



Preliminary Results of the Environmental Review for Surry Power Station Units 1 and 2 Subsequent License Renewal

November 7, 2019

Overview

- NRC's Regulatory Role
- Surry Background
- Environmental Review
- Preliminary Findings
- Environmental Review Milestones
- Submitting Public Comments

NRC's Regulatory Role

- **NRC's Primary Governing Statutes**
 - Atomic Energy Act
 - Energy Reorganization Act
 - National Environmental Policy Act (NEPA)
- **NRC's Mission**
 - Protect public health and safety
 - Promote the common defense and security
 - Protect the environment

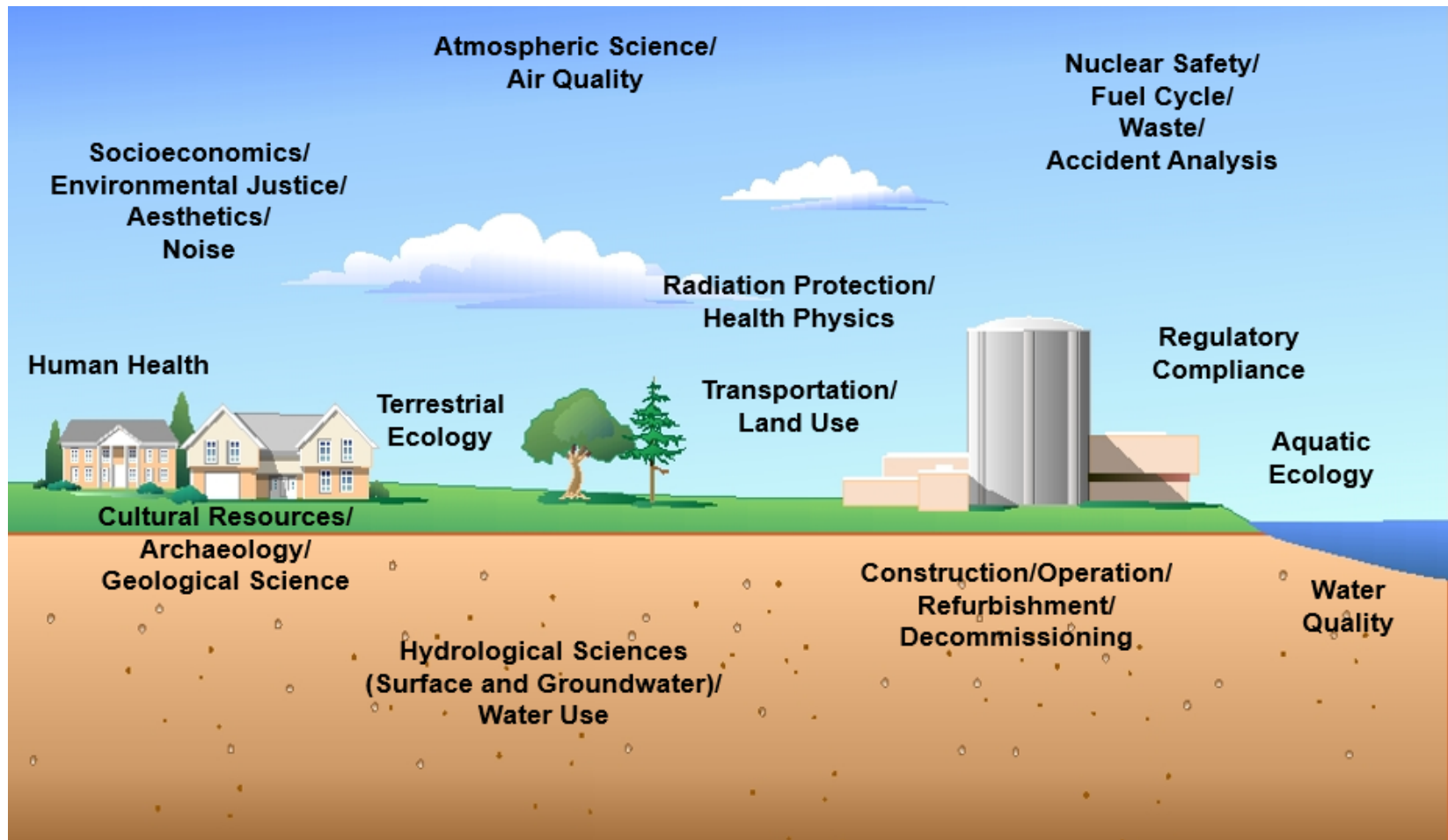
Surry Power Station Background

| Description | Unit 1 | Unit 2 |
|-------------------------------|-----------|-----------|
| Operating Licenses Issued | 5/25/1972 | 1/29/1973 |
| First Renewed Licenses Issued | 3/20/2003 | |
| First License Renewal Expires | 5/25/2032 | 1/29/2033 |

Environmental Review

- **Generic Environmental Impact Statement (GEIS)**
 - Addresses environmental issues common to all plants(or a distinct subset of plants) during the license renewal term
- **Supplemental Environmental Impact Statement (SEIS)**
 - Addresses site-specific environmental issues during the license renewal term
 - Includes any new and significant information regarding generic issues, an evaluation of alternatives, and an evaluation of cumulative impacts

