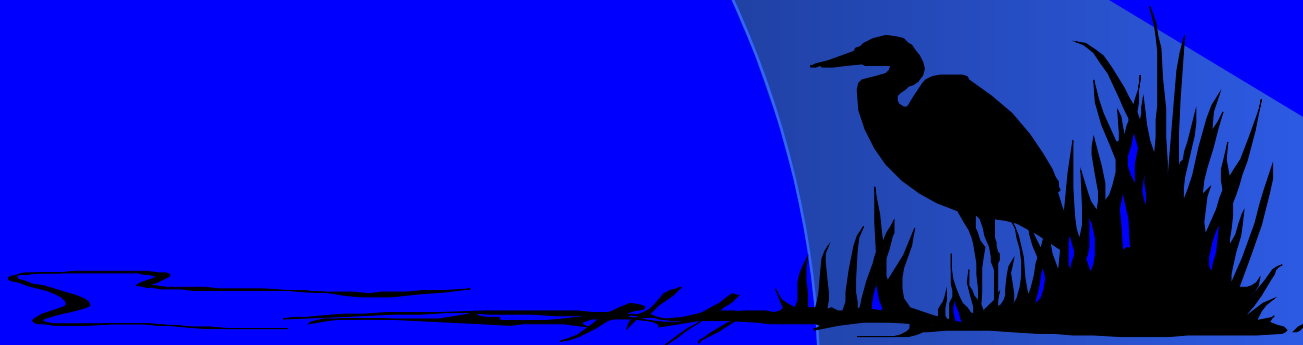




Preliminary Results of Environmental Review Fort Calhoun Station, Unit 1

Nuclear Regulatory Commission

February 26, 2003





Purpose of Today's Meeting

- Discuss NRC's license renewal process
- Describe the environmental review process
- Discuss the results of our review
- Provide the review schedule
- Accept any comments you may have today
- Describe how to submit comments



Fort Calhoun Station Unit 1 License Renewal

- Operating license expires in 2013
- Application requests authorization to operate Fort Calhoun Station Unit 1 for up to an additional 20 years

