



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
SAM NUNN ATLANTA FEDERAL CENTER
61 FORSYTH STREET, SW, SUITE 23T85
ATLANTA, GEORGIA 30303-8931

March 3, 2010

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

SUBJECT: ANNUAL ASSESSMENT LETTER – JOSEPH M. FARLEY NUCLEAR PLANT
(NRC INSPECTION REPORT 05000348/2010001 AND 05000364/2010001)

Dear Mr. Johnson:

On February 9, 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 January 1, 2009, through December 31, 2009. 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 Information" will include the security cornerstone review and resultant inspection plan.

Overall, Farley Units 1 and 2 operated in a manner that preserved public health and safety and fully met all cornerstone objectives. 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". In addition a White Finding was issued in the second quarter 2009 for failure to maintain the means to provide alert, notification, and clear instruction to all of the population within the plume exposure pathway Emergency Planning Zone (EPZ). A supplemental inspection was completed in February 2010, using Inspection Procedure 95001. No significant weaknesses were identified.

Unit 2 plant performance was within the Regulatory Response column of the NRC's Action Matrix in the most recent quarter for a White Finding in the Emergency Preparedness Cornerstone issued in the second quarter 2009 for failure to maintain the means to provide alert, notification, and clear instruction to all of the population within the plume exposure pathway Emergency Planning Zone (EPZ). A supplemental inspection was completed in February 2010, using Inspection Procedure 95001. No significant weaknesses were identified. All Performance Indicators during the assessment period were Green for Unit 2.

SNC 2

Additionally, the NRC has identified a substantive cross-cutting issue in the area of human performance. During the cycle, there were 3 green findings and one severity level III violation with documented cross-cutting aspects in the area of human performance which constitute a cross-cutting theme in the aspect of "procedural compliance" (H.4(b)). In evaluating the scope of efforts and progress in addressing the cross-cutting theme, the staff determined that you had appropriately identified/recognized the cross-cutting theme, scheduled and took actions based on judgment and/or risk insights to address this theme. However, the NRC does not have a reasonable assurance the scope of actions taken will be effective in addressing the procedural compliance cross-cutting issue. Therefore the staff has concluded that a substantive cross-cutting issue in the Human Performance area does exist at this time. The Human Performance cross-cutting issue will be addressed in the plant's baseline inspection as an area of focus. The NRC assessment of your progress to clear the SCCI will be based on: 1.) The appropriate and comprehensive range of actions identified by the Corrective Action Program, which address the cross-cutting theme; 2.) Fewer than four findings with the cross-cutting aspect of "procedural compliance" (H.4(b)) during the previous twelve month assessment period; and 3.) An increased level of confidence in your ability to deal effectively with issues as related to the cross-cutting theme of "procedural compliance" (H.4(b)) during the previous six month assessment period. Additionally, a resident inspector semi-annual trend review of the procedure adherence issues will assess your efforts to ensure effective corrective action implementation and timeliness. This will encompass both the original apparent cause determination 2008 action items (CR 2008106454) related to procedure adherence and the recent CR (2009113187) regarding a potential NRC identified cross-cutting theme.

We also plan on conducting several infrequently performed inspections, which include the triennial 50.59 Modification inspection, triennial Fire Protection inspection, temporary instruction (TI) 2515/172 "Reactor Coolant System Dissimilar Metal Butt Welds," TI 2515/177 "Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal, and Containment Spray Systems (NRC Generic Letter 2008-01)," Independent Spent Fuel Storage Installation and operator licensing inspections.

The enclosed inspection plan details the inspections, less those related to security scheduled through June 30, 2011. 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 end-of 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).

