

U.S.NRC

UNITED STATES NUCLEAR REGULATORY COMMISSION

Protecting People and the Environment

Public Outreach Meeting
Calvert Cliffs
Nuclear Power Plant Unit 3
Combined License Application

Tom Bergman, Deputy Director
Licensing Operations
Division of New Reactor Licensing
Office of New Reactors

Purposes of this meeting

- Talk with you about a 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



Stakeholders

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



License Applicants –
UniStar and
Constellation

Combined License Application Review and Construction Inspection

- Larry Burkhardt, Senior Project Manager
 - Overall Combined License Application Review
- Tom Fredrichs, Senior 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:** UniStar and Constellation
- **When:** UniStar/Constellation submitted the environmental report part of the application on July 13, 2007 and will submit the second and final part of the application between Dec 2007 and Mar 2008

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 (AREVA's US EPR design will undergo safety review by the NRC at the same time as the combined license application review)
 - Quality assurance
 - Security plan
 - Emergency preparedness (with FEMA)
 - 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

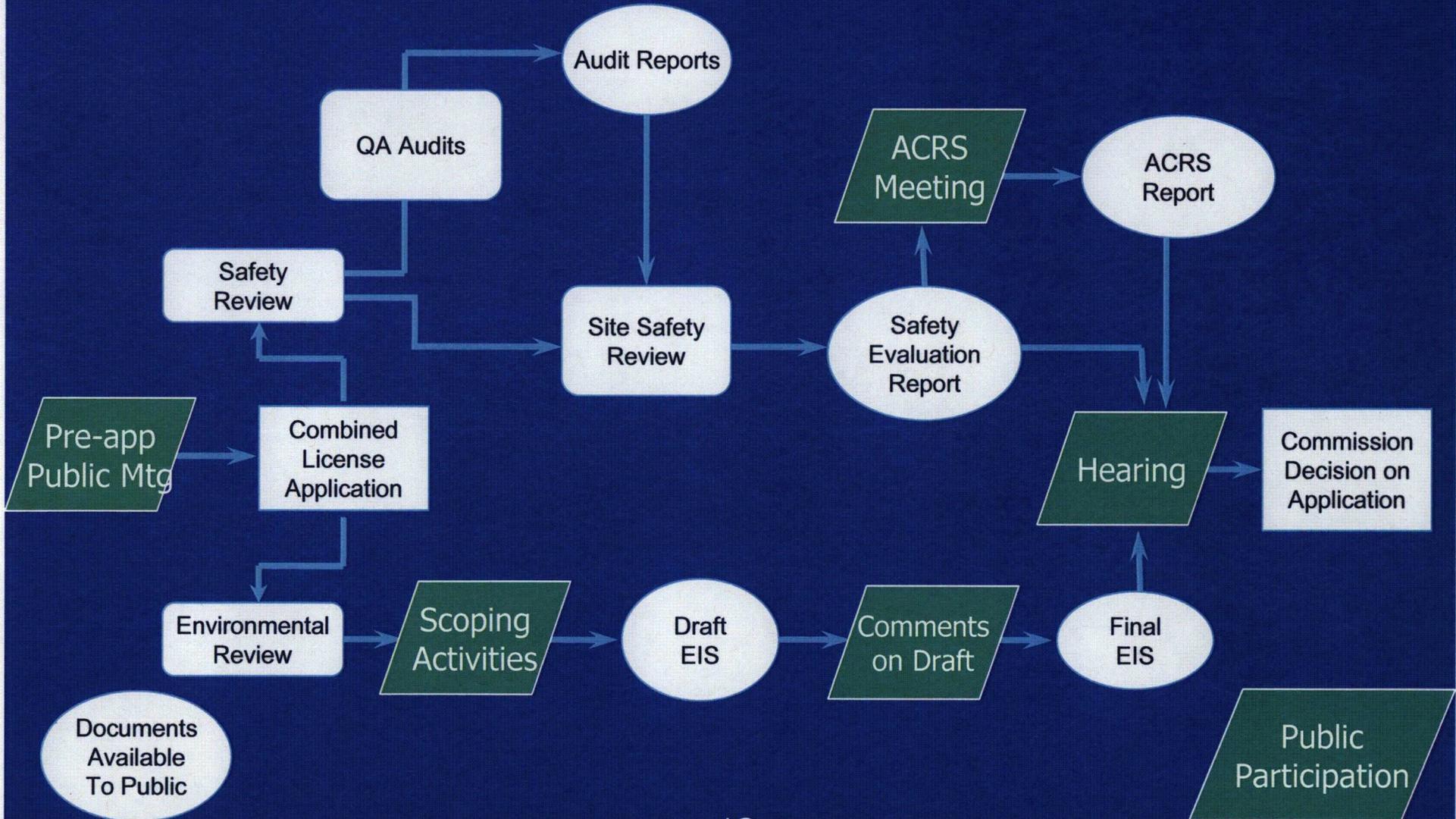
Public Participation in the License Application Review Process

