Preliminary Site-Specific Results of the License Renewal Environmental Review For Seabrook Station



United States Nuclear Regulatory Commission

Protecting People and the Environment

September 15, 2011

Meeting Overview

NRC presentation (25 minutes)

- NRC's regulatory role
- Summary of environmental review
- Upcoming milestones and how to submit comments outside this meeting
- Other topics
- Q&A's (25 minutes)
- Your comments (remaining time)

NRC's Regulatory Oversight

- NRC regulates civilian use of nuclear materials, including power plants
- NRC's mission:
 - Protect public health and safety
 - Promote common defense and security
 - Protect the environment

Environmental Review

- Generic Environmental Impact
 Statement addresses issues common to many or all plants
- Draft Supplemental Environmental Impact Statement addresses sitespecific issues
- Review proposed action (license renewal) and alternatives

How Impacts are Quantified

NRC-defined impact levels:

- <u>SMALL</u> 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.

Site-Specific Environmental Issues of Continued Operation

Issues	Impact	DSEIS Section
Land Use	SMALL	4.1
Air Quality	SMALL	4.2
Surface Water Resources	SMALL	4.3
Groundwater Resources	SMALL	4.4
Aquatic Resources	SMALL to LARGE	4.5
Terrestrial Resources	SMALL	4.6
Protected Species and Habitats	SMALL to LARGE	4.7
Human Health	SMALL	4.8
Socioeconomics	SMALL	4.9

Cumulative Impacts

- Overall impacts to environment including past, present, and likely future actions
- Preliminary findings
 - MODERATE to LARGE cumulative impacts on aquatic resources
 - SMALL cumulative impacts in all other areas

Alternatives

- Alternative energy sources analyzed
 - Natural gas-fired combined cycle units
 - New nuclear
 - Combination of alternatives (combined cycle gas-fired unit and wind power)
- No action alternative

Preliminary Conclusion

The environmental impacts of license renewal for Seabrook Station are not great enough to deny the option of license renewal.

Seabrook Environmental Review Milestones

Application Submitted Notice of Intent - Scoping **Scoping Public Meeting** Scoping Period Ended Scoping Summary Report Draft SEIS **Draft SEIS Public Meeting Draft SEIS Comments Due** Final SEIS (projected)

June 1, 2010 July 20, 2010 August 19, 2010 October 20, 2010 March 1, 2011 August 1, 2011 September 15, 2011 October 26, 2011 March 2012

Additional Information

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- The draft SEIS can be viewed at:
 - Seabrook Library, 25 Liberty Lane, Seabrook, NH 03874
 - Amesbury Public Library, 149 Main Street, Amesbury, MA 01913
- Online:

http://www.nrc.gov/reactors/operating/licensing/renewal/applications/seabrook.html

Submitting Comments After the Meeting

- By mail: Chief, Rules, Announcements and Directives Branch Division of Administrative Services Mailstop TWB- 05B01M U.S. NRC, Washington, DC 20555-0001
- Internet: <u>www.regulation.gov</u>, search on Docket IDs: NRC-2010-0206

Comments due by October 26, 2011

Concrete Degradation

- Evidence of alkali-silica reaction (ASR) discovered at Seabrook during the license renewal process
- ASR occurs slowly over time and can cause expansion and cracking in concrete
- There are no immediate safety concerns associated with ASR at Seabrook
- License renewal safety review delayed

 Until an adequate aging management program is provided

NRC Response to Fukushima

- The NRC's response to Fukushima is as a current operating issue
- Increased inspections at operating facilities
- NRC Near-Term Task Force issued its report on July 12, 2011
 - Continued operations and continued licensing activities do not pose an imminent risk to public health and safety
- Staff paper on prioritization of task force recommendations due October 3, 2011
- More information:
 - http://www.nrc.gov/japan/japan-info.html

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