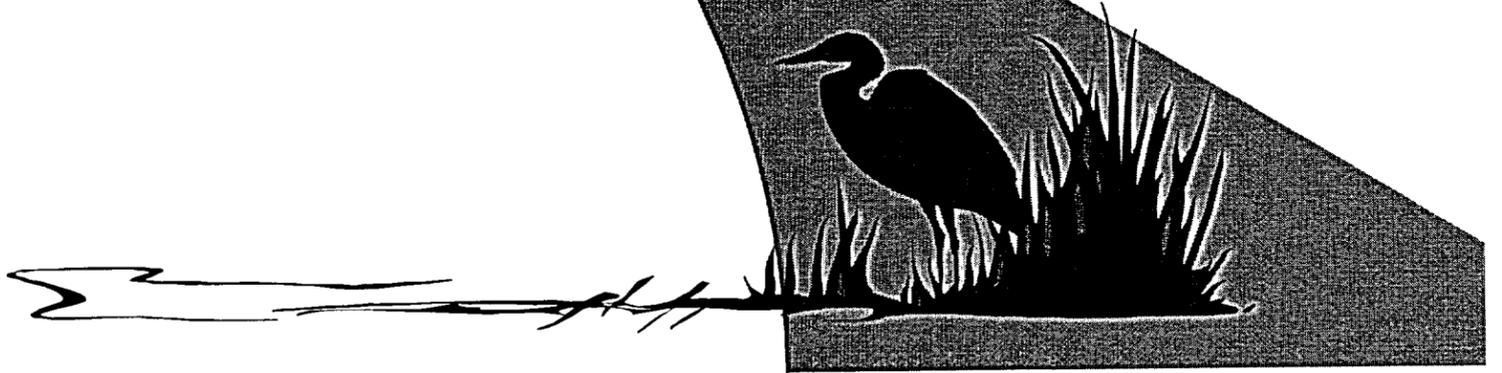




Preliminary Results of Environmental Review Peach Bottom Units 2 & 3

Nuclear Regulatory Commission
July 31, 2002





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



Peach Bottom Units 2 and 3 License Renewal

-
- Operating licenses expire in 2013 (Unit 2) and 2014 (Unit 3)
 - Application requests authorization to operate units for an additional 20 years



