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Ivanpah Solar Electric Generating System (Ivanpah) Avian & Bat Technical Advisory Committee (TAC) Meeting

July 5, 2016 – Meeting Notes

TAC Meeting on July 5, 2016 via WEBEX

Attendees: Roger Johnson – TAC Retiring Co-chair – CEC

Eric Knight – Designated TAC co-chair - CEC Amedee Brickey – TAC Member – USFWS Magdalena Rodriguez - TAC Member – CDFW George Piantka – TAC Member - Solar Partners

Doug Davis – NRG Operations Daniel Riser-Espinoza – WEST, Inc.

Karl Kosciuch – WEST, Inc.

Marc Sydnor – Sydnor and Associates, Inc.

Introductions

• Attendee introductions (TAC members and invited guests)

• Roger Johnson is retiring and Eric Knight will replace him as the TAC as CEC co-chair

Review of Agenda

Agenda items reviewed. No additions.

Review of June 13, 2016 meeting notes and follow up actions

• Review of the Winter report

TAC Discussion:

- TAC discussed the lack of an estimate of known cause fatalities in the heliostat area.
 WEST explained that the model requires greater than five detections in a particular category to provide an estimate. In this case, less than five detections were found in the heliostat area. However, all detections are used to develop the total estimates of known cause.
- TAC requested clarification of the sampling during the winter season. WEST clarified the tower areas Units 1, 2, and 3 were sampled 8 times and Unit 2 heliostat plots were sampled 9 times.
- TAC discussed the procedure to determine how searcher efficiency trial carcasses were determined to be scavenged prior to a searcher finding the trial carcass. WEST explained that the carcasses are placed by the designated biologist prior to a search and searchers are unaware of the carcass placement. Immediately after the search, the designated biologist returns to see if carcasses are still available. If the carcass is present, then it was missed by searchers. If the carcass is no longer present and was not found by searchers, then the carcass is assumed to have been scavenged prior to the search, and thus was unavailable to be found.

- TAC discussed the meaning of "censoring of the data" for scavenger trials. WEST explained that censoring is standard practice used when the exact time of removal for a carcass is unknown. This occurs when carcasses are moved from the view of the camera and the exact number of days that the carcass is present is unknown, but the interval that the carcass was present is known. The data is entered as an interval of time.
- TAC discussed whether differences exist in the carcass persistence rates across the Units.
 WEST explained that carcass persistence across the Units was examined in the proposal for Revision 13 of the Avian and Bat Monitoring and Management Plan. No significant difference was found in these rates across Units.
- TAC discussed whether estimates should be developed for each tower to correlate tower operations and fatalities. WEST explained that the sample interval for the fatality monitoring does not coincide with the production intervals. In addition, separate sets of estimates would need to be calculated for each tower. Finally, when separating towers, sample sizes become lower and uncertainty in the estimates would increase.
- TAC discussed why all detections in the ACC are assigned to the category of known cause fatalities, and are thus attributable to the facility. WEST explained that all fatalities found in the ACC are assumed to be facility related, since no predation or other cause can be assumed within the closed units. These fatalities are assigned the category of "other" known fatalities (not singed or collision).
- TAC discussed how the age of a carcass is determined. WEST explained that the team uses a combination of bird decomposition trial photos and other criteria to assess the carcasses. When assigning carcasses for estimates, a conservative approach is taken if the estimated carcass age is coincidental with the sample interval, then the carcass is included in the estimate.
- TAC discussed the margin of error for estimates of carcass aging. WEST has not tested the margin specifically; however, to ensure accuracy, the WEST crew employs one laboratory person to identify and examine each carcass to determination the age. The use of a single person for this task promotes consistency.

Follow-up Items:

• WEST to revise report according to comments.

Additional Topics

- Spring monitoring is complete and does overlap with some of the outages that occurred.
- Road runner BMPs are being installed on July 5th, 2016.

Next Meeting:

September 15, 2016 10 am to 2 pm