



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION IV  
1600 E. LAMAR BLVD.  
ARLINGTON, TX 76011-4511

September 1, 2015

Mr. Michael R. Chisum, Vice President  
Entergy Operations, Inc.  
Waterford Steam Electric Station, Unit 3  
17265 River Road  
Killona, LA 70057-0751

**SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR WATERFORD STEAM ELECTRIC  
STATION, UNIT 3 (REPORT 05000382/2015005)**

Dear Mr. Chisum:

On August 13, 2015, the Nuclear Regulatory Commission (NRC) completed its mid-cycle performance review of the Waterford Steam Electric Station, Unit 3. The NRC reviewed the most recent quarterly performance indicators (PIs) in addition to inspection results and enforcement actions from July 1, 2014 through June 30, 2015. This letter informs you of the NRC's assessment of your facility during this period and its plans for future inspections at your facility.

The NRC determined the performance at the Waterford Steam Electric Station, Unit 3, during the most recent quarter was within the Licensee Response Column of the NRC's Reactor Oversight Process (ROP) Action Matrix because all inspection findings had very low (i.e., Green) safety significance, and all PIs indicated that your performance was within the nominal, expected range (i.e., Green). Therefore, the NRC plans to conduct ROP baseline inspections at your facility.

On April 9, 2015, the NRC closed a White finding that was held open pending successful completion of a supplemental inspection and effective evaluation of the extent of condition of the finding. This finding involved the failure to establish an adequate test program to demonstrate that the train B emergency diesel generator ventilation exhaust fan would perform satisfactorily in service. The NRC initially completed a supplemental inspection using Inspection Procedure 95001, "Supplemental Inspection for One or Two White Inputs in a Strategic Performance Area," on October 10, 2014, and documented the results in NRC Inspection Report 05000382/2014011 (ADAMS ML14364A412). During this inspection, the NRC determined that your extent of cause review was insufficient; therefore not all inspection objectives were met, and the White finding remained open as an Action Matrix input.

On March 19, 2015, the NRC completed a re-inspection documented in NRC Inspection Report 05000382/2015010 (ADAMS ML15097A550). The NRC determined that your staff adequately evaluated the extent of cause for other safety-related systems and identified appropriate corrective actions. Based on these determinations, the NRC concluded that all inspection objectives were satisfied. As a result, the NRC determined the performance at the Waterford Steam Electric Station, Unit 3, to be in the Licensee Response Column of the Reactor

Oversight Process Action Matrix as documented in our assessment follow-up letter dated May 8, 2015 (ADAMS ML15128A166).

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit has been completed for the Waterford Steam Electric Station, Unit 3, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 2515/191, "Inspection of the Implementation of Mitigating Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact Mr. Geoffrey Miller at (817) 200-1173 with any questions you have regarding this letter.

Sincerely,

/RA/

Troy Pruett, Director  
Division of Reactor Projects

Docket: 50-382  
License: NPF-38

Enclosure: Waterford Steam Electric Station  
Unit 3 Inspection/Activity Plan

Oversight Process Action Matrix as documented in our assessment follow-up letter dated May 8, 2015 (ADAMS ML15128A166).

The enclosed inspection plan lists the inspections scheduled through June 30, 2017. Routine inspections performed by resident inspectors are not included in the inspection plan. The inspections listed during the second half of the inspection plan are tentative and may be revised at the end-of-cycle performance review. The NRC provides the inspection plan to allow for the resolution of any scheduling conflicts and personnel availability issues. The NRC will contact you as soon as possible to discuss changes to the inspection plan should circumstances warrant any changes. This inspection plan does not include security related inspections, which will be sent via separate, non-publicly available correspondence.

In response to the accident at Fukushima, the Commission issued Order EA-12-049, "Order Modifying Licenses with Regard to Requirements for Mitigation Strategies for Beyond-Design-Basis External Events," which requires licensees to develop, implement, and maintain guidance and strategies to maintain or restore core cooling, containment, and spent fuel pool cooling capabilities following a beyond-design-basis external event. Additionally, the Commission issued Order EA-12-051, "Order Modifying Licenses with Regard to Reliable Spent Fuel Pool Instrumentation," which requires licensees to have a reliable means of remotely monitoring wide-range Spent Fuel Pool levels to support effective prioritization of event mitigation and recovery actions in the event of a beyond-design-basis external event. The NRC is conducting audits of licensee efforts towards compliance with these Orders. The audit has been completed for the Waterford Steam Electric Station, Unit 3, and the information gathered will aid staff in development of the ultimate Safety Evaluation for the site. After the NRC staff receives the Final Compliance letter for the site, the Final Safety Evaluation will be issued. Then, the NRC staff will confirm through inspections the full implementation of the orders mentioned above by performing Temporary Instruction 2515/191, "Inspection of the Implementation of Mitigating Strategies and Spent Fuel Pool Instrumentation Orders and Emergency Preparedness Communication/Staffing/Multi-Unit Dose Assessment Plans."

