



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**
REGION II
245 PEACHTREE CENTER AVENUE NE, SUITE 1200
ATLANTA, GEORGIA 30303-1257

March 5, 2012

Mr. Joseph W. Shea
Manager, Corp. Nuclear Licensing Programs
Tennessee Valley Authority
1101 Market Street, LP 4B-C
Chattanooga, TN 37402-2801

**SUBJECT: ANNUAL ASSESSMENT LETTER FOR BROWNS FERRY NUCLEAR PLANT
UNITS 1, 2, and 3 (NRC INSPECTION REPORT 05000259, 260, 296/2011007)**

Dear Mr. Shea:

On February 16, 2012, the NRC completed its end-of-cycle performance review of Browns Ferry Nuclear Plant, Units 1, 2, and 3. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from January 1, 2011 through December 31, 2011. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility. This performance review and enclosed inspection plan do not include security information. A separate letter will include the NRC's assessment of your performance in the Security Cornerstone and its security-related inspection plan.

The NRC determined the plant performance at Browns Ferry Units 2 and 3, during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., green) safety significance, and all Performance Indicators (PI) indicated that your performance was within the nominal, expected range (i.e., green). Therefore, the NRC plans to conduct ROP baseline inspections at these units.

The NRC determined the plant performance at Browns Ferry Unit 1 during the most recent quarter was within the Multiple/Repetitive Degraded Cornerstone column (Column 4) of the NRC's ROP Action Matrix, beginning the fourth quarter 2010, based on the issuance of one finding classified as having a high safety significance (Red). This was detailed in Final Significance Determination Of A Red Finding, Notice Of Violation, And Assessment Follow-Up Letter (NRC Inspection Report No. 05000259/2011008) for Browns Ferry Nuclear Plant, dated May 9, 2011.

Consistent with NRC Manual Chapter 0305, the NRC will conduct Part 3 of a supplemental inspection in accordance with IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input," following written notification from you on your readiness to support this inspection. The Red finding is being held open past 4 quarters pending completion of Part 3, IP 95003. Based on a review of the inspection results, the NRC will provide further clarification regarding specific actions TVA will need to take following completion of Part 3 of IP 95003.

In its Annual Assessment Letter, dated March 4, 2011, (ML11063042), the NRC opened a SCCI in the Corrective Action Program component of the Problem Identification and Resolution cross-cutting area. Specifically, a cross-cutting theme was identified based on four Green inspection findings for the associated 12-month assessment period with documented cross-cutting aspects in the area of Problem Identification and Resolution, in the aspect of "appropriate and timely corrective actions" (P.1(d)). The NRC determined that an SCCI existed because the NRC had a concern with your staff's scope of effort and progress in addressing the cross-cutting theme (NRC Inspection Report No. 05000259,260,296/2010005). Although you identified and implemented a range of actions to address the cross-cutting theme; these actions had not yet proven effective in substantially mitigating the cross-cutting theme, even though a reasonable duration of time has passed. In its Mid-Cycle Assessment Letter, dated August 29, 2011, (ML112411450), the NRC requested that this SCCI be addressed during your third party safety culture assessment which will be reviewed as part of the Independent NRC Safety Culture Assessment per IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input." This SCCI will continue to remain open pending completion of these assessments and until the NRC has reviewed your other actions to address this SCCI, based on the following: 1.) A comprehensive range of actions are identified in your Corrective Action Program that effectively demonstrate you will address the cross-cutting theme; 2.) No significant increase in the number of findings with the cross-cutting aspect of "appropriate and timely corrective actions" (P.1(d)) during the previous twelve month assessment period; and 3.) The NRC has an increased level of confidence in your ability to deal effectively with operational/equipment issues as related to the cross-cutting theme of "appropriate and timely corrective actions" (P.1(d)) during the previous six months assessment period. This letter is the third consecutive assessment letter documenting an SCCI with the same cross-cutting aspect.

In its Annual Assessment Letter, dated March 3, 2010, (ML100620960), the NRC opened a SCCI in the Corrective Action Program component of the Problem Identification and Resolution cross-cutting area. Specifically, a cross-cutting theme was identified based on four Green inspection findings for the associated 12-month assessment period with documented cross-cutting aspects in the area of Problem Identification and Resolution, in the aspect of "thorough evaluation of identified problems" (P.1(c)). The NRC determined that an SCCI existed because the NRC had a concern with your staff's scope of effort and progress in addressing the cross-cutting theme (NRC Inspection Report No. 05000259,260,296/2010005). Although you identified and implemented a range of actions to address the cross-cutting theme; these actions had not yet proven effective in substantially mitigating the cross-cutting theme, even though a reasonable duration of time has passed. In its Mid-Cycle Assessment Letter, dated August 29, 2011, (ML112411450), the NRC requested that this SCCI be addressed during your third party safety culture assessment which will be reviewed as part of the Independent NRC Safety Culture Assessment per IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input." This SCCI will continue to remain open pending completion of these assessments and until the NRC has reviewed your other actions to address this SCCI, based on the following: 1) An appropriate and comprehensive range of actions identified by the Corrective Action Program, which will effectively address the cross-cutting theme; 2) No significant increase in the number of findings with the cross-cutting aspect of "thorough evaluation of identified problems" (P.1(c)) during the previous twelve month assessment period; and 3) An increased level of confidence in your ability to deal effectively with operational and equipment issues as related to the cross-cutting theme of "thorough evaluation of identified problems" (P.1(c)) during the previous six month

assessment period. This letter is the fifth consecutive assessment letter documenting an SCCI with the same cross-cutting aspect.

