Director's Decision DD-99-06

DD-99-06

UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Samuel J. Collins, Director

In the matter of	)	Docket No. 50-259
THE TENNESSEE VALLEY AUTHORITY	)	License No. DPR-33
(Browns Ferry Nuclear Power Plant, Unit 1)	)	

I. Introduction

On April 5, 1998, Mr. David A. Lochbaum filed a petition[(1)], pursuant to Title 10 of the Code of Federal Regulations (10 CFR 2.206), on behalf of the Union of Concerned Scientists (Petitioner).

Petitioner requested the Nuclear Regulatory Commission (NRC) to (1) revoke the operating license for Browns Ferry Nuclear Plant, Unit 1; (2) require the Tennessee Valley Authority (TVA) to submit either a decommissioning plan or a lay-up plan for Unit 1; (3) conduct NRC inspections at Browns Ferry Unit 1 against the decommissioning plan or the lay-up plan; and (4) hold a hearing in the Washington, DC, area.

As the basis for the request, Petitioner asserts that because Unit 1 has been on "administrative hold" since June 1, 1985, and has not operated since then, revoking the operating license and requiring relicensing if TVA later decides to restart Unit 1 is a better and safer process than is the current restart process of Inspection Manual Chapter (IMC) 0350. Further, a decommissioning plan would provide assurance that the irradiated fuel is stored safely and that Units 2 and 3 are sufficiently independent of Unit 1 for safe operation.

Petitioner notes that while Unit 1 has been in administrative hold status, the NRC has issued numerous bulletins, generic letters, and information notices. TVA's typical action in response to these NRC communications is to delay addressing the issues until prior to returning the unit to service. Petitioner notes a similar response was provided by TVA to the NRC's letter of October 9, 1996, which requested information pertaining to the adequacy, availability, and control of design-basis information[(2)],[(3)]. Petitioner speculates that the configuration management problems and plant material condition that led to the shutdown in 1985 only could have worsened since then. Thus, Petitioner believes that requiring relicensing for Unit 1 if the decision is made to restart would "wipe the licensing slate clean and allow TVA, the NRC, and the public to examine restarting the plant without the burden of unraveling the mess caused by more than a decade of licensing limbo." Petitioner further asserts that the NRC cannot meaningfully inspect a facility in a degraded condition and in an uncertain licensing status.

On April 29, 1998, the NRC acknowledged receipt of the petition and informed Petitioner that the petition had been assigned to the Office of Nuclear Reactor Regulation (NRR) for response. Petitioner was informed that the request for a hearing was denied because the petition did not provide new information that raised the potential for a significant safety issue and did not allege any violations of NRC requirements. Petitioner was advised that

any new information that should be considered by the NRC in evaluating the issues raised in the petition should be provided promptly to the NRC in writing.

On June 5, 1998, Petitioner reiterated the request for a hearing and cited NRC Bulletin 94-01, "Potential Fuel Pool Draindown Caused by Inadequate Maintenance Practices at Dresden Unit 1," as an example of what could involve one or more significant safety issues. Bulletin 94-01 was sent to (1) all holders of operating licenses or construction permits for nuclear power reactors (for information) and (2) all holders (except Shoreham) of licenses for nuclear power reactors that are permanently shutdown with spent fuel in the spent fuel pool (for action). Petitioner argued that Bulletin 94-01 should have been sent to the Unit 1 licensee for action instead of merely for information because Unit 1 is more nearly like a permanently shutdown facility than an operating facility and the conditions described in the bulletin could have existed at Unit 1.

By letter dated August 7, 1998, Petitioner was informed that the NRC had reconsidered its earlier denial of the request for a hearing and had decided that holding an informal public hearing would be appropriate(4), even though such a hearing was not required under the criteria for such hearings as provided in NRC Management Directive 8.11, "Review Process for 10 CFR 2.206 Petitions." The August 7 letter also addressed the issues surrounding Bulletin 94-01 and its applicability to Browns Ferry Unit 1. The hearing was held on October 26, 1998, in the Browns Ferry Nuclear Plant Training Center(5).

