Draft
Initial Study/
Mitigated Negative Declaration

1 mW Wind Turbine

Victor Valley Community College

18422 Bear Valley Road
Victorville, California

October 2007

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INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

**WIND TURBINE AT VICTOR VALLEY COMMUNITY COLLEGE,
VICTORVILLE, CALIFORNIA**

The Victor Valley Community College District proposes to construct and operate a 1-megawatt (MW) wind turbine on its campus in Victorville, San Bernardino County, California. The Proposed Project would include removal of a temporary meteorological data collection tower, construction of the wind turbine, an underground electrical transmission line and access roadway improvements to the turbine.

The California Environmental Quality Act (CEQA), as established by the statute (Public Resources Code §§ 21000 *et seq.)*, requires that the environmental implications of an action by a local agency be estimated and evaluated before project approval. This Initial Study has been prepared in accordance with Section 15365 of CEQA Guidelines (14 Cal. Code Reg. 1500 *et seq.*). This Initial Study provides the assessment for a determination of whether the project may have a significant effect on the environment.

SECTION 1. PROJECT INFORMATION

1.1	**Project Title**	Wind Turbine at Victor Valley Community College
1.2	**Lead Agency Name and Address**	Victor Valley Community College District 18422 Bear Valley Road Victorville, CA 92392-5849
1.3	**Contact Person and Phone Number**	Robert Silverman, Ph.D. Superintendent/President, Victor Valley Community College (760) 245-4271 ext. 2150
1.4	**Project Location**	Victor Valley Community College is located in San Bernardino County approximately 38 miles north of San Bernardino, 83 miles northeast of Los Angeles and 190 miles south of Las Vegas (VVC, 2003). The campus is east of the Interstate 15 (I-15) corridor and south of California State Highway 18. The college is located in the City of Victorville and surrounded by Adelanto, Apple Valley and Hesperia to the northwest, northeast and south, respectively (Figure 1). The proposed wind turbine would be constructed on the Lower Campus east of Mojave Fish Hatchery Road and north of the soccer field (Figure 2).
1.5	**Project Sponsor's Name and Address**	Victor Valley Community College District 18422 Bear Valley Road Victorville, CA 92392-5849
1.6	**General Plan Designation**	The City of Victorville General Plan designation for the proposed wind turbine site is Public/Institutional (City of Victorville, 2007).

Figure 1. Location of the Proposed Project

Figure 2. Proposed Wind Turbine at Victor Valley Community College

1.7 Zoning

The location of the proposed project is zoned P-C (Public and Civic District) in accordance with the Title 18, Chapter 18.48 of the City of Victorville Municipal Code.

1.8 Description of the Proposed Project

The Victor Valley Community College District proposes to construct and operate a 1-MW wind turbine on the campus of Victor Valley Community College. This wind turbine would be the first alternative energy system on the campus of Victor Valley Community College. The proposed wind turbine would improve energy efficiency and provide a renewable source of electricity to Victor Valley Community College. Assuming an average electrical load of 1.3 megawatts at the college, the wind turbine would generate between 10 and 15 percent of the energy needs on an annual basis. At peak output power, the turbine could generate about 75 percent of the electrical load of the college (Chevron Energy Solutions, 2005).

The wind turbine would be designed in accordance with State of California Division of the State Architect (DSA) standards. The DSA acts as California's policy leader for building design and construction, and provides design and construction oversight for K–12 schools and community colleges. The wind turbine would also be designed in accordance with Federal Aviation Administration (FAA) requirements for obstructions to navigable airspace.

The proposed wind turbine would consist of a two-bladed wind turbine on a tubular steel tower to be approximately 230 ft (70 m) tall. The rotor would have a diameter of 193 ft (59 m). The turbine would have a maximum height of approximately 326 ft (99 m), measured from the base of the tower to the rotor blade tip at its highest point. The turbine would be placed on a foundation elevated approximately 2 ft above the ground (total height of 328 ft). The system would include a wind turbine generator, transformer, switchgear and metering panel. The system would be designed to meet California Building Code (CBC) for Seismic Zone 4. The preliminary project footprint of the wind turbine would be approximately 1,225 sq ft (0.03 acres). The wind turbine would be painted bright white, and include lighting in accordance with FAA requirements.

Approximately 1,100 ft of trench would be required for the new conduits for a 5 kiloVolt (kV) connection from the turbine to Mojave Fish Hatchery Road. The new line would connect to the electrical distribution loop for the campus.

An access road to the wind turbine would be constructed along the alignment for the transmission line. The roadway would either consist of an improved dirt road or a paved roadway. No new parking would be required. Parking for maintenance activities is available on the improved dirt road. The existing fencing may be replaced to accommodate access of the crane and associated equipment.

The proposed facilities to be constructed are shown on Figure 3.

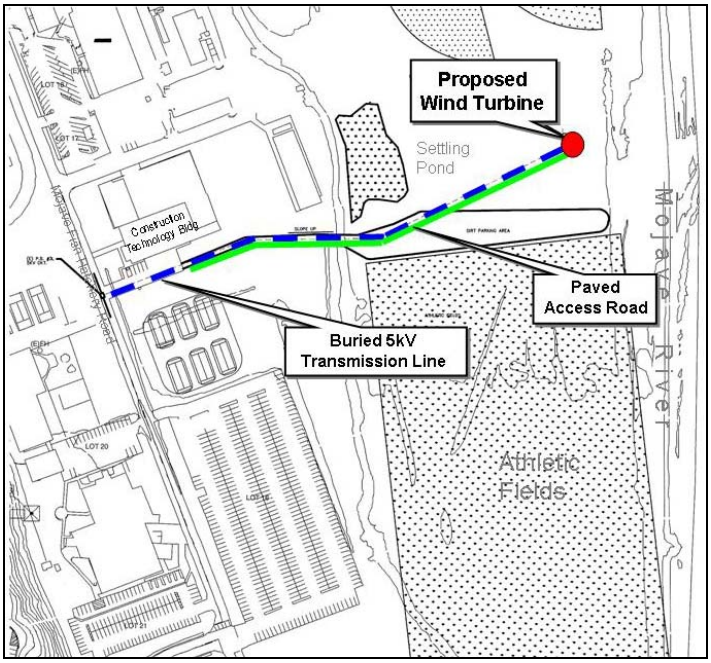

Figure 3. Preliminary Site Layout for Wind Turbine at Victor Valley Community College

1.9 Background

The Victor Valley Community College District serves an area of approximately 2,200 square miles in the High Desert area of San Bernardino County. The District was created in 1960 and the college is governed by an elected Board of Trustees. The Board of Trustees is under the advisory supervision of the California Board of Governors which oversees higher education in California. The campus occupies approximately 252 acres of land and has an enrollment of over 11,000 students (VVC, 2003).

Victor Valley Community College has an electrical power plant (Central Plant) located on the Upper Campus. The main existing service is a 4.16 kV, 1200 amp switch gear, metered by Southern California Edison. The maximum demand is approximately 1,760 kilo volt-amperes (kVA) which represents approximately 40 percent of capacity based on the existing 750 ampere (A) fusing (Carrierjohnson, 2007).

