

## Notes | 1/4/2008

### Altamont Pass Wind Resource Area Scientific Review Committee Conference Call

Reviewed and Final Approval by SRC 2/13/08

#### Agenda Items

- Winter Shutdown Update
- Relocation Guidelines
- SRC Recommendations on Hazardous Turbines
- February In-Person Meeting Agenda

#### MT Action Item by the Feb Meeting

The monitoring team will identify and map strings or large segments of turbines that the SRC did not visit to assess any other potentially hazardous turbines the SRC might want to evaluate. The SRC would like an estimate of the candidate number of sites and turbines so it can determine whether it wants to reevaluate additional turbines, assess the time necessary to do so, and make the request to the County to conduct further field visits.

#### Update on Winter Shutdown

The settling parties are starting mediation on January 18. The County has requested that companies continue the winter shutdown during the mediation process. Some non-monitored turbines are now operating in the Altamont. Here is the status of the companies:

- AWI – will turn on monitored and non-monitored turbines after the 2-month shutdown period. Monitored turbines will be synchronized with monitoring team searches.
- FPLE -- will turn on monitored and non-monitored turbines after the 2-month shutdown period. Monitored turbines will be synchronized with monitoring team searches.
- AES – will remain shutdown during the course of mediation.
- EnXco – will remain shutdown during the course of mediation.

The County directive for a 2-month winter shutdown of all turbines in the Altamont applied to AWI even though it is not a settling party; this supplanted the requirement in AWI's permit stipulating a 2.5 month shutdown. County staff did not provide a reason for waiving the permit requirement that turbines owned by non-settling companies do not have to be shut down for an extra two weeks this winter.

The Monitoring Team reported that to date a total of 8 fatalities of target species have been documented during the winter time shutdown. None were golden eagles, and only one was a red-tailed hawk.

#### SRC Issues of Concern

The SRC expressed concern that if the non-monitored turbines are turned on before the monitored turbines, it would be difficult to apply the mortality estimates derived from the monitored to the non-monitored turbines and thus potentially affect the reliability of the overall annual mortality estimate. Also, turning turbines on and off could increase the number of fatalities. One reason that the SRC recommended the universal (all turbines) 4-month shutdown was to minimize the impact

of turning on the turbines while raptors are abundant in the APWRA and also habituated to the turbines having been shutdown. The SRC recommended the 4-month shutdown anticipating that fewer birds would be in the vicinity as birds return to nesting areas, and that some of the birds in the area during the restart are simply moving through the area and have not become habituated to the shutdown turbines.

### **Public Comment**

Mike Boyd, CARE, said that he is unaware that turbines are operating. He recognizes that AWI is not a settling party and should be in compliance with the conditional use permits.

Emre Ergas, FPL, stated that he understands the 4-month recommendation. If only a 2-month requirement, he wondered if SRC concern was that the non-monitored turbines are operating while monitored turbines are not. He wondered if the preference would have been to do the monitoring sweep and then turn them all on. He asked when would be the best time to restart the non-monitored turbines following a 2-month shutdown. The SRC did not recommend when the non-monitored turbines should be restarted after a 2-month shutdown because of concerns surrounding the timing of restarting turbines after only a 2-month shutdown. The SRC reiterated its recommendation for a 4-month shutdown.

### **SRC Recommendations on Hazardous Turbines**

Related Materials

[P67 SRC Selection of Dangerous Wind Turbines Draft Report 12/9/07](#)

[P68 Turbine List \(Partial\) for SRC Selection of Dangerous Wind Turbines 12/7/07](#)

[P69 SRC Hazardous Rating Scale 12/18/07](#)

The SRC revisited its recommendations developed during its 12/21/07 conference call and modified the recommendations slightly for further clarification:

#### **SRC Recommendations 1/4/08 Revised from 12/21**

**All towers and turbines that were rated 8-10 are recommended for removal (P69).**

**If the winter shutdown is not extended to at least three full search cycles (anticipated to be about 3 months), towers and turbines rated 7 and 7.5 are recommended for removal.**

**The SRC recommends that it will consider evaluating turbines and towers not previously evaluated for hazard and removal.**

#### **Original Recommendations from 12/21**

All towers and turbines rated 8-10 are recommended for removal (P69).

If the winter shutdown is not extended beyond 2 months, towers and turbines rated 7 and 7.5 are recommended for removal.

If the winter shutdown is not extended beyond 3 months, the SRC should return to the wind farm to assess more turbines as candidates for removal.

### **Discussion**

One SRC member recommended that the SRC evaluate the location of evaluated turbines to confirm the turbines are distributed across Altamont Pass. If ranked turbines are located throughout the wind farm, the SRC would be better able to say that the reduced mortality applies across the Altamont.

The facilitator asked how the ranking relates to a previously planned SRC task to re-classify non-classified turbines. SRC members agreed that site visits were the preferred methodology, especially because the changing configuration of turbines has made the Smallwood and Spiegel (June 2005) methodology obsolete.

### **Future Agenda Item**

Look at spatial layout of ranked turbines and consider how many are in the monitored and non-monitored turbines.

### **Public Comment**

Eli Saddler, Audubon, asked whether the SRC continued to support and recommend a 4-month winter shutdown. The SRC re-iterated that it supports the 4-month shutdown.

