



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
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ATLANTA, GEORGIA 30303-8931

March 4, 2009

Mr. Preston D. Swafford
Chief Nuclear Officer and Executive Vice President
Tennessee Valley Authority
3R Lookout Place
1101 Market Street
Chattanooga, TN 37402-2801

SUBJECT: ANNUAL ASSESSMENT LETTER – BROWNS FERRY NUCLEAR PLANT
(NRC INSPECTION REPORT 05000259/2009001, 05000260/20009001 AND
05000296/2009001)

Dear Mr. Swafford:

On February 12, 2009, the NRC staff completed its performance review of the Browns Ferry Nuclear Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2008. 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 enclosed inspection plan do not include security information. A separate letter designated and marked as "Official Use Only-Security-Related Information" will include the security cornerstone review and resultant inspection plan.

Overall, Browns Ferry Units 1, 2, and 3 operated in a manner that preserved public health and safety and met all cornerstone objectives. Plant performance for all units for the most recent quarter 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). In the preceding three quarters of the assessment period, all three units were also in the Licensee Response column except Unit 1 which was in the Regulatory Response column in the first quarter of the assessment period. In the first quarter, the Unit 1 "Unplanned Scrams per 7000 Critical Hours PI" of the Initiating Events Cornerstone was in the White performance band.

The Unit 1 "Unplanned Scrams per 7000 Critical Hours PI" was White in the first quarter as performance improved from the Yellow performance band (degraded Initiating Events Cornerstone) in the fourth quarter of 2007 and then to the Green performance band in the second quarter of this assessment period. During December 2008, the NRC performed a Supplemental Inspection in accordance with Inspection Procedure 95002, "Inspection For One Degraded Cornerstone Or Any Three White Inputs In a Strategic Performance Area," for the Unit 1 degraded cornerstone. The Supplemental Inspection determined that your evaluations adequately determined the areas in need of improvement and your proposed corrective actions were appropriate to resolve the deficiencies related to the degraded Initiating Events Cornerstone. Thus, the Supplemental Inspection completed the NRC's additional inspection activities associated with the Unit 1 degraded cornerstone. In addition to the reactor oversight

process (ROP) baseline inspections, we plan to conduct inspections of your Independent Spent Fuel Storage Facility, Temporary Instruction (TI) 2515/173, "Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative," TI 2515/175, "Emergency Response Organization, Drill/Exercise Performance Indicator, Program Review," and an additional biennial Problem Identification and Resolution (PI&R) inspection as discussed below, and conduct operator licensing exams. Furthermore, we plan to conduct non-baseline inspections of your power uprate activities. The scheduling of these uprate inspections are dependent upon completion of work activities and will be scheduled when appropriate.

In the 2007 annual assessment letter dated March 3, 2008, the NRC informed you of a substantive cross-cutting issue (SCCI) in the PI&R cross-cutting area with a theme associated with appropriate and timely corrective actions (P.1(d)). The established criteria for clearing this SCCI was that "your corrective actions in this affected area show evidence of effectiveness during the 2008 inspection period as demonstrated by no new greater-than-Green findings with the same cross-cutting aspect, a small number of new Green findings that are examples of the same common theme, and evidence of improvement as described in the Brown Ferry Turn Around Plan and the corrective action trend Problem Evaluation Report (PER) 136489."

The NRC included inspections in this SCCI area in the October biennial PI&R inspection, the December Supplemental Inspection, discussed above, and the routine baseline inspection program performed by the resident inspectors. The end-of-cycle review of findings determined that your performance had improved and the criteria associated with the number of Green and greater-than Green findings had been met. However, the end-of-cycle review concluded that at this time there was insufficient evidence of improvement from the Turn Around Plan and PER 136489 to close the SCCI. Although the PI&R inspection team concluded that implemented and proposed corrective actions were adequate to address the SCCI, the team was unable to determine the actual effectiveness of these corrective actions due to the brief time period between the implementation of corrective actions and the inspection. The Supplemental Inspection team reached a similar conclusion. The end-of-cycle review also noted that the routine resident baseline inspections had documented a number of negative observations involving the SCCI area. As a result, additional inspection is needed to determine the effectiveness of the SCCI corrective actions. It is our understanding that additional evidence of the improvements from the Turn Around Plan and PER 136489 will be available for inspection after June 30, 2009, the completion date for your Corrective Action Program self-assessment. Consequently, the NRC is planning to conduct an additional biennial PI&R inspection after this date to assess the final criterion for clearing the SCCI. The NRC staff will work with your staff to determine specific dates for this inspection.

The enclosed inspection plan details the inspections, less those related to security, scheduled through June 30, 2010. The inspection plan is provided 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 nine months of the inspection plan are tentative and may be revised at the mid-cycle review.

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).