II. Background

TVA is the holder of operating licenses for three nuclear power units at the Browns Ferry site. In March 1985, TVA voluntarily shut down Units 1 and 3 because of questions relating to primary containment isolation testing at Unit 1 and reactor water level instrumentation at Unit 3. Unit 2 was in a refueling outage, but TVA voluntarily decided not to restart the unit as scheduled because other questions and concerns arose about the adequacy of TVA's nuclear program. In September 1985(6), the NRC requested TVA to submit its plans for correcting problems and improving performance in its overall nuclear program and at Browns Ferry. The Commission did not order TVA to obtain its approval before restarting the plants because of prior verbal agreement between TVA and NRC to that effect; however, TVA was required, pursuant to 10 CFR 50.54(f), to inform the NRC if TVA intended to change this commitment. In late 1985, TVA submitted its corporate nuclear performance plan (CNPP) to address weaknesses in the TVA corporate nuclear program. The CNPP was followed by the Browns Ferry Nuclear Performance Plan to address site-specific weaknesses and to resolve additional concerns raised by the NRC. These plans formed the regulatory framework for the restart of Unit 2.

In July 1987, the NRC concluded(7) that organizational, staffing, and programmatic improvements already in place or under way would resolve the problems at the corporate level. In January 1991, the NRC concluded(8) that TVA's commitments and corrective action programs for Unit 2 were acceptable, and in April 1991, the Commission approved Unit 2 restart. Unit 2 restarted May 24, 1991. TVA submitted its corrective action plan for returning Units 1 and 3 to service in 1991(9), and generally used the same methods, criteria, and technical positions for Unit 3 that were approved for the restart of Unit 2. In February 1992, an NRC Restart Panel was formed in accordance with NRC IMC 0350. TVA completed the recovery of Browns Ferry Unit 3 in 1995, and the Commission authorized the Regional Administrator to approve restart of Unit 3 upon completion of certain open issues. The NRC Administrator for Region II issued restart approval on November 19, 1995. Units 2 and 3 have operated well since their respective restarts, and this performance is reflected in the NRC systematic assessment of licensee performance reports issued since the restart of Unit 2.

In April 1996, TVA requested removal(10) of Browns Ferry Unit 1 as a Category 3 plant from the NRC's list of problem plants. TVA stated that no decision had been reached on the long-term operational status of Unit 1, and the unit is defueled and maintained in lay-up status. Those shared systems that support operation of Units 2 and 3, however, will continue to be kept in service. TVA noted that there are no plans for equipment refurbishing or

recovery activities at Unit 1. TVA committed to inform the NRC immediately of a decision to return Unit 1 to service, to implement the same programs used for the Unit 3 recovery, and to not restart Unit 1 without prior Commission approval. Unit 1 was removed from the list of problem plants(11) on June 21, 1996.

III. Discussion

The hearing provided Petitioner the opportunity to present information related to issues that have a bearing upon the actions requested in the petition. Petitioner, represented by Mr. David Lochbaum, was joined in presenting information to support the petition by Ms. Ann Harris, a representative of We the People of Tennessee and spokesperson for the National Nuclear Safety Network. The NRC staff has reviewed the transcript of the hearing to identify the relevant issues to be considered in addition to the filing of April 5, 1998. The following paragraphs discuss the issues raised in the petition and in the hearing.

Related issues have been grouped together and are addressed in the following paragraphs.

Petitioner Issues

- The NRC does not inspect Browns Ferry Unit 1.
- The NRC cannot meaningfully inspect Browns Ferry Unit 1 because the NRC does not have an "Administrative Hold" category.
- The NRC cannot meaningfully inspect Browns Ferry Unit 1 because it is not in compliance with NRC regulations, including the "Maintenance Rule."

Petitioner asserts that, contrary to a statement made in a letter(12) to him by the NRC Project Manager for Browns Ferry, he has information that shows that NRC inspectors do not look at Browns Ferry Unit 1 at all. Petitioner asserted further, that NRC inspectors could not meaningfully inspect Unit 1 because NRC regulations recognize only two categories of power plants: operating plants and permanently closed plants.

