

Regulatory

File Cy.

TENNESSEE VALLEY AUTHORITY

CHATTANOOGA, TENNESSEE 37401

September 27, 1972

Mr. Daniel R. Muller
Assistant Director
Environmental Projects
Directorate of Licensing
U.S. Atomic Energy Commission
Washington, DC 20545



Dear Mr. Muller:

Please refer to my letter of August 26 transmitting copies of the proposed final environmental statement for the Watts Bar Nuclear Plant (Docket Nos. 50-390 and 50-391) for your review.

We have identified several minor errors and have included some information which has been developed since the statement was transmitted to you. Twelve copies of the changes to be made are enclosed. We do not believe any of the changes are of major significance and hope they will not affect the early completion of your review.

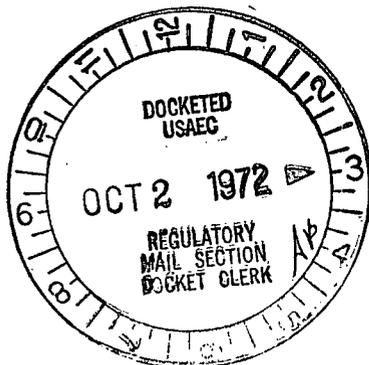
We are prepared to meet with you to discuss the statement at any time. Please call Mr. H. G. Parris, Chief, Power Supply Planning Branch, 615-755-2294, if you require assistance.

Very truly yours,

A handwritten signature in cursive script, appearing to read "J. E. Gilleland".

J. E. Gilleland
Assistant to the Manager of Power

Enclosures



5373

LB

WATTS BAR NUCLEAR PLANT - FINAL ENVIRONMENTAL STATEMENT

ERRATA

1. Summary Sheet, line 3. Change "Units 1, 2, and 3" to "Units 1 and 2."
2. Table of Contents.
 - a. Page (xiv), Section 8.3. Change "Generating" to "Generation."
 - b. Page (xiv). Add new line: "9.0 CONCLUSION" just above "APPENDIX A."
3. Page 1.1-14, 2d complete paragraph. Change "(~3,650 feet)" to "(~3,940 feet)" and change "(~4,450 feet)" to "(~4,800 feet)."
4. Page 1.1-19. Under (b) Fish and other aquatic life, sentence 3, change "seven species" to "eight species."
5. Page 1.1-20, paragraph continued from page 1.1-19, line 5. Insert "Hexagenia," after "mayfly."
6. Page 1.1-20, 1st complete paragraph, line 7. Delete "miles" at end of line.
7. Page 1.1-21, paragraph 1. Change last sentence to read: "Watts Bar tailwater has supported approximately 6.1 percent of fishing trips to 12 TVA tailwaters which were inventoried over the period 1965-69."
8. Figure 1.1-2. Minimum exclusion distance is shown at radius of 3,650 feet; it should be shown at 1,200 meters (~3,940 feet).
9. Page 2.1-17. Under (b) Accident occurrences, line 3, change "10 years" to "20 years."
10. Page 2.1-18, line 5. Change "5 years" to "12 years."
11. Page 2.2-7, 1st full paragraph, line 6. Change "245T" to "2,4,5-T."
12. Table 2.3-2. Add "(cont'd)" after "2.3-2" at top of 2d page of table.
13. Page 2.4-34, 3d complete paragraph. Change first two sentences to read: "Milk will be sampled from dairy farms near the plant on a monthly basis. Locally processed milk will also be sampled on a monthly basis."
14. Page 2.4-36, last paragraph. Change first sentence to read: "At present TVA feels that its planned sampling includes those vectors which. . . ."

15. Figure 2.6-4. Change title to read:

WATTS BAR DAM HOURLY FLOW

TEN YEARS OF RECORDS

1959-68

16. Page 2.7-3. Under (2) Importance of locale to existence of important species, considering states in life history, delete 1st sentence and replace with:

Alteration of ground cover for construction of the plant and resulting wildlife habitat modification will have direct and indirect effects on numerous faunal species. Clearing of 50 to 55 acres of hardwood and pines and associated understory species of vegetation will destroy habitats of those species that feed, nest, roost, seek protection, and otherwise rely on the forested areas to be cleared. The impact on the wildlife directly affected will be severe but highly localized and is not considered to be significant in terms of fauna of the area.

17. Page 2.7-6, paragraph 2, line 6. Change "excavation of" to "excavation by."
18. Page 2.7.7, paragraph 2, last word. Change "ozone" to "zone."
19. Page 2.7-9, paragraph continued from 2.7-8.
- a. Line 5. Change "will" to "could."
 - b. Delete last two sentences: "The flow to the intake is from . . . in the 2-mile reach above the nuclear plant intake."
20. Page 2.7-9, line 6 from bottom of page. Delete "nearly."
21. Page 2.7-15. Replace paragraph 2 with the following:

