicants' Response to Contentions of Intervenor Wells Eddleman Relating to the Draft Environmental Statement", dated July 8, 1983, at 9-11.

15-AA, that relate specifically to Applicants or to the Harris Plant, are redundant of the arguments advanced as bases for Joint Contention I (management capability) and Joint Contention VII (steam generator design). Mr. Eddleman has not proposed a contention that lends itself to litigation; rather, the Staff should treat proposed Contention 15-AA as a comment on the Draft Environmental Statement ("DES").

BACKGROUND

In estimating the energy to be generated from the Harris Plant over its lifetime, the Staff assumed a 55 percent capacity factor for the Harris Units in the DES (at 6-3). The Staff described the benefit from this energy generation as "large".

In its May 27, 1983 "Memorandum and Order (Ruling on Cost Savings Contentions, Discovery Disputes, Scheduling Matters)" (at 8, n.8), the Board directed:

[T]he Staff's 55% capacity factor should be taken as the benchmark, for it is the Staff's impact statement that will serve as the basis for the NEPA cost/benefit balance for this facility. The Applicants should advise the Board by July 1, 1983, that they accept the Staff's 55% capacity factor or file by that date a contention that the factor should be higher and the basis therefor. By the same date, Mr. Eddleman should file any contention he wishes to advance that the 55% capacity factor is too high, and the basis therefor. Pending receipt of any such filings, we will defer rulings on the earlier capacity factor contentions.^{2/}

On July 1, 1983, Applicants responded to the Board's May 27, 1983 Memorandum and Order by stating:

^{2/} Applicants understand that the Board had deferred ruling on that portion of original Contention 15 that alleged a capacity factor of 70% is too high and on Contention 15A, which also alleged a capacity
- footnote cont'd on next page

Applicants accept, for the purpose of calculating the benefit from operation of the Shearon Harris Nuclear Power Plant as described in the NRC Staff's Draft Environmental Impact Statement, an assumed capacity factor of 55% for the Harris units. In light of the operating history of Westinghouse PWR's with overall average lifetime capacity factors in the mid-60% range and the lifetime capacity factor of Carolina Power & Light Company's Robinson Unit 2 (a Westinghouse PWR) of 66%, Applicants view the Staff's assumption as clearly conservative. Furthermore, the NRC Staff's view is that a reasonable assumption for lifetime average capacity factor would be 55% to 65%. The Staff used the low end of the range for purposes of the DES analysis. However, we do not object to such conservatism.

"Contention 15-AA: Staff Overestimation of Harris Capacity Factor, by Wells Eddleman", dated June 30, 1983, was received by Applicants on July 5, 1983. Pursuant to the Board's Memorandum and Order of September 22, 1982 (at 8), Applicants' Response is due fifteen days after receipt of the new contention, or in this case July 20, 1983.

ARGUMENT

1. Statements Advanced By Mr. Eddleman As Basis For Contention 15-AA Are Factually Inaccurate

Mr. Eddleman alleges "[m]any presently operating nuclear plants have lifetime capacity factors below 55%." (emphasis supplied). That statement is simply not true. Mr. Eddleman refers to only one PWR, McGuire Unit 1, with a unique startup problem with Westinghouse Model D-3 Steam Generators, as having less than a 55%

2/ footnote cont'd
factor of 70% is too high. Applicants assume Contentions 15 and 15A have been superceded by Contention 15-AA.

cumulative capacity factor. The other three nuclear plants cited by Mr. Eddleman as having capacity factors lower than 55% are Brunswick Units 1 and 2 and Browns Ferry Unit 1. All three Units are BWR's, which generally have lower capacity factors on average than PWR's. Mr. Eddleman has not indicated the statistical significance of these four plants in comparison with over seventy operating nuclear units in establishing the probability of lifetime capacity factors. Mr. Eddleman has failed to plead a causal link between the initial, low start-up capacity factor of McGuire Unit 1 and the assumption of a 55% lifetime capacity factor at the Harris Plant.^{3/} Mr. Eddleman has failed to relate the capacity factors to date at three BWR's with the estimated lifetime capacity factors at the Harris Units, PWR's.^{4/}

Mr. Eddleman alleges that "Harris will be subject to more stringent regulations and requirements than most plants now operating." Applicants reject that statement as unsupported and untrue. Harris will be subject to the same regulations as all other operating plants. Applicants also reject as unfounded the assertion that Robinson has "the lowest site stringency (safety/operating requirements) of any nuclear plant in NRC Region II." While the absence of standardized technical specifications may reduce paperwork requirements, there is no suggestion that plants operating pursuant to older technical specifications thereby "compromise safety".