Browns Ferry Unit 1 is sometimes referred to as being in an "Administrative Hold"(13) status, but this is a TVA designation and it is irrelevant for regulatory purposes. Browns Ferry Unit 1 is an operating reactor subject to all the terms and conditions that are specified in Operating License DPR-33(14), the uncertainty of its return to service notwithstanding. The Unit 1 Technical Specifications (TSs) are maintained, are in force, and must be complied with. The operating license and associated TSs are amended periodically, usually in concert with similar changes for Units 2 and 3.

Some Unit 1 systems or components(15) are required to support the unit in its current defueled condition, or they directly support the safe operation of Units 2 or 3. These systems and components are maintained and operated as required under applicable plant programs or TSs. The remaining systems and components(16) have been placed in lay-up status to protect their economic value and to preserve the equipment in the event a decision is made to restart the unit. Unit 1 is subject to both routine and reactive NRC inspection, and the unit is inspected by NRC inspectors. However, the operational status of the facility is considered when determining the frequency, type, and scope of inspections, and the amount of inspection effort is substantially less than for a comparable facility in active service because much of the equipment and systems serve no safety function while the unit is shutdown and defueled. Thus, the NRC inspection effort for Unit 1 is focused mostly upon those areas that have a direct bearing upon safety. Generally, this includes those structures, systems, and components (SSCs) that are necessary to ensure the safe storage of Unit 1 irradiated fuel and to support the safe operation of Units 2 and 3. The inspection effort includes no or little effort for SSCs that are not needed to provide a safety function for the current plant operating status.

Petitioner, in the original petition and during the hearing, relied upon information compiled by the NRC that led

him to conclude that Unit 1 is not inspected at all. The sources of the tables used by Petitioner, though not fully identified, appear to be taken from certain NRC documents that were intended primarily for internal management use, but the information has been released through at least one Freedom of Information Act request, and similar information has been presented at several of the annual Regulatory Information Conferences sponsored by NRR. We acknowledge that the NRC documents are misleading and could lead a person to that conclusion regarding Unit 1 inspection. Until 1997, NRR compiled quarterly various program and management information in a "White Book," intended for internal purposes. The documents included data on inspection efforts expended at single-, dual-, and triple-unit sites. In those documents, Browns Ferry was shown as a dual unit site, though it is actually a triple unit site. Unit 1 was not included because it was not in operational service. This was done so that the data could be used for comparison purposes to other dual-unit sites. Although these documents[(17)] have described incorrectly the Browns Ferry site as a dual-unit site, the fact remains that Unit 1 is inspected by NRC inspectors. This inspection activity is adequately demonstrated by the results of a review of NRC inspection reports for Browns Ferry issued for the 3-year period 1996 through 1998. Of 32 inspection reports issued for that period, 10 refer to NRC inspection of Unit 1 issues (Table I). Table I does not include inspection activities associated with the systems "shared" between the units or inspection of common buildings; those items are routinely inspected as support for Units 2 and/or 3.

NRC IMC 0030, "Policy and Guidance for Development of NRC Inspection Manual Programs," provides guidance for the development of the NRC inspection program, and the inspection program at Browns Ferry has been developed in accordance with this guidance. For the 12 month period from October 1, 1997, through September 30, 1998, the actual NRC inspection effort expended at Unit 1 was approximately 12 percent of the effort expended at either of the other units. On a site basis, Unit 1 received approximately 6 percent of the total inspection hours for the site. Thus, the greater inspection effort at the operating units allows the NRC to adequately assess the licensee's performance and to focus its efforts into areas that have the greater safety significance as opposed to inspecting in areas of Unit 1 that have little on no safety significance.

Petitioner asserts that Browns Ferry Unit 1 is not in compliance with NRC regulations. To support this contention, Petitioner states that usually TVA has deferred taking actions with respect to Browns Ferry Unit 1 requested by numerous generic communications issued since 1985. TVA typically has committed to completing the actions before returning the unit to service, if such a decision is made. As additional support for this contention, Petitioner notes that there is an outstanding issue regarding Unit 1 compliance with 10 CFR 50.65, commonly referred to as the maintenance rule.

