

Draft NOTES | 11/19/2012 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

- **Hazardous Turbine Removals Update & Information**
- **Update on Final 2010-11 Bird Year Monitoring Report**

Action Items

Party	Due Date	Action
SRC	Dec. 5-6, 2012	Next in-person meeting (1.5 days)
Sandra Rivera		Email relevant SRC members about contract extension documents
Julie Yee, Jim Estep, Monitoring Team	ASAP	Meet to identify data/information/analysis on 8.0 turbines for Dec 5-6 meeting
Forebay Wind & Shawn Smallwood	Dec. 5	Confirm whether 4 8.0-ranked turbines are part of the FloDesign study.
EDF & Monitoring Team		Monitoring Team will send spreadsheet of turbine removals to EDF for review, QAQC and confirmation
Julie Yee & Brian Karas		Develop recommendation to SRC on bleed-through issue

Announcements

Sandra Rivera of Alameda County reported that AWI has withdrawn its request to operate three turbines during the 2012-13 winter shutdown period.

In addition, she said the County will renew or extend contracts by the end of December for CCP, the Monitoring Team, and three SRC members. She is in discussion now with the Monitoring Team over monitoring scope. She will send information to SRC members about contract logistics.

Hazardous Turbine Removals Update & Information

Related Documents

[P253 Alameda County Memo on 8.0 HRT Removals](#)

Sandra Rivera of Alameda County reviewed the SRC's task this year under the Adaptive Management Plan to review 8.0-ranked high-risk turbines and make recommendations for

removal/relocation. The purpose of the day's discussion was to develop a clear list of items the SRC would need to consider for the issue at its December 5-6 in-person meeting. As part of this, at the December meeting, the SRC will consider a request by EDF, formerly enXco, for a credit toward the turbine removals. She reviewed the status for each wind company, which is presented below

1. NextEra (ESI) does not need to remove 8.0 turbines because it has satisfied the Adaptive Management Plan terms by removing turbines for its repowering project in Contra Costa County. It is off the table for the December consideration.
2. EDF (enXco): the Adaptive Management Plan calls for removal of 44 8.0 turbines. The company has removed 56 other turbines, 14 of which were ranked 7.0-7.5, and the remainder of which were unranked. EDF is requesting that those removals be considered a credit toward removal of the 8.0 turbines. Chris Dreiman of EDF said the 56 removed turbines came from a single project in one area called enXco 5. The SRC should determine what information it will need to look at to consider the credit request.
3. SeaWest (purchased by FloDesign, which is now called Forebay Wind): the company has removed 16 8.0 turbines and four 8.0 turbines remain on site. John Howe of Forebay Wind said the study currently underway to test the avian risk of the company's new turbine design included the rationale of leaving some high-risk turbines in place for study purposes. He said he and study scientist Shawn Smallwood would confirm whether some or all of the four remaining turbines are being used in the study.

An SRC recommendation is needed at the December meeting about the possible removal of hazardous turbines, as the wind companies would need to remove the turbines by the end of seasonal shutdown.

SRC Comments

SRC members discussed the following issues:

- Whether it would be possible to determine the rank of the unranked turbines that EDF removed. Brian Karas of the Monitoring Team said the rankings of these turbines are probably listed in the 2007 rankings list, and the Monitoring Team can bring information on the 2007 and 2010 rankings to the December meeting.
- It would be helpful to know, of the 8.0 ranked turbines, which ones are monitored, and the associated fatalities.
- In considering the 7.0-7.5 turbines as a credit, we need to be able to compare the fatalities of these turbines – develop data or analysis to look at the trade-off of the turbines removed versus the 44 8.0s.
- In considering the 7.0-7.5 turbines as a credit, compare the fatalities of not only these specific 7.0-7.5 turbines, but also compare the class of 7.0-7.5 to 8.0 Altamont-wide, the relative difference in fatalities function.
- Consider to what extent the HRT management action is effective

Jesse Schwartz of the Monitoring Team said he could develop a spreadsheet including fatality rates on a turbine-specific basis by ranking groups.

Doug Leslie of the Monitoring Team suggested a catch-per-unit effect could be developed for the higher ranked versus lower ranked turbines, by the number of fatalities per search. The Monitoring Team will need to take a cost-effective approach to collecting and analyzing the data, as the issue could get complex, and funds are limited.

Public Comment

Shawn Smallwood, former SRC member and member of the 2010 SRC HRT ranking subcommittee, said he did an evaluation of turbines in place that is on the SRC website that could be helpful in the SRC's consideration. The problem is that the number of turbines has been diminishing, shrinking the sample size, so analysis will become more difficult. Doug Leslie is right that the analysis could be complex. The subcommittee ranked 8.0 turbines based on fatalities and other factors, but most 7.0-7.5 turbines lacked a fatality history and thus were ranked based primarily on juxtaposition to derelict towers and other such environmental factors.

