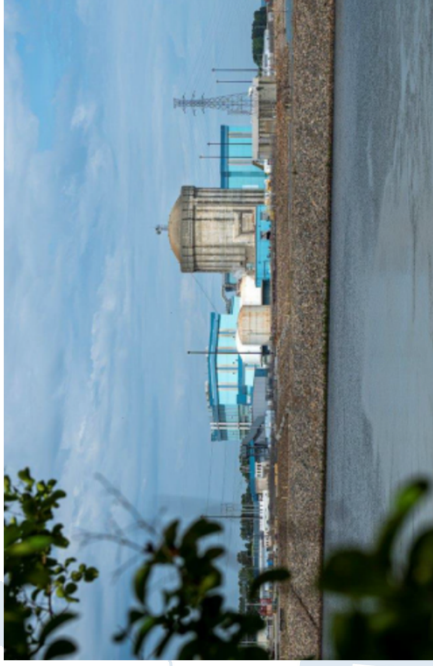


Preliminary Findings of the Environmental Review for Virgil C. Summer Nuclear Station, Unit 1, Subsequent License Renewal



December 17, 2024

Presentation Slides - ADAMS Accession No. ML24348A110

Agenda

- Introductions and Purpose
- Opening Remarks
- Environmental Review
- Draft Supplemental Environmental Impact Statement (SEIS) Preliminary Findings
- Draft SEIS Participant Contact Information
- Public Participation

Meeting Logistics

- NRC is actively soliciting comments on the draft SEIS to aid the NRC staff's review
- For this virtual meeting, participants are in listen-only mode until the comment session
- No regulatory decisions will be made at today's meeting

Introductions and Purpose

- Marieliz Johnson, Safety Review Lead, Office of Nuclear Reactor Regulation (NRR)
- Kim Conway, Environmental Review Lead, Office of Nuclear Material Safety and Safeguards (NMSS)
- Steve Koenick, Chief, Environmental Project Management Branch 1, NMSS

U.S. Nuclear Regulatory Commission – An Independent Regulatory Agency

NRC MISSION

We license and regulate U.S. civilian use of radioactive materials, protecting public health and safety, promoting the nation's common defense and security, and protecting the environment

STATUTORY AUTHORITY

- *Atomic Energy Act of 1954*
- *Energy Reorganization Act of 1974 split the Atomic Energy Commission into the NRC and the predecessor of the Energy Department*



