Solar Energy Development
Programmatic EIS Ethnographic Study
Orientation Presentation

Presented by
Richard Stoffle,
Kathleen Van Vlack,
Phillip Dukes,
Hannah Johnson 2011
PEIS designed to:

- Evaluate utility-scale solar energy development
- Develop and implement Agency-specific programs that would establish environmental policies and mitigation strategies for solar energy projects
- Amend relevant BLM land use plans with the consideration of establishing a new BLM solar energy development program
Involved Agencies

- The Office of Energy Efficiency and Renewable Energy (EERE)
- Department of Energy (DOE)
- Bureau of Land Management (BLM)
Why a Programmatic EIS?

- PEIS evaluates environmental impacts of broad agency actions
  - Involves land changing land use plans
  - Would establish environment policies and mitigation strategies
Utility Scale Solar Energy

- The sun radiates more energy in one second than the world has used since time began

- In one hour enough energy reaches the earth to power the planet for an entire year
Utility-Scale Solar Energy

- Utility-scale solar energy facilities
  - Generate large amounts of electricity to be put directly into the electricity transmission grid
Utility-Scale Solar Energy

- **Parabolic Trough**
- **Power Tower**
- **Solar Dish**

- Suitable technologies
  - Concentrating solar power technologies
  - Photovoltaic technologies
Environmental Considerations

- Land Disturbance/ Land Use Impacts
  - Use relatively large area
  - May interfere with natural sunlight, rainfall, and drainage
Environmental Considerations

- Land Disturbance/ Land Use Impacts
  - Land disturbance could impact cultural resources
  - Could interfere with current use.
Environmental Considerations

- Transmission lines, access roads, etc
- Proper siting can minimize impacts
Environmental Considerations

- Water impacts
  - Cooling panels requires water
  - Can be affected by contact with panels
Environmental Considerations

- Hazardous Materials
  - Solar panels can contain contaminants
  - Must be disposed of properly
Environmental Considerations

- Visual Impacts
  - Large, highly geometric, highly reflective
Maps

- Utah Sites
Maps

- Nevada Sites