Emre Ergas asked the County if FPL's accelerated removal of the high risk turbines rated 8-10 would be recognized in place of Tier 3 turbine removal requirements identified in the settlement agreement. FPL is seeking confirmation of its contractual requirements with the County. FPL has committed to removing 50 high risk turbines by March 31. FPL and the County will work out these details.

One SRC member clarified that it was not the intent of the SRC that the turbines rated 8-10 would be matched one-to-one with Tier 3 turbines. The SRC recommended that all turbines rated 8-10 should be removed.

Another member clarified that he would like to visit all Tier 3 turbines if the County was to conclude that the removal of turbines rated 8-10 could serve as replacements for the Tier 3 removal requirement. The changing configuration in the Altamont has likely affected the hazard levels of the Tier 3 turbines.

Sandi Rivera said the County would be using the new ranking to identify hazardous ranked turbines and possibly consider amending the permits with the hazardous ranking.

### **Data Issues**

On January 8, the monitoring team begins its second full fatality search sweep since the winter shutdown; the sweep takes about 1 month to complete. The SRC continued to discuss the concern about starting the non-monitored turbines while monitored turbines remain shutdown because of the impact it would have on the data, i.e. applicability of monitored data to non-monitored data or "contaminating" the mortality estimate.

Emre Ergas, FPL, asked two related questions: Would it contaminate the data of a 2-month shutdown? Would the companies have to wait until Feb 8 or some other date to avoid this?

One SRC member summarized and others concurred with her response: data contamination would be unavoidable because, due to the rotating schedule of the monitored turbines, some monitored turbines must remain on when other monitored turbines are off. The SRC can't completely eliminate the potential data contamination associated with differential restart dates whether those differences occur between monitored vs. unmonitored turbines, or just within monitored turbines. But, the SRC is trying to minimize it to make the non-monitored site conditions as similar as possible to the monitored sites and have both turned on at about the same time. She's unsure what the "best" timing would be to affect this, and the SRC reiterated that this problem would be less of an issue after a 4-month shutdown when bird flight activity is reduced.

### **MT Action Item by the Feb Meeting**

The monitoring team will identify other potentially hazardous turbine sites for the February SRC meeting (see action item above).

## **Relocation Guidelines**

### **P70\_ SRC Hazardous Turbine Relocation Guidelines**

In response to a request from interested parties and to document insights gained through December field visits, the SRC has prepared **Relocation Guidelines** to assist the companies with removing and relocating wind turbines.

### **Comments and Questions**

Generally, the relocation guidelines were well received. SRC and public comments included:

- Better define terms and consider adding a glossary, including definition for "derelict"
- Consider using diagrams or photos, such as or including the ones that FPLE provided during its credit request to assist with understanding
- Simplify the next steps section
- Create some type of workbook that could be circulated and easily used

The guidelines are not meant to address every potentially dangerous situation relative to turbine siting. Instead, they address the clearest and possibly the most dangerous situations based on SRC current understanding of the relationships of topography and land forms, bird behavior and movement, and wind patterns in the APWRA.

The SRC went on to discuss consultation for relocations and urged that a sustainable process be created for the future. Turbine removal is a dynamic and changing process. Training a person, such as biologist Renee Culver, to be the go-to person on these issues could be helpful to all the companies since consultation with the SRC isn't always feasible. SRC members decided to include recommendations for a continuing process in the relocation guidelines.

### **SRC Recommendation on Consultation for Relocating Turbines**

The SRC recommended that the companies consult with the SRC or a company point person trained by the SRC on removing and relocating turbines. The SRC could train the point person on relocation guidelines and situations to avoid when removing turbines that could increase the potential hazard for raptors in the Altamont. When getting ready to remove a turbine, the company

could consult with the SRC or point person. The company could consult with the trained person about turbine removals that create gaps or relocations.

## **February Agenda Items**

**Day 1, Feb 12, 10:00-5:30**

**Day 2, Feb 13, 9:00-4:30**

**Day 3, Feb 14, 8:30-11:30**

- Monitoring report
- Public technical workshop on monitoring data and management strategies
- Meeting with settling parties
- Monitoring team issues and questions for the SRC
- Monitoring data and report discussion continued
- SRC tasks to identify method to measure 50% reduction
- SRC work plan and goals for 2008
- SRC reporting outcomes
- Compliance reporting
- Physical location of ranked turbines to consider whether to evaluate other turbines for hazard and to consider how many are monitored
- Blade painting
- Defining derelict
- EIR steps in permits

### **Other Potential Topics of Interest Identified Previously**

- Managing vacant or derelict turbines
- Burrowing owl behavioral study
- Jim Castle burrowing owl presentation
- Repowering (definition and evaluation)
- Habitat conservation areas
- Classifying unclassified turbines
- Study on small birds and bats at APWRA
- How to evaluate impacts on avian species & ecosystems for future review
- Whether to incorporate additional correction factors (besides scavenger removal & search efficiency)
- Relative abundance power analysis
- Permanent shutdown
- Contra Costa Monitoring / TAC Update

**Participants**

**SRC**

Sue Orloff  
Shawn Smallwood  
Julie Yee  
Jim Estep  
Joanna Burger

**Others**

Joan Stewart  
Eli Saddler  
Bill Damon  
Emre Ergas  
Gabe Vaca  
Renee Culver  
Mark Cullors  
Mike Boyd  
Jim Hopper, AES

**Monitoring Team**

Brian Karas

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