- Obtain information at www.nrc.gov
 - NRC processes and how to participate
 - Publicly available information about the license application
 - Part One of CCNPP, Unit 3 COLA (ML071980294)
- Attend and observe most meetings between the NRC and the applicant
- Comment on environmental review
- Attend and participate in Advisory Committee on Reactor Safeguards meetings
- Participate in the hearing 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) 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

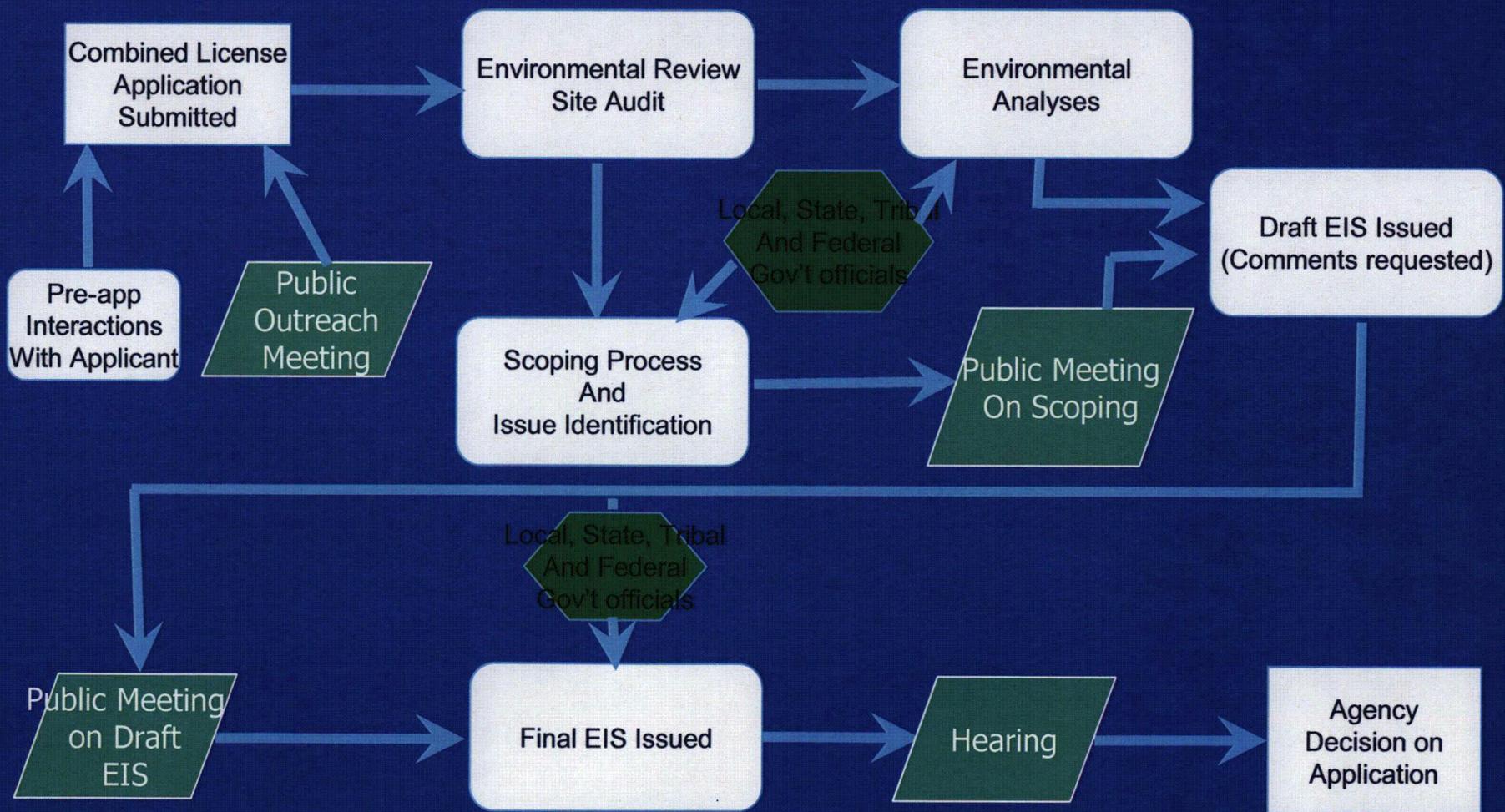
Combined License Application Review Process