In 2006, the Victor Valley Community College District approved an Energy Service Contract with Chevron Energy Solutions company, a division of Chevron U.S.A., Inc. for the implementation of certain energy-related improvements to District facilities in accordance with California Government Code Sections 4217.10 to 4217.18. The proposed wind turbine is one of several energy improvement projects underway at Victor Valley Community College.

1.10 Purpose of the Project

The purpose of the project is to improve energy efficiency and supplement the existing power plant at the Victor Valley Community College with a renewable source of energy. The Proposed Project would use airflow to power a wind turbine. Wind power is renewable and produces no greenhouse gases during operation. The power

output of a turbine is a function of wind speed, so as wind speed increases, power output would also increase. Areas where winds are stronger and more constant are preferred locations for wind farms.

The project would also serve an educational purpose as a demonstration facility for construction and engineering technology students.

1.11 Construction

The Proposed Project would require construction of the turbine, transmission line and access road (Figure 3) as follows:

- Approximately 1,225 sq ft of property would be used for the proposed wind turbine (generator, transformer, switchgear and metering panel) to be constructed between the existing baseball/softball and soccer fields on the Lower Campus. An existing 192 ft high meteorological tower and support wiring (surrounded by fencing) would be dismantled or demolished to allow construction of the proposed wind turbine. The proposed wind turbine would be fenced and gated.
- Approximately 1,100 ft of buried 5 kV transmission line would be constructed from the transformer pad of the proposed wind turbine to Mojave Fish Hatchery Road to the west. The alignment for the transmission line would be along gravel-covered, unpaved ground from the turbine site, through an unpaved parking area and traveling upslope to the west, and through the paved parking lot south of the Construction Technology Building at Mojave Fish Hatchery Road. An access road to the wind turbine would be constructed along this transmission line alignment (approximately 1,100 ft of roadway would be paved including repaving of areas where transmission line is installed).

Construction of the wind turbine would require minimal site clearing, grading and excavation within the fenced area north of the soccer field. With the exception of removal of the existing meteorological tower, no demolition of any structures is anticipated. Construction of the wind turbine would require an excavation depth of up to approximately 50 ft from the surface to construct a foundation approximately 30 ft in diameter. The subsurface soil would be prepared for the foundation and pads. The tower, rotor, nacelle and transformer would be shipped and assembled on site with the use of cranes.

Installation of the transmission line would include trenching to a depth and width of 5 ft, placing of bedding material, placement of the transmission line, backfilling the trench, and repaving. Although the construction plan has not been determined at this time, it is possible that the entire length of this trench may be open at one time. While some temporary lane closures may be required, closures of entire roads would not be expected during the construction period. Construction vehicles and equipment would be staged onsite and would not require street closures. Construction of the Proposed Project would require approximately three months.

1.12 Operation

The proposed wind turbine would be owned and operated by Victor Valley Community College. Operations and maintenance function for the wind turbine may be contracted to a private entity.

The wind turbine would operate on an automatic basis whenever sufficient wind is present at a maximum 24 hours per day, seven days per week. The system is expected to have an operational lifespan of 25 years.

1.13 Related Projects

A variety of improvements and upgrades are ongoing and planned on the campus of Victor Valley Community College (Table 1).

Table 1. Related Projects at Victor Valley Community College

Project	Area (sq ft)	Year(s) of Construction
Central Plant Upgrades	20,414 [a]	2006/2007
Advanced Technology Building	34,086	2006 - 2008
Speech/Drama Addition	20,275	2006/2007
Adaptive Physical Education Center	15,000[a]	(TBD)
Health Professionals Building	19,300[a]	2011 - 2012
Fire Technology/Admin. of Justice Facility	15,768	2011 - 2012

Source: VVCC, 2007; Victor Valley CCD, 2006; Carrierjohnson, 2007; DSA, 2007
a Estimated Area TBD to be determined

The Federal Highway Administration and City of Victorville are proposing to construct a Park-N-Ride facility, approximately 3.7 acres in size, at the northeast corner of Fish Hatchery Road and Bear Valley Road, approximately 0.3 mile southwest of the proposed wind turbine.

In addition, the cities of Victorville, Apple Valley and Hesperia are in various stages of approving specific plans for new residential communities that will add new dwelling units, commercial, retail and recreational spaces to the area.

Formerly George Air Force Base, the Southern California Logistics Airport (SCLA) is a dedicated air cargo facility with future plans for an 8,500-acre multi-modal business complex that would integrate manufacturing, industrial and office facilities with nine core business units: air cargo, aviation maintenance, rail complex, real estate development, military defense programs, flight testing, advanced flight training, charter passenger service and a business/executive jet travel center. SCLA is located approximately 10 miles northwest of the proposed site for the wind turbine.

1.14 Surrounding Land Uses and Setting

Public/Institutional, Open Space/Open Space - Conservation, Low-Density Residential (5 dwelling units per acre) and Residential – Equestrian (1 dwelling unit per 1 to 2.5 gross acres) (City of Victorville, 2007 and Apple Valley, 2007)

1.15 Other agencies whose approval is required

Federal Aviation Administration, California Division of State Architect, California Department of Fish and Game, and Lahontan Regional Water Quality Control Board (Region 6)

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following page.

☐ Aesthetics	☐ Agricultural Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Hazards & Hazardous Materials	☐ Hydrology /Water Quality	☐ Land Use /Planning
☐ Mineral Resources	☐ Noise	☐ Population /Housing
☐ Public Services	☐ Recreation	☐ Transportation /Traffic
☐ Utilities /Service Systems	☐ Mandatory Findings of Significance	

Determination: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☑ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Robert M Silverman — Signature

10/24/07 — Date

Robert Silverman, Ph.D., Superintendent/President — Printed Name

Victor Valley Community College — For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance

SECTION 2. CEQA ENVIRONMENTAL CHECKLIST

The Environmental Checklist and discussion of potential environmental effects were completed in accordance with Section 15063(d)3 of the California Environmental Quality Act Guidelines to determine if the proposed project may have any significant impacts on the environment.

