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Gene A. Blanc

TRIP REPORT TO OCONEE NUCLEAR STATION, DUKE POWER COMPANY, CHARLOTTE,  
NORTH CAROLINA

Trip length: Origin -- August 31 to September 1, 1971.

Left Washington National Airport on American Airlines Flight 496 to Knoxville, Tennessee. Arrived at Oak Ridge National Laboratory at approximately 10:30 a.m. was met by Jack McWherter and taken to Ed Struxness' office. Ed had three questions concerning DREP-ORNL relations. These have been presented to G. A. Blanc, ADEP. Jack McWherter introduced me to members of ORNL who are involved in writing Environmental Statements. A list of ORNL personnel committed to this program and their phone numbers provided by Ed Struxness, has been presented to G. A. Blanc.

I traveled with Jack McWherter to Knoxville, Tennessee the afternoon of Aug. 31 where we boarded Piedmont Airlines Flight 296 to Greenville - Spartanberg, South Carolina. The group from ORNL, including DeVaughn R. Nelson (High Energy Physics); George N. Parker (Reactor Chemistry); R. Fred Gray (System Environmental Engineer); J. T. Kitchings (Ecologist) and Paul B. Dunaway (Ecological Science Dir.) went to Holiday Inn, Clemson, South Carolina. We attended an orientation program at Holiday Inn at 8:30 p.m. presented by Charles A. Dewey. Paul H. Barton (Duke Project leader for Oconee), and three members of Duke's staff assigned to Steam Production: J. S. Davis, J. C. Aabye, and L (Lionel) Lewis. An opportunity was provided to ask questions.

I traveled with the group from ORNL to Oconee site the morning of Sept. 1. I was met by Paul Barton at the Visitors Center and awaited arrival of the helicopter, carrying N. S. Lee (SR. V. P. , Engineering and Construction) from Charlotte, North Carolina. Mr. Lee, a vigorous speaker who was much disturbed by delays in obtaining approvals for completion of Oconee, Units 1, 2, & 3 presented Duke's calculations for "cost-benefit" analysis. The group went in groups of 2, each for the site view by helicopter.

Jack McWherter and I remained through W. S. Lee's presentation to obtain complete details of Duke's cost-benefit analysis. Mr. Lee made it clear that his presentation was in compliance with the Court's Decision on the Calvert Cliff's case.

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This information, as he presented it, was broken into two sections:

- (1) Quantitative, including land value; total annual costs; environmental costs (i.e., municipal water supplies, average requirement). (This came under a heading of "Water Budget"); recreational value, including land use, and thermal effects on fish, wildlife (directed at investment to promote and protect); and Headwater benefits.
- (2) Qualitative Evaluations: Water Quality Control; soil conservation and forestry; Radioactivity; Consumption of non-replenishing natural resources. It was agreed that this information would be presented formally in writing to L. Rogers for inclusion in the Oconee Docket.

Mr. Lee indicated that Air Pollution also would be covered in his report. Some attention at this point was given to comparison of Hydro versus gas turbine for emergency generation. Hydro is favored by Mr. Lee because of greater efficiency and lower break-down characteristics. Mr. Lee jokingly refers to gas turbines as "Turkey Roasters".

Mr. McWherter and I viewed the Oconee site together by helicopter (in the rain) after Mr. Lee's presentation. The helicopter we rode in is used by Duke to survey power lines, and within the area viewed by us we had the opportunity to see lines being built to handle Oconee's transmission. While we were unable to view the newly developed Lake Jocassee in detail, we saw its location through the rain in the distance.

The pilot identified back waters and shallows that are sprayed with oil for mosquito control. During the orientation presentation on Tuesday evening, pictures were shown of the application of this oil. One shot showed the jet being applied to the shore rather than to the water. Dr. Paul Dunaway indicated that the oil might prove toxic for plants. We were assured that the picture was taken only to show the jet more clearly and that the oil was applied in practice only to the water. In answer to a question concerning "what kind of oil was used", the group from Duke indicated that they believed it was "transformer oil". They suggested that it was applied "diluted" and that it was bio-degradable. They indicated they would identify the oil specifically later. Need for mosquito control cited by Duke personnel was the history of malaria at this location.

The program for environmental monitoring in operation at Lake Norman

(McGuire) was presented. The same program, we were assured would be in operation on Keowee (Oconee) with some changes, suggested by the experience at Lake Norman. Photographs, and details of the "skimmer wall", both during construction and after flooding were presented on Tuesday evening. Attention to description of the weir built for containment of cooling water was discussed. The canal constructed to connect Keowee with the Hartwell Reservoir was shown in pictures on Tuesday evening and viewed by helicopter over-flight on Wednesday.

I toured Oconee Unit 1 with Mr. McWherter and Mr. Barton. The tower (containment) is reached by elevator from ground level. Activity was obvious with "hard hats" moving throughout this Unit. The flexible cable covering for contacts with the core lay atop the reactor vessel. Details of progress were noted and will be presented by Jack McWherter in his trip report. Jack was not as sure from his examination of Unit 1 with Mr. Barton and me that it was as "ready" to be fueled as we were led to believe.

The Control Center, which handles both Units 1 and 2, is located between these containments. Control is through a complex computer program that assists in the transfer of fuel elements.

Neither Unit 2 nor Unit 3 containment were visited, but we were assured by Mr. Barton that they will be identical to Unit 1.

In a call to Jack McWherter 10:30 Sept. 7, 1971 he indicated that updated questions following our trip will be forthcoming from him shortly. Jack did not have a copy of the "hand-outs" supplied to attendees of the Friday, August 20 meeting in Germantown. I presented him a copy during our visit. In the discussion on Sept. 7, Jack, after having studied this information, felt that many more details of Duke's program would have to be provided to complete the statement.

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