

Preparation for Advanced Reactors Environmental Reviews, Including Integration of NEPA Processes

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Agenda

- What is the NRC doing to prepare for advanced reactor environmental reviews?
- What can industry and applicants do to help the NRC prepare?
- Advanced reactor differences that may affect environmental reviews
- Resource areas
- Purpose and Need for an EIS
- Pre-application
- Suggestions for improving NRC's environmental process

What is the NRC Doing to Prepare for Advanced Reactor Environmental Reviews?

- Engaging with potential applicants
- Identifying issues for non-light water reactors
- Planning to develop interim staff guidance for micro-reactors
- Implementing lessons learned from previous environmental reviews
- Guidance on integrating other environmental laws into NEPA process
- Impacts of FAST-41/Executive Order 13807 on environmental review processes

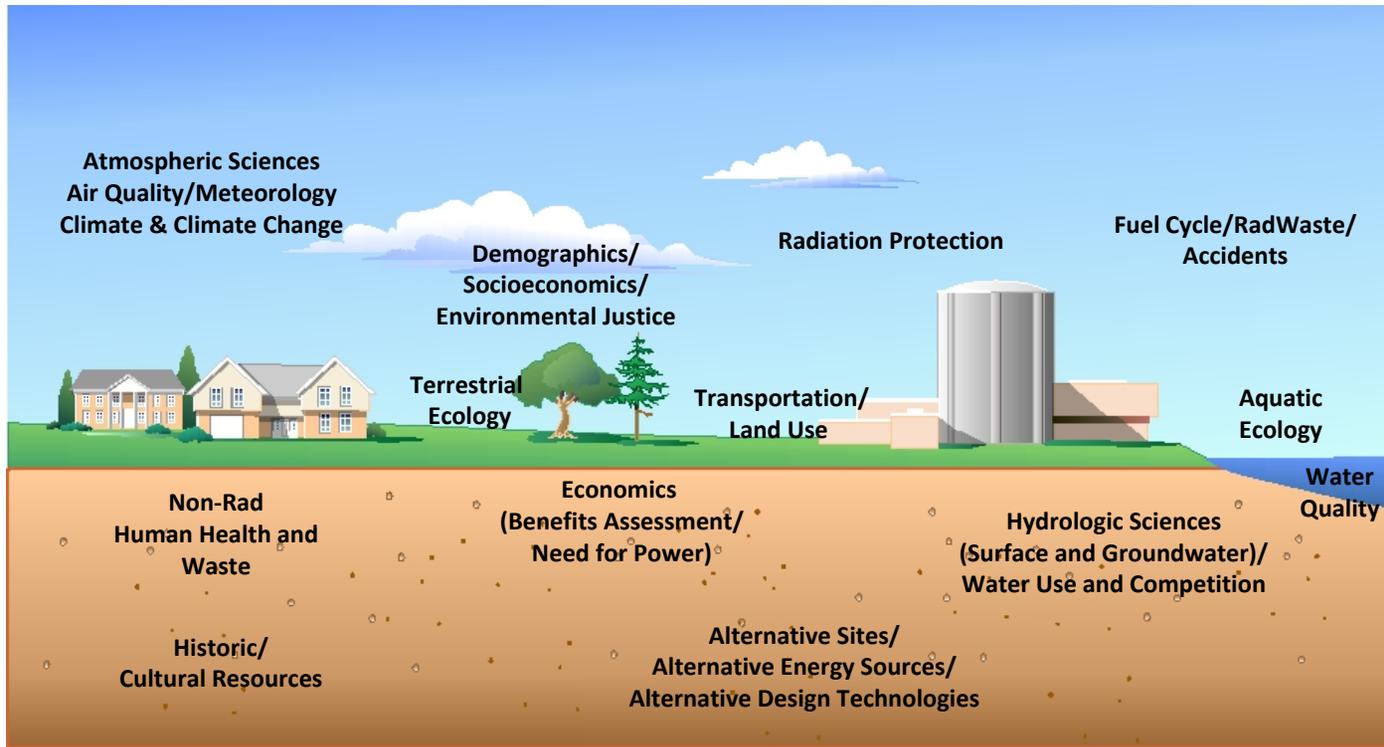
What Can the Industry and Applicants do to Help the NRC Prepare?

