



**ALAMEDA COUNTY CDA
PLANNING DEPARTMENT**

STAFF REPORT – PROJECT UPDATE – INFORMATION ONLY

**TO: EAST COUNTY BOARD OF ZONING ADJUSTMENTS
HEARING DATE: JUNE 27, 2013**

GENERAL INFORMATION

APPLICATION: MODIFICATION OF 16 CONDITIONAL USE PERMITS

OWNER/ APPLICANT: ALTAMONT WINDS, INC.

REQUEST: To modify conditions on 16 conditional use permits, for continued operation of existing utility-scale wind turbines with a combined generation capacity of 85.8 megawatts (MW), specifically to eliminate phased removal and wintertime shutdown as specified in Exhibit G of the CUPs approved in 2005 and as amended as Exhibit G-2 in 2007, and provide for decommissioning and removal of the existing wind turbines after December 31, 2015.

SPECIFIC PERMITS, OPERATORS, PROPERTY OWNERS AND PARCEL NUMBERS: Conditional Use Permit Numbers, Facility Permittee/Land Owner family names and Assessor’s Parcel Numbers (APNs) as follows:

C-8036, Altamont Infrastructure Company/Frick & Costa, APN: 099B-5680-015-00;

C-8037, Altamont Infrastructure Company/Pombo, APNs: 099B-6300-002-01, 099B-6300-002-02, 099B-6325-002-03, 099B-6325-002-04 and 099B-6425-001-06;

C-8134, Altamont Infrastructure Company/Rooney, APN: 099B-6125-002-00;

C-8137, Altamont Infrastructure Company/Mulqueeney, APNs: 099A-1800-002-03, 99A-1800-002-04, 99b 7890-002-04, 99B-7890-002-05, 99B-7900-001-05, 99B-7900-001-07, 99B-7910-001-01, 99B-7925-001-03, 99B-7925-001-04, 99B-7925-002-04, 99B-7925-002-05, 99B-7975-001-00, 99B-7980-001-00, 99B-7985-001-03, 99B-7985-001-04, 99B-7985-001-05, 99B-7985-001-06 and 99B-8050-001-00;

C-8191, WindWorks Inc./Mulqueeney, APN: 099B-7910-001-01;

C-8216, WindWorks Inc./Alameda County Waste Management Authority, APN: 099A-1810-001-00;

C-8232, Altamont Infrastructure Company/ Egan, APN: 099B-6125-003-00;

C-8233, Altamont Infrastructure Company/Elliott, APN: 099B-6125-004-00;

C-8235, Altamont Infrastructure Company/Corbett, APNs: 099A-1785-001-14 and 099B-5650-001-04;

C-8236, Altamont Infrastructure Company/Dunton, APN: 099B-5680-001-00;

C-8237, Altamont Infrastructure Company/Valhalla Enterprises, APNs: 099B-5610-001-00 and 099B-6075-003-00;

C 8238, Altamont Infrastructure Company/Ralph Properties II, APNs: 099B-7375-001-07, 099B-7300-001-05 and 099B-6325-001-03;

C-8241, Altamont Infrastructure Company/Walker Family Trust, APNs: 099B-6100-002-10, 099B-6100-002-11, 099B-6100-003-10, 099B-6100-003-11, and 099B-6100-003-13;

C-8242, Altamont Infrastructure Company/Marie Gomes Farms, APNs: 099B-6150-002-07, 099B-6150-003-00 and 099B-6150-004-10;

C-8243, Altamont Infrastructure Co./Alameda County Waste Management Authority: APNs: 099A-1770-002-01, 099A-1770-002-02, 099A-1770-002-03, 099A-1780-001-04, 099A-1790-003-00 and 099A-1810-001-00.

C-8244, Altamont Infrastructure Company/Marie Gomes Farms, APNs: 099A-1795-001-00, 099A-1790-002-00 and 099B-6425-002-03;

ZONING: A-BE 160 and A-BE-320 (Agriculture, Minimum Building Site Area 160 and 320 acres, respectively) Districts, intended to promote implementation of general plan land use proposals (or designations) for agricultural and other non-urban uses, to conserve and protect existing agricultural uses, and to provide space for and encourage such uses in places where more intensive development is not desirable or necessary. (Section 17.06.010). Permitted uses include a variety of agricultural and agricultural support uses, including crop, vine and tree farms, animal husbandry, wineries, fish hatcheries, trails, and on qualified building sites, single family and secondary dwelling units. Conditionally permitted uses include privately-owned wind electric generators.

