

U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

Public Outreach Meeting
South Carolina E&G
Summer Nuclear Power Plant
Combined License Application

Thomas Bergman, Deputy Director
Licensing Operations
Division of New Reactor Licensing

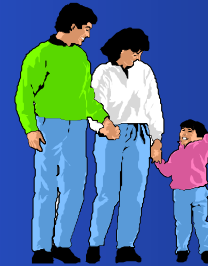
Purposes of this meeting

- Talk with you about combined license that may eventually authorize construction and operation of a new nuclear power plant
- Explain what the NRC does during the review of a combined license application
- Describe how you can participate in the regulatory process

Nuclear Regulatory Commission

- Mission: to protect the public health and safety, promote the common defense and security, and protect the environment
- Independent Agency
 - Five Commissioners
 - Staff of technical and regulatory experts
- Over 30 years of experience regulating operating reactors and other civilian use of nuclear materials
 - Regulates 104 operating reactors in the U.S.
 - Administers Agreement State Program under which Maryland entered into Agreement to regulate control and use of certain nuclear materials at hospitals and industrial facilities
 - Regulates commercial nuclear fuel production facilities and waste storage facilities in the U.S.

Participants in NRC Licensing Process



NRC

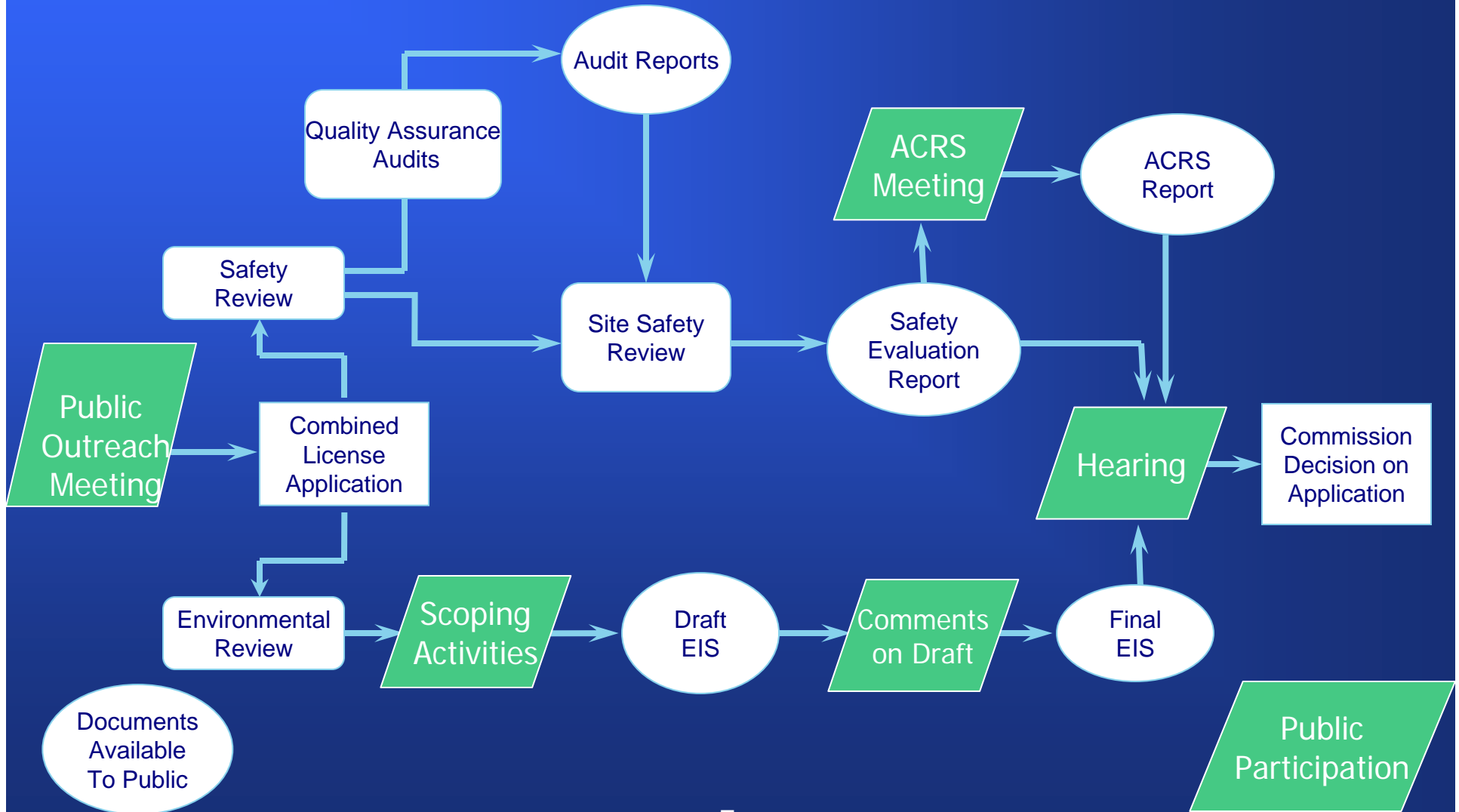
- Commissioners
- Staff members
- Hearing Boards
- Advisory Committee on Reactor Safeguards (ACRS)