An intensive analysis of the terrestrial ecosystem has been undertaken in order to assess the environmental impact of the plant on the terrestrial ecosystem of the plant site. Comprehensive studies of the flora and fauna will be conducted in several phases. The first phase is a survey and analysis of vegetation, including forest shrubs and ground cover. This survey was carried out according to the description given in Appendix I of this statement. Figure 2.7-6 shows the distribution of vegetative cover existing on the site. Clearing operations for construction of the plant will result in some loss due to terminating the growth of merchantable timber. These losses are not considered significant in terms of forest

resources of the area due to the small amount involved, although some wildlife habitat will be destroyed as previously discussed. Clearing of brush or other nonmerchandise species is not considered significant since no rare, endangered, or unique species will be affected by these operations. One species found in the study area is proposed as a rare and endangered species--the spider-lily, Hymenocallis occidentalis. The species is found on the U.S. Forest Service - Southern Region list of rare and endangered species. It is also listed in several floral manuals as being rare. Several spider-lilies were found in the proposed nuclear plant site area, but none were found in the areas to be cleared or altered for construction. Thus the population should not be threatened by any direct impact of the proposed nuclear plant.

The second phase of the studies is a survey and analysis of the fauna of the impact area, and the third phase is an evaluation and summary of the impact of the nuclear plant's construction on the area's overall terrestrial ecosystem.

A survey of fauna of the area has been made and related to investigations of the plant site to determine possible impacts to faunal species. This survey will be used as background information to evaluate impacts of the plant's construction and operation.

22. Page 2.7-24. Add new page, Figure 2.7-6 (attached).

23. Page 2.10-4. Under 4. Archaeology, replace paragraph with:

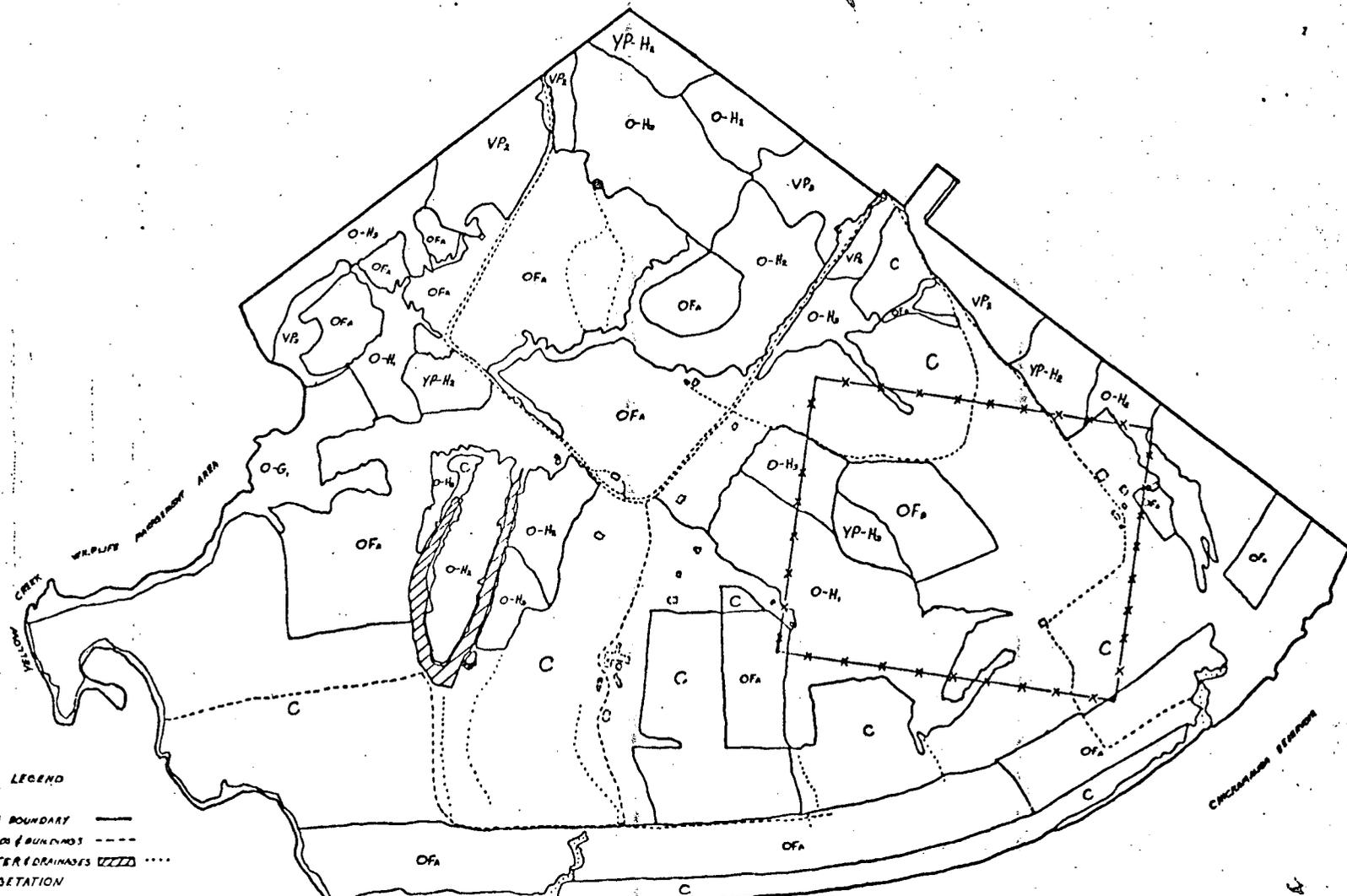
Two archaeological sites on the project area were known to exist and had been previously recorded by the Department of Anthropology of the University of Tennessee. Following an examination of these sites in December of 1970, it was agreed that archaeological investigations should be undertaken with the necessary funds being provided by TVA. Findings on 4ORh6 (the Leuty site) were of some importance with a lengthy occupation indicated. A date of 1100 A.D., plus or minus 100, was established for one phase of this occupation by radiocarbon dating, placing it in the Mississippian cultural period. Investigation of the principal portion of the site has been completed, but additional work is being done at two associated areas near the reservoir shoreline which will be affected by construction activity. This work will be completed prior to the planned initiation of construction in these areas.