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter will be 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).

Please contact Mr. Geoffrey Miller at (817) 200-1173 with any questions you have regarding this letter.

Sincerely,

/RA/

Troy Pruett, Director  
Division of Reactor Projects

Docket: 50-382  
License: NPF-38

Enclosure: Waterford Steam Electric Station  
Unit 3 Inspection/Activity Plan

DISTRIBUTION: See next page

ADAMS Accession Number: ML15243A571

<input checked="" type="checkbox"/> SUNSI Review By: GMiller	ADAMS: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Sensitive <input checked="" type="checkbox"/> Non-Sensitive	<input type="checkbox"/> Non-Publicly Available <input checked="" type="checkbox"/> Publicly Available
OFFICE	C:DRP/D	D:DRS	D:DRP
NAME	GMiller	AVegel	TPruett
SIGNATURE	/RA/	/RA/	/RA/
DATE	8/27/15	8/27/15	8/27/15

OFFICIAL RECORD COPY

Letter to Michael R. Chisum from Troy Pruett, dated September 1, 2015

SUBJECT: MID-CYCLE ASSESSMENT LETTER FOR WATERFORD STEAM ELECTRIC  
STATION, UNIT 3 (REPORT 05000382/2015005)

DISTRIBUTION:

Regional Administrator (Marc.Dapas@nrc.gov)  
Deputy Regional Administrator (Kriss.Kennedy@nrc.gov)  
DRP Director (Troy.Pruett@nrc.gov)  
DRP Deputy Director (Ryan.Lantz@nrc.gov)  
DRS Director (Anton.Vegel@nrc.gov)  
DRS Deputy Director (Jeff.Clark@nrc.gov)  
Senior Resident Inspector (Frances.Ramirez@nrc.gov)  
Resident Inspector (Chris.Speer@nrc.gov)  
Site Administrative Assistant (Linda.Dufrene@nrc.gov)  
Branch Chief, DRP (Geoffrey.Miller@nrc.gov)  
Senior Project Engineer, DRP (Bob.Hagar@nrc.gov)  
Project Engineer, DRP (Jan.Tice@nrc.gov)  
Public Affairs Officer (Victor.Dricks@nrc.gov)  
Public Affairs Officer (Lara.Uselding@nrc.gov)  
RIV State Liaison Officer (Bill.Maier@nrc.gov)  
Project Manager (Michael.Orenak@nrc.gov)  
Director, DIRS, NRR (Scott.Morris@nrc.gov)  
Deputy Director, DIRS, NRR (Allen.Howe@nrc.gov)  
Director, DORL, NRR (Anne.Boland@nrc.gov)  
Deputy Director, DORL, NRR (George.Wilson@nrc.gov)  
Director, NSIR/DPR (Rob.Lewis@nrc.gov)  
Chief, LPLIV-2, DORL, NRR (Meena.Khanna@nrc.gov)  
Regional Counsel (Karla.Fuller@nrc.gov)  
RITS Coordinator (Marisa.Herrera@nrc.gov)  
Technical Support Assistant (Loretta.Williams@nrc.gov)  
Congressional Affairs Officer (Jenny.Weil@nrc.gov)  
RIV Congressional Affairs Officer (Angel.Moreno@nrc.gov)  
RIV/ETA: OEDO (Cindy.Rosales-Cooper@nrc.gov)  
ROPassessment Resource@nrc.gov  
ROPreports@nrc.gov  
OEMail Resource@nrc.gov

