



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

May 31, 2011

Carolina Power and Light Company
Mr. Michael J. Annacone
Vice President
Brunswick Steam Electric Plant
P. O. Box 10429
Southport, NC 28461

SUBJECT: MEETING SUMMARY - CATEGORY 1 PUBLIC MEETING - ANNUAL
ASSESSMENT OF BRUNSWICK STEAM ELECTRIC PLANT, DOCKET NOS.
50-325, 50-324

Dear Mr. Annacone:

This refers to the Category 1 public meeting which was held on May 25, 2011, at the Brunswick Media Center Auditorium, 8520 River Road SE, Southport, NC 28461, from 5:30 p.m. to 7:30 p.m. The purpose of the meeting was to discuss the NRC Reactor Oversight Process Annual Assessment of your Brunswick Steam Electric Plant.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosures will be available electronically for public inspection in the NRC Public Document Room (PDR) or from the Publicly Available Records (PARS) component of NRC's Agencywide Document Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Should you have any questions concerning this meeting, please contact me at (404) 997-4603.

Sincerely,

/RA/

Randall A. Musser, Chief
Reactor Projects Branch 4
Division of Reactor Projects

Docket Nos.: 50-325, 50-324
License Nos.: DPR-71, DPR-62

Enclosures: 1. Brunswick 2010 EOC Public Meeting Attendees
2. Brunswick 2010 Annual Assessment Meeting Slides
3. Brunswick EOC Meeting handouts

cc w/encl.: (See page 2)

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X PUBLICLY AVAILABLE ☐ NON-PUBLICLY AVAILABLE ☐ SENSITIVE X NON-SENSITIVE
ADAMS: X Yes ACCESSION NUMBER: ML111510997 X SUNSI REVIEW COMPLETE RAM 5/31/11

OFFICE	RII:DRP	RII:DRP					
SIGNATURE	JSD	RAM					
NAME	JDodson	RMusser					
DATE	05/27/2011	05/31/2011					
E-MAIL COPY?	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO	YES NO

OFFICIAL RECORD COPY DOCUMENT NAME: G:\DRPI\RPB4\PROGESS ENERGY
MEETINGS\2011\BRUNSWICK EOC MEETING SUMMARY 052511.DOCX

cc w/encl:
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cc w/encl. (continued next page)

CP&L

3

cc w/encl. (continued)
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Wilmington, NC 28403

CP&L

4

Letter to Michael J. Annacone from Randall A. Musser dated May 31, 2011

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ASSESSMENT OF BRUNSWICK STEAM ELECTRIC PLANT, DOCKET NOS.
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Distribution w/encl:

C. Evans, RII

L. Douglas, RII

OE Mail

RIDSNRRDIRS

PUBLIC

RidsNrrPMBrunswick Resource



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II

245 PEACHTREE CENTER AVENUE NE SUITE 1200
ATLANTA, GEORGIA 30303-1257

BRUNSWICK NUCLEAR PLANT
END-OF-CYCLE PUBLIC MEETING

Southport, NC
May 25, 2011

<u>Name (Print)</u>	<u>Title and Organization</u>
1) GREG KOLOUM	NRC
2) ANTHONY MINARIK	NRC
3) Phil O'Bryan	NRC
4) Ryan Mosier	Progress Energy
5) Roger Hannah	NRC
6) Betty Hitchcock	NRC
7) Mike Annacone	Progress Energy
8) Ed Wills	PROGRESS ENERGY
9) Joe Farrow	PG&E
10) Robert Creech	PG&E Retired Southport Resident
11) Jim Brumm	Reporter/StarNews
12) Jerry Parchman	Progress Energy Retired Wilmington
13) Randy Musser	NRC
14) Tom Sherrill	Progress Energy
15) Aleje Sawlee	
16) Ian Hawkes	

