

AUG 18 1977

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JRBuchan

Docket Nos. 50-259
50-260
and 50-296

Tennessee Valley Authority
ATTN: Mr. Godwin Williams, Jr.
Manager of Power
818 Power Building
Chattanooga, Tennessee 37201

Gentlemen:

The Commission has issued the enclosed Amendment Nos. 31, 28 and 6 to Facility License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Unit Nos. 1, 2 and 3. These amendments consist of changes to the Technical Specifications in response to your request of July 15, 1977. You were previously notified of these changes by telephone and telecopy on July 15, 1977.

These amendments revise the Environmental Technical Specification 2.1 contained in Appendix B to the licenses. The change would temporarily increase the maximum temperature measured at the 5 foot depth of the downstream control point from 86 F to 90 F. The amendments do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin, and therefore do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

Copies of the Environmental Impact Appraisal and the Notice of Issuance/Negative Declaration are also enclosed.

Sincerely,

Thomas V Wambach

A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures and cc:
See next page

ML020040236

OFFICE➤	DOR:ORB#1	OELD	DOR:OT	DOR:ORB#1		
SURNAME➤	TVWambach:1b			ASchwencer		
DATE➤	7/27/77	7/ /77	7/ /77	7/ /77		

(The following text is extremely faint and largely illegible due to low contrast and noise. It appears to be a list or index of items, possibly names or titles, arranged in two columns.)

1. *What is the purpose of the study?*
 2. *What are the research questions or hypotheses?*
 3. *What is the study design?*
 4. *What are the variables?*
 5. *What are the data sources?*
 6. *What are the data collection methods?*
 7. *What are the data analysis methods?*
 8. *What are the results?*
 9. *What are the conclusions?*
 10. *What are the limitations?*
 11. *What are the implications?*
 12. *What are the future research directions?*

1. *Chlorophyll *a** and *Chlorophyll *b** were determined by the method of Arar and Collins (1971). The *Chlorophyll *a** and *Chlorophyll *b** contents were expressed as $\mu\text{g g}^{-1}$ of dry weight.

Figure 1. The effect of the concentration of the *Agrobacterium* suspension on the transformation efficiency of *Agrobacterium* strains. The number of transformed cells was determined by the number of colonies obtained on the selective medium. The results are the mean of three independent experiments. Error bars represent the standard deviation.

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AUG 18 1977

Enclosures:

1. Amendment No. 31 to DPR-33
2. Amendment No. 28 to DPR-52
3. Amendment No. 6 to DPR-68
4. Environmental Impact Appraisal
5. Notice of Issuance / Negative Declaration

cc w/encl:

H. S. Sanger, Jr., Esquire
General Counsel
Tennessee Valley Authority
400 Commerce Avenue
E 11B 33 C
Knoxville, Tennessee 37802

Mr. D. McCloud
Tennessee Valley Authority
303 Power Building
Chattanooga, Tennessee 37401

Mr. William E. Garner
Route 4, Box 354
Scottsboro, Alabama 35768

Athens Public Library
South and Forrest
Athens, Alabama 35611

Mr. Charles R. Christopher
Chairman, Limestone County Commission
Post Office Box 188
Athens, Alabama 35611

Ira L. Myers, M.D.
State Health Officer
State Department of Public Health
State Office Building
Montgomery, Alabama 36104

Mr. C. S. Walker
Tennessee Valley Authority
400 Commerce Avenue
W 9D199 C
Knoxville, Tennessee 37902

Chief, Energy Systems
Analysis Branch (AM-459)
Office of Radiation Programs
U.S. Environmental Protection
Agency
Room 645, East Tower
401 M Street, SW.
Washington, D.C. 20460

U.S. Environmental Protection
Agency
Region IV Office
ATTN: EIS COORDINATOR
345 Courtland Street
Atlanta, Georgia 30308

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WPasciak
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DEisenhut
ACRS(16)
CMiles, OPA
DRoss

OFFICE➤	DOR:ORB#1	DOR:OT	OELD	DOR:ORB#1		
SURNAME➤	Wambach:lb	BGrimes		ASchwencer		
DATE➤	7/22/77	7/ /77	7/ /77	7/ /77		

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

August 18, 1977

Docket Nos. 50-259
50-260
and 50-296

Tennessee Valley Authority
ATTN: Mr. Godwin Williams, Jr.
Manager of Power
818 Power Building
Chattanooga, Tennessee 37201

Gentlemen:

The Commission has issued the enclosed Amendment Nos. 31, 28 and 6 to Facility License Nos. DPR-33, DPR-52 and DPR-68 for the Browns Ferry Nuclear Plant, Unit Nos. 1, 2 and 3. These amendments consist of changes to the Technical Specifications in response to your request of July 15, 1977. You were previously notified of these changes by telephone and telecopy on July 15, 1977.