Stakeholders

- Residents of the community
- Public interest groups
- Other Federal Agencies
- State entities
- Local officials
- Tribal officials, and others

License Applicant –
South Carolina Energy
and Gas

Combined License Application Review Process



Combined License Application Review and Construction Inspection

- Jeff Ciocco, Senior Project Manager
 - Overall Combined License Application Review
- Paul Kallan, Project Manager
 - Environmental Review
- Omid Tabatabai, Senior Reactor Operations Engineer
 - Construction Inspection

Combined License

- **What:** Authorization from the NRC to construct and, with conditions, operate a nuclear power plant at a specific site and in accordance with laws and regulations
- **Who:** SCE&G
- **When:** South Carolina Energy and Gas plans to submit the complete application in November 2007.

Combined License Regulatory Process (10 CFR Part 52)

- Has been in place since 1989
 - Reflects lessons learned from licensing and construction of plants in the US in the 60's and 70's
 - Intended, in part, to avoid inefficient use of NRC resources to review design as construction is proceeding
- Safety-focused and efficient process
 - Provides for NRC review of all site, design, and operational issues before granting license
 - Allows the public access to information about the reactor design and site-specific issues early in the licensing process
 - Maintains a predictable and stable regulatory process for all stakeholders
 - Safety benefits should be realized once plants are operating due to more efficient use of resources resulting from increased standardization of reactor designs

What the NRC will review

- Compliance with regulations to ensure adequate protection of public health and safety and common defense and security
 - Design of facility
 - Quality assurance
 - Security plan
 - Emergency preparedness (with the Federal Emergency Management Agency)
 - Operator Training
 - Applicant's process to verify that the nuclear plant will be built as designed and operated in accordance with NRC regulations
- Disclosure of environmental impacts and evaluate alternatives

NRC Staff Review

- Determine whether application satisfies NRC safety and environmental regulations and requirements
- Perform environmental review in accordance with National Environmental Policy Act and other statutes
- Make informed decisions based on the facts and compliance with U.S. laws and NRC regulations
- Clearly document our safety and environmental findings
- Follow established procedures that allow public participation
- Maintain an open and transparent process

Opportunities for Public Participation

- Obtain information at www.nrc.gov
 - NRC processes and how to participate
 - Publicly available information about the license application
- Meetings between the NRC and the applicant
- Comment on environmental review
- Participate in Advisory Committee on Reactor Safeguards meetings
- Participate in the hearing process