Brunswick Annual Assessment Meeting

Reactor Oversight Program - 2010

**Nuclear Regulatory Commission - Region II
Southport, North Carolina
May 25, 2011**



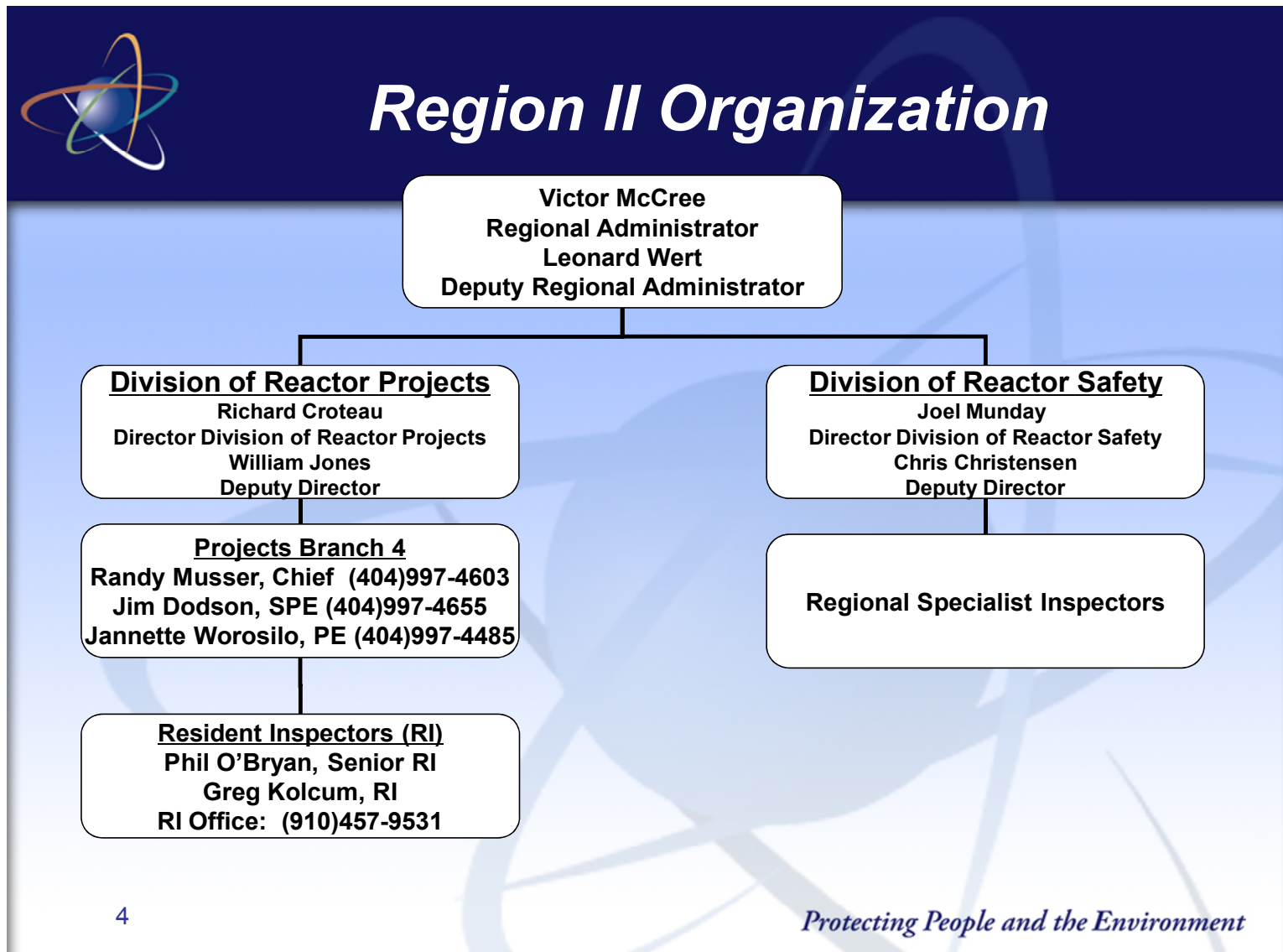
Purpose of Today's Meeting

- **How the NRC regulates**
- **Brunswick 2010 Performance**
- **Licensee Response**