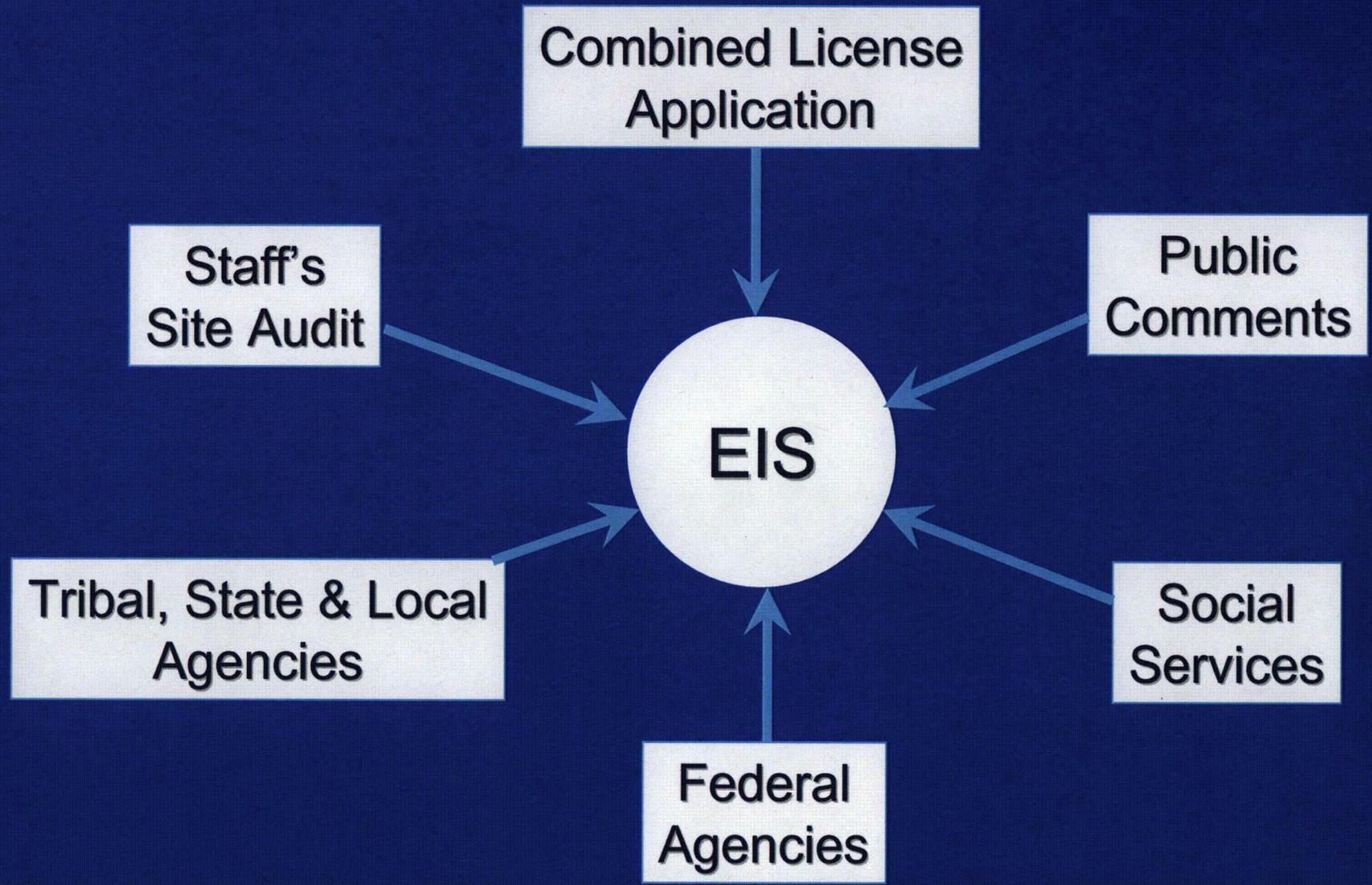
National Environmental Policy Act

- 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

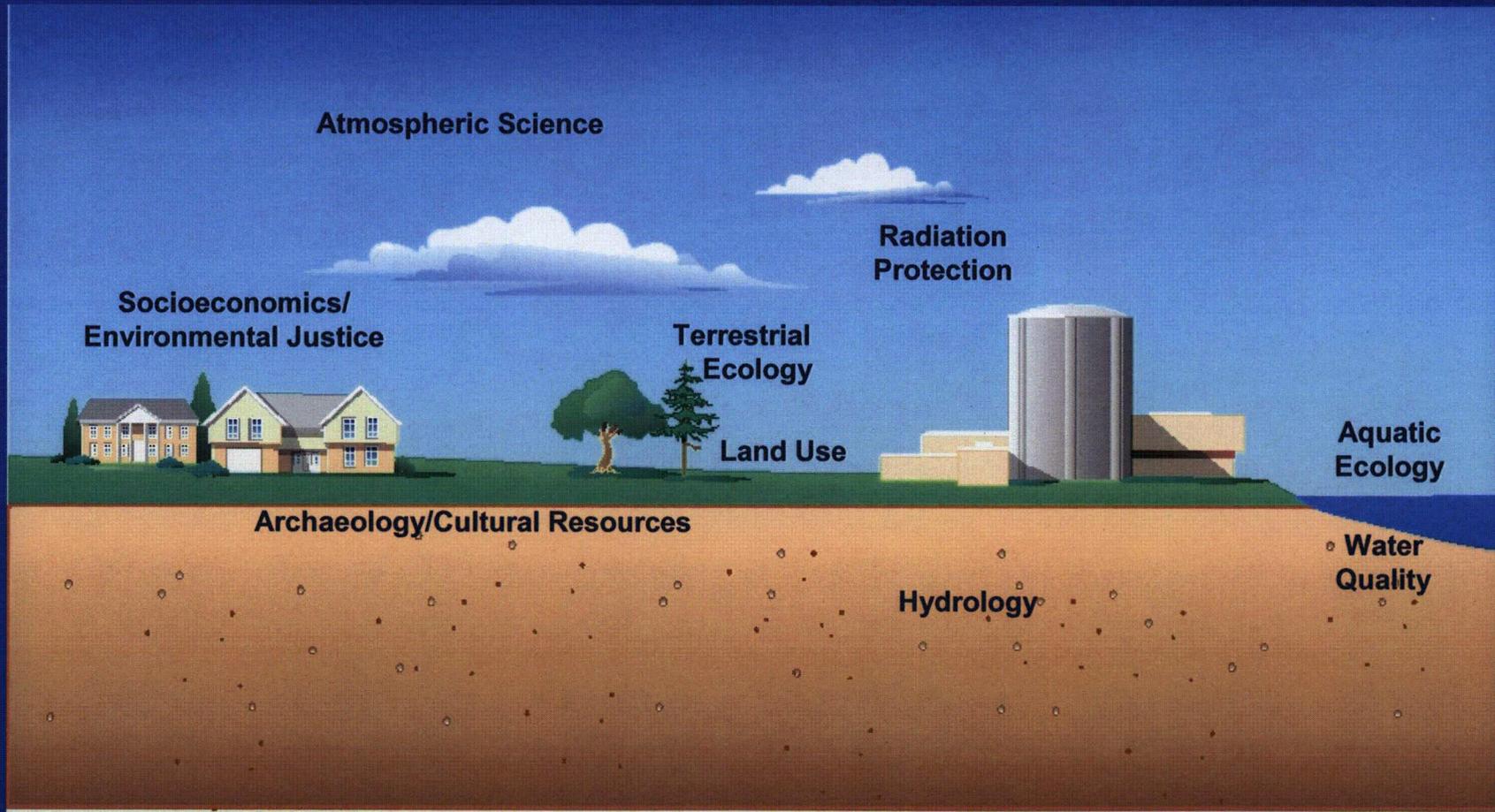
Environmental Review Process



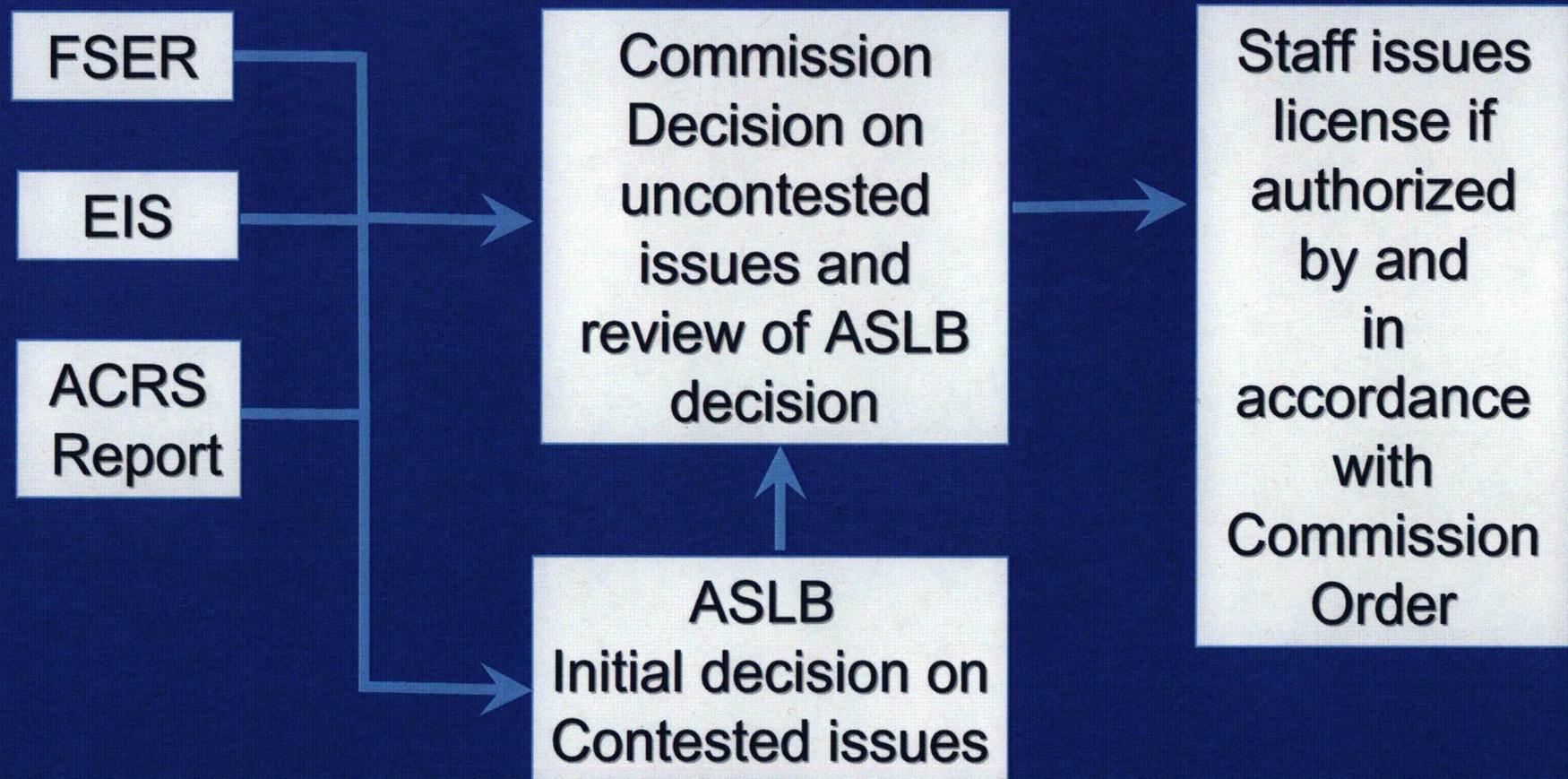
Information Gathering



Environmental Review Team Expertise



Combined License Decision Process



If the License is issued....

- The NRC authorizes 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 will inspect nuclear safety–related construction activities
