

## 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

Duke Power Company LLC d/b/a Duke Energy Carolinas, LLC ATTN: Mr. Bruce H. Hamilton

Vice President

Oconee Nuclear Station

7800 Rochester Highway Seneca, SC 29672

SUBJECT: ANNUAL ASSESSMENT LETTER - OCONEE NUCLEAR STATION

NRC INSPECTION REPORT 05000269/2007001, 05000270/2007001,

AND 05000287/2007001

Dear Mr. Hamilton:

On February 8, 2007, the NRC staff completed its performance review of your Oconee Nuclear Station. Our technical staff reviewed performance indicators (PIs) for the most recent quarter and inspection results for the period from January 1 through December 31, 2006. 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 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, Oconee Units 1, 2, and 3 operated in a manner that preserved public health and safety and met all cornerstone objectives with moderate degradation in safety performance. Plant performance for the most recent quarter (fourth quarter 2006) was within the Degraded Cornerstone Column of the NRC's Action Matrix. This was the result of a fourth quarter 2006 Mitigating Systems cornerstone Performance Indicator (PI) reflecting performance at a level that may require additional NRC oversight (White), in conjunction with a third guarter 2006 Mitigating Systems cornerstone finding of low to moderate safety significance (White), affecting all three units. The White Mitigating Systems cornerstone PI (Emergency AC Power System) was the result of an extended forced outage on Keowee Hydroelectric Unit 2. The third quarter White finding involved the failure to effectively control maintenance activities, and therefore assess and manage the risk associated with breaching the standby shutdown facility (SSF) external flood protection barrier. In addition, the Degraded Cornerstone performance of Oconee Unit 3 was also reflective of the aforementioned White PI (or finding) in conjunction with a fourth quarter 2006 White Mitigating Systems White finding involving the failure to implement adequate foreign material exclusion controls for the Unit 3 reactor building emergency sump. In response to the Degraded Cornerstone performance in the fourth quarter of the assessment period, a supplemental inspection (inclusive of the White Mitigating Systems PI and both findings) will be performed under Inspection Procedure (IP) 95002. Satisfactory NRC completion of the IP 95002 inspection is highly dependent on adequate root cause/extent of condition reviews by

your staff. We have been discussing the status of these reviews with your staff to determine an appropriate date for the inspection. Our current plan is to perform the IP 95002 inspection in the April 2007 time frame.

Plant performance of all three Oconee Units during the third quarter of the assessment period was within the Regulatory Response Column of the NRC's Action Matrix. This was due to the aforementioned third quarter Mitigating Systems White finding involving maintenance activities. First and second quarter plant performance 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).

For your information, the following issues are still under staff review as part of the Significance Determination Process and may warrant additional supplemental inspections if they are determined to be of greater than very low risk significance:

- Unresolved Item (URI) 05000269,270,287/2006002-02 (Failure to Identify SSF External Flood Vulnerability via Sewer System)
- URI 05000269,270,287/2006003-01 (Failure to Identify SSF Internal Flooding Risk via Potable Water System)

Additionally, the staff is also continuing its review of licensing basis issues associated with tornado mitigation and high energy line break analysis.

The enclosed inspection plan details the inspections, less those related to physical protection, scheduled through September 30, 2008. In addition to reactor oversight process (ROP) baseline inspection activities and the IP 95002 Supplemental Inspection discussed above, the plan currently includes non-ROP inspection activities involving: (1) operator licensing examinations; (2) your Independent Spent Fuel Storage Installation; and (3) a pressurized water reactor containment sump blockage temporary instruction. 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 <a href="http://www.nrc.gov/reading-rm/adams.html">http://www.nrc.gov/reading-rm/adams.html</a> (the Public Electronic Reading Room).

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If circumstances arise which cause us to change our inspection plan, we will contact you to discuss the change as soon as possible. Please contact Mr. James H. Moorman, III at (404) 562-4647 with any questions you may have regarding this letter or the inspection plan.

Sincerely,

#### /RA/

William D. Travers Regional Administrator

Docket Nos.: 50-269, 50-270, 50-287, 72-04, 72-40

License Nos.: DPR-38, DPR-47, DPR-55

Enclosure: Oconee Inspection/Activity Plan

cc w/encl: (See next page)

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cc w/encl:
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**Inspection / Activity Plan** 03/01/2007 - 09/30/2008

