

ENCLOSURE 1

PROPOSED OPERATING LICENSE AMENDMENT
BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3
DOCKET NOS. 50-259, 50-260, AND 50-296
(TVA-BFN-TS-88-258)

LIST OF AFFECTED PAGES

UNIT 1, DPR-33

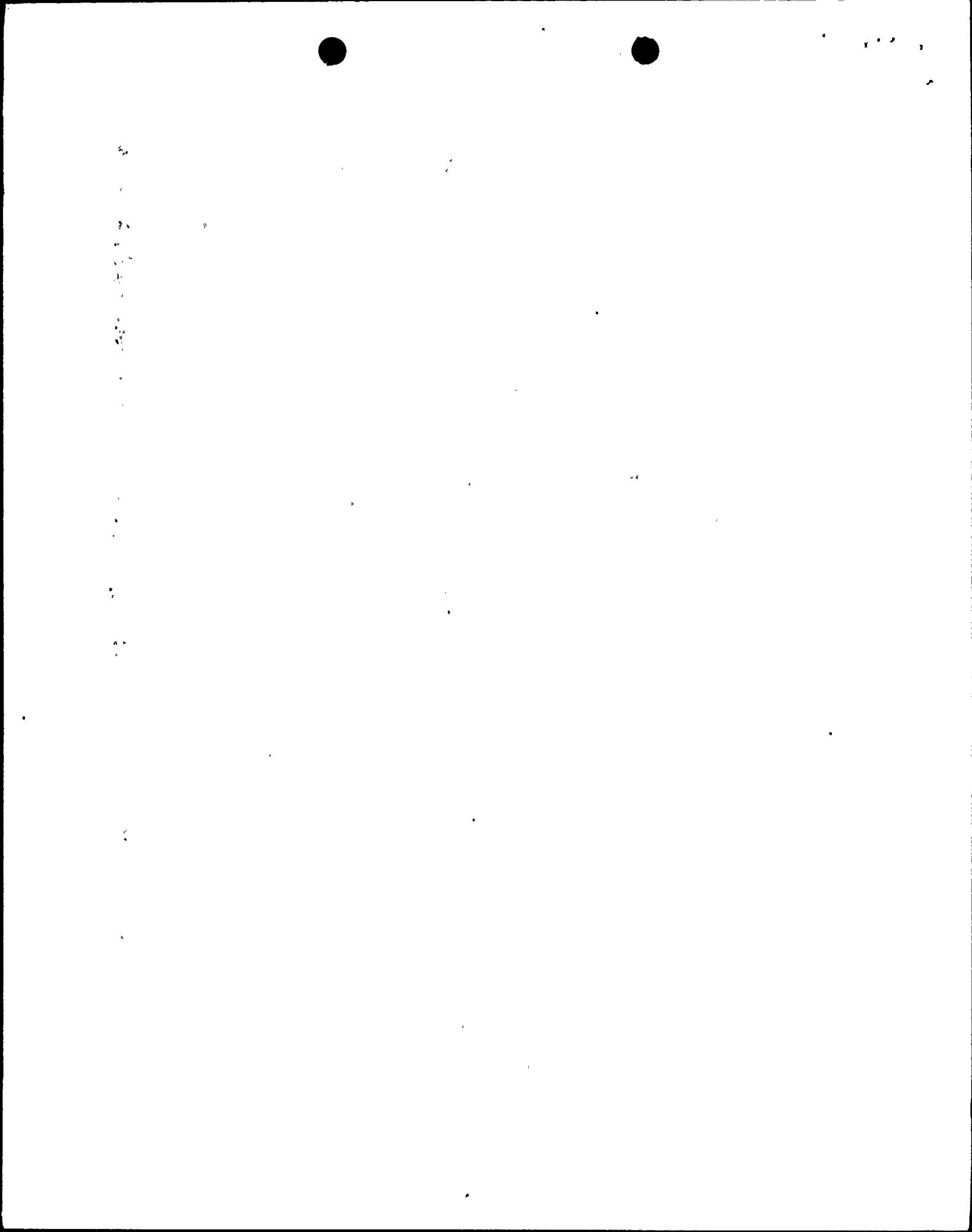
page 6, item 2.D

Unit 2, DPR-52

page 6, item 2.E

Unit 3, DPR-68

page 6, item 2.F



NOV 24 1981

(11) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved Safeguards Contingency Plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved Contingency Plan, which was submitted pursuant to 10 CFR 73.40, consists of documents withheld from public disclosure pursuant to 10 CFR 2.790(d) and is identified as "Browns Ferry Nuclear Power Station Safeguards Contingency Plan" dated March 1, 1979, as revised by page changes dated September 1, 1979, April 15, 1980, December 21, 1980, and March 30, 1981, as as may subsequently be revised in accordance with 10 CFR 50.54(p). The Contingency Plan shall be fully implemented, in accordance with 10 CFR 73.40(b) within 30 days of issuance of amendment no. 73 dated June 19, 1981.

(12) The licensee is authorized to temporarily store low-level radioactive waste in an existing covered pavilion that is situated outside the security fence, as presently located, but inside the site exclusion area. The total amount of low-level waste to be stored shall not exceed 1320 curies of total activity. This authorization expires two years from the effective date of this amendment¹ and is subject to all the conditions and restrictions in TVA's application dated January 21, 1980.

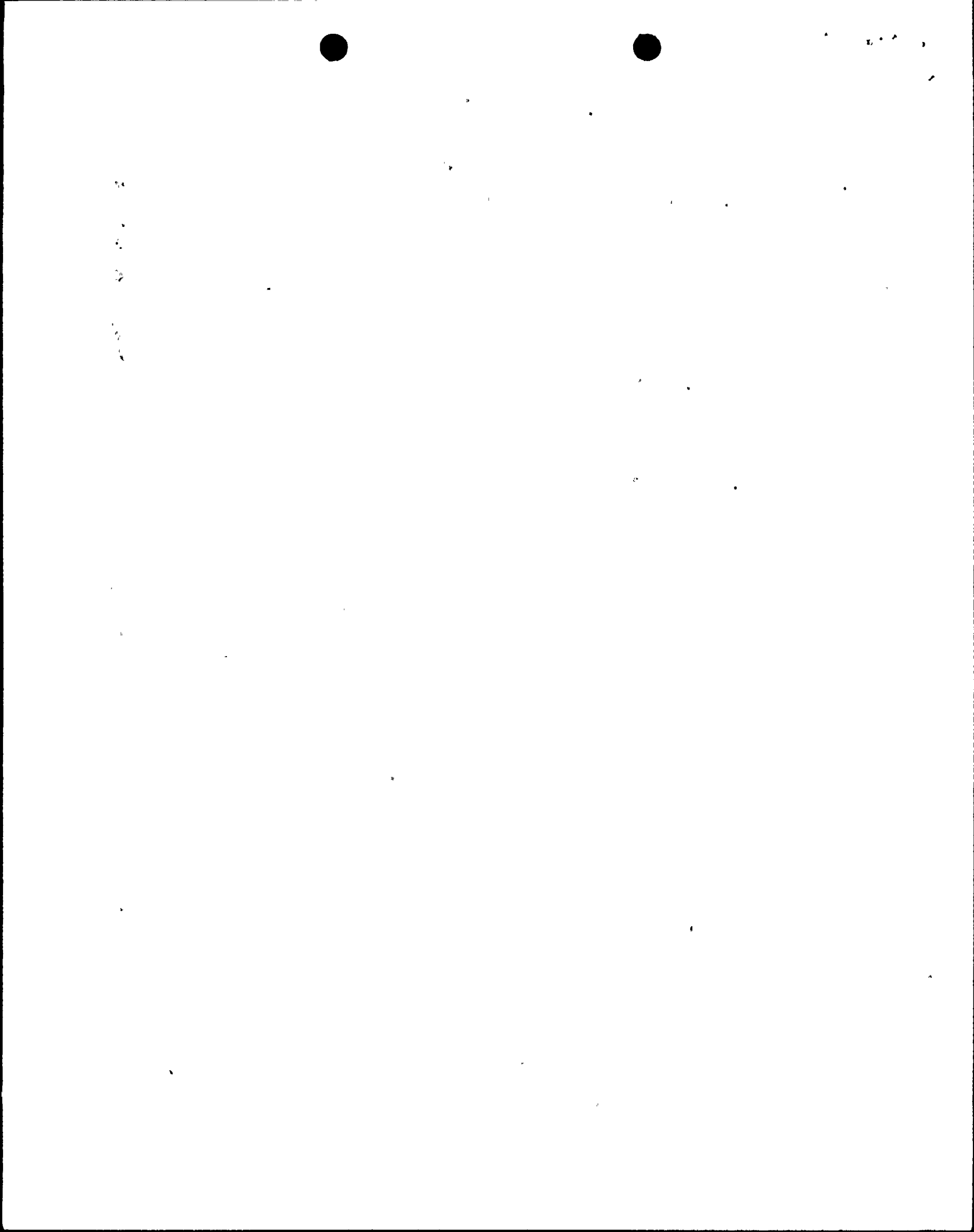
D. This amended license is effective as of the date of issuance and shall expire at midnight on December 20, 2013.

FOR THE ATOMIC ENERGY COMMISSION

S/ A. Giambusso
A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Date of Issuance: DEC 20 1973

BFN-Unit 1



FEB 12 1985

- (11) The licensee shall fully implement and maintain in effect all provisions of the Commission-approved Safeguards Contingency Plan, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). The approved Contingency Plan, which was submitted pursuant to 10 CFR 73.40, consists of documents withheld from public disclosure pursuant to 10 CFR 2.790(d) and is identified as "Browns Ferry Nuclear Power Station Safeguards Contingency Plan" dated March 1, 1979, as revised by page changes dated September 1, 1979, April 15, 1980, December 21, 1980, and March 30, 1981, and as may subsequently be revised in accordance with 10 CFR 50.54(p). The Contingency Plan shall be fully implemented, in accordance with 10 CFR 73.40(b) within 30 days of issuance of amendment no. 70 dated June 19, 1981.
- (12) The licensee is authorized to temporarily store low-level radioactive waste in an existing covered pavilion that is situated outside the security fence, as presently located, but inside the site exclusion area. The total amount of low-level waste to be stored shall not exceed 1320 curies of total activity. This authorization expires two years from the effective date of this amendment and is subject to all the conditions and restrictions in TVA's application dated January 21, 1980.
- (13) Commission Order dated March 25, 1983 is modified as follows: in Attachment 1, for item II.F.1.1 and II.F.1.2 change "12/31/84" to "Prior to startup in Cycle 6."
- E. This license is effective as of the date of issuance and shall expire at midnight, June 28, 2014.

FOR THE ATOMIC ENERGY COMMISSION

S/ A. Giambusso
A. Giambusso, Deputy Director
for Reactor Projects
Directorate of Licensing

Attachment:
Appendices A & B - Technical
Specifications

Date of Issuance: JUN 28, 1974

BFN-Unit 2



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- (2) The licensee is required, upon completion of the Mark I Owners Group containment long-term program related to relief valve operation, to make such modifications on a timely basis as may be necessary to restore the original design safety margins approved for the construction permit and used for the design of the torus structures when subjected to relief valve operation."
 - (3) The facility may be modified as described in 'Browns Ferry Nuclear Plant Unit 3 Emergency Core Cooling Systems Low Pressure Coolant Injection Modifications for Performance Improvement (October 1977)' and as described in TVA's letter of December 28, 1977 transmitting the aforementioned report and in TVA's supplemental letter of December 13, 1978.
 - (4) Commission Order dated March 25, 1983 is modified as follows:

In Attachment 1, for item II.F.1.1 and II.F.1.2 change "12/31/84" to "Prior to Unit 2 startup in Cycle 6."
- F. This license is effective as of the date of issuance and shall expire at midnight, July 2, 2016.

FOR THE NUCLEAR REGULATORY COMMISSION

S/ R. C. DeYoung for
Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Attachment:
Appendices A & B -
Technical Specifications

Date of Issuance: JUL 2 1976

BFN-Unit 3

ENCLOSURE 2

PROPOSED OPERATING LICENSE AMENDMENT
BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3
DOCKET NOS. 50-259, 50-260, AND 50-296
(TVA-BFN-TS-88-258)

DESCRIPTION AND JUSTIFICATION FOR
OPERATING LICENSE AMENDMENT TO EXTEND
EXPIRATION DATE TO 40 YEARS FROM DATE OF ISSUANCE
OF THE FULL-POWER LICENSE



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ENCLOSURE 2

Description of Change

TVA, pursuant to 10 CFR 50.90, requests an amendment to the BFN operating license for unit 1 (DPR-33), unit 2 (DPR-52), and unit 3 (DPR-68). Currently the BFN Operating License for units 1, 2, and 3 state that this license is effective as of the date of issuance and shall expire at midnight on May 10, 2007 (Unit 1 Item 2.D), May 10, 2007 (Unit 2 Item 2.E), and July 31, 2008 (Unit 3 Item 2.F). These dates were established as 40 years from the issuance of the respective construction permits. TVA is requesting that the subject operating license sections be amended using the following expiration dates: Unit 1 - December 20, 2013; Unit 2 - June 28, 2014; and Unit 3 - July 2, 2016. These dates are established by taking the 40-year life from the issuance of the respective operating license.

Reason for Change

The current operating license expiration date is 40 years from the date of issuance of the construction permit (May 10, 1967 for units 1 and 2 and July 31, 1968 for unit 3). Because of the time required between the issuance of the construction permit and the full-power operating license for unit 1 (6 years and 7 months), unit 2 (7 years and 2 months), and unit 3 (8 years and 1 month), the effective period for the operating license would be approximately 33 years and 5 months for unit 1 and 31 years and 11 months for units 2 and 3. Current NRC policy is to issue operating licenses for a 40-year period beginning with the date of issuance. The requested amendment to the expiration date of the BFN operating licenses would provide for the 40-year period of operation that the units were initially designed for.

The proposed amendment is an administrative change that allows TVA to operate BFN for the full-design life and spread the capital cost of BFN over a longer period of time. This change will effectively lower the cost of electricity and thereby benefit the residential and industrial customers' within TVA's service area.

Justification for Change

The justification for this change is patterned after the suggested guidelines issued by NRC to supplement the April 30, 1985 policy letter by H. L. Thompson to H. R. Denton covering extending the operating license for nuclear power plants. These guidelines suggest that the licensee address: significant environmental impacts, equipment qualification, and technical specifications for in-service inspection and testing.

Section 103.c of the Atomic Energy Act of 1954 provides that a license is to be issued for a specified period not exceeding 40 years. 10 CFR 50.51 specifies that each license will be issued for a fixed period of time not to exceed 40 years from date of issuance. 10 CFR 50.56 and 10 CFR 50.57 allow the issuance of an operating license pursuant to 10 CFR 50.51 after the

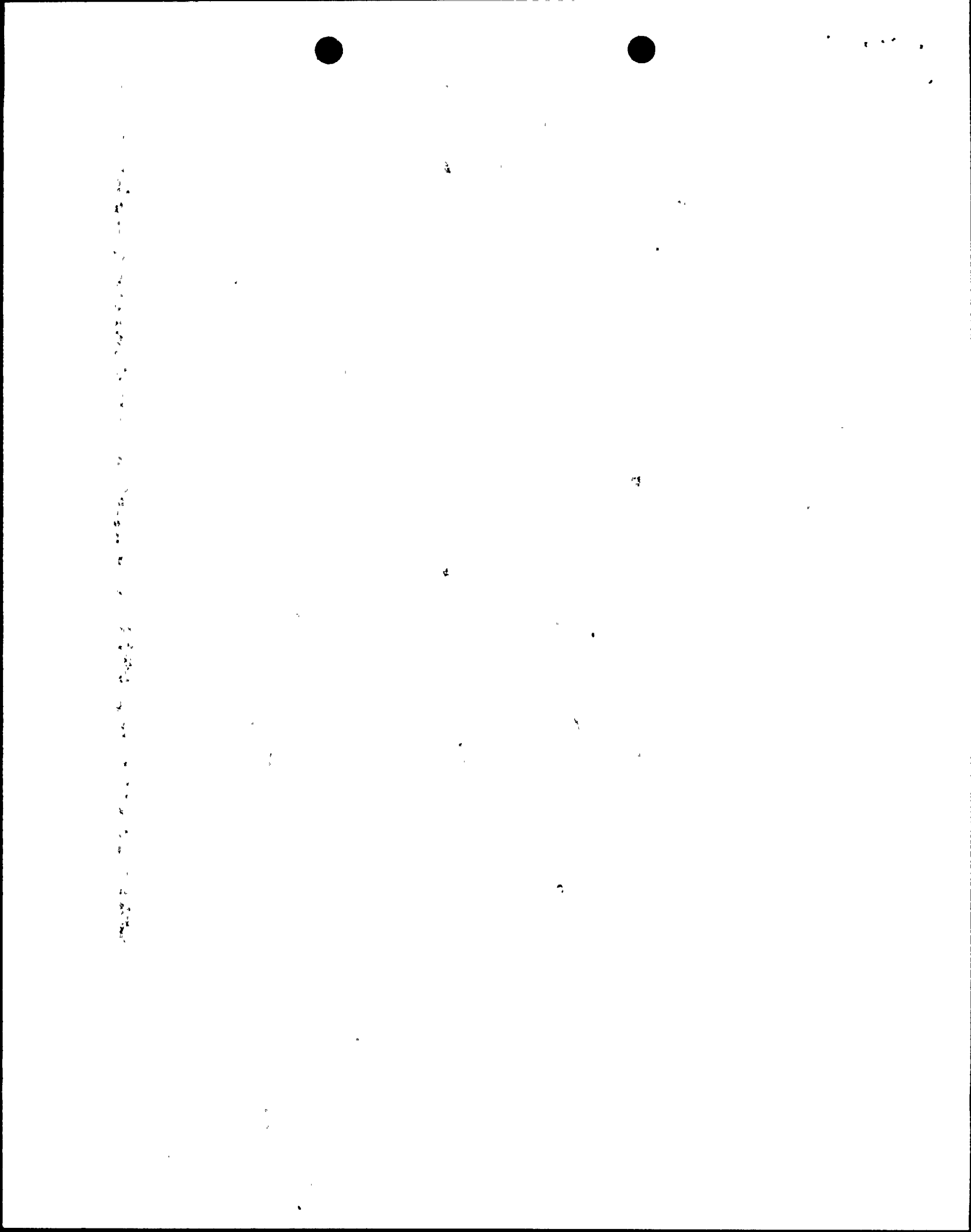


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construction of the facility has been substantially completed, in conformity with the construction permit, and when other provisions specified in 10 CFR 50.57 are met. The currently licensed term for the BFN Units 1, 2, and 3 is 40 years, commencing with the issuance of the construction permits. Accounting for the time that was required for plant construction, this represents an effective operating license term of approximately 32 effective full-power years (EFPY). Consistent with section 103.c of the Atomic Energy Act and sections 50.51, 50.56 and 50.57 of the Commission's regulations, BFN seeks extensions of the operating license terms for units 1, 2, and 3 such that the fixed period of the licenses would be 40 years from the date of the issuance of the operating license.