IMC 0720 provides guidance with regard to NRC generic communications on nuclear reactor issues. Generic communications consist of bulletins, generic letters, and information notices. Bulletins may transmit information to the addressees, request specified actions, and require a written response. Generic letters request that analyses be performed or descriptions of proposed corrective actions be submitted regarding matters of safety, safeguards, or environmental significance. The addressees may be asked to accomplish the actions and report their completion by letter. Information relating to these actions may be requested on a voluntary basis or in accordance with Section 182a, Atomic Energy Act of 1954, as amended, and 10 CFR 50.54(f). Usually, this type of generic letter requests new or revised licensee commitments or other continuing actions but may not explicitly or coercively solicit licensee commitments. Information notices provide information regarding safety, safeguards, or environmental issues. Information notices normally are used to bring significant, recently identified safety, security, or environmental information to the attention of licensees. Addressees are expected to review the information for applicability to their facilities and consider actions, as appropriate, to avoid similar problems.

IMC 0720 states that the various types of generic communications are not used to impose regulatory requirements, and they are not to be used as a substitute for the rule-making process. Thus, the fact that a licensee merely provides the written response required by the Atomic Energy Act and/or NRC rules and regulations but does not, or will not, implement other requested action(s) does not, by itself, constitute being in non-compliance with a regulatory requirement and does not constitute a basis for suspension or revocation of

the operating license. In such circumstances, the NRC, may take other action commensurate with the safety significance of the issues. Such actions could vary in severity from acceptance by the NRC that the licensee has a valid basis for not taking the requested actions up to the NRC's issuing an Order to shut down (or to remain shutdown) until the particular safety issue is resolved in an acceptable manner. With regard to Browns Ferry Unit 1, the licensee has either taken the requested actions in the generic communications when necessary or has committed to address the issues raised before the unit can be restarted. Furthermore, although TVA has no announced plans for restarting the facility, TVA has agreed not to restart it without specific approval from the Commission. Thus, any Commission action taken with regard to revoking the Unit 1 operating license merely because of TVA's deferral of actions requested in generic communications pending a decision to restart Unit 1 would serve no useful purpose.

With the possible exception of 10 CFR 50.65, the Commission is not aware of any non-compliance issues with applicable NRC rules and regulations at Browns Ferry Unit 1. Furthermore, Petitioner has not offered any contradictory credible information, either in the original petition or during the hearing. However, the issue of Unit 1 compliance with 10 CFR 50.65 is still undergoing review by the NRC staff, and no final decision has been made.

The issue regarding 10 CFR 50.65 arose from an inspection of the implementation of 10 CFR 50.65 at the Browns Ferry plant from April 4 through April 8, 1997(18). The inspection team found that the licensee considered Unit 1 status (shutdown and defueled) for implementing 10 CFR 50.65. Thus, a number of Unit 1 systems, such as high pressure coolant injection, which normally would be included within the scope of 10 CFR 50.65 for an operating plant, were not included, and performance monitoring, data collection, and trending were not being performed on these systems. However, those Unit 1 systems that support Unit 2 and/or Unit 3 operation, systems that are common to Unit 2 or Unit 3, or systems required to maintain safe shutdown of Unit 1, such as spent fuel pool cooling, were properly scoped under 10 CFR 50.65, and performance monitoring, data collection, and trending were being performed on these systems.

At issue is whether scoping Unit 1 SSCs by considering the defueled and indefinite shutdown condition of Unit 1 satisfies 10 CFR 50.65. The staff has informed the licensee that the issue can be resolved by one of three approaches, namely, certify per 10 CFR 50.82(a)(1) that Unit 1 operations have ceased permanently, submit a request for exemption from those aspects of 10 CFR 50.65 that currently are not being met, or revise the scope of the Unit 1 maintenance program to meet the requirements of the rule. On February 4, 1999, TVA submitted a request for a temporary partial exemption from the requirements of 10 CFR 50.65. The staff currently is reviewing the proposed exemption request.

Petitioner Issues

- TVA would exceed its statutory debt limit if Browns Ferry Unit 1 is closed prematurely.
- TVA may lack the money needed to put Browns Ferry Unit 1 into the operating category, or the permanently closed category.
- TVA does not have the necessary funds for decommissioning funding assurance.