GENERAL PLAN DESIGNATION: The site is subject to the East County Area Plan (ECAP), adopted in 1994 and amended substantially in November 2000 by the voter-approved Ordinance/ Initiative Measure D. The ECAP designates the site as Large Parcel Agriculture (LPA), and establishes minimum parcel sizes for specific areas of the East County (100 acres for the subject parcels) and maximum building intensity (floor area ratio or FAR). Subject to the provisions, policies and programs of the ECAP, the LPA designation permits one single family residence per parcel, agricultural uses, agricultural processing facilities, public and quasi-public uses, quarries, landfills and related facilities, “windfarms and related facilities, utility corridors and similar uses compatible with agriculture.”

ENVIRONMENTAL REVIEW: Pursuant to the California Environmental Quality Act (CEQA), the County is preparing an environmental impact report (EIR) for the proposed modifications to the CUPs. The Draft EIR was released for public review and comment on March 6, 2013. The County is preparing responses to all comments submitted before the public period closed on April 19th 2013. The County’s responses to comments, as well as revisions to the Draft EIR, will constitute the Final EIR and will be completed and made available at least 10 days before the Board of Zoning Adjustments considers the approval of the proposed project.

RECOMMENDATIONS:

That the East County Board of Zoning Adjustments hear a presentation on the methodology used in the Draft EIR, take public comment, and identify any major gaps in the information required to make a decision on the proposal at the Board’s meeting on July 18, 2013.

PERTINENT FACTS:

Physical Features: The subject CUPs are widely distributed across the Alameda County portion of the Altamont Pass Wind Resource Area (APWRA). The APWRA comprises an approximately 50,000-acre area that extends across the northeastern hills of Alameda County and a smaller proportion of Contra Costa County to the north. The region is generally characterized by rolling foothills of annual grassland. The area in which the CUPs are permitted is mostly treeless with relatively steep terrain on the west and more gently rolling hills on the east toward the floor of the Central Valley. The underlying landscape generally consists of undeveloped grazing land. Major features of the area include the wind turbines, ancillary facilities, an extensive grid of high voltage power transmission lines, substations, microwave towers, a landfill site, Interstate 580, railroad track lines, ranch houses, and clusters of rural residential homes on Dyer and Midway Roads.

History – Before 2005: In the late 1970s the State of California designated several wind resource areas in the state, including the APWRA in the northeast corner of Alameda County and the southeast corner of Contra Costa County. The designation enabled various wind-energy companies to be formed and apply for conditional use permits from the Counties to operate privately-owned wind farms (or wind energy production facilities). Most of the existing wind farms in the Alameda County portion of the APWRA were approved by the County as CUPs between 1981 and 1993. By the mid-1990s the APWRA was the largest windfarm region in the world, with over 7,200 operating wind turbines. Many windfarms overlapped, with separate permits issued to different operating companies that had obtained leases from the same property owners. Various turbine designs by different manufacturers were used, with maximum production capacity of most individual turbines ranging from 40 to 150 kilowatts (kW). A small proportion of turbines were built with larger capacities of up to 400 kW.

Since the mid-1980s research and investigations have resulted in clear evidence of birds colliding with wind turbine blades, and that many of the birds killed were special-status raptor species that are protected by the federal Endangered Species Act (ESA), including Golden Eagle, Red-Tailed Hawk, Burrowing Owl, and American Kestrel. Many other migratory bird species are protected by the international Migratory Bird Treaty Act (MBTA). Many studies investigated the causal relationship between turbine facilities and avian mortality, and several recommendations emerged for siting future turbines, managing existing facilities and removing individual turbines that have certain siting and physical features that result in higher than predicted avian mortality. Also beginning in the 1990s, interest has risen in replacing turbines in the APWRA, especially the older and smaller turbines of 100 to 150 kW capacity, with larger, more efficient turbines that have been manufactured at increasingly large scales – recently up to 3 MW (i.e., 3,000 kW) or larger. Research also indicates that the larger turbines, with blades turning at lower speeds and at higher elevations, and substantially lower net “swept area” per MW of capacity, would result in substantially reduced levels of avian mortality.

Permit Extensions, 2005 - Present. In September of 2005 and January of 2006 the County renewed a total of 31 use permits to five operating entities, including Altamont Winds Inc. (under the name of Wind Works, Inc.), Seawest Power Resources, Altamont Power Company, enXco Energy Resources, and a management company, Altamont Infrastructure Company. Although the original use permits had resulted in two or more companies operating on individual parcels, the new use permits numbers were assigned to the individual property owners in the APWRA. However, the main focus of the use permit extensions was on the specific conditions that been negotiated with the input of the property owners, the wind farm operators, state and county agencies, and three environmental advocacy groups. These conditions included requirements to establish the Scientific Review Committee (SRC, Condition 5), hire a County consultant (the Monitoring Team, Condition 6) to conduct research and monitoring of avian mortality, establish an Avian Wildlife Protection Program and Schedule (AWPPS) with various measures aimed at reduction in avian mortality (Condition 7, with detailed requirements established in Exhibit G), and to

require preparation of an Environmental Impact Report (EIR) for a repowering program and the phased removal of turbines as well as existing operations (Condition 8).

