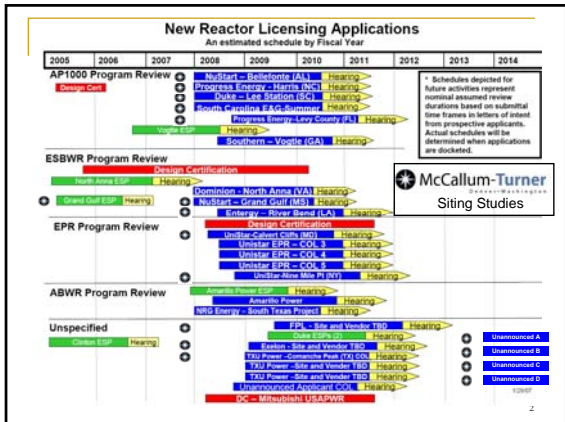


Nuclear Power Plant Site Selection: Strategic and Regulatory Considerations

Kyle Turner





Regulatory and Strategic Objectives

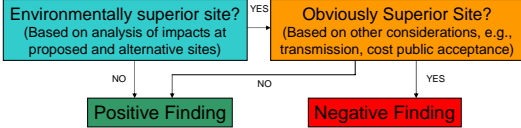
Select a nuclear power plant site that satisfies:

- Applicant's business plans and objectives
- NRC site suitability & technical requirements
- NEPA requirements for the consideration of alternative sites (process), e.g.:
 - Reasonable range of alternatives
 - Overt consideration of environmental issues



NRC Guidance on Alternative Sites

- Required finding: The proposed site is one for which no obviously superior alternative exists
- Two-tiered test – Is there an:



- Site selection process satisfies NEPA alternatives guidance

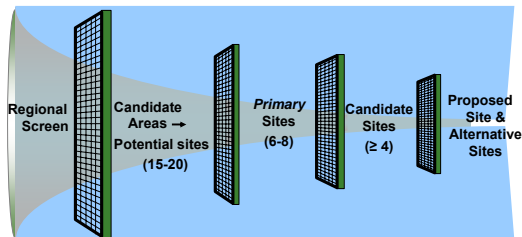
Define Region of Interest

Under NEPA, reasonable alternatives are defined by project objectives/business plan = Statement of purpose and need

ROI is defined by applicant's project objectives

- Examples:
 - Existing nuclear plant sites ???
 - Service territory
 - Multiple states

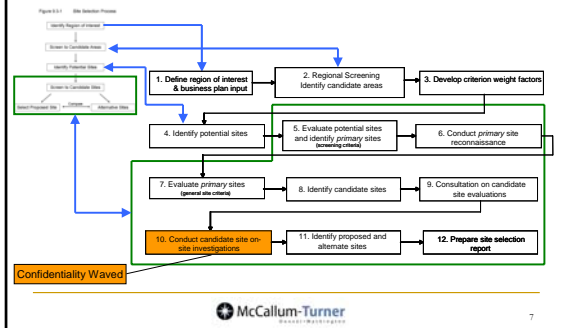
Site Selection - Conceptual



Process:

Developed from EPRI *Siting Guide: Site Selection and Evaluation Criteria for an Early Site Permit Application (Siting Guide)*, March 2002

Site Selection – Functional



Strategic Considerations & Decisions

- Definition of Region of Interest/reasonable alternatives
- Marriage of decision process with regulatory process
- Level of detail at each step in the process
- Confidentiality (on-site investigations)
- Site access
- Data quality (publicly available vs. on-site)

Recommendations

- Start early (6 month to 2 year process)
- Be thorough (be able to “tell the story” for each stage of the decision process)
- Consider environmental issues at each step
- Document decisions and bases real-time