- Pre-application discussions with NRC and other Federal and State Agencies (as per FAST-41/Executive Order 13807)
- Continue to engage the NRC on advanced reactor issues
- Nuclear Energy Institute (NEI) guidance on pre-application NEI 10-7
- Provide suggestions to NRC on ways to improve the environmental review process

Different Types, Sizes, and Uses for Advanced Reactors Affect Environmental Review

- Different types of reactor designs and sizes will affect the radiological sections of the review (e.g., postulated accidents, fuel cycle impacts)
- Size - Guidance currently exists for large light water (LLWR) and small modular reactors
- Staff will be developing guidance for micro-reactors
- Micro-reactors use less resources
 - If a specific resource is not used, then there is no need to evaluate impact(s) to that resource
 - Evaluations should be appropriately scaled to the significance of the impacts

Resource Areas Evaluated in EIS

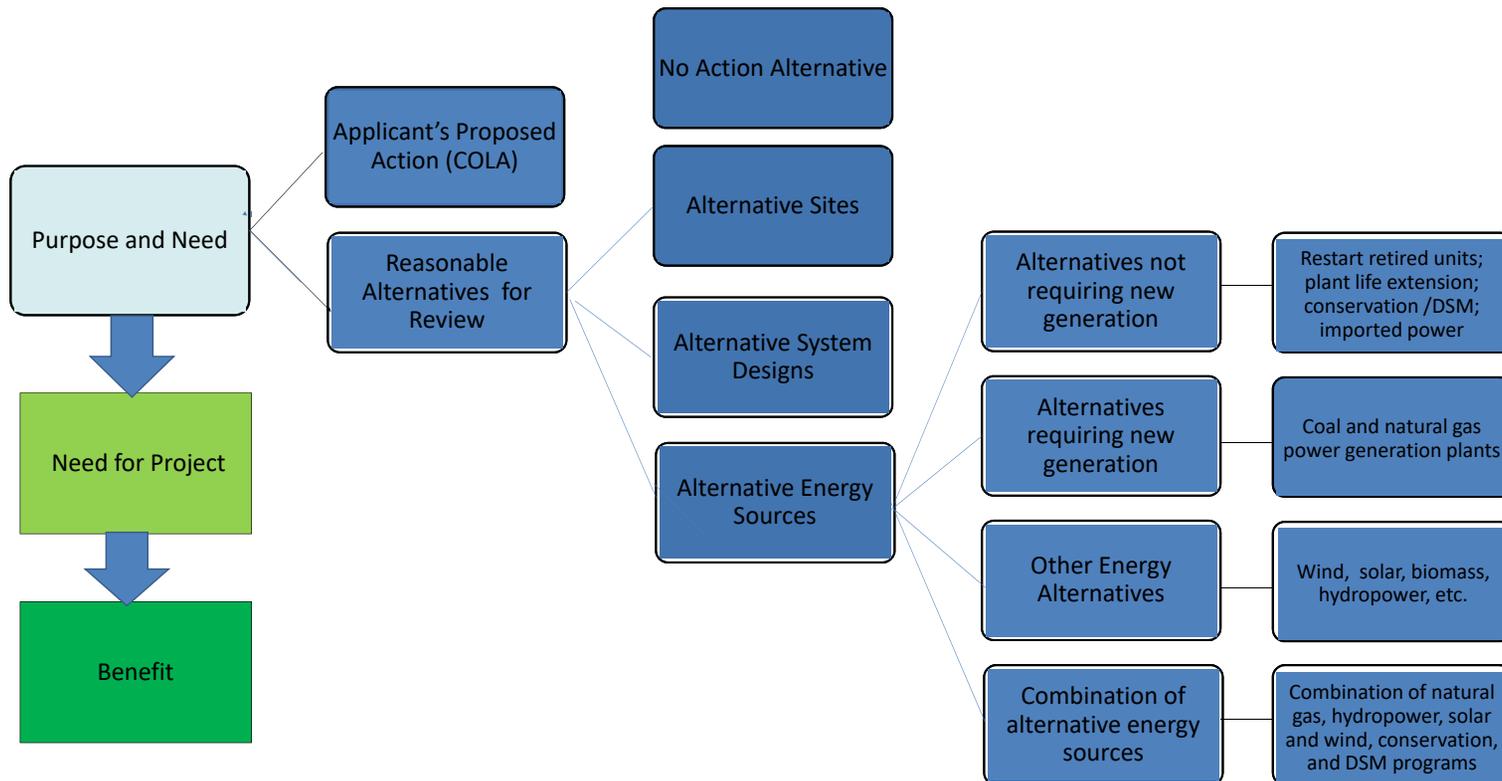


Evaluate Resources Based on Significance

- 10 CFR 51.45 (b)(1) “Impacts shall be discussed in proportion to their significance.”
- If resource shown on previous slide is not used then no need to evaluate that resource
- For example, if no wetlands impacted then no need to evaluate impacts to wetlands

Purpose and Need for Large Reactor:

Could be different for an advanced reactor with different alternatives



Pre-application is Important!

- Each project and site will be different – pre-application interactions with NRC can facilitate mutual understanding of these differences and potential impacts on EIS development
- EO 13807 requires coordination between the applicant and all federal agencies issuing permits
- Pre-application interactions will need to include these other agencies

Questions or Suggestions For Improving the NRC's Environmental Review Processes?

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