Combined License Application Review Process



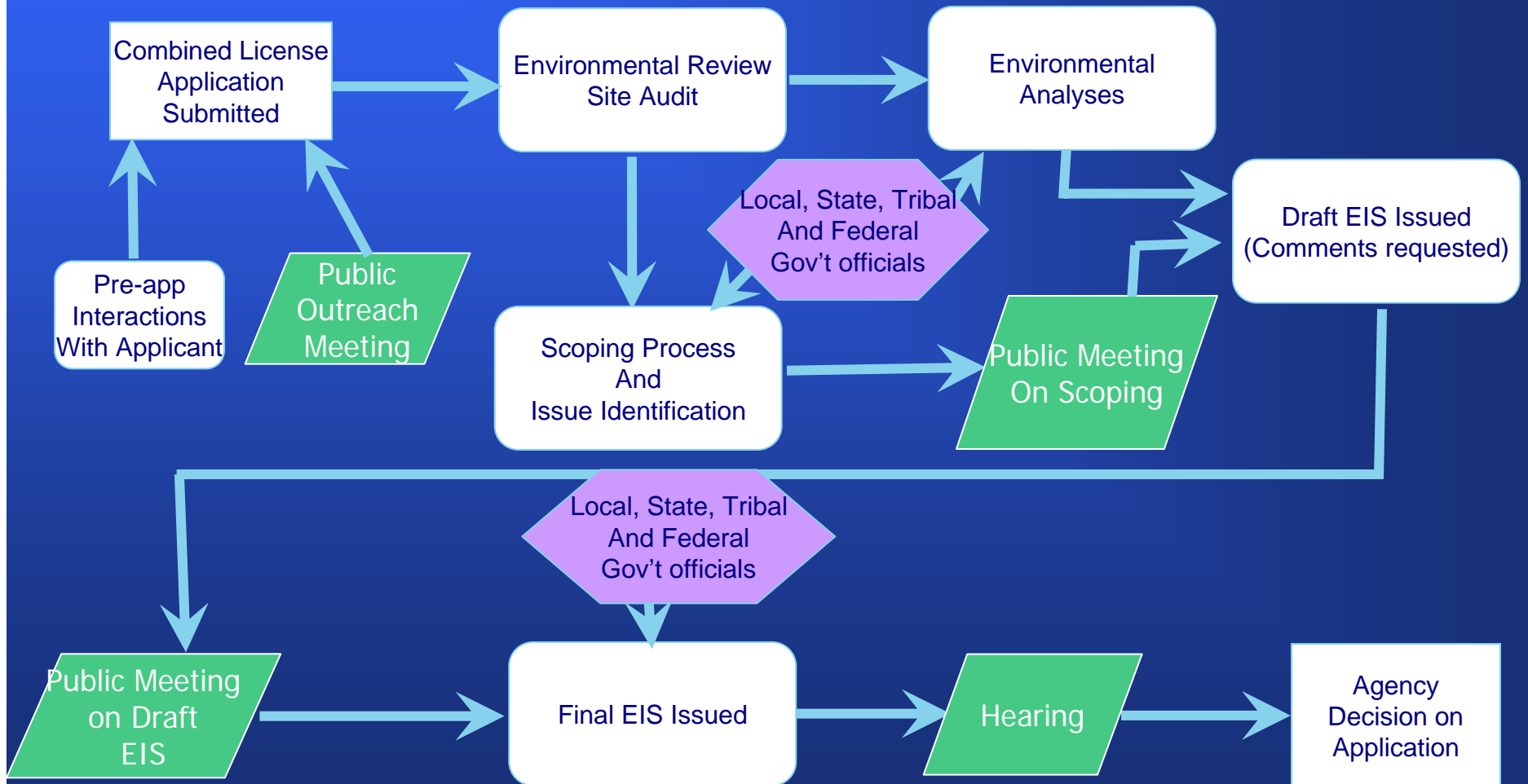
The Hearing Process

- NRC issues a Notice of Hearing in the *Federal Register*, which offers an opportunity for the public to participate in the hearing as a party (called “intervention”)
- A request (petition) to intervene must be filed within 60 days of the date of the Notice
- The requestor must state his or her interest that may be affected by granting the license, and at least one dispute with the application
- Three judges (an Atomic Safety and Licensing Board (ASLB)) will decide whether to grant intervention and conduct the hearing
- A person who did not seek to intervene or was not granted intervention may make a statement to the Board, although this statement is not evidence in the hearing
- Regulations governing intervention are in 10 C.F.R. § 2.309

