



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

April 17, 2009

South Carolina Electric & Gas Company  
Mr. Jeffrey B. Archie  
Vice President, Nuclear Operations  
Virgil C. Summer Nuclear Station  
P.O. Box 88  
Jenkinsville, SC 29065

SUBJECT: MEETING ANNOUNCEMENT - PUBLIC MEETING / OPEN HOUSE - VIRGIL C.  
SUMMER NUCLEAR STATION, DOCKET NO. 50-395

Dear Mr. Archie:

This letter refers to a Category 3 public meeting which occurred on Monday, April 13, 2009 at 5:00 p.m. at the McCrorey-Liston Elementary School, Blair, S.C. Enclosed is a list of attendees and materials used during the presentation. The purpose of the meeting was to provide an open public forum to discuss the NRC Reactor Oversight Process and the Annual Assessment of the Virgil C. Summer Nuclear Station. It is our opinion that this meeting was beneficial and provided a forum to discuss the NRC's regulatory process with the public.

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) 562-4551.

Sincerely,

/RA/

Gerald J. McCoy, Chief  
Reactor Projects Branch 5  
Division of Reactor Projects

Docket No.: 50-395  
License No.: NPF-12

Enclosures: 1. Meeting Attendance List  
2. Meeting Presentation Slides  
3. Posters

cc w/encls: (See page 2)

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PUBLICLY AVAILABLE       NON-PUBLICLY AVAILABLE       SENSITIVE       NON-SENSITIVE  
ADAMS:  Yes      ACCESSION NUMBER: \_\_\_\_\_       SUNSI REVIEW COMPLETE

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| OFFICE       | RII:DRP  | RII:DRP  |          |          |          |          |          |
| SIGNATURE    | GJM for  | GJM      |          |          |          |          |          |
| NAME         | DArnett  | GMcCoy   |          |          |          |          |          |
| DATE         | 4/ /2009 | 4/ /2009 | 4/ /2009 | 4/ /2009 | 4/ /2009 | 4/ /2009 | 4/ /2009 |
| E-MAIL COPY? | YES NO   | YES NO   | YES NO   | YES NO   | YES NO   | YES NO   | YES NO   |

cc w/encls:

R. J. White

Nuclear Coordinator

S.C. Public Service Authority Mail Code 802

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U.S. NRC

576 Stairway Road

Jenkinsville, SC 29065

Letter to Jeffrey Archie from Gerald J. McCoy dated April 17, 2009

SUBJECT: MEETING ANNOUNCEMENT - PUBLIC MEETING / OPEN HOUSE - VIRGIL C.  
SUMMER NUCLEAR STATION, DOCKET NO. 50-395

Distribution w/encls:

Region II Administrator's Secretary  
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## VIRGIL C. SUMMER NUCLEAR STATION Annual Assessment Meeting

Reactor Oversight Program - 2008

Nuclear Regulatory Commission - Region II  
Jenksville, South Carolina  
April 13, 2009



## Purpose of Today's Meeting

- A public forum for discussion of the licensee's performance in 2008
- NRC will address the performance issues identified in the annual assessment letter
- Licensee will be given the opportunity to respond and inform the NRC of new or existing programs to maintain or improve performance

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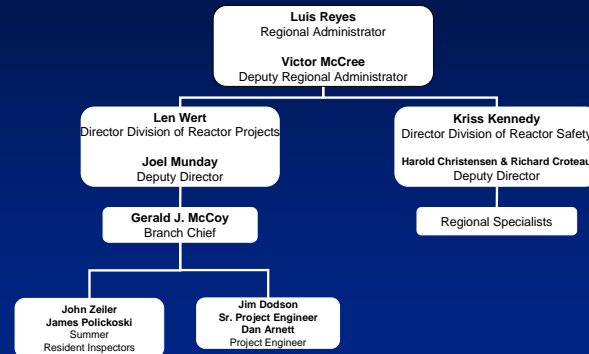
## Agenda

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

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## Region II Organization



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## Our Mission



- To license and regulate the nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

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## Some Nuclear Facts



- More than 100 nuclear power plants supply about 20 percent of the electricity in the U.S.
- Nuclear materials are used in medicine for diagnosis and cancer treatment.
- Nuclear materials are widely used in industry, such as in density gauges, flow measurement devices, radiography devices, and irradiators.

