UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

in the Matter of

TENNESSEE VALLEY AUTHORITY

(Browns Ferry Nuclear Plant, Unit Nos. 1, 2 and 3) Docket Nos. 50-259, 50-260 and 50-296 (License amendment to permit storage of low level radioactive waste)

NRC STAFF RESPONSE TO APPEAL BOARD ORDER OF SEPTEMBER 20, 1982

I. INTRODUCTION

By its Order of September 20, 1982 in this proceeding, the Appeal Board established a schedule for the provision of information on the current status of the Tennessee Valley Authority's application to store low-level radioactive waste ("LLRW") at the Browns Ferry Nuclear Plant and for statements by the parties as to the appropriate course of action for any further proceedings. This memorandum responds to the Appeal Board's directive that the Staff file "any supplemental information which [the Appeal Board] should be apprised of with regard to the questions asked of TVA" by the Appeal Board. Order, dated September 20, 1982, at 3. Affidavits in support of the supplemental information provided herein are attached.

II. SUPPLEMENTAL INFORMATION ON QUESTIONS POSED TO TVA

Question 1: What approvals are now being sought by TVA for storage of low-level radioactive waste at Browns Ferry?

TVA states in its answer to Question 1 that it is seeking a 5-year license "to store low level radioactive waste on an interim basis as a

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Richard J. Rawson Counsel for NRC Staff

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backup measure. . . . " For clarification, the Staff notes that the authorization sought is simply for 5-year storage. TVA has not amended its application to limit the use of the modules only to interim use on a backup basis. That portion of TVA's answer is a statement of intended use rather than a description of the licensing authorization sought. TVA's intention in this regard is consistent with NRC Generic Letter 81-38 cited in TVA's statement and with the July 26, 1982 letter (with attached press release) from TVA to Harold R. Denton, Director of the Office of Nuclear Reactor Regulation. Affidavit of Peter Loysen, dated October 8, 1982 ("Loysen Affidavit") at ¶2. For the Appeal Board's information, complete copies of these letters are attached to the Loysen Affidavit.

The Staff has no other information to add to that provided by TVA in response to Question 1.

Question 2: What approvals does TVA contemplate seeking in the future?

In its answer to Question 2, TVA states that while it "would probably seek" renewal of a five-year license, "TVA does not now plan to seek any further NRC approvals for LLRW storage." The Staff would point out, however, that amendments to a five-year license may be necessary from time to time. One possible amendment which the Staff anticipates may be sought at some future time relates to the nature of containers to be used for storing spent resins. TVA's amended application of November 3, 1981, Enclosure 2 at § 2.2.3, discusses these containers and their integrity. Since the filing of the amended application, disposal requirements

- 2 -

imposed by the Barnwell facility (to which Browns Ferry spent resins are normally shipped) have been changed to require the use of a container of a type different than that described in TVA's amended application for spent dewatered resins of higher activity levels. Similar disposal requirements for waste of certain characteristics are contained in the NRC's proposed rule (10 CFR Part 61) relating to LLRW disposal. TVA has established a plan for the evaluation of any new containers it might use in the Sequoyah Nuclear Plant LLRW Storage Facility and the results of these evaluations will be documented and maintained in TVA's record management system. It is possible that, should TVA decide to store waste at Browns Ferry in containers that differ from those described in its Browns Ferry amended application, an amendment to the Browns Ferry LLRW storage license now being sought would be required. Loysen Affidavit at § 3.

The Staff has no other information to add to that provided by TVA in response to Question 2.

Question 3: How many storage modules have been constructed thus far? What is their capacity and what is planned for them if the approvals TVA is seeking are granted?

TVA states in its answer to Question 3 that four modules have been constructed. The Staff notes that three of these four modules are designed and intended for storage of trash LLRW while the other module is designed and intended for storage of spent resin LLRW. Loysen Affidavit at ¶ 4. The Staff has no other information to add to that provided by TVA in response to Question 3.

- 3 -

Question 4: How many storage modules does TVA plan on constructing? What is their capacity and what use is planned for them if the approvals TVA is seeking are granted?

Although TVA states that it has no plans to complete any modules beyond the four already completed, the Appeal Board should be aware that the application is for authorization to store LLRW in up to 22 modules, at least five of which were planned to be for storage of spent resin LLRW and at least nine of which were planned to be for storage of trash LLRW. The Staff's safety evaluation and environmental assessment consider the larger number of modules described in the application, which has not been amended in this regard. Loysen Affidavit at ¶ 5. The Staff has no other information to add to that provided by TVA in response to Question 4.