A brief explanation is provided for all determinations. A "No Impact" or "Less Than Significant Impact" determination is made when the project would not have any impact or would not have a significant effect on the environment for that issue area, respectively, based on a project-specific analysis

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. Aesthetics. Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
While the City of Victorville General Plan does not evaluate aesthetics as a planning element, the City's land use element includes the goal of [maintaining] Victorville as an aesthetically pleasing community with development standards which reflect community needs. There are no designated scenic vistas in the City of Victorville. The proposed wind turbine would be located on the Lower Campus of Victor Valley Community College. The area is developed on either side of the Mojave River. The proposed wind turbine would be in the same location as the existing, unlit 192-ft high meteorological tower that forms a thin, vertical line protruding above its surroundings. The site is generally flat and composed of irrigated recreational fields and visible north of Bear Valley Road, with the Fairview and San Gabriel Mountains serving as a scenic backdrop. The project setting is developed with low density residential surrounding areas. The proposed wind turbine would protrude approximately 328 ft above the ground and be a permanent, fixed structure that would serve as a distinct focal point visible from Bear Valley Road and to residents north and east with a view of the Lower Campus. The wind turbine would be bright white in color, with lighting, and both taller and wider in appearance than the existing meteorological tower. The rotor of the wind turbine would rotate continuously whenever wind is present. The proposed wind turbine would serve as a new visual element in the area, but would not obstruct general views of the mountains or other scenic aspects of the area. The transmission line would be located underground and would not adversely affect any scenic views. Roadway modifications would not change the visual appearance of the site or its surroundings. The effect of the Proposed Project on scenic vistas would be considered less than significant.				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
There are no State Scenic Highways in the project area (Bear Valley Road is not designated as a state scenic highway). Although the structure would be visible in the local area, there would be no substantial damage to scenic resources within a state scenic highway. Therefore, impacts to scenic resources from the Proposed Project would be considered less than significant.				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?			X	

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The visual character of the project site is primarily institutional with residential land uses in a commercial area. The visual field is an urbanized desert setting composed of natural features including a backdrop of mountain ranges to the east and a partial view of the dry riverbed of the Mojave River. This view contains developed structures including college buildings on the Upper Campus and recreational fields on the Lower Campus. Although transmission towers and other utility poles can be seen in the distance, the existing 192-ft meteorological tower is the single tallest structure in the area. The meteorological tower is barely visible due to its narrow width, appearing as a faint vertical line in the viewshed (Figure 4).

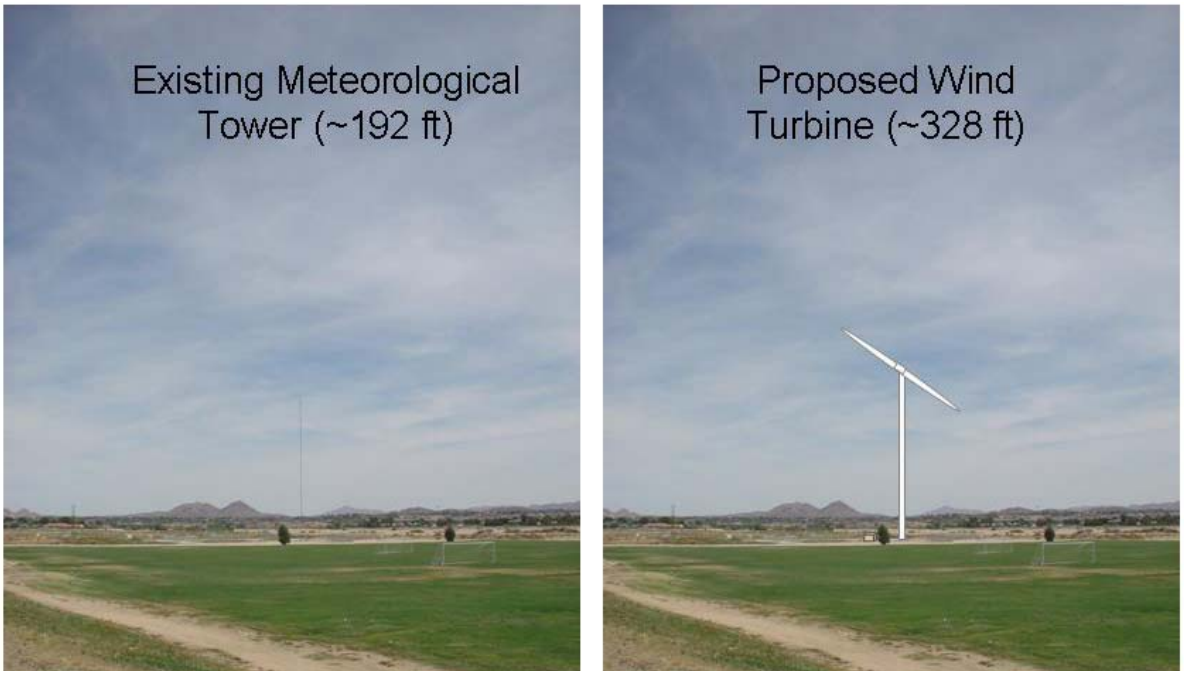

Figure 4. Comparison Views of Existing Meteorological Tower and Proposed Wind Turbine on Lower Campus of Victor Valley Community College (looking northeast)

The proposed wind turbine, approximately 328 ft above ground, would be placed at approximately the same location as the existing meteorological tower (Figure 4). The wind turbine would become a permanent visible aspect in the view of the Mojave River open space corridor as seen when looking north along Bear Valley Road. Depictions of the proposed wind turbine, as would be seen from Bear Valley Road, are shown on Figures 5 through 7.

The wind turbine would protrude above other visual features including the distant ridgeline of the Fairview Mountains to the east and the San Gabriel Mountains to the southwest (when viewed from residences in Apple Valley east of the site).

The proposed wind turbine would be visible to certain residents north of Victor Valley Community College. This would include limited residents along Deer Park Lane, Pahute Road, Fairway Road (cul de sacs from Deauville Drive) and Mountain Meadows Drive. Figure 8 shows a view of the proposed wind turbine from the Spring Valley Golf Course.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

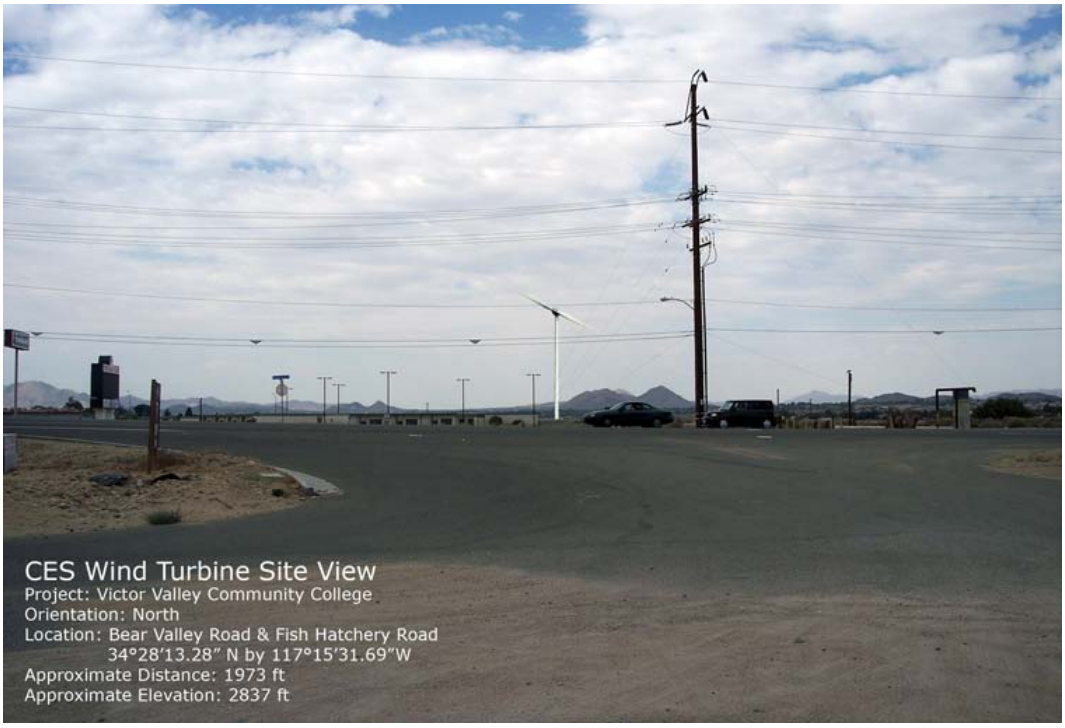

Figure 5. View of Proposed Wind Turbine from Bear Valley Road (looking northeast)

