UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of
DUKE POWER COMPANY, et al.
(Catawba Nuclear Station,
 Units 1 and 2)

Docket Nos. 50-413 50-414 in - the +

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AFFIDAVIT OF LIONEL LEWIS

My name is Lionel Lewis. I am employed by Duke Power Company as System Health Physicist. I have been employed in this position since 1967. I hold a MS in Biophysics as the result of an AEC Fellowship in Radiological Physics at the University of Rochester. My professional qualifications are contained in an attachment to this affidavit.

In the position that I hold, I am familiar with the radiation levels experienced by various systems within Duke's nuclear units, including those anticipated by Catawba, as a result of operation at various power levels, including full power. I am also familiar with costs, time, difficulty, and assessment of exposures to plant maintenance and operating personnel, resulting from maintenance and repair work to those systems. Those exposures are evaluated to assure compliance with 10 C.F.R. Part 20 and the As Low As Reasonable Achievable (ALARA) philosophy (which requires licensees to use their best efforts, on a cost-benefit basis, to keep exposures ALARA within Part 20 limits).

The purpose of this affidavit is to respond to the assertions of Palmetto Alliance and CESG that operation of Catawba Unit 1 will significantly increase the costs and exposures incurred in performing 8412260448 841221 PDR ADOCK 05000413 G PDR maintenance and repair work and increase releases to the environment beyond those anticipated in the FSAR and ER due to the repair of supposedly faulty welds.

Before full power operation is permitted by the NRC the reactor must undergo a successful period of escalation power testing and evaluation at many low and intermediate power levels. The testing and evaluation, among other things, ensures that operation at any and all power levels will fully comply with NRC regulations and the technical specifications for the operation of the reactor. This testing and evaluation also considers radiation and contamination levels in the plant, occupational doses to plant personnel due to operation and maintenance work, and doses to the public due to planned releases of radioactive gaseous and liquid effluents.

Based on our experience with our other nuclear units and particularly with the McGuire Nuclear Station which is a twin of the Catawba Nuclear Station, we believe that radiation and contamination levels in the station as a result of reactor operation will be within regulatory limits as are radiation doses incurred by station personnel. Doses to the public resulting from the normal radioactive effluent releases will also be within regulatory limits.

The NRC often requires modifications to plants which have been operating for many years. Despite the presence of large quantities of fission and activation products, work on radioactive systems has been accomplished with minimal radiation exposure. This is possible

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through compliance with the radiation protection standards of 10 CFR Part 20, viable Health Physics programs, and espousement of the ALARA philosophy. Our experience at our nuclear plants confirms this point.

I, Lionel Lewis, of lawful age, being duly sworn, state that I have reviewed the foregoing affidavit, and that the statements contained therein are true and correct to the best of my knowledge and belief.

Lionel Lewis

Subscribed and sworn to before me this 20 day of <u>December</u> 1984.

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Joann D. Dowman Notary Public

My Commission Expires: 7-12-88