



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

REGION II  
SAM NUNN ATLANTA FEDERAL CENTER  
61 FORSYTH STREET, SW, SUITE 23T85  
ATLANTA, GEORGIA 30303-8931

March 1, 2007

Tennessee Valley Authority  
ATTN: Mr. K. W. Singer  
Chief Nuclear Officer and  
Executive Vice President  
6A Lookout Place  
Chattanooga, TN 37402-2801

SUBJECT: ANNUAL ASSESSMENT LETTER - BROWNS FERRY NUCLEAR PLANT,  
NRC INSPECTION REPORT 05000259/2007001, 05000260/2007001 AND  
05000296/2007001

Dear Mr. Singer:

On February 6, 2007, the NRC technical staff completed its performance review of the operating Units 2 and 3 at the Browns Ferry Nuclear Plant for the period from January 1 through December 31, 2006. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results over the previous twelve months. The purpose of this letter is to inform you of our assessment of your safety performance during this period and our plans for future inspections at your facility.

This performance review and the enclosed inspection plan do not include physical protection information. A separate letter designated and marked as "Exempt from Public Disclosure in Accordance with 10 CFR 2.390" will include the physical protection review and a resultant inspection plan.

Overall, Browns Ferry Units 2 and 3 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. Plant performance for the most recent quarter, as well as for the first three quarters of the assessment cycle, was within the Licensee Response Column of the NRC's Action Matrix, based on all inspection findings being classified as having very low safety significance (Green) and all PIs indicating performance at a level requiring no additional NRC oversight (Green). Therefore, we plan to conduct reactor oversight process (ROP) baseline inspections at your facility. We also plan on conducting non-ROP inspections of the independent spent fuel storage facility and extended power uprate modifications. Additionally, initial reactor operator licensing examinations are scheduled.

Pursuant to NRC Inspection Manual Chapter (MC) 2509, "Browns Ferry Unit 1 Restart Project Inspection Program," the Unit 1 Restart Oversight Panel has the responsibility to provide periodic licensee performance assessments of Unit 1 prior to restart, and to determine when Unit 1 ROP cornerstones are monitorable under the ROP. At present, the Restart Oversight Panel has determined that Unit 1 is under Limited ROP Oversight and as such the guidance contained in sections of MC 0305 "Operating Reactor Assessment Program," referring to performance assessments are not fully applicable to Unit 1. Effective January 1, 2005, the following four (4) ROP cornerstones for Unit 1 were determined to be monitorable under the ROP and were transitioned to the ROP: Occupational Radiation Safety, Public Radiation,

Emergency Preparedness, and Physical Protection. The performance assessment and future inspection plans for these cornerstones are the same as described above for Units 2 and 3. However, for the remaining three unmonitorable Unit 1 ROP cornerstones (i.e., Initiating Events, Mitigating Systems, and Barrier Integrity) the Restart Oversight Panel monitored the licensee's performance only using inspection findings. Until a full transition into the ROP has been completed, the performance assessment of the unmonitorable cornerstones during Unit 1 recovery will only be based upon information from inspections, and will not include PIs.

On August 15, 2006, the NRC issued a performance assessment of Unit 1 recovery activities that determined TVA had performed work in a manner that preserved and maintained public health and safety during the previous six months. Since then, the Restart Oversight Panel has continued to assess the inspection findings for 2006. During the 2006 assessment period, the NRC has identified several weakness, deficiencies and non-cited violations that were captured and addressed in the licensee's corrective action program and dispositioned using traditional enforcement. The Panel has determined that all of the inspection findings for 2006 would be classified as having very low safety significance and would require no additional NRC oversight. Consequently, the Panel has concluded that the Unit 1 recovery effort to date by TVA continues to provide adequate protection of public health and safety. In accordance with MC 2509, the NRC will continue to conduct non-ROP inspections of Unit 1 which include specialized inspections of Special Programs, open items, and significant Unit 1 modification work; system readiness and turnover; restart testing; operational readiness assessment; and power ascension testing. Furthermore, the NRC plans to conduct additional ROP-related baseline inspections of the Unit 1 unmonitorable cornerstones to compensate for the lack of PI data.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2008. The inspection plan is provided to minimize the resource impact on your staff and to allow for the resolution of any scheduling conflicts and personnel availability issues well in advance of inspector arrival onsite. Routine resident inspections are not listed due to their ongoing and continuous nature. The inspections in the last twelve months of the inspection plan are tentative and may be revised at the mid-cycle review meeting.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be made 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 the inspection plan, we will contact you to discuss the change as soon as possible. Please contact me at (404) 562-4550 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

