

SRC Comments on APWRA EIR NOP

Joanna Burger

COMMENTS FROM J. BURGER ON NOTICE OF PREPARATION (on CUP)

OVERALL:

SPECIFIC COMMENTS

Page 2 under Proposed Project: Does this mean that existing companies (without repowering) could be issued permits? The avoidance and minimization measures apply to birds I assume.

SUMMIT Wind Project: How many replacement or repowering turbines will they use?

Decommissioning and Reclamation: Do landowners have a say in whether existing roads are removed?

New Wind Farm Construction: While the number for Summit is given here, it should also be above.

NextEra Wind Repowering

Is this the same location as currently (i.e. no expansion of spatial area)?
Do we need some guidelines about placement for repowering that are in the document?

Alternatives: I assume land-owner considerations fit in land use planning?

Project Background: How many of the original conditions under CUP will remain?

What is the oversight and involvement of Audubon and CAE?

Page 6: Which of the 7 key provisions (or modifications thereof) will remain?

Page 6: Some of the amended CUPs should be added for clarity for the public (the Jan 11, 2007 one

EIR Process:

I am worried about the rapidity of the public process. Document preparation was a long process, but the time allotted the public is short.

What consideration is given to site neighbors (not the land-owners within the site)?

Jim Estep

General Comment

Combining the existing CUPs and the two repowering projects into a single ‘project’ for purposes of CEQA seems awkward. The analysis of existing projects is limited to operations of existing windfarms while the analysis of the repowering projects includes the removal of existing windfarms and the siting of entirely new windfarms. It is unclear how biological effects will be analyzed – cumulatively or on a project by project basis. Analyzing impacts cumulatively will potentially deemphasize the effects of the existing projects due to the benefits derived from repowering. Analyzing impacts on a project by project basis would be more appropriate, but also more appropriately lends itself to separate EIRs (repowering EIR and Existing CUP EIR). More clarity is needed on the proposed approach to conducting the assessment.

Existing CUPs

Impact Assessment

It appears that the EIR will address the impacts of current operations relative to the existing CUPs. Then, once the HCP/NCCP is completed, the county will amend as necessary the existing CUPs to include conservation measures and avoidance and minimization measures. The description appears to imply that the HCP/NCCP avoidance and minimization measures will be the primary method of mitigating impacts for existing projects. This raises several questions.

- a) How can the EIR reach significance conclusions pursuant to CEQA prior to the completion of the HCP/NCCP?
- b) Is the county assuming that the HCP/NCCP avoidance and minimization measures will reduce impacts to a level of less than significant?
- c) Knowing what we’ve learned from several years of monitoring, and assuming that avoidance and minimization measures will not include turbine removal, why would one consider the avoidance and minimization measures that will be designed for a new generation wind farm (and which will likely be related primarily to turbine siting) to be potentially effective on existing projects?

The EIR should evaluate and calculate impacts related to avian mortality using the information generated from the monitoring program. Based on these data, determine the significance of the impact pursuant to CEQA guidance. If it is determined to be significant, mitigation measures can then be applied to minimize the impact, which should include turbine removal, in an effort to reach a level of less than significant. The alternative is for the county to issue overriding considerations and permit continuing avian mortality.

Summit Wind

Project Description

1. It appears to be implied, but the description doesn't explicitly specify that all 1,394 old turbines will be removed as part of the project and replaced with 60 new turbines. Does the project description include removal of 1,394 old turbines and all related infrastructure?
2. The project description should provide additional details on the siting of new turbines and whether the SRC's siting guidance will be used.
3. More specifics are needed on miles of road construction, miles of buried or above ground wires, etc.
4. While it specifies that the project area is located within the designated APWRA area and in areas where there are existing turbines, will the project also include currently undeveloped portions of the APWRA? Need to provide more specifics on the project location.

Future decommissioning

How is 'no longer operable' defined? It seems like the county might consider requiring some specific level of operation. Can 90 percent of the turbines remain non-functioning as long as 10% are operating? Perhaps decommissioning should occur on a turbine basis rather than waiting for the 'project' to become non-operable.

NextEra Wind Repowering

Project Description

1. How many old turbines will be removed?
2. The project description should provide additional details on the siting of new turbines and whether the SRC's siting guidance will be used.
3. Will the NextEra project decommission and rehabilitate existing roads and other features not required by the repowered project as is the Summit project? Additional specifics are needed on the project description – both decommissioning of old turbines and related infrastructure as well as new.
4. Also need specifics on the tower height and blade length to determine the location of the swept area relative to the ground.