SEIS: Environmental Issues Evaluated



How Impacts are Defined

- **SMALL**
 - Effects are not detectable or are so minor that they will neither destabilize nor noticeably alter any important attribute of the resource
- **MODERATE**
 - Effects are sufficient to alter noticeably, but not to destabilize, important attributes of the resource
- **LARGE**
 - Effects are clearly noticeable and are sufficient to destabilize important attributes of the resource

How Impacts are Defined

- **Federally Listed Species and Critical Habitat (Endangered Species Act)**
 - No effect
 - May affect but is not likely to adversely affect/adversely modify
 - May affect and is likely to adversely affect/adversely modify
- **Essential Fish Habitat (Magnuson-Stevens Act)**
 - No adverse impacts
 - Minimal adverse impacts
 - Substantial adverse impact

How Impacts are Defined

- **Cultural and Historic Resources (National Historic Preservation Act)**
 - May adversely affect
 - May not adversely affect
- **Environmental Justice (Executive Order 12898)**
 - Disproportionally high and adverse human health and environmental effects

Site-Specific Impacts

| Resource Area | Impacts |
|--|-------------------------|
| <ul style="list-style-type: none">• Land Use/Visual Resources• Air Quality/Noise• Geologic Environment• Surface Water Resources• Groundwater Resources• Terrestrial Resources• Socioeconomics• Transportation• Human Health• Waste Management and Pollution• Aquatic Resources | <p>All SMALL</p> |

Site-Specific Impacts

| Resource Area | Impacts |
|---|---|
| <ul style="list-style-type: none">Special Status Species and Habitats (threatened, endangered, and protected species; essential fish habitat) | <ul style="list-style-type: none">May affect, but is not likely to adversely affect northern long-eared bat, short nose sturgeon, and Atlantic sturgeonMay affect, but is not likely to adversely modify designated critical habitat of the Chesapeake Bay distinct population segment of Atlantic sturgeonNo more than minimal adverse effects on essential fish habitat of the summer flounder (larvae, juveniles, and adults), Atlantic butterfish (juveniles and adults), bluefish (juveniles), and windowpane flounder (juveniles and adults) or on the prey base of the little skate (adults) or winter skate (adults)No adverse effects on the essential fish habitat of any life stages of the black sea bass, Atlantic herring, clear nose skate, or red hake |

Site-Specific Impacts

| Resource Area | Impacts |
|---|--|
| <ul style="list-style-type: none">• Historic and Cultural Resources | <ul style="list-style-type: none">• Would not adversely affect known historic properties |
| <ul style="list-style-type: none">• Environmental Justice | <ul style="list-style-type: none">• No disproportionately high and adverse human health and environmental effects on minority and low-income populations |
| <ul style="list-style-type: none">• Cumulative Impacts | <ul style="list-style-type: none">• See SEIS Section 4.16 |
| <ul style="list-style-type: none">• Postulated Accidents (SAMA) | <ul style="list-style-type: none">• See SEIS Appendix F |

Cumulative Impacts

- Overall impacts to the environment including past, present, and reasonably foreseeable future actions
- Actions that were considered include:
 - Electric generation facilities adjacent to Surry and in Yorktown
 - Renewable energy facilities nearby
 - Manufacturing facilities in the vicinity
 - Military and other federal facilities
 - Park and recreation sites
 - Other construction projects
- Climate Change

Alternatives

- Alternative energy sources analyzed (power replacement)
 - New nuclear (small modular reactor)
 - Natural gas combined-cycle alternative
 - Combination alternative (natural gas combined-cycle, solar, and demand-side-management)
- No-action alternative

Preliminary Conclusion

- The adverse environmental impacts of Surry Power Station license renewal are not so great that preserving the option of subsequent license renewal for energy-planning decisionmakers would be unreasonable

Environmental Review Milestones

- Draft SEIS published Oct. 17, 2019
- Start of Comment Period Oct. 25, 2019
- Draft SEIS Public Meeting Nov. 7, 2019
- Draft SEIS Comment Due Dec. 10, 2019
- Final SEIS Apr. 2020

Obtaining the Draft SEIS

- **Public Library:**

Williamsburg Regional Library, 515 Scotland St.,
Williamsburg, VA 23185

- **NRC Public Website for Surry project:**

[https://www.nrc.gov/reactors/operating/licensing/ren
ewal/applications/surry-subsequent.html](https://www.nrc.gov/reactors/operating/licensing/ren
ewal/applications/surry-subsequent.html)

- **Operating Reactor Correspondence**

[https://www.nrc.gov/public-involve/listserver/plants-
by-region.html](https://www.nrc.gov/public-involve/listserver/plants-
by-region.html)

- **Agencywide Documents Access and Management System (ADAMS):**

<https://www.nrc.gov/reading-rm/adams.html>

Obtaining the Draft SEIS

- **NRC Public Website for Surry project:**
<https://www.nrc.gov/reactors/operating/licensing/renewal/applications/surry-subsequent.html>
 - Surry subsequent license renewal application
 - The environmental report
 - The current schedule
 - The project managers associated with Surry plant

How to Submit Comments

- **By mail:** Office of Administration
Mail Stop: TWFN-7-A60M
ATTN: Program Management,
Announcements and Editing Branch
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001
- **Internet:** www.regulations.gov
 - Docket ID: NRC-2018-0280
- **By Email:** Surry1n2SLREIS@nrc.gov
- **Env. PM:** tam.tran@nrc.gov, Voice: 301-415-3617
- **Comments due by December 10, 2019**