Unit Number	Inspection Activi	ty	No. of Staff on Site	Planned Dates Start End		Inspection Type
	OL RQ - RE	QUALIFICATION INSPECTION	2			
1, 2, 3	IP 7111111B	Licensed Operator Requalification Program		03/26/2007	03/30/2007	Baseline Inspections
	PSB1-RP - RP	PRE-INSP VISIT/ISFSI	1			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		04/10/2007	04/12/2007	Baseline Inspections
	EB3-ISI - UN	IIT 2 INSERVICE INSPECTION	1			
2	IP 7111108P	Inservice Inspection Activities - PWR		04/23/2007	04/27/2007	Baseline Inspections
	95002 - 95	002 SUP INSPECT (MSPI, SSF, U3RBES)	4			
1, 2, 3	IP 95002	Inspection For One Degraded Cornerstone Or Any Three White Inputs In A Strategic Perform		04/30/2007	05/04/2007	Supplemental Prograi
	PSB1-RP - RP	OCCUPATIONAL BASELINE INSP WK1	2			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		04/30/2007	05/04/2007	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		04/30/2007	05/04/2007	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		04/30/2007	05/04/2007	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		04/30/2007	05/04/2007	Baseline Inspections
	EB1-SUMP - PV	VR CONTAINMENT SUMP BLOCKAGE TI (U-2)	1			
2	IP 2515/166	Pressurized Water Reactor Containment Sump Blockage [NRC GENERIC LETTER 2004-02]		05/06/2007	05/11/2007	Safety Issues
	EB3SGISI - UN	IIT 2 STEAM GENERATOR ISI	1			
2	IP 7111108P	Inservice Inspection Activities - PWR		05/07/2007	05/11/2007	Baseline Inspections
	PSB1-RP - RP	OCCUPATIONAL BASELINE INSP WK2	3			
1, 2, 3	IP 7112101	Access Control to Radiologically Significant Areas		05/14/2007	05/18/2007	Baseline Inspections
1, 2, 3	IP 7112102	ALARA Planning and Controls		05/14/2007	05/18/2007	Baseline Inspections
1, 2, 3	IP 7112202	Radioactive Material Processing and Transportation		05/14/2007	05/18/2007	Baseline Inspections
1, 2, 3	IP 71151	Performance Indicator Verification		05/14/2007	05/18/2007	Baseline Inspections
	PB1-PI&R - BII	ENNIAL PI&R INSPECTION	5			
1, 2, 3	IP 71152B	Identification and Resolution of Problems		07/09/2007	07/13/2007	Baseline Inspections
1, 2, 3	IP 71152B	Identification and Resolution of Problems		07/23/2007	07/27/2007	Baseline Inspections
	60855.1 - OF	PERATIONAL ISFSI RESIDENT INSPECTION	1			
1	IP 60855.1	Operation of an Independent Spent Fuel Storage Installation at Operating Plants		07/09/2007	07/13/2007	Other Routine
	OL PREP - INI	ITIAL EXAM PREPARATION	4			
1	V23266	OCONEE/AUGUST 2007 EXAM AT POWER FACILITIES		08/06/2007	08/10/2007	Not Applicable
	PSB1-EP - EP	PINSP	1			
1, 2, 3	IP 7111402	Alert and Notification System Testing		08/06/2007	08/10/2007	Baseline Inspections
1, 2, 3	IP 7111403	Emergency Response Organization Augmentation Testing		08/06/2007	08/10/2007	Baseline Inspections
1, 2, 3	IP 7111404	Emergency Action Level and Emergency Plan Changes		08/06/2007	08/10/2007	Baseline Inspections
1, 2, 3	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies		08/06/2007	08/10/2007	Baseline Inspections
1, 2, 3	IP 71151-EP01	Drill/Exercise Performance		08/06/2007	08/10/2007	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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#### Oconee

