

March 2, 2006

10 CFR 54

U.S. Nuclear Regulatory Commission
ATTN: Document Control Desk
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Washington, D.C. 20555-0001

Gentlemen:

In the Matter of	)	Docket Nos. 50-259
Tennessee Valley Authority	)	50-260
		50-296

**BROWNS FERRY NUCLEAR PLANT (BFN) - UNITS 1, 2, AND 3 LICENSE
RENEWAL APPLICATION - REQUEST FOR ADDITIONAL INFORMATION
(RAI) RELATED TO APPENDIX F OF THE LICENSE RENEWAL
APPLICATION: INTEGRATION OF BROWNS FERRY UNIT 1 RESTART AND
LICENSE RENEWAL ACTIVITIES (TAC NOS. MC1704, MC1705, AND
MC1706)**

By letter dated December 31, 2003, TVA submitted for NRC review an application pursuant to 10 CFR 54 to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2, and 3. As part of its review of TVA's license renewal application, the NRC staff, by letter dated January 31, 2006, identified areas where additional information is needed to complete its review.

The specific area requiring a request for additional information (RAI) is related to License Renewal Application Appendix F: Integration of Browns Ferry Unit 1 Restart and License Renewal Activities.

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The basic principle for the restart of Unit 1 is that all three BFN units will be operationally identical upon completion of the Unit 1 restart activities. At restart, the Unit 1 current licensing basis (CLB) will be the same as the CLB for Units 2 and 3. TVA documented the implementation activities necessary to make the CLB for Unit 1 the same as that of Units 2 and 3 in Appendix F to the License Renewal Application. The Unit 1 CLB changes will be implemented prior to restart of the unit.

The enclosures to this letter contain the specific NRC requests for additional information and the corresponding TVA responses:

- Enclosure 1 provides the NRC requests and response thereto.
- Enclosure 2 provides a table listing Unit 1 Restart Commitments From Appendix F of The License Renewal Application.

If you have any questions regarding this information, please contact me at (256) 729-2636.

I declare under penalty of perjury that the forgoing is true and correct. Executed on this 2nd day of March, 2006.

Sincerely,

William D. Crouch
Manager of Licensing
and Industry Affairs

Enclosure:
cc: See page 3

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Enclosure

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ENCLOSURE 1

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
LICENSE RENEWAL APPLICATION (LRA) ,

RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION (RAI) RELATED
TO APPENDIX F OF THE LICENSE RENEWAL APPLICATION: INTEGRATION OF
BROWNS FERRY UNIT 1 RESTART AND LICENSE RENEWAL ACTIVITIES

(SEE ATTACHED)

**TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
LICENSE RENEWAL APPLICATION (LRA) ,**

**RESPONSE TO NRC REQUEST FOR ADDITIONAL INFORMATION (RAI) RELATED
TO APPENDIX F OF THE LICENSE RENEWAL APPLICATION: INTEGRATION OF
BROWNS FERRY UNIT 1 RESTART AND LICENSE RENEWAL ACTIVITIES**

By letter dated December 31, 2003, the Tennessee Valley Authority (TVA) submitted for NRC review an application pursuant to 10 CFR 54 to renew the operating licenses for the Browns Ferry Nuclear Plant, Units 1, 2, and 3. As part of its review of TVA's license renewal application, the NRC staff, by letter dated January 31, 2006, identified areas where additional information is needed to complete its review.

The specific area requiring a request for additional information is related to License Renewal Application Appendix F: Integration of Browns Ferry Unit 1 Restart and License Renewal Activities.

Provided below are the specific NRC requests for additional information (RAIs) and the corresponding TVA responses.

NRC RAI Appendix F (i)

Any 50.59 evaluations that are already in place or expect to be completed before March 2006 regarding these thirteen Appendix F items,

TVA Response to RAI Appendix F (i)

Enclosure 2 provides a list of the items from Appendix F of the License Renewal Application (LRA), the BFN commitment tracking number, the design change notice (DCN) number, if applicable, and the current status of field implementation of the modification. In accordance with TVA procedures, each of the modifications was evaluated under 10 CFR 50.59, and no NRC action is required for BFN to implement the modifications.

NRC RAI Appendix F (ii)

Any modifications that might need the Division of Operating Reactor Licensing (DORL), NRR approval (under 10 CFR 50.90 or otherwise), as well as any constraints in preventing completion of these items identified in Appendix F of LRA, and

TVA Response to RAI Appendix F (ii)

No NRC action is required for TVA to implement the modifications. There are no constraints preventing completion of these items prior to the restart of Unit 1.

Commitment 1 of the table provided in Enclosure 2 has a Technical Specifications (TS) change request that is associated with the alternate leakage path for Unit 1. By letter dated July 9, 2004 (Reference 1), TVA submitted to NRC proposed BFN Unit 1 TS change TS-436. TVA must receive approval of the change as well as complete the actions necessary to establish a seismically rugged main steam isolation valve (MSIV) alternate leakage path for Unit 1 prior to restart. By letter dated September 27, 2004 (Reference 2), NRC added this as a license condition for only Unit 1.