BFN's request for extension of the operating licenses is based on the fact that a 40-year service life was considered during the design and construction of the plant. Although this does not mean that some components will not wear out during the plant lifetime, design features were incorporated which maximize the inspectability of structures, systems, and equipment. Surveillance and maintenance practices which have been implemented in accordance with the American Society of Mechanical Engineers code and the technical specifications provide assurance that any unexpected degradation in plant equipment will be identified and corrected.



I. POTENTIAL ENVIRONMENTAL, HEALTH, AND SAFETY IMPACTS

TVA has reviewed the BFN Final Environmental Statement (FES) dated June 15, 1972. As discussed below, the proposed extension of the period of facility operations poses no significant environmental effects that have not been already considered.

A. RADIOLOGICAL IMPACTS

1. General Public

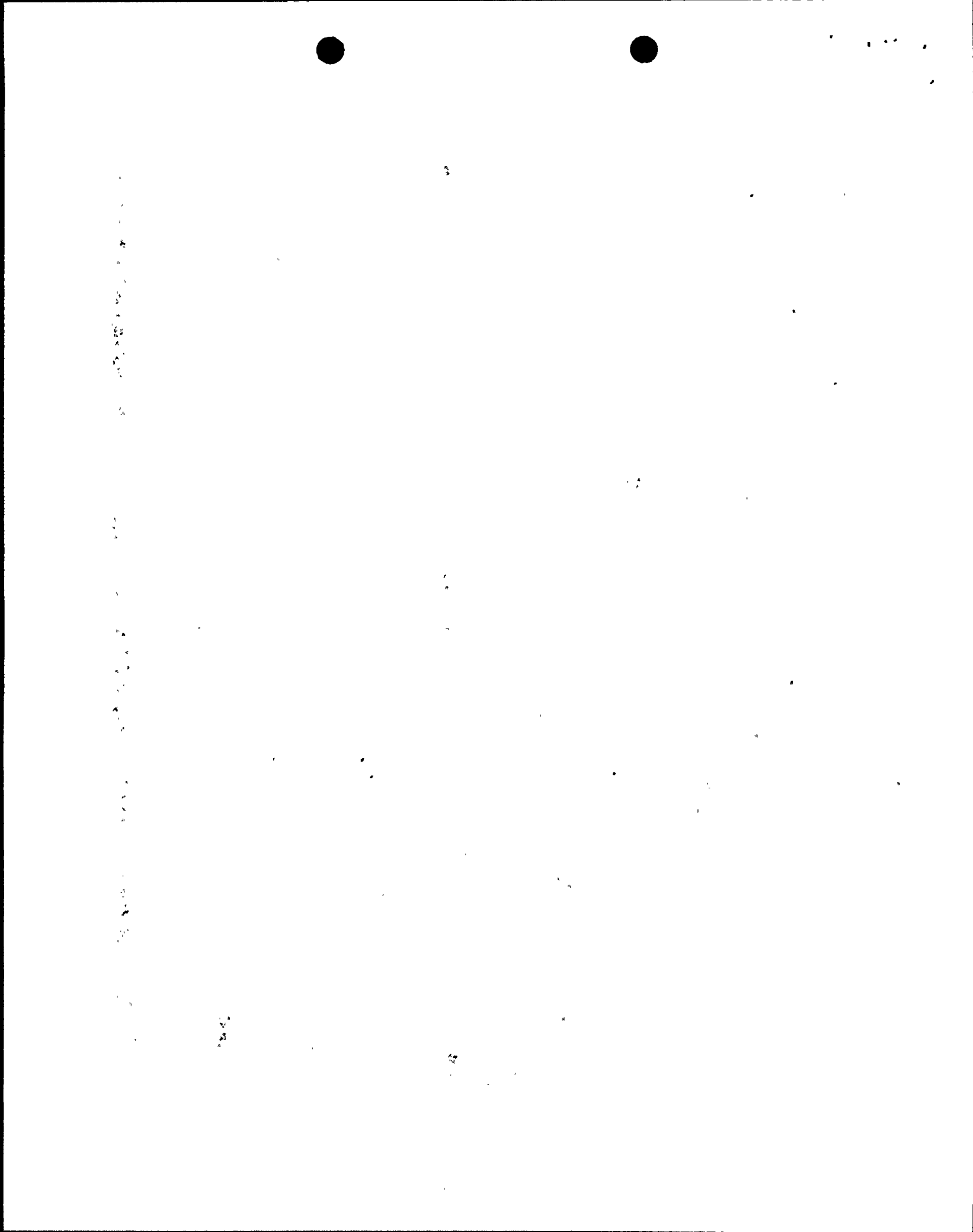
a. Population Estimates

As forecasted in the Final Safety Analysis Report (FSAR) of 1982, the population of the 10-mile Emergency Planning Zone (EPZ), projected to be 48,390 in 2020, has increased from 26,740 to 39,945 in 1987.

In spite of the increase, population density has remained clustered with higher density occurring in Morgan County in the urban industrial area around Decatur on the eastern edge of the EPZ and in the city of Athens in Limestone County. Decatur has experienced a population growth which has occurred predominantly to the south and east of the city outside of the 10-mile EPZ. Limestone County has a seasonal influx of population for recreation on the Tennessee and Elk Rivers.

Other areas of the 10-mile EPZ are primarily agrarian with corresponding low density population concentration. Lawrence County is primarily agrarian with seasonal influx on the Tennessee River for recreation. Fifty new homes have been built in the Mallard Creek and Flower Hill areas of Lawrence County. State Highway 24 in that county has been expanded from two lanes to four lanes, thereby increasing traffic flow. Lauderdale County's area of the 10-mile EPZ is primarily recreational on the Tennessee River and has seasonal influx.

Highway 24 has been expanded in the area where population density has increased. The areas of highest population density occur at or near the perimeter of the 10-mile EPZ. The predominant land users are agriculture workers which have a lower population density. With sufficient State and Federal roads and highways, there continues to be assurance that appropriate measures can be taken to protect the population in the event of a nuclear accident.



Potential Environmental, Health, and Safety Impacts (Cont'd)

b. Dose Consequences From Effluents

1. Appendix I Dose Limits

Radiological impacts to offsite individuals due to releases of radioactive liquid and gaseous wastes from the plant remain well within all applicable regulatory limits. Computed gaseous offsite doses are typically less than 10 percent of the 10 CFR 50, Appendix I, guidelines (for a three-unit plant) of 30 millirad/year gamma and 60 millirad/year beta air dose and 45 millirem/year organ dose. Computed offsite liquid doses are typically less than 15 percent of the 10 CFR 50, Appendix I, guidelines of 9 millirem/year total body and 30 millirem/year organ dose. Radioactive effluent releases are controlled by technical specification section 3.8. These specifications implement the release limits specified in 10 CFR 20 and set performance goals based on 10 CFR 50, Appendix I.

2. Part 100 Siting Criteria

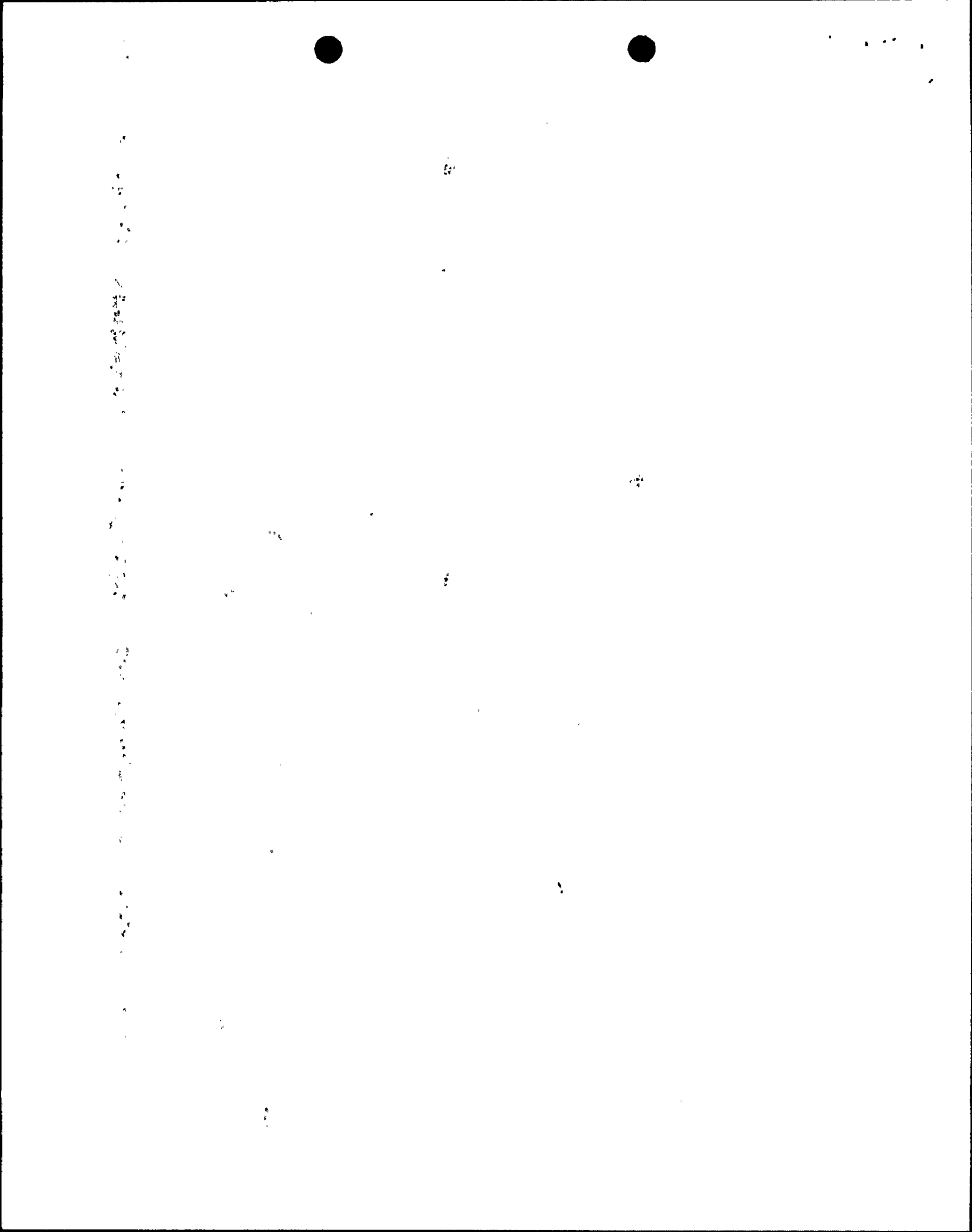
TVA does not expect any significant increase in the annual offsite population dose because of the operations of BFN for the years of 2007 to 2016. Doses calculated for offsite populations in the year 2016 would be about 10 percent greater than those estimated for the 2007 population. This increase would be due solely to an estimated growth of population during 2007 through 2016. However, population doses would remain less than 0.02 percent of the natural background dose to the offsite population. We expect decommissioning doses beginning in 2017 to be reduced as compared to doses that would be expected for a 2008 decommissioning due to improvements made in decommissioning technology and improved ALARA practices.

2. Occupational Exposure

TVA has also evaluated the impact of the proposed extension on predicted radiological occupational exposures, on individual worker as low as reasonably achievable (ALARA) measures, and on 10 CFR Part 20 dose limits. Tables 2, and 3 (attached) provide data regarding occupational exposures at BFN.

a. ALARA Considerations

NUREG 0713 Volume 7 reported occupational radiation exposures at 17 BWR nuclear plant sites (25 reactors) from the period between 1981-1985. This evaluation yielded an industry average of 996 man rem/reactor/year. NUREG 0713 reported the occupational radiation exposures for BFN to be 737 man rem/reactor/year for the same period of time.



Potential Environmental, Health, and Safety Impacts (Cont'd)

The BFN values were below the average of U.S. boiling water nuclear generating plants. This is attributed to a management commitment to as low as reasonably achievable (ALARA) exposures. We expect that below average occupational exposures will continue to be "normal" for the life of the BFN facility.

TVA has an aggressive ALARA program at BFN. Exposure goals have been established for station man-rem to minimize collective doses. ALARA reviews and analysis are conducted for workplans for proposed jobs which are projected to exceed five man-rem. Steps are built into the jobs to reduce dose. All proposed facility modifications receive similar reviews. Prejob briefings are held with workers to cover dose savings measures. In addition, mock-ups are used, as appropriate, to train workers.

Table 1 shows TVA's historical and projected operational schedule for BFN. Table 2 shows projected occupational exposure for BFN. Table 3 shows TVA's past personnel exposure for BFN for the years 1982 through 1987. The man-rem exposure is by plant area regardless of how these exposures were obtained (normal operations, maintenance, repair or refueling operations, etc.) and by whom (plant operations/maintenance personnel, contractor/vendor personnel, etc.). This data is the same data provided yearly as required by 10 CFR 20.407(b) and BFN Technical Specification 6.9.1.2.

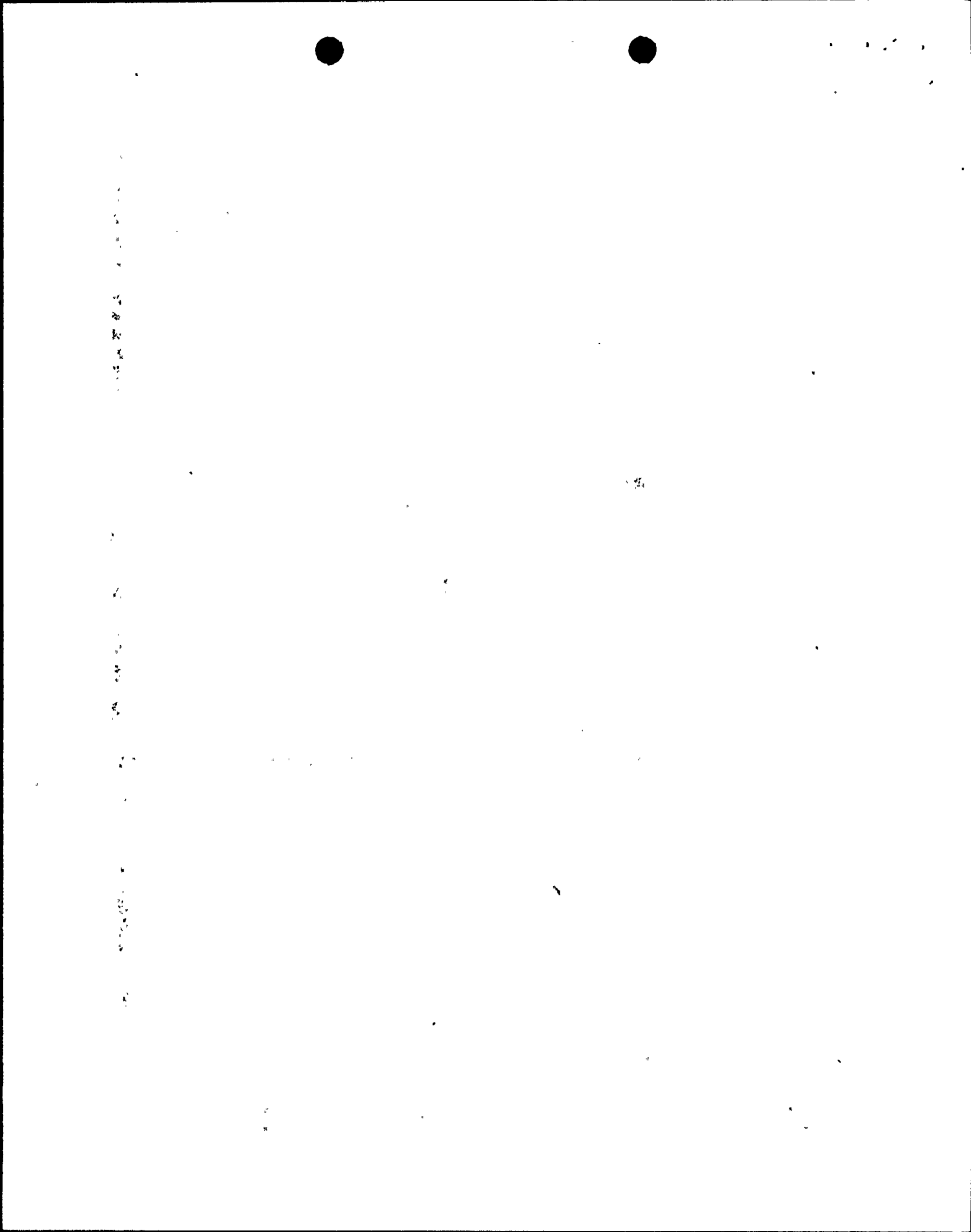
b. Personnel Dose Limits

The above-described ALARA considerations provide assurance that occupational exposures will satisfy 10 CFR Part 20 limits during the additional years of service. Further assurance that those limits will be satisfied throughout the life of the facility is provided by existing technical specifications which require compliance with 10 CFR Part 20. In addition, one of the primary focuses of the existing Radiological Control program is to ensure compliance with 10 CFR Part 20.