NRC's License Renewal Review

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



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

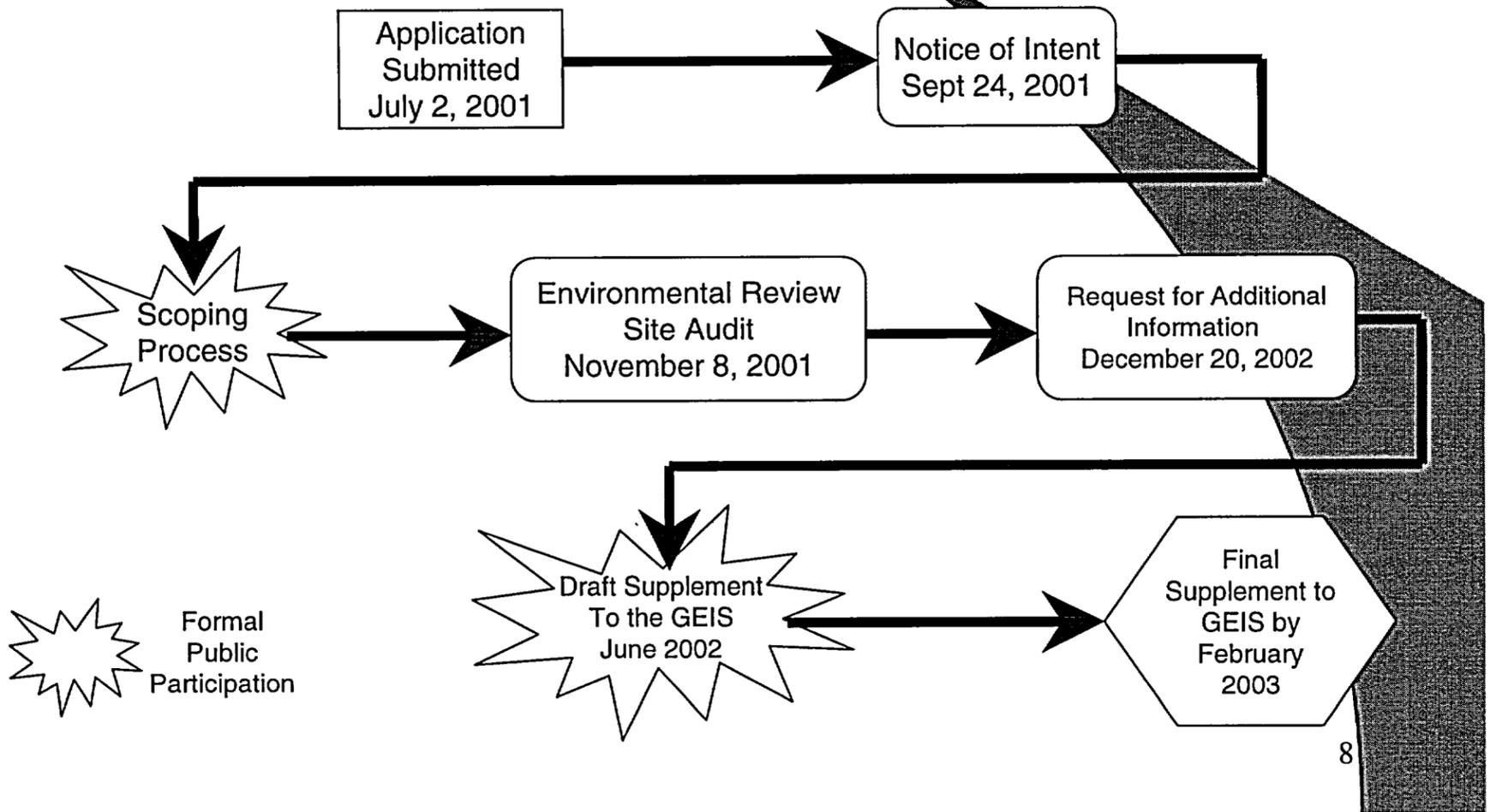


Decision Standard for Environmental Review

To determine whether or not the adverse environmental impacts of license renewal for Peach Bottom Units 2 and 3, are so great that preserving the option of license renewal for energy planning decision makers would be unreasonable.

