

September 23, 1983

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD DOCKETED
USNRC

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

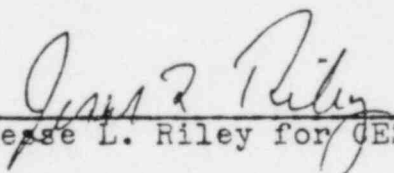
'83 SEP 26 A11:52

Docket Nos. 50-413
OFFICE OF SECRETARY
OF ENERGY & SERVICE
BRANCH

CESG'S RESPONSE TO THE BOARD'S PREHEARING CONFERENCE
ORDER CONCERNING DESIGNATION OF WITNESSES ON CESG'S
CONTENTION 18 (PALMETTO 44)

In response to the Board's Prehearing Conference Order dated September 14, 1983, CESG will offer as its witness on CESG contention 18 (Palmetto 44) Jesse Riley. In response to Board direction at the September 12, 1983 prehearing conference, a resume of Riley's experience is attached.

Respectfully submitted,


Jesse L. Riley for CESG

DS03

RESUME
JESSE L. RILEY

Riley, Jesse L. b. Los Angeles, CA, Nov. 21, 1914

Chicago schools. Roosevelt H.S., technical course.

Northwestern U. School of Engineering, 1931-32. Arts, 1932-35.
Honors degree in chemistry, in physics. S.B. cum laude. Phi
Beta Kappa, 1934. Sigma Xi assoc. 1934.

U. of Chicago. Physical organic chemistry. Thesis: Kinetics of
Hydrolysis of Allyl and Benzyl Chlorides. Sigma Xi, 1936. MS, 1943.

Universal Oil Products Co. 1935-36. 1938-39. Analyst. Gas analyst.
Analyt. research: solubility petroleum industry gases in elastomers;
sorption of same on desiccants, particularly magnesium perchlorate.
Investigator of explosion in gas lab.

Shell Oil Co. 1940-42. Research chemist. Referee method for
vapor pressure of gasoline. Fuel oil stability test. Congealing
point of high additive aviation gasolines. Carcinogenicity of
petroleum fractions.

Celanese Fibers Co. 1943-81. Research chemist--progression
includes research associate, senior research associate, staff
scientist. Consultant, 1981-- . Rheology of dilute polymer
and concentrated polymer solutions. Ultra precision photo-
viscometer. Baker-Philippoff equation. Kinetics of hydrolysis
and alcoholysis of organic acid anhydrides. Super-acid phenomena.
Thermal conductivity of cellulose acetate solution. Wet stretch
extrusion of polymer solutions. Super strength cellulosic fibers.
Tensile characteristics, fatigue characteristics, property distrib-
ution of high strength fibers. Failure mechanisms of fibers.
Flaw identification. Flaw origins. Mechanism of tensile response
of fibers--the "tautness distribution". The chemistry of wood
pulp. Optical characterization of cellulosic polymer solutions.
Acetylation test for the characterization of cellulosic pulps.
Filtration studies. Multistage filtration tests. Particle
microscopy. Extrusion stability factors: dissolved gases, jet
deposits, particulates. Deformable particles; demonstration of,
origin of. Thermocouple application in explosive air/solvent
vapor atmospheres. Investigator of explosion of plant dissolver.
Inert gas systems in plant. Development programs in plant for
new fibers. New fibers put in production: Fortisan-36, Arnel 60,
and self crimping CA/CTA. Patents: 15.

McGuire intervention, 1971-81. Stud bolt studies. Hydrogen
ignition and combustion mechanisms. Need for power forecasts.

JR

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In the Matter of

DUKE POWER COMPANY, ET AL.

(Catawba Nuclear Station,
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Docket Nos. 50-413
50-414

AFFIRMATION OF SERVICE

I hereby affirm that copies of "CESG'S RESPONSE TO THE BOARD'S PREHEARING CONFERENCE ORDER CONCERNING DESIGNATION OF WITNESSES ON CESG'S CONTENTION 18 (PALMETTO 44)" in the above captioned proceeding have been served on the following by deposit in the United States mail first class this 23rd day of September, 1983:

James L. Kelley, Chairman
Administrative Judge
Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dr. A. Dixon Callihan
Administrative Judge
Union Carbide Corporation
P. O. Box Y
Oak Ridge, TN 37830

Dr. Richard F. Foster
Administrative Judge
P. O. Box 4263
Sunriver, Oregon 97702

Richard P. Wilson, Esq.
Assistant Attorney General
P. O. Box 11549
Columbia, South Carolina 29211

J. Michael McGarry, III, Esq.
Debevoise and Liberman
1200 17th Street, NW
Washington, DC 20036

Robert Guild, Esq.
Attorney for the Palmetto Alliance
P. O. Box 12097
Charleston, South Carolina 29412

Palmetto Alliance
2135 1/2 Devine Street
Columbia, South Carolina 29205

Carole F. Kagan, Attorney
Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

George E. Johnson, Esq.
Office Executive Legal Director
U. S. Nuclear Regulatory Commission
Washington, DC 20555

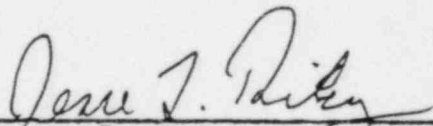
William L. Porter, Esq.
Albert V. Carr, Esq.
Ellen T. Ruff, Esq.
Duke Power Company
P. O. Box 33189
Charlotte, North Carolina 28242

Atomic Safety and Licensing Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Atomic Safety and Licensing Appeal
Board Panel
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Docketing & Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Don R. Willard
Mecklenburg County Department
of Environmental Health
1200 Blythe Blvd.
Charlotte, NC 28203



Jesse L. Riley for CESG