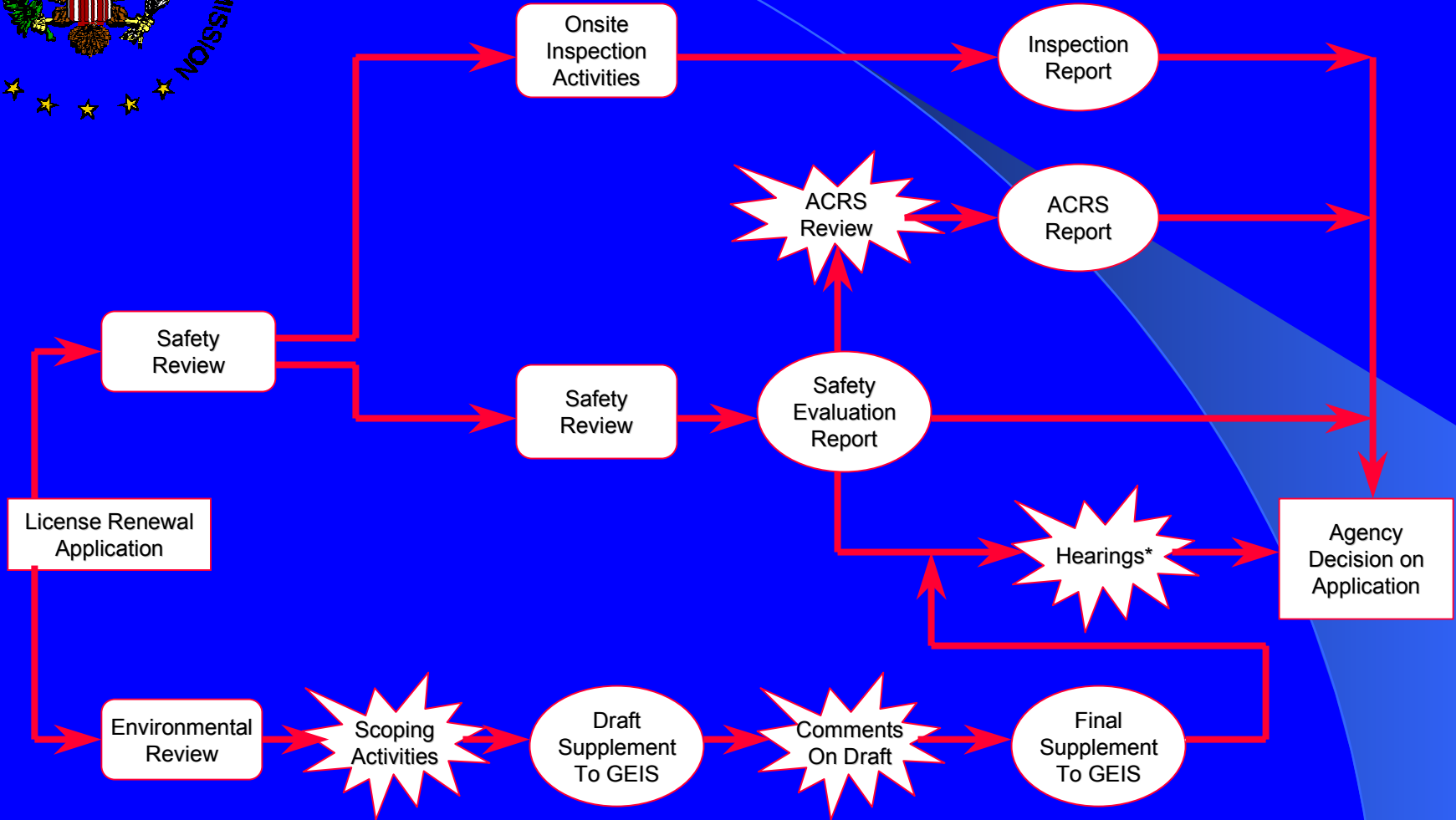


NRC's License Renewal Review

- Safety review
- Environmental review
- Plant inspections
- Advisory Committee on Reactor Safeguards (ACRS)



License Renewal Process



 Formal Public Participation

*If a request for hearing is granted



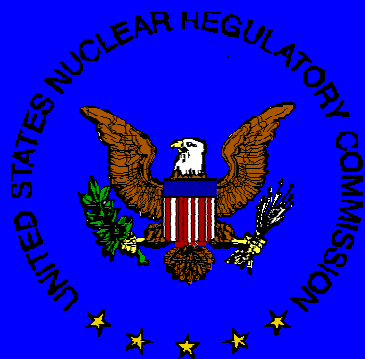
National Environmental Policy Act

- NEPA requires Federal agencies to use a systematic approach to consider environmental impacts
- Commission has determined that an environmental impact statement (EIS) will be prepared for a license renewal action