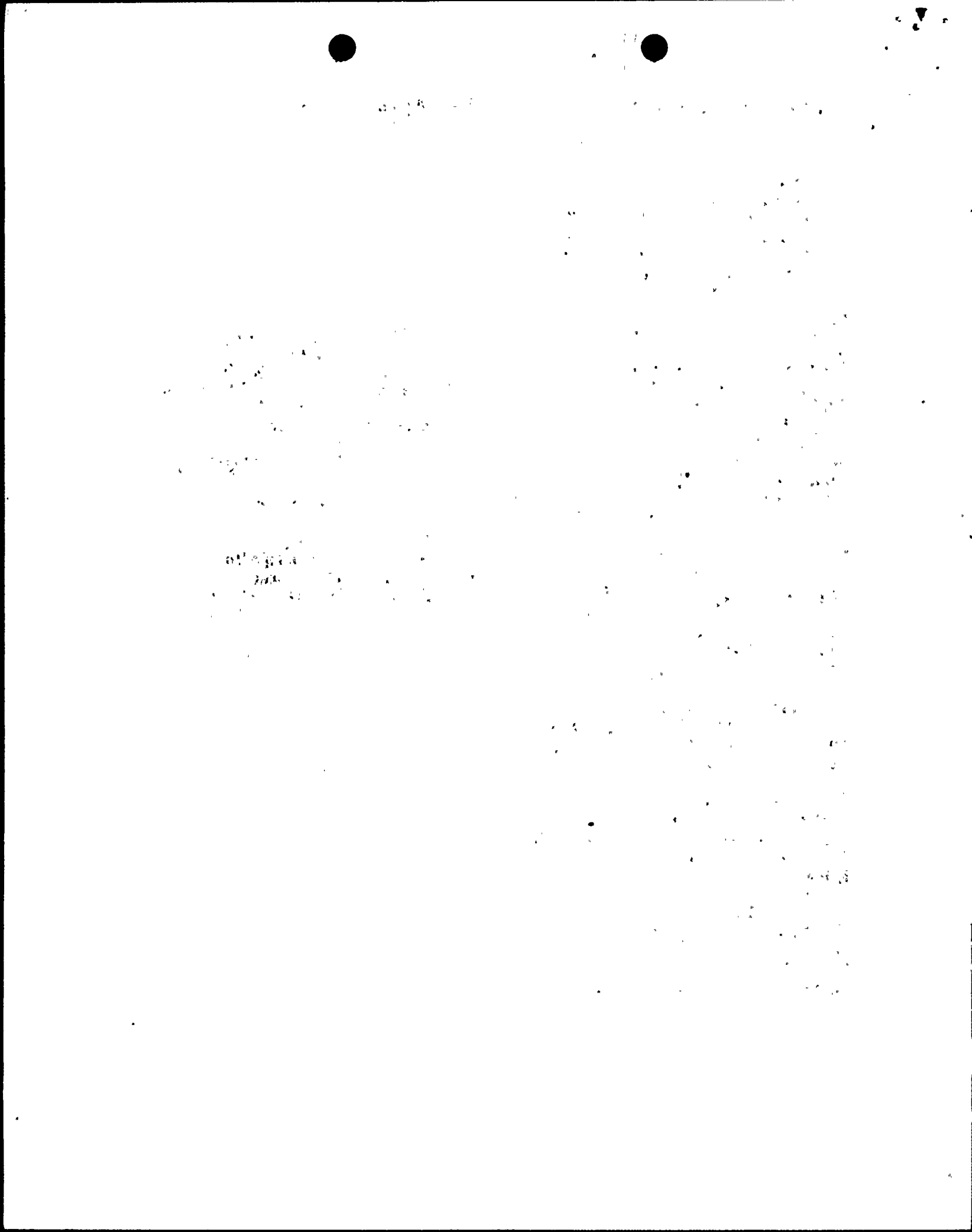
These amendments revise the Environmental Technical Specification 2.1 contained in Appendix B to the licenses. The change would temporarily increase the maximum temperature measured at the 5 foot depth of the downstream control point from 86 F to 90 F. The amendments do not involve significant new safety information of a type not considered by a previous Commission safety review of the facility. They do not involve a significant increase in the probability or consequences of an accident, do not involve a significant decrease in a safety margin, and therefore do not involve a significant hazards consideration. We have also concluded that there is reasonable assurance that the health and safety of the public will not be endangered by this action.