## Inspection / Activity Plan 03/01/2007 - 09/30/2008

Unit No. of Staff **Planned Dates** Inspection on Site Start End Number Inspection Activity Title **Type** PSB1-EP - EP INSP 1 1, 2, 3 IP 71151-EP02 **ERO Drill Participation** 08/06/2007 08/10/2007 Baseline Inspections 1, 2, 3 IP 71151-EP03 Alert & Notification System 08/06/2007 08/10/2007 **Baseline Inspections OL EXAM** - INITIAL EXAM WEEK 1 4 V23266 OCONEE/AUGUST 2007 EXAM AT POWER FACILITIES 08/27/2007 08/31/2007 Not Applicable 1 **OL EXAM** - INITIAL EXAM WEEK 2 3 V23266 OCONEE/AUGUST 2007 EXAM AT POWER FACILITIES 09/10/2007 09/14/2007 Not Applicable EB3-ISI - UNIT 3 INSERVICE INSPECTION 1 IP 7111108P 3 10/29/2007 11/02/2007 **Baseline Inspections** Inservice Inspection Activities - PWR EB3SGISI - UNIT 3 STEAM GENERATOR ISI 1 3 IP 7111108P Inservice Inspection Activities - PWR 11/05/2007 11/09/2007 **Baseline Inspections** - COMPONENT DESIGN BASES INSPECTION EB1-CDBI 8 IP 7111121 1, 2, 3 Component Design Bases Inspection 01/14/2008 01/18/2008 Baseline Inspections 1, 2, 3 IP 7111121 Component Design Bases Inspection 01/28/2008 02/01/2008 **Baseline Inspections** 1, 2, 3 IP 7111121 Component Design Bases Inspection 02/15/2008 02/11/2008 Baseline Inspections 1, 2, 3 IP 7111121 Component Design Bases Inspection 02/25/2008 02/29/2008 **Baseline Inspections** PSB1-EP - EP EXERCISE 3 1, 2, 3 IP 7111401 **Exercise Evaluation** 03/10/2008 03/14/2008 **Baseline Inspections** 1, 2, 3 IP 7111404 Emergency Action Level and Emergency Plan Changes 03/10/2008 03/14/2008 **Baseline Inspections** 1, 2, 3 IP 71151-EP01 Drill/Exercise Performance 03/10/2008 03/14/2008 **Baseline Inspections** 1, 2, 3 IP 71151-EP02 **ERO Drill Participation** 03/10/2008 03/14/2008 **Baseline Inspections** 1, 2, 3 IP 71151-EP03 Alert & Notification System 03/10/2008 03/14/2008 **Baseline Inspections** EB3-ISI - U-1 INSERVICE INSPECTION 1 IP 7111108P 1 Inservice Inspection Activities - PWR 04/07/2008 04/11/2008 Baseline Inspections PSB1-RP - RADIATION PROTECTION PREINSPECTION VISIT 1 1.2.3 IP 7112101 Access Control to Radiologically Significant Areas 06/16/2008 06/18/2008 **Baseline Inspections** EB3 - MR - MAINT RULE 1 IP 7111112B Maintenance Effectiveness 1, 2, 3 06/23/2008 06/27/2008 **Baseline Inspections EB2-TFP** - TRIENNIAL FIRE PROTECTION 5 07/03/2008 IP 7111105T 07/01/2008 1.2.3 Fire Protection [Triennial] Baseline Inspections 1, 2, 3 IP 7111105T Fire Protection [Triennial] 07/21/2008 07/25/2008 **Baseline Inspections** 1.2.3 IP 7111105T Fire Protection [Triennial] 08/04/2008 08/08/2008 **Baseline Inspections** PSB1-RP - RADIATION PROTECTION PUBLIC BASELINE 4 1, 2, 3 IP 7112101 Access Control to Radiologically Significant Areas 07/14/2008 07/18/2008 **Baseline Inspections** 1.2.3 IP 7112103 Radiation Monitoring Instrumentation and Protective Equipment 07/18/2008 07/14/2008 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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#### Oconee

# Inspection / Activity Plan 03/01/2007 - 09/30/2008

Unit No. of Staff **Planned Dates** Inspection on Site Start End Type Number Inspection Activity Title PSB1-RP - RADIATION PROTECTION PUBLIC BASELINE 4 1, 2, 3 IP 7112201 Radioactive Gaseous and Liquid Effluent Treatment and Monitoring Systems 07/14/2008 07/18/2008 Baseline Inspections 1, 2, 3 IP 7112203 Radiological Environmental Monitoring Program (REMP) And Radioactive Material Control P 07/14/2008 07/18/2008 Baseline Inspections 1, 2, 3 Occupational Exposure Control Effectiveness IP 71151-OR01 07/14/2008 07/18/2008 **Baseline Inspections** 1, 2, 3 IP 71151-PR01 **RETS/ODCM Radiological Effluent** 07/14/2008 07/18/2008 Baseline Inspections EB1-MODS - MODIFICATIONS-10CFR50.59 4 1, 2, 3 IP 7111102 Evaluation of Changes, Tests, or Experiments 08/11/2008 08/15/2008 Baseline Inspections 1, 2, 3 IP 7111117B Permanent Plant Modifications 08/11/2008 08/15/2008 Baseline Inspections **OL PREP** - INITIAL EXAM PREP 2 OCONEE/SEPTEMBER 2008 EXAM AT POWER FACILITIES V23286 08/18/2008 08/22/2008 Not Applicable **OL EXAM** - INITIAL EXAM WEEK 1 3 V23286 OCONEE/SEPTEMBER 2008 EXAM AT POWER FACILITIES 09/08/2008 09/12/2008 Not Applicable OL EXAM - INITIAL EXAM WEEK 2 3 V23286 OCONEE/SEPTEMBER 2008 EXAM AT POWER FACILITIES 09/22/2008 09/26/2008 Not Applicable