**/RA/**

Malcolm T. Widmann, Chief  
Reactor Projects Branch 6  
Division of Reactor Projects

Docket No.: 50-259, 50-260, 50-296, 72-52  
Licensee No.: DPR-33, DPR-52, DPR-68

Enclosure: Browns Ferry Inspection/Activity Plan

cc w/encl: (See page 4)

cc w/encl:

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**Browns Ferry**  
**Inspection / Activity Plan**  
**03/01/2007 - 09/30/2008**

Unit Number	Inspection Activity	Title	No. of Staff on Site	Planned Dates Start	Planned Dates End	Inspection Type
	<b>PSB1-RP - RP OCCUPATIONAL BASELINE INSP WEEK 1</b>		<b>2</b>			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		02/26/2007	03/02/2007	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		02/26/2007	03/02/2007	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		02/26/2007	03/02/2007	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		02/26/2007	03/02/2007	Baseline Inspections
	<b>EB3-BF1 - REVIEW A-46 CONSISTENCY REVIEW</b>		<b>1</b>			
1	IP 37551	Onsite Engineering		03/05/2007	03/07/2007	Other Routine
	<b>EB3-ISI - U2 INSERVICE INSPECTION</b>		<b>1</b>			
2	IP 7111108G	Inservice Inspection Activities - BWR		03/05/2007	03/09/2007	Baseline Inspections
	<b>PSB1-RP - RP OCCUPATIONAL BASELINE INSP WEEK 2</b>		<b>3</b>			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		03/19/2007	03/23/2007	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		03/19/2007	03/23/2007	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		03/19/2007	03/23/2007	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		03/19/2007	03/23/2007	Baseline Inspections
	<b>ORAT - UNIT 1 ORAT</b>		<b>8</b>			
1	IP 93806	Operational Readiness Assessment Team		04/01/2007	04/30/2007	Other Routine
	<b>LIC REN - LICENSE RENEWAL</b>		<b>2</b>			
1	IP 71002	License Renewal Inspection		04/09/2007	04/13/2007	License Renewal Insp
	<b>INSP - UNIT 1 RP (NON-BASELINE)</b>		<b>1</b>			
1	IP 7112101	Access Control to Radiologically Significant Areas		04/23/2007	04/27/2007	Baseline Inspections
1	IP 7112102	ALARA Planning and Controls		04/23/2007	04/27/2007	Baseline Inspections
1	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment		04/23/2007	04/27/2007	Baseline Inspections
1	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems		04/23/2007	04/27/2007	Baseline Inspections
1	IP 7112202	Radioactive Material Processing and Transportation		04/23/2007	04/27/2007	Baseline Inspections
1	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P		04/23/2007	04/27/2007	Baseline Inspections
	<b>START-UP - MC 72502, 72302, 72400, 72526, 72518,</b>		<b>4</b>			
1	IP 71004	Power Uprate		04/30/2007	05/04/2007	Other Routine
	<b>START-UP - START-UP TEST RESULTS EVALUATION MC72301</b>		<b>2</b>			
1	IP 71004	Power Uprate		05/07/2007	05/11/2007	Other Routine
	<b>EPU - POWER UPRATE MC 71004</b>		<b>2</b>			
1	IP 71004	Power Uprate		05/07/2007	05/11/2007	Other Routine
1	IP 71004	Power Uprate		06/04/2007	06/08/2007	Other Routine
	<b>LTT - LARGE TRANSIENT TESTING MC 72514, 72510</b>		<b>5</b>			
1	IP 71004	Power Uprate		06/11/2007	06/22/2007	Other Routine

