

NOTES | 12/3/2009 Conference Call**Altamont Pass Wind Resource Area Scientific Review Committee**

Prepared by the Center for Collaborative Policy

Reviewed and approved by the SRC

All SRC Members Present**Discussion Topics****Meeting Summary Approval****Update on Draft Monitoring Report and Other Analytical Issues****Meeting Outcomes**

- The Draft Monitoring Report will be released on December 18
- The report will reference updated statistics on adjustment factors for small birds
- The report will use feather spot adjustment approaches SRC members expect will result in more realistic estimates of fatality numbers
- Meeting summaries approved:
 - [P116 SRC Meeting Notes 7-29-09 Conference Call](#)
 - [P128 SRC Meeting Summary September 2009](#)

Action Items

- Facilitators to send out hotel information to SRC per January 13-14 meeting
- The Buena Vista report to be posted on the SRC website
- Monitoring Team to post PDFs of KB data sheets on SRC website
- Monitoring Team to send SRC Subcommittee members Julie Yee and Shawn Smallwood the latest KB study data in spreadsheet format
- Monitoring Team to produce Monitoring Report on December 18
- Monitoring Team to recirculate the draft 48-Hour Search Interval (KB) study (M32)

Next Meeting

Date: In-Person Meeting, January 13-14, 2010, Emeryville California

Agenda:

- Present Draft Monitoring Report
- Discuss Future Monitoring

In-Person Meeting

Participants confirmed that the next in-person will be held January 13-14. The meeting will be held at the same Marriott Hotel in Emeryville.

Meeting Summary Approval**Related Documents**[P116 SRC Meeting Notes 7-29-09 Conference Call](#)[P128 SRC Meeting Summary September 2009](#)

The SRC approved P116, the July 29 conference call meeting notes.

In regards to P128, the meeting summary for the September in-person meeting, Facilitator Gina Bartlett noted that during review of the summary, some SRC members had been concerned that some of the reported comments were too brief. She asked if SRC members preferred a court reporter to record a detailed summary. SRC members said their concern was more that the summary was not sufficiently detailed to understand some of the comments made in the reported discussion. The SRC members thought it preferable to delete the items rather than include unclear statements, which could be misleading. SRC members also said they liked reviewing the summaries in sequence. This allows people to add comments before items are deleted.

The SRC approved P128, the September 2009 meeting summary.

Update on Draft Monitoring Report and Other Analytical Issues

The Monitoring Team Project Manager Doug Leslie said the Draft Monitoring Report was delayed because the Monitoring Team received database updates and needed to conduct database quality review past the previously identified October 31 database deadline. So, the report could not be released two weeks before the previously planned SRC December meeting. In addition, there were adjustment factor issues, and two SRC Subcommittee meetings on adjustment factors. The Monitoring Team has a good solid draft report. The report will address about everything requested, except a specific assessment on the effect of turbine removal at the operating group level. The database continues to be a problem at the turbine level, but the string level looks good. The 50% reduction analysis will include several APWRA-wide comparisons, including by nameplate only, by installed capacity, by similarly sampled turbines and by core turbines. There will also be the Diablo Winds comparisons and the seasonal shutdown comparisons, which will include the ramp-up and ramp down before shutdown, and at the operating group level.

SRC Questions

- In response to a question, the Monitoring Team clarified that "nameplate" is defined strictly by turbine address as though all turbines are operating; "installed capacity" is derived from annual rated capacity information provided by power companies.

Update on CEC and Recent Wind Company-Provided Operating Data

At the October meeting, SRC members had asked the wind companies to produce a memo explaining the differences between their recently provided operating data and operating data available through the CEC, and which they would recommend using in the Monitoring Report. Shawn Smallwood was able to get CEC data up to 2003, plus the 2006 year. The Monitoring Team shared that information with Alameda County and the wind companies. The wind companies sent e-mails to Sandra Rivera of Alameda County saying that the wind companies feel that the recently provided data is more accurate, and companies were unable to get an accounting of the CEC data. Therefore, the monitoring report will use the recently provided wind company data. Shawn Smallwood said the CEC staff had previously agreed to cooperate with him in providing data, but after the October meeting, they did not return repeated phone calls. He said there is a 20% discrepancy in 2006 data between the two sources and that the discrepancy increased steadily since

1998. Some explanation of these discrepancies needs to be included in the report (perhaps in an appendix).

Public Comment

Renee Culver of NextEra said she understands the frustration, but doesn't want the discrepancy to hold up the analyses. She believes the most accurate data is that recently provided by the wind companies to the Monitoring Team. She doesn't want to see any more delays in the report. The cause of the discrepancy could be something as simple as an unclear request for information from the CEC.

Emre Ergas of NextEra said the only data he has seen from the CEC shows APWRA-wide, not company-specific, data. Companies periodically provide the data to the CEC, and never hear back. To resolve the issue, a random search could be conducted to compare the company-provided data with physical conditions.

Smallwood pointed out that the CEC summaries of APWRA capacity values have appeared in reports that were available to the public for years, but he is unaware that the wind companies noticed any problems in those reports. He suggested that the issue of the discrepancy can be dealt with in one or more of several ways. One, the monitoring team can learn from the CEC why the discrepancy exists. Two, the monitoring team can summarize its turbine status data it collected over the last four years to demonstrate that the trend in these data correspond with the trend in the capacity data reported by the companies. Three, the fatality metric can be the number of fatalities per MW per year for all turbine addresses documented in the baseline study, regardless of when or to what degree the turbine status subsequently changed.