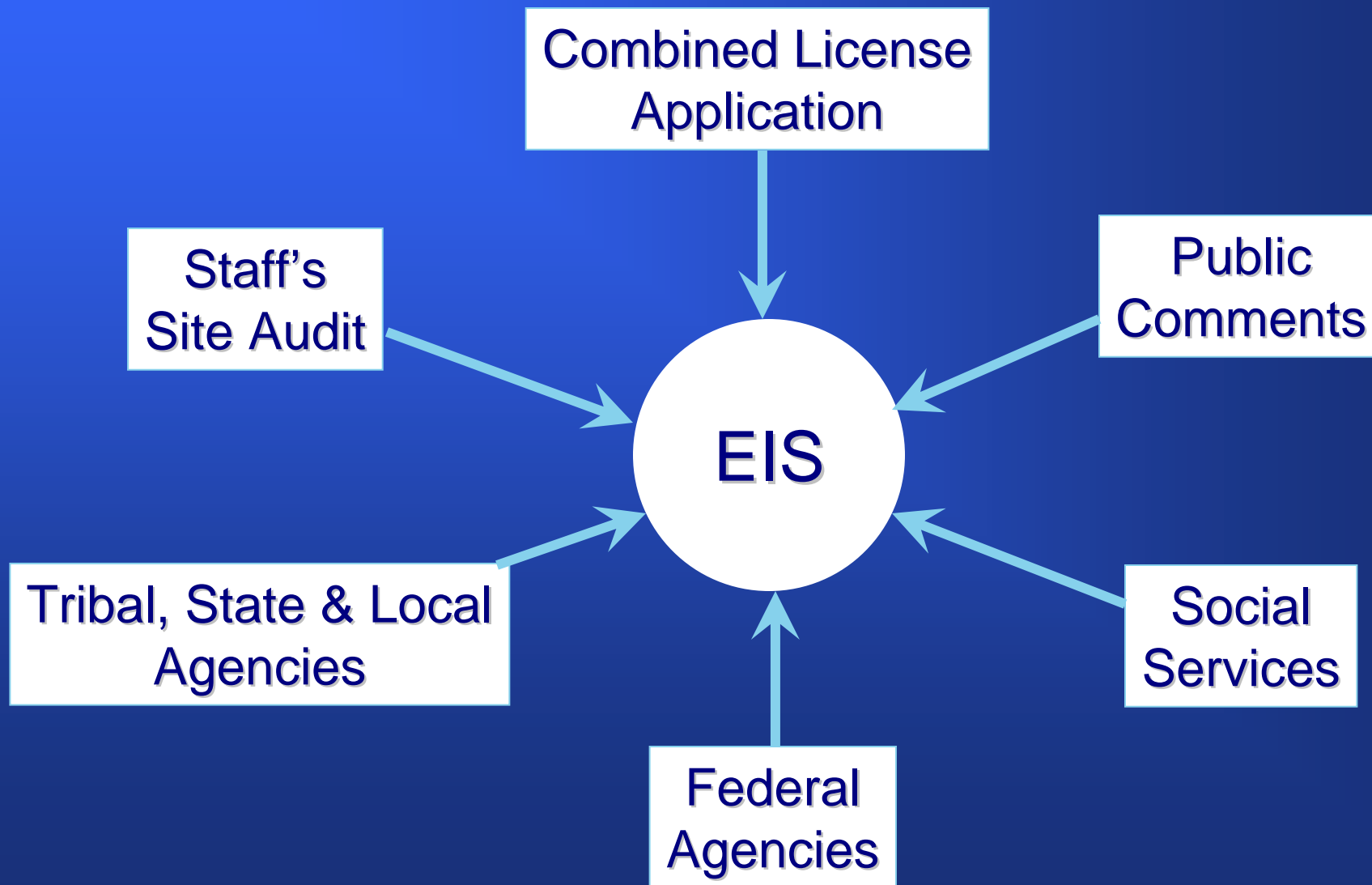
National Environmental Policy Act (NEPA)

- NEPA requires Federal agencies to use a systematic approach to consider environmental impacts
- An Environmental Impact Statement (EIS) is required for major Federal actions that may significantly affect the quality of the human environment
- Granting a combined license is considered a major Federal action