Alternatives

It is unclear how the EIR in general and particularly the Alternatives Analysis will be presented given that there are two vastly different elements to the ‘project’ (existing operations at old windfarms and repowering projects).

Alternatives for the existing project may be limited to the following because the project already exists.

- No project – defined as a decommissioning of all turbines
- Partial decommissioning of turbines
- Seasonal shutdown
- Removal of all turbines rated 7 or higher by the SRC

Alternatives for the repowering project(s) can include:

- Reduced project: smaller project (fewer removals and fewer new turbines),
- Reduced new turbines: removal of all existing turbines within the repowered area, but fewer new turbines;
- Relocated project: removal of existing turbines, but repowering in another geographic area within or outside of the APWRA with less mortality potential.
- Reduced operations (seasonal shutdowns)

I’m not sure there is a reasonable way to combine these elements in order to conduct an alternatives analysis for the entire project (existing and repowering elements).

Environmental Impacts

Assessment Procedures

Will avian mortality be analyzed on an APWRA basis or project basis? In other words, would you anticipate that any calculated potential reductions in mortality due to repowering would be used to indicate an APWRA-wide reduction with the overall ‘project’ (existing and repowering elements), thereby minimizing the continuing effect of existing projects? If so, this seems awkward in that companies not participating in the repowering efforts would benefit from this type of area-wide analysis and potentially not have to address their ongoing mortality issues. If this is not the case, then the impact assessment should address avian mortality for each project component individually, 1) existing CUPs, 2) Summit Repowering, and 3) NextEra Repowering).

Siting

The EIR should analyze the effects of new turbine siting on biological resources. Issues include:

- Avoidance of high risk areas
- Use of SRC or other siting guidelines (e.g., state guidelines)

- Given the large size of turbines, how is siting constrained by soils, topography, landforms, slopes, etc? Will it require additional leveling or contouring and more impacts to vegetation?

Collision mortality

- Of particular interest will be the threshold for significance relative to avian mortality. The EIR should define this threshold for each affected species or species group. The analysis should investigate the number of birds of each potentially affected species or species group that can be removed from a population before reaching biological significance pursuant to CEQA guidance.
- How will the EIR address golden eagle mortality relative to its status as a Fully Protected (i.e., no take) species in California? Golden eagle mortality will occur and cannot be fully eliminated under the proposed project descriptions, and as a Fully Protected species will require a CEQA determination of significant. This will require that the county issue a statement of overriding consideration and permit continued mortality of golden eagles.

Sue Orloff

Comments on the NOP – Orloff

Since I agree with what both Jim and Joanna wrote, I tried not to repeat their comments. Some of my comments are probably beyond the scope of an NOP.

General Comment

There were only two new repowering projects mentioned in the NOP (Summit and NextEra). Does this mean that no other repowering projects can be developed within the permit period or can other repowering projects be proposed? This poses a potential problem either way. If other projects are allowed, then evaluating impacts (separately or site-wide) for unforeseen future projects is going to be difficult. But if no other projects can be considered then this hinders the progress of repowering.

Impact Assessment

What is the effective period of the EIR? Does it just go through the end of the permit period (2018) or will it match the HCP/NCCP period (which is probably much longer)?

Also, will the EIR use the same target species list as the HCP/NCCP?

How will the determination of a significant effect be decided? What are the significant determination thresholds for raptor mortality? Will impacts be evaluated at a local or

regional level? Determining significance is often a subjective evaluation. If the threshold for significance is not met for some species, will no mitigation be required?

Will each of the two repowering projects be evaluated separately? Environmental effects could be individually limited but cumulatively considerable.

Turbine configurations and conditions change with repowering, attrition, and removals. How will the impacts be assessed with these ongoing changes that alter the impact level? It's like evaluating a moving target. Reassessments of potentially hazardous turbines and conditions would need to be made regularly and then mitigation measures adjusted accordingly.

There is no mention of any adaptive management in the NOP. Data from monitoring the new turbines may inform continued future repowering. Will the two proposed repowering projects be required to conduct post construction monitoring or will the Altamont wide monitoring program be relied upon to gather and analyze additional data on repowered sites? Will the EIR be flexible enough to allow mitigation measures to be modified or added?

There was no mention of monitoring the reclamation efforts to verify that restoration has been successful. This will ensure that cables are sufficiently buried, vegetation has been established, and erosion has been controlled. Monitoring would also provide information on other needed restorations and identify any remedial actions.