Figure 6. View of Proposed Wind Turbine from Bear Valley Road (looking northwest)

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 7. View of Proposed Wind Turbine from Bear Valley Road (looking northwest)

Figure 8. View of Proposed Wind Turbine from Spring Valley Lake Golf Course (looking southeast)

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed wind turbine would be visible to those residents with view of the Lower Campus that includes recreational fields adjacent to the Mojave River. East of the site in the City of Apple Valley, the proposed wind turbine would be visible to certain residents along Indian River Drive, Yorkshire Drive, Pinto Way, and Saddle Lane. The wind turbine would be visible from the Spring Valley Equestrian Center (Indian River Drive) as well as from commercial locations along Apple Valley Road. Figure 9 shows a view of the campus from residences to the east in Apple Valley. The proposed wind turbine would be visible as a new focal point within the built environment. The wind turbine would not obscure views of the distant mountains, but would change and interrupt the viewshed for some residents. Although the proposed wind turbine would not change the overall visual character of the area, it would introduce a new dominant feature in the viewshed of the Mojave River at this location. This visual change would not be considered a substantial degradation of the visual quality of the area. The County of San Bernardino has designated the Mojave River corridor from Barstow to Hesperia as a natural Open Space for the purposes of recreation, scenic resources and health/safety (San Bernardino County, 2006). The Mojave River is the major perennial river in the desert region and is an area of extreme biologic importance, containing rare desert riparian habitat. The entire length of the Mojave River should be maintained as open space to provide needed riparian habitat for desert species. Dispersion corridors should be provided along the river through urban areas (San Bernardino County, 2006). The Proposed Project would not result in any conflicts with plans and policies for preservation of open space, and would not adversely impact the visual character and quality of the project area. The Proposed Project would not substantially degrade the visual character of the site and its surroundings.				
d) Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?			X	
The existing recreational fields on the Lower Campus are currently not lighted, although parking areas and roadways have outdoor lighting. The surrounding area, including Bear Valley Road, is characterized by typical urban sources of light and glare. Construction activities would occur primarily during daylight hours; therefore, no new sources of artificial lighting would be necessary during construction at the wind turbine site or transmission line and access road. Because of its height, the proposed wind turbine would require artificial lighting in accordance with Federal Aviation Administration (FAA) requirements for marking obstructions to navigable airspace. This new lighting would be placed at the top of the nacelle at a height of approximately 279 ft above the ground. Lights would operate continuously regardless of operation of the wind turbine. A single, flashing red or white strobe light in the sky would be visible during the day and night by residents north and east of the site. Although the new lighting would operate continuously, the light would be a single, red or white flashing point in the sky and, therefore, would not create a new source of substantial light in the area. Due to the safety aspect of the required lighting, there are no alternatives for reduced lighting for a tower of this height. The proposed wind turbine would be painted bright white and would not be expected to generate a substantial amount of light or glare in the surrounding community. Therefore, impacts from light and glare would be considered less than significant.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Figure 9. Comparison Views of Existing Meteorological Tower and Proposed Wind Turbine from Residences East of Victor Valley Community College (looking southwest)

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
II. Agriculture Resources. In determining whether impacts to agriculture resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
Agricultural crop production in Victorville is limited to property northeast of State Highway 18 east of and abutting the Mojave River. There is no agricultural production on or near the Victor Valley Community College campus. The State of California Department of Conservation Division of Land Resources has surveyed land as part of its Farmland Mapping and Monitoring Program. Most of the City of Victorville is classified as Developed or Built-up Land. The Proposed Project would not result in conversion of farmland. Impacts to farmland would not occur.				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X
The only Williamson Act contract in Victorville is the Kemper-Campbell Ranch southeast of State Highway 18 and west of and abutting the Atchison, Topeka and Santa Fe Railroad right-of-way. There are no Williamson Act contracts in place at or in the immediate vicinity of the site for the Proposed Project. Therefore, the Proposed Project would not result in any conflicts to existing zoning or Williamson Act contracts.				
c) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
The Proposed Project would not result in the conversion of farmland into non-agricultural uses.				
III. Air Quality: Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?			X	

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The Proposed Project would result in temporary air pollutant emissions during construction of the wind turbine at Victor Valley Community College, as shown on Table 2. The construction-related air pollutant emissions would not result in any conflict with objectives or implementation of the Mojave Desert Air Quality Management District (MDAQMD) Air Quality Management Plan. Impacts to air quality are considered less than significant.

Table 2. Estimated Air Pollutant Emissions from Proposed Construction of Wind Turbine at Victor Valley Community College

Source	Emissions (tons/year)					
	CO	ROG	NOX	SOX	PM10	PM2.5
Construction of Wind Turbine	0.18	0.03	0.42	0.05	0.10	0.02
Construction of Access Road	0.58	0.03	0.15	0.01	0.65	0.11
Electrical Line Trenching	5.40	1.06	13.12	1.42	1.29	0.22
Removal of Existing Met Tower	0.00	0.01	0.04	0.00	0.05	0.01
Wind Turbine Foundation	2.55	0.45	5.97	0.65	0.37	0.06
Totals:	**8.71**	**1.58**	**19.70**	**2.13**	**2.47**	**0.42**
MDAQMD Threshold (lb/day)[a]	548	137	137	137	82	NA

[a] Source: MDAQMD, 2006

CO = carbon monoxide SOX = sulfur oxides

ROG = reactive organic gases PM10 = particulate matter less than or equal to 10 microns in diameter

NOX = nitrogen oxides PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

Particulate matter emissions shown on Table 2 do not reflect watering for dust control. Although impacts to air quality are considered less than significant, emissions of particulate matter can be reduced by approximately 50 percent with watering for dust control (a standard construction practice).

b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?			X	

The Proposed Project would result in the generation of air contaminant emissions that would result from the use of construction equipment and construction worker vehicles (Table 2). These emissions would not exceed MDAQMD significance thresholds. Construction activities would be temporary and would not be expected to result in any adverse, long-term effects on air quality because the generation of air pollutants primarily associated with temporary construction activities would be limited to construction projects for the wind turbine system installation. Impacts to air quality from construction of the Proposed Project would be considered less than significant. Once the construction of the wind turbine is completed, there would be no operational emissions other than from two maintenance vehicles that would access the turbine twice per year.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?			X	

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

The project area is located in Mojave Desert Air Basin and managed by the Mojave Desert Air Quality Management District. The nearest monitoring station is the Victorville Air Quality Monitoring Station, located at 14306 Park Avenue. The area is classified as a non-attainment area for ozone precursors (reactive organic compounds and nitrogen oxides) and particulate matter (both PM10 and PM2.5). The net increase in emissions of these pollutants that would be attributed to construction of the Proposed Project would not be expected to exceed federal or state standards.