Copies of the Environmental Impact Appraisal and the Notice of Issuance/Negative Declaration are also enclosed.

Sincerely,

J. V. Wambach
for A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Enclosures and cc:
See next page



Enclosures:

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Washington, D.C. 20460

U.S. Environmental Protection.
Agency
Region IV Office
ATTN: EIS COORDINATOR
345 Courtland Street
Atlanta, Georgia 30308



1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for ensuring the integrity of the financial system and for providing a clear audit trail. The text notes that without proper record-keeping, it would be difficult to identify discrepancies or to hold individuals accountable for their actions.

2. The second part of the document outlines the specific procedures that must be followed when recording transactions. It details the steps from the initial entry of a transaction into the system to the final review and approval. The text stresses the need for consistency and attention to detail throughout the entire process.

3. The third part of the document addresses the challenges associated with maintaining accurate records. It identifies common pitfalls, such as data entry errors or incomplete information, and provides strategies to avoid them. The text also discusses the importance of regular audits to ensure the accuracy of the records over time.

4. The fourth part of the document discusses the role of technology in improving record-keeping. It highlights the benefits of using automated systems to reduce the risk of human error and to streamline the recording process. The text also mentions the importance of ensuring that the technology used is secure and reliable.

5. The fifth part of the document concludes by reiterating the importance of accurate record-keeping and the need for everyone involved in the process to adhere to the established procedures. It encourages a culture of transparency and accountability, where individuals are encouraged to report any issues or discrepancies immediately.



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-259

BROWNS FERRY NUCLEAR PLANT, UNIT NO:1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 31
License No. DPR-33

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated July 15, 1977, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility License No. DPR-33 is hereby amended to read as follows:

"(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 31, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications."

3. This license amendment is effective as of July 15, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

for *J. V. Wambach*
A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 18, 1977



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-260

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28
License No. DPR-52

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated July 15, 1977, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility License No. DPR-52 is hereby amended to read as follows:



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for a systematic approach to data collection and the importance of using reliable sources of information.

3. The third part of the document describes the process of interpreting the data and drawing conclusions from it. It stresses the importance of being objective and unbiased in the analysis and the need to consider all relevant factors.

4. The fourth part of the document discusses the importance of communicating the results of the analysis to the relevant stakeholders. It emphasizes that clear and concise communication is essential for ensuring that the findings are understood and acted upon.

5. The fifth part of the document provides a summary of the key findings and conclusions of the study. It highlights the main points of the analysis and the implications of the findings for the organization's future operations.

"(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No. 28, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications."

3. This license amendment is effective as of July 15, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

for J. V. Wambar
A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 18, 1977



THE
FEDERAL
BUREAU OF
INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535

MEMORANDUM FOR THE DIRECTOR, FBI

SUBJECT: [Illegible]

DATE: [Illegible]

TO: [Illegible]

FROM: [Illegible]

RE: [Illegible]

[The remainder of the memorandum body is illegible due to extreme image quality.]



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

TENNESSEE VALLEY AUTHORITY

DOCKET NO. 50-296

BROWNS FERRY NUCLEAR PLANT, UNIT NO. 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 6
License No. DPR-68

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Tennessee Valley Authority (the licensee) dated July 15, 1977, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and paragraph 2.C.(2) of Facility License No. DPR-68 is hereby amended to read as follows:



1. The first part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St.

2. The second part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St.

3. The third part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St.

4. The fourth part of the document is a list of names and addresses. The names are listed in the first column, and the addresses are listed in the second column. The names are: John Doe, Jane Smith, and Bob Johnson. The addresses are: 123 Main St, 456 Elm St, and 789 Oak St.

