

DOCKETED

Docket Number:	07-AFC-05C
Project Title:	Ivanpah Solar Electric Generating System (Compliance)
TN #:	217148
Document Title:	Ivanpah Solar Electric Generating System Meeting Notes
Description:	Avian & Bat Technical Advisory Committee (TAC) meeting, December 13, 2016 - Meeting Notes
Filer:	Cenne Jackson
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	4/18/2017 10:09:33 AM
Docketed Date:	4/18/2017

**Ivanpah Solar Electric Generating System (Ivanpah)
Avian & Bat Technical Advisory Committee (TAC) Meeting**
December 13, 2016 – Meeting Notes

TAC Meeting on December 13, 2016 at the California Energy Commission

TAC Members Present: Michael Lewis – TAC Co-chair – CEC
Magdalena Rodriguez - TAC Member – CDFW
George Piantka – TAC Member - Solar Partners I, II and VIII,
LLC

Invited Guests: Joe Douglas – CEC
Christina Root – CEC
Eric Knight – CEC
Doug Davis – Solar Partners I, II and VIII, LLC
Marc Sydnor – Sydnor and Associates, Inc.

Via Teleconference: Daniel Riser-Espinoza – WEST, Inc.
Karl Kosciuch – WEST, Inc.

Introductions

- Attendee introductions (TAC members and invited guests)

Review of Agenda

- Agenda items reviewed - no revisions.

Review of September 15, 2016 Meeting Notes and Follow-up Actions

- Meeting Notes: TAC decided to defer final approval of the September 15, 2016 meeting notes pending final review of other TAC members.
- Spring Report: Spring Report was docketed on September 30, 2016.
- Treatment of Unplanned Outages: WEST stated that adjusting fatality estimates to account for unplanned forced outages is not feasible. WEST further explained that flux effects did not occur; thus it is inappropriate to estimate what flux effects would have been at a tower if it were operating.
- Summer Report Revision: WEST detailed the duration and time of the unplanned forced outages in the Summer Report, as per the TAC request.
- Sandia National Laboratories: Solar Partners updated the TAC on the Sandia National Laboratories study.
- Year 4 Monitoring: The agencies provided a recommendation that the solar field be monitored as per the Avian and Bat Monitoring and Management Plan, Revision 13 (Plan) through Spring 2017. Monitoring of Unit 2 solar field will be discontinued after Spring and all three tower areas will continue to be monitored through the rest of year 4 (Summer and Fall 2017).

Follow-up Items:

- NRG to provide schedule and information for Sandia National Laboratory Study meetings to CEC.
- September 2016 TAC notes to be re-circulated to the TAC for approval.

Review of 2016 Summer Report Presentation by WEST:

- WEST presented a review of the Summer 2016 Report
 - Levels of detections were consistent with previous summer seasons.
 - The pattern of detections did not appear to be influenced by unplanned forced outages at the facility.
 - A large percentage of the detections were small passerines that are short-lived with high reproductive rates, thus population growth rates are less sensitive to changes in survival.
 - Overall, per Plan, mortality levels are consistent with the low category.

TAC Discussion:

- TAC discussed the detections versus the estimates. WEST explained that detections represent the actual count of avian carcasses collected by searchers in the field. The estimates are the result of a statistical calculation that factors in the detections, the area searched, the searcher efficiency and carcass persistence time.
- TAC discussed the unplanned forced outages within the reports. WEST explained that in comparison to previous summer seasons, the pattern of detections was consistent with previous years and no influence to the estimates was apparent. WEST explained that the period of the unplanned forced outages is included in the report.
- TAC discussed whether the deterrents were functioning during the outages. NRG explained that deterrents were functioning throughout the season on Units 1 and 2, including during the outages. Deterrents at Unit 3 were not functioning during the outage.
- TAC discussed why estimate totals from categories of fatalities within tables presented in the report do not sum arithmetically. WEST explained that while estimates are not provided for areas or categories of fatalities where the number of detections are less than or equal to five, these detections are used to derive an overall estimate. Hence, when five or fewer detections occur in an area, the sum of these values will be less than the overall estimate.
- TAC discussed the yellow warbler, a special status species detected during the summer surveys. WEST explained that there are no local populations, since the species does not breed in the area. In comparison to the regional (California) and National (United States) populations (as provided by Partners in Flight), the level of mortality is low.

Follow-up Items:

- WEST to include the timing of the unplanned forced outages within the Summer Report.
- TAC to review the language within the report regarding summation of the estimates and provide recommendation for clarification.
- TAC to review the Summer report and provide comments so that it can be docketed in January 2017.

Fall 2016 Monitoring Efforts

- WEST presented Fall 2016 monitoring efforts.
 - Carcass persistence times were slightly lower than the previous fall seasons
 - Searcher efficiency rates exceeded plan assumptions
 - Patterns and magnitude of detections were consistent with the previous fall seasons.

TAC Discussion:

- TAC discussed the correlation of weather to the migration period and whether wetter or dryer years influence migration. WEST stated that they have not correlated the detections to local weather patterns since migration is likely to be influenced by regional or national weather patterns. The report does discuss the correlation to larger migration across the region, as shown in the BirdCast migration data.

Follow-up Items:

- WEST to provide a fall season report based on the seasons as defined in the Plan.
- The Annual Report will discuss the biologically informed seasons.

Additional Topics

- Doug Davis with NRG has taken new position within the company but will still be available for consultation, and Tim Sisk will be the lead for onsite avian compliance.
- TAC discussed who will be providing site reports for avian species moving forward. NRG stated that the designated biologists in coordination with Tim Sisk will provide these reports.
- TAC discussed whether new acoustic and chemosensory deterrence has been installed. NRG stated that the new acoustic deterrence has been shipped and will be installed shortly. The new deterrence provides a more focused acoustic effect of greater magnitude. The chemosensory deterrence is being modified, by relocating the device closer to ground level and utilizing a higher concentration grape seed extract.

Follow-up Items:

- NRG will provide a report to describe the modifications to the deterrence systems.

Next Meeting:

TBD