Brian Karas said the geographic context of some of the turbines might have changed, especially given the removal of adjacent turbines.

Sandra Rivera said this is why the Adaptive Management Plan was written to allow for incorporating an SRC review before removals.

Brian Karas suggested the Monitoring Team could do a first cut summary of the turbines, including identifying any turbines where conditions might have changed.

Next Steps to Prepare for Dec. 5-6, 2012, SRC Consideration of High-Risk Turbines

The SRC agreed that a subcommittee of Julie Yee and Jim Estep will work with the Monitoring Team to identify the essential information the SRC will need to review for the December meeting. This process can ensure that the Monitoring Team takes a cost-effective approach to providing information and analysis for the SRC.

The SRC identified the following items to aid in its consideration of the turbines in December:

Items for December consideration of high-risk turbines:

- 2007 and 2010 rankings of EDF's removed turbines
- Map of turbines under consideration
- Map and photos of EDF turbines under consideration (EDF to provide)
- Monitoring Team summaries of the involved turbine strings including what fatalities have occurred

Update on Final 2010-11 Bird Year Monitoring Report

Related Documents

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

Update on Report & Database

Doug Leslie, Monitoring Team Project Manager, said that the report has been completed and released. An Appendix C is not quite complete, although it was complete enough, and incorporates a lot of effort into analyzing the QA/QC data.

As for the database, the 2011 bird year data are being error checked. Once the Monitoring Team and NextEra review and confirm the data, they will be completed and updated on the website. He expected that to happen by mid-December.

SRC Comments

SRC members discussed the following issues:

- For the 50% determination, it would be helpful to have a table showing the actual megawatt values that were used for the calculations, and how megawatts used have changed through time for the calculations. Doug Leslie said it would be feasible to create a table for the meeting.
- It would also be helpful to identify what BLOB each turbine belongs to, so that there is a data dictionary or other information to ensure transparency, so the public can check and replicate the analysis. In response, Jesse Schwartz of the Monitoring Team said he is pretty confident that the analysis is 100% reproducible based on current information on the website, but how the information is used in order to reproduce the analysis may not be sufficiently clear to the user. There could be a narrative, spreadsheet or a model developed that provides a walk-through of the data and a description of how the data were analyzed. To reproduce the calculations, one would need sufficient mathematical expertise.
- Weren't both rated and installed capacity going to be used in the analysis? In response, an SRC member said her fuzzy recollection was that both metrics were used when current study data were being compared to baseline data, because of issues with sampling coverage. She didn't remember the SRC coming to a decision to use one metric, but thought that the rationale for using both metrics might no longer apply now that the baseline dataset is not part of the analysis.

Shawn Smallwood, a former member of the SRC, offered to provide some clarification on the use of installed versus permitted capacity.

Preview of December Discussion Topics

Facilitator Ariel Ambruster said the December meeting will include discussions on the report findings and will set aside time for the SRC to discuss the new detection probability estimate. The report will be used as a basis for the SRC's determination on whether a 50% reduction in avian fatality has been achieved. Then, based on the SRC's determination, there is time set aside to discuss what will happen next; if the 50% has been met, it could mean a different picture for monitoring.

An SRC member suggested another topic, related to the 50% determination, which is that the detection probability analysis identified a much greater potential for bleed-through to occur. This is when a fatality is missed by searchers, and is part of the adjustment factor, but is later found. It leads to an upward bias in the estimated number of fatalities. The question is what the implications of this are on the SRC's interpretations. The degree of the bias needs to be determined.

Another SRC member said it will be important for the SRC to be in agreement on what the metric is and why it is used.

SRC member Julie Yee and Monitoring Team member Brian Karas will develop a strawman recommendation for the SRC to consider on the bleed-through issue.

Facilitator Mary Selkirk said it will be important for the SRC to focus on what the bottom line is. Sandra Rivera of Alameda County said there are implications for the companies in the 50% determination – based on the SRC's recommendation, they may have to remove more turbines. There isn't a lot of time to consider the issue, so the SRC will need to deal with the best information it already has.

Next In-Person Meeting: December 5-6, 2012

Topics

- Final 2010-11 Bird Year Monitoring Report: Presentation & Discussion
- New Detection Probability Estimate
- 50% Avian Fatality Reduction Determination
- Hazardous Turbine Removals
- 2012-13 Bird Year Monitoring Update
- Looking Ahead to 2013

ATTENDEES

SRC

Joanna Burger
Jim Estep
Michael Morrison
Sue Orloff
Julie Yee

Consultants

Doug Leslie
Jesse Schwartz
Brian Karas

Identified Public

Renee Culver, NextEra
Chris Dreiman, EDF (enXco)
John Howe, Forebay Wind (FloDesign)
Stu Russell, Point Impact Analysis
Shawn Smallwood
Joan Stewart, NextEra

Staff

Sandra Rivera, Alameda County
Mary Selkirk, CCP
Ariel Ambruster, CCP