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<b>PSB1-EP - EP EXERCISE</b>			<b>3</b>			
1, 2, 3	IP 7111401	Exercise Evaluation		07/23/2007	07/27/2007	Baseline Inspections
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		07/23/2007	07/27/2007	Baseline Inspections
1, 2, 3	IP 71151-EP01	Drill/Exercise Performance		07/23/2007	07/27/2007	Baseline Inspections
1, 2, 3	IP 71151-EP02	ERO Drill Participation		07/23/2007	07/27/2007	Baseline Inspections
1, 2, 3	IP 71151-EP03	Alert & Notification System		07/23/2007	07/27/2007	Baseline Inspections
<b>PI&amp;R - PROBLEM IDENTIFICATION AND RESOLUTION</b>			<b>5</b>			
1, 2, 3	IP 71152B	Identification and Resolution of Problems		08/06/2007	08/10/2007	Baseline Inspections
1, 2, 3	IP 71152B	Identification and Resolution of Problems		08/20/2007	08/24/2007	Baseline Inspections
<b>60855.1 - OPERATIONAL ISFSI INSPECTION BY RESIDENT</b>			<b>1</b>			
1	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		08/01/2007	09/30/2007	Other Routine
<b>OL PREP - INITIAL EXAM PREP</b>			<b>3</b>			
1	V23268	BROWNS FERRY/SEPTEMBER 2007 EXAM AT POWER FACILITIES		08/06/2007	08/10/2007	Not Applicable
<b>OL EXAM - INITIAL EXAM</b>			<b>3</b>			
1	V23268	BROWNS FERRY/SEPTEMBER 2007 EXAM AT POWER FACILITIES		08/27/2007	08/31/2007	Not Applicable
<b>EB1-CDBI - COMPONENT DESIGN BASES INSPECTION</b>			<b>6</b>			
1, 2, 3	IP 7111121	Component Design Bases Inspection		10/29/2007	11/02/2007	Baseline Inspections
1, 2, 3	IP 7111121	Component Design Bases Inspection		11/12/2007	11/16/2007	Baseline Inspections
1, 2, 3	IP 7111121	Component Design Bases Inspection		11/26/2007	11/30/2007	Baseline Inspections
1, 2, 3	IP 7111121	Component Design Bases Inspection		12/10/2007	12/14/2007	Baseline Inspections
<b>EB3-ME - MAINTENANCE EFFECTIVENESS</b>			<b>1</b>			
1, 2, 3	IP 7111112B	Maintenance Effectiveness		11/26/2007	11/30/2007	Baseline Inspections
<b>EB1-MODS - MODIFICATIONS - 10CFR50.59</b>			<b>4</b>			
1, 2, 3	IP 7111102	Evaluation of Changes, Tests, or Experiments		01/14/2008	01/18/2008	Baseline Inspections
1, 2, 3	IP 7111117B	Permanent Plant Modifications		01/14/2008	01/18/2008	Baseline Inspections
<b>EB3HS - HEAT SINK</b>			<b>1</b>			
1, 2, 3	IP 7111107B	Heat Sink Performance		01/28/2008	02/01/2008	Baseline Inspections
<b>OL PREP - INITIAL EXAM PREP</b>			<b>3</b>			
1	V23278	BROWNS FERRY/FEBRUARY 2008 EXAM AT POWER FACILITIES		01/28/2008	02/01/2008	Not Applicable
<b>OL EXAM - INITIAL EXAM</b>			<b>3</b>			
1	V23278	BROWNS FERRY/FEBRUARY 2008 EXAM AT POWER FACILITIES		02/25/2008	03/07/2008	Not Applicable
<b>EB3-ISI - UNIT 3 - ISI</b>			<b>1</b>			
3	IP 7111108G	Inservice Inspection Activities - BWR		03/10/2008	03/14/2008	Baseline Inspections
<b>RP-PS - RADIATION PROTECTION PREINSPECTION VISIT</b>			<b>1</b>			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		04/14/2008	04/16/2008	Baseline Inspections

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

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**03/01/2007 - 09/30/2008**

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<b>PSB1-EP - EP INSP</b>			<b>2</b>			
1, 2, 3	IP 7111402	Alert and Notification System Testing		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 7111403	Emergency Response Organization Augmentation Testing		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 71151-EP01	Drill/Exercise Performance		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 71151-EP02	ERO Drill Participation		06/02/2008	06/06/2008	Baseline Inspections
1, 2, 3	IP 71151-EP03	Alert & Notification System		06/02/2008	06/06/2008	Baseline Inspections