"(2) Technical Specifications

The Technical Specifications contained in Appendices A and B, as revised through Amendment No.6 , are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications."

3. This license amendment is effective as of July 15, 1977.

FOR THE NUCLEAR REGULATORY COMMISSION

J. V. Wambach
for A. Schwencer, Chief
Operating Reactors Branch #1
Division of Operating Reactors

Attachment:
Changes to the Technical
Specifications

Date of Issuance: August 18, 1977

ATTACHMENT TO LICENSE AMENDMENTS

AMENDMENT NO. 31 TO FACILITY LICENSE NO. DPR-33

AMENDMENT NO. 28 TO FACILITY LICENSE NO. DPR-52

AMENDMENT NO. 6 TO FACILITY LICENSE NO. DPR-68

DOCKET NOS. 50-259, 50-260 AND 50-296

Revise Appendix B as follows:

Remove pages 2 and 3 and replace with identically numbered pages.

2.0 LIMITING CONDITIONS FOR OPERATION

2.1 THERMAL DISCHARGE LIMITS

Objective

The purpose of this specification is to limit the thermal stress on aquatic life in Wheeler Reservoir by operating Browns Ferry Nuclear Plant so as to meet the applicable water quality temperature standards of the State of Alabama.

Specification

The plant-induced reservoir water temperature at the 5-foot depth at the downstream control point shall not exceed the water temperature measured at the 5-foot depth of the upstream control monitor by more than the applicable maximum temperature rise (currently 5°F) nor shall the reservoir water temperature measured at the 5-foot depth at the downstream control point exceed the applicable maximum water temperature (currently 86°F*) due to the discharge of the condenser cooling water. If this limiting condition is exceeded, the plant operator shall initiate control measures. The control measures shall be (1) to reduce the waste heat discharged to the reservoir and/or (2) to request modifications in the releases from TVA's Gunter'sville and/or Wheeler Dams to increase the streamflow by the Browns Ferry plant.

*During a special diffuser performance study during the summer of 1977 (anticipated completion in June 1977), a maximum temperature rise of 10°F, and a maximum water temperature of 90°F, both recorded at the 5-foot depth, will be permitted for a time not to exceed a cumulative total of 7 days.

†During the interim until August 31, 1977, the maximum water temperature allowed shall be 90°F.

Monitoring Requirement

The water temperature data collected by the thermal monitoring network is telemetered to the Browns Ferry meteorological station. The meteorological station will receive the data and automatically record the readings every 60 minutes. All temperature data are recorded on paper tape and maintained for record keeping purposes. The 5-foot depth temperature data which are used to prevent exceeding the limiting condition will be transmitted to the control room and will be visually displayed for monitoring purposes. The accuracy of the system and the sensitivity of the thermistor sensors are designed to be $\pm 0.3^\circ\text{F}$ and 0.01°F , respectively.

Three thermal monitors spaced across the reservoir in the vicinity of river mile 292.5 shall serve as the downstream control. Two monitors located above the plant, one located at about river mile 297.6, and a second located in this vicinity will provide the upstream water temperature data. The system is designed so that the downstream control monitors serve as backup for one another and similarly for the two upstream monitors. The locations of existing temperature monitors are displayed in Figure 2.1-1.

In the event the system described is out of service, an alternate method will be employed three times a day (once each shift) to measure the river temperature at the 5-foot depth in the vicinity of the upstream and downstream control monitors and thus determine the temperature rise and the maximum river water temperature below the plant. When such a method would result in an imminent and substantial endangerment to the safety of personnel, this paragraph shall not apply.