B. Uranium Fuel Cycle

The following information is furnished consistent with 10 CFR 51.52(a):

1. The licensed reactor core thermal power limit for BFN is 3293 megawatts thermal.

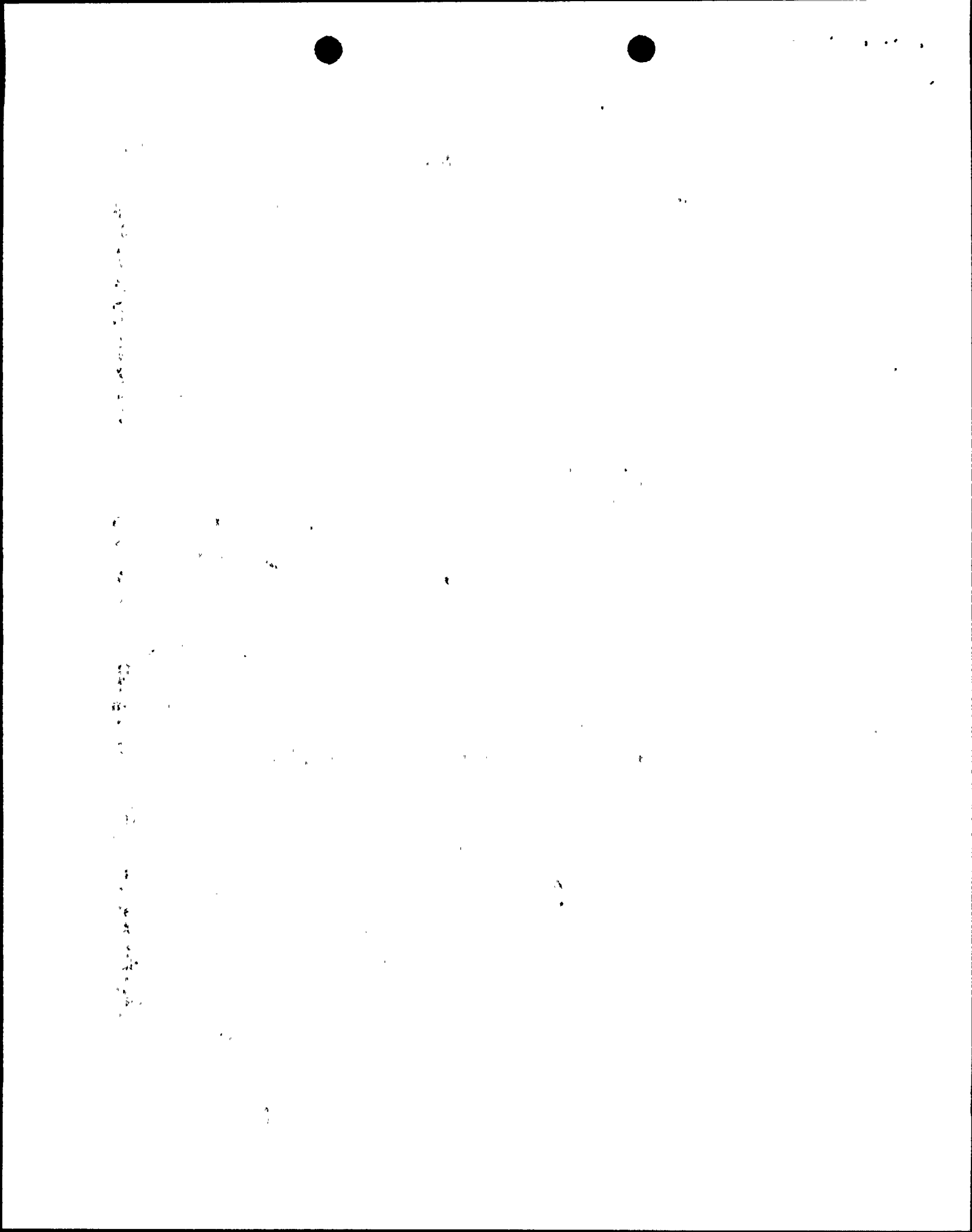


Potential Environmental, Health, and Safety Impacts (Cont'd)

2. The initial uranium-235 enrichment for fuel assemblies at BFN is less than 4 percent by weight. Fuel pellets are clad in zircaloy rods. These parameters are controlled by technical specification 1.1.
3. The average expected level of burnup of the irradiated fuel from BFN is about 32,000 megawatt-days per metric ton of uranium (MWD/MTU). This is consistent with the burnup of 10 CFR 51.52(a), the effective levels of radioactivity from a fuel assembly with an average burnup of 32,000 MWD/MTU will be cooled for a period of time and will be within the requirements of a fuel assembly with an average burnup of 33,000 MWD/MTU that has cooled for 90 days.
4. All radioactive waste, that will be sent to a burial facility, other than irradiated fuel, is packaged and transported in solid form by either truck or rail. BFN Technical Specification 3.8 establishes requirements for the Solid Radioactive Waste System.
5. Irradiated fuel assemblies will be transported from the BFN site either by truck, rail, or barge.
6. The transportation of radioactive material is regulated by the Department of Transportation and the NRC. The regulations provide for protection of the public and transport workers from radiation. This protection is achieved by a combination of standards and requirements applicable to packaging, limitations on the contents of packages, radiation levels from packages, and procedures to limit the exposure of persons under normal and accident conditions.

Primary reliance for safety in transport of radioactive material is placed on the packaging. The packaging must meet regulatory standards (10 CFR 71 and 49 CFR 173) established according to the type and form of material for containment, shielding, nuclear criticality safety, and heat dissipation.

The standards provide that the packaging shall prevent the loss or dispersal of the radioactive contents, retain shielding efficiency, assure nuclear criticality safety, and provide adequate heat dissipation under normal conditions of transport and under specified accident damage test conditions. The contents of packages not designed to withstand accidents are limited, thereby limiting the risk from releases which could occur in an accident. The contents of the package also must be limited so that the standards for external radiation levels, temperature, pressure, and containment are met.



Potential Environmental, Health, and Safety Impacts (Cont'd)

Furthermore, the additional amount of nuclear fuel and waste resulting from an extended operating period will continue to be within the limits assumed for the original licensing basis. Because of improved fuel cycle designs and longer operation between refueling outages, the total amount of spent fuel produced over a 40-year operating lifetime will be less than that originally projected by the FSAR for BFN.

Based on the above, TVA concludes that the radiological impact from the transportation of irradiated fuel and solid radioactive waste is in accordance with the impacts set forth in Table S-1 of 10 CFR 51.52. The environmental costs will not be significantly affected during the additional years of operation.

C. Nonradiological Impacts

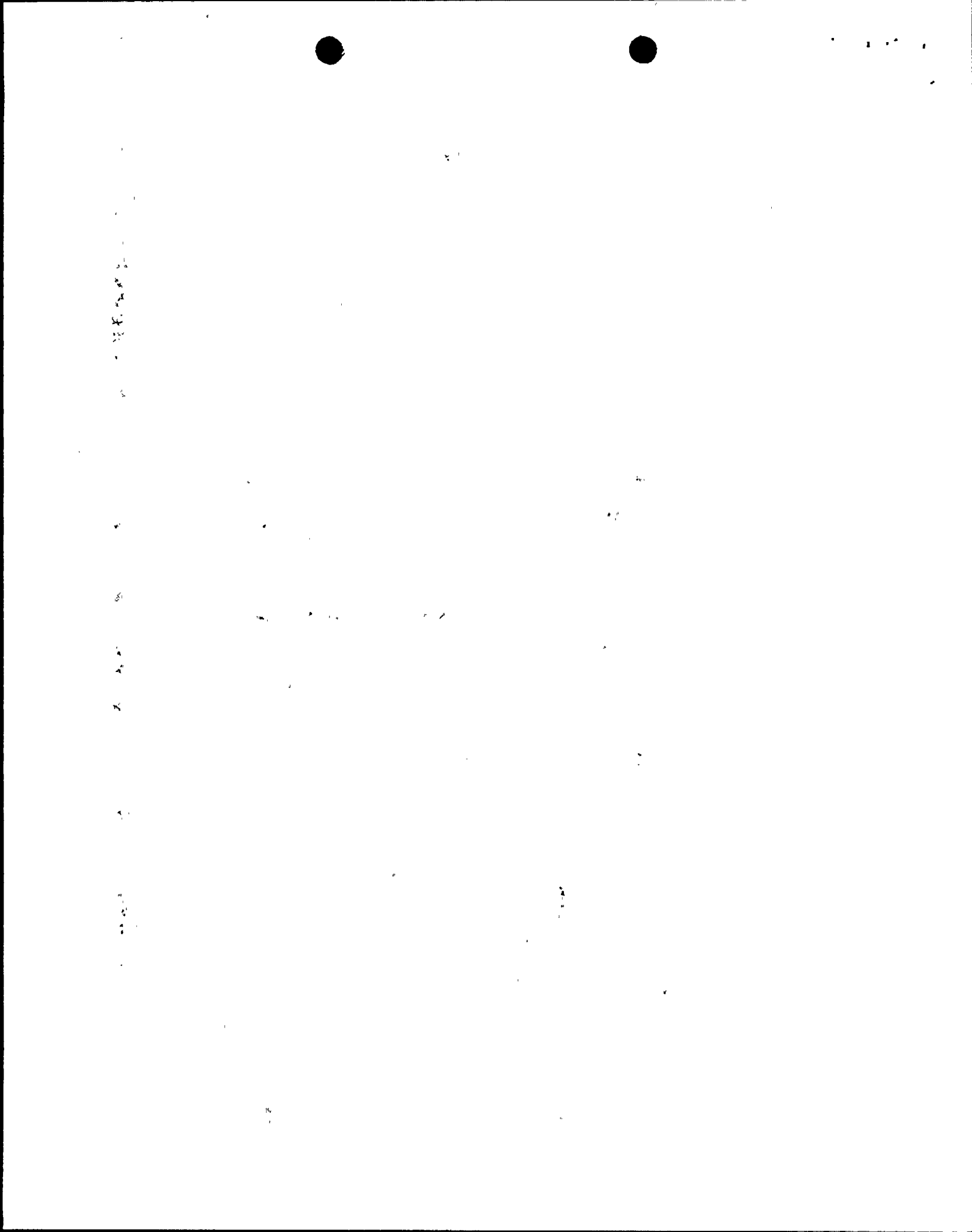
In the approximately 16 years since the environmental statement was issued, a number of modifications have been made to the BFN and the surrounding site and facilities. These modifications, in general, had the effect of improving the reliability and safety of the plant or reducing the environmental impact of plant operation. They include:

1. Facilities

Many modifications to the plant have been made since the original operating license has been issued. Significant modifications are described in the BFN updated Final Safety Analysis Report. Modifications made without prior NRC approval, in accordance with the provisions of 10 CFR 50.59, were reported on an annual basis to the Commission. Modifications requiring prior NRC approval were made following receipt of an NRC safety evaluation report. No modification was found to affect the conclusions of the BFN Final Environmental Statement.

2. Land Use

The use of the BFN site was considered in the FES for BFN unit 1, 2, and 3. The total area of land dedicated to the operation of the three units remains the same as originally contemplated, although the proportions used for parking, temporary storage, construction, permanent buildings, and fill areas have changed. The proposed extension does not create new or alter previously established land uses as discussed and/or evaluated in the BFN FSAR or its updates. Thus, no new land use impacts result from the proposed extension.



Potential Environmental, Health, and Safety Impacts (Cont'd)

3. Aquatic Impacts

No significant aquatic impacts have been observed as a result of thermal or chemical discharges attributable to BFN or from the withdrawal of cooling water. In addition, study methodologies have changed over the years to provide improved sampling programs in order to better quantify aquatic impacts from operations at BFN. Again, however, there is no evidence of significant aquatic impacts resulting from operations at BFN.

Thermal discharges from BFN are regulated through the National Pollutant Discharge Elimination System (NPDES) Permit. Data collected to date has indicated that the water quality and indigenous biota of Wheeler Reservoir are protected by the thermal limits specified in the NPDES Permit. Operation of BFN will continue to be in compliance with the NPDES Permit.

D. Physical Protection and Training

1. Security

BFN has implemented and will maintain in effect all provisions of the following commission approved documents, including amendments and changes made pursuant to the authority of 10 CFR 50.54(p). These approved documents consist of information withheld from public disclosure pursuant to 10 CFR 2.790 (d):

- a. "BFN Physical Security Plan" dated June 15, 1982 including revisions.
- b. "BFN Safeguards Contingency Plan" initially dated June 15, 1982 and as amended and submitted pursuant to 10 CFR 73.40.
- c. "BFN Guard Training and Qualification Plan" initially dated August 17, 1979 including revisions. This plan shall be implemented in accordance with 10 CFR 73.55 (b)(4). BFN may make changes to this plan without prior commission approval if the changes do not decrease the safeguards effectiveness of the plan. BFN will maintain records of and submit reports concerning such changes in the same manner as required for changes made to the Safeguards Contingency Plan pursuant to 10 CFR 50.54(p).



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2. Emergency Preparedness Plan

BFN has implemented and will maintain throughout the plant life emergency plans which meet the standards of 10 CFR 50.47(b) and the requirements in 10 CFR 50, Appendix E, including amendments and changes made pursuant to the authority of 10 CFR 50.54(q). BFN will continue to meet the requirements of 10 CFR 50.54(s), 50.54(t) and 50.54(u).

3. Fire Protection

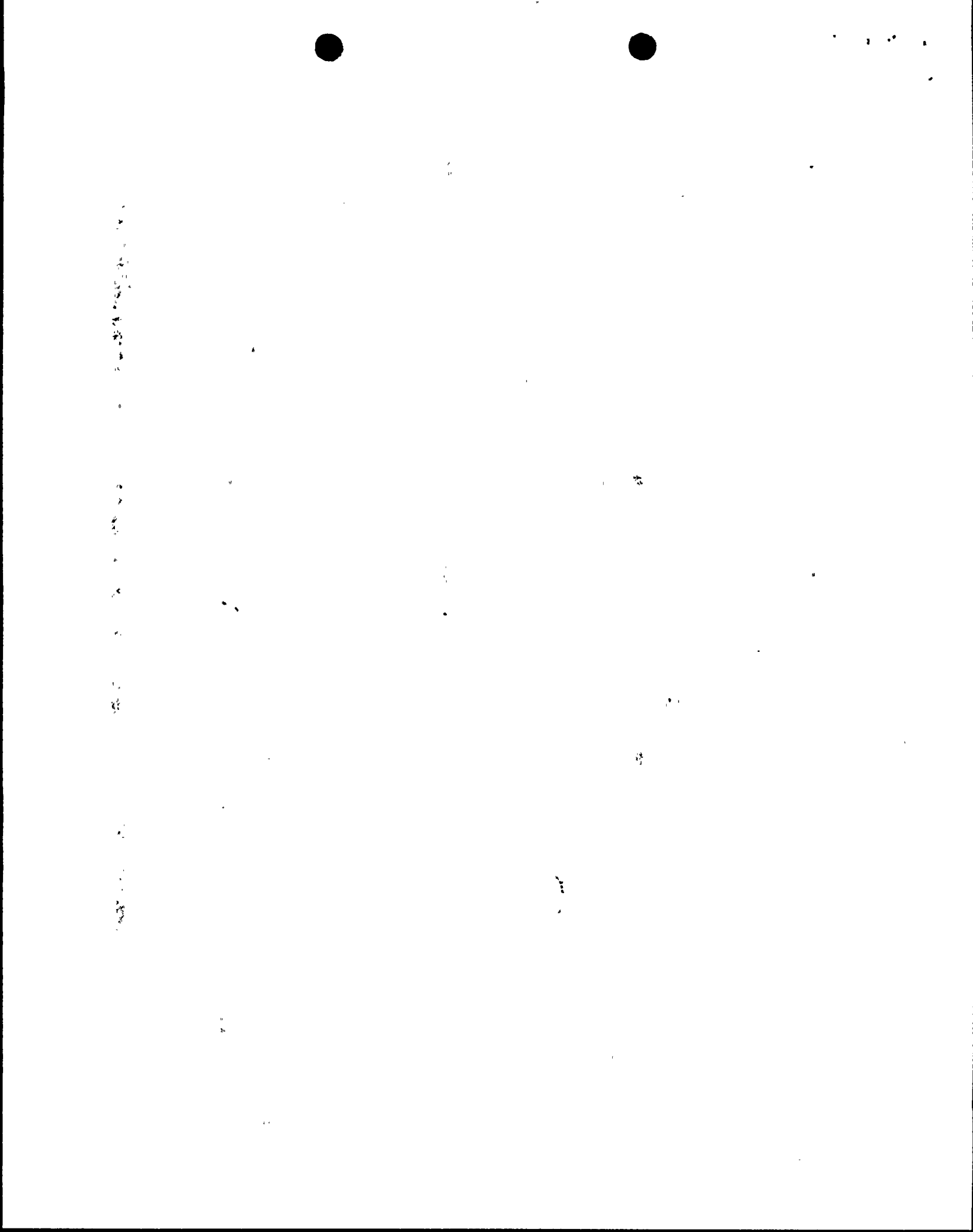
BFN is currently upgrading various plant fire protection systems as identified in various documents submitted to NRC. BFN will continue to maintain in effect an adequate fire protection program throughout plant life.

4. Training

BFN will maintain required training programs in accordance with 10 CFR 55, INPO and BFN Technical Specifications Chapter 6.0. These programs will be implemented throughout the life of BFN.

E. Environmental Assessment

The above information demonstrates that there are no significant adverse impacts on the quality of the human environment which result from the proposed extension. Although some additional impacts will occur as a result of normal plant operations, none of these effects are significant. For example, additional radioactive releases associated with normal operation will occur. However, the proposed extension does not alter the fact that such releases are negligible compared to natural background regardless of the period of operation. In addition, any adverse impacts have previously been analyzed and continue to be outweighed by the benefits attributable to extending operation.



