

DOI/BIA Utility-Scale Solar Energy Development Workshop

AGENDA

February 20-22, 2013

BIA-Western Regional Office

2600 North Central Avenue, Phoenix, AZ 85004

Workshop Description: On behalf of the DOI Office of Indian Energy and Economic Development, Argonne National Laboratory and the National Renewable Energy Laboratory will host a 3-day workshop on utility-scale solar energy development. The objective of the workshop is to provide BIA and other DOI staff with a comprehensive, high-level understanding of what utility-scale solar energy development entails. Topics to be covered include BIA's renewable energy development process, project financing, basics of utility-scale solar technologies, potential environmental impacts and mitigation measures, the development process, concerns and priorities of other federal agencies, and transmission development. The workshop will include 2 days of lecture plus a 3rd day visiting selected solar plants that are either operational or under construction.

Weds., Feb. 20

8:00—8:30 REGISTRATION

8:30—9:00 Welcome, Introductions, and Workshop Objectives (30 mins)

9:00—10:30 BIA Processes for Renewable Energy Development (90 mins)

- New leasing rule and checklist (S. Webb, BIA) (30 mins.)
- Overview of Hearth Act (S. Webb, BIA) (10 mins)
- Overview of BLM Solar Programmatic EIS (S. Stewart, ESA Assoc.) (15 mins)
- NEPA overview and strategies (S. Stewart, ESA Assoc.) (15 mins)
- Questions and answers (20 mins)

10:30—10:45 BREAK

10:45—12:15 Financing (90 mins)

- Financing options (J. Bedard, NREL) (30 mins)
- Power Purchase Agreement (PPA) overview (S. Haase, NREL) (30 mins)
- Tax issues related to development on Tribal lands (P. Thomas, DOE OIE) (30 mins)

12:15—1:30 WORKING LUNCH

KRoad Moapa Solar Project case study (BIA Western Regional Office; Chairman Anderson, Moapa Business Council; and Jennifer Carlton, Brownstein Hyatt Farber Schreck, LLP). Lunch will be delivered to the meeting room. Participants will select from a menu at registration; we will be collecting money to cover the cost, including tax and tip.

1:30—2:00 Market Assessment (S. Haase, NREL) (30 mins)

- 2:00—3:15 Photovoltaic/Concentrating PV (A. Walker, NREL) (75 mins)**
 - Solar resource assessment
 - Both utility-scale and community-scale (i.e., rooftop mounted systems, net metering)
- 3:15—3:30 BREAK**
- 3:30—4:45 Concentrating Solar Power (C. Turchi, NREL) (75 mins)**
- 4:45—5:00 Wrap Up and Discussion**

Thurs., Feb. 21

- 8:00—8:30 REGISTRATION**
- 8:30—8:45 General Remarks/Introduction to Day 2**
- 8:45—9:30 Water Resources Impacts and Mitigation (C. Greer, ANL) (45 mins)**
- 9:30—10:30 Ecological Resources Impacts and Mitigation (including T&E species) (L. Walston, ANL) (60 mins)**
- 10:30—10:45 BREAK**
- 10:45—11:30 Visual Resources Impacts and Mitigation (B. Sullivan, ANL) (45 mins)**
- 11:30—12:00 Cultural Resources Impacts and Mitigation (K. Wescott, ANL) (30 mins)**
- 12:00—1:00 WORKING LUNCH**
Solar Field Overlay Zones, Town of Gila Bend (R. Buss, Town Manager). Lunch will be delivered to the meeting room. Participants will select from a menu at registration; we will be collecting money to cover the cost, including tax and tip.
- 1:00—2:00 Development Process Panel (60 mins)**
 - Overview of development processes (J. Bedard, NREL) (20 mins)
 - Industry perspective: KRoad Solar (S. Gallagher) (20 mins)
 - Discussion (20 mins)
- 2:00—3:00 Interagency Cooperation/Consultation Panel (60 mins)**
 - BLM Pre-Application Process and PODs (E. Arreola) (15 mins)
 - NPS (S. Quinn) (15 mins)
 - USFWS (ESA Section 7 consultation) (B. Werner) (15 mins)
 - Discussion (15 mins)
- 3:00—3:15 BREAK**
- 3:15—4:30 Transmission Development Panel (75 mins.)**
 - Overview of transmission development processes (Transmission 101) (20 mins) (J. Steward, Western)
 - How the grid operates, major interconnections, reliability issues, congestion issues, power purchase agreements, etc.

- Western’s interconnection process (20 mins) (J. Steward, Western)
- Arizona Public Service (APS) Interconnection Processes (L. Henrickson, APS) (20 mins)
- Discussion (15 mins)

4:30—5:00 Discussion and Feedback

Fri., Feb. 22

**Solar Facility Site Tours
(for those who have pre-registered)**

Participants will travel by bus to the Gila Bend, AZ area to tour two different solar facilities:

- Solon Cotton Center project, 17-MW, tracking PV, operational
- Abengoa Solana project, 280-MW, parabolic trough, under construction

The bus will depart from the BIA Western Regional Office at 7:30 AM and return by 2:00 PM. The following provides an approximate schedule for the day based on those fixed endpoints. Participants are invited to bring their own drinks and snacks for the drive down. Note we will be stopping for refreshments before the drive back to Phoenix.

7:30	Depart BIA Western Regional Office
7:30—9:00	Drive to Cotton Center Solar Facility
9:00—10:00	Tour of Cotton Center Solar Facility
10:00—10:30	Drive to Solana Solar Project
10:30—11:00	Outside-the-fence tour of Solana Solar Project
11:00—2:00	Drive back to BIA Western Regional Office, including short stop for refreshments