Petitioner has made a number of assertions regarding the ability of TVA to fund operations and/or decommissioning of Unit 1 but has not provided any facts in support thereof. The NRC, however, has no regulatory authority with regard to issues related to TVA's statutory debt limit or other financial matters and decisions other than decommissioning funding assurance.

On November 23, 1998, the Commission's amended rules for "Financial Assurance Requirements for Decommissioning Nuclear Power Reactors" became effective(19). The amendments require power reactor licensees to report periodically on the status of their decommissioning funds, and on changes in their external trust agreements and other financial assurance mechanisms, and also allow licensees to take credit for certain earnings on decommissioning trust funds. The amendments also added a definition of the term "Federal

Licensee" to address the issue of which licensees may use statements of intent. As now defined in 10 CFR 50.2, a Federal Licensee means any NRC licensee, the obligations of which are guaranteed by and supported by the full faith and credit of the United States Government. In the past, TVA has relied upon statements of intent to have decommissioning funds available. The purpose of the statement of intent is to obtain a commitment by another, and superior, governmental entity that the obligations of the subordinate governmental entity will be paid by the superior entity if the subordinate entity cannot pay them. Such a commitment represents support for the obligations by the full faith and credit of the United States. TVA agrees[(20)] that the revised definition excludes TVA from relying upon this funding mechanism and has informed the NRC that statements of intent will no longer be relied upon for decommissioning funding assurance. TVA has provided documentation for three external Master Decommissioning Trusts that were established in 1996. TVA has stated that the external trusts arrangements meet the requirements for an external sinking fund (10 CFR 50.75(e)(ii)). The trust arrangements meet the requirement that the account be segregated from licensee assets and placed outside the licensee's administrative control. During the hearing on October 26, 1998, a representative of the TVA's Office of the General Counsel stated that the external trust fund arrangements exceeded several hundreds of millions of dollars. As required by 10 CFR 50.75(f)(1), TVA is to report to the NRC by March 31, 1999, and at least once every 2 years thereafter, the status of its decommissioning funding, including the amount of decommissioning funds estimated to be required, the amount accumulated to the end of the calendar year preceding the date of the report, and a schedule of the annual amounts remaining to be collected. The NRC will review the status of TVA's decommissioning funding report, and if necessary, appropriate action will be taken to ensure compliance with NRC regulations.

Petitioner Issue

- A decommissioning plan would ensure safe storage of Browns Ferry Unit 1 irradiated fuel and would ensure sufficient independence of Units 2 and 3 from Unit 1.

Petitioner contends that Unit 1 irradiated fuel stored in its spent fuel pool will continue to represent a threat to public health for many years. The probability of an accident involving stored fuel is considered to be sufficiently small to make the overall risk to the public from an accident acceptable; however, Petitioner contends that the probability is small only because NRC regulations for design features and administrative controls at both permanently closed plants and operating plants minimize the chances of an accident. Petitioner asserts that there are no regulations for plants in Administrative Hold status, and, thus, there are no regulations that apply to Unit 1.

As previously stated, Administrative Hold is a TVA designation, not an NRC designation, and, thus, for NRC regulatory purposes, Browns Ferry Unit 1 is an operating reactor and is subject to all terms and conditions of the Unit 1 operating license, TSs, and all applicable NRC regulations, contrary to Petitioner's assertion that Unit 1 is unregulated.

Each of the reactors at Browns Ferry has its own spent fuel storage pool, but the pools of Units 1 and 2 are joined by a transfer canal that allows fuel assemblies to be transferred between the Unit 1 and Unit 2 fuel storage pools. The fuel storage facilities are shared only for Units 1 and 2, and the transfer canal is the only shared feature. The Unit 1 spent fuel storage pool is located on a common refueling floor with and in the same structure that houses the Units 2 and 3 spent fuel storage pools.

Units 2 and 3 are in active operational status, thus, each unit is refueled periodically, requiring discharge of recently irradiated fuel into the storage pools. Compared to Unit 1 fuel that was last discharged in 1985, recently discharged fuel from Unit 2 or Unit 3 is substantially more radioactive and produces greater decay heat. Thus, the consequences of an accident involving recently discharged irradiated fuel would be more severe than the same accident involving Unit 1 fuel. It follows that TSs, administrative controls, technical requirements, and design features that are adequate to ensure the safe storage of Unit 2 or Unit 3 spent fuel are also adequate to ensure safe storage of Unit 1 irradiated fuel.