II. EVALUATION OF PLANT DESIGN

TVA reviewed the safety analyses set forth in both the FSAR and facility technical specifications and the Commission's Safety Evaluation Report (SER), as supplemented (including the supplement for the full term operating license), for BFN. As discussed herein, structures, systems and components either are designed and maintained to perform at least for the full 40-year operating term, or are subject to detailed inspection, surveillance and maintenance requirements which provide assurance that abnormal degradation will be detected and corrective action taken. Only the reactor pressure vessel (RPV) is considered an essentially nonreplaceable plant component. TVA has determined that the RPV, consistent with its original design, will maintain its functional capability at least for the full 40-year operating term.

A. EQUIPMENT QUALIFICATION

The environmental qualification (EQ) program for electrical equipment operating in a harsh environment is described in section III.1 of the BFN Nuclear Performance Plan (NPP). The program ensures that EQ is maintained for electrical equipment necessary to prevent or mitigate the consequences of accidents that could result in offsite exposures comparable to the 10 CFR 100 guidelines. In addition, nonsafety-related electrical equipment whose failure under postulated harsh environmental conditions could prevent safety-related equipment from performing its intended safety function was also included in the program.

Aging analyses are being performed for all safety-related electrical equipment within the scope of 10 CFR 50.49 (harsh environment). The qualified life of the equipment or component will be incorporated within BFN's maintenance and replacement practices to ensure that the subject safety-related electrical equipment remains qualified and available to perform its intended safety function regardless of the overall age of the plant.

B. INSERVICE INSPECTION (ISI) AND INSERVICE TEST PROGRAMS (IST)

TVA has ongoing ISI and IST programs for BFN that are maintained in accordance with 10 CFR 50.55(a). The surveillance requirements for these programs are contained in the BFN Technical Specifications and are required to conform to Section XI of the ASME Boiler and Pressure Vessel Code. Where specific relief from the Section XI code was necessary, TVA has provided written relief requests to NRC for review and approval in accordance with 10 CFR 50.55(a)(g)(6)(i).



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EVALUATION OF PLANT DESIGN (cont'd)

In addition to the ISI and IST programs, the following BFN Technical Specifications also provide additional requirements for monitoring component aging and the cumulative effects of power operation over the life of the plant.

1. Technical Specification 3.6.A - Thermal and Pressurization Limits

Temperature and pressure changes during heatup, cooldown, and during inservice hydrostatic testing of the reactor pressure vessel are limited to protect against nonductile failure. These limits were established using the methods derived from Appendix G in Section III of the ASME Boiler and Pressure Vessel Code as required by 10 CFR 50 Appendix H. Reactor vessel irradiation specimens are removed and examined at specific intervals to determine changes in material properties. The results of the examinations are used to update the pressure and temperature limits.

2. Technical Specification 3.6.G - Structural Integrity

The ISI program for ASME Code Class 1, 2, and 3 components performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code ensure that the structural integrity of these components will be maintained at an acceptable level throughout the life of the plant.

3. Technical Specification 6.10.1g - Design Fatigue Usage Evaluation

A fatigue usage evaluation is performed for the reactor pressure vessel. The following locations are monitored: the feedwater nozzles, the shell near the water line, and the flange studs. Transients that occur during plant operation are reviewed and a cumulative fatigue usage factor for each location is determined. The cumulative fatigue usage factors for each location are reported in the annual operating report. The worst cumulative usage factor experienced at BFN is less than 0.3 as of December 31, 1987. This is well below the technical specification limit of 1.0. When the cumulative usage factor reaches a value of 1.0, an inservice inspection is included for the specific location at the next scheduled inspection (3 and 1/3 year interval) and 3 and 1/3 year intervals thereafter. An evaluation is performed in accordance with the ASME Section XI Code if any flaw indications are detected and the results are submitted to NRC in a special report.

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EVALUATION OF PLANT DESIGN (cont'd)

C. REACTOR PRESSURE VESSEL

The original design of the reactor pressure vessel (RPV) and associated internals considered the effects of 40 years of operation within the cyclic limits given in the BFN FSAR (Section 4.2). Those cyclic limits equate to 40 years of operation at full power (MW thermal) with a plant capacity factor of 80% (i.e., 32 EFPY), including expected operational and thermal transients. Further, the design of the RPV meets the intent of 10 CFR 50, Appendix A, GDC 31 "Fracture Prevention of Reactor Coolant Pressure Boundary". In addition, the FSAR provides that the reactor vessel shall not be exposed to more than 10^{19} nvt of neutrons with energies exceeding 1 mev (FSAR Section 4.2.5).

BFN technical specifications establish a reactor pressure vessel surveillance program to monitor the radiation-induced changes in the mechanical and impact properties of pressure vessel materials in accordance with 10 CFR Part 50, appendix H. Changes in the impact properties of the material contained in surveillance capsules placed inside the reactor vessel are evaluated at prescribed times using preirradiation and postirradiation Charpy impact test specimens. Changes in mechanical properties are evaluated by a similar comparison from tensile test specimens. Three (3) representative RPV materials are evaluated: base metal; weld metal; and heat-affected zone. A complete record of the chemical analyses, fabrication history, and impact and mechanical properties of all surveillance test materials is maintained. This program provides additional assurance that adverse cumulative effects of power operation will be detected.

In summary, the RPV vessel stress analyses includes appropriate consideration of thermal transient and fatigue effects which may be expected during the extended period of operation. Thus the RPV will not be adversely affected by the requested extension.

D. STRUCTURES AND SYSTEMS

BFN structures and systems are adequately designed to accommodate a forty year operating life. BFN has applicable surveillance and maintenance procedures in place to assure that any potential degradation of functional capabilities of facility structures and systems will be detected in a timely manner, without regard to the period of authorized operation.



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EVALUATION OF PLANT DESIGN (cont'd)

1. Structures

The original design basis for structures at BFN considered normal, operating static and dynamic loads, as well as accident loads due to design basis accidents and external phenomena such as earthquakes, hurricanes, and floods.

Industry experience has demonstrated that reinforced concrete and steel building structures that are properly maintained do not degrade significantly with time. The structures at BFN are well maintained to prevent against problems associated with corrosion. In addition, surveillance and maintenance measures provide assurance that any unexpected degradation of structures will be identified and corrected. Thus, the additional period of operation poses no safety concern which has not already been adequately addressed.

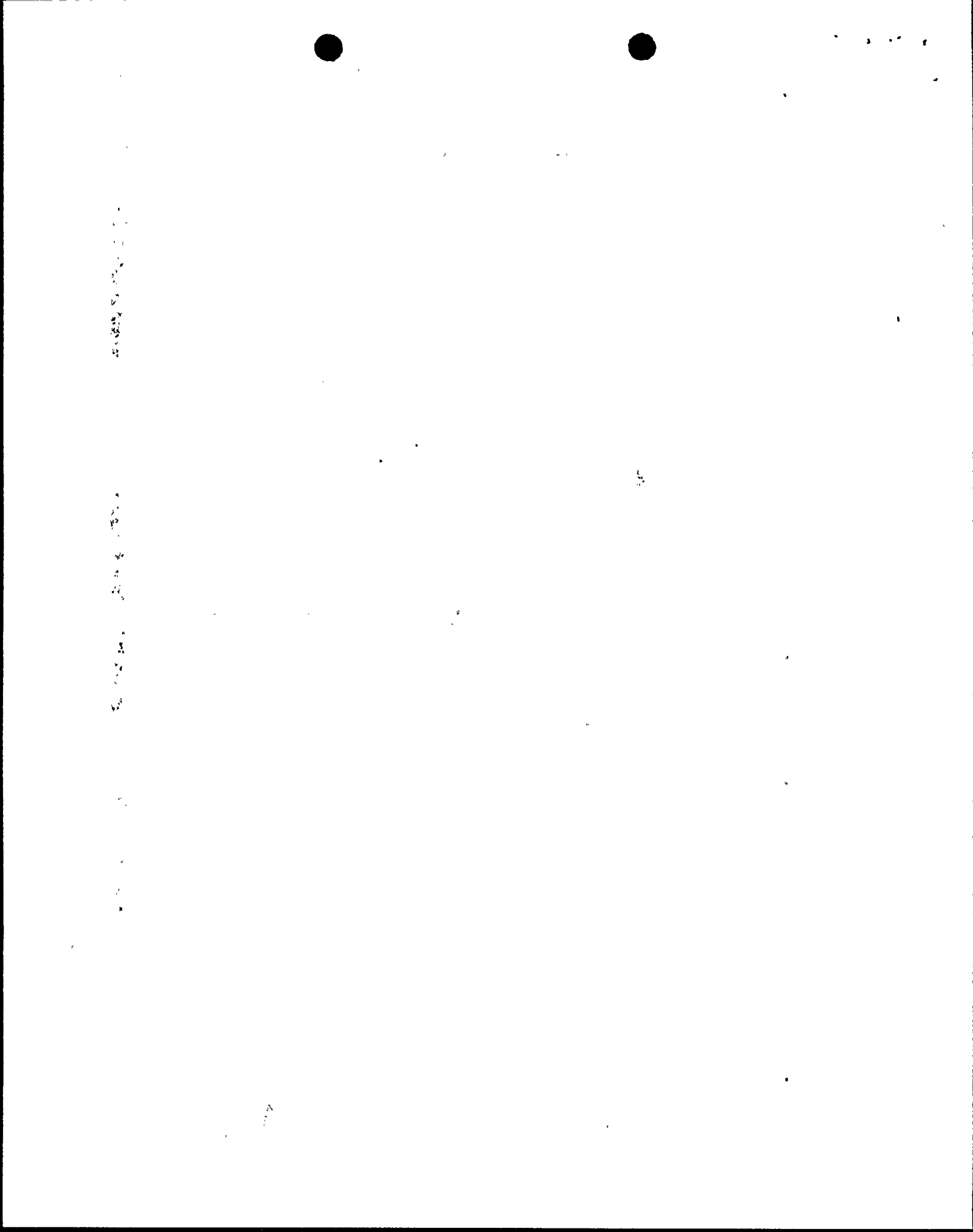
In addition, the containment structure has a formal inspection program that is structured to satisfy the intent of 10 CFR Part 50, Appendix J. The inspection program calls for three integrated leak rate tests (ILRT) in every ten year cycle. These tests include visual examination of both the interior and exterior surfaces for signs of deterioration which could affect structural integrity. The containment is also pressurized and leakage is measured to insure the design functions of the containment are maintained. These inspections are well documented and are at closely spaced intervals such that any deterioration affecting structural integrity will be noted and repaired.

Finally, corrosion of structures exposed to the outside environment are also monitored. If any signs of deterioration are identified; appropriate repairs would be made at that time.

Based on the above considerations, the extension of the operation license for BFN should have no adverse impact on the safety of structures.

2. Systems

BFN has numerous programs and procedures to provide assurance that degradation of those systems can be detected and corrected to assure necessary performance and availability throughout plant life.



EVALUATION OF PLANT DESIGN (cont'd)

One such program identifies the measures BFN is taking to mitigate Intergranular Stress Corrosion Cracking (IGSCC). This program will provide assurance of continued long-term piping integrity and reliability for each unit. The mitigation plans for each unit have been prepared in accordance with NRC positions as stated in Generic Letter 88-01 "NRC Position on IGSCC in BWR Austenitic Stainless Steel Piping." This plan addresses the three factors that cause IGSCC which consist of (1) replacement of material with resistant material when replacement is required; (2) stress improvement of welds, and (3) water chemistry improvement. BFN's detailed response and long-term IGSCC plans were submitted to NRC by TVA letter dated August 1, 1988 (L44 880801 804).

In addition to the above programs, BFN technical specifications set forth limiting conditions for operation and surveillance requirements concerning the prevention of equipment degradation, including equipment and components within the reactor pressure boundary. In accordance with technical specifications, transient and operational cycles are recorded, maintained and evaluated over the duration of the operating license. Also in-service testing and in-service inspection (IST/ISI, respectively) programs are conducted in accordance with ASME Code Section XI, as well as performance of periodic surveillance (tests, visual inspections, etc.) of safety related equipment normally in standby, programmed periodic maintenance, and trending of periodic test results. Continuation of these provisions provide assurance that potential fatigue of those components will be detected and corrected in a timely manner.

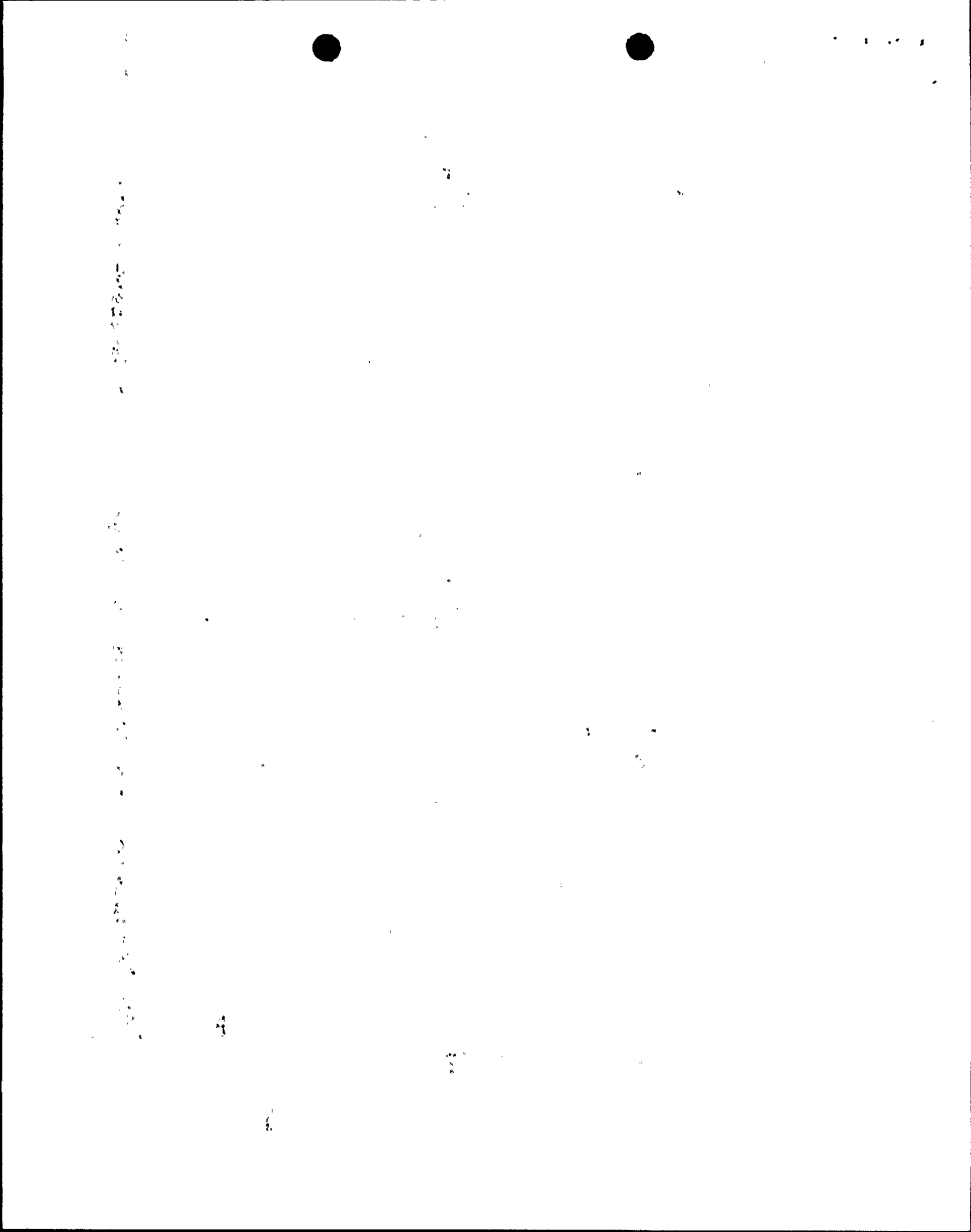


TABLE 1

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 1

<u>CYCLE</u>	<u>STARTUP DATE</u>	<u>SHUTDOWN DATE</u>	<u>ACTUAL OPERATING DAYS</u>	<u>SCHEDULED OUTAGE DAYS</u>	<u>CYCLE LENGTH DAYS</u>	<u>EQUIVALENT FULL POWER DAYS</u>	<u>CYCLE AVAILABILITY FACTOR</u>	<u>CYCLE CAPACITY FACTOR</u>	<u>THERMAL OUTPUT TBTU</u>	<u>NEW ELECTRICAL OUTPUT MWH</u>	<u>GROSS ELECTRICAL OUTPUT MWH</u>
1	10/15/1973	9/13/1977	1429	124	1553	526.755	0.3686	0.3392	142.085	13463944	13880911
2	1/15/1978	11/26/1978	315	53	368	232.894	0.7393	0.6329	62.820	5952810	6137163
3	1/18/1979	1/02/1980	349	80	429	298.154	0.8543	0.6950	80.423	7620866	7856878
4	3/22/1980	4/10/1981	384	174	558	333.967	0.8697	0.5985	90.083	8536246	8800606
5	10/01/1981	4/16/1983	562	261	823	478.768	0.8519	0.5817	129.141	12237373	12616354
6	1/02/1984	3/19/1985	442	3497	3939	371.426	0.8403	0.0943	100.187	9493698	9787710
7	10/15/1994	5/18/1996	581	100	681	399.023	0.6868	0.5859	107.631	10199090	10514947
8	8/26/1996	3/14/1998	565	100	665	398.994	0.7062	0.6000	107.623	10198332	10514166
9	6/22/1998	1/08/2000	565	100	665	398.971	0.7061	0.6000	107.617	10197764	10513580
10	4/17/2000	11/03/2001	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
11	2/11/2002	8/30/2003	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
12	12/08/2003	6/25/2005	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
13	10/03/2005	4/21/2007	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
14	7/30/2007	2/14/2009	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
15	5/25/2009	12/11/2010	565	100	665	398.968	0.7061	0.6000	107.616	10797669	10513482
16	3/21/2011	10/08/2012	567	100	667	400.002	0.7055	0.5997	107.895	10224107	10540739
17	1/16/2013	8/06/2014	567	100	667	400.354	0.7061	0.6002	107.990	10233109	10550020
18	11/14/2014	6/01/2016	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
19	9/09/2016	3/28/2018	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
20	7/06/2018	1/22/2020	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
21	5/01/2020	11/17/2021	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
22	2/25/2022	9/13/2023	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
23	12/22/2023	7/09/2025	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
24	10/17/2025	5/05/2027	565	100	665	399.157	0.7065	0.6002	107.667	10202502	10518464
25	8/13/2027	2/28/2029	565	0	565	399.157	0.7065	0.7065	107.667	10202502	10518464