Two other construction projects are planned on the campus of Victor Valley Community College during the same time frame as the Proposed Project, as shown on Table 3. These two projects would generate air contaminant emissions from the use of construction equipment and construction worker vehicles (Table 3). These emissions would not exceed MDAQMD significance thresholds.

Table 3. Estimated Air Pollutant Emissions from Other Construction Planned at Victor Valley Community College

Source	Estimated Emissions (tons/year)					
	CO	ROG	NOX	SOX	PM10	PM2.5
Advanced Technology Building	10.71	2.16	26.34	2.85	7.44	1.26
Speech/Drama Addition	6.37	1.28	15.67	1.70	4.25	0.72
Totals:	**17.08**	**3.44**	**42.01**	**4.55**	**11.69**	**1.98**
Proposed Project	8.71	1.58	19.70	2.13	2.47	0.42
Other Construction Projects	17.08	3.44	42.01	4.55	11.69	1.98
Combined Totals:	**25.79**	**5.02**	**61.71**	**6.68**	**14.16**	**2.40**
MDAQMD Threshold (lb/day) [a]	548	137	137	137	82	NA

[a] Source: MDAQMD, 2006

CO = carbon monoxide
ROG = reactive organic gases
NOX = nitrogen oxides
SOX = sulfur oxides
PM10 = particulate matter less than or equal to 10 microns in diameter
PM2.5 = particulate matter less than or equal to 2.5 microns in diameter

Construction activities would be temporary and would not be expected to result in any adverse, long-term effects on air quality. Even when the other planned construction project estimated emissions are combined with the Proposed Project, no significance criteria are exceeded; therefore, the projects would not be considered cumulatively considerable. Impacts from cumulatively considerable air pollutants would be considered less than significant.

d) Expose sensitive receptors to substantial pollutant concentrations?			X	

The nearest sensitive receptor to the site is the Victor Valley Community College Child Development Center approximately 0.56 mile from the proposed site. The proposed wind turbine would be located between recreational fields used on a limited basis by college students and the public during weekends and holidays. Children at the Child Development Center, students and community members would not be expected to be exposed to substantial construction-related pollutants as a result of the Proposed Project. Impacts to sensitive receptors would be considered less than significant

e) Create objectionable odors affecting a substantial number of people?				X

No activities would occur, and no materials or chemicals would be stored on-site, that would have the potential to cause odor impacts during project activities at the site. Therefore, adverse odor impacts affecting a substantial number of people would not be expected to occur.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. Biological Resources. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	

The wind turbine would be situated between athletic fields (baseball diamonds to the north and soccer fields to the south). A holding pond is west of the proposed site. The wind turbine would be approximately 165 ft (50 m) west of the property line (marked by a fence), and approximately 213 ft (65 m) from a levee on the west side of the Mojave River. The immediate area where the turbine would be placed is used as an unpaved, makeshift parking lot. Electrical power generated by the turbine would be routed in a buried corridor westward along an existing dirt road and beneath a parking lot.

The proposed site for the wind turbine was surveyed by a terrestrial ecologist on June 4, 2007. Neither direct sightings nor indirect evidence of species considered sensitive by the State of California, and no Federal- or State-listed threatened or endangered species, were recorded in the vicinity of the proposed site or inhabit the study area.

Land use by Victor Valley Community College and construction of the Mojave River levee have removed all vestiges of the native creosote-white bur sage community. The habitat necessary for Mohave ground squirrel (*Spermophilus mohavensis*) and desert tortoise (*Gopherus agassizii*) which may once occurred here before roads or buildings associated with the College were constructed, have been entirely and permanently altered. Neither of these protected species inhabit the study area at this time.

Yellow-breasted chat (*Icteria virens*), considered sensitive by the State of California, was heard in a marshy channel about a quarter mile north of the proposed wind turbine site. A Cooper's hawk (*Accipiter cooperii*), also considered a sensitive species, was observed perched in a willow at the same location.

Areas in the study area where burrowing owl (*Athene cunnicularia*) would likely burrow were examined carefully. None of the burrows show any evidence of present, recent, or former occupation by burrowing owls. No burrowing owls were seen in flight anywhere within the study area. An old owl pellet cast probably by a great-horned (*Bubo virginianus*) was found on the ground below a chain-link fence at the site of the tower. Bones visible in the cast were from a rodent. No further attempt was made to identify the bones.

California ground squirrel (*Spermophilus beecheyi*) was abundant throughout the study area. Gopher mounds (*Thomomys* cf. *bottae*) were widespread on the sloped embankments around the fields, but less so on the fields. Flocks of up to an estimated 50 horned larks (*Eremophila alpestris*) used the soccer fields, unpaved parking grounds, and the baseball diamonds.

The wind turbine would be built adjacent to the west side of the Mojave River. If birds use this area as a local flyway along the river's course, they may be close enough to run into the rotors when flying at night. Similarly, bats drawn to forage by moisture from irrigation and the insect flights that moisture promotes, may collide with the tower or rotors of the wind turbine. The potential exists for bird or bat deaths from collision with the proposed wind turbine.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Impacts to biological resources from construction and operation of the proposed project would not adversely affect listed and sensitive species.				
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Service?			X	
The project site does not contain riparian habitat. The proposed site for the wind turbine is an unpaved, gravel-covered flat area containing a meteorological tower. The conduit and access road would be constructed within existing roadways and not within drainage areas. A steady flow of water along a man-made channel occurs about 1,800 ft (550 m) north of the wind turbine site. The source of this water was not determined, but is being directed toward the main channel of the Mojave River. Bulrushes (*Scirpus* sp.), cattails (*Typha latifolia*), willows (*Salix* sp.) and many other aquatic plant species were present. The channel constitutes a narrow biotic oasis on the western side of the river channel. Among others, yellow breasted chat (*Icteria virens*) were heard in their customary way of calling from hiding within the vegetation. A solitary Cooper's hawk (*Accipiter cooperii*) was also observed. The floodplain on the west side of the Mojave River has been previously disturbed. Most is in turf grass appropriate for field sports and receives irrigation. The fields are mowed regularly. It appears the sports fields were leveled by pushing soil to the east, forming irregular mounds along the outside edge of the levee. North of Bear Valley Road and along the athletic fields, the levee confines the Mojave River on the western side. All the athletic fields, and the site of the proposed wind turbine, are in the natural floodplain as it would have existed prior to hydraulic constraints by the levee. An area at the south end of the soccer field has been used historically as a dump site for construction materials, mostly soil and rocks, but with considerable brush deposited to limit erosion. Three large cottonwoods (*Populus fremontii*) still grow north of Bear Valley Road. The levee was built immediately west of these trees which are inside the levee. No notable wildlife species were seen or heard in these trees. Impacts to riparian habitat or other sensitive natural communities would be considered less than significant.				
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
There are no federally protected wetlands within one mile of the proposed site for the wind turbine (Track Info Services, 2007). Riparian areas are approximately 1,800 ft (550 m) north of the proposed wind turbine site as described in Section IV.(b). The Proposed Project would not result in physical modifications or placement of facilities in, or adjacent to, wetlands.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
Although the potential exists for bird or bat deaths from collision with the proposed wind turbine, the Proposed Project would not be expected to interfere substantially with movement of wildlife. The proposed wind turbine, transmission line and access road would be constructed on previously disturbed ground and roadway surfaces. Impacts to wildlife movement would be considered less than significant.				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				X
The Proposed Project would not result in the need to remove any trees subject to local policies or ordinances. No conflicts with local policies or ordinances would occur.				
f) Conflict with the provision of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
The proposed wind turbine would be located in the planning area of the West Mojave Plan (Habitat Conservation Plan and California Desert Conservation Area Plan). The proposed wind turbine site, however, is not located within any conservation areas for any particular species as designated in this plan. The County of San Bernardino Open Space Plan identifies a wildlife corridor along the Mojave River in the Victorville Area. The Mojave River wildlife corridor follows the alignment of the river from Hesperia northward past Barstow. As the major perennial river in the desert region of San Bernardino County, the Mojave River is an area of extreme biological importance and contains rare desert riparian habitat (County of San Bernardino, 2006). The City of Victorville is participating in development of the West Mojave Coordinated Management Plan, a habitat conservation plan initiated by the U.S. Bureau of Land Management. This plan has not yet been finalized or adopted at this time (City of Victorville, 2007). The Proposed Project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.				
V. Cultural Resources. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?				X