^{3/} McGuire Unit 1 began commercial operation on December 1, 1981. The capacity factor cited for McGuire Unit 1 was for one year's operations while limited to 50% power. The Unit's cumulative availability factor has been 74.6%. U.S. Nuclear Regulatory Commission, Licensed Operating Reactors - Status Summary Report Data as of 12-31-82 (NUREG-0020, Vol. 7 No. 1), 2-176 (January 1983).

^{4/} Browns Ferry Unit 1 had a cumulative capacity factor of 53.6% as of December 31, 1982. The capacity factor for 1982 was 84.5%. NUREG-0200, supra, at 2-022.

In an attempt to tie steam generator problems at McGuire Unit 1 to the Harris Plant, Mr. Eddleman has baldly asserted that the McGuire steam generators are "similar" to Harris steam generators. Westinghouse Model D-4 steam generators at Harris are significantly different than the Model D-3 at McGuire Unit 1. But, to the extent Mr. Eddleman desires to litigate the reliability of steam generators, his allegations are redundant of Joint Contention VII, as discussed below.

Finally, Applicants reject the cryptic litany of allegations regarding management capability relating to plant operating problems at Brunswick Units 1 and 2. In any event, as discussed below, this issue is redundant of Joint Contention I.

In sum, Mr. Eddleman has failed to support proposed Contention 15-AA with adequate basis and specificity. Many of the statements advanced as basis for the proposed contention are factually inaccurate. Furthermore, Mr. Eddleman has failed to establish a causal relationship between the statements offered as basis and the proposed contention.

2. The Issues Raised As Basis For Contention 15-AA
Are Redundant Of Admitted Contentions

The principal issues advanced by Mr. Eddleman as basis involve steam generator problems at McGuire Unit 1 and management capability at CP&L's Brunswick Plant. These two issues are the subject of admitted contentions -- respectively, Joint Intervenor Contentions VII and I. Applicants will demonstrate that steam generator problems that have occurred at other plants in the past will not affect performance or safe operations at Harris. Applicants will demonstrate that they have the management capability to operate the Harris Plant. Mr.

Eddleman's conclusory proposed Contention 15-AA apparently would seek to litigate these same issues in the context of a capacity factor contention. The result would be a duplication of effort, without purpose.

3. Proposed Contention 15-AA Does
Not Present a Litigable Issue

Assume, for purposes of argument, that Mr. Eddleman was able to demonstrate that the Staff may have overestimated the Harris capacity factor -- that, indeed, there is a nontrivial probability that the annual benefit will be only 8.67 billion KWH's^{5/} or 7 billion KWH's or 6 billion KWH's (which is less than a 40% annual capacity factor). Mr. Eddleman still has not suggested that the energy generated at such low capacity factors would not be a significant benefit, that it would not be utilized by the Company in lieu of fossil capacity to the economic benefit of the ratepayers, or that it would not be used to supply hospitals, schools and the daily commerce and residential needs of Applicants' customers. Mr. Eddleman has not proposed a credible estimated capacity factor with basis and specificity that is so low that there would be no economic benefit from operating the Harris Plant to weigh against the small environmental impacts. While the Staff's analysis of environmental impacts may be subject to challenge as having been underestimated, this is because it may be appropriate to condition the operating license to mitigate those environmental impacts if the challenge is sustained. Such a

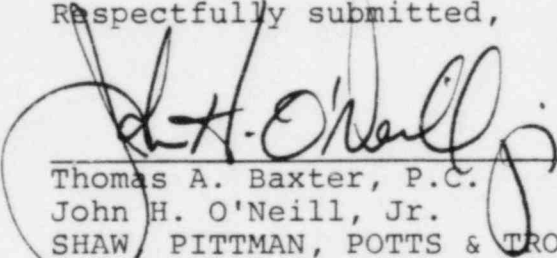
^{5/} As an extreme example of an inconsequential allegation, Mr. Eddleman complains that the Staff rounded 8.67 billion to 9 billion KWHs. Similarly the difference between DER and MDC ratings, which cannot be determined until the Unit is operational, is inconsequential.

rationale is not available for a nonspecific attack on the Staff's quantification of the benefit. The Staff has found the benefit of energy to be generated by the Harris Plant to be "large". Unless Mr. Eddleman can attack that qualitative judgment with some basis and specificity, litigating the precise nature of the Staff's estimate of a 55% capacity factor is a meaningless exercise.

CONCLUSION

Proposed Contention 15-AA must be rejected. Mr. Eddleman has failed to plead a litigable contention with adequate basis and specificity. The basis advanced in support of proposed Contention 15-AA contains factual errors and raises matters redundant of issues advanced in Joint Intervenor Contentions I and VII. The Staff should consider proposed Contention 15-AA as a comment on the DES and address it in the FES.

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