Strategic

Plan

Fiscal Year

2022-2026

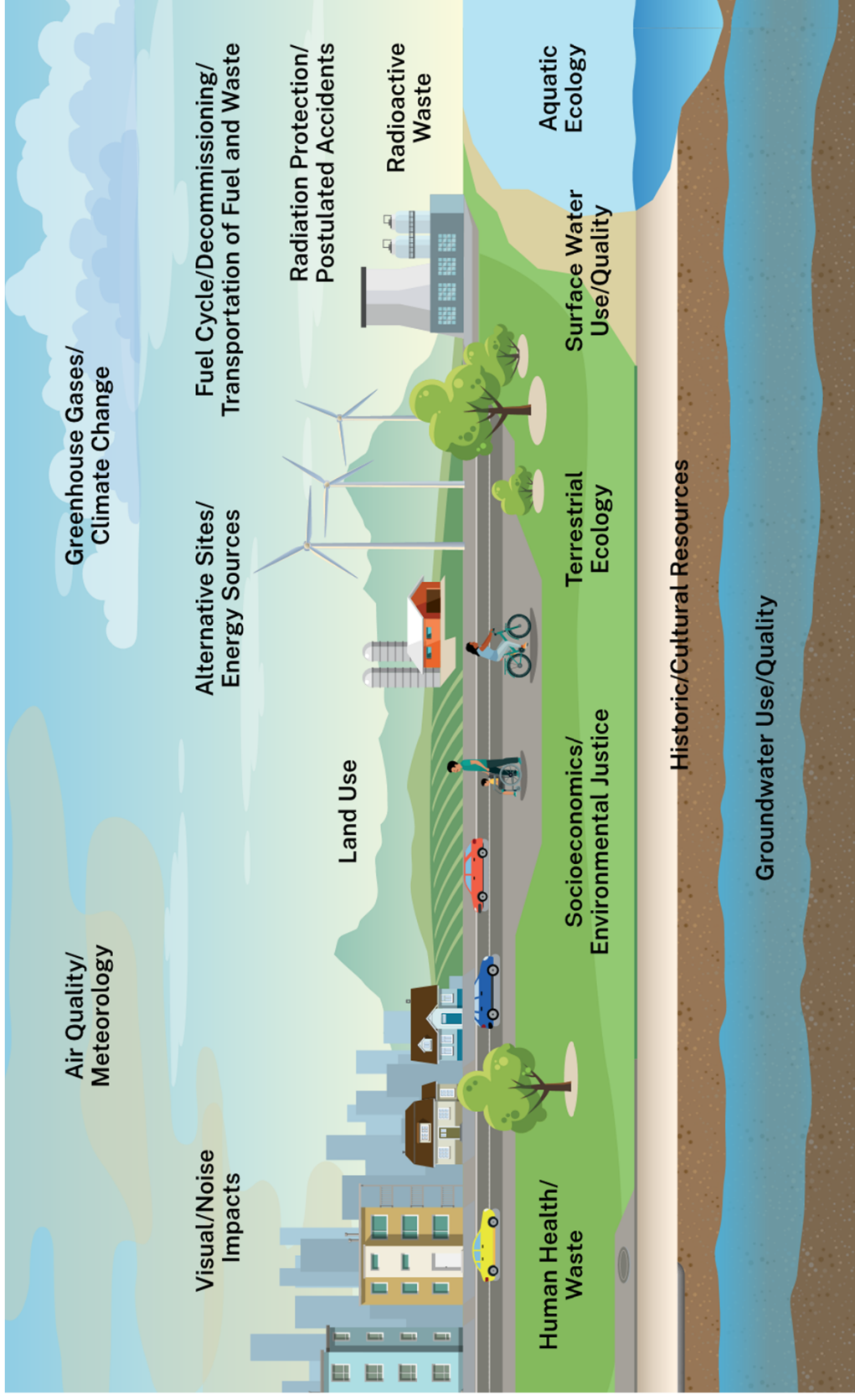
V.C. Summer Subsequent License Renewal

- The subsequent license renewal application for Virgil C. Summer Nuclear Station, Unit 1 (V.C. Summer) was submitted on August 17, 2023
- The current renewed operating license expiration date for V.C. Summer is August 6, 2042
- If a subsequent license renewal is granted, it will be for an additional 20 years

Environmental Review

- Generic Environmental Impact Statement (GEIS)
 - Addresses Category 1 environmental issues common to all plants (or a distinct subset of plants) during the license renewal term
- Environmental Impact Statement
 - Neither the applicant nor the NRC identified information that is both new and significant related to Category 1 issues that would call into question the conclusions in the LR GEIS
 - Addresses Category 2 environmental issues during the subsequent license renewal term on a site-specific basis

Environmental Review



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 (cont.)

- **Federally Listed Species and Critical Habitat** (Endangered Species Act)
 - No effect
 - May affect but is not likely to adversely affect
 - May affect and is likely to adversely affect
- **Essential Fish Habitat** (Magnuson-Stevens Act)
 - No adverse impacts
 - Minimal adverse impacts
 - More than minimal, but less than substantial adverse effects
 - Substantial adverse impact

How Impacts are Defined (cont.)

- **Sanctuary Resources** (National Marine Sanctuaries Act)
 - No effect
 - Not likely to destroy, cause the loss of, or injure sanctuary resources
 - Likely to destroy, cause the loss of, or injure sanctuary resources
- **Historic and Cultural Resources** (National Historic Preservation Act)
 - No effect
 - No adverse effect
 - Adverse effect

How Impacts are Defined (cont.)

- **Environmental Justice*** (Executive Order 12898)
 - Disproportionately high and adverse human health and environmental effects
 - No disproportionately and adverse human health and environmental effects on minority and low-income populations

* The NRC chooses to address EJ, though not required. There is a pending vote by the Commission on addressing EJ.

Draft SEIS Resource Areas

Resource Area	SEIS Section
Land Use and Visual Resources	Section 3.2
Meteorology, Air Quality, and Noise	Section 3.3
Geologic Environment	Section 3.4
Surface Water and Groundwater Resources	Section 3.5
Terrestrial Resources	Section 3.6
Aquatic Resources	Section 3.7
Federally Protected Ecological Resources	Section 3.8
Historic and Cultural Resources	Section 3.9
Socioeconomics	Section 3.10
Human Health, Postulated Accidents	Section 3.11
Environmental Justice	Section 3.12
Waste Management	Section 3.13
Uranium Fuel Cycle, Termination of Operations and Decommissioning	Section 3.15
Greenhouse Gas Emissions and Climate Change	Section 3.15.3

Draft SEIS Preliminary Findings

Resource Area

- Land Use/Visual Resources
- Air Quality/Noise
- Geologic Environment
- Surface Water/Groundwater Resources
- Terrestrial Resources
- Aquatic Resources
- Socioeconomics
- Transportation
- Human Health
- Postulated Accidents
- Waste Management
- Uranium Fuel Cycle
- Termination of Operations/Decommissioning

SMALL

Impacts

Draft SEIS Preliminary Findings (cont.)