2.1 Continued

Bases

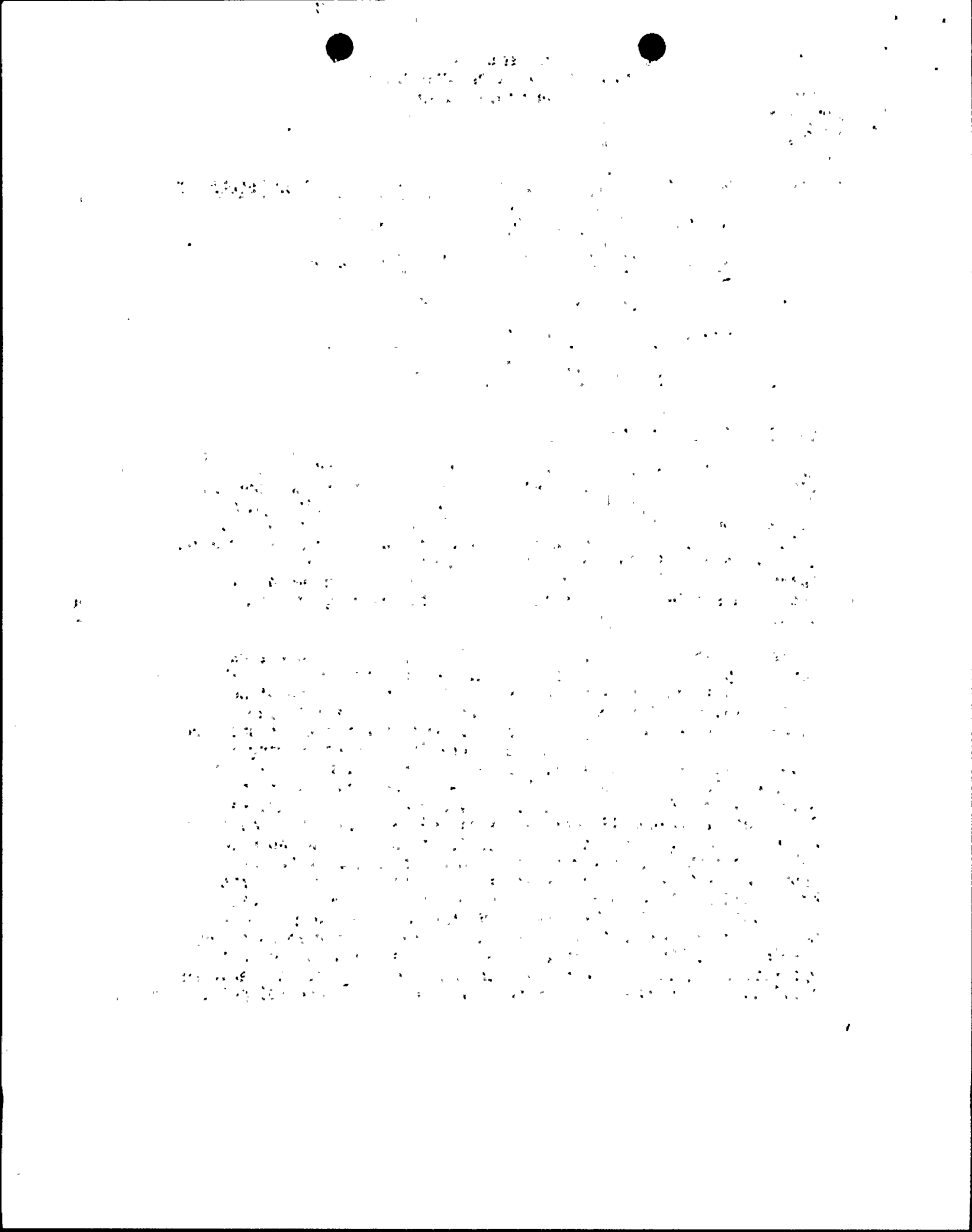
TVA, as a Federal agency, is required by Section 313 of the Federal Water Pollution Control Act Amendments of 1972 (P.L. 92-500) and by Executive Order 11507, "Prevention, Control and Abatement of Air and Water Pollution at Federal Facilities," to meet applicable Federal, state, and local water quality standards. On July 17, 1972, the State of Alabama adopted and on September 19, 1972, the Environmental Protection Agency approved thermal criteria for surface waters in the State of Alabama. The current applicable thermal standards are to limit the maximum temperature rise above natural temperature before the addition of artificial heat to 5°F and the maximum water temperature to 86°F. In the application of this temperature criteria the temperature shall be measured, in the case of Wheeler Reservoir, at a depth of 5 feet. The higher temperature limits during the special diffuser performance study during the summer of 1977 will be for brief periods and will not adversely affect the environment.