Biological surveys would also need to be conducted before any reclamation activities, so that the work can be tailored to the specific needs of the site. For example, recontouring the land or removing foundations could impact sensitive species that occupy underground burrows such as California tiger salamander or burrowing owls.

It would be important to consider the difficulty in evaluating, avoiding, and mitigating for impacts to the state and federally listed California tiger salamander. These animals occur throughout the Altamont and can be found not only in ground squirrel burrows but gopher holes, crevices, or under rocks. Detecting presence when they are underground is difficult and time consuming. I think a section 7 consultation with USFWS would be needed before any decommissioning takes place.

Additional studies may need to be conducted to assess the impacts to bats – such as studies on seasonal and spatial distributions, and migratory and other movement patterns.

Compensatory mitigation has not been discussed. If mitigation measures are not sufficient to reduce impacts below significance then unavoidable fatalities may need to be addressed by off-site land acquisition or other compensation.

Setting aside non-development zones within the Altamont would also be an option for compensatory mitigation. Using existing bird use data to design possible movement corridors through the Altamont would be useful.

Summit

It is not clear where transmission lines will be buried and where they will be above ground. Of course every effort should be made to place them underground but especially in topographical hazardous situations such as between canyons, and in saddles and notches.

Next-Era

Will the transmission lines be buried?

Shawn Smallwood

COMMENTS ON THE NOTICE OF PREPARATION FOR A PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT ON REVISED CUPs FOR WIND TURBINES IN THE ALAMEDA COUNTY PORTION OF THE ALTAMONT PASS

Shawn Smallwood

26 September 2010

I appreciate the opportunity to comment on the Notice of Preparation (NOP). My comments follow.

PROJECT ALTERNATIVES

I suggest the following alternatives be considered in the Programmatic Environmental Impact Report (PEIR):

- (1) No project;
- (2) No change to turbine models and turbine operations;
- (3) Complete repowering to modern wind turbines with careful siting to minimize environmental impacts; and,
- (4) Partial repowering and partial continued operations of old turbines.

NCCP/HCP

The PEIR is being prepared for the County of Alameda to issue revised conditional use permits (CUPs) for the continued operation of, and repowering of, wind turbines in the

Altamont Pass Wind Resource Area (APWRA). However, this NOP is confusing because it also states that another CEQA (and NEPA) review will take place for a planned NCCP/HCP, which would, if certified, revise the CUPs yet again, using another conservation strategy directed solely at wind turbine operations. It makes little sense to prepare an EIR that will be rendered obsolete by another EIR/EIS, especially one that is directed to the same environmental impacts and involving the same limited suite of mitigation options.

Alameda County should not introduce yet another complicated planning process to reduce avian and bat fatalities in the APWRA. The history of the APWRA harbors a series of complicated mitigation agreements that proved ineffective (Smallwood 2008). The various agreements were sufficiently complicated that the County of Alameda repeatedly claimed the wind companies were in compliance with their CUPs, and rationalized relaxing permit conditions, when wind companies were obviously out of compliance with their CUPs. The result was no significant reduction of avian fatality rates in the APWRA over two decades of agreements and mitigation plans. Given this history, and given the disturbing magnitude of the ongoing environmental impacts, no further consideration should be given to another EIR (and EIS) for an NCCP/HCP. The environmental review at hand should be simple and comprehensible.

Furthermore, the NOP is misleading by giving the impression that another mitigation strategy prepared for the NCCP/HCP would be superior to the strategy directed toward the PEIR. The available suite of mitigation measures have been reviewed by the Alameda County Scientific Review Committee (SRC) for four years. Three of the five SRC members have been involved with fatality monitoring and research in the APWRA for periods spanning 11 to 21 years. It is highly unlikely that the committee convened to guide the NCCP/HCP -- composed mostly of individuals with little if any experience in the APWRA -- will develop a mitigation strategy that is more effective than a strategy developed by the SRC.

MITIGATION ALTERNATIVES

Repowering

Repowered turbines need to be carefully sited to minimize collision hazards to birds and bats, and to minimize grading impacts caused by construction of access roads and turbine laydown areas. Siting should be guided by (1) patterns of fatality rates among APWRA wind turbines, (2) flight patterns of species of greatest concern (e.g., golden eagle, red-tailed hawk, American kestrel, burrowing owl), and (3) the spatial distribution of burrowing owl burrows. Siting methods were developed in Smallwood and Neher (2009) and Smallwood et al. (2009), and they were advanced further, specifically for Contra Costa County repowering projects (Smallwood and Neher 2010).