NRC RAI Appendix F (iii)

Any programmatic commitments identified in Appendix F (such as Maintenance Rule, Implementation of BWRVIP etc.) and how TVA proposes to resolve these programmatic commitments prior to Unit 1 restart.

TVA Response to RAI Appendix F (iii)

There are four programmatic commitments identified in Appendix F of the LRA for Unit 1: Fire Protection, Environmental Qualification, Maintenance Rule, and implementation of the Boiling Water Reactor Vessel Internals Project (BWRVIP). TVA's proposed method of resolution for each of these programmatic commitments prior to Unit 1 restart was provided in Reference 3.

References

1. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) Unit 1- Technical specification (TS) 436 - Increased Main Steam Isolation Valve (MSIV) Leakage Rate Limits and Exemption from 10 CFR 50, Appendix J," dated July 9, 2004
2. NRC letter to TVA, "Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3 - Issuance of Amendments Regarding Full-Scope Implementation of Alternate Source Term (TAC NOS. MB5733, MB5734, MB5735, MC0156, MC0157, and MC0158) (TS-405)," dated September 27, 2004
3. TVA letter to NRC, "Browns Ferry Nuclear Plant (BFN) Units 1, 2, and 3 License Renewal Application - Additional Information Concerning the Integration of Unit 1 Restart and License Renewal Activities (TAC NOS. MC1704, MC1705 and MC1706)," dated January 31, 2005

ENCLOSURE 2

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT (BFN)
UNITS 1, 2, AND 3
LICENSE RENEWAL APPLICATION (LRA) ,

UNIT 1 RESTART COMMITMENTS FROM APPENDIX F OF THE LICENSE
RENEWAL APPLICATION

(SEE ATTACHED)

UNIT 1 RESTART COMMITMENTS FROM APPENDIX F OF THE LICENSE RENEWAL APPLICATION

LRA APP. F #	COMMITMENT	TVA Commitment Tracking # (NCO #)	DCN #	% FIELD COMPLETE
1	Evaluate and modify, as required, main steam leakage path piping to ensure structural integrity.	020065001	51143, 51173, 51112	35%
		040021001	N/A	
2	Implement Containment Atmosphere Dilution System modification.	860184001	51205	13%
		840126012	51143	28%
3	Revise Fire Protection Program to ensure compliance with 10 CFR 50 Appendix R.	860326098	51180, 51368, 51229, 51092, 51208 and whole series of DCNs	40%
		860326098	N/A	Report has been drafted and is awaiting completion of modifications.

UNIT 1 RESTART COMMITMENTS FROM APPENDIX F OF THE LICENSE RENEWAL APPLICATION

LRA APP. F #	COMMITMENT	TVA Commitment Tracking # (NCO #)	DCN #	% FIELD COMPLETE
4	Implement Environmental Qualification Program (10 CFR 50.49) .	860326148	whole series of DCNs	30%
5	Address GL 88-01, and make necessary plant modifications.	880175006	51045, 51046, 51194, 51151, and 51152	83%
6	BWRVIP Programs used for Units 2 and 3 will be used for Unit 1.	040006031	N/A	95% of inspections completed; minor repairs required.
7	Install ATWS features (10 CFR 50.62) : • Alternate Rod Injection (ARI) • Recirculation Pump Trip (RPT) • Standby Liquid Control System (SLCS)	850447001	51107, 51233, 51234, and 51240	50%

UNIT 1 RESTART COMMITMENTS FROM APPENDIX F OF THE LICENSE RENEWAL APPLICATION

LRA APP. F #	COMMITMENT	TVA Commitment Tracking # (NCO #)	DCN #	% FIELD COMPLETE
8	Remove Reactor Vessel Head Spray piping in drywell, and seal the primary containment penetrations.	860095001	51151	86%
9	Implement the Hardened Wetwell Vent modification.	890245002	51189	60%
10	Cap Service Air and Demineralized Water Primary Containment Penetrations.	040006032	51183, 51174	65%
11	Modify Auxiliary Decay Heat Removal System to serve Unit 1.	040006033	51197	88%
12	Fully implement the Maintenance Rule. Unit 1's temporary exemption ceases to be effective upon Unit 1 restart (10 CFR 50.65).	040006030	N/A	N/A

UNIT 1 RESTART COMMITMENTS FROM APPENDIX F OF THE LICENSE RENEWAL APPLICATION

LRA APP. F #	COMMITMENT	TVA Commitment Tracking # (NCO #)	DCN #	% FIELD COMPLETE
13	Replace RWCU piping outside of primary containment with IGSCC resistant piping.	890111001	51194	100% NCO closed on 09/29/2005.
	Implement actions requested in GL 89-10 for RWCU.	900006004	51046	100%