- NRC will verify that the plant is built as designed prior to operation (required by regulation)

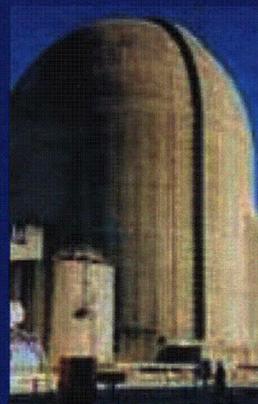
**NRC
Construction
Inspection
Program**

**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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Acronyms

- ACRS – Advisory Committee on Reactor Safeguards
- COL – combined license
- COLA – combined license application
- DAC – design acceptance criteria
- DC – design certification
- DCD – design certification document
- DHS – Department of Homeland Security
- EIS – Environmental impact Statement
- ER – environmental report
- ESP – early site permit
- FEMA – Federal Emergency Management Agency
- IAW – in accordance with
- ITAAC – inspections, tests, analyses, and acceptance criteria
- I&C – instrumentation and controls
- LWA – limited work authorization
- NRO – Office of New Reactors
- PM – project manager
- PRA – probabilistic risk assessment
- QA – Quality assurance
- SE – safety evaluation
- SER – safety evaluation report
- U.S. EPR – AREVA's Evolutionary Power Reactor