Question 5: What are the current and projected rates of production of low level waste from operations at Browns Ferry Nuclear Plant?

TVA has provided figures for its annual production of LLRW at Browns Ferry. The Staff's Environmental Impact Appraisal of June, 1982, in Table 1.1, provides historical data on monthly shipments of Browns Ferry LLRW between October, 1979 and August, 1981. Loysen Affidavit at ¶ 6. The Staff has no other information to add to that provided by TVA in response to Question 5.

Question 6: How does TVA now accommodate, and plan to accommodate, the storage and disposal of that waste?

For the Appeal Board's information, a copy of the Low-Level Radioactive Waste Policy Act of 1980 (Pub. L. No. 96-573, 94 Stat. 3347 (1980)), referred to in TVA's answer, is attached to the Loysen Affidavit. The Staff has no other information to add to that provided by TVA in response to Question 6.

- 4 -

Question 7: What offsite disposal facilities are now available to TVA and what is TVA's allocation at each for Browns Ferry originating waste?

TVA has provided figures for its most recent monthly allocations for LLRW disposal at Barnwell. The Staff's Environmental Impact Appraisal of June, 1982, in Table 1.1, provides historical data on past monthly allocations to TVA at Barnwell between January, 1980 and August, 1981. In addition, TVA states that the Beatty, Nevada disposal facility "is not currently available" because the license "recently expired and has not been renewed." The Staff understands that a timely request for renewal of the facility license was filed for the Beatty disposal facility and that the Nevada State Board of Health has voted not to renew the license. Pending final licensing action by the appropriate state authority, however, the Beatty facility is still available to authorized users. Affidavit of John R. McGrath, dated October 8, 1982, at ¶ 2.

The Staff has no other information to add to that provided by TVA in response to Question 7.

Question 8: What is the current status of the Southeast Interstate Low-Level Radioactive Waste Management Compact and of TVA's participation in it? How will its implementation affect the storage and disposal of low level radioactive waste from Browns Ferry?

TVA states in its answer that eligible states except North Carolina have passed legislation "enacting the compact" and that differences between versions of the Southeast Interstate Low-Level Radioactive Waste Management Compact "have recently been resolved in meetings among the States." By way of clarification, the Staff notes its understanding that the states involved have passed legislation enacting different versions of

- 5 -

a compact. As TVA states, the differences have recently been resolved in meetings among the appropriate state representatives. A uniform compact bill embodying the resolution of these differences is now being drafted. Creation of the compact will require approval of the agreed-upon language (or other appropriate legislation) by the states and by Congress. One significant point resolved by the states' representatives involves the schedule for the closing of the Barnwell facility and the opening of a second disposal site. The states' representatives have agreed that the Barnwell facility, which will serve as the compact's first disposal facility, will be closed on December 31, 1992 and that a second disposal site will have been selected, licensed and opened by December 31, 1991. Affidavit of Stephen N. Salomon, dated October 8, 1982, at ¶ 2-3.

Because good progress is being made toward creation of the Southeast Interstate Low-Level Radioactive Waste Management Compact and because a suitable facility already exists and will be available within the region at Barnwell, the Staff believes that adequate space will be available for offsite disposal of the wastes being generated at Browns Ferry as well as any placed in the onsite Storage Facility. Loysen Affidavit at ¶ 7.

The Staff has no other information to add to that provided by TVA in response to Question 8.

Question 9: What are TVA's plans with regard to either volume reduction or incineration of Browns Ferry low level radioactive waste?

For the Appeal Board's information, a copy of the Policy Statement on Low-Level Waste Volume Reduction (46 F.R. 51100, October 16, 1981), referred to in footnote 5 of TVA's filing, is attached to the Loysen Affidavit. The Staff has no other information to add to that provided by TVA in response to Question 9.

- 6 -

III. SUMMARY

In response to the Appeal Board's Order of September 20, 1982 in this proceeding, the Staff has set forth supplemental information, beyond that provided by TVA in its responses to the Appeal Board's nine questions, which the Staff believes the Appeal Board should be apprised of. The Staff is not aware of any additional information with which the Appeal Board should be provided in this matter.

Respectfully submitted,

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Richard J. Rawson Counsel for NRC Staff

Dated at Bethesda, Maryland this Par day of October, 1982