Among the requirements of the AWPPS was the Wintertime Seasonal Shutdown (WSSD), to cease turbine operations in the winter months due to indications from research conducted over several years that shutting down the wind turbines during the wintertime peak avian migration period would reduce avian mortality rates. The WSSD as established in the AWPPS was originally as a “crossover” research program to cease operation of half the turbines during the first half of the winter, switching to the suspended operation of the opposite half of the turbines in the second half of the winter. Under the direction of the SRC the WSSD was modified to require complete shutdown of the turbines operating under these CUPs between November 1 and February 15 of each year.

In addition to the WSSD, the Program and Schedule required permanent removal for the purpose of repowering, 10% of the existing turbines by September 30, 2009, an additional 25% by September 30, 2013 (for a cumulative total of 35%), an additional 50% of the original turbines by September 30, 2015 (i.e., 85% of all turbines), and the remaining 15% of turbines by September 30, 2018. For AWI, which owned 920 turbines as of 2005, this represented removal of 92 turbines in 2009, 230 more turbines by September 2013 (322 turbines in total), 460 more in 2015 (for a total of 782), and the remaining 15% (138 turbines) by September of 2018. Although the AWPPS included many other requirements, it is the WSSD and the phased removal or decommissioning of turbines that is the subject of the request for modifications of the CUPs by AWI.

PROJECT DESCRIPTION

Altamont Winds, Inc. (AWI) applied in July 2011 to modify the conditions of the 16 Conditional Use Permits (CUPs) that were approved in September of 2005, originally for 920 wind turbines with a combined nameplate generating capacity of 95 MW. AWI has removed a total of 92 100-kW wind turbines since 2005, as required by the conditions of those CUPs; however, it requests specifically to eliminate the requirement that it remove of an additional 230 turbines by September 2013 (a combined total of 35 percent, or 322), and another 460 more turbines in September 2015. Additionally, AWI seeks to eliminate its participation in the annual wintertime seasonal shutdown (WSSD) from the 1st of November to February 15th of each year. Lastly, it proposes that all of its turbines (100 percent) would be shut down or disconnected from service as of December 31, 2015.

The proposed modifications – defined as the Project for the purposes of CEQA – would therefore provide for continued, year-round operation of all 828 existing turbines on the site through December 2015, and subsequent decommissioning of the existing turbines and AWI’s share of related APWRA infrastructure. Decommissioning consists of removing turbines and associated facilities, and reclamation of their sites, and would commence in 2016 and be completed by the end of 2017. In other respects, the proposed Project involves no physical changes to existing turbines or related infrastructure prior to decommissioning activities, but only changes to the months or times of operation and the decommissioning schedule.

Although the proposed modifications do not alter the physical environment before decommissioning, the CUPs required that an EIR be prepared to evaluate the environmental impacts of a repowering program and to also evaluate continued operation of existing turbine facilities and their progressive removal or phased decommissioning. The Draft EIR is intended to comply with the latter requirement, but does not address repowering of the AWI turbines, because AWI does not currently have a repowering proposal. At the time that AWI proposes repowering, a separate project EIR will be required. A separate, combined program-project EIR is being prepared on behalf of a consortium of wind farm operators, that formerly

included AWI, to address overall repowering of the Alameda County portion of the APWRA on a program level, and some specific repowering projects that have been proposed.

The Project objective is additional operation of the AWI turbines for greater efficiency (year-round vs. partial-year operation), increased renewable energy output to help meet the state's goals for renewable energy (33% from renewable energy sources by 2020), reduced emissions of carbon dioxide and other greenhouse gases that result from conventional energy production, and increased company revenue, which the applicant asserts is essential to fund its future repowering program.

DRAFT EIR

The County prepared a Draft EIR (DEIR), which was released for public review on March 6, 2013. The East County Board of Zoning Adjustments (BZA) held a public hearing on March 28, 2013 for the purpose of taking public comments and making comments on the DEIR. As summarized in the staff report for that hearing, the DEIR provides a comprehensive identification of the environmental impacts of the project. The DEIR's analysis of biological resources indicated that the Project's modifications to the conditions of the Use Permits would have significant and unavoidable adverse impacts on special-status avian species (Impact BIO-1), specifically including the four focal raptor species, either directly or indirectly (i.e. through habitat modifications). These focal species include American kestrel, burrowing owl, golden eagle and red-tailed hawk. These project impacts were specifically distinguished (and quantitatively estimated) as those occurring as a result of both year-round operation through the winter season, and continued operation of the 828 wind turbines through the end of 2015, and in particular as occurring over and above the impacts anticipated from No-Project conditions (i.e., the baseline, or without any changes to the existing conditions of the CUPs).