Thus, whether or not Unit 1 was to be declared permanently shut down, the fuel storage requirements would not be changed. Requiring the licensee to declare the permanent shutdown of Unit 1 and to submit a post-shutdown decommissioning activities report, as requested by Petitioner, would have no effect upon the risk to the public from a potential fuel-handling accident or from accidental draining of the fuel storage pool because the existing technical specifications and administrative controls would not be changed, and existing design features to preclude draining of the storage pools would be maintained. Additionally, the SSCs required to ensure safe storage of irradiated fuel in the Unit 1 storage pool are operated, tested, and maintained to ensure that they are capable of performing their function.

With regard to Petitioner's assertion that a decommissioning plan would ensure sufficient independence of Units 2 and 3 from Unit 1, it is not at all clear which safety issue would be addressed. As currently licensed, the Browns Ferry units incorporate some sharing of certain structures and systems to obtain redundancy and improve reliability, but aside from the shared and common features, each unit is capable of operating independently of the other units, and each unit's Tss and technical requirements take into account the shared and common features that must be operable to support safe operation of that unit. Requiring the licensee to declare the permanent shutdown of Unit 1 and to submit a post-shutdown decommissioning activities report would require retaining those sections of the Unit 1 TSs that are necessary to support the safe operation of Units 2 and 3.

Continuing Operational Safety of Browns Ferry Unit 1

The Browns Ferry Unit 1 TSs are maintained and amended periodically as necessary, as is the case with Units 2 and 3, and TVA is required to operate Unit 1 in conformance with the TSs and technical requirements. Inasmuch as Unit 1 is shutdown and defueled, a number of safety and non-safety systems and components are not required to be operational. These systems and components have been drained, deenergized, and disassembled, as appropriate, and have been placed in a lay-up condition to protect and preserve the equipment pending a decision to resume power operations. The lay-up program is described in plant procedures and includes periodic monitoring of the condition of the equipment and lay-up status.

Unit 1 systems and components required to perform a function while the unit is in its current defueled status or that are required to support Units 2 and 3 operations are operated, maintained, and periodically tested in conformance with applicable TSs, and are included within the scope of the maintenance rule (10 CFR 50.65) program. Design and configuration control is maintained for these systems, and modifications or temporary alterations are performed under the provisions of 10 CFR 50.59.

Certain systems and components not required to perform a function while Unit 1 is shutdown and defueled may not now conform to the design basis or may not have been modified to meet the actions requested by various NRC generic communications issued since the unit shut down. This, by itself, does not constitute a basis for revoking the license since the facility is in an operational mode in which the equipment is not required to be operable. TVA has committed to implementing a Design Baseline Verification Program for Unit 1 prior to returning Unit 1 to service.

Units 1 and 2 share a common control room that is staffed continually by licensed reactor operators, and the Unit 1 control boards are given regular attention similar to the operating units. Operators and engineers routinely tour areas of Unit 1 containing the systems and equipment that the TSs require to be operable to ensure safe storage of irradiated fuel and to support operation of the other units.

Relicensing Versus Applying the IMC 0350 Process

Petitioner asserts that revoking the operating license and requiring relicensing if TVA later decides to restart Unit 1 is a better and safer process than is the current restart process in IMC 0350. Petitioner believes that this

would "wipe the licensing slate clean and allow TVA, the NRC, and the public to examine restarting the plant without the burden of unraveling the mess caused by more than a decade of licensing limbo."

NRC IMC 0350 provides staff guidelines for approving restart of nuclear power plants that have been shut down either voluntarily or involuntarily because of a significant operating event, complex equipment problems, or serious licensee management deficiencies. The guidelines have been used successfully for the restart of Browns Ferry Unit 3, Crystal River Unit 3, and Millstone Unit 3 and are being used for the D. C. Cook reactors and Millstone Unit 2. In each case, a plant-specific restart plan is developed using the IMC for guidance. The restart action plan identifies expected NRC actions to be taken before approving restart and includes an inspection plan to ensure that an adequate inspection record is created to support the restart decision. IMC 0350 specifies that the NRC Commissioners are to be adequately informed of staff restart actions on a continuing basis through Commission papers or through the Executive Director for Operations, and as necessary, the staff will brief the Commissioners. IMC 0350 provides the opportunity for public participation through public meetings.