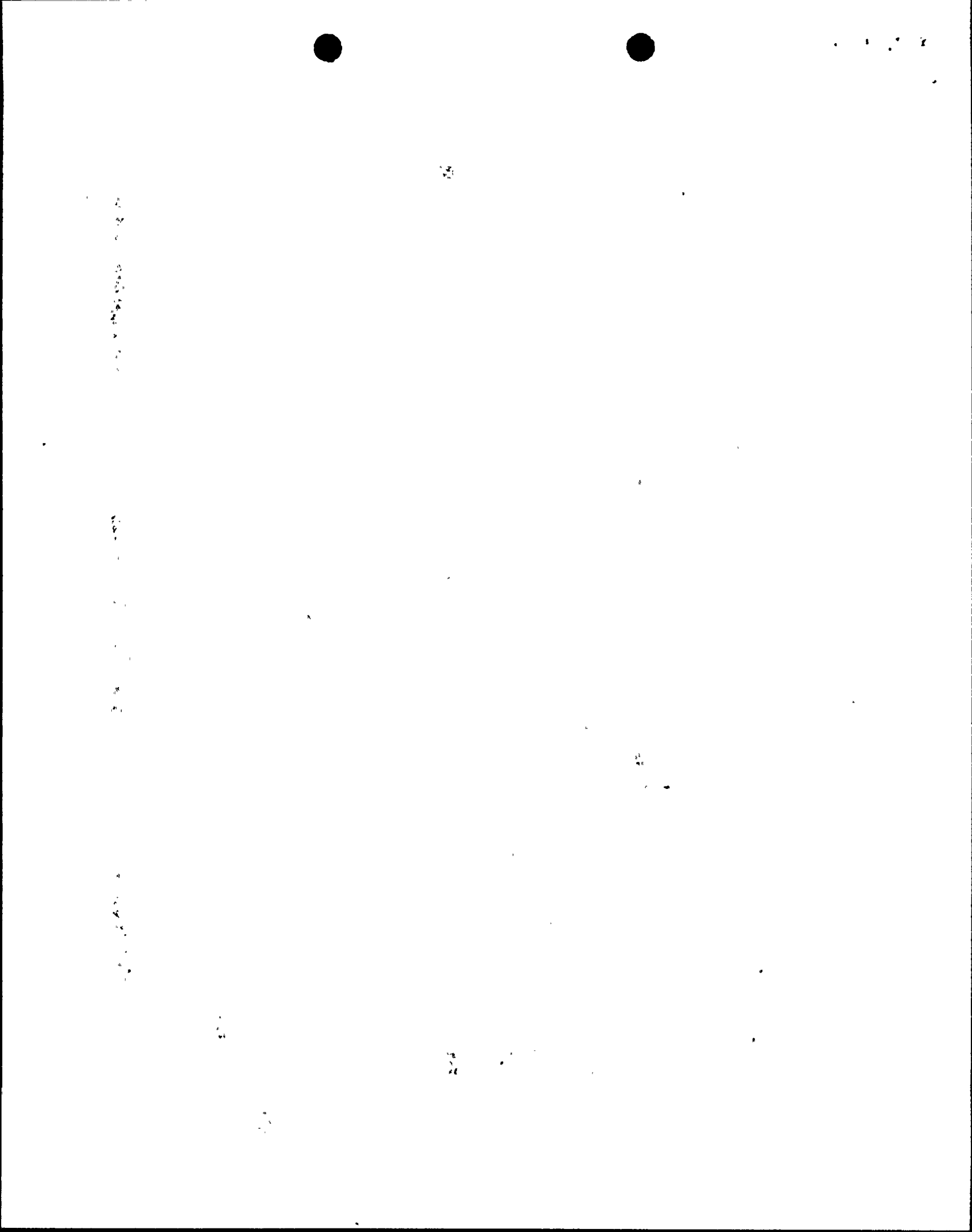


TABLE 1

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 2

CYCLE	STARTUP DATE	SHUTDOWN DATE	ACTUAL OPERATING DAYS	SCHEDULED OUTAGE DAYS	CYCLE LENGTH DAYS	EQUIVALENT FULL POWER DAYS	CYCLE AVAILABILITY FACTOR	CYCLE CAPACITY FACTOR	THERMAL OUTPUT TBTU	NEW ELECTRICAL OUTPUT MWH	GROSS ELECTRICAL OUTPUT MWH
1	8/28/1974	3/18/1978	1298	101	1399	475.279	0.3662	0.3397	128.200	12148204	12524424
2	6/27/1978	4/27/1979	304	35	339	263.750	0.8676	0.7780	71.143	6741495	6950274
3	6/01/1979	9/05/1980	462	79	541	370.013	0.8009	0.6839	99.806	9457595	9750488
4	11/23/1980	7/30/1982	614	233	847	498.483	0.8119	0.5885	134.459	12741306	13135893
5	3/20/1983	9/15/1984	545	1552	2097	414.905	0.7613	0.1979	111.915	10605041	10933470
6	12/15/1988	9/19/1990	643	200	843	436.230	0.6784	0.5175	117.667	11150099	11495408
7	4/07/1991	12/19/1992	622	100	722	432.956	0.6961	0.5997	116.784	11066427	11409144
8	3/29/1993	10/15/1994	565	100	665	398.994	0.7062	0.6000	107.623	10198332	10514166
9	1/23/1995	8/10/1996	565	100	665	398.971	0.7061	0.6000	107.617	10197764	10513580
10	11/18/1996	6/06/1998	565	100	665	398.971	0.7061	0.6000	107.617	10197764	10513580
11	9/14/1998	4/01/2000	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
12	7/10/2000	1/26/2002	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
13	5/06/2002	11/22/2003	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
14	3/01/2004	9/17/2005	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
15	12/26/2005	7/14/2007	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
16	10/22/2007	5/09/2009	565	100	665	398.956	0.7061	0.5999	107.613	10197385	10513189
17	8/17/2009	3/05/2011	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
18	6/13/2011	12/29/2012	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
19	4/08/2013	10/25/2014	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
20	2/02/2015	8/20/2016	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
21	11/28/2016	6/16/2018	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
22	9/24/2018	4/11/2020	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
23	7/20/2020	2/05/2022	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
24	5/16/2022	12/02/2023	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
25	3/11/2024	9/27/2025	565	0	565	399.960	0.7061	0.7061	107.614	10197479	10513286

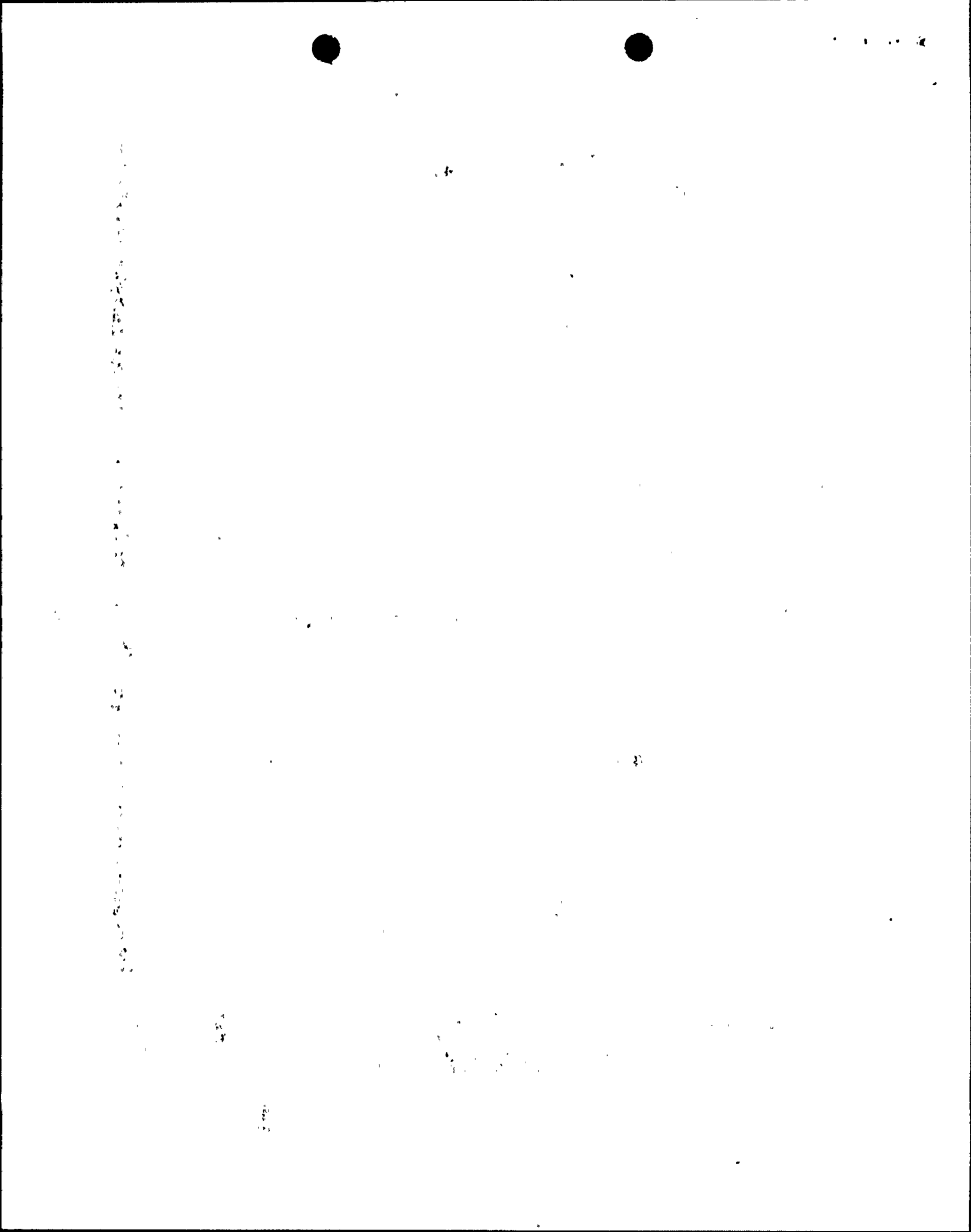


TABLE 1

BROWNS FERRY NUCLEAR POWER PLANT - UNIT 3

CYCLE	STARTUP DATE	SHUTDOWN DATE	ACTUAL OPERATING DAYS	SCHEDULED OUTAGE DAYS	CYCLE LENGTH DAYS	EQUIVALENT FULL POWER DAYS	CYCLE AVAILABILITY FACTOR	CYCLE CAPACITY FACTOR	THERMAL OUTPUT TBTU	NEW ELECTRICAL OUTPUT MWH	GROSS ELECTRICAL OUTPUT MWH
1	8/19/1976	9/08/1978	750	75	825	540.725	0.7210	0.6554	145.853	13820999	14249023
2	11/22/1978	8/24/1979	275	106	381	225.376	0.8195	0.5915	60.792	5760637	5939039
3	12/08/1979	11/23/1980	351	56	407	284.741	0.8112	0.6996	76.805	7278025	7503419
4	1/18/1981	10/30/1981	285	164	449	246.941	0.8665	0.5500	66.609	6311854	6507327
5	4/12/1982	9/06/1983	512	450	962	410.052	0.8009	0.4262	110.606	10481001	10805588
6	11/29/1984	3/22/1994	3400	100	3500	482.405	0.1419	0.1378	130.122	12330333	12712192
7	6/30/1994	1/16/1996	565	100	665	398.994	0.7062	0.6000	107.623	10198332	10514166
8	4/25/1996	11/11/1997	565	100	665	398.982	0.7062	0.6000	107.620	10198048	10513873
9	2/19/1998	9/07/1999	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
10	12/16/1999	7/03/2001	565	100	665	398.960	0.7061	0.5999	107.614	10197479	10513286
11	10/11/2001	4/29/2003	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
12	8/07/2003	2/22/2005	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
13	6/02/2005	12/19/2006	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
14	3/29/2007	10/14/2008	565	100	665	398.964	0.7061	0.5999	107.615	10197574	10513384
15	1/22/2009	8/10/2010	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
16	11/18/2010	6/05/2012	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
17	9/13/2012	4/01/2014	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
18	7/10/2014	1/26/2016	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
19	5/05/2016	11/21/2017	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
20	3/01/2018	9/17/2019	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
21	12/26/2019	7/13/2021	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
22	10/21/2021	5/09/2023	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
23	8/17/2023	3/04/2025	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
24	6/12/2025	12/29/2026	565	100	665	398.968	0.7061	0.6000	107.616	10197669	10513482
25	4/08/2027	10/24/2028	565	0	565	398.968	0.7061	0.7061	107.616	10197669	10513482



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TABLE 2
BFN UNIT 1

Projected Occupational Exposure
Man-Rem*

<u>YEAR</u>	<u>OUTAGE</u>	<u>NON-OUTAGE</u>	<u>TOTAL</u>
2007	400	100	500
2008	No outage	240	240
2009	500	175	675
2010	100	225	325
2011	400	185	585
2012	425	185	610
2013	75	230	305

* Assumes 20 man-rem per month during non-outage and 150 man-rem per month during outage.



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Table 2
BFN Unit 2
.. Projected Occupational Exposure
Man-Rem

<u>YEAR</u>	<u>OUTAGE</u>	<u>NON-OUTAGE</u>	<u>TOTAL</u>
2007	500	70	570
2008	No outage	240	240
2009	500	175	675
2010	No outage	240	240
2011	500	175	675
2012	No outage	240	240
2013	500	175	675
2014	150	220	370



Table 2
BFN Unit 3
Projected Occupational Exposure
Man-Rem

<u>YEAR</u>	<u>OUTAGE</u>	<u>NON-OUTAGE</u>	<u>TOTAL</u>
2008	375	50	425
2009	125	225	350
2010	500	175	675
2011	No outage	240	240
2012	500	175	675
2013	No outage	240	240
2014	500	175	675
2015	No outage	240	240
2016	500	175	675



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TABLE 3

PLANT: BROWNS FERRY 1, 2, 3 (BWR) NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
1982

WORK & JOB FUNCTION	NUMBER OF PERSONNEL (>100 M-REM)			TOTAL PERSONS	TOTAL MAN-REMS			TOTAL MAN-REMS
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS		STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS	
REACTOR OPERATIONS & SURV.								
MAINTENANCE PERSONNEL	48	112	23		16.600	29.600	16.500	
OPERATING PERSONNEL	90	0	0		22.000	0.0	0.0	
HEALTH PHYSICS PERSONNEL	25	0	58		7.700	0.0	26.900	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	43	0		0.0	21.600	0.0	
TOTAL	163	155	81	399	46.300	51.200	43.400	140.900
ROUTINE MAINTENANCE								
MAINTENANCE PERSONNEL	324	936	195		184.800	696.100	125.600	
OPERATING PERSONNEL	161	0	0		75.200	0.0	0.0	
HEALTH PHYSICS PERSONNEL	30	0	68		13.000	0.0	41.400	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	93	0		0.0	45.000	0.0	
TOTAL	515	1029	263	1807	273.000	741.100	167.000	1181.100
IN-SERVICE INSPECTION								
MAINTENANCE PERSONNEL	0	0	0		0.0	0.700	0.500	
OPERATING PERSONNEL	0	0	0		0.0	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	0		0.0	0.0	0.0	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	0	0		0.0	0.0	0.0	
TOTAL	0	0	0	0	0.0	0.700	0.500	1.200
SPECIAL MAINTENANCE								
MAINTENANCE PERSONNEL	32	623	95		8.800	317.000	31.000	
OPERATING PERSONNEL	8	0	0		1.300	0.0	0.0	
HEALTH PHYSICS PERSONNEL	3	0	11		.400	0.0	3.200	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	36	0		0.0	13.00	0.0	
TOTAL	43	659	106	808	10.500	330.100	34.220	374.800
WASTE PROCESSING								
MAINTENANCE PERSONNEL	26	3	0		9.300	1.000	0.0	
OPERATING PERSONNEL	15	0	0		6.800	0.0	0.0	
HEALTH PHYSICS PERSONNEL	5	0	2		1.700	0.0	0.900	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	0	0		0.0	0.0	0.0	
TOTAL	46	3	2	51	18.700	1.000	0.900	20.600
REFUELING								
MAINTENANCE PERSONNEL	0	20	4		0.0	3.600	1.000	
OPERATING PERSONNEL	19	0	0		6.300	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	0		0.0	0.0	0.0	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	0	0		0.0	0.0	0.0	
TOTAL	19	20	4	43	6.300	3.600	1.000	10.900
TOTAL BY JOB FUNCTION								
MAINTENANCE PERSONNEL	430	1694	317	2441	219.500	1048.000	174.600	1442.100
OPERATING PERSONNEL	293	0	0	293	112.200	0.0	0.0	112.200
HEALTH PHYSICS PERSONNEL	63	0	139	202	22.800	0.0	72.400	95.200
SUPERVISORY PERSONNEL	0	0	0	0	0.0	0.0	0.0	0.0
ENGINEERING PERSONNEL	0	172	0	172	0.300	79.700	0.0	80.000
GRAND TOTAL	786	1866	456	3108	354.800	1127.700	247.000	1729.500