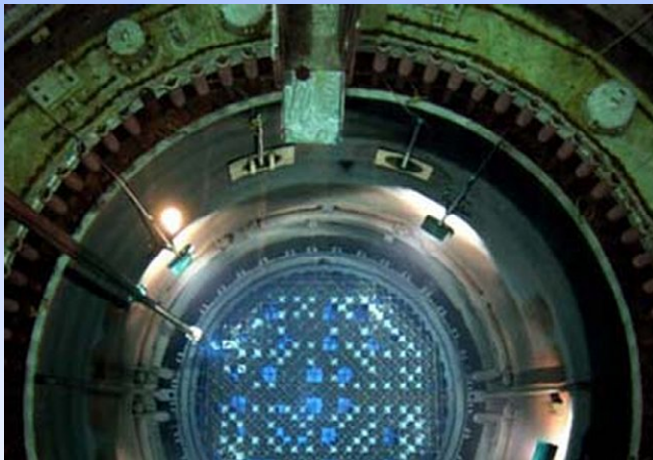
Agenda

- **Introduction**
- **Review of Reactor Oversight Process**
- **National Summary of Plant Performance**
- **Discussion Brunswick Performance**
- **Licensee Response and Remarks**
- **NRC Closing Remarks**
- **Break**
- **NRC available to address public questions**





Our Mission



- **License and regulate:**
 - Civilian Reactors
 - Radioactive Materials (e.g. medical and industrial)
 - Byproducts
- **Protect public health and safety**
- **Promote the common defense and security**
- **Protect the environment.**



Some Nuclear Facts



- **104 US nuclear power plants (20% of total generation)**



- **Nuclear materials widely used in medicine (e.g. cancer treatment).**



- **Nuclear materials are widely used in industry (e.g. density gauges and irradiators).**



The NRC Regulates

- **Nuclear reactors** - commercial power reactors, research and test reactors, new reactor designs
- **Nuclear materials** - nuclear reactor fuel, radioactive materials for medical, industrial, and academic use
- **Nuclear waste** – transportation, storage and disposal of nuclear material and waste, decommissioning of nuclear facilities
- **Nuclear security** – physical security of nuclear facilities and materials from sabotage or attacks



What We Don't Do

- **Regulate nuclear weapons, military reactors, or space vehicle reactors**
- **Own or operate nuclear power plants**
- **Regulate some radioactive materials, such as X-rays and naturally occurring radon**



How We Regulate

- **Establish rules and regulations**
- **Issue licenses**
- **Provide oversight (inspection and enforcement)**
- **Conduct research**
- **Respond to events and emergencies**



Assurance of Plant Safety

- **Require “defense-in-depth”**
- **Require long-term maintenance of equipment**
- **Require continual training of operators**
- **Verify compliance with regulations**



NRC Nuclear Security Requirements



- **Armed security forces**
- **Surveillance and perimeter patrols**
- **State-of-the-art site access equipment and controls**
- **Physical barriers and detection zones**
- **Intrusion detection systems and alarm stations.**

