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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
DUKE POWER COMPANY	)	Docket No. 70-2623
	)	
(Amendment to Materials License SNM-1773 for Oconee Nuclear Station Spent Fuel Transportation and Storage at McGuire Nuclear Station)	)	

TESTIMONY OF DONALD B. BLACKMON

Q. Have you previously testified in this proceeding?

A. No.

Q. Have you prepared a statement of professional qualifications for use in this proceeding?

A. Yes.

Q. And what are your professional qualifications?

A. I am a Design Engineer in the Design Engineering Department, Duke Power Company. My business address is 422 South Church Street, Charlotte, North Carolina. I have been employed by Duke Power Company, with the exception of several months' active duty with the U. S. Army, since August, 1970. During this period I have progressed in various responsibilities in the Design Engineering Department to my current job responsibility as a group leader in the Environmental Section.

I am a graduate of The Citadel in Charleston, South Carolina with a degree of Bachelor of Science in Civil Engineering. In

addition to my undergraduate degree, I have taken courses in business, economics, accounting, and managerial skills at the University of North Carolina at Charlotte. I am a member of the American Society of Civil Engineers, the American Nuclear Society, and the Water Pollution Control Federation. I am a Registered Professional Engineer in North Carolina and South Carolina.

My employment at Duke Power Company in the Design Engineering Department has included engineering and environmental siting work for the Catawba, Cherokee, and Perkins Nuclear Stations. I was responsible for the coordination and preparation of the Environmental Reports--Construction Permit for the Catawba, Cherokee, and Perkins Nuclear Stations, and for the Environmental Reports--Operating License for the McGuire and Catawba Nuclear Stations. I was responsible for, supervised, and produced the demographic and land use portions of these Environmental Reports. I am currently involved in the coordination and supervision of Duke's power plant siting program, which includes demographic evaluations.

Q. In your demographic studies what documentation do you rely on?

A. I rely upon federal, state, and local publications. On the federal level, I utilize data from the Bureau of Census. On the state level, I make reference to the State Statistical Abstracts and other publications. On the local level, I rely upon documents from the Charlotte-Mecklenburg Planning Commission and the Chamber of Commerce.

Q. Are you familiar with Duke Power Company's application to ship spent fuel from the Oconee Nuclear Station to McGuire Nuclear Station?

A. Yes, I am.

Q. Are you familiar with the transportation routes that will be utilized in this activity?

A. Yes, I am aware of the three routes that have been approved by the Nuclear Regulatory Commission. I am also familiar with the proposed primary route that has been advanced by Duke Power Company.

Q. What is the population density of Mecklenburg County, North Carolina?

A. Based upon current information, the population density is 815 people per square mile.

Q. What is the population density of Charlotte, North Carolina?

A. Based upon current information, the population density is 2,433 people per square mile.

Q. With respect to the proposed primary route advanced by Duke Power Company, have you examined the population density along the route that is within the city limits of Charlotte?

A. Yes, I have.

Q. What is that average population density?

A. 2,771 people per square mile.

Q. How does this figure compare with population densities along the approved routes?

A. This figure is comparable to the higher population density areas along the approved routes, such as Lincolnton, Mount Holly, and Cherryville, North Carolina.

Q. Are there areas of higher population density along the proposed primary route in Charlotte?

A. Yes. There is one particular area extending approximately 1-½ miles along the route where the population density is approximately 4,000 people per square mile.

Q. Within the Charlotte-Mecklenburg area what is the area of maximum population density?

A. Our studies indicate that the downtown central business district, which comprises approximately three-fourths of a square mile, has a population during the working hours of 39,300 people.

Q. How close is the central business district to the proposed primary route?

A. Approximately three miles.

Q. In addition to the above, have you performed any other population density studies relating to the proposed primary route within the City Limits of Charlotte?

A. Yes, I have examined a 10 kilometer radius circle centered at the intersection of I-85 and I-77. The population density within this area is 2,180 people per square mile.

April 11, 1980