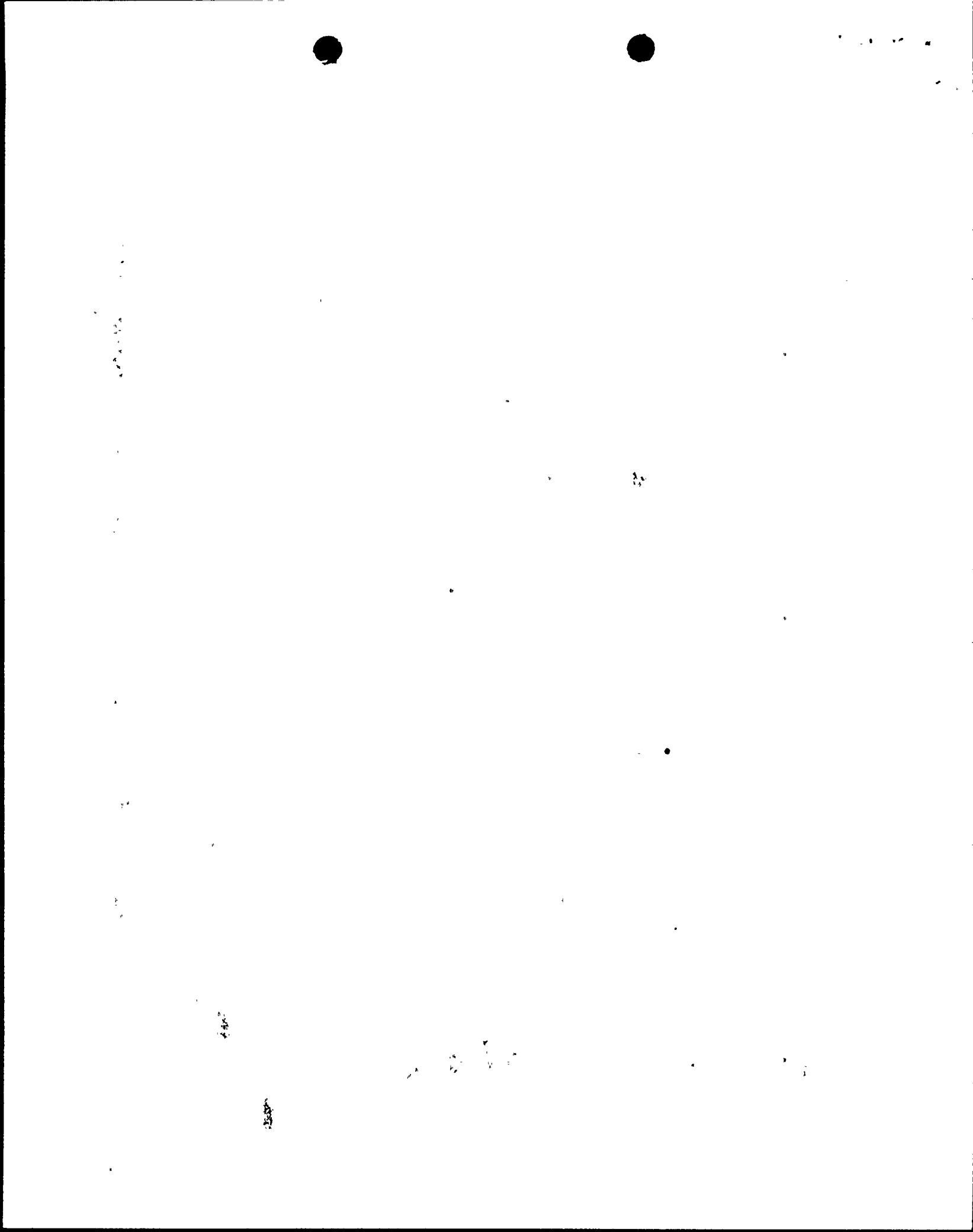


TABLE 3

PLANT: BROWNS FERRY 1, 2, 3 (BWR) NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
1983

WORK & JOB FUNCTION	NUMBER OF PERSONNEL (>100 M-REM)			TOTAL PERSONS	TOTAL MAN-REMS			TOTAL MAN-REMS
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS		STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS	
REACTOR OPERATIONS & SURV.								
MAINTENANCE PERSONNEL	80	169	29		17.400	41.500	14.900	
OPERATING PERSONNEL	148	0	0		42.600	0.0	0.0	
HEALTH PHYSICS PERSONNEL	34	0	103		15.300	0.0	54.300	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	73	0		0.0	24.600	0.0	
TOTAL	262	242	132	636	75.300	66.100	69.200	210.600
ROUTINE MAINTENANCE								
MAINTENANCE PERSONNEL	290	1090	254		154.900	940.300	167.100	
OPERATING PERSONNEL	148	0	0		57.000	0.0	0.0	
HEALTH PHYSICS PERSONNEL	33	0	109		14.500	0.0	57.900	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	79	0		0.0	38.400	0.0	
TOTAL	471	1169	363	2003	226.400	978.700	225.000	1430.100
IN-SERVICE INSPECTION								
MAINTENANCE PERSONNEL	11	95	40		5.600	46.400	51.200	
OPERATING PERSONNEL	2	0	0		0.400	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	10		0.0	0.0	2.600	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	2	0		0.0	0.200	0.0	
TOTAL	13	97	50	160	6.000	46.600	53.800	106.400
SPECIAL MAINTENANCE								
MAINTENANCE PERSONNEL	35	753	261		12.600	406.500	319.900	
OPERATING PERSONNEL	11	0	0		2.200	0.0	0.0	
HEALTH PHYSICS PERSONNEL	10	0	48		2.700	0.0	23.300	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	29	0		0.0	8.200	0.0	
TOTAL	56	782	309	1147	17.500	414.700	343.200	775.400
WASTE PROCESSING								
MAINTENANCE PERSONNEL	25	6	0		9.100	1.700	0.0	
OPERATING PERSONNEL	10	0	0		6.800	0.0	0.0	
HEALTH PHYSICS PERSONNEL	5	0	2		1.700	0.0	1.200	
SUPERVISORY PERSONNEL	0	0	0		0.00	0.0	0.0	
ENGINEERING PERSONNEL	0	0	0		0.00	0.0	0.0	
TOTAL	40	6	2	48	17.600	1.700	1.200	20.500
REFUELING								
MAINTENANCE PERSONNEL	3	71	2		0.400	13.100	0.800	
OPERATING PERSONNEL	25	0	0		9.600	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	7		0.0	0.0	1.2	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	6	0		0.0	1.2	0.0	
TOTAL	28	77	9	114	10.0	14.300	2.0	26.300
TOTAL BY JOB FUNCTION								
MAINTENANCE PERSONNEL	444	2184	586	3214	200.0	1449.500	553.900	2203.400
OPERATING PERSONNEL	344	0	0	344	118.600	0.0	0.0	118.600
HEALTH PHYSICS PERSONNEL	82	0	279	361	34.200	0.0	140.500	174.700
SUPERVISORY PERSONNEL	0	0	0	0	0.0	0.0	0.0	0.0
ENGINEERING PERSONNEL	0	189	0	189	0.000	72.600	0.0	72.600
GRAND TOTAL	870	2373	865	4108	352.800	1522.800	694.400	2569.300

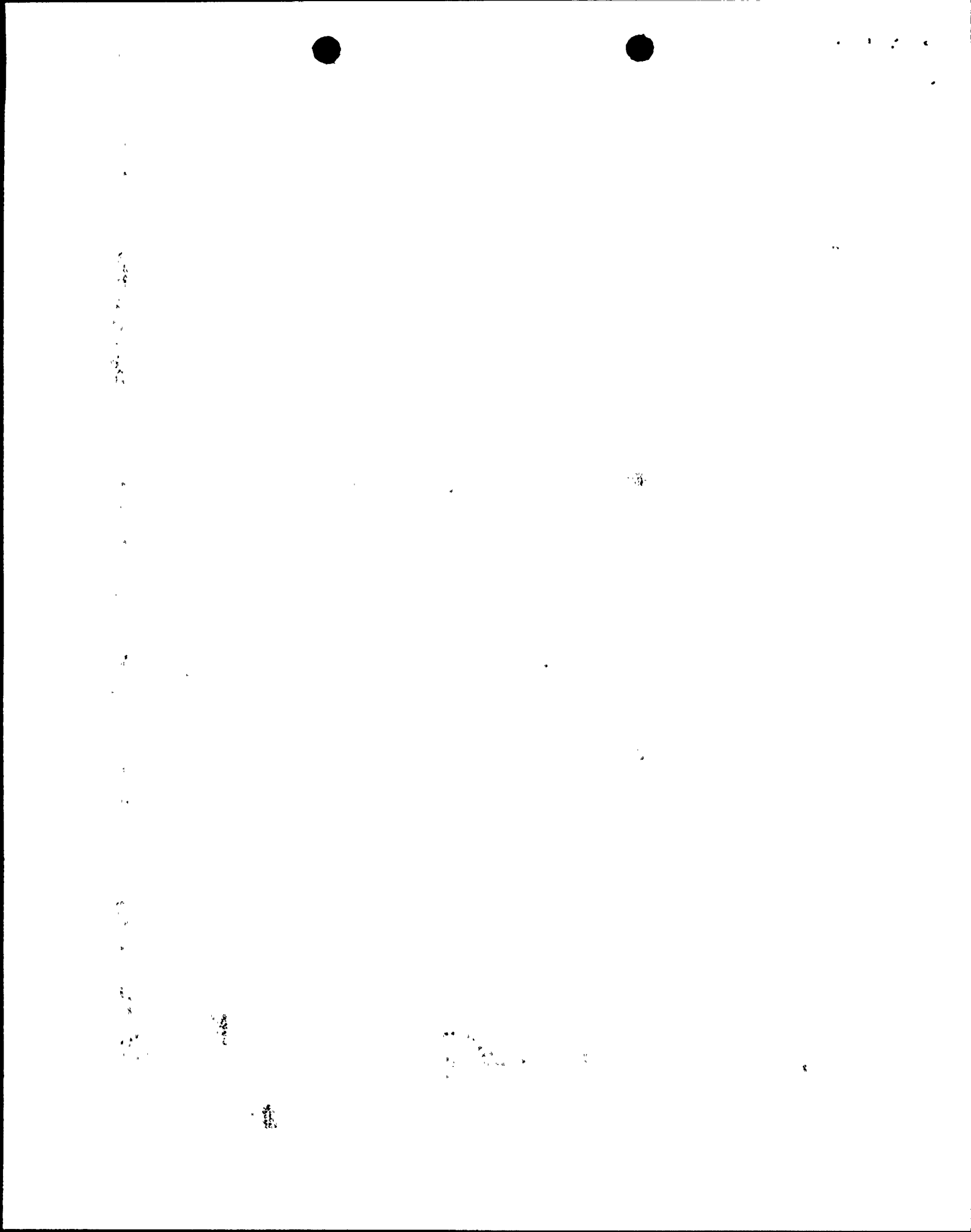


TABLE 3

PLANT: BROWNS FERRY 1, 2, 3 (BWR) NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
1984

WORK & JOB FUNCTION	NUMBER OF PERSONNEL (>100 M-REM)			TOTAL PERSONS	TOTAL MAN-REMS			TOTAL MAN-REMS
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS		STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT & OTHERS	
REACTOR OPERATIONS & SURV.								
MAINTENANCE PERSONNEL	45	43	0		8.200	12.400	0.0	
OPERATING PERSONNEL	121	0	0		30.300	0.0	0.0	
HEALTH PHYSICS PERSONNEL	62	3	95		29.000	0.500	60.500	
SUPERVISORY PERSONNEL	1	56	16		0.100	17.900	4.000	
ENGINEERING PERSONNEL	0	24	0		0.0	4.700	0.0	
TOTAL	229	126	111	466	67.600	35.500	64.500	167.600
ROUTINE MAINTENANCE								
MAINTENANCE PERSONNEL	452	557	0		252.000	317.400	0.0	
OPERATING PERSONNEL	95	0	0		24.300	0.0	0.0	
HEALTH PHYSICS PERSONNEL	49	2	96		14.300	0.300	53.900	
SUPERVISORY PERSONNEL	0	13	47		0.0	4.200	26.100	
ENGINEERING PERSONNEL	0	28	0		0.0	11.200	0.0	
TOTAL	596	600	143	1339	290.600	333.100	80.000	703.700
IN-SERVICE INSPECTION								
MAINTENANCE PERSONNEL	7	0	0		0.806	0.0	0.0	
OPERATING PERSONNEL	0	0	0		0.0	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	0		0.0	0.0	0.0	
SUPERVISORY PERSONNEL	0	14	0		0.0	2.800	0.0	
ENGINEERING PERSONNEL	0	0	0		0.0	0.0	0.0	
TOTAL	7	14	0	21	0.806	2.800	0.0	3.606
SPECIAL MAINTENANCE								
MAINTENANCE PERSONNEL	39	385	1		16.600	160.800	0.200	
OPERATING PERSONNEL	0	0	0		0.0	0.0	0.0	
HEALTH PHYSICS PERSONNEL	13	0	41		4.600	0.0	29.300	
SUPERVISORY PERSONNEL	1	61	177		0.100	79.200	216.300	
ENGINEERING PERSONNEL	0	13	0		0.0	4.300	0.0	
TOTAL	53	459	219	731	21.300	244.300	245.800	511.400
WASTE PROCESSING								
MAINTENANCE PERSONNEL	23	0	0		7.300	0.0	0.0	
OPERATING PERSONNEL	11	0	0		5.400	0.0	0.0	
HEALTH PHYSICS PERSONNEL	4	0	3		1.300	0.0	3.500	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	0	0		0.0	0.0	0.0	
TOTAL	38	0	3	41	14.000	0.0	3.500	17.500
Refueling								
MAINTENANCE PERSONNEL	2	31	0		1.200	2.00	6.200	
OPERATING PERSONNEL	15	0	0		4.200	0.0	0.0	
HEALTH PHYSICS PERSONNEL	0	0	7		0.0	0.0	1.500	
SUPERVISORY PERSONNEL	0	0	0		0.0	0.0	0.0	
ENGINEERING PERSONNEL	0	1	0		0.0	0.100	0.0	
TOTAL	17	32	7	56	5.400	6.300	1.500	13.200
TOTAL BY JOB FUNCTION								
MAINTENANCE PERSONNEL	586	1016	1	1585	286.106	496.800	0.200	783.106
OPERATING PERSONNEL	242	0	0	242	64.200	0.0	0.0	64.200
HEALTH PHYSICS PERSONNEL	128	5	242	375	49.200	0.800	148.700	198.700
SUPERVISORY PERSONNEL	2	144	240	386	0.200	104.100	246.400	350.700
ENGINEERING PERSONNEL	0	66	0	66	0.0	20.300	0.0	20.300
TOTAL	940	1231	483	2654	399.706	622.000	395.300	1417.006

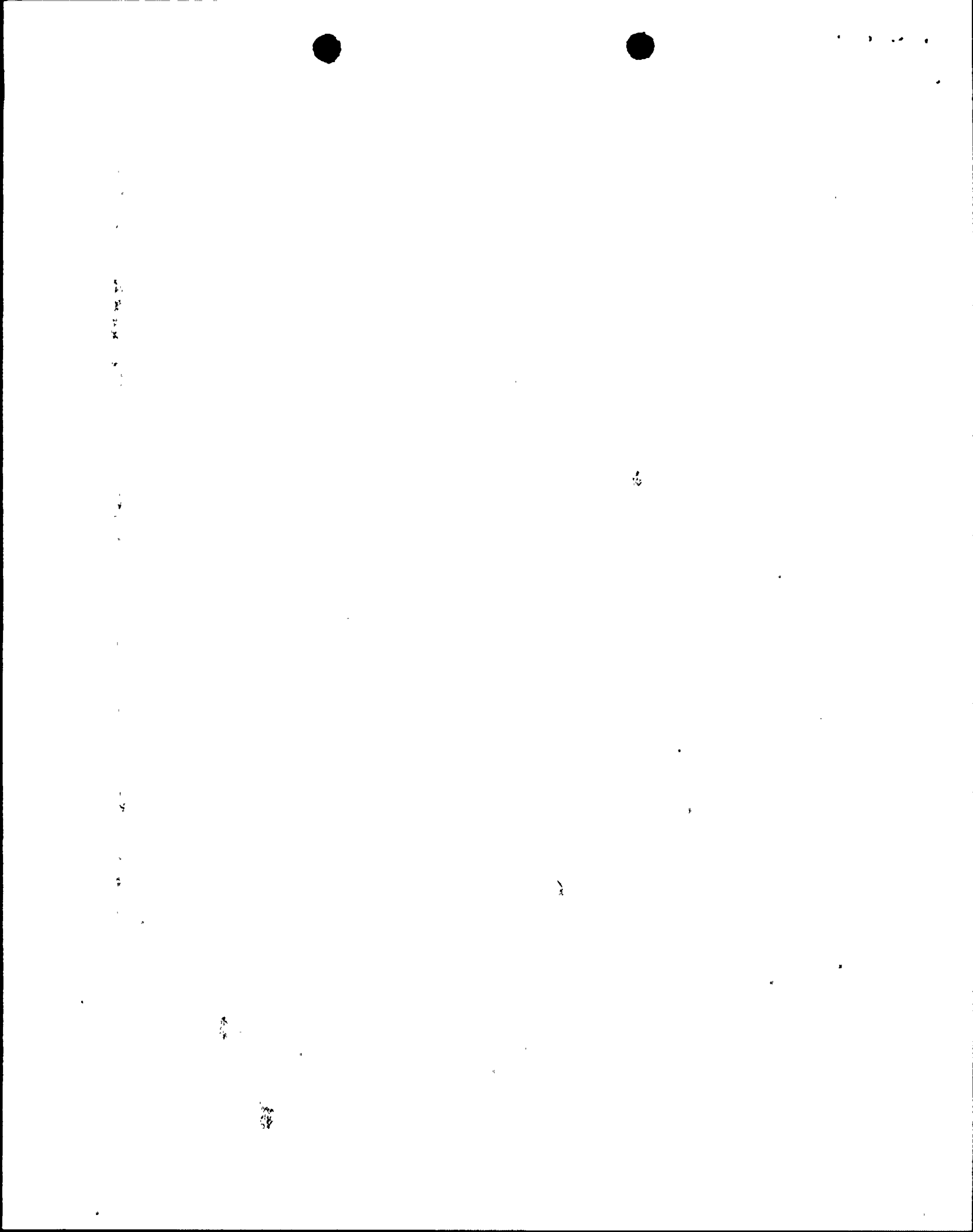


TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
PLANT: BROWNS FERRY NUCLEAR PLANT 1985

