



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

September 1, 2010

Mr. J. Randy Johnson
Vice President - Farley
Southern Nuclear Operating Company, Inc.
7388 North State Highway 95
Columbia, AL 36319

SUBJECT: MID-CYCLE PERFORMANCE REVIEW AND INSPECTION PLAN – JOSEPH M. FARLEY NUCLEAR PLANT

Dear Mr. Johnson:

On August 10, 2010, the NRC staff completed its performance review of Joseph M. Farley Nuclear Plant. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from July 1, 2009, through June 30, 2010. 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, marked as "Official Use Only - Security Related Information," will include the security cornerstone review and resultant inspection plan.

Plant performance for the most recent quarter for Unit 1 was within the Regulatory Response column of the NRC's Action Matrix. The Mitigating Systems Performance Index (MSPI), Emergency AC systems crossed the threshold from Green to White in the first quarter 2008 due to failures of the 1B Emergency Diesel Generator (EDG). A Supplemental Inspection was conducted for Unit 1 during the third quarter 2008 using Inspection Procedure 95001 "Inspection For One Or Two White Inputs In A Strategic Performance Area".

Unit 2 plant performance was within the Licensee Response column of the NRC's Action Matrix in the most recent quarter 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).

Additionally, the staff reviewed your progress in addressing a substantive cross-cutting issue (SCCI) in the area of human performance. This SCCI was identified during the 2009 end of cycle assessment period due to 4 findings with documented cross-cutting aspects in the area of human performance and a cross-cutting issue in the aspect of procedural compliance H.4(b). In evaluating the scope of efforts and progress in addressing the cross-cutting issue, the staff determined that you appropriately identified the cross-cutting theme and took actions to address it and recognized the cross-cutting theme and scheduled actions based on judgment and risk insights to address this theme. However, the NRC determined that the corrective actions have not been in place long enough to ensure sustainable improvement in the procedure adherence area. In addition, effectiveness reviews have not been completed which would provide a qualitative metric indicating improvements in the procedure adherence area. Therefore, the

staff has concluded that the substantive cross-cutting issue in the Human Performance area should remain open. The Human Performance cross-cutting issue will continue to be addressed in the plant's baseline inspection as an area of focus. In addition, a semi-annual trend review of the procedure adherence issues will assess your efforts to ensure effective corrective action implementation, timeliness, and effectiveness reviews.

The enclosed inspection plan details the inspections, less those related to physical protection scheduled through December 31, 2011. The enclosed 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 end-of-cycle review. We also plan on conducting Temporary Instruction (TI) 2515/172 "Reactor Coolant System Dissimilar Metal Butt Welds," TI 2515/179 "Verification of Licensee Responses to NRC Requirements for Inventories of Materials Tracked in National Source Tracking System," Independent Spent Fuel Storage Installation Inspections, and Operator Licensing Examinations.

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 Scott Shaeffer at 404-997-4521 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

/Joel T. Munday RA for/

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

Docket Nos.: 50-348 and 50-364
License Nos.: NPF-2 and NPF-8

Enclosure: Farley Inspection/Activity Plan (09/01/2010 – 12/31/2011)

cc w/encl: (See page 3)

