

## **SRC Decision on FPLE Credit for Removing High Risk Turbines**

**20 July 2007**

**Prepared by the Center for Collaborative Policy**

**Approved by the Scientific Review Committee 8/17/2007**

**Submitted to County of Alameda Planning Director 8/17/2007**

In February, April and July 2007, a representative of FPL Energy Partnerships (FPLE) met with the Altamont Pass Wind Resource Area Scientific Review Committee (SRC) to request credit for shutting down or relocating high risk turbines as stipulated in the settlement agreement reached between the Audubon Society, Californians for Renewable Energy, Green Ridge Power (FPLE), ESI, enXco, SeaWest Power Resources, and the County of Alameda Board of Supervisors. One provision of the settlement is for wind power companies to shut down Tier 1&2 turbines per Smallwood and Spiegel June 2005 report within 30 days of the agreement. However, the settlement also provides for the opportunity for each wind power company to request credit against this requirement if companies have shut down other high risk turbines. The agreement says:

5 (a) (ii) ...each wind power company may submit to Audubon and the SRC a list and description of high risk applicable turbines already shut down and ask for credit against this Tier 1 and 2 shutdown requirement. The SRC will grant credit for such applicable turbines reasonably determined on a scientific and technical basis to be high risk, provided such applicable turbines were shut down on or after May 2002 and the fact that the applicable turbines were not listed as Tier 1 or 2 will not prejudice this evaluation.

FPLE was the only company that requested credits for prior wind turbine shutdowns.

### **FPLE Request<sup>1</sup>**

FPLE sought credit for removing or relocating 96 turbines in place of a settlement requirement to shut down all of its 60 Tier 1&2 turbines (27 Tier 1 and 33 Tier 2). FPLE presented its data and maps, including fatality data from 1989-2006, and reported that it permanently shut down or relocated 96 turbines in 2004. Of these, FPLE left 42 lattice towers as end-row pylons intended to divert flights of raptors around the last operating turbine in the row. In April 2006, FPLE removed 22 of the 42 lattice towers.

As of July 20, 2007, FPLE reported that 22 of the 27 Tier 1 and 25 of the 33 Tier 2 turbines are operating. Since initiating discussions with the SRC, FPLE has agreed to shut down or relocate nine additional Tier 1 turbines. After relocating these nine turbines, 13 Tier 1 turbines would remain operating. As part of the credit proposal, FPLE would continue to remove Tier 1& 2 turbines through attrition.

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<sup>1</sup> Please see Documents that [FPLE Credits for High Risk Turbine Removal Multiple Documents](#) (P24)

### FPLE Proposal Summary

In exchange for removing FPLE's 27 Tier 1 and 33 Tier 2 turbines, FPLE is requesting credit for:

- 1) 96 shutdowns or relocations;
- 2) Removing 9 Tier 1 turbines in a string (4286 to 4294) to occur within 15 days of granting the credit; and
- 3) Removing remaining Tier 1&2 turbines through attrition associated with maintenance.

### SRC on Granting the Credit

Four of five members agreed, with varying degrees of endorsement, to grant FPLE credit for removing the turbines as a substitute for removing all Tier 1&2 turbines under the settlement. The agreement is based on certain assumptions:

1. FPLE will remove the additional string of Tier 1 turbines (4286 to 4294) deemed high risk within 15 days of issuing this credit as stipulated in the settlement agreement.
2. FPLE will continue to remove Tier 1&2 turbines through attrition.

### Summary of SRC Opinions

The SRC did not achieve consensus on this issue. Four of the five members support granting the credit. As discussed in the SRC charter, the range of SRC opinions is summarized to inform the Alameda County Planning Director.

One member was unable to support the agreement. This member feels assisting the companies to achieve the 50% reduction in mortality is incumbent upon the SRC and does not believe the companies will be able to achieve the 50% reduction in three years with the strategies committed to date. The member believes that the potential mortality reduction that might result from removing the high risk turbines could help achieve the 50% target. Also, the evidence provided did not convince this member that the applicable turbines were removed specifically to reduce mortality or that the applicable turbines, which were removed, would reduce mortality more than any other turbines.<sup>2</sup>

The four members supporting the credit generally think that the shutdowns and relocations, coupled with the additional string removal, will likely produce reductions in mortality equal to removal of Tier 1&2 turbines, according to a comparison of WRRS data.

In stating their support, each of the four members shared his or her thinking.

One member cited the difficulty of comparing the risk associated with the 96 turbines and the remaining 51 (60 minus 9 to be removed) Tier 1&2 turbines because there was no control over the survey conditions for the data reported on the original 96 or the 51. However, since some of the Tier 1&2 turbines have been removed, this member viewed this as a hedging of risks in granting the credit. Ultimately, this member agreed to grant the credit, thinking that the risk associated

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<sup>2</sup> See Smallwood: New Information Regarding Alameda County SRC Decision of 11 April 2007 to Grant FPLE Credits for Removing and Relocating Wind Turbines in 2004, 23 April 2007 (P26), Smallwood: Response to P24 Documents on FPLE Credits, 19 July 2007 (P41) and Smallwood: Verification of Tier 1&2 Wind Turbine Shutdowns and Relocations, K Shawn Smallwood, 15 April 2007 (P22)

with the 96 turbines was comparable to the Tier 1&2 turbines based on available data. This member also discussed the relationship between granting the credit and achieving the 50% reduction, but ultimately decided the impact of shutting down the remaining Tier 1&2 turbines would not create enough of a substantial impact to reach the 50%.<sup>3</sup>

One member would like the credit to encourage wind power companies to be proactive and believes that granting the credit will encourage the companies to remove turbines and potentially introduce other strategies to reduce avian fatalities. This member recognized the weakness of the data.

One member felt this was a reasonable alternative. The settlement allows the credit to occur so this member de-linked it from the 50% reduction. This member wants to move forward and focus on the management strategies to get to the 50% reduction.

The fourth member expressed concern that the management strategies conducted to date in addition to the FPLE proposal would not be sufficient to reduce mortality by 50 percent. This member would have preferred to link the credits to FPLE participation in another study on a management strategy, such as the pylon study, if other companies agreed to do so.

#### **Related Materials**

[K. Shawn Smallwood: New Information Regarding Alameda County SRC Decision of 11 April 2007 to Grant FPLE Credits for Removing and Relocating Wind Turbines in 2004, 23 April 2007 \(P26\)](#)

[K. Shawn Smallwood: Response to P24 Documents on FPLE Credits, 19 July 2007 \(P41\)](#)

[K. Shawn Smallwood: Verification of Tier 1&2 Wind Turbine Shutdowns and Relocations, K Shawn Smallwood, 15 April 2007 \(P22\)](#)

[Julie Yee: Memo Regarding Decision on FPLE Credit \(P46\)](#)

[FPLE Credits for High Risk Turbine Removal Multiple Documents \(P24\)](#)

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<sup>3</sup> See Yee, Memo Regarding Decision on FPLE Credit, 13 Aug 2007 (P46)