

**NOTES | 1/16/2013 Conference Call**

**Altamont Pass Wind Resource Area Scientific Review Committee**

Prepared by the Center for Collaborative Policy

Reviewed and approved by the SRC

**All 5 SRC Members Present**

**Discussion Topics**

- Meeting Summary Approval
- Avian Fatality 60% Core Turbine Analysis
- Next In-person Meeting

**Next In-Person Meeting**

Date: March 25-26

**Action Items**

Party	Due Date	Action
SRC	March 25-26, 2013	▪ Next in-person meeting (1.5 days)
Monitoring Team	January 23	▪ Revise <a href="#">M95 Evaluation of 2010 Bird Year Rotating Panel on Fatality Rate Changes</a> to examine and correct as needed possible computational or 2005-06 data incorporation errors, incorporate caveated rotating panel only table, distribute as final PDF
Monitoring Team	Within 1 month	▪ Notify when error-checked and completed 2011 bird year data is available

**Announcements**

Sandra Rivera of Alameda County announced that the contracts for CCP, the Monitoring Team, and SRC have been updated. The County has also received a repowering proposal from EDF to replace 317 old generation turbines with 7-12 repowered turbines. FloDesign has also submitted an application for the 40 research turbines project. The Planning Director’s decisions on the 50% determination and high-risk turbine removal, drawn from the SRC determinations, will be released the week of January 21st.

**Meeting Summary Approval**

**Related Documents**

[P254 SRC Call Notes 11-19-12](#)

The SRC approved the call notes with no changes. The final call notes will be posted online.

## **Avian Fatality 60% Core Turbine Analysis**

### **Related Documents**

[M95 Evaluation of 2010 Bird Year Rotating Panel on Fatality Rate Changes](#)

[M87 2010-11 APWRA Final Bird Fatality Report](#)

### **Background**

At the December in-person meeting, some SRC members expressed uncertainty about the trend in avian fatality and whether a 50% decline in fatalities had been achieved. One concern was whether a new design in the Monitoring Program, implemented in the 2010-11 bird year, might have introduced bias into the analysis. The new design, which monitors half the sample size as the previous monitoring, is composed of 60% continued monitoring at already-monitored turbines (fixed or core turbines), while rotating in 40% new turbines (rotating panel). The SRC asked the Monitoring Team to conduct an analysis comparing the 60% core or fixed turbines to the entire sample of turbines, to determine if results were different and could potentially have impacted the 50% analysis.

### **Presentation**

Doug Leslie, Monitoring Team Project Manager, presented the M95 Memo ([M95 Evaluation of 2010 Bird Year Rotating Panel on Fatality Rate Changes](#)). Monitoring data from all non-Diablo turbines was compared against the 60% fixed turbines to assess whether there was a trend. He said trends were similar among the four focal species except for burrowing owls: for this species, there was no change in the fatality rate with the non-Diablo turbines, and there was a slight decrease in the fatality rate for the fixed panel sample.

### **SRC Discussion on Memo and Rotating Panel Design**

One SRC member said the trends of the 2009-2010 data, shown in the graph on page 3, seem the same for all species except golden eagle. The golden eagle data shown in the graph seemed to show a doubling in fatalities, although number of fatalities for golden eagle were much less.

Another SRC member said, while there are some differences with and without the rotating panel turbines, the differences don't seem to be driving the 2010 increase in red-tailed hawk fatalities that the SRC raised concerns about in December.

Doug Leslie said the monitoring sample was cut in half in 2010, so that year represents a large sample size departure. The fixed portion would be one quarter of the sample from previous years. This indicates how much sample size might have been reduced. Then, golden eagles are already subject to a small sample size.

An SRC member agreed that, given the low golden eagle numbers, more error would be expected with a smaller sample size.

SRC members said the data shown in the memo does not indicate a larger problem with the new rotating panel design, and helps to clarify a previous uncertainty.

An SRC member asked why the adjusted red-tailed hawk fatalities for non-Diablo turbines show a very different curve from that shown in Figure 3-5 in the final monitoring report. Could this be a calculation error?

SRC and Monitoring Team members identified possible causes for the differences in the curve for the 2005 and 2006 years:

- Monitoring occurred in Contra Costa County in the 2005 in 2006 years, but not thereafter, so there may have been issue in the way that change was incorporated into the analysis
- The way the Team defined the strata in 2005-06 may have been different
- One analysis was done on strings, and the other on BLOBs.
- Possibly the analysis is by gigawatts rather than megawatts.
- The numbers are a full order of magnitude different, so there might have been a decimal point error
- The figures may incorporate unadjusted data.

Doug Leslie said he does not think it will impact the assessment of fatality trends. He said the Team will look at the issue and put out a revised memo.

An SRC member asked that the Monitoring Team show results from the rotating panel only turbines as a separate value, to help the SRC understand how much the rotating panel could vary.

Jesse Schwartz of the Monitoring Team said that sample is small and there will be a lot of variance. It would be misleading to put an estimator around the data, so the data will have to be caveated.

### **Public Comment**

There were no comments from the public.

### **Next Steps**

- The Monitoring Team will troubleshoot the analysis and send out a revised final memo as a PDF in a week with any needed corrections in red tailed hawk data and analysis. The revision will include an explanation if the memo red tailed hawk data does not line up with Figure 3-5 because of different analytical methods.
- The Monitoring Team will include information on the 40% rotating panel as a third value.

### **Monitoring Team Updates**

Doug Leslie shared that the Monitoring Team has completed the verification of the 2011-12 bird year fatality rates. The Monitoring Team will soon finalize the database and announce that it is complete and available to the public.

### **Wrap Up and Next Steps**

**Next In-person Meeting: March 25-26, 2013**

#### **Tentative Topics:**

- Draft bird fatality report on 2011-12 bird year

- Seasonal shutdown modeling
- Provide input on AWI permit modification DEIR
- Burrowing owl study report

It will be a 1.5-day meeting.

**ATTENDEES**

**SRC**

Joanna Burger  
Jim Estep  
Michael Morrison  
Sue Orloff  
Julie Yee

**Consultants**

Doug Leslie  
Jesse Schwartz  
Brian Karas

**Identified Public**

Kim Brown, Ventus Environmental  
Solutions  
Renee Culver, NextEra  
Chris Dugan - TRA  
Stu Russell, Point Impact Analysis  
Joan Stewart, NextEra

**Staff**

Sandra Rivera, Alameda County  
Ariel Ambruster, CCP  
Grace Person, CCP