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Farley

Inspection / Activity Plan

09/01/2010 - 12/31/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			OL RQ - REQUAL INSPECTION		5
1,2	09/20/2010	09/24/2010	IP 7111111B	Licensed Operator Requalification Program	
			PSB1-TI - TI-179 NSTS VERIFICATION		3
1,2	10/18/2010	10/22/2010	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
1,2	11/01/2010	11/05/2010	IP 2515/179	Verification of Licensee Responses to NRC Requirement for Inventories of Materials Tracked in NSTS	
			EB3ISI - UNIT 1 INSERVICE INSPECTION		1
1	10/18/2010	10/22/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			EB3TI172 - EB3 RX COOLANT SYS DM BUTT WELDS		1
1	10/18/2010	10/22/2010	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			PSB1-RP - RP OCCUPATIONAL BASELINE WEEK1		3
1,2	10/18/2010	10/22/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	10/18/2010	10/22/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	10/18/2010	10/22/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	10/18/2010	10/22/2010	IP 71124.04	Occupational Dose Assessment	
1,2	10/18/2010	10/22/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	10/18/2010	10/22/2010	IP 71151	Performance Indicator Verification	
			EB3SGISI - UNIT 1 SG INSERVICE INSPECTION		1
1	10/25/2010	10/29/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			PSB1-RP - RP OCCUPATIONAL BASELINE WEEK 2		2
1,2	11/01/2010	11/05/2010	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
1,2	11/01/2010	11/05/2010	IP 71124.02	Occupational ALARA Planning and Controls	
1,2	11/01/2010	11/05/2010	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
1,2	11/01/2010	11/05/2010	IP 71124.04	Occupational Dose Assessment	
1,2	11/01/2010	11/05/2010	IP 71124.05	Radiation Monitoring Instrumentation	
1,2	11/01/2010	11/05/2010	IP 71151	Performance Indicator Verification	
			PSB1EP - EMERGENCY PREPAREDNESS EXERCISE		3
1,2	12/06/2010	12/10/2010	IP 7111401	Exercise Evaluation	
1,2	12/06/2010	12/10/2010	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	12/06/2010	12/10/2010	IP 71151	Performance Indicator Verification	
			EB3HS - HEAT SINK		1
1,2	01/31/2011	02/04/2011	IP 7111107T	Heat Sink Performance	
			TFPI - TRIENNIAL FIRE PROTECTION INSPECTION		6
1,2	03/07/2011	03/11/2011	IP 7111105T	Fire Protection [Triennial]	
1,2	03/21/2011	03/25/2011	IP 7111105T	Fire Protection [Triennial]	

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

Enclosure

Farley
Inspection / Activity Plan
09/01/2010 - 12/31/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			OL EXAM - INITIAL EXAM PREP		6
1	04/18/2011	04/22/2011	V23349	FARLEY/MAY 2011 EXAM AT POWER FACILITIES	
			PSB1EP - EMERGENCY PREPAREDNESS INSPECTION		1
1,2	05/02/2011	05/06/2011	IP 7111402	Alert and Notification System Testing	
1,2	05/02/2011	05/06/2011	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
1,2	05/02/2011	05/06/2011	IP 7111404	Emergency Action Level and Emergency Plan Changes	
1,2	05/02/2011	05/06/2011	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
1,2	05/02/2011	05/06/2011	IP 71151	Performance Indicator Verification	
			OL EXAM - INITIAL EXAM - WEEK 1		5
1	05/09/2011	05/14/2011	V23349	FARLEY/MAY 2011 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		5
1	05/16/2011	05/20/2011	V23349	FARLEY/MAY 2011 EXAM AT POWER FACILITIES	
			PI&R - PROBLEM IDENTIFICATION AND RESOLUTION		4
1,2	06/06/2011	06/10/2011	IP 71152B	Identification and Resolution of Problems	
1,2	06/20/2011	06/24/2011	IP 71152B	Identification and Resolution of Problems	
			CDBI - COMPONENT DESIGN BASES INSPECTION		9
1,2	08/15/2011	08/19/2011	IP 7111121	Component Design Bases Inspection	
1,2	08/29/2011	09/02/2011	IP 7111121	Component Design Bases Inspection	
1,2	09/12/2011	09/16/2011	IP 7111121	Component Design Bases Inspection	
1,2	09/26/2011	09/30/2011	IP 7111121	Component Design Bases Inspection	
			EB3 ISI - UNIT 2 IN-SERVICE INSPECTION		1
2	10/17/2011	10/21/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			PSB1-RP - RP HAZARD ASSESSMENT		2
1,2	10/17/2011	10/21/2011	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
			EB3SGISI - UNIT 2 SG IN-SERVICE INSPECTION		1
2	10/24/2011	10/28/2011	IP 7111108P	Inservice Inspection Activities - PWR	
			PSB1-RP - RP PUBLIC RADIATION PROTECTION INSP		3
1,2	12/12/2011	12/16/2011	IP 71124.04	Occupational Dose Assessment	
1,2	12/12/2011	12/16/2011	IP 71124.06	Radioactive Gaseous and Liquid Effluent Treatment	
1,2	12/12/2011	12/16/2011	IP 71124.07	Radiological Environmental Monitoring Program	
1,2	12/12/2011	12/16/2011	IP 71124.08	Radioactive Solid Waste Processing and Radioactive Material Handling, Storage, and Transportation	
1,2	12/12/2011	12/16/2011	IP 71151	Performance Indicator Verification	

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