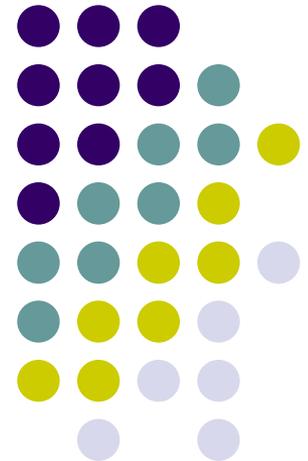


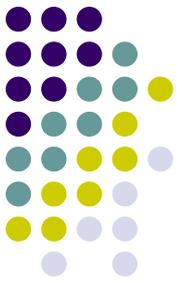
NEPA Best Practices

“...incorporate environmental considerations in planning and decision-making through a systematic interdisciplinary approach ...prepare detailed statements assessing the environmental impact of and alternatives to major federal actions significantly affecting the environment.” (Sec 102)



Shannon Stewart, Environmental Science Associates (ESA)
BIA Utility-Scale Solar Energy Development Workshop
February 20, 2013

NEPA for Utility-Scale Solar



The scope of your analysis and documentation will depend on the proposal and its environmental effects.

- Environmental Assessment

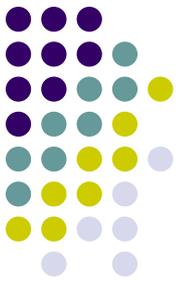
- A tool for determining the “significance” of environmental impacts
- Results in a Finding of No Significant Impact or preparation of an EIS

- Environmental Impact Statement

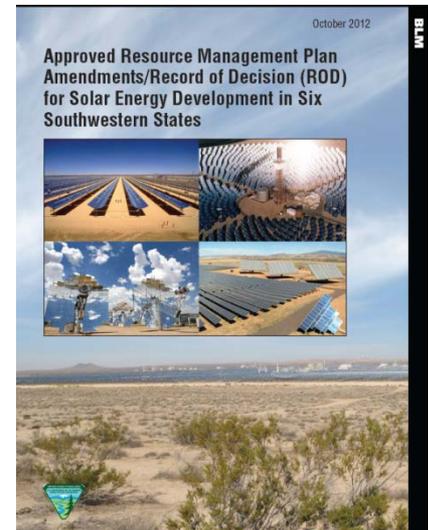
- Prepared for actions whose effects are expected to be significant and are not fully covered in an existing EIS



Using Existing Environmental Analyses



- Determination of NEPA Adequacy
 - A new proposed action may rely on a single or multiple existing NEPA documents
- Tiering
 - Tiering is using the coverage of general matters in broader NEPA documents in subsequent, narrower NEPA documents; narrows the range of alternatives and concentrate solely on the issues not already addressed
- Incorporation by Reference
 - Refer to other available documents that cover similar issues, effects and/or resources considered in the NEPA analysis being prepared



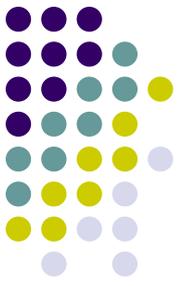


Don't Reinvent the Wheel

- Project-specific NEPA documents for a variety of solar energy technologies
- BLM Solar Programmatic EIS
- AZ Restoration Design Energy Project EIS
 - Impact analysis
 - Applicant proposed mitigation measures
 - Agency mitigation strategies
 - Cumulative effects information
 - Possible alternatives
 - Rationale for eliminating alternatives from detailed analysis

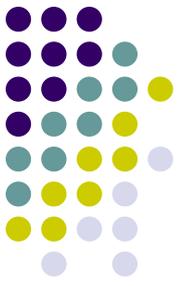


Cooperating Agencies



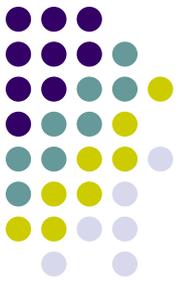
- Avoid duplication of effort
- Enhance credibility of environmental analysis
- Encourage support for management decisions
- Build relationships of trust and cooperation
- Make better, more informed decisions
- Expand the scope of the NEPA analysis to consider connected and cumulative actions of all cooperating agencies into a single document to improve overall interagency coordination
- Ensure that the NEPA document meets all agency requirements and standards
- Prepare a Memorandum of Understanding between lead agency and cooperating agency(s)