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## 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

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## 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

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## How We Regulate

- Establish rules and regulations
- Issue licenses
- Provide oversight through inspection, enforcement, and evaluation of operational experience
- Conduct research to provide support for regulatory decisions
- Respond to events and emergencies

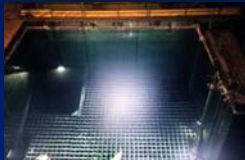
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## Assurance of Plant Safety

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

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## What We Do – Nuclear Waste



- The NRC regulates:
  - Storage of spent reactor fuel in fuel pools or dry storage casks, and
  - A national spent fuel storage site--Yucca Mountain.

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## What We Do – Nuclear Security



- NRC Requires:
  - Well-armed and well-trained security forces,
  - Surveillance and perimeter patrols,
  - State-of-the-art site access equipment and controls,
  - Physical barriers and detection zones, and
  - Intrusion detection systems and alarm stations.

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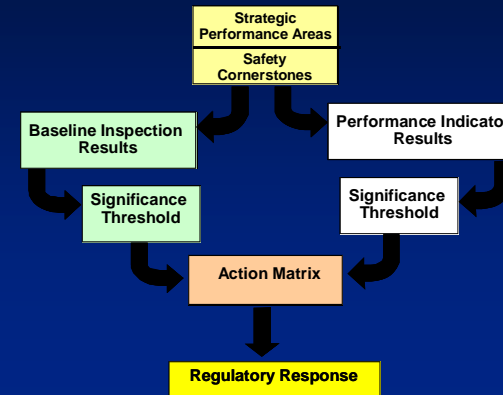


## NRC Performance Goals

- 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.

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## Reactor Oversight Process



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## 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 ~60 hrs/yr

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## Significance Threshold

### Performance Indicators

- Green:** Only Baseline Inspection
- White:** May increase NRC oversight
- Yellow:** Requires more NRC oversight
- Red:** Requires more NRC oversight

### Inspection Findings

- Green:** Very low safety issue
- White:** Low to moderate safety issue
- Yellow:** Substantial safety issue
- Red:** High safety issue

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## Action Matrix Concept

| Licensee Response | Regulatory Response | Degraded Cornerstone | Multiple/Rep. Degraded Cornerstone | Unacceptable Performance |
|-------------------|---------------------|----------------------|------------------------------------|--------------------------|
|-------------------|---------------------|----------------------|------------------------------------|--------------------------|



Increasing Safety Significance

Increasing NRC Inspection Efforts

Increasing NRC/Licensee Management Involvement

Increasing Regulatory Actions

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## National Summary of Plant Performance

### Status at End of 2008

|  |            |
|--|------------|
| Licensee Response                        | 86         |
| Regulatory Response                      | 14         |
| Degraded Cornerstone                     | 3          |
| Multiple/Repetitive Degraded Cornerstone | 1          |
| Unacceptable                             | 0          |
| <b>Total</b>                             | <b>104</b> |

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## National Summary

- Performance Indicator Results (end of CY 2008)
  - Green 1762
  - White 6
  - Yellow 0
  - Red 0
- Total Inspection Findings (for 2008)
  - Green 776
  - White 17
  - Yellow 0
  - Red 0

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## VIRGIL C. SUMMER NUCLEAR STATION Assessment Results

(January 1 - December 31, 2008)

- Summer's performance was within the Licensee Response Column of the Action Matrix for all four quarters.
- No supplemental inspections were conducted.

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## Safety Significant Findings or PIs

- No safety significant findings or PIs were identified during the assessment period.
- All Reactor Oversight Process inspection findings were classified as very low safety significance (Green).
- All performance indicators were Green.