The Tennessee Valley Authority has taken action to comply with applicable thermal water quality standards of the State of Alabama in the operation of the 3-unit Browns Ferry facility by installing mechanical draft cooling towers. However, inadequate cooling tower performance has resulted in drastic curtailment of power generation during summer periods when peak load demands are critical on the TVA system to meet thermal standards.

The Browns Ferry Nuclear Plant Environmental Statement analyzed the environmental effects of operating the plant with a 10°F rise and 93°F maximum temperature limitation. This evaluation concluded that the 10°F and 93°F limitations would be adequate to protect aquatic life except for coldwater fishes. To protect the spawning habitats of the coldwater fish species, limits of 5°F rise and 86°F maximum temperature were imposed. Recent data indicate that the spawning grounds of these fishes are not located in areas influenced by the thermal plume, thus a 90°F maximum temperature limit is allowed until August 31, 1977. A full review will be made to determine what permanent limits will be imposed.

TVA has requested from EPA and the State of Alabama that the maximum temperature limitation be increased to 90°F. The EPA has granted a stay of the 86°F limit pending their decision on whether to grant or deny an adjudicatory hearing in this matter. In discussions with the Alabama Water Improvement Commission, State water quality officials also indicated concurrence with the stay of the 86°F limit.

All systems described for thermal discharge limits will be operational prior to any significant discharge of waste heat. The placement of the temperature monitoring instruments shall be such that compliance with water quality criteria will be demonstrated. The placement of the temperature sensors at the 5-foot depth in the waters of Wheeler Reservoir is in accordance with the requirements of the water quality criteria of the State of Alabama. The temperature data is converted to digital data at the station on the reservoir. The transmission, computer storage, and monitoring system is being used at other facilities and has performed accurately and reliably.





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

ENVIRONMENTAL IMPACT APPRAISAL BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NOS. 31 , 28 AND 6 TO

FACILITY LICENSE NOS. DPR-33, DPR-52 AND DPR-68

TENNESSEE VALLEY AUTHORITY

BROWNS FERRY NUCLEAR PLANT, UNITS 1, 2 AND 3

DOCKET NOS. 50-259, 50-260 AND 50-296

Description of Proposed Action

By letter dated July 15, 1977, telecopied to NRC headquarters, Tennessee Valley Authority (TVA) requested changes to the thermal discharge limits (Section 2.1) in Appendix B to Facility Operating Licenses DPR-33, DPR-52 and DPR-68 for Browns Ferry Nuclear Plant, Units 1, 2 and 3. This request was further supported by information telecopied on July 15, 1977, which related to the location of spawning areas of certain cold water species and the amount of egg and larva samples collected in field monitoring programs for these species.

Their proposed change would allow an increase in the downstream control point maximum water temperature from 86°F to 90°F. The licensee has had problems meeting the 86°F limit because of poor cooling tower performance. This higher temperature will cause slightly larger thermal plumes downstream of the plant and upstream at the plant under low stream flow conditions. Also, during low flow conditions, it is likely that a 90°F or greater thermal blockage will be formed when the discharge temperature control point measures 90°F. The Browns Ferry Nuclear Station National Pollutant Discharge Elimination System (NPDES) Permit also contains a maximum discharge temperature limitation of 86°F. TVA requested relief from the U.S. Environmental Protection Agency (EPA) on the NPDES permit 86°F limit by asking that an adjudicatory hearing be granted which would stay this contested provision. By letter dated July 15, 1977, EPA granted a stay to the maximum discharge temperature but did not grant or deny the request for adjudicatory hearing. The EPA letter further required that when the ambient upstream temperature exceeds 81°F the maximum discharge temperature shall not exceed 90°F as measured at the downstream control point.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the integrity of the financial system and for the ability to detect and prevent fraud. The document also notes that records should be kept for a sufficient period of time to allow for a thorough review if necessary.

2. The second part of the document outlines the specific requirements for record-keeping. It states that all transactions must be recorded in a clear and concise manner, and that the records must be accessible to the appropriate authorities. The document also requires that records be kept in a secure location and that they be protected from unauthorized access or destruction.