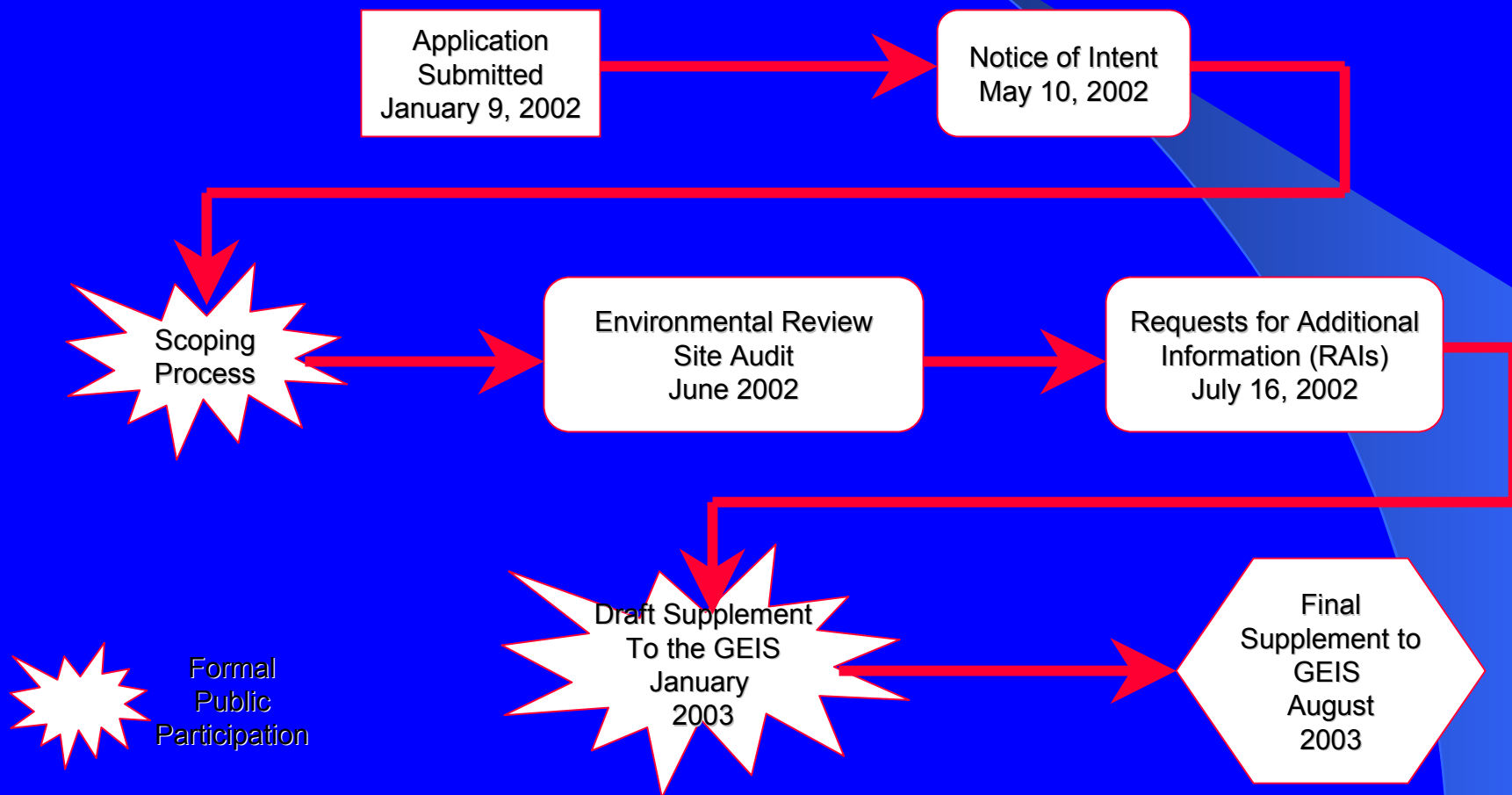


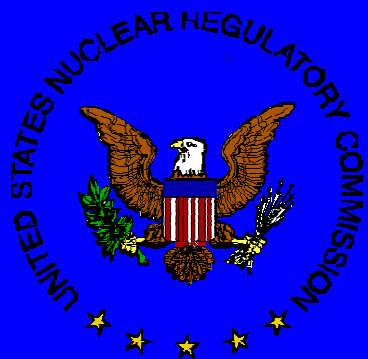
Decision Standard for Environmental Review

To determine whether or not the adverse environmental impacts of license renewal for Fort Calhoun Station Unit 1, are so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