Through such meetings, the public may hear and comment on the licensee's restart plans and the results of NRC reviews of the restart activities. Public comments and concerns are considered by the NRC and may be factored into the restart review, as appropriate.

During the hearing on October 26, 1998, Petitioner was questioned by an NRC representative regarding why it is believed that the processes used by TVA and NRC to recover Units 2 and 3 would not work for recovery of Unit 1. Petitioner indicated that the process is "not very objective and it's basically up to the whims of the restart team as to what is safe, where the lines are drawn." However, when asked if there would be an issue if the process is applied correctly with openness and public involvement, Petitioner responded by referencing the use of the process at Millstone and indicating that it [IMC 0350] is a good process, but that it wasn't followed [at Millstone]. Thus, Petitioner's issue does not appear to be the process but its implementation. Petitioner conceded that the IMC 0350 process is working very well in the case of the D. C. Cook plant, and that if it were used at Browns Ferry Unit 1 as it is being used at D. C. Cook, there would be reasonable expectation that a good product would be realized.

IV. Summary and Conclusions

The NRC has determined that

- Petitioner has not identified any credible safety concern that has been created by the current "Administrative Hold" status of the unit that would not otherwise exist if the operating license were to be revoked. Absent a credible safety concern, there is no regulatory basis for suspending or revoking an operating license merely because the licensee chooses not to operate the unit.

- The licensee is required to comply with and is, with one possible exception to the staff's knowledge, in compliance with all current applicable regulations for operating reactors and is required to comply with Unit 1 TSs and other technical requirements for the current operational mode of the unit. The issue of compliance of Unit 1 with 10 CFR 50.65 is the subject of an ongoing review, and resolution is expected soon.

- Unit 1 is inspected by NRC inspectors, but at a reduced scope that is appropriate for the status of the unit.

- Decommissioning Unit 1 would not provide any greater degree of safety for the Unit 1 irradiated fuel, for radiation control, or for Units 2 and 3 than is currently provided by the requirements of the operating license, TSs, and the Technical Requirements Manual.

- There is no demonstrated credible basis for the assertion that facility restart based upon IMC 0350 is a less reliable process for resolving the safety concerns of a problem plant than the relicensing process. The

IMC 0350 process has been demonstrated by a number of restart efforts, including those for Browns Ferry Unit 3.

For the reasons stated herein Petitioner's requests for the NRC to revoke the Browns Ferry Unit 1 operating license and to require TVA to submit a decommissioning plan or a lay-up plan for Unit 1, and for the NRC to conduct inspections against the decommissioning plan are denied.

As provided for in 10 CFR 2.206(c), a copy of this decision will be filed with the Secretary of the Commission for the Commission's review. This decision will constitute the final action of the Commission 25 days after issuance unless the Commission, on its own motion, institutes review of the Decision at that time.

Dated at Rockville, Maryland, this 29th day of March 1999.

FOR THE NUCLEAR REGULATORY COMMISSION

ORIGINAL SIGNED BY:

Samuel J. Collins, Director
Office of Nuclear Reactor Regulation

Table 1
Browns Ferry Unit 1 Inspection Activities (1996 through 1998)

Inspection Report	Date	Inspection Activity
50-259/96-01	02/29/96	Radioactive material postings
50-259/96-03	04/14/96	Connection of Unit 1 and Unit 2 spent fuel pool volumes, spent fuel pool design-basis and operating information
50-259/96-05	06/18/96	Updated final safety analysis report description of spent fuel pool systems
50-259/96-06	08/15/96	Continuous air monitoring systems
50-259/96-10	11/07/96	Housekeeping issues
50-259/96-12	12/20/96	Lay-up and preventive maintenance program implementation
50-259/97-03	04/22/97	Spent fuel pool cooling system walkdown, identification that Unit 1 pool makeup valve operator had been removed
50-259/97-04	05/21/97	Maintenance rule implementation
50-259/97-08	08/29/97	Sampling of raw cooling water discharge
50-259/97-12	02/12/98	Repairs to a radiation monitoring system valve