Electronic Distribution for Waterford Steam Electric Station, Unit 3

## Waterford

## Inspection / Activity Plan

07/01/2015 - 06/30/2017

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
		<b>EXAM - INITIAL OPERATOR EXAM</b>		4
3	08/17/2015 08/21/2015	X02546	INITIAL EXAM WAT(09/2014)	
3	09/14/2015 09/18/2015	X02546	INITIAL EXAM WAT(09/2014)	
		<b>INSP - OPERATOR REQUAL INSPECTION</b>		3
3	07/27/2015 07/31/2015	IP 7111111B	Licensed Operator Requalification Program	
		<b>EB1-17T - WAT PERMANENT PLANT MODS &amp; 5059</b>		5
3	08/10/2015 08/28/2015	IP 7111117T	Evaluations of Changes, Tests, and Experiments and Permanent Plant Modifications	
		<b>RS 12 PI - RADIATION SAFETY</b>		2
3	10/26/2015 10/30/2015	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
3	10/26/2015 10/30/2015	IP 71124.02	Occupational ALARA Planning and Controls	
3	10/26/2015 10/30/2015	IP 71151-OR01	Occupational Exposure Control Effectiveness	
3	10/26/2015 10/30/2015	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
		<b>71111.08 - WATERFORD ISI</b>		1
3	11/02/2015 11/13/2015	IP 7111108P	Inservice Inspection Activities - PWR	
		<b>RS 13 PI - RADIATION SAFETY</b>		2
3	03/21/2016 03/25/2016	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
3	03/21/2016 03/25/2016	IP 71124.03	In-Plant Airborne Radioactivity Control and Mitigation	
3	03/21/2016 03/25/2016	IP 71151-OR01	Occupational Exposure Control Effectiveness	
3	03/21/2016 03/25/2016	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	
		<b>EP-2 - BIENNIAL EP PROGRAM INSPECTION</b>		1
3	04/18/2016 04/22/2016	IP 7111402	Alert and Notification System Testing	
3	04/18/2016 04/22/2016	IP 7111403	Emergency Preparedness Organization Staffing and Augmentation System	
3	04/18/2016 04/22/2016	IP 7111404	Emergency Action Level and Emergency Plan Changes	
3	04/18/2016 04/22/2016	IP 7111405	Correction of Emergency Preparedness Weaknesses and Deficiencies	
		<b>EP-1 - EP PERFORMANCE INDICATORS</b>		1
3	05/02/2016 05/06/2016	IP 71151-EP01	Drill/Exercise Performance	
3	05/02/2016 05/06/2016	IP 71151-EP02	ERO Readiness	
3	05/02/2016 05/06/2016	IP 71151-EP03	Alert & Notification System Reliability	
		<b>RS 24 - RADIATION SAFETY</b>		2
3	08/29/2016 09/02/2016	IP 71124.02	Occupational ALARA Planning and Controls	
3	08/29/2016 09/02/2016	IP 71124.04	Occupational Dose Assessment	
		<b>EXAM - INITIAL EXAM</b>		4
3	03/06/2017 03/10/2017	X02588	INITIAL EXAM WAT3 (04/2017)	
3	04/03/2017 04/07/2017	X02588	INITIAL EXAM WAT3 (04/2017)	

This report does not include INPO and OUTAGE activities.

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

## Waterford

## Inspection / Activity Plan

07/01/2015 - 06/30/2017

Unit Number	Planned Dates Start End	Inspection Activity	Title	No. of Staff on Site
		<b>TSB 52B - BIENNIAL PI&amp;R INSPECTION</b>		<b>4</b>
3	10/24/2016 10/28/2016	IP 71152B	Problem Identification and Resolution	
3	11/14/2016 11/18/2016	IP 71152B	Problem Identification and Resolution	
		<b>EB2-02 - LICENSE RENEWAL INSPECTION</b>		<b>4</b>
3	01/23/2017 01/27/2017	IP 71002	License Renewal Inspection	
3	02/06/2017 02/10/2017	IP 71002	License Renewal Inspection	
		<b>EB1-07T - WAT HEAT SINK PERFORMANCE</b>		<b>1</b>
3	03/20/2017 03/24/2017	IP 7111107T	Heat Sink Performance	
		<b>71111.08 - INSERVICE INSPECTION RFO 21</b>		<b>1</b>
3	04/10/2017 04/21/2017	IP 7111108P	Inservice Inspection Activities - PWR	
		<b>RS 12 PI - RADIATION SAFETY</b>		<b>3</b>
3	04/17/2017 04/21/2017	IP 71124.01	Radiological Hazard Assessment and Exposure Controls	
3	04/17/2017 04/21/2017	IP 71124.02	Occupational ALARA Planning and Controls	
3	04/17/2017 04/21/2017	IP 71151-OR01	Occupational Exposure Control Effectiveness	
3	04/17/2017 04/21/2017	IP 71151-PR01	RETS/ODCM Radiological Effluent Occurrences	

This report does not include INPO and OUTAGE activities.

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