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed wind turbine would not require the removal of any existing buildings or structures other that the meteorological tower (erected in 2005). There are no historic landmarks within 0.5 mile of the proposed site (Track Info Services, 2007), nor are there any sites in Victorville or Apple Valley that are currently listed on the National Register of Historic Places (NRHP). None of the 27 historic sites or points of interest in Victorville are considered eligible for registration as a California Historical Landmark, and are only significant with respect to local history (City of Victorville, 2007). The Proposed Project would not result in any adverse change to historical resources.				
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?		X		
The entire City of Victorville General Plan area is considered to be sensitive regarding archaeological resources due to the existence of recovery sites throughout. Therefore, excavation/grading beyond minor cut and fill associated with finished grading requires evaluation to determine the potential for archaeological resources (City of Victorville, 2007). An archaeological survey of the proposed site for the wind turbine was conducted in September 2007. No prehistoric or historic archaeological resources or historic-era built-environment resources were identified during the survey. A check of the Native American Heritage Commission (NAHC) Sacred Lands File did not identify any Native American cultural resources or sacred sites that would be impacted by the proposed project. California Historic Landmark No. 963, the Mojave Trail, is located immediately adjacent to the project area. Although no archaeological resources were identified within or immediately adjacent to the project area and the results of the archaeological survey were negative, the proximity of the Mojave Trail/Mojave River and the alluvial soils contained within the project area indicate that the area may contain buried archaeological resources. Therefore, the proposed project has a high potential to encounter subsurface archaeological material. Due to the need for intrusive ground disturbance associated with the foundation for the wind turbine, the potential exists for encountering subsurface cultural materials during project construction, primarily during trenching and excavation activities. To avoid potential impacts to archaeological resources that may be buried beneath the project area, the Victor Valley Community College District would ensure that the following two mitigation measures are implemented: *Prior to project construction, a qualified archaeologist would be retained to monitor all project-related ground disturbance. A pre-construction meeting should be conducted in which the project archaeologist shall explain procedures necessary to protect and safely remove potentially significant archaeological materials for study and curation. Methods used during monitoring and/or recovery of archaeological resources would be documented in a report of findings.* *In the event any archaeological materials or subsurface deposits are unearthed during earthmoving activities, the construction contractor would cease activity in the affected area (e.g., redirect activities into another area) until the discovery can be evaluated by a qualified archaeologist or historic resources specialist, as required, and appropriate treatment measures implemented.* With incorporation of these mitigation measures, impacts to archaeological resources would be considered less than significant.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Directly or indirectly destroy a unique paleontological resource or site of unique geologic feature?		X		

Recorded paleontological resource recovery sites are widespread throughout the Victorville General Plan area. In 1985, the City of Victorville conducted a city-wide geologic survey to determine the location of the fossil bearing lake bed strata in the city. The survey identified nine ancient lake bed deposits estimated to date back to the Pleistocene Epoch (10,000 to 900,000 years ago). These lake beds contain numerous mammalian fossils, including teeth, limb fragments, phalanges and metacarpal from hoses, camels and other large animals.

Several resources have been identified and recovered as a result of monitoring requirements. The most significant find was a mammoth discovered in 1993. With the exception of areas above the 2,985 foot contour or below the 2,727 foot contour, all of the General Plan area is located on fossil bearing strata[1]. The entire General Plan area is considered to be sensitive regarding paleontological resources due to the existence of recovery sites throughout (City of Victorville, 2007).

In October 2007, a paleontological resources records search and review of scientific literature was conducted for the proposed project at the San Bernardino County Museum, Division of Geology. Findings of this study indicate that the upper soils within the project area are comprised of Holocene floodplain and Recent active wash sediments of the Mojave River. These sediments have been assigned a low paleontologic sensitivity. In some areas, however, these younger sediments may overlie older Pleistocene alluvium, which has been assigned a high paleontologic sensitivity. No previously-known paleontological localities have been recorded within the boundaries of the project area, although one fossil locality has been identified approximately 0.25 mile south-southwest of the site. Impacts to significant nonrenewable paleontologic resources would not be expected and paleontological monitoring is not recommended.

Earthmoving activities associated with project construction, as well as the unauthorized collection of fossil remains by construction personnel, could result in the loss of previously unrecorded fossil sites and the remains of extinct land mammal species. This loss would be a significant adverse environmental impact to paleontologic resources. To avoid potential impacts to paleontological resources, the Victor Valley Community College District would ensure that the following mitigation measure would be implemented before and during construction activities:

In the event paleontological resources are encountered during earthwork, the construction contractor would cease activity in the affected area (e.g., redirect activities into another area) until a qualified paleontologist can evaluate the discovery, and implement appropriate treatment measures. The paleontologist would determine if the paleontological material should be salvaged, identified and permanently preserved. Curation of specimens into an accredited museum repository would be conducted by a qualified paleontologist, who would also need to be retained to develop a mitigation program in accordance with the County of San Bernardino Development Code §82.20.030, including curation, to mitigate adverse effects associated with the proposed project.

With incorporation of these mitigation measures, impacts to nonrenewable paleontologic resources would be considered less than significant.

d) Disturb any human remains, including those interred outside of formal cemeteries?		X		

[1] The proposed site for the wind turbine is located at the 2,820 foot contour (within fossil bearing rock strata).