SNC 3

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 404-562-4521 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.: 50-348 and 50-364
License Nos.: NPF-2 and NPF-8

Enclosure: Farley Inspection/Activity Plan

cc w/encl: (See page 4)

SNC 4

cc w/encl:
B. D. McKinney, Jr.
Regulatory Response Manager
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

N. J. Stringfellow
Licensing Manager
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

T. D. Honeycutt
Regulatory Response Supervisor
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Todd L. Youngblood
Plant Manager
Joseph M. Farley Nuclear Plant
Electronic Mail Distribution

Managing Attorney and Compliance Officer
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Jeffrey T. Gasser
Executive Vice President
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

L. Mike Stinson
Vice President
Fleet Operations Support
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Paula Marino
Vice President
Engineering
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Moanica Caston
Vice President and General Counsel
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Chris Clark
Commissioner
Georgia Department of Natural Resources
Electronic Mail Distribution

John G. Horn
Site Support Manager
Joseph M. Farley Nuclear Plant
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Aimee J. Gray
Performance Improvement Supervisor
Joseph M. Farley Nuclear Plant
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Ted V. Jackson
Emergency Response and Radiation
Program Manager
Environmental Protection Division
Georgia Department of Natural Resources
Electronic Mail Distribution

C. Howard Mahan
Principal Licensing Engineer
Joseph M. Farley Nuclear Plant
Southern Nuclear Operating Company, Inc.
Electronic Mail Distribution

Cynthia A. Sanders
Radioactive Materials Program Manager
Environmental Protection Division
Georgia Department of Natural Resources
Electronic Mail Distribution

James C. Hardeman
Environmental Radiation Program Manager
Environmental Protection Division
Georgia Department of Natural Resources
Electronic Mail Distribution

Mr. Mark Culver
Chairman
Houston County Commission
P. O. Box 6406
Dothan, AL 36302

cc w/encl. continued next page

SNC 5

cc w/encl continued:

James A. Sommerville
Program Coordination Branch Chief
Environmental Protection Division
Georgia Department of Natural Resources
Electronic Mail Distribution

State Health Officer
Alabama Dept. of Public Health
Electronic Mail Distribution

F. Allen Barnes
Director
Environmental Protection Division
Georgia Department of Natural Resources
Electronic Mail Distribution

Farley
Inspection / Activity Plan
03/01/2010 - 06/30/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			PB2-SPI - SPECIAL INSPECTION - 2E SW PUMP FAILURE		2
1, 2	02/23/2010	03/26/2010	IP 93812	Special Inspection	
			INIT - INITIAL EXAM PREP		6
1	03/15/2010	03/19/2010	V23323	FARLEY/MARCH 2010 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM WEEK		7
1	04/05/2010	04/16/2010	V23323	FARLEY/MARCH 2010 EXAM AT POWER FACILITIES	
			EB3ISI - UNIT 2 ISI		1
2	04/12/2010	04/16/2010	IP 7111108P	Inservice Inspection Activities - PWR	
			EB3TI172 - EB3 RCS DM BUTT WELDS		1
1, 2	04/12/2010	04/16/2010	IP 2515/172	Reactor Coolant System Dissimilar Metal Butt Welds	
			TI-177 - TI-177 GAS INTRUSION		3
1, 2	05/24/2010	05/28/2010	IP 2515/177	Managing Gas Accumulation In Emergency Core Cooling, Decay Heat Removal & Containment Spray System	
			OL RQ - REQUAL INSPECTION		4
1, 2	09/20/2010	09/24/2010	IP 7111111B	Licensed Operator Requalification Program	
			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		2
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	

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

Enclosure

Farley
Inspection / Activity Plan
03/01/2010 - 06/30/2011

Unit Number	Planned Dates		Inspection Activity	Title	No. of Staff on Site
	Start	End			
			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		2
1,2	03/07/2011	03/11/2011	IP 7111105T	Fire Protection [Triennial]	
1,2	03/07/2011	03/25/2011	IP 7111105T	Fire Protection [Triennial]	
			OL EXAM - INITIAL EXAM PREP		4
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 Evaluation	
1,2	05/02/2011	05/06/2011	IP 7111403	Emergency Response Organization Augmentation Testing	
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-EP01	Drill/Exercise Performance	
1,2	05/02/2011	05/06/2011	IP 71151-EP02	ERO Drill Participation	
1,2	05/02/2011	05/06/2011	IP 71151-EP03	Alert & Notification System	
			OL EXAM - INITIAL EXAM - WEEK 1		3
1	05/09/2011	05/14/2011	V23349	FARLEY/MAY 2011 EXAM AT POWER FACILITIES	
			OL EXAM - INITIAL EXAM - WEEK 2		3
1	05/16/2011	05/27/2011	V23349	FARLEY/MAY 2011 EXAM AT POWER FACILITIES	

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

Enclosure