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1. The petition can be viewed and downloaded from the NRC World Wide Web page (http://www.nrc.gov/NRC/PUBLIC/2206/petitions/g9800199/g980199.html). Copies of the petition also are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L

Street, NW., Washington, DC 20555-0001, and at the local public document room located at the Athens Public Library, South Street, Athens, Alabama 35611.S

2. NRC letter from James M. Taylor, Executive Director for Operations, to Craven Crowell, Chairman, TVA Board of Directors, dated October 9, 1996.

3. This letter was sent to TVA on Browns Ferry Units 2 and 3, Sequyoah Units 1 and 2, and Watts Bar Units 1 and 2 dockets. It was not sent on the Browns Ferry Unit 1 docket because that facility was not operating, and it was known to the NRC that extensive designbasis reconstitution will be required before the facility may be restarted.

4. The NRC concluded that the petition raised novel issues with respect to maintaining an operating license for a facility for which there are no plans for future operations and that the information that might be presented during an informal public hearing could constitute a valuable resource for the NRC in reaching a decision with regard to the petition.

5. The hearing transcript can be obtained from the NRC World Wide Web page (http://www.nrc.gov/NRC/PUBLIC/2206trans.html). Copies of the transcript are available for public inspection at the Commission's Public Document Room, the Gelman Building, 2120 L Street, NW., Washington, DC 20555-0001, and at the local public document room located at the Athens Public Library, 504 E. South Street, Athens, Alabama 35611.

6. NRC letter from William J. Dircks, Executive Director for Operations, to Charles Dean, Chairman, TVA Board of Directors, dated September 17, 1985.

7. NUREG-1232, Volume 1, "Safety Evaluation Report on Tennessee Valley Authority Revised Coporate Nuclear Performance Plan," July 1987.

8. NUREG-1232, Volume 3, Supplement 2, "Safety Evaluation Report on Tennessee Valley Authority: Browns Ferry Nuclear Performance Plan. Browns Ferry Unit 2 Restart," January 1991.

9. Letter from Mark O. Medford, Vice President, Nuclear Assurance, Licensing, and Fuels, TVA, dated January 9, 1991.

10. Letter from Oliver D. Kingsley, President and Chief Nuclear Officer, TVA, dated April 16, 1996, to James M. Taylor, NRC Executive Director for Operations.

11. NRC letter from James A. Taylor, Executive Director for Operations, to Oliver D. Kingsley, President and Chief Nuclear Officer, TVA, dated June 21, 1996.

12. NRC letter from Albert W. De Agazio, Browns Ferry Project Manager, to David A. Lochbaum, Union of Concerned Scientists, dated January 23, 1998. This letter also was an attachment to the April 5, 1998 submitted by Mr. Lochbaum.

13. "Administrative Hold" is a TVA designation that denotes that while no decision has been made regarding future operation of the facility, the option for restart at an unspecified future date is being retained.

14. Operating License No. DPR-33 was issued to TVA for the operation of Browns Ferry Unit 1 on December 20, 1973. The license expires on midnight October 20, 2013.

15. This includes such systems (or portions thereof) as spent fuel pool cooling and cleanup, raw water, fire protection, reactor/refuel zone ventilation, radiation monitoring, residual heat removal, reactor building closed

cooling water, certain electrical systems, and emergency diesel generators.

16. Many of these systems and components have been drained, deenergized, and disassembled, as appropriate.

17. Publication of these documents was discontinued at the end of 1996.

18. NRC Inspection Report 50-259/97-04, 50-260/97-04, and 50-296/97-04, issued May 21, 1997.

19. Final rule changes to 10 CFR Parts 30 and 50 on financial assurance requirements for the decommissioning of nuclear power plants were published in the Federal Register on September 22, 1998 (63 FR 50465).

20. Letter from Mark J. Burzynski, Manager, Nuclear Licensing, TVA, dated December 21, 1998, to NRC.