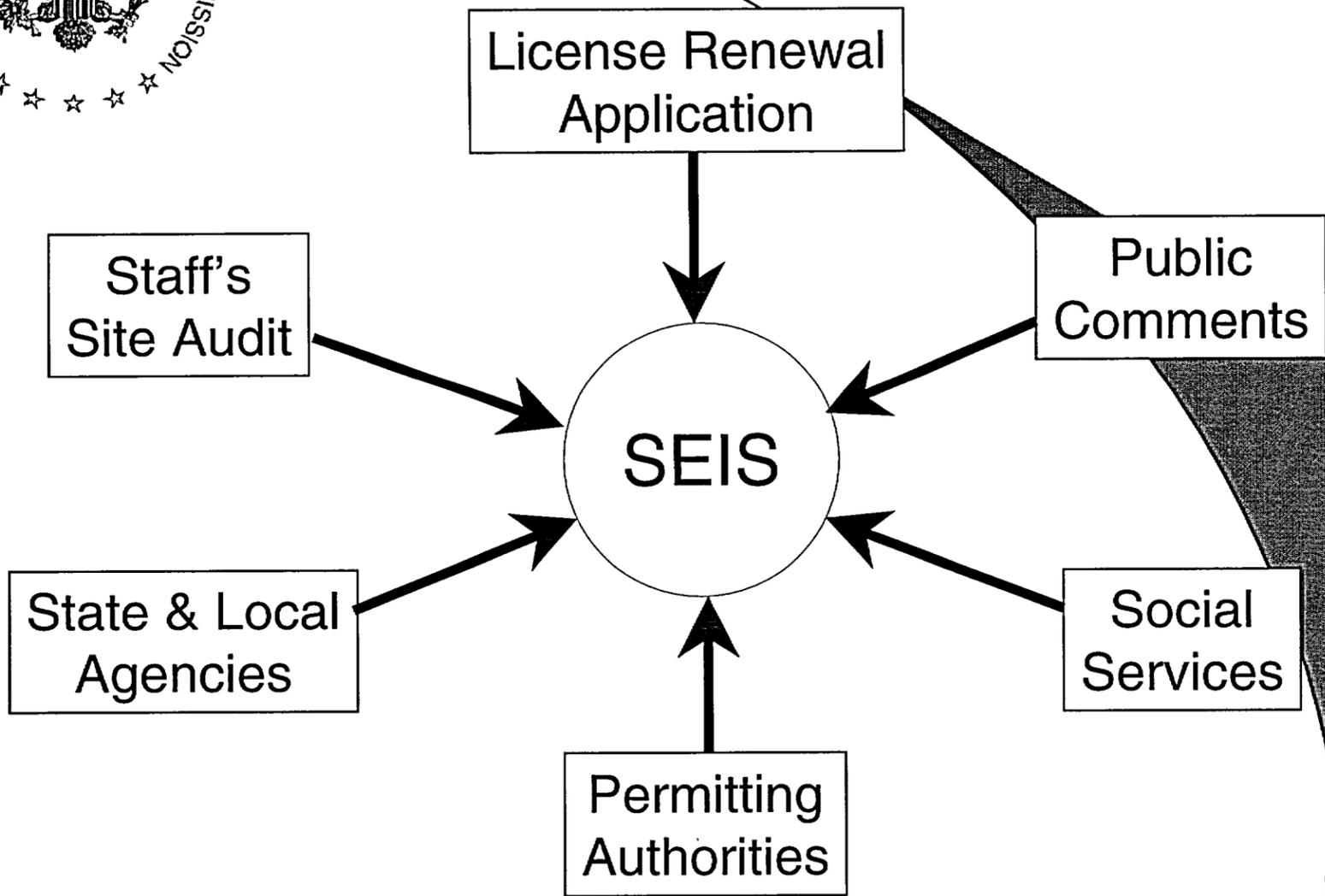


Environmental License Renewal Process



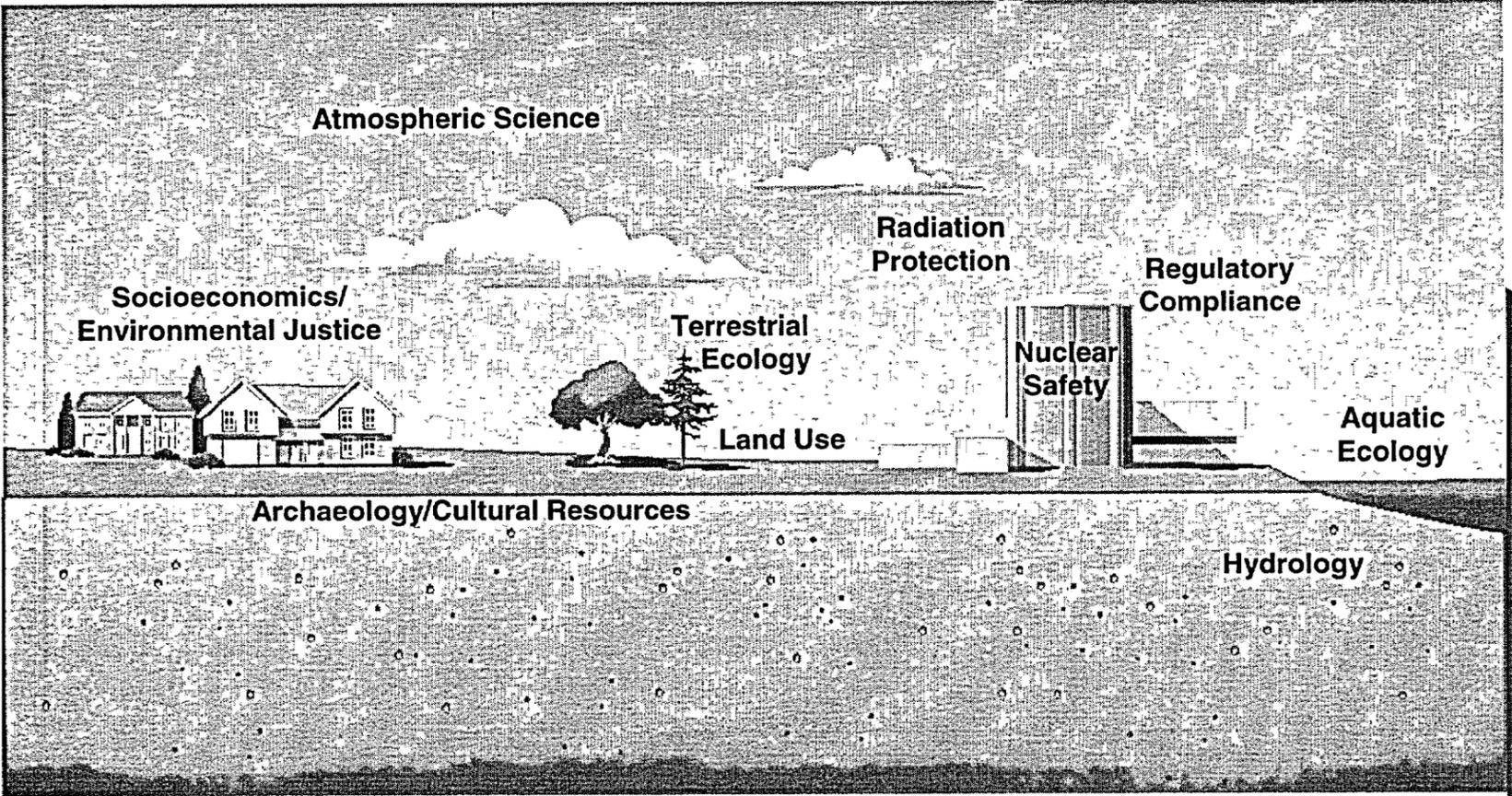


Information Gathering



