



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PDR

MAY 16 1980

Mr. Dennis J. Nightingale
Director
Electric Division
North Carolina Utilities Commission
P.O. Box 991
Raleigh, NC 27602

Dear Mr. Nightingale:

We are pleased to respond to your March 28, 1980, request for economic data relating to generation of electric power. The data presented forms the basis for Nuclear Regulatory Commission estimates of electric power generation and supplements the data supplied to Mr. Wells by my letter of March 22, 1978.

If there are any questions regarding this information, please feel free to directly contact Mr. Jack O. Roberts at (301) 492-8599.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert G. Ryan".

Robert G. Ryan
Director
Office of State Programs

Enclosure:
Dated requested by NC
Public Staff Utilities Comm.

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DATA REQUESTED BY THE STATE OF NORTH CAROLINA PUBLIC
STAFF UTILITIES COMMISSION

CAPITAL COST

A series of commercial electric power cost studies were in the final stage of being completed at the time of the Commission's last request, March, 1978. NUREG-0241 thru 0244 was sent at that time. NUREG 0245 thru NUREG 0248 are the remaining reports of this series. Copies of these reports are enclosed.

The Department of Energy is funding studies at United Engineers to update the cost of coal and nuclear generating units. The initial update reports capital, full cycle and O & M costs (1978 dollars) for six different nuclear and five different fossil power generating units in the expanded AEC (NUREG) Code-of-Accounts. This three volume document "Final Report and Initial Update of the Energy Economic Data Base (EEDB) Program Phase I" may be obtained from United Engineers and Constructors, 30 South 17th Street, Philadelphia, PA 19101. The updated cost has been incorporated into the CONCEPT code at Oak Ridge National Laboratory.

NUREG 0480 "Coal and Nuclear: A comparison of the Cost of Generating Baseload Electricity by Region," copy enclosed, is an NRC staff report comparing the economics of coal and nuclear generating units for 10 regions of the contiguous U.S. This report is in the process of being updated. The updated report should be available about the end of 1980.

Draft copies of Appendix A - "Generic Fixed Charge Rates" and Appendix D - "Capacity Factors for Base Load Coal and Nuclear Generating Units" which will be a part of the revised NUREG 0480 are enclosed.

NUREG 0607, "Treatment of Inflation in the Development of Discount Rates and Levelized Cost² in NEPA Analyses for Electric Utility Industry," copy enclosed, provides the rationale for a 3% real discount rate.

NUREG/CR-1041 "Fuel Cycle Cost Projections" provides data on cost and cost trends associated with the nuclear fuel cycle industry.

Draft NUREG-0634 "Sensitivity of Generation Cost to Changes in Electricity Growth Rates and Issuance of Construction Permits for Nuclear Power Plants," copy enclosed, is in the review and final drafting stage and should be published in the next few months. (Any comments the North Carolina staff wishes to make on this report would be appreciated).

Draft - "Cost and Reliability Impacts of Shutting Down Nuclear" is a collection of tables containing cost data that may be of use.

Letter dated April 24, 1980 to Jack O. Roberts from H. I. Bowers contains data and results of analysis related to backfitting cost for nuclear Plants.