

1201-2002
UNITED STATES OF AMERICA
ATOMIC ENERGY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

IN THE MATTER OF)	
)	
CAROLINA POWER & LIGHT COMPANY)	Docket Nos. 50-400
)	50-401
(Shearon Harris Nuclear Power)	50-402
Plant, Units 1, 2, 3 and 4))	50-403
)	

OUTLINE OF TESTIMONY
OF
EDWARD HEMPSTEAD WISER

QUALIFICATIONS

Education: Bachelor of Science, Iowa State University, 1953. Master's Degree in Agricultural Engineering from North Carolina State University in 1958. Received Doctorate in Agricultural Engineering from North Carolina State University in 1964. NSF Summer Institute in Hydrology, Princeton University, 8 weeks in 1965.

Work and Teaching Experience: Two years as agricultural engineer at International Voluntary Services. From 1957 to present, Instructor, Assistant Professor, Associate Professor, and Professor at North Carolina State University.

SPECIFIC TESTIMONY

On contention C.6, concerning adequacy of water supply:

Successful operation of the Shearon Harris project will be affected by operation of the New Hope Reservoir upstream. Whether the reservoir will be operated with or without low flow control is yet to be resolved by court action.

If the reservoir is operated without low flow control

(i.e. as a dry dam), the net effect will be beneficial to the Shearon Harris project. Flows at low and intermediate levels will be unaffected. However, flood flows will be spread out over a longer period of time, thus permitting more extended periods of pumping from the river.

If the reservoir is operated with low flow control (i.e. as a multi-purpose reservoir, as originally planned), the net effect will be detrimental to the Shearon Harris project. During periods of low flow, releases from the reservoir will be at rates to maintain the 600 cfs level at Lillington, which will not be usable by the project. Following such dry periods, the reservoir will store excess flow to restore its storage, thus creating an "upstream withdrawal" at the same time that the project would be expected to be recovering its own storage by pumping. The result of such operation would be that no water would be available from the Haw River for periods of 9 months or more, and that flows from the Deep River would be available only to the extent that they exceed 600 cfs. Construction of the proposed Randleman and Howards Mill reservoirs would similarly reduce flow available from the Deep River.

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