3. The third part of the document discusses the role of the auditor in ensuring the accuracy of the records. It states that the auditor must conduct a thorough review of the records and must report any discrepancies or irregularities to the appropriate authorities. The document also requires that the auditor maintain a separate record of all findings and conclusions.

4. The fourth part of the document discusses the consequences of failing to comply with the record-keeping requirements. It states that any individual or organization that fails to maintain accurate records may be subject to disciplinary action, including fines and imprisonment. The document also notes that failure to comply with the requirements may result in the loss of the organization's license to operate.

5. The fifth part of the document discusses the importance of training and education in ensuring the accuracy of the records. It states that all individuals involved in the financial system must receive appropriate training and education to ensure that they are able to maintain accurate records. The document also requires that training and education be provided on a regular basis to ensure that individuals are up-to-date on the latest requirements and procedures.

6. The sixth part of the document discusses the importance of transparency and accountability in the financial system. It states that all transactions must be recorded in a way that allows for a clear and concise review of the system. The document also requires that the results of the audit be made available to the public in a clear and concise manner.

7. The seventh part of the document discusses the importance of the financial system in the economy. It states that the financial system is essential for the growth and development of the economy and that it must be maintained in a way that ensures its integrity and stability. The document also notes that the financial system must be able to provide a clear and concise picture of the economy to the public.

8. The eighth part of the document discusses the importance of the financial system in the lives of individuals. It states that the financial system is essential for the well-being of individuals and that it must be maintained in a way that ensures its integrity and stability. The document also notes that the financial system must be able to provide a clear and concise picture of the economy to individuals.

9. The ninth part of the document discusses the importance of the financial system in the lives of organizations. It states that the financial system is essential for the success of organizations and that it must be maintained in a way that ensures its integrity and stability. The document also notes that the financial system must be able to provide a clear and concise picture of the economy to organizations.

10. The tenth part of the document discusses the importance of the financial system in the lives of the world. It states that the financial system is essential for the well-being of the world and that it must be maintained in a way that ensures its integrity and stability. The document also notes that the financial system must be able to provide a clear and concise picture of the economy to the world.

Evaluation

Wheeler Reservoir, on which the Browns Ferry Units are located, contains primarily warm water fish fauna considered typical of southeastern U.S. reservoirs. It also contains three typically coldwater species, namely, walleye, sauger, and smallmouth bass.^{2/} These cold water species have been the focus of previous reviews and because of this, thermal limits were established after preparation of the draft environmental impact statement to assure protection of these species. The most critical period for each of these species is during spawning periods. High temperature is known to inhibit spawning of cold water fishes of some species. Furthermore, all states of growth (from eggs through juvenile) of most coldwater species have been shown to be sensitive to abnormally high temperatures.

The July 15, 1977 information telecopied from TVA describes the location of Wheeler Reservoir spawning areas of the above three species. The data indicate that no significant spawning activity occurs in the vicinity of the plant or in the area of the influence of the thermal plume, nor are significant densities of fish eggs and larvae found in these areas. The data indicate that the smallmouth bass spawn in other areas scattered throughout the reservoir, that the sauger spawn mainly in the tailraces of dams in the winter, and that no substantial presence of walleye spawning has been observed. On this basis, we judge that there will be no significant impact to these species in Wheeler Reservoir over the time proposed for the specification change.

Other forms of biota in the reservoir, including warm water fishes, were evaluated in the FES for a maximum discharge temperature of 93°F. That evaluation found that the impact was acceptable. We conclude that that finding is still valid.

On the basis of the above analysis, and on the basis that TVA provide detailed written supporting information as soon as possible we conclude that the information provided by TVA is adequate to support an interim increase in the maximum temperature limit at the downstream control point to 90°F until August 31, 1977. This information was received July 26, 1977, and our examination of it confirms the acceptability of the interim increase. An NRC license condition provides that the water quality standards of the State of Alabama must be observed by the licensee. In this regard, the State of Alabama orally on July 15, 1977, and by letter dated July 19, 1977, informed the licensee that the temperature increase to 90°F for an interim period was acceptable. Since EPA will also be evaluating the long term impacts of operation at temperatures above 86°F as stated in their July 15, 1977 letter to TVA, we will coordinate our review with EPA.