Developer's Objectives



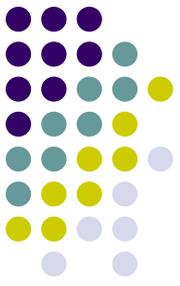
- A developer's interests and objectives, including any constraints or flexibility with respect to their proposal, should be described in the NEPA document.
- This information will help determine which alternatives are analyzed in detail through the NEPA process and may also provide a basis for eliminating some alternatives from detailed analysis.
- Agency must independently evaluate the information submitted by a developer regarding the proposed action and potential alternatives.
- Seek the assistance of other Federal, State and/or local agencies in evaluating such information for renewable energy development (e.g., DOE).

Alternatives



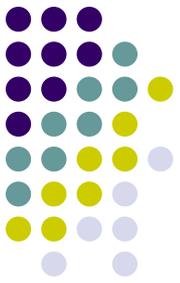
- Disclose preliminary alternatives discussions in your NEPA document (e.g., alternatives considered but eliminated from further analysis).
- If a developer has flexibility with respect to the proposed technology or is uncertain about a specific technology, it may be appropriate to fully analyze an alternative for a different technology.
- Develop a well-supported rationale when deciding whether to analyze it or eliminate it from detailed analysis.
- Possible Alternatives for Utility-Scale Solar:
 - Modified site configuration
 - Alternative Location
 - Modification to a proposed technology (wet vs. dry cooling)
 - Different technology (PV vs. CSP)
 - Reduced footprint/MWs
 - Phasing

Connected Actions

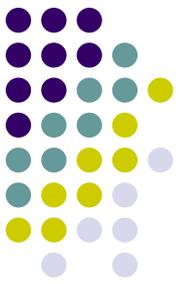


- It's OK to label things as connected actions!
- Two Step Approach:
 - Step 1 – Are the actions connected?
 - Both actions must have independent utility for them not to be connected
 - Step 2 – How should the connected actions be addressed in the NEPA analysis (i.e., what is the nature of the connection)?
 - Describe the connected action and its relationship to the proposed action.
 - If the action and its effects can be prevented by agency decision-making, then the effects are properly considered indirect effects of the action.
 - If the action cannot be prevented by (or its effects modified by) agency decision-making, the effects should be analyzed in the cumulative effects analysis of the analysis.

Cumulative Effects



1. Determine which of the issues identified for analysis may involve a cumulative effect with other past, present, or reasonably foreseeable future actions.
2. Establish and describe the geographic and temporal scope for each cumulative effects issue.
3. Describe the effects of past, present, and reasonably foreseeable future actions for the resources of concern within the geographic and temporal scope established.
4. Describe the incremental differences in cumulative effects as a result of the effects of the proposed action and alternatives.
5. Describe how the incremental effect of the proposed action and each alternative relates to any relevant thresholds (e.g., regulatory or biological).

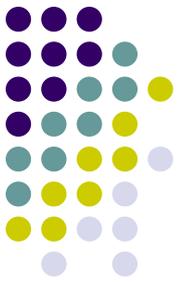


Emerging Issues

- Priority Desert Tortoise Connectivity Habitat
 - USFWS has identified certain lands that may be important for desert tortoise connectivity
- National Park Service High Potential Conflict Areas
 - NPS identified lands where utility-scale solar energy development poses a high potential for conflict with the natural, cultural, and/or visual resources administered by the NPS
- Visual Resource Impacts
- Military & Aviation Operations
- Recreation Impacts



Where to go for Information



- Project-specific NEPA documents
 - http://www.blm.gov/wo/st/en/prog/energy/renewable_energy/active_renewable_projects.html
- BLM Solar Programmatic EIS
 - <http://solareis.anl.gov/>
- AZ Restoration Design Energy Project EIS
 - http://www.blm.gov/az/st/en/prog/energy/arra_solar.html