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
-----MO=REACTOR OPS SURVEILLANCE-----								
MAINTENANCE PERSONNEL	738	48	30	816	35.749	3.931	2.306	41.986
OPERATING PERSONNEL	77	2	0	79	15.936	0.280	0.000	16.216
HEALTH PHYSICS PERSONNEL	96	4	111	211	26.681	0.859	42.411	69.951
SUPERVISORY PERSONNEL	16	0	0	16	2.146	0.000	0.000	2.146
ENGINEERING PERSONNEL	133	12	44	189	17.519	1.792	6.103	25.414
<u>MO</u>	<u>1060</u>	<u>66</u>	<u>185</u>	<u>1311</u>	<u>98.031</u>	<u>6.862</u>	<u>50.820</u>	<u>155.713</u>
-----MO=ROUTINE MAINTENANCE-----								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	854	44	94	992	249.317	4.844	28.191	232.352
OPERATING PERSONNEL	75	2	0	77	5.654	0.007	0.000	5.661
HEALTH PHYSICS PERSONNEL	92	3	109	204	11.692	0.522	19.894	32.108
SUPERVISORY PERSONNEL	15	1	0	16	1.464	0.000	0.000	1.464
ENGINEERING PERSONNEL	137	12	43	192	25.903	0.865	2.604	29.372
<u>MO</u>	<u>1173</u>	<u>62</u>	<u>246</u>	<u>1481</u>	<u>294.030</u>	<u>6.238</u>	<u>50.689</u>	<u>350.957</u>
-----MO=SPECIAL MAINTENANCE-----								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	664	73	126	863	175.136	41.738	98.323	315.197
OPERATING PERSONNEL	31	0	0	31	1.147	0.000	0.000	1.147
HEALTH PHYSICS PERSONNEL	56	0	100	156	4.440	0.000	29.805	34.245
SUPERVISORY PERSONNEL	13	1	0	14	2.699	0.314	0.000	3.013
ENGINEERING PERSONNEL	96	5	22	123	16.327	0.273	4.732	21.332
<u>MO</u>	<u>860</u>	<u>79</u>	<u>248</u>	<u>1187</u>	<u>199.749</u>	<u>42.325</u>	<u>132.860</u>	<u>374.934</u>
-----MO=WASTE PROCESSING-----								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	129	0	6	135	4.613	0.000	0.560	5.173
OPERATING PERSONNEL	13	0	0	13	2.089	0.000	0.000	2.089
HEALTH PHYSICS PERSONNEL	62	1	42	105	1.859	0.000	0.813	2.672
SUPERVISORY PERSONNEL	1	0	0	1	0.000	0.000	0.000	0.000
ENGINEERING PERSONNEL	3	0	4	7	0.006	0.000	0.560	0.566
<u>MO</u>	<u>208</u>	<u>1</u>	<u>52</u>	<u>261</u>	<u>8.567</u>	<u>0.000</u>	<u>1.933</u>	<u>10.500</u>

TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1985

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	2473	165	256	2894	469.097	50.513	129.380	648.990
OPERATING PERSONNEL	218	5	0	223	25.717	0.291	0.000	26.008
HEALTH PHYSICS PERSONNEL	321	8	383	712	44.719	1.381	93.658	139.758
SUPERVISORY PERSONNEL	46	2	0	48	6.309	0.314	0.000	6.623
ENGINEERING PERSONNEL	399	29	113	541	60.219	2.930	13.999	77.148
	===	===	===	===	=====	=====	=====	=====
	3457	209	752	4418	606.061	55.429	237.037	898.527

TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
PLANT: BROWNS FERRY NUCLEAR PLANT 1985
TOTAL NUMBERS OF INDIVIDUALS

GROUP	STATION	UTILITY	CONTRACT	TOTAL
MAINTENANCE PERSONNEL	870	73	151	1094
OPERATING PERSONNEL	76	2	0	78
HEALTH PHYSICS PERSONNEL	96	4	110	210
SUPERVISORY PERSONNEL	18	1	0	19
ENGINEERING PERSONNEL	131	8	46	185
	=====	====	=====	=====
	1191	88	307	1586

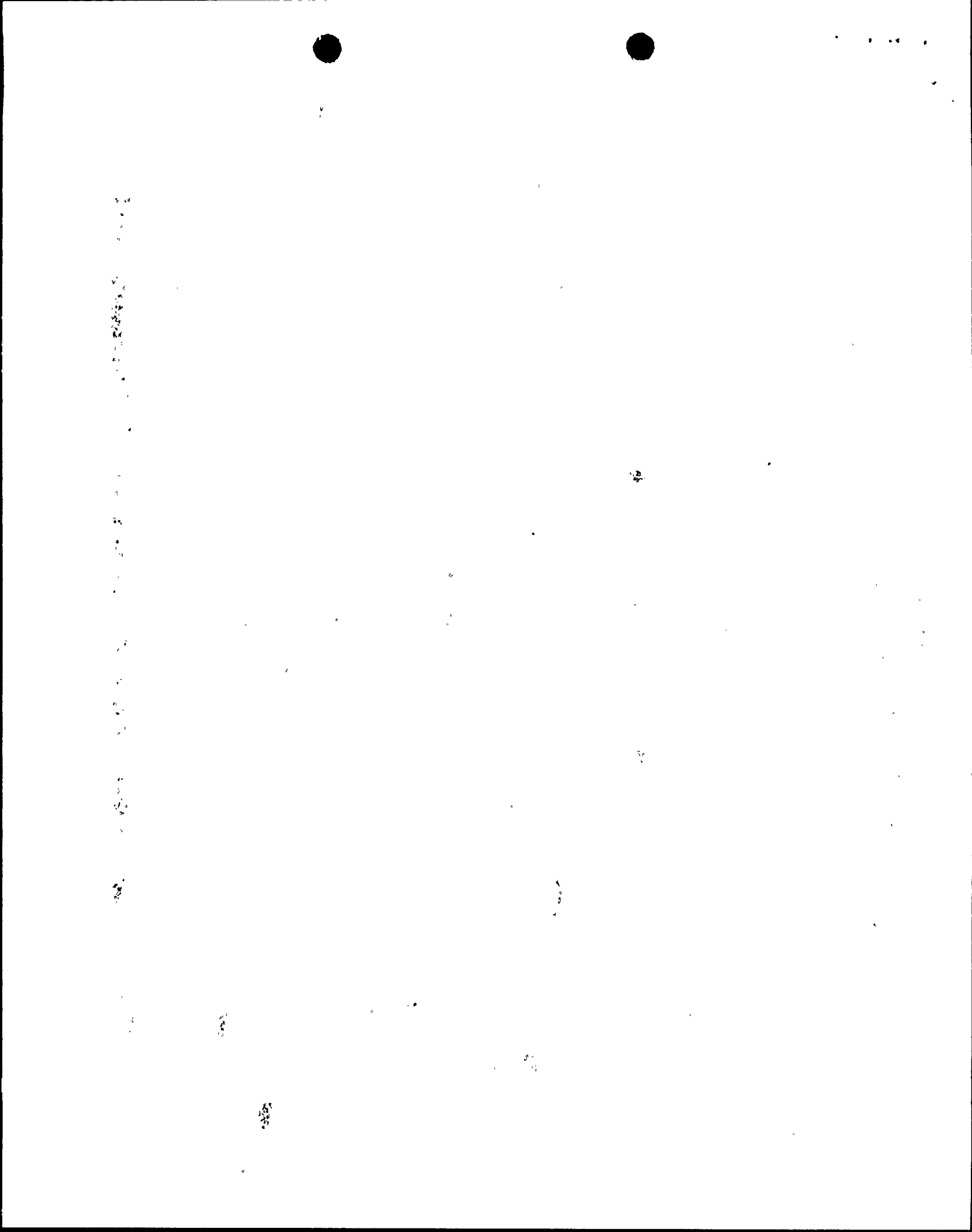


TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1986

NUMBER OF PERSONNEL (>100 M-REM)					TOTAL MAN-REM			
MO=REACTOR OPS SURVEILLANCE								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	706	44	38	788	40.494	4.283	2.924	47.701
OPERATING PERSONNEL	54	1	1	56	5.961	0.106	0.106	6.173
HEALTH PHYSICS PERSONNEL	129	19	79	227	26.014	7.348	28.809	62.171
SUPERVISORY PERSONNEL	18	0	1	19	2.019	0.000	0.086	2.105
ENGINEERING PERSONNEL	106	2	261	369	9.800	0.016	48.513	58.329
<u>MO</u>	<u>1013</u>	<u>66</u>	<u>380</u>	<u>1459</u>	<u>84.288</u>	<u>11.753</u>	<u>80.438</u>	<u>176.479</u>
MO=ROUTINE MAINTENANCE								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	815	48	63	926	271.757	2.651	34.294	308.702
OPERATING PERSONNEL	51	1	0	52	2.407	0.000	0.000	2.407
HEALTH PHYSICS PERSONNEL	124	18	79	221	12.822	4.048	16.313	33.183
SUPERVISORY PERSONNEL	18	0	0	18	1.531	0.000	0.000	1.531
ENGINEERING PERSONNEL	114	1	225	340	17.170	0.160	35.306	52.636
<u>MO</u>	<u>1122</u>	<u>68</u>	<u>367</u>	<u>1557</u>	<u>305.687</u>	<u>6.859</u>	<u>89.913</u>	<u>398.459</u>
MO=IN-SERVICE INSPECTION								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	188	43	7	238	29.876	33.820	0.081	63.777
HEALTH PHYSICS PERSONNEL	49	13	62	124	1.442	1.495	8.268	11.205
SUPERVISORY PERSONNEL	6	3	2	11	0.145	0.562	0.609	1.316
ENGINEERING PERSONNEL	22	0	35	57	2.386	0.000	17.747	20.133
<u>MO</u>	<u>265</u>	<u>59</u>	<u>106</u>	<u>430</u>	<u>33.849</u>	<u>35.877</u>	<u>26.705</u>	<u>96.431</u>
MO=SPECIAL MAINTENANCE								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	687	24	109	820	119.067	3.707	104.050	226.824
OPERATING PERSONNEL	40	1	0	41	1.417	0.029	0.000	1.446
HEALTH PHYSICS PERSONNEL	59	6	57	122	14.764	0.040	8.635	23.439
SUPERVISORY PERSONNEL	14	0	0	14	1.641	0.000	0.000	1.641
ENGINEERING PERSONNEL	81	0	93	174	6.386	0.000	2.765	9.151
<u>MO</u>	<u>881</u>	<u>31</u>	<u>259</u>	<u>1171</u>	<u>143.275</u>	<u>3.776</u>	<u>113.450</u>	<u>262.501</u>

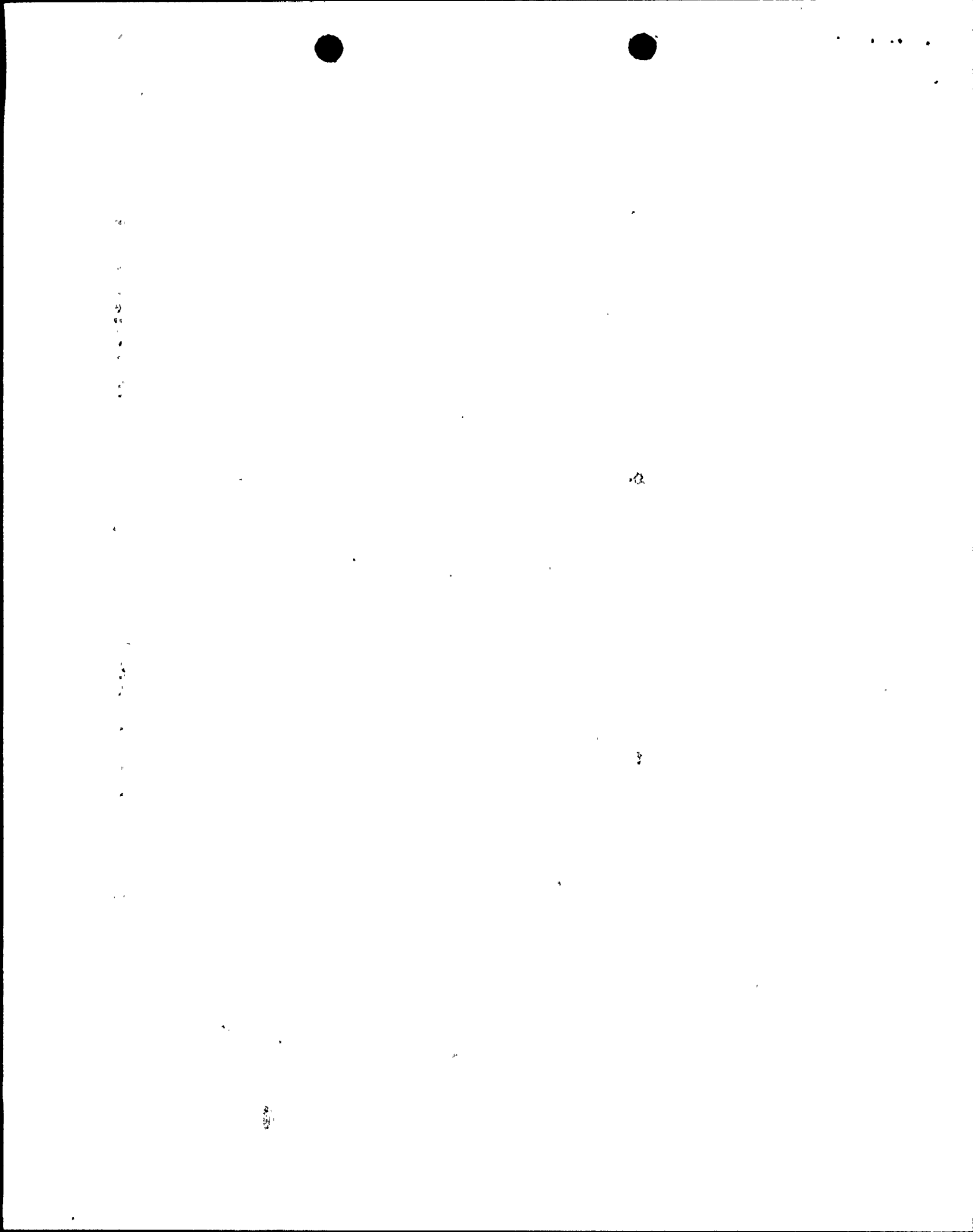


TABLE 3

 NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1986

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MO=REACTOR WASTE PROCESSING								
MAINTENANCE PERSONNEL	114	5	0	119	6.709	0.021	0.000	6.730
OPERATING PERSONNEL	8	0	0	8	1.837	0.000	0.000	1.837
HEALTH PHYSICS PERSONNEL	76	9	34	119	1.134	0.085	0.169	1.388
SUPERVISORY PERSONNEL	3	0	0	3	0.077	0.000	0.000	0.077
ENGINEERING PERSONNEL	14	0	7	21	0.771	0.000	0.002	0.773
<u>MO</u>	<u>215</u>	<u>14</u>	<u>41</u>	<u>270</u>	<u>10.528</u>	<u>0.106</u>	<u>0.171</u>	<u>10.805</u>
MO=REFUEL								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	5	0	0	5	0.000	0.000	0.000	0.000
OPERATING PERSONNEL	5	0	0	5	0.066	0.000	0.000	0.066
HEALTH PHYSICS PERSONNEL	2	0	6	8	0.000	0.000	0.005	0.005
ENGINEERING PERSONNEL	18	0	6	24	0.036	0.000	0.005	0.005
<u>MO</u>	<u>30</u>	<u>0</u>	<u>12</u>	<u>42</u>	<u>0.102</u>	<u>0.000</u>	<u>0.011</u>	<u>0.113</u>
	<u>3526</u>	<u>238</u>	<u>1165</u>	<u>4929</u>	<u>577.729</u>	<u>58.371</u>	<u>308.688</u>	<u>944.788</u>

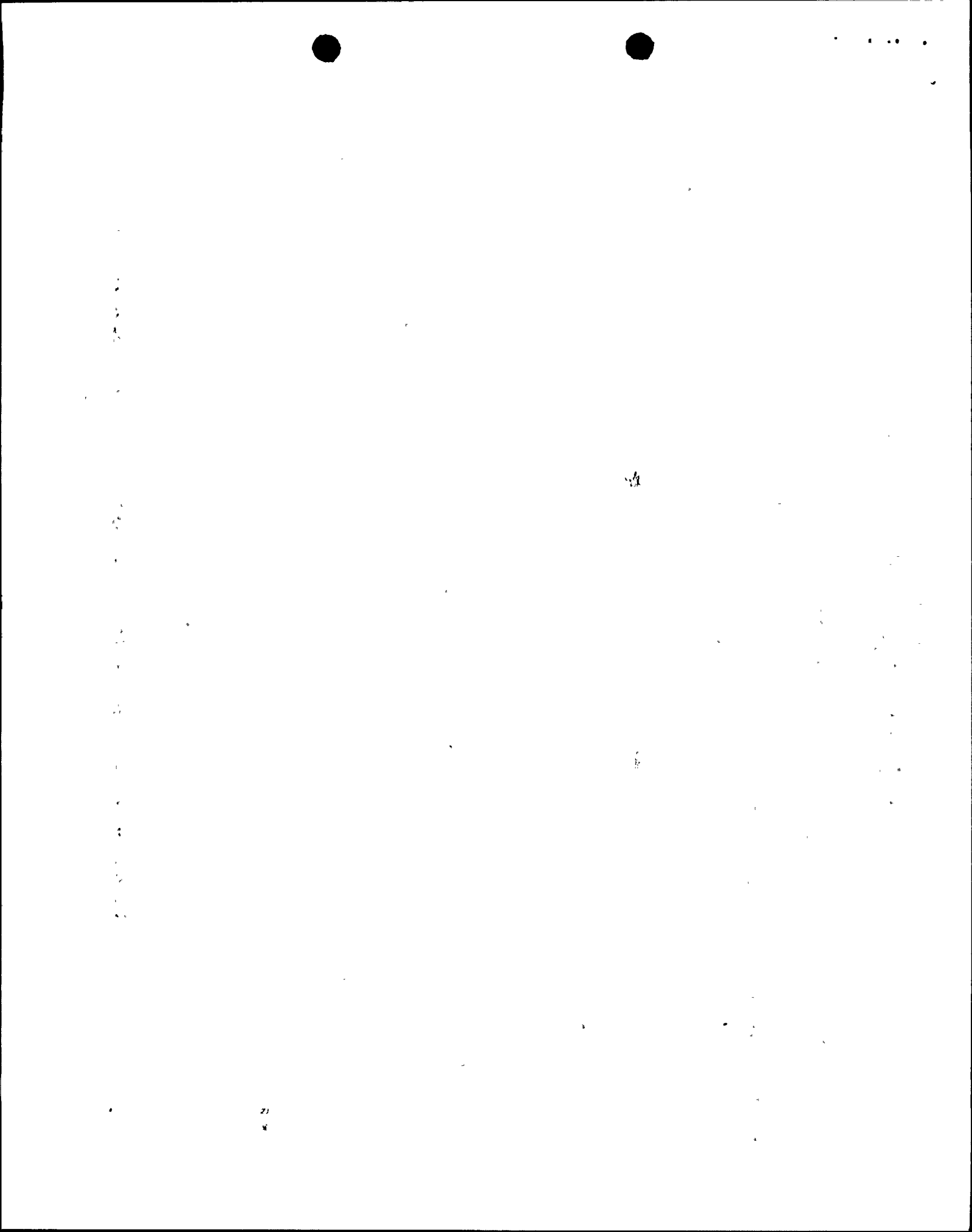


TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1986

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	2515	164	217	2896	467.903	44.482	141.349	653.734
OPERATING PERSONNEL	158	3	1	162	11.688	0.135	0.106	11.929
HEALTH PHYSICS PERSONNEL	439	65	317	821	56.176	13.016	62.199	131.391
SUPERVISORY PERSONNEL	59	3	3	65	5.413	0.562	0.695	6.670
ENGINEERING PERSONNEL	355	3	627	985	36.549	0.176	104.339	141.064
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	3526	238	1165	4929	577.729	58.371	308.688	944.788