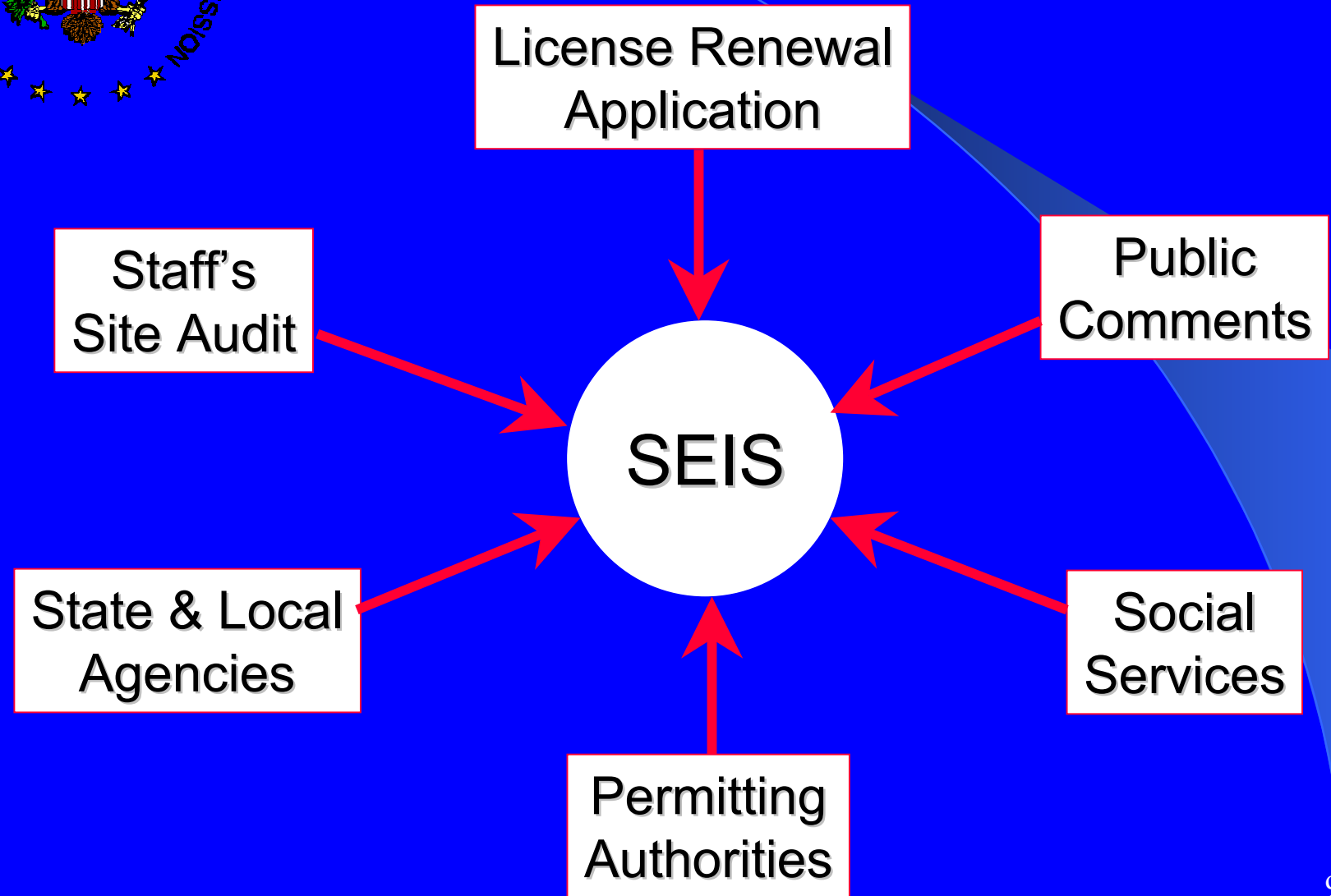


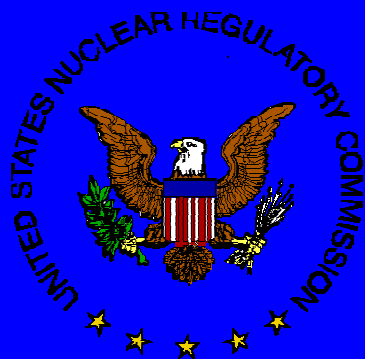
Environmental License Renewal Process



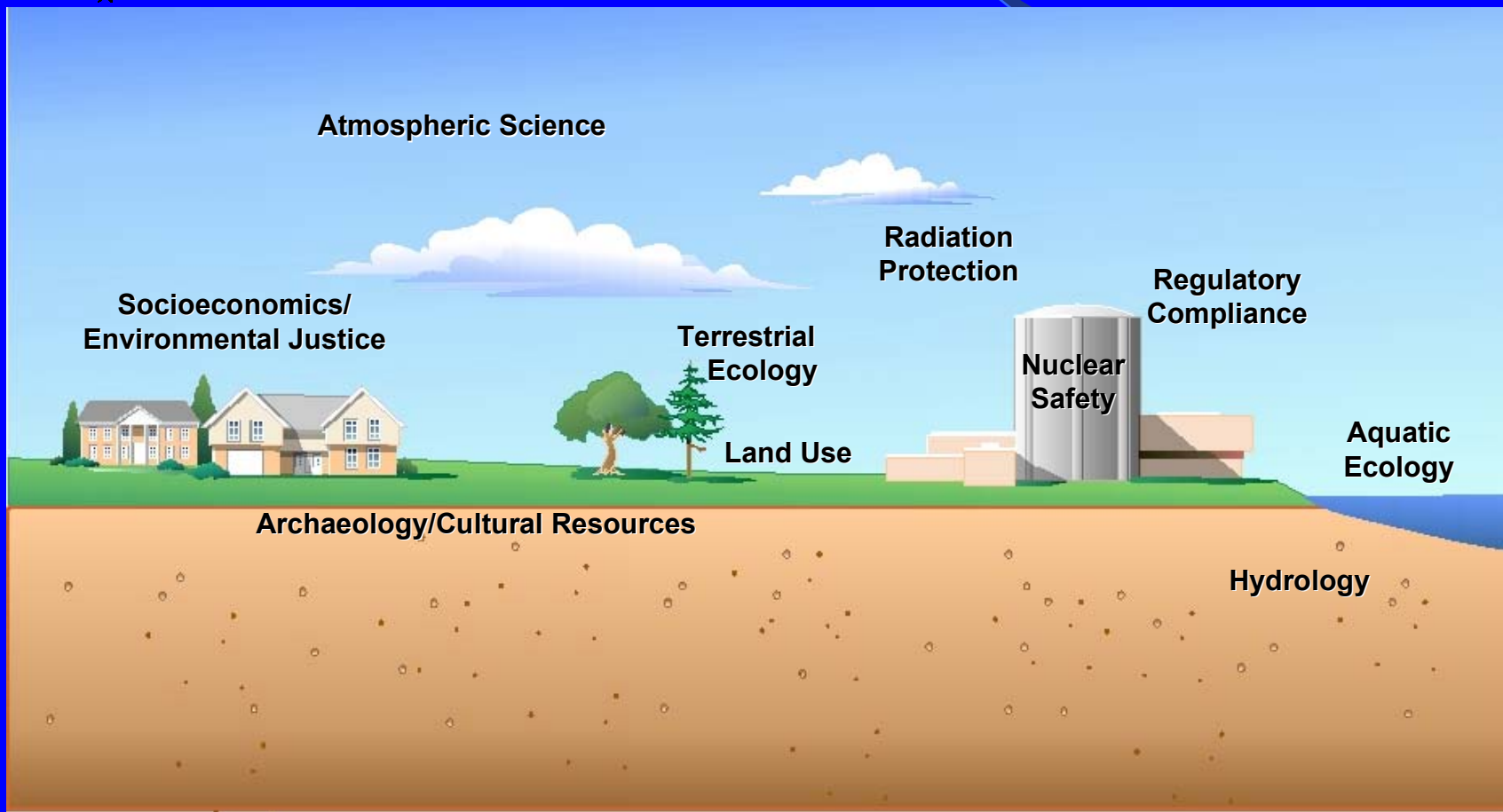


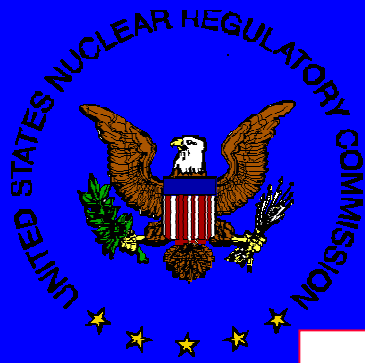
Information Gathering



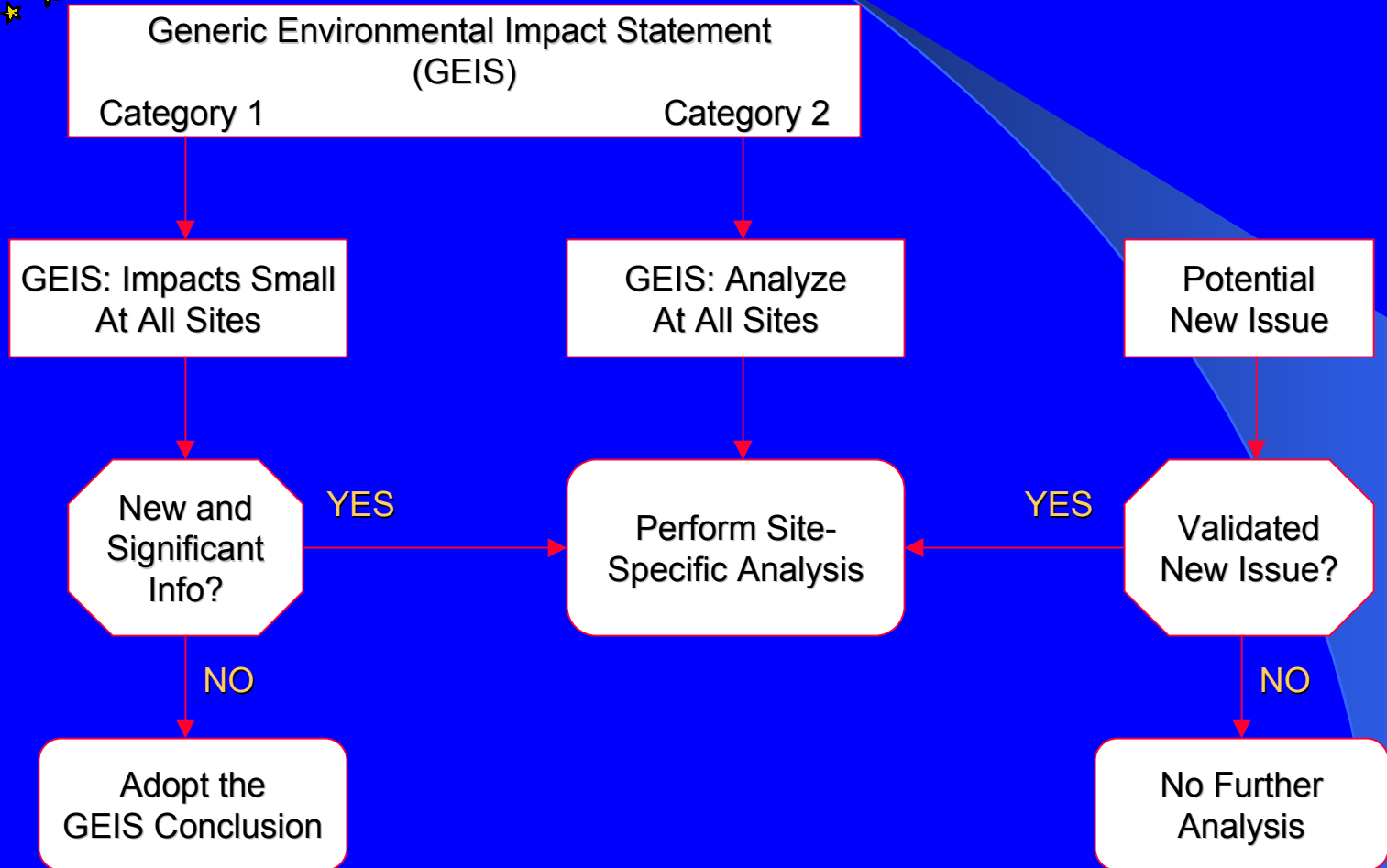


Team Expertise





Analysis Approach





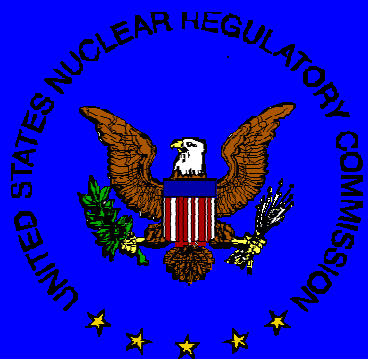
How Impacts are Quantified

- NRC-defined impact levels:
 - **SMALL**: *Effect is not detectable or too small to destabilize or noticeably alter any important attribute of the resource*
 - **MODERATE**: *Effect is sufficient to alter noticeably, but not destabilize important attributes of the resource*
 - **LARGE**: *Effect is clearly noticeable and sufficient to destabilize important attributes of the resource*
- Consistent with the Council on Environmental Quality guidance for NEPA analyses



Environmental Impacts of Operation

-
- Chapter 2 – Plant Description and Plant Interaction with the Environment
 - Chapter 4 – Potential Impacts of Operation
 - Cooling System
 - Transmission Lines
 - Radiological
 - Socioeconomic
 - Groundwater Use and Quality
 - Threatened or Endangered Species