1. The first part of the document is a list of names and addresses, which are arranged in three columns. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list appears to be a directory or a roster of some kind.

Conclusion and Basis for Negative Declaration

On the basis of the foregoing analysis, it is concluded that there will be no significant environmental impact attributable to the proposed action. Having made this conclusion the Commission has further concluded that no environmental impact statement for the proposed action need be prepared and that a negative declaration to this effect is appropriate.

Date: August 18, 1977

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REFERENCES

1. Letter from Howard Zeller of the U.S. Environmental Protection Agency to Herbert S. Sanger of Tennessee Valley Authority dated July 15, 1977.
2. Letter from Tennessee Valley Authority to Mr. Howard Zeller of the U.S. Environmental Protection Agency dated April 19, 1973.

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that proper record-keeping is essential for transparency and accountability, particularly in the context of public administration and financial management.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It highlights the need for a systematic approach to data collection, ensuring that all relevant information is captured and analyzed thoroughly.

3. The third part of the document focuses on the interpretation of the collected data. It discusses the various statistical and analytical tools used to draw meaningful conclusions from the data, and emphasizes the importance of context in interpreting the results.

4. The fourth part of the document discusses the implications of the findings for policy-making and practice. It highlights the need for evidence-based decision-making, and discusses the various ways in which the findings can be used to inform policy and practice.

5. The fifth part of the document discusses the challenges and limitations of the research. It highlights the need for further research, and discusses the various ways in which the findings can be used to inform policy and practice.

6. The sixth part of the document discusses the conclusions of the research. It highlights the main findings of the study, and discusses the implications for policy and practice.

7. The seventh part of the document discusses the recommendations for future research. It highlights the need for further research, and discusses the various ways in which the findings can be used to inform policy and practice.

8. The eighth part of the document discusses the acknowledgments. It acknowledges the contributions of the various individuals and organizations that have supported the research.

9. The ninth part of the document discusses the references. It lists the various sources of information used in the research.

10. The tenth part of the document discusses the appendices. It includes various tables, figures, and other supplementary information that is relevant to the research.

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NOS. 50-259, 50-260 AND 50-296

TENNESSEE VALLEY AUTHORITY

NOTICE OF ISSUANCE OF AMENDMENTS TO FACILITY
OPERATING LICENSES

AND

NEGATIVE DECLARATION

The U.S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 31 to Facility Operating License No. DPR-33, Amendment No. 28 to Facility Operating License No. DPR-52, and Amendment No. 6 to Facility Operating License No. DPR-68 issued to Tennessee Valley Authority (the licensee), which revised Technical Specifications for operation of the Browns Ferry Nuclear Plant, Unit Nos. 1, 2 & 3 (the facility), located in Limestone County, Alabama. The amendments were effective as of July 15, 1977, because of the circumstances involved in plant operation as a consequence of cooling tower operation. Formal issuance of the license amendments occurred on August 18, 1977.

These amendments revise the Environmental Technical Specification 2.1 contained in Appendix B to the licenses. The change would temporarily increase the maximum temperature measured at the 5 foot depth of the downstream control point from 86°F to 90°F.

The application for the amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the license amendments. Prior public notice of these amendments was not required since the amendments do not involve a significant hazards consideration.



The Commission has prepared an Environmental Impact Appraisal for the revised Technical Specifications and has concluded that an environmental impact statement for this particular action is not warranted because there will be no significant environmental impact attributable to the action.

For further details with respect to this action, see (1) the application for amendments dated July 15, 1977, (2) Amendment No. 31 to License No. DPR-33, Amendment No. 28 to License No. DPR-52, and Amendment No. 6 to License No. DPR-68, and (3) the Commission's Environmental Impact Appraisal. All of these items are available for public inspection at the Commission's Public Document Room, 1717 H Street, NW., Washington, D.C. and at the Athens Public Library, South and Forrest, Athens, Alabama 35611. A copy of items (2) and (3) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Director, Division of Operating Reactors.

Dated at Bethesda, Maryland, this 18th day of August 1977.

FOR THE NUCLEAR REGULATORY COMMISSION



Thomas V. Wambach, Acting Chief
Operating Reactors Branch #1
Division of Operating Reactors