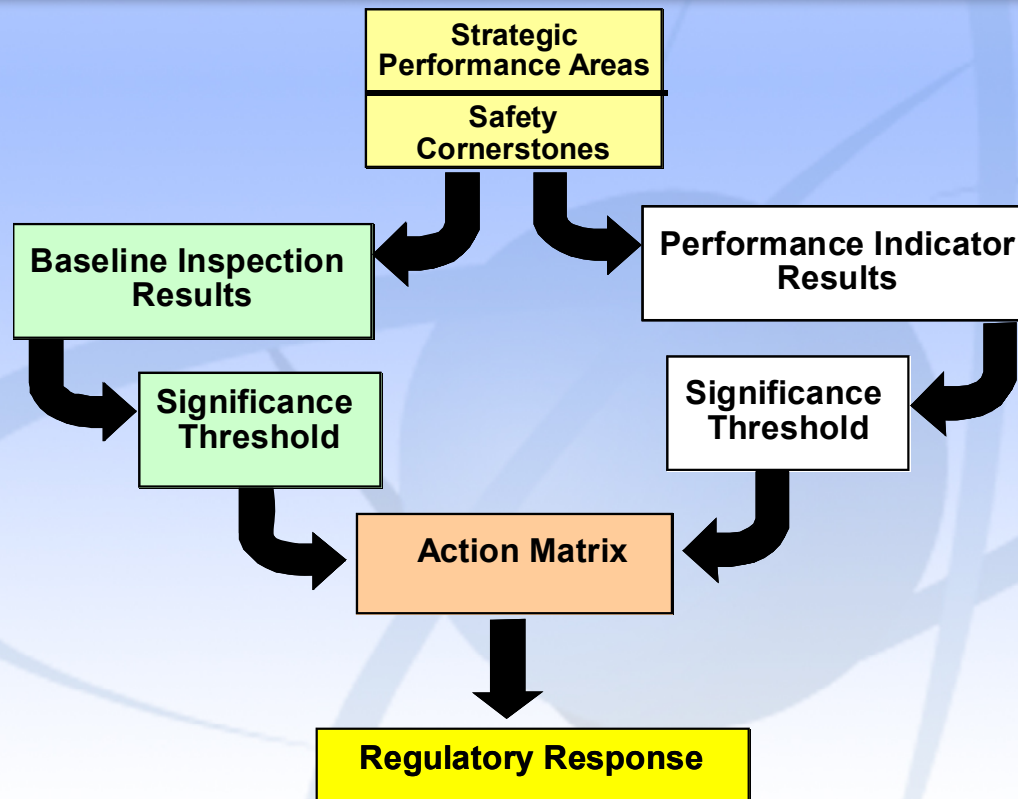


NRC Performance Goals

- **Safety:** Ensure adequate protection of public health and safety and the environment.
- **Security:** Ensure adequate protection in the secure use and management of radioactive materials.



Reactor Oversight Process





Examples of Baseline Inspections

- **Equipment Alignment** ~80 hrs/yr
- **Triennial Fire Protection** ~250 hrs
every 3 yrs
- **Operator Response** ~125 hrs/yr
- **Emergency Preparedness** ~80 hrs/yr
- **Rad Release Controls** ~110 hrs
every 2 yrs
- **Worker Radiation Protection** ~95 hrs/yr
- **Corrective Action Program** ~250 hrs
every 2 yrs
- **Corrective Action Case Reviews** ~70 hrs/yr



Significance Threshold

Performance Indicators

Green: Only Baseline Inspection

White: Increased NRC oversight

Yellow: Increased NRC oversight

Red: Increased NRC oversight

Inspection Findings

Green: Very low safety issue

White: Low to moderate safety issue

Yellow: Substantial safety issue

Red: High safety issue



Action Matrix Concept

Licensee Response	Regulatory Response	Degraded Cornerstone	Multiple/Rep. Degraded Cornerstone	Unacceptable Performance
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Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions



National Summary of Plant Performance

December 31, 2010

Licensee Response	89
Regulatory Response	9
Degraded Cornerstone	6
Multiple/Repetitive Deg. Cornerstone	0
Unacceptable	0
Total	104



National Summary

- **Performance Indicator Results (total for CY 2010)**
 - **Green** 7009
 - **White** 23
 - **Yellow** 0
 - **Red** 0
- **Total Inspection Findings (total for CY 2010)**
 - **Green** 816
 - **White** 9
 - **Yellow** 2
 - **Red** 0



Brunswick Assessment Results

	1 st Qtr 2010	2 nd Qtr 2010	3 rd Qtr 2010	4 th Qtr 2010
Action Matrix Column	Regulatory Response Column	Licensee Response Column	Regulatory Response Column	Regulatory Response Column
Basis	<u>Mitigating Systems</u> White Finding – EDG Alternate Safe Shutdown Deficiency		<u>Emergency Preparedness</u> White Finding – Untimely Staffing of the Emergency Response Organization during an Alert	<u>Emergency Preparedness</u> White Finding – Untimely Staffing of the Emergency Response Organization during an Alert

Protecting People and the Environment



Brunswick Assessment Results (2010)

- **1st Quarter - Regulatory Response Column**

White inspection finding identified in 2009. This finding involved a performance deficiency related to the alternate safe shutdown function of the emergency diesel generators.