Investigation of 4ORh7 (the McDonald site) was considered quite significant. A charcoal sample from a Hamilton (late Woodland) mound (Mound D) on this site established a date of 705 A.D., plus or minus 120 years, and laboratory analysis

of artifacts and other material recovered is continuing. This is the first time that carbon dating of samples from the Hamilton culture has been accomplished. It results in a considerable increase in our knowledge of this poorly known and understood culture. While this work was in progress, the remainder of the project area was surveyed and other potential sites were identified. These sites closely parallel the reservoir edge and are downstream from the construction area. Accordingly, they will not be affected.

24. Page 3.0-3, paragraph just before 2. Air pollution. Delete "or undetectable" at end of first sentence; add "although some adverse effects may be undetectable." to end of next sentence.
25. Page 3.0-4, paragraph 2. Delete the sentence: "Careful monitoring of these releases will be conducted to detect probable effects."
26. Page 4.1-4, line 3. Change "25 percent" to "20 percent."
27. Page 7.7-3. Add attached page.
28. Page 7.10-22. This should be page 7.10-17; insert after page 7.10-16 and change following page numbers accordingly.
29. Appendix B, page B-1, paragraph 2. Add the following sentence at end of paragraph: "Although this discussion is concerned with the IF-300 shipping cask which will be used at the Browns Ferry Nuclear Plant, either the IF-300 or a cask capable of meeting identical criteria will be used at Watts Bar Nuclear Plant."
30. Appendix D, page D-10, paragraph 4, line 2. Change "assumption" to "assumptions."
31. Appendix D, page D-10, paragraph 5, line 4. Change "drop" to "drops."
32. Appendix D, page D-12, 1st full paragraph, line 2. Change "off" to "onto."
33. References for Section 2.5. Add reference:
 3. "Coagulant Aids for Water Treatment," Journal of America Water Works Association, Volume 63, pp. 388-389.

VEGETATIVE COVER WATTS BAR NUCLEAR PLANT SITE



LEGEND

SITE BOUNDARY ———

ROADS & BUILDINGS - - - -

WATER & DRAINAGES [hatched pattern]

VEGETATION

FOREST TYPES

- OAK-HICKORY O-H
- YELLOW PINE-HARDWOOD YP-H
- VIRGINIA PINE VP
- OAK-GUM O-O

STAND SIZE

- LARGE SAWTIMBER 1
- SMALL SAWTIMBER 2
- POLE 3
- SEEDLING & SAPLING 4

MAJOR AREA OF CONSTRUCTION



1" = 660'

August 1972

- OPEN GROUND COVER**
- CULTIVATION C
 - OLD FIELD OF OF
 - GRASSES & FORBS A
 - SHRUB B

FIGURE 2.7-6

Reduce to approx. 10x6"

2.7-24

Page 3
Mr. M. I. Foster
August 6, 1971

7.7-3

Reservoir. We would suggest that attention be directed to this question in the Environmental Statement.

We appreciate this opportunity to review and comment on the draft Environmental Impact Statement and apologize for the delay in reply. However, the statement has been under review by local officials and agencies, in addition to our staff and the additional time has been necessary to correlate all comments received.

Should there be any question or additional information required, please contact me.

Sincerely,

Charles L. Thrailkill
Executive Director

CLT:RPS/jmh

cc: Director
Division of Radiological & Environmental Protection
Atomic Energy Commission
Washington, D. C. 20545

Leonard Bradley, Tennessee Office of Urban & Federal Affairs
Malcolm Gholdstone, Chairman, Rhea County Court
Walter L. Smith, Mayor, Spring City
Paul Levenood, Mayor, Dayton
Charles Rockholt, Mayor, Decatur
Raymond Gallaher, Chairman, Meigs County Court
John Moeller, Tennessee State Planning Commission
T. D. Harden, Chattanooga-Hamilton County Regional
Planning Commission

8/9/71

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8-31-71--FEG:MA

CC: J. R. Meldorf, 708 EB, Chattanooga
G. F. Stone 719 EB, Chattanooga

NAV. DEV. & REG. STUDIES		
AUG 9 71		
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