Resource Area

Impacts

- | | |
|---|---|
| • Historic and Cultural Resources | • Would not adversely affect known historic properties |
| • Environmental Justice | • No disproportionately and adverse human health and environmental effects on minority and low-income populations |
| • Greenhouse Gas Emissions and Climate Change | • See Draft SEIS Section 3.15.3 |
| • Cumulative Impacts | • See Draft SEIS Section 3.16 |

Draft SEIS Preliminary Findings – Special Status Species and Habitats and Sanctuary Resources

- May affect but is not likely to adversely affect
 - Tricolored bat
 - Monarch butterfly
- No effect
 - on designated critical habitats or essential fish habitat
 - on sanctuary resources

Alternatives Evaluated

- No-action alternative
- Alternative energy sources (power replacement)
 - Natural gas
 - New nuclear (small modular reactor)
 - Natural gas and solar combination
 - New nuclear and solar combination

Preliminary Recommendation

The adverse environmental impacts of subsequent license renewal for V.C. Summer, Unit 1, for an additional 20 years beyond the current expiration date are not so great that preserving the option of subsequent license renewal for energy-planning decisionmakers would be unreasonable

Environmental Review Milestones

Milestone	Date
Draft SEIS Published	November 26, 2024
Comment Period Began	December 6, 2024
Draft SEIS Public Meetings	December 17, 2024 (virtual) January 9, 2025 (in-person)
Draft SEIS Comments Due	January 21, 2025
Final SEIS	June 2025

Obtaining the Draft SEIS

- Printed copy:
 - Fairfield County Library
300 West Washington Street, Winnsboro, SC
- V.C. Summer Project Public Website:
<https://publish.nrc.gov/reactors/operating/licensing/renewal/applications/virgil-summer-subsequent.html>
- Agencywide Documents Access and Management System (ADAMS):
 - <https://www.nrc.gov/reading-rm/adams.html>
 - Draft SEIS accession number: [ML24330A271](#)

Additional Information

- V.C. Summer Subsequent License Renewal Website:
<https://publish.nrc.gov/reactors/operating/licensing/renewal/applications/virgil-summer-subsequent.html>
 - V.C. Summer subsequent license renewal application
 - Environmental report
 - Current schedule
 - Project managers associated with V.C. Summer
- Sign up for V.C. Summer Listserv to Receive Correspondence:
 - <https://www.nrc.gov/public-involve/listserver/plants-by-region.html>

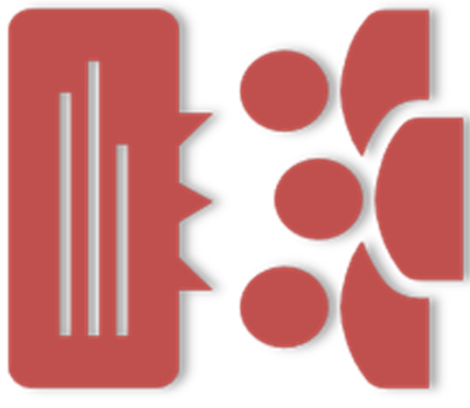
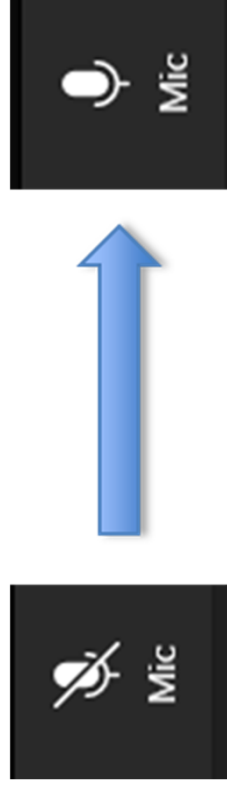
Submitting Comments

- By mail:
Office of Administration
Mailstop TWFN-7-A60M
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
- Website:
<http://www.regulations.gov>, use Docket ID NRC-2023-0152
- Email: SummerEnvironmental@nrc.gov

Comments should be submitted by **January 21, 2025**

Public Participation

- Raise your hand
 - MS Teams: “Raise my hand” button
 - On the phone: press “*5”
- You’ll still need to unmute
 - MS Teams: Unmute button
 - On the phone: press “*6”



Audio/Technical Issues

Drop off and log back on

Call into Bridge line:

301-576-2978

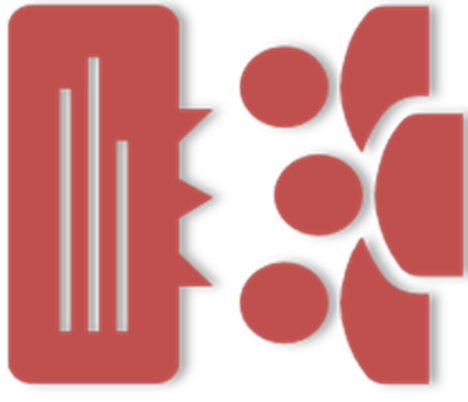
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In Teams, check your device settings:

Click “More”

Choose “Settings”

Choose “Device Settings”



Draft SEIS Participant Contact Information

- Meeting Summary
 - Meeting participant list
 - NRC presentation
 - Transcript of the meeting
- Final SEIS
 - To receive the final SEIS, email contact information to kimberly.conway@nrc.gov