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The Proposed Project is not expected to encounter any human remains as a result of earthmoving activities. The project area is not otherwise known to be a previous cemetery or burial site. Therefore, the probability of encountering human remains during project construction is unlikely. To avoid potential impacts to human remains that may be buried beneath the surface in the work area, the Victor Valley Community College District would ensure that the following mitigation measure is implemented: *In the event human remains are encountered during project construction, the San Bernardino County Coroner shall be immediately contacted to determine whether or not investigation of the cause of death is required. In the event the remains are Native American in origin, the Native American Heritage Commission shall be contacted to determine necessary procedures for protection and preservation of remains, including reburial, as provided in the CEQA Guidelines, Section 15064.5(e).* With incorporation of this mitigation measure, impacts to human remains would be considered less than significant.				
VI. Geology and Soils. Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
Four regional faults or seismic zones (San Andreas, Helendale - S. Lockhardt, North Frontal and Cucamonga) are within the project area (ESSW, 2007). Surface rupture is not anticipated to be a hazard in the area (City of Victorville, 2007). The project site is not located within a currently established Alquist-Priolo special studies zone (State of California Fault Rupture Hazard Zone) (ESSW, 2007). Therefore, the potential for surface fault rupture occurring at the project site is considered to be low. The proposed wind turbine would be designed and constructed to resist damage from an earthquake, and would conform to Seismic Zone 4 of the 2001 California Building Code. The potential impact from rupture of an earthquake fault is considered less than significant.				
ii) Strong seismic ground shaking?			X	
Ground shaking from earthquakes associated with nearby and distant faults may occur during the lifetime of the project. Because earthquake-related hazards cannot be avoided in the southern California region, the project site could be subjected to strong seismic ground shaking. The proposed wind turbine would be designed and constructed to resist damage from an earthquake, and would conform to Seismic Zone 4 of the 2001 California Building Code. Therefore, the potential impact from seismic ground shaking would be considered less than significant.				
iii) Seismic-related ground failure, including liquefaction?		X		

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The potential exists for liquefaction to occur at the proposed site is high (ESSW, 2007). Liquefaction results when water-saturated, sandy unstable soils are subject to intense shaking, such as caused by an earthquake. These soils lose cohesiveness, causing unreinforced structures to fail. The primary factors for increased liquefaction susceptibility include areas subject to high seismicity, shallow groundwater, and young, poorly consolidated sandy alluvium. When this type of sandy alluvium is present, liquefaction susceptibility is generally considered high if groundwater depth is less than 10 ft below the ground surface, moderate if groundwater depth is between 10 and 30 ft, and low if groundwater is between 30 and 50 ft deep. Liquefaction is usually not considered a hazard if groundwater table is greater than 50 ft in depth (City of Victorville, 2007). The proposed site for the wind turbine on the Lower Campus is within an area that is highly susceptible to liquefaction (Carrierjohnson, 2007). The potential for liquefaction to occur at the proposed site is considered high because the depth of groundwater beneath the site is within 50 feet. Based on a historic high groundwater condition at around 10 feet, about 5 inches of total liquefaction induced settlement may occur in the upper 50 feet. Soil boring conducted at the site encountered free groundwater at approximately 31 feet (ESSW, 2007). The following mitigation measure will be incorporated into project planning: *The project will be designed and constructed in accordance with recommendations for the following aspects as included in the project-specific geotechnical investigation: site grading; excavation and utility trenches; foundations; pile-anchor installation; mitigation of soil corrosivity on concrete; seismic design criteria; and, unpaved site access road .* With implementation of this mitigation measure, the impact from seismic-related ground failure, including liquefaction, would be considered less than significant.				
\iv) Landslides?			X	
The proposed site and surrounding area is generally flat (terrain with slope angle of less than five degrees). The geologic hazard associated with landslides is considered low or negligible on the proposed site (ESSW, 2007). Therefore, the impact from landslides would be considered less than significant.				
b) Result in substantial soil erosion or the loss of topsoil?		X		
The Proposed Project would result in limited removal of topsoil for construction of the wind turbine, transmission line and access road. Any topsoil removed from the site would be placed in the immediate area and used for re-compaction purposes. The transmission line and access road would be constructed using standard erosion control measures. The Proposed Project would not result in development of any structures on sloped areas or within any area of potential slope failure. Therefore, slope stabilization would not be required. Soils on the site are susceptible to wind and water erosion (ESSW, 2007). Although construction would occur in areas where soils have been disturbed and modified by past construction, the Proposed Project would include preventative measures to reduce erosion, as follows: *Site grading plans for the transmission line, access road improvements and wind turbine would include standard erosion control measures to minimize the potential for loss of topsoil.* *Earthwork would be planned and conducted in such a manner as to minimize the duration of exposure of unprotected soils.*				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Earthwork would be conducted using best management practices, such as single point construction entries, to minimize erosion during demolition and construction. *In order to minimize soil loss, earthwork would include watering for dust control.* *Grass and other landscaping would be reestablished in the disturbed areas immediately after construction is completed, thereby reducing the potential for erosion.* With incorporation of these mitigation measures, impacts from erosion and loss of topsoil would be considered less than significant.				
c) Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		X		
The project site is located at the eastern margin of the western Mojave Desert. This area is characterized as broad nearly flat alluvial valleys in between isolated mountain ranges, including Silver Mountain and Bell Mountain. The Mojave River trends northward through this area. The sediments within the valley consist of fine- to coarse-grained sands with interbedded clays, silts, gravels, and cobbles of alluvial (water-laid) origin. Quaternary younger and older alluvial deposits underlie the project area (ESSW, 2007). The potential for seismically induced ground subsidence is considered to be moderate at this time. Dry sands tend to settle and densify when subject to strong earthquake shaking (ESSW, 2007). The Proposed Project would be designed and constructed in accordance with the recommendations of the project-specific geotechnical investigation which requires approval by the Geotechnical Engineer for placement and compaction of fill, backfilling of trenches and testing of soils. With incorporation of the mitigation measures described in Section VI(a)(iii), impacts from unstable soils would be considered less than significant.				
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
Soils on the proposed site for the wind turbine are visually classified to be in the “very low” expansion (E<20) category in accordance with Table 18A-I-B of the California Building Code (ESSW, 2007). Impacts from expansive soils would be considered less than significant.				
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?				X
The Proposed Project would not include the requirement to support the use of septic tanks or alternative wastewater disposal systems.				
VII. Hazards and Hazardous Materials. Would the project:				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
The Proposed Project would not involve the transport, storage, use and disposal of any hazardous materials. Operation of the proposed wind turbine would not be expected to create a significant hazard to the public. The impact of the Proposed Project from hazardous materials would be considered less than significant.				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
The Proposed Project would not require the storage or use of any hazardous materials. The potential for an unforeseen upset or accident involving hazardous materials is minimal. The impact from release of hazardous materials into the environment would be considered less than significant.				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
The proposed wind turbine would be located on the campus of an existing community college. There are no existing or proposed schools within one-quarter mile of the proposed wind turbine. The Proposed Project would not use or store hazardous substances in quantities that could result in a significant hazard to the public. Therefore, no accidental explosion or release of toxic or hazardous substances as a result of the Proposed Project would be expected to occur near an existing or proposed school.				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
A search of available environmental records was conducted in May 2007 by Track Info Services, LLC, an independent database review company. The records search includes a review of available federal, state, and local environmental databases. These databases identify properties or locations that have had known releases of regulated substances, or which have had histories involving the use, storage, treatment, generation, disposal, or handling of hazardous substances. The records search meets search requirements of ASTM Standard Practice for Environmental Site Assessments, E 1527-05. No listed or delisted facilities within one-half mile of the project site were present on the National Priority List (NPL), Corrective Action Reports, Treatment Storage and Disposal Facility List, or State Priority List. One leaking underground storage tank was reported at 18525 Bear Valley Road, Hesperia, approximately 0.4 mile south of the site. A remediation plan has been developed for gasoline and contaminated soil that will be excavated and removed from this site.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The site for the proposed wind turbine and associated access road and transmission line would not create any significant hazard to the public or the environment.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?		X		

The project area is located near three public airports, as identified in Table 4. The site is not within either airport of the applicable Master Plan areas.

