



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

August 29, 2011

Mr. R. M. Krich
Vice President, Nuclear Licensing
Tennessee Valley Authority
1101 Market Street, LP 3R-C
Chattanooga, TN 37402-2801

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR THE BROWNS FERRY NUCLEAR PLANT UNITS 1, 2, and 3 (NRC INSPECTION REPORT 05000259, 260, 296/2011006)

Dear Mr. Krich:

On August 11, 2011, the NRC completed its mid-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 July 1, 2010 through June 30, 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 supplemental inspections in accordance with IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input," following notification from you on your readiness to support these inspections.

In its annual assessment letter, dated March 4, 2011, the NRC opened a substantive cross-cutting issue (SCCI) with the aspect of "appropriate and timely corrective actions" (P.1(d)). To address the SCCI, your staff completed a root cause/common cause investigation. Following a review of your investigation, the NRC determined that an SCCI exists because the NRC has 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. Therefore, the SCCI will remain open until 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.

The NRC requests your staff address this SCCI as part of your planned safety culture assessment required by the supplemental IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input." The NRC will continue to monitor your staff's effort and progress in addressing the SCCI via completion of the IP 95003 supplemental inspection, which includes an evaluation of your safety culture assessment.

In its annual assessment letter, dated March 3, 2010, the NRC opened a SCCI with the aspect of "thorough evaluation of identified problems" (P.1(c)). In December 2010, an inspection was performed to assess the progress of your actions identified during your root cause investigation, to address the SCCI (NRC Inspection Report No. 05000259,260,296/2010005). The staff performed a review of your actions and determined that the actions taken up to that time had not proven effective in substantially mitigating the cross-cutting theme, even though a reasonable duration of time had passed. The NRC has reviewed your written response, provided upon the NRC's request, in which you detailed the actions you will take to address this SCCI. In that letter you informed the NRC that you were not ready for the NRC to review your actions to address this SCCI. Therefore, the SCCI will remain open until: 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 "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 fourth consecutive assessment letter documenting an SCCI with the same cross-cutting aspect. The NRC requests your staff address this SCCI as part of your planned safety culture assessment required by the supplemental IP 95003, "Supplemental Inspection for Repetitive Degraded Cornerstones, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or One Red Input." The NRC will continue to monitor your staff's effort and progress in addressing the SCCI via completion of IP 95003 supplemental inspection, which includes an evaluation of your safety culture assessment.

During this mid-cycle performance review, the NRC identified a cross-cutting theme in the Work Practices component of the Human Performance & Error Prevention cross-cutting area. Specifically, four Green inspection findings for the current 12-month assessment period with documented cross-cutting aspect of "Human Performance & Error Prevention" (H.4(b)). The NRC determined that a substantive cross-cutting issue (SCCI) does not exist because the NRC does not have a concern with your staff's scope of effort and progress in addressing the cross-cutting theme. The staff determined that you have completed a common cause root cause analysis implementing a range of actions to address the cross-cutting theme. The staff also determined that the scope and content of actions that you identified were reasonable. Additionally, the staff recognized that two of the recent cross cutting-aspects that were identified involved human errors involving corporate staff members and did not involve Browns Ferry staff members and therefore it was not reasonable to determine that a SCCI existed. The NRC will continue to monitor your staff's effort and progress in addressing the theme until the theme criteria are no longer met.

In addition to the ROP baseline inspections at your facility, we also plan on conducting one infrequently performed inspection which is 92702, Follow up On Traditional Enforcement Actions Including Violations, Deviations, Confirmatory Action Letters, Confirmatory Orders, And Alternative Dispute Resolution Confirmatory Orders.

The enclosed inspection plan lists the inspections scheduled through December 30, 2012. 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 the days following the Fukushima Daiichi nuclear accident in Japan, the Commission directed the staff to establish a senior-level agency task force to conduct a methodical and systematic review of the NRC's processes and regulations to determine whether the agency should make additional improvements to its regulatory system. The NRC has since completed Temporary Instruction (TI) 183, "Follow-up to Fukushima Daiichi Nuclear Station Fuel Damage Event," and TI-184, "Availability and Readiness Inspection of Severe Accident Management Guidelines (SAMGs)" at your facility. Results of these inspections can be found here: <http://www.nrc.gov/japan/japan-activities.html>. Additionally, on May 11, 2011, the agency issued NRC Bulletin 2011-01, "Mitigating Strategies," to confirm compliance with Order EA-02-026, subsequently imposed license conditions, and 10 CFR 50.54(hh)(2), and to determine the status of licensee mitigating strategies programs. On July 12, 2011, the NRC's Task Force made its recommendations to the Commission in its report, "Recommendations for Enhancing Reactor Safety in the 21st Century: The Near-Term Task Force Review of Insights from the Fukushima Daiichi Accident." The NRC is currently reviewing the Task Force's recommendations to determine what additional actions may be warranted.

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).

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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 Wert Acting 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)

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Sincerely,

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cc w/encl: (See page 5)

*FOR PREVIOUS CONCURRENCE SEE ATTACHED SHEET.