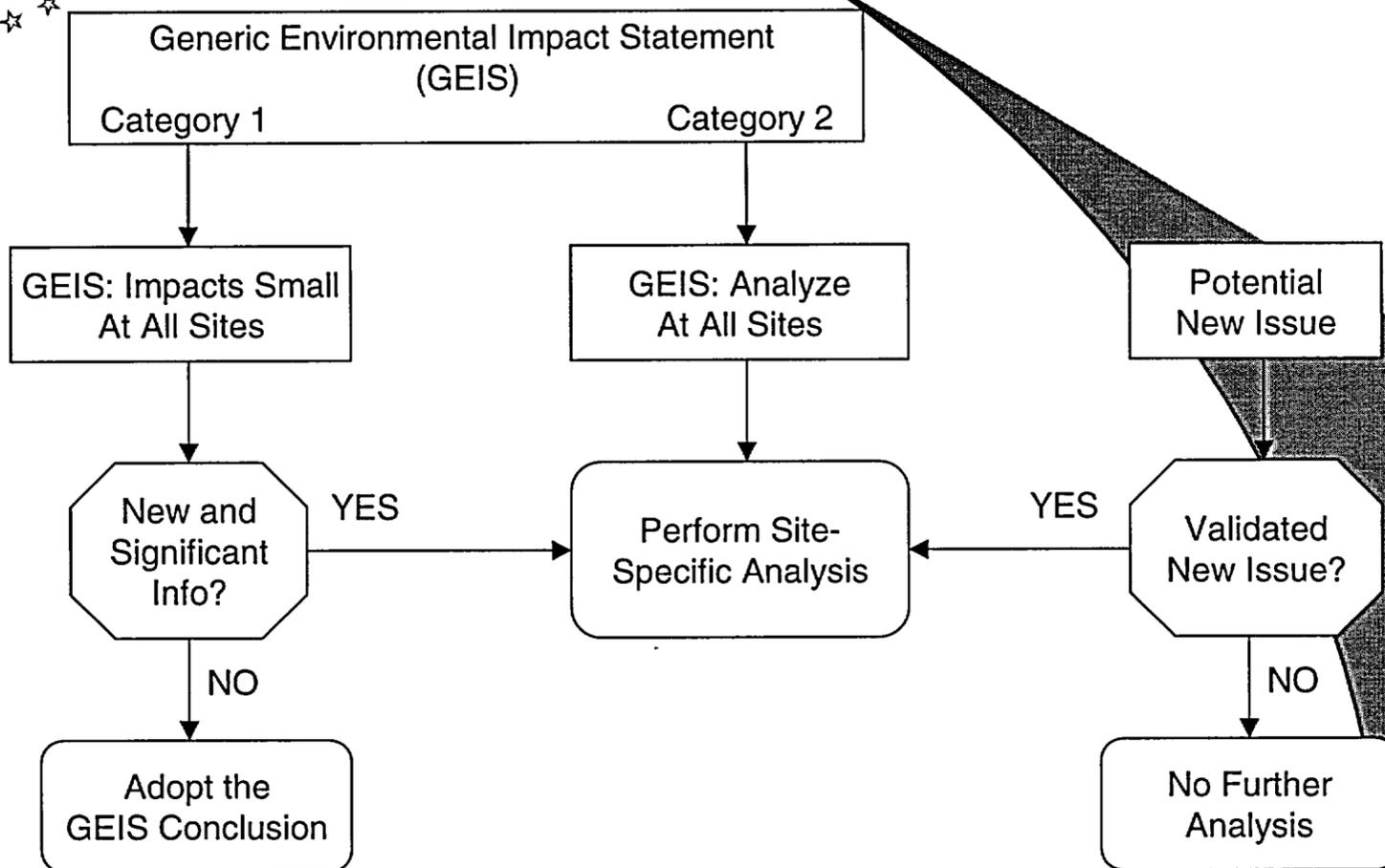


Team Expertise





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

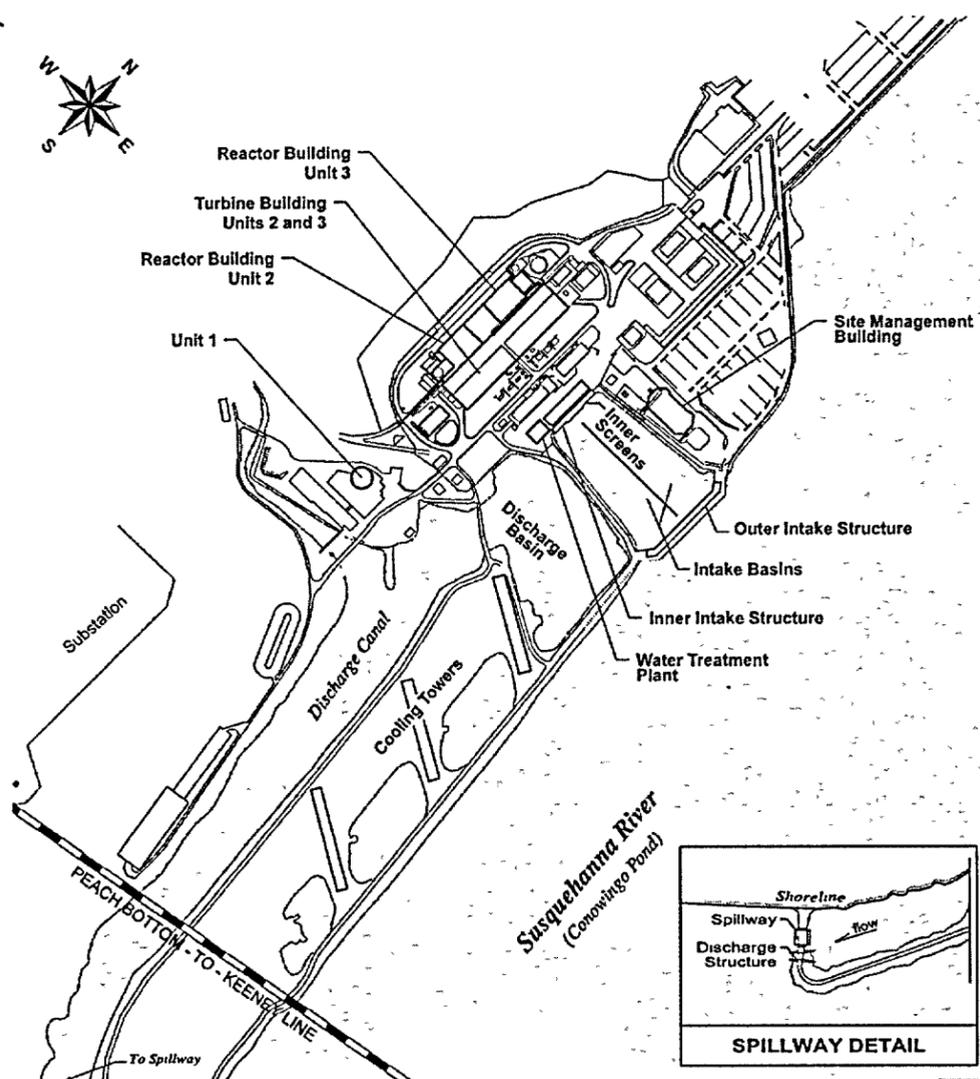


Environmental Impacts of Operation

-
- Cooling System
 - Transmission Lines
 - Radiological
 - Socioeconomic
 - Groundwater Use and Quality
 - Threatened or Endangered Species



