

# Preliminary Results of the License Renewal Environmental Review For Grand Gulf Nuclear Station

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January 29, 2014

# Overview and Purpose

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- NRC presentation
  - NRC's regulatory role
  - Summary of environmental review
  - Upcoming milestones and how to submit comments outside this meeting
- Your comments

# NRC's Regulatory Oversight

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

# Environmental Review

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- Generic Environmental Impact Statement (GEIS) addresses issues common to all plants
- Supplemental Environmental Impact Statement (SEIS) addresses site-specific issues for Grand Gulf Nuclear Station license renewal
- Review proposed action (license renewal) and alternatives

# How Impacts are Quantified

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- NRC-defined impact levels:
  - **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.
- Protected Species and Habitats - impact significance determination language from the Endangered Species Act.

# Site-Specific Environmental Review of Grand Gulf Nuclear Station

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Resource Areas	Impact	DSEIS Section
Land Use	SMALL	4.1
Air Quality	SMALL	4.2
Geological Environment	SMALL	4.3
Surface Water Resources	SMALL	4.4
Groundwater Resources	SMALL	4.5
Aquatic Resources	SMALL	4.6
Terrestrial Resources	SMALL	4.7
Protected Species and Habitats	No effect/may affect, but not likely to adversely affect	4.8
Human Health	SMALL	4.9
Socioeconomics	SMALL	4.10

# Cumulative Impacts

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- Overall impacts to environment including past, present, and reasonably foreseeable future actions
- Preliminary findings
  - MODERATE cumulative impacts for aquatic and terrestrial resources
  - SMALL cumulative impacts in all other areas

# Alternatives

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- Alternative energy sources analyzed (power replacement)
  - New nuclear
  - Natural-gas-fired combined-cycle (NGCC)
  - Supercritical pulverized coal
  - Combination – NGCC, demand-side management, purchased power, biomass
- No action alternative



# Preliminary Conclusion

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The NRC's preliminary recommendation is that the adverse environmental impacts of license renewal for Grand Gulf Nuclear Station are not great enough to deny the option of license renewal for energy-planning decisionmakers

# Waste Confidence Decision

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- NRC Waste Confidence Decision and Rule (WCD) addresses management of spent fuel after the renewal term.
- Consistent with the Commission direction, a Grand Gulf renewed license will not be issued until an updated WCD is issued.
- Waste Confidence Final Environmental Impact Statement and Rule available in fall 2014.
- <http://www.nrc.gov/waste/spent-fuel-storage/wcd.html>

# Environmental Review Milestones

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Application Received	November 1, 2011
Notice of Intent	December 27, 2011
Scoping Public Meeting	January 31, 2012
Scoping Period Ended	February 27, 2012
Scoping Summary Report	April 16, 2013
Draft SEIS	November 30, 2013
Draft SEIS Public Meeting	January 29, 2014
Draft SEIS Comments Due	February 11, 2014
Final SEIS	September 2014

# Additional Information

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- Environmental PM:

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- Safety Review:

**John Daily**

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- The draft SEIS can be viewed at:

- The Henrietta Person Memorial Library,  
606 Main Street, Port Gibson, Mississippi

- NRC's Web site ([www.nrc.gov](http://www.nrc.gov)):

- <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/>

# Submitting Comments After the Meeting

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- By mail: Chief, Rules, Announcements, and Directives Branch (RADB)  
Division of Administrative Services  
Mailstop 3WFN-06-44M  
U.S. NRC, Washington, D.C. 20555-0001
- In person: 11545 Rockville Pike  
Rockville, Maryland
- Internet: [www.regulations.gov](http://www.regulations.gov), docket ID: NRC-2011-0262

**Comments due by February 11, 2014**