X PUBLICLY AVAILABLE NON-PUBLICLY AVAILABLE SENSITIVE X NON-SENSITIVE
ADAMS: Yes ACCESSION NUMBER: PKG: ML112411450 SUNSI REVIEW COMPLETE

OFFICE	RII:DRP	RII:DRP	RII:DRP	RII:ORA	RII:ORA		
SIGNATURE	EGuthrie for	GXG	RXC2	LXW1	LWert for		
NAME	*CKontz	*EGuthrie	*RCroteau	LWert	VMcCree		
DATE	8/23/11	8/23/11	8/23/11	08/29/2011	08/29/2011		
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: S:\DRP\PERIODIC ASSESSMENTS & REPORTS\EOC & MID-CYCLE\2011\MID-CYCLE\INPUT\RPB6\MID CYCLE LETTER BFN 2011 (FINALREV3).DOCX

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Letter to R. M. Krich from Victor M. McCree dated August 29, 2011

SUBJECT: ANNUAL ASSESSMENT LETTER FOR THE BROWNS FERRY NUCLEAR
PLANT UNIT 1 (NRC INSPECTION REPORT 05000259,260,296/2011001)

Distribution w/encl:

C. Evans, RII

L. Douglas, RII

OE Mail

RIDSNNRRDIRS

PUBLIC

RidsNrrPMBrownsFerry Resource

ROP Reports

Institute of Nuclear Power Operations (INPO)

Browns Ferry

Inspection / Activity Plan

09/01/2011 - 12/31/2011

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
RESBASE - RES BASELINE 3				
1, 2, 3	07/01/2011 09/30/2011	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	4
1, 2, 3	07/01/2011 09/30/2011	IP 7111101	Adverse Weather Protection	
1, 2, 3	07/01/2011 09/30/2011	IP 7111104	Equipment Alignment (Quarterly)	
1, 2, 3	07/01/2011 09/30/2011	IP 7111104S	Equipment Alignment	
1, 2, 3	07/01/2011 09/30/2011	IP 7111105A	Fire Protection - Annual	
1, 2, 3	07/01/2011 09/30/2011	IP 7111105Q	Fire Protection - Quarterly	
1, 2, 3	07/01/2011 09/30/2011	IP 7111106	Flood Protection Measures	
1, 2, 3	07/01/2011 09/30/2011	IP 7111107A	Heat Sink Performance	
1, 2, 3	07/01/2011 09/30/2011	IP 7111111Q	Licensed Operator Requalification Program	
1, 2, 3	07/01/2011 09/30/2011	IP 7111112Q	Maintenance Effectiveness	
1, 2, 3	07/01/2011 09/30/2011	IP 7111113	Maintenance Risk Assessments and Emergent Work Control	
1, 2, 3	07/01/2011 09/30/2011	IP 7111115	Operability Determinations and Functionality Assessments	
1, 3	07/01/2011 09/30/2011	IP 7111118	Plant Modifications	
1, 2, 3	07/01/2011 09/30/2011	IP 7111119	Post Maintenance Testing	
1, 2, 3	07/01/2011 09/30/2011	IP 7111120	Refueling and Other Outage Activities	
1, 2, 3	07/01/2011 09/30/2011	IP 7111122	Surveillance Testing	
1, 2, 3	07/01/2011 09/30/2011	IP 71151	Performance Indicator Verification	
1, 2, 3	07/01/2011 09/30/2011	IP 71152	Problem Identification and Resolution	
1, 2, 3	07/01/2011 09/30/2011	IP 71153	Followup of Events and Notices of Enforcement Discretion	
RESBASE - RES BASELINE 4				
1, 2, 3	10/01/2011 12/31/2011	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	4
1, 2, 3	10/01/2011 12/31/2011	IP 7111101	Adverse Weather Protection	
1, 2, 3	10/01/2011 12/31/2011	IP 7111104	Equipment Alignment (Quarterly)	
1, 2, 3	10/01/2011 12/31/2011	IP 7111104S	Equipment Alignment	
1, 2, 3	10/01/2011 12/31/2011	IP 7111105A	Fire Protection - Annual	
1, 2, 3	10/01/2011 12/31/2011	IP 7111105Q	Fire Protection - Quarterly	
1, 2, 3	10/01/2011 12/31/2011	IP 7111106	Flood Protection Measures	
1, 2, 3	10/01/2011 12/31/2011	IP 7111107A	Heat Sink Performance	
1, 2, 3	10/01/2011 12/31/2011	IP 7111111Q	Licensed Operator Requalification Program	
1, 2, 3	10/01/2011 12/31/2011	IP 7111112Q	Maintenance Effectiveness	
1, 2, 3	10/01/2011 12/31/2011	IP 7111113	Maintenance Risk Assessments and Emergent Work Control	
1, 2, 3	10/01/2011 12/31/2011	IP 7111115	Operability Determinations and Functionality Assessments	
1, 3	10/01/2011 12/31/2011	IP 7111118	Plant Modifications	

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

Browns Ferry

Inspection / Activity Plan

09/01/2011 - 12/31/2011

Unit Number	Planned Dates Start	Planned Dates End	Inspection Activity	Title	No. of Staff on Site
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RESBASE - RES BASELINE 4

1, 2, 3	10/01/2011	12/31/2011	IP 7111119	Post Maintenance Testing	4
1, 2, 3	10/01/2011	12/31/2011	IP 7111120	Refueling and Other Outage Activities	
1, 2, 3	10/01/2011	12/31/2011	IP 7111122	Surveillance Testing	
1, 2, 3	10/01/2011	12/31/2011	IP 71151	Performance Indicator Verification	
1, 2, 3	10/01/2011	12/31/2011	IP 71152	Problem Identification and Resolution	
1, 2, 3	10/01/2011	12/31/2011	IP 71153	Followup of Events and Notices of Enforcement Discretion	

PSB1EP - EMERGENCY PREPAREDNESS EXERCISE

1, 2, 3	12/05/2011	12/09/2011	IP 7111401	Exercise Evaluation	3
1, 2, 3	12/05/2011	12/09/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2, 3	12/05/2011	12/09/2011	IP 71151	Performance Indicator Verification	

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