Meeting participants discussed extrapolating the data to show an APWRA-wide comparison, versus performing a string-by-string analysis from installed capacity information. A ratio of the number of fatalities by the number of turbine addresses that were recorded during the baseline study, holding the number of baseline turbines constant, should reflect a declining trend in fatalities as turbines are removed. The APWRA-wide extrapolation would reflect megawatts in production, and would reflect the region-wide installed capacity environment for birds, and how it has changed in the last 10 years. Each number will be biased in different ways, so both analyses are important to look at.

SRC members said it will be important to describe the data discrepancies in the draft report and explain why specific data are used.

The Monitoring Team agreed to provide a correlation in the report to show if the trend between a sample of turbines and the wind company data is the same or not, and if not, why not.

Public Comments/Questions

In response to several questions by Emre Ergas, the Monitoring Team clarified that:

- Nameplate capacity is on a string basis
- The report will present data through September 2009
- Data from all the turbines will be used
- Both a rate and extrapolation will be provided

- Extrapolation will be conducted by strings and operating groups, which show similar turbines at similar location by similar entity
- Installed capacity is capacity throughout the year
- The APWRA-wide figures with similarly sampled turbines will be by both nameplate and installed capacity
- Monitoring Team members are open to recommendations on how to incorporate Buena Vista data. Possibilities include excluding Buena Vista capacity and adding values from the recently released Buena Vista report produced by Insignia; average across the report values; or include Buena Vista in estimates, even though Buena Vista turbines are not monitored by this team.
- Data on the SRC website is largely complete, except for some issues to be resolved in records from the last three months. The splitting of string numbers should be completed in a day or two.
- The report will not provide a detailed analysis of first versus second year current data, but will provide graphs of fatalities per search over time, which will provide a trend of relative abundance of fatalities. Data would show spikes and drops in response to a number of factors, such as large fluctuations in bird use, and increasingly smaller search interval and other factors. While there is no statistical tests that could be looked at, the issue will be discussed in the report.

Emre Ergas said he thought this approach was another methodology which should be explicitly stated in the report, given that there are a number of issues with the various methods for comparing baseline to current study. Monitoring Team members said they could do that and discuss in the conclusion their assessment of the trends over the last four years.

- The report will be released on December 18.

One SRC member said that database errors have only recently been sufficiently reconciled, and a good report rather than a rushed report is preferred.

Adjustment Factors

Monitoring Team members said they will not have time to recirculate the draft 48-Hour Search Interval (KB) Report (M32) before they produce the Draft Monitoring Report on December 18. The revised report will show different curves than the existing draft report, but the same conclusions. The different curves will not affect the Monitoring Report conclusions. The Monitoring Report will reference the updated data. Doug Leslie said he would like to produce a different deliverable that combines discussion of both small and large bird carcasses. In the meantime, the Monitoring Team will provide data sheets related to the KB Report on the SRC website. The Team will also send Julie Yee and Shawn Smallwood the updated spreadsheet of carcass monitoring data from the KB Study.

One SRC member said the SRC originally recommended the KB Report in order to clarify an important issue for use in the Monitoring Report, to increase confidence about adjustments. Referencing the data in the Monitoring Report is acceptable.

SRC Subcommittee Meetings

The SRC Subcommittee met twice by conference call with the Monitoring Team to discuss adjustment factors. They decided that partial carcasses would be combined with whole carcasses for adjusting. They identified four options for feather spot adjustment:

1. Adjust based on the KB Study feather spot curve
2. Leave feather spots unadjusted
3. Develop an adjustment that incorporates a rate of transition from carcass to feather spot
 - A. Using a formal model to be developed involving transition matrices
 - B. Using a crude approach based on the few records of feather spot known to have originally been carcasses, such as dividing them into two groups: those transitioned to feather spot within two days, and those transitioned in more than two days. The data for this approach is currently in flux.
4. Lump the feather spots and carcasses to develop a combined curve

The Subcommittee and Monitoring Team identified pros and cons to each approach, and there was no consensus. They agreed that three approaches, 1, 2 and 4, would be used for burrowing owls and American kestrels to show and discuss the range of estimates from different approaches. For other small bird species, no recommendation was made.

The original Monitoring Team proposal was to use the KB Report curves for carcasses and feather spots and to show raw unadjusted numbers. Any one of these approaches would probably cut the number of estimated fatalities by one third, to more realistic numbers

Julie Yee has produced a Subcommittee meeting summary and a memo about adjusting feather spots, which will be posted on the SRC website.

During discussion on this issue among SRC and Monitoring Team members, the following points were made:

- The facilitator expressed concern that the SRC and Monitoring Team did not have adequate time to develop and agree on the approach to option #3 for the Draft Monitoring Report, as the modeling method has not yet been developed and the data for the crude approach is limited and currently in flux. One possibility might be to incorporate that option into the final report, depending on time and other constraints.
- Some SRC members see option #3 as the option that makes the most sense biologically.
- While it's important to try to get the best numbers, utilizing option #3 versus the other three options would probably not change the report's conclusions.
- Option #4 might not be appropriate, as the proportion of burrowing owls at other sites within the APWA may not be the same as those used for the KB Study. The sites in the KB study were selected based on occurrence of burrowing owls.

Monitoring Team members said the Draft Monitoring Report will use option #4 for small birds other than burrowing owls and American kestrels.

ATTENDEES

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