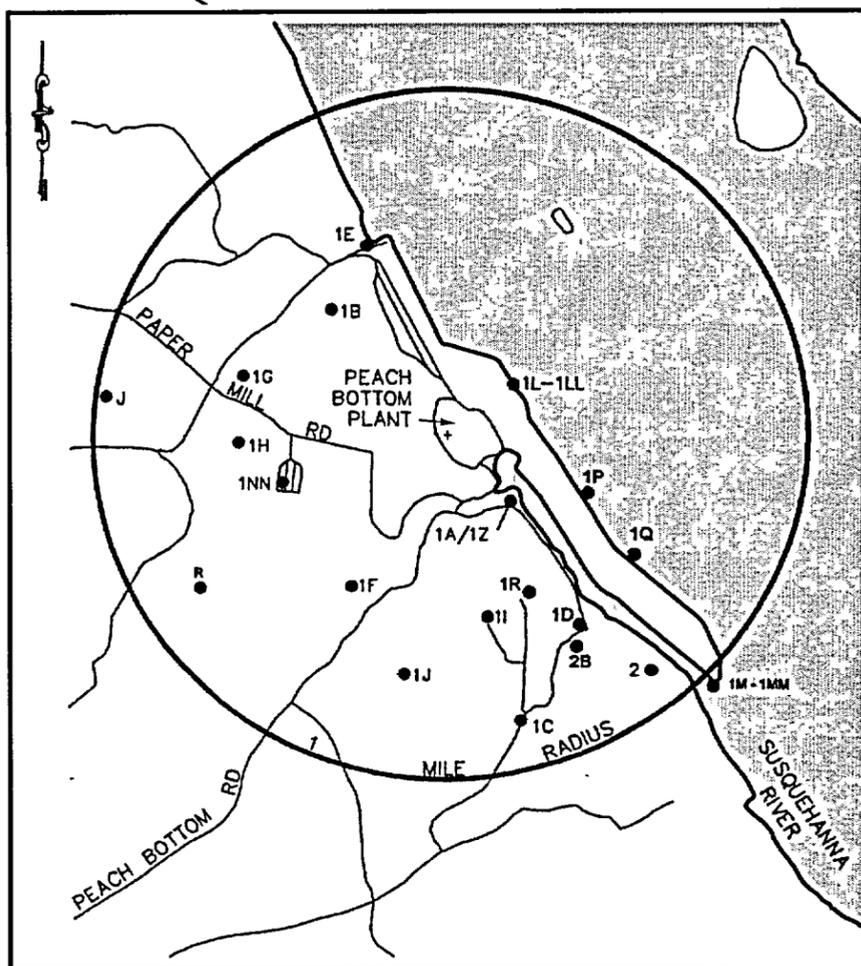
Cooling System Impacts





Radiological Impacts

Local
Sampling
Locations





Potential New and Significant Information

- Comments were received during scoping with claims of elevated childhood cancer resulting from releases of strontium-90.
- No new and significant information identified by the licensee or the NRC staff.



Threatened or Endangered Species





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



Impacts of Postulated Accidents

- Design-Basis Accidents

- Severe Accidents
 - Severe Accident Mitigation Alternatives (SAMAs)



Preliminary Results of SAMA Evaluation

- 204 candidate improvements identified
 - 174 eliminated during initial, qualitative screening
 - Remaining 30 subjected to quantitative cost-benefit analysis
 - 30 SAMAs reduced to 5 based on cost and risk reduction considerations
- Detailed conceptual design and cost estimates developed for 5 remaining SAMAs
- None of the candidates were found to be cost beneficial



Results of SAMA Evaluation (continued)

- Overall conclusion:

Additional plant improvements to further mitigate severe accidents are not required at Peach Bottom Units 2 and 3.



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 any adverse environmental impacts of license renewal for Peach Bottom Units 2 and 3 are not so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable



Environmental Review Milestones

- Draft SEIS issued: June 02
- Comment period: July 5 to September 17, 2002
- Final EIS issued: February 2003



Point of Contact

-
- Agency point of contact: Duke Wheeler
(800) 368-5642, Ext. 1444
 - Documents locations:
 - Collinsville Public Library, Brogue, PA
 - Quarryville Public Library, Quarryville, PA
 - Whiteford Branch Library, Whiteford, MD
 - 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/supplement10



NRC Addresses

Provide comments:

- By mail at: Chief, Rules and Directives Branch
Division of Administrative Services
Mail Stop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
- In person at: 11545 Rockville Pike
Rockville, Maryland
- E-mail at: Peach_Bottom_EIS@nrc.gov
- On-line comment form with web version of the DSEIS

UNITED STATES NUCLEAR REGULATORY COMMISSION