- **2nd Quarter – Licensee Response Column**

- **3rd and 4th Quarters - Regulatory Response Column**

White inspection finding identified in September, 2010 for untimely augmentation of on-shift staffing during a declaration of an Alert emergency classification



Brunswick Inspection Activities

January 1 - December 31, 2010

- **7509 total hours of inspections**
 - Radiation Protection – Occupational and Public Radiation Safety
 - Problem Identification and Resolution
 - Emergency Preparedness Inspection
 - Component Design Basis Inspection
 - In Service Inspection
 - Special Inspection
- **1 White finding, 6 Green findings.**



Brunswick Annual Assessment Summary

January 1 - December 31, 2010

- **Progress Energy operated Brunswick in a manner that preserved public health and safety.**
- **All cornerstone objectives were met**
- **For 2011:**
 - **95001 Supplemental Inspection was performed in May, 2011 in the area of Emergency Preparedness.**
 - **NRC plans only baseline inspections for the remainder of 2011**



Fukushima – NRC Response

NRC Response to Fukushima Event

- Direct technical support to the Japanese
- Additional inspection of US reactors
- Comprehensive NRC review of the event (Task Force)
- NRC Fukushima FAQ's:
<http://pbadupws.nrc.gov/docs/ML1110/ML11103A063.pdf>



Licensee Response and Remarks

**Michael Annacone
Site Vice President
Brunswick**



Open to the Public

- **The NRC places a high priority on keeping the public and stakeholders informed of its activities.**
- **At www.nrc.gov, you can:**
 - Find public meeting dates and transcripts;
 - Read NRC testimony, speeches, press releases, and policy decisions; and
 - Access the agency's Electronic Reading Room to find NRC publications and documents.



What Do You Think of the ROP???

The biennial ROP external survey is coming, and we want to hear from you!

Email ROPsurvey@nrc.gov to be notified when the ROP survey is available.

**For information on the ROP survey, please visit our website at
<http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/program-evaluations.html#section3>**



Contacting the NRC

- **Report an emergency**
 - (301) 816-5100 (call collect)
- **Report a safety concern**
 - (800) 695-7403
 - Allegation@nrc.gov
- **General information or questions**
 - www.nrc.gov
 - Select “What We Do” for Public Affairs



NRC Representatives

- **Richard Croteau, Director, Division Reactor Projects (DRP)**
 - (404) 997-4500
- **William Jones, Deputy Division Director, DRP**
 - (404) 997-4501
- **Randall Musser, Branch Chief**
 - (404) 997-4603
- **Phil O'Bryan, Senior Resident Inspector**
 - (910) 457-9531
- **Greg Kolcum, Resident Inspector**
 - (910) 457-9531



Reference Sources

- **Reactor Oversight Process**
 - <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>
- **Public Electronic Reading Room**
 - <http://www.nrc.gov/reading-rm.html>
- **Public Document Room**
 - 1-800-397-4209 (Toll Free)

Brunswick EOC Meeting May 25, 2011

The following publications were made available at the public meeting for the BRUNSWICK STEAM ELECTRIC PLANT on May 25, 2011:

- 1) Reactor Oversight Process NUREG-1649, revision 4, 12/06
- 2) NRC Regulator of Nuclear Safety NUREG/BR-0164, revision 5, 03/07
- 3) Reporting Safety Concerns to the NRC NUREG/BR-0240 revision 3, 04/05
- 4) Information Digest NUREG-1350, Volume 22, 08/09
- 5) NRC Frequently Asked Questions Related to the March 11, 2011 Japanese Earthquake and Tsunami