The DEIR also determined that some potentially significant impacts of the Project on other aspects of biological resources could be reduced to less than significant levels after mitigation is implemented, including: impacts on special-status terrestrial species (i.e., non-avian species), including direct and indirect impacts; adverse effects on riparian habitat and other sensitive natural communities; and potential adverse effects on state or federally protected wetlands through direct removal, filling, etc. Additionally, potentially significant noise impacts could result, including exposure of residences to increased wind turbine noise (i.e., during additional months of each year), and exposure of residences to noise during decommissioning activities. However, these noise impacts could be reduced to less than significant levels with implementation of identified mitigation measures.

The DEIR addressed four alternatives, including the No Project Alternative, and three others, representing the Project only modified to include the winter seasonal shutdown (i.e., retaining the existing shutdown requirement) (Alternative 1); the Project also with a winter seasonal shutdown but with continued operation of the 828 existing wind turbines through October 31 of 2016 (about one year longer than the Project as proposed) (Alternative 2); and the Project, again with winter seasonal shutdowns, but operating all turbines through September 30 of 2018 (Alternative 3).

The comparison among the alternatives focused on the varying impacts on biological resources, especially fatality rates for avian species of concern, air quality and the emission of greenhouse gases (GHGs, both directly from decommissioning activities and indirectly by offsets of GHG emissions by non-renewable energy production sources), noise from turbines affecting a number of homeowners in the area, and the relative risks and hazards of wildland fires for each alternative.

The process of completing an EIR requires the County to respond to the comments received during the 45-day public comment period between March 6 and April 19, 2013. The Final EIR (FEIR), which is

currently being prepared, will include all of the comments and responses to each of those comments. The FEIR will also include an Errata section that will supplement the content of the DEIR with clarifications and details that individual comments requested. The FEIR will be made available a minimum of ten (10) days prior to the hearing of the Board of Zoning Adjustments on the project, which is currently scheduled for July 18, 2013. *The FEIR will not include responses to any comments made during the BZA informational hearing on June 27th, or any other comments that may have been received after the comment period ended on April 19th.*

Methodology for Determining Avian Impacts. Several comments on the DEIR requested clarification and more information regarding the methodology used in the DEIR to estimate the impacts of the project on avian wildlife, and specifically on the four focal raptor species. Comments included suggestions that the fatality rates should only be based on the results of monitoring conducted between 2008 and 2010, and exclude the data from the years 2005 to 2010, on the grounds that the earlier years represented higher fatality rates due to the presence of many hazardous turbines that had been removed in the later years.

Some commenters also believed that the fatality rates should not be based on the sum total capacity (averaged annual MW), as used in Table 3.2-4 in the DEIR, but on *net capacity factors*, that would account for operating time per month, which varies over the course of a year and which are especially reduced in the winter months.

The FEIR will provide the clarification requested as to the methodology for estimating and quantifying the impacts on avian mortality. The Planning Department and the EIR consultants wish to provide the Board, the applicant and the public in advance with supplemental information related to the methodology clarifications. At the hearing, the consultants will make a presentation on how they derived and applied the avian fatality rates.

In summary, the fatality rates as described in the DEIR (page 3.2-28, and listed in Table 3.2-4) were used to estimate the effects of the operational changes that the project proposes (i.e., retention of turbines that are scheduled to be removed, and their continual operation through the end of 2015). The rates were developed through the monitoring program that is managed by the Alameda County Avian Fatality Monitoring Team (MT), overseen by the Scientific Review Committee. The MT produces an annual report that discloses the avian fatalities observed and presents estimates of annual avian fatality rates (on a standardized per megawatt per year basis) and estimates of total APWRA-wide avian fatalities for all native avian species. These rates represent the best available data and therefore are used in the Draft EIR. Because the unit of measure for the rates from the MT is megawatts of installed capacity per year, the Draft EIR calculations must also be in the same unit of measure in order to have results that can be used for comparison between the project and the alternatives. The use of net capacity factors in calculating avian mortality are not appropriate because they fail to take into account two important elements. First, as stated above, the best available rates have a unit of measure expressed in per megawatt of installed capacity per year. Second, data collected by the MT clearly shows that wintertime use of the APRWA for some focal species (most importantly golden eagle and red tail hawk) is much higher than at other times of the year. Thus, while turbines may be spinning less during those winter months, more birds are present in the region, which the evidence suggests would result in higher fatality rates for those birds.

Recommendation: That the East County Board of Zoning Adjustments hear a presentation on the methodology used in the Draft EIR, take public comment, and identify any major gaps in the information required to make a decision on the proposal at the Board's meeting on July 18, 2013.

Staff Planner: Andrew Young, Planner III

Reviewed By: Sandra Rivera, Assistant Planning Director

H:\APPLICATIONS - 2011\PLN2011_00102\Staff Report\PLN2011-00102 EBZA 6-27-13 - AWI Pmt Mods Update.docx