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## VIRGIL C. SUMMER NUCLEAR STATION Inspection Activities

(January 1 - December 31, 2008)

7,423 hours of inspection related activities

- Component Design Basis Inspection
- Radiation Protection Inspections
- Emergency Preparedness Inspections
- Problem Identification and Resolution Inspection
- In Service Inspection
- Dissimilar Metals Inspection (TI 2515/172)
- Resident Inspector daily Inspections

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## VIRGIL C. SUMMER NUCLEAR STATION Annual Assessment Summary

(January 1 - December 31, 2008)

- South Carolina Electric & Gas Company operated the Virgil C. Summer Nuclear Station in a manner that preserved public health and safety.
- All cornerstone objectives were met.

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## VIRGIL C. SUMMER NUCLEAR STATION Annual Assessment Summary

(January 1 - December 31, 2008)

- Substantive cross-cutting issues—none were identified during CY 2008
- NRC plans baseline inspections at Summer for the remainder of CY 2009.

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## Open to the Public

- The NRC places a high priority on keeping the public and stakeholders informed of its activities.
- At [www.nrc.gov](http://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.

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## Contacting the NRC

- Report an emergency
  - (301) 816-5100 (call collect)
- Report a safety concern
  - (800) 695-7403
  - [Allegation@nrc.gov](mailto:Allegation@nrc.gov)
- General information or questions
  - [www.nrc.gov](http://www.nrc.gov)
  - Select "What We Do" for Public Affairs

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## NRC Representatives

- John Zeiler, Senior Resident Inspector
  - (803) 345-5683
- James Polickoski, Resident Inspector
  - (803) 345-5684
- Jim Dodson, Senior Project Engineer
  - (404) 562-4655
- Gerry McCoy, Branch Chief
  - (404) 562-4551

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## 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)

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## NRC Strategic Plan

### Strategic 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.



### Strategic Objectives

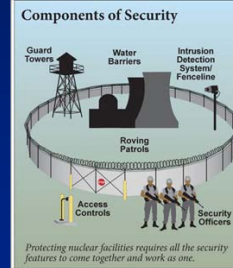
- **Openness:** The NRC appropriately informs and involves stakeholders in the regulatory process.
- **Effectiveness:** NRC actions are high quality, efficient, timely, and realistic, to enable the safe and beneficial use of radioactive materials.
- **Operational Excellence:** NRC operations use effective business methods and solutions to achieve excellence in accomplishing the agency's mission.



## Nuclear Security & Safeguards

### Physical Protection

- Security Inspections
- Force-on-Force Exercises
- Interagency Cooperation
- Intrusion Detection & Assessment
- Response & Offsite Assistance
- Threat Assessment



### Information Security

Preventing Unauthorized Disclosure

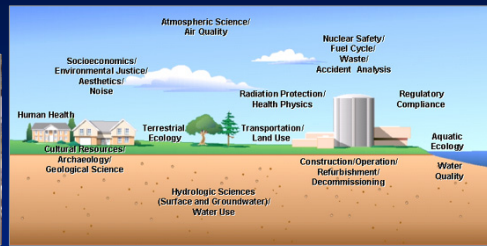


## License Renewal

### ▪ Safety Review of Aging Management



### ▪ Review of Environmental Impacts



### ▪ Opportunities for Public Participation



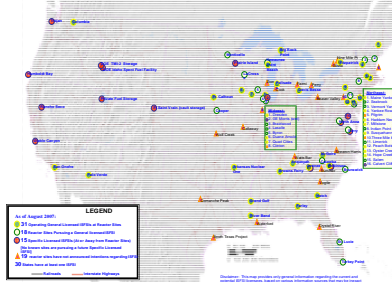
## Spent Nuclear Fuel Safe and Secure Storage & Transport



### Assured By

- Comprehensive Regulations
- Detailed NRC Review
- Robust Cask & Package Designs
- Significant Experience Base
- Continued Oversight

### U.S. Independent Spent Fuel Storage Installations



### Spent Fuel Dry Storage Single & Dual Purpose Cask

As some nuclear reactors across the country, spent fuel is kept on site, above ground, in systems basically similar to the ones shown here.

1. The spent fuel is loaded in a cask. The cask is designed to protect the fuel from fire, theft, and sabotage. It is also designed to prevent the release of radioactive materials.
2. The cask is placed in a storage area. The storage area is designed to protect the cask from fire, theft, and sabotage. It is also designed to prevent the release of radioactive materials.