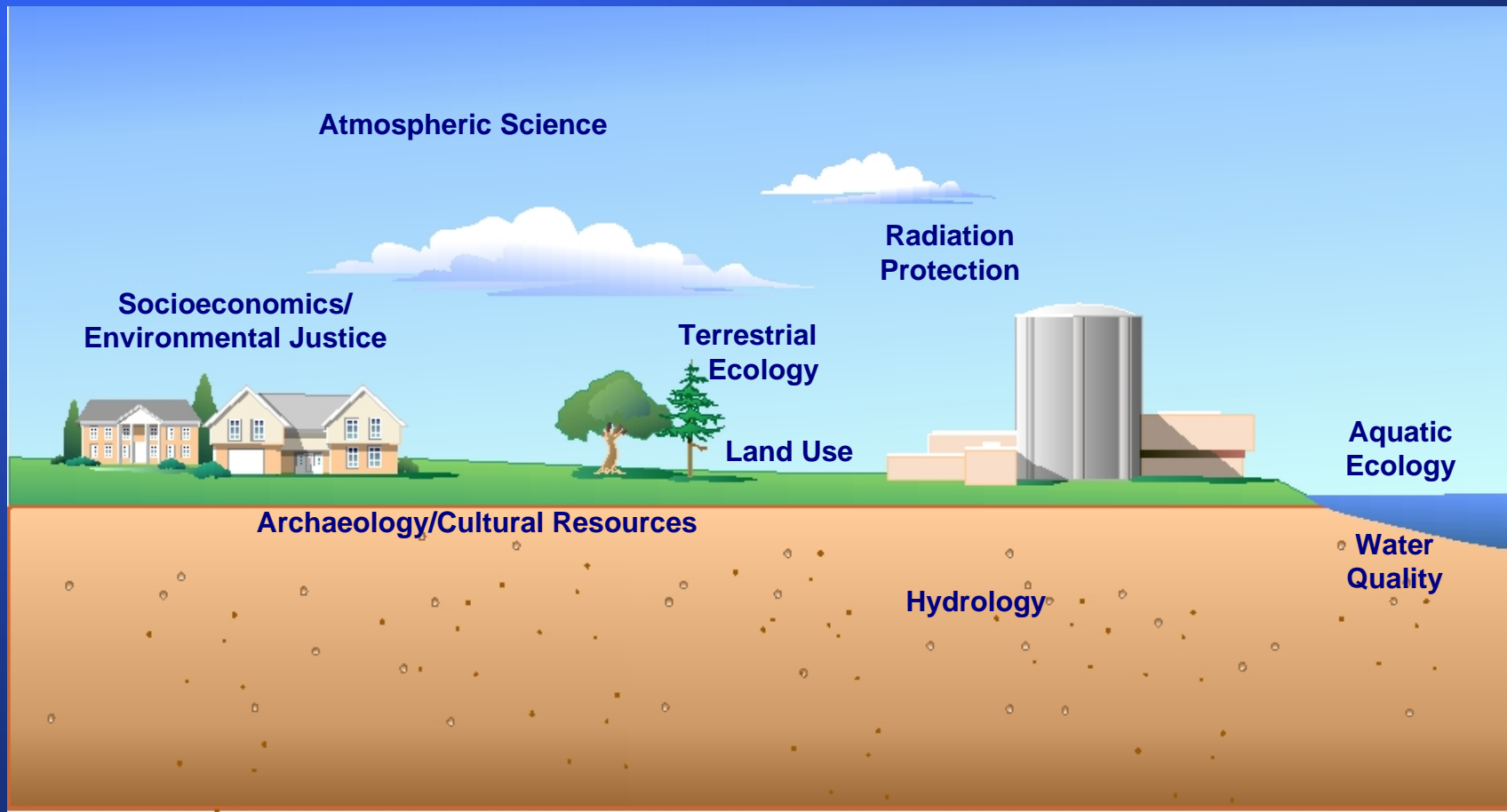
Environmental Review Process



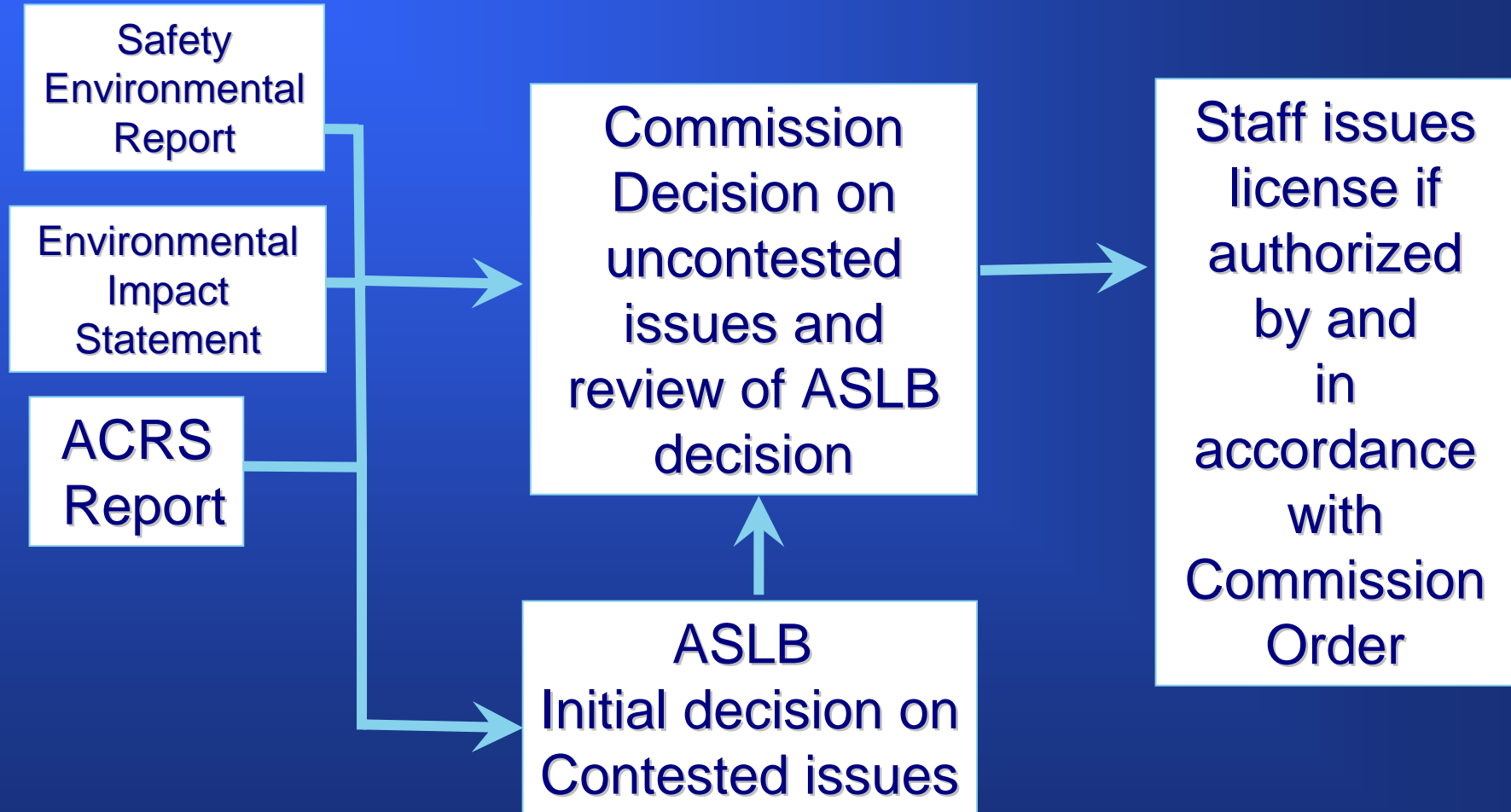
Information Gathering



Environmental Review Team Expertise



Combined License Decision Process



If the License is issued....

- The NRC would authorize the licensee to start construction of a nuclear power plant and to operate, if specified conditions are met
 - Preparatory site work that is not related to the nuclear safety-portion of the facility, such as clearing land and building access roads and other support facilities, may be permitted by other authorities such as the state and/or local municipality
- NRC staff would inspect nuclear safety–related construction activities
- NRC would verify that the plant is built as designed prior to operation (required by regulation)

**NRC
Construction
Inspection
Program**

Vendor
Inspections

Quality
Assurance Engineering
Program

Operational
Program
Inspections

Inspection,
Tests, Analyses, and
Acceptance Criteria



ITAAC

- Inspections, Tests, Analyses, and Acceptance Criteria to confirm that the facility has been constructed and will be operated in conformity with the license
- Required to be submitted as part of the design certification and combined license applications
- Reviewed and approved by NRC staff in conjunction with the application

ITAAC Implementation

- Licensees perform 100% of ITAAC verification during construction
- NRC reviews all completed ITAAC and directly inspects a sample of ITAAC-related activities.
- Both the Licensee and NRC document ITAAC closure activities
- The regulations provide an opportunity to request a hearing based on whether acceptance criteria are met
- Prior to plant operation all acceptance criteria must be met

NRC CONTACTS

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- Stephanie Coffin, Chief, AP1000 Projects Branch
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