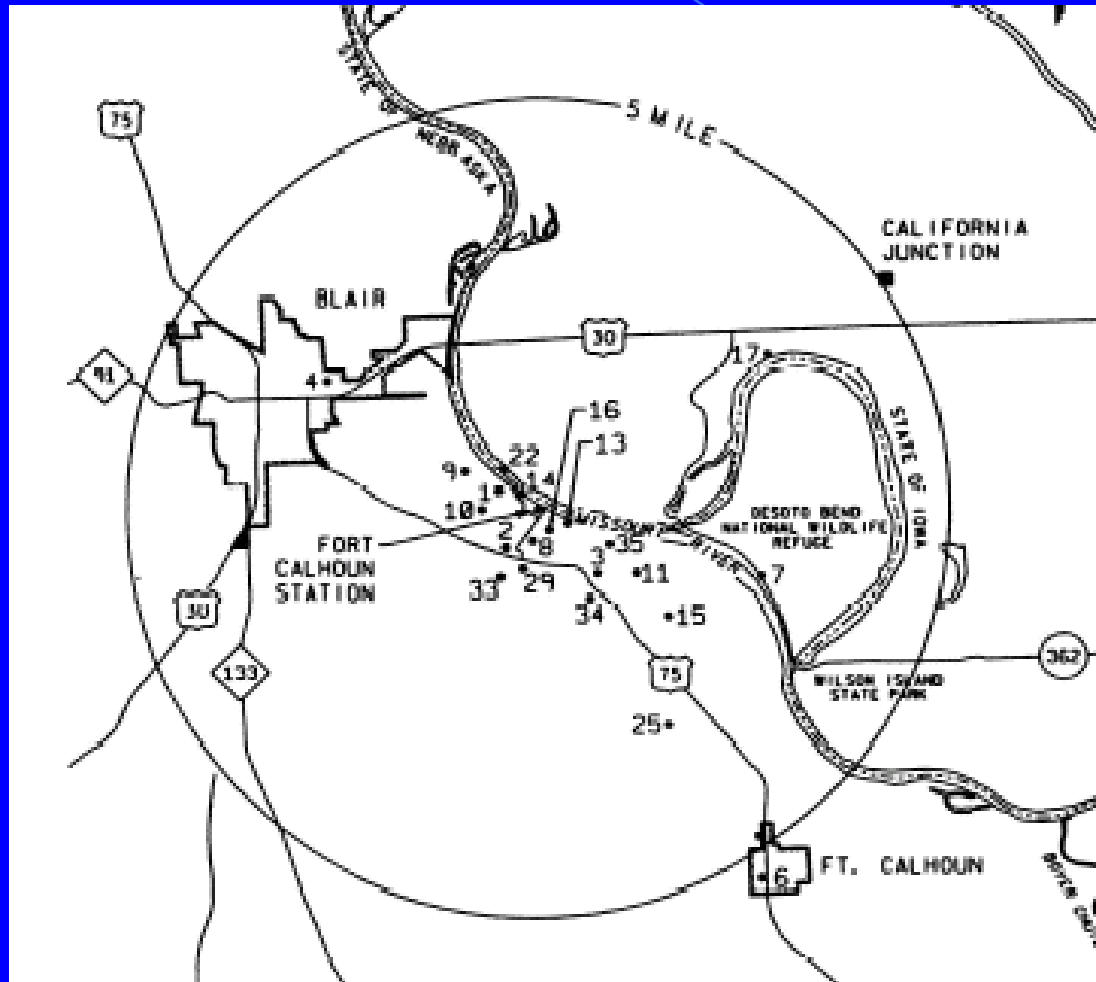
Cooling System Impacts

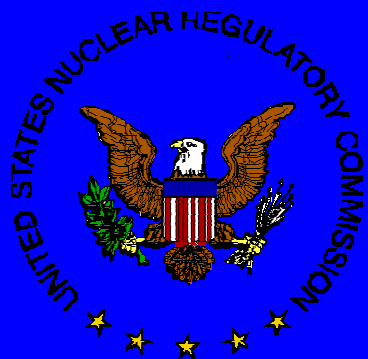




Radiological Impacts

Fort Calhoun Near-Site and On-Site Radiological Monitoring Locations





Threatened or Endangered Species



Pallid sturgeon



Bald eagle



Potential New and Significant Information

- No new and significant information identified:
 - as a result of the scoping process
 - by the licensee
 - by the staff



Other Environmental Impacts Evaluated

- Uranium Fuel Cycle and Solid Waste Management
- Decommissioning



Alternatives

-
- No-action
 - New generation
 - Purchased electrical power
 - Alternative technologies
 - Combination of alternatives



Preliminary Conclusions for Alternatives

- Alternatives (including the no-action alternative) may have environmental effects in at least some impact categories that reach MODERATE or LARGE significance



Postulated Accidents

- Design-Basis Accidents
- Severe Accidents
 - Severe Accident Mitigation Alternatives (SAMAs)



Preliminary Results of SAMA Evaluation

- Seven SAMAs found to be cost beneficial, but not related to managing the effects of aging.
- The seven cost beneficial SAMAs are not required to be implemented as part of license renewal, because they do not relate to managing the effects of aging.
- However OPPD currently plans to voluntarily implement the seven cost beneficial SAMAs



Conclusion

- Impacts of license renewal are SMALL for all impact areas
- Impacts of alternatives to license renewal range from SMALL to LARGE
- The staff's preliminary recommendation is that the adverse environmental impacts of license renewal for Fort Calhoun Station Unit 1 are not so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable



Environmental Review Milestones

- Draft EIS issued – 1/6/03
- Comment period – 1/17/03 to 04/10/03
- Final EIS issued – 8/15/03



Point of Contact

- Agency point of contact:
Jack Cushing
(800) 368-5642, Ext. 1424
- Documents located at the Blair Public Library, 210 South 17th Street, Blair, Nebraska, and the W. Dale Clark Library, 215 South 15th Street, Omaha, Nebraska and can be viewed at the NRC's Web site (www.nrc.gov)
- Draft SEIS can also be viewed at: www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1437/supplement12/



NRC Addresses

Provide comments:

- By mail at: Chief, Rules and Directives Branch
Division of Administrative Services
Mailstop T-6D59
U.S. Nuclear Regulatory Commission
- In person at: 11545 Rockville Pike
Rockville, Maryland
- E-mail at: Ft_Calhoun_EIS@nrc.gov