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TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
PLANT: BROWNS FERRY NUCLEAR PLANT 1986
TOTAL NUMBERS OF INDIVIDUALS

GROUP	STATION	UTILITY	CONTRACT	TOTAL
MAINTENANCE PERSONNEL	886	51	124	1061
OPERATING PERSONNEL	54	1	1	56
HEALTH PHYSICS PERSONNEL	127	8	77	212
SUPERVISORY PERSONNEL	17	3	2	22
ENGINEERING PERSONNEL	101	1	264	366
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	1185	64	468	1717



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TABLE 3

 NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1987

NUMBER OF PERSONNEL (>100 M-REM)					TOTAL MAN-REM			
MO=REACTOR OPS SURVEILLANCE								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	775	34	18	827	55.229	1.516	0.513	57.258
OPERATING PERSONNEL	65	1	8	74	7.766	0.087	1.108	8.961
HEALTH PHYSICS PERSONNEL	132	2	41	175	45.869	0.203	10.329	56.401
SUPERVISORY PERSONNEL	13	2	1	16	1.393	0.184	0.053	1.630
ENGINEERING PERSONNEL	132	1	173	306	10.021	0.017	28.666	38.704
MO	1117	40	241	1398	120.278	2.007	40.669	162.954
MO=ROUTINE MAINTENANCE								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	895	34	48	977	410.051	5.387	5.908	421.346
OPERATING PERSONNEL	63	1	7	71	1.079	0.084	0.056	1.219
HEALTH PHYSICS PERSONNEL	129	1	40	170	16.365	0.006	2.984	19.355
SUPERVISORY PERSONNEL	11	1	3	15	0.891	0.000	0.024	0.915
ENGINEERING PERSONNEL	122	5	155	282	17.444	0.609	16.942	34.995
MO	1220	42	253	1515	445.830	6.086	25.914	477.830
MO=IN-SERVICE INSPECTION								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	138	27	3	168	12.258	5.977	0.499	18.734
OPERATING PERSONNEL	3	0	1	4	0.003	0.000	0.025	0.028
HEALTH PHYSICS PERSONNEL	59	1	22	82	0.386	0.005	0.174	0.565
SUPERVISORY PERSONNEL	5	0	0	5	0.487	0.000	0.000	0.487
ENGINEERING PERSONNEL	13	3	20	36	0.426	0.039	6.803	7.268
MO	218	31	46	295	13.560	6.021	7.501	27.082
MO=WASTE PROCESSING								
GROUP	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	637	21	115	773	177.342	6.927	89.462	273.731
OPERATING PERSONNEL	35	0	1	36	0.797	0.000	0.000	0.797
HEALTH PHYSICS PERSONNEL	106	1	37	144	24.368	0.001	11.114	35.483
SUPERVISORY PERSONNEL	8	0	1	9	1.239	0.000	0.030	1.269
ENGINEERING PERSONNEL	92	3	75	170	15.450	0.628	16.745	32.823
MO	878	25	229	1132	219.196	7.556	117.351	344.103

TABLE 3

 NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1987

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MO-WASTE PROCESSING								
MAINTENANCE PERSONNEL	93	0	7	100	2.844	0.000	0.327	3.171
OPERATING PERSONNEL	12	0	1	13	1.004	0.000	0.005	1.009
HEALTH PHYSICS PERSONNEL	72	0	11	83	1.251	0.000	0.090	1.341
SUPERVISORY PERSONNEL	4	0	0	4	0.214	0.000	0.000	0.214
ENGINEERING PERSONNEL	10	0	15	25	0.481	0.000	0.207	.688
<u>MO</u>	<u>191</u>	<u>0</u>	<u>34</u>	<u>225</u>	<u>5.794</u>	<u>0.000</u>	<u>0.629</u>	<u>6.423</u>
MO-REFUEL								
MAINTENANCE PERSONNEL	51	0	0	51	5.971	0.000	0.000	5.971
OPERATING PERSONNEL	30	0	0	30	0.570	0.000	0.000	0.570
HEALTH PHYSICS PERSONNEL	28	0	12	40	0.633	0.000	0.385	1.018
ENGINEERING PERSONNEL	17	1	16	34	0.573	0.005	0.326	0.904
<u>MO</u>	<u>126</u>	<u>1</u>	<u>28</u>	<u>155</u>	<u>7.747</u>	<u>0.005</u>	<u>0.711</u>	<u>8.463</u>
	<u>3750</u>	<u>139</u>	<u>831</u>	<u>4720</u>	<u>812.405</u>	<u>21.675</u>	<u>192.775</u>	<u>1026.855</u>

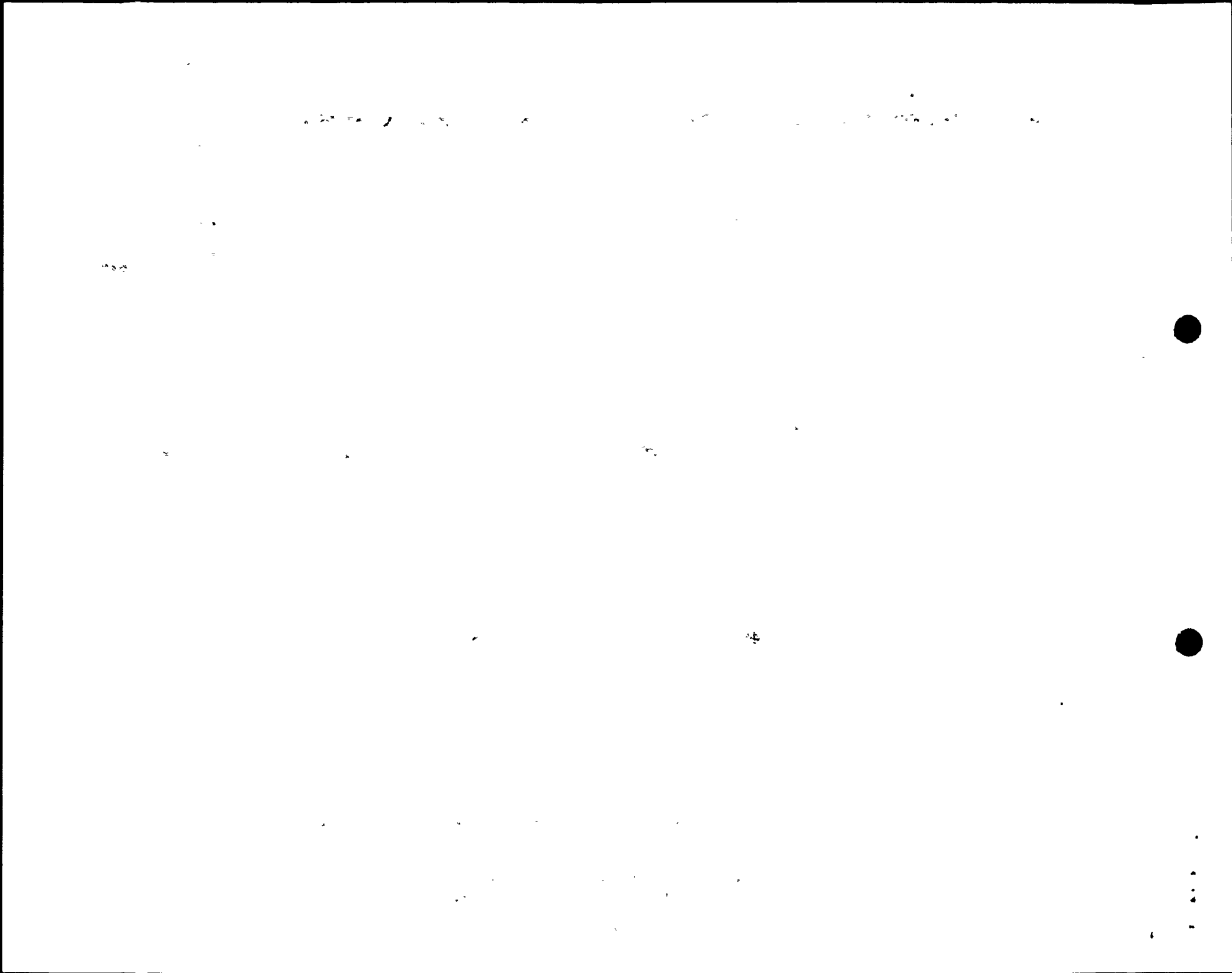


TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
 PLANT: BROWNS FERRY NUCLEAR PLANT 1987

GROUP	NUMBER OF PERSONNEL (>100 M-REM)				TOTAL MAN-REM			
	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL PERSONS	STATION EMPLOYEES	UTILITY EMPLOYEES	CONTRACT AND OTHERS	TOTAL M-REMS
MAINTENANCE PERSONNEL	2589	116	191	2896	663.695	19.807	96.709	780.211
OPERATING PERSONNEL	208	2	18	228	11.219	0.171	1.194	12.584
HEALTH PHYSICS PERSONNEL	526	5	163	694	88.872	0.215	25.076	114.163
SUPERVISORY PERSONNEL	41	3	5	49	4.224	0.184	0.107	4.515
ENGINEERING PERSONNEL	386	13	454	853	44.395	1.298	69.689	115.382
	===	===	===	===	=====	=====	=====	=====
	3750	139	831	4720	812.405	21.675	192.775	1026.855



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TABLE 3

NUMBER OF PERSONNEL AND MAN-REM BY WORK AND JOB FUNCTION
PLANT: BROWNS FERRY NUCLEAR PLANT 1987
TOTAL NUMBERS OF INDIVIDUALS

GROUP	STATION	UTILITY	CONTRACT	TOTAL
MAINTENANCE PERSONNEL	946	44	121	1111
OPERATING PERSONNEL	65	1	9	75
HEALTH PHYSICS PERSONNEL	134	0	27	161
SUPERVISORY PERSONNEL	14	0	3	17
ENGINEERING PERSONNEL	115	2	154	271
	=====	=====	=====	=====
	1274	47	314	1635



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ENCLOSURE 3

PROPOSED OPERATING LICENSE AMENDMENT

BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, AND 3

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

(TVA-BFN-TS-88-258)

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATIONS

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ENCLOSURE 3

DETERMINATION OF NO SIGNIFICANT HAZARDS CONSIDERATION
BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, AND 3

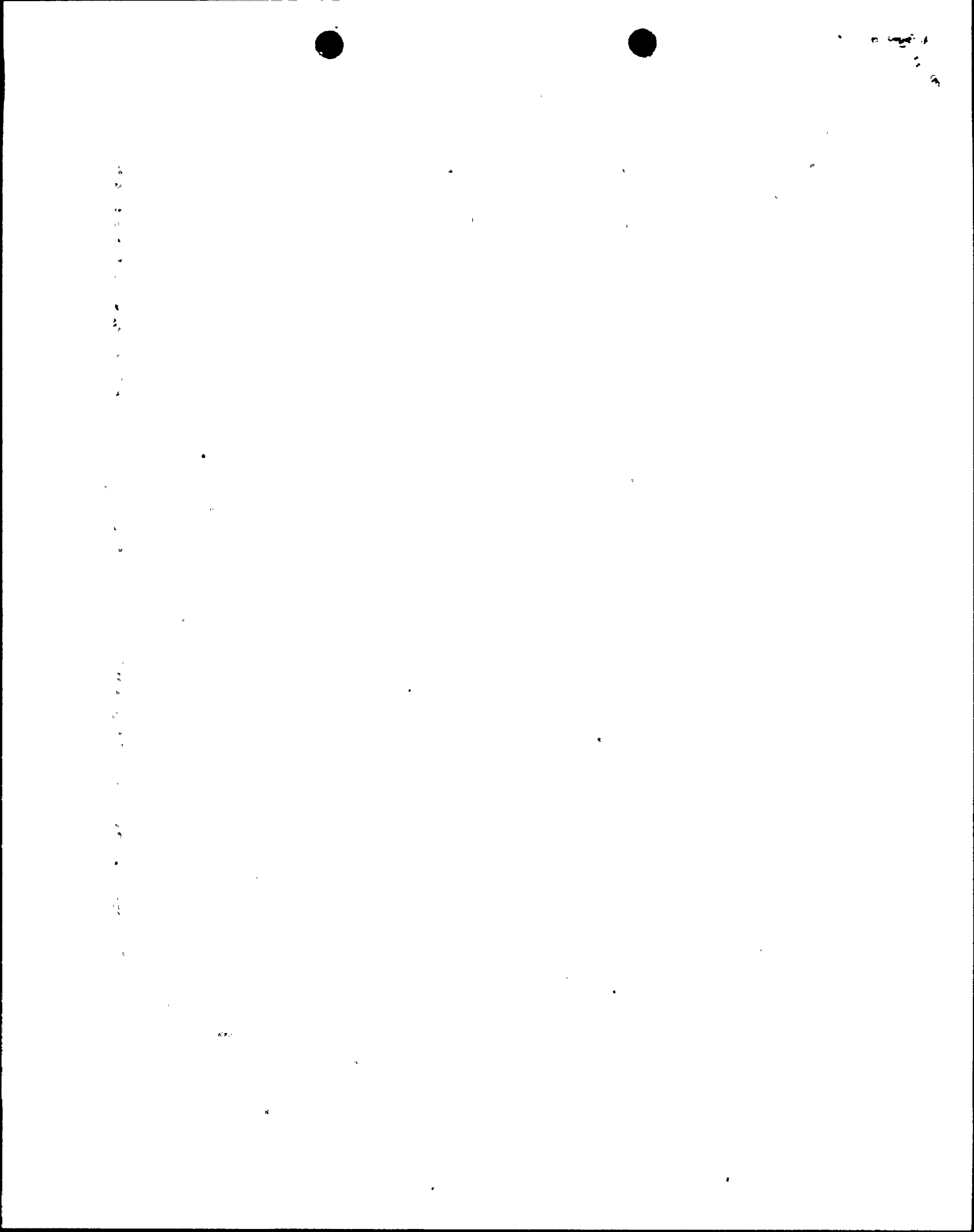
Description of Amendment Request

The proposed amendment would change the Browns Ferry Nuclear Plant (BFN) Technical Specifications for units 1, 2, and 3 by the extension of the current operating licenses expiration date. This would entail taking the 40 year life of BFN from the issuance of the operating license rather than from the issuance of the construction permit.

Basis for Proposed No Significant Hazards Consideration Determination

NRC has provided standards for determining whether a significant hazards consideration exists as stated in 10 CFR 50.92(c). A proposed amendment to an operating license involves no significant hazards consideration if operation of the facility in accordance with the proposed amendment would not 1) involve a significant increase in the probability or consequences of an accident previously evaluated, or 2) create the possibility of a new or different kind of accident from an accident previously evaluated, or 3) involve a significant reduction in a margin of safety.

1. The proposed change does not involve a significant increase in the probability or consequence of an accident previously evaluated. This change does not involve any changes to the design or operation of BFN. Therefore, no changes will be made that could alter postulated scenarios regarding accident initiation or response. In addition this proposed amendment does not require any changes to the safety analysis. There are no modifications to the facility procedures or technical specifications. Existing surveillance, inspection, testing, and maintenance practices provide assurance that degradation in plant equipment, structures, or components will be identified and corrected as necessary throughout the life of the facility. The operation of BFN in accordance with the existing programs will ensure that plant operation will be bounded by the BFN Final Safety Analysis Report (FSAR) and Final Environmental Statement as amendment.
2. The proposed change does not create the possibility of a new or different kind of accident from any accident previously evaluated. This amendment does not involve any change to the physical structure or any of the components or systems of the plant. This proposed change is administrative in nature and does not exceed any of the analysis as evaluated in the BFN FSAR.
3. The proposed amendment does not involve a significant reduction in a margin of safety. There are no changes in the design, design basis, or operation of the facility. This change does not require any technical specification changes. Existing surveillance, inspection, testing and maintenance programs will provide assurance that degradation of equipment, structures or components will be identified and corrected throughout the lifetime of the facility. These practices will be maintained throughout the operating life of BFN and therefore assuring that there will not be any significant reduction in the margin of safety.



Determination of Basis for Proposed No Significant Hazards

Since the application for amendment involves a proposed change that is encompassed by the criteria for which no significant hazards consideration exists, TVA has made a proposed determination that the application involves no significant hazards consideration.