In addition to the reactor oversight process (ROP) baseline inspections at your facility, we also plan on conducting infrequently performed inspections which include: Inspection Procedure (IP) 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input"; Reactor operator licensing examinations; 92702, Follow up On Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, And Alternative Dispute Resolution Confirmatory Orders; and TI 2515/182, "Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping and Tanks."

The enclosed inspection plan lists the inspections scheduled through June 30, 2013. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the last nine months of the inspection plan are tentative and may be revised at the mid-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes.

In accordance with 10 CFR 2.390 of the NRC's Rules of Practice, a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

If circumstances arise which cause us to change this inspection plan, we will contact you to discuss the change as soon as possible. Please contact Eugene Guthrie at 404-997-4662 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA By Leonard D. Wert, Jr. For/

Victor M. McCree
Regional Administrator

Docket No.: 50-259, 50-260, 50-296
License No.: DPR-33, DPR-52, DPR-68

Enclosure: Browns Ferry Inspection/Activity Plan

cc w/encl: (See page 5)

cc w/encl:
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Browns Ferry
Inspection / Activity Plan
03/01/2012 - 06/01/2013

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			PSB1-RP - RP RAD HAZARD ASSESSMENT		1
1, 2, 3	04/09/2012	04/13/2012	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			EB3 ISI - UNIT 3 INSERVICE INSPECTION		1
3	04/16/2012	04/20/2012	IP 7111108G	Inservice Inspection Activities - BWR	
			OL EXAM - INITIAL EXAM PREP		3
1	04/16/2012	04/20/2012	V23370	BROWNS FERRY / MAY 2012 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 1		3
1	05/07/2012	05/11/2012	V23370	BROWNS FERRY / MAY 2012 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		3
1	05/14/2012	05/19/2012	V23370	BROWNS FERRY / MAY 2012 EXAM AT POWER FACILITIES	
			PSB1EP - EMERGENCY PREPAREDNESS INSPECTION		2
1, 2, 3	06/25/2012	06/29/2012	IP 7111402	Alert and Notification System Testing	
1, 2, 3	06/25/2012	06/29/2012	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1, 2, 3	06/25/2012	06/29/2012	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2, 3	06/25/2012	06/29/2012	IP 71151	Performance Indicator Verification	
			PSB1-RP - PUBLIC RADIATION PROTECTION BASELINE		4
1, 2, 3	06/18/2012	06/22/2012	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1, 2, 3	06/18/2012	06/22/2012	IP 71124.07	Radiological Environmental Monitoring Program	
1, 2, 3	06/18/2012	06/22/2012	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1, 2, 3	06/18/2012	06/22/2012	IP 71151	Performance Indicator Verification	
			OL RQ - REQUAL INSPECTION		2
1, 2, 3	10/08/2012	10/12/2012	IP 7111111B	Licensed Operator Requalification Program	
			EB3 ISI - UNIT 1 INSERVICE INSPECTION		1
1	10/29/2012	11/02/2012	IP 7111108G	Inservice Inspection Activities - BWR	
			EB3 LR - UNIT 1 POST APPROVAL LR - PHASE 1		2
1	10/29/2012	11/02/2012	IP 71003	Post-Approval Site Inspection for License Renewal	
			CDBI - COMPONENT DESIGN BASES INSPECTION		5
1, 2, 3	01/28/2013	02/01/2013	IP 7111121	Component Design Bases Inspection	
1, 2, 3	02/11/2013	02/15/2013	IP 7111121	Component Design Bases Inspection	
1, 2, 3	02/25/2013	03/01/2013	IP 7111121	Component Design Bases Inspection	
			ISI - UNIT 2 INSERVICE INSPECTION		1
2	03/25/2013	03/29/2013	IP 7111108G	Inservice Inspection Activities - BWR	

This report does not include INPO and OUTAGE activities.
 This report shows only on-site and announced inspection procedures.

Browns Ferry
Inspection / Activity Plan
03/01/2012 - 06/01/2013

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
			LR71003 - UNIT 2 POST APPROVAL LIC RENEWAL-PHASE 1		2
2	04/01/2013	04/05/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
			PSB1-RP - RP OCCUPATIONAL BASELINE		3
1, 2, 3	04/01/2013	04/05/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2, 3	04/01/2013	04/05/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2, 3	04/01/2013	04/05/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2, 3	04/01/2013	04/05/2013	IP 71124.04	Occupational Dose Assessment	
1, 2, 3	04/01/2013	04/05/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2, 3	04/01/2013	04/05/2013	IP 71151	Performance Indicator Verification	
			PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 2		4
1, 2, 3	04/15/2013	04/19/2013	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1, 2, 3	04/15/2013	04/19/2013	IP 71124.02	Occupational ALARA Planning and Controls	
1, 2, 3	04/15/2013	04/19/2013	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1, 2, 3	04/15/2013	04/19/2013	IP 71124.04	Occupational Dose Assessment	
1, 2, 3	04/15/2013	04/19/2013	IP 71124.05	Radiation Monitoring Instrumentation	
1, 2, 3	04/15/2013	04/19/2013	IP 71151	Performance Indicator Verification	
			LR71003 - UNIT 1 POST APPROVAL LIC RENEWAL-PHASE 2		5
1	05/06/2013	05/10/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
1	05/20/2013	05/24/2013	IP 71003	Post-Approval Site Inspection for License Renewal	
			OL EXAM - INITIAL EXAM PREP		3
1	05/13/2013	05/17/2013	V23394	BROWNS FERRY/JUNE 2013 INITIAL EXAM AT POWER FACILITIES	
			TI-182 - TI-182 BURIED PIPING/TANK - PHASE 1		1
1, 2, 3	05/13/2013	05/17/2013	IP 2515/182	Review of the Implementation of the Industry Initiative to Control Degradation of Underground Piping	

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This report shows only on-site and announced inspection procedures.