Table 4. Public Airports Near Victor Valley Community College

No.	Name of Public Airport	Distance from Proposed Wind Turbine
1	Hesperia Airport	7.3 miles
2	Apple Valley Airport	7.5 miles
3	Southern California Logistics Airport	10 miles

Because the proposed wind turbine would be approximately 328 ft high and could be a potential hazard to navigable airspace, the Victor Valley Community College District will file a notification of the proposed construction with the FAA in accordance with 14 CFR Part 77. The following mitigation measures will be incorporated into project planning:

The Victor Valley Community College District will file a notification to the FAA in accordance with 14 CFR Part 77 and integrate FAA recommendations for lighting and markings into project construction and design, as appropriate.

The proposed wind turbine would be constructed, designed and operated in compliance with FAA requirements for lighting and associated markings (painting), including light failure systems.

Any failure or malfunction of wind turbine lighting will be reported to the FAA within thirty (30) minutes.

With compliance of FAA requirements, the project would not be expected to result in a safety hazard for people residing or working in the project area. Therefore, with incorporation of mitigation, airport safety related impacts would be considered less than significant.

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?		X		

The project site is within the vicinity of ten private airstrips (Table 5). The proposed wind turbine would be designed and constructed in accordance with FAA requirements as described in Section VII(e). The project would not be expected to result in a safety hazard for people residing or working in the project area. With incorporation of the mitigation measures described in Section VII(e), safety related impacts associated with private airstrips would be considered less than significant.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact

Table 5. Private Airports in the Vicinity of Victor Valley Community College

No.	Name of Private Airstrip	Location	Distance from Site
1	SCE High Desert District Heliport	12353 Hesperia Road, Victorville	1.8 miles
2	Victor Valley Community Hospital Heliport	15248 Eleventh Street, Victorville	4.1 miles
3	St. Mary Desert Valley Hospital Heliport	18300 Highway 18 , Apple Valley	4.5 miles
4	H.S. Osborne Private Airport	Star Route Box 12, Oro Grande	9.5 miles
5	Lugo Substation Heliport	6655 Escondido Street, Hesperia	9.7 miles
6	Buddy E. Holiday Ranch Airport	26676 Holiday Ranch Road, Apple Valley	9.9 miles
7	William E. Poole Heliport	19378 Central Road, Apple Valley	9.9 miles
8	IPP Adelanto Airport	Pansy Road, Adelanto	11.4 miles
9	Adelanto Airport	9174 Poppy Road, Adelanto	12.5 miles
10	Hansen Airport	20875 Old El Mirage Road, Adelanto	25.1 miles

Source: USDOT, 2007

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	

The Proposed Project would not result in any interference with existing emergency response or emergency evacuation plans for local, state or federal agencies. While temporary lane closures may occur, complete street closures would not be required during project construction. All emergency procedures would be implemented within local, state, and federal guidelines. Therefore, impacts to emergency response or evacuation plans would be considered less than significant.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?			X	

The Victorville Planning Area is considered to have a “medium” potential of occurrence for wildland fires (City of Victorville, 2007). The construction and operation of the Proposed Project would not result in any increase in the fire hazard at or near the project site. The Proposed Project would not result in any increase in exposure of people or structures to risk from wildland fires. Therefore, impacts from wildland fires would be considered less than significant.

VIII. Hydrology and Water Quality. Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The development of the proposed wind turbine would not be expected to violate any water quality standards or waste discharge requirements. Construction of the foundation would be above the vadose zone, and construction dewatering would not be required. As described in Section VI.(a)(iii), recommendations of the site-specific geotechnical investigation will be incorporated into project design and construction. Impacts to water quality standards or waste discharge requirements would not be expected.				
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	
The City of Victorville is located within the boundaries of the Mojave River Ground Water Basin to which stream flow from the Mojave River serves as the main source of recharge. The project site is located within the Alto Sub-Basin which is in a state of overdraft, experiencing a 2 ft average annual decline in the water table each year. The Mojave Water Agency, which serves the Victorville area, is purchasing entitlements of State Water Project supplies to meet its demand (City of Victorville, 2007). The earthwork associated with construction of the proposed wind turbine, transmission line and access road would not interfere with any known aquifers. With the exception of site watering for dust control, construction and operation of the wind turbine would not substantially contribute to depletion of groundwater. Therefore, impacts to groundwater supplies would be considered less than significant.				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?			X	
Construction of the proposed wind turbine would not require any alteration of drainage patterns or waterways. Erosion control measures would be implemented during construction to minimize the potential for sediment to be picked up and transported off-site, or by runoff. Construction equipment would not be rinsed off on-site in such a manner to affect nearby drainageways. Construction materials would be covered and stored in contained areas away from the Mojave River. Therefore, impacts to drainage patterns from the Proposed Project would be considered less than significant.				
d) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off- site?		X		
The Proposed Project would not result in any alteration of existing drainages. The underground transmission line would be placed in the existing roadway on the Lower Campus. The resulting surface runoff would not be expected to change from existing conditions, or result in any increase in flooding.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed wind turbine site on the Lower Campus is located in an area that is considered to have a potential for earthquake-induced flooding (Carrierjohnson, 2007). The geologic hazard of seismically-induced flooding is considered low or negligible on this site (ESSW, 2007). The site is located approximately 500 ft from the 100-year floodplain associated with the Mojave River (Track Info Services, 2007). Through its National Flood Insurance Program, the Federal Emergency Management Agency (FEMA) has identified areas subject to periodic flood hazards. The Flood Insurance Rating Map (FIRM) identifies an approximately 1,000-ft wide corridor designated Zone A immediately east of the proposed site for the wind turbine (FEMA, 2007). Areas designated Zone A are subject to flooding in the event of a 100-year flood (no base flood elevations have been determined). The presence of flood control improvements, such as the levee, reduces the potential for flooding from the Mojave River at this location (City of Victorville, 2007). To minimize the potential for surface runoff during construction of the proposed wind turbine, transmission line and access road, the following mitigation measures would be included in project design and construction: *Erosion control measures would be implemented during construction of