Post-construction fatality and utilization monitoring lasting three years should be required. The effects of repowering on fatality rates and habitat displacement (avoidance effects) need to be quantified to inform future permit renewals and mitigation planning.

Continued operation of old turbines

The SRC recommended removal of turbines they ranked 7 to 10 on a collision hazard scale. They also recommended the continuation of a four-month winter shutdown. Over the past four years, the SRC made many other recommendations, most of which were not followed in a timely fashion or not followed at all (SRC document P-147). For example, the SRC repeatedly recommended that the CUP requirements be met, as fatality reductions could not be realized without mitigation actions being taken. The SRC also recommended that all unproductive turbines and vacant towers be removed. The wind companies should better inform the SRC of their actions, including which turbines were removed or relocated, and when the actions happened. The SRC recommended compliance monitoring by a trusted third party or by the SRC. The SRC requested power output data from the companies so that the SRC could test hypotheses related to patterns of collisions, leading to improved removal and relocation recommendations. The SRC recommended a focused burrowing owl behavior study in order to learn why burrowing owls are being killed at such high rates near wind turbines. The SRC also recommended a background mortality study, searcher detection trials, more aggressive behavior monitoring of flying birds, and timely processing of bird utilization monitoring. If the continued operations of old-generation turbines are to be considered in one or more PEIR alternatives, then the SRC's recommendations should be fully implemented.

All old-generation turbines that are allowed to continue operating should be monitored for fatalities until the turbines are removed.

Compensatory mitigation

No matter which model of horizontal-axis wind turbines operate in the APWRA, birds and bats will continue to be killed by moving turbine blades. Even reducing raptor mortality 80-85% due to repowering, the remaining fatality rates should be considered significant. There is no fatality-reducing or fatality-minimizing mitigation measure that will reduce the impacts below a threshold of significance under CEQA. Therefore, compensatory mitigation will be necessary.

Compensatory mitigation should be based on a nexus between a project's adverse impacts and the benefits gained through the mitigation. Although some consideration should be devoted to finding this nexus, in reality it will be very difficult to arrive at such a nexus due to the nature and magnitudes of the impacts. The impacts will continue for the life of the project(s), and they will affect some species that lack distinct taxonomic units or "populations" within the APWRA. Most of the species affected are migratory, using the APWRA briefly or for only part of the year. It may be impossible to rely on habitat restoration or habitat protections as a means to replace the annual numbers of birds and bats killed by wind turbines in the APWRA. Therefore, a simpler, arbitrary compensatory mitigation ratio may be needed. Furthermore, a compensatory mitigation ratio may still fail to lessen impacts to *less than significant* for the simple reason that many of the birds being killed cannot be taken under the Migratory Bird Treaty Act.

Decommissioning and reclamation of existing wind farms

The NOP states that as repowering proceeds, power poles and electrical overhead lines will be removed where they are no longer needed. I recommend that all the power poles and overhead lines are removed; they should be replaced by undergrounded lines. The power poles and overhead lines kill numerous birds, although estimates of annual fatality rates caused by electrocution and line strikes have yet to be made.

MITIGATION MONITORING

The PEIR should detail a credible mitigation monitoring plan. The mitigation monitoring conducted so far has been grossly inadequate (see SRC document P-148). Actions allegedly taken by the wind companies were often in dispute, and the timing and magnitude of the actions were always vague and confusing. A trusted third party is needed to perform this monitoring.

REFERENCES

Smallwood, K. S. 2008. Wind power company compliance with mitigation plans in the Altamont Pass Wind Resource Area. *Environmental & Energy Law Policy Journal* 2(2):229-285.

Smallwood, K. S., and L. Neher. 2009. Map-Based Repowering of the Altamont Pass Wind Resource Area Based on Burrowing Owl Burrows, Raptor Flights, and Collisions with Wind Turbines. Final Report to the California Energy Commission, Public Interest Energy Research – Environmental Area, Contract No. CEC-500-2009-065. Sacramento, California. 63 pp.
<http://www.energy.ca.gov/2009publications/CEC-500-2009-065/CEC-500-2009-065.PDF>

Smallwood, K. S. and L. Neher. 2010. Siting Repowered Wind Turbines to Minimize Raptor Collisions at the Tres Vaqueros Wind Project, Contra Costa County, California. Draft Report to the East Bay Regional Park District, Oakland, California.

Smallwood, K. S., L. Neher, and D. A. Bell. 2009. Map-based repowering and reorganization of a wind resource area to minimize burrowing owl and other bird fatalities. *Energies* 2009(2):915-943. <http://www.mdpi.com/1996-1073/2/4/915>