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 Dr. Heather Gepford at (404) 562-4659 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/RA/

Leonard D. Wert, Jr., Director
Division of Reactor Projects

Docket Nos.: 50-259, 50-260, 50-296
License Nos.: DPR-33, DPR-52, DPR-68

Enclosure: Browns Ferry Inspection/Activity Plan (03/01/09 - 06/30/10)

cc w/encl.: (See page 4)

cc w/encl:

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07200052 - TENNESSEE VALL

Inspection / Activity Plan

03/01/2009 - 06/30/2010

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
1	09/01/2009 09/30/2009	ISFSI IP 60854	- ISFSI PREOPERATIONAL INSPECTION Preoperational Testing Of An ISFSI	1

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

Browns Ferry
Inspection / Activity Plan
03/01/2009 - 06/30/2010

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			PSB1EP - EP REVIEW PI AND PLAN CHANGES		1
1, 2, 3	03/16/2009	03/20/2009	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2, 3	03/16/2009	03/20/2009	IP 711151	Performance Indicator Verification	
			EB3ISI - UNIT 2 INSERVICE INSPECTION		1
2	05/04/2009	05/08/2009	IP 7111108G	Inservice Inspection Activities - BWR	
			PSB1-RP - RP OCCUPATIONAL INSPECTION WEEK1		2
1, 2, 3	05/11/2009	05/15/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1, 2, 3	05/11/2009	05/15/2009	IP 7112102	ALARA Planning and Controls	
1, 2, 3	05/11/2009	05/15/2009	IP 7112202	Radioactive Material Processing and Transportation	
			PSB1-RP - RP OCCUPATIONAL BASELINE - WEEK 2		3
1, 2, 3	05/18/2009	05/22/2009	IP 7112101	Access Control to Radiologically Significant Areas	
1, 2, 3	05/18/2009	05/22/2009	IP 7112102	ALARA Planning and Controls	
1, 2, 3	05/18/2009	05/22/2009	IP 7112202	Radioactive Material Processing and Transportation	
1, 2, 3	05/18/2009	05/22/2009	IP 711151	Performance Indicator Verification	
			OL EXAM - INITIAL EXAM - PREP		3
1	06/22/2009	06/26/2009	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 1		4
1	07/06/2009	07/10/2009	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		5
1	07/13/2009	07/17/2009	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			TFPI - TRIENNIAL FIRE PROTECTION INSPECTION		6
1, 2, 3	09/21/2009	09/25/2009	IP 7111105T	Fire Protection [Triennial]	
1, 2, 3	10/05/2009	10/09/2009	IP 7111105T	Fire Protection [Triennial]	
			ISFSI - ISFSI OPERATIONAL INSPECTION		2
1, 2, 3	09/01/2009	12/31/2009	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants	
			CDBI-EB1 - COMPONENT DESIGN BASES INSPECTION		7
1, 2, 3	09/28/2009	10/02/2009	IP 7111121	Component Design Bases Inspection	
1, 2, 3	10/19/2009	10/23/2009	IP 7111121	Component Design Bases Inspection	
1, 2, 3	11/02/2009	11/06/2009	IP 7111121	Component Design Bases Inspection	
1, 2, 3	11/16/2009	11/20/2009	IP 7111121	Component Design Bases Inspection	
			PSB1EP - EMERGENCY PREPAREDNESS EXERCISE		3
1, 2, 3	11/02/2009	11/06/2009	IP 2515/175	Emergency Response Organization, Drill/Exercise Performance Indicator, Program Review	
1, 2, 3	11/02/2009	11/06/2009	IP 7111401	Exercise Evaluation	
1, 2, 3	11/02/2009	11/06/2009	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2, 3	11/02/2009	11/06/2009	IP 711151	Performance Indicator Verification	

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Browns Ferry
Inspection / Activity Plan
03/01/2009 - 06/30/2010

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			EB3ISI - UNIT 3 INSERVICE INSPECTION		1
3	03/08/2010	03/12/2010	IP 7111108G	Inservice Inspection Activities - BWR	
			PSB1EP - EMERGENCY PREPAREDNESS INSPECTION		1
1, 2, 3	03/22/2010	03/26/2010	IP 7111402	Alert and Notification System Testing	
1, 2, 3	03/22/2010	03/26/2010	IP 7111403	Emergency Response Organization Augmentation Testing	
1, 2, 3	03/22/2010	03/26/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1, 2, 3	03/22/2010	03/26/2010	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1, 2, 3	03/22/2010	03/26/2010	IP 71151	Performance Indicator Verification	
			PSB1-RP - RP ACCESS CONTROLS		1
1, 2, 3	03/29/2010	04/02/2010	IP 7112101	Access Control to Radiologically Significant Areas	
1, 2, 3	03/29/2010	04/02/2010	IP 71151	Performance Indicator Verification	
			OL EXAM - INITIAL EXAM PREP		7
1	05/17/2010	05/21/2010	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			PSB1-RP - RP GROUNDWATER PROTECTION		1
1, 2, 3	05/31/2010	06/04/2010	IP 2515/173	Review of the Implementation of the Industry Ground Water Protection Voluntary Initiative	
			OL EXAM - INITIAL EXAM - WEEK 1		7
1	06/07/2010	06/11/2010	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		7
1	06/14/2010	06/18/2010	V23304	BROWNS FERRY/JULY 2009 EXAM AT POWER FACILITIES	
			PSB1-RP - RP PUBLIC RADIATION PROTECTION		3
1, 2, 3	06/21/2010	06/25/2010	IP 7112103	Radiation Monitoring Instrumentation and Protective Equipment	
1, 2, 3	06/21/2010	06/25/2010	IP 7112201	Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems	
1, 2, 3	06/21/2010	06/25/2010	IP 7112203	Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control Program	
1, 2, 3	06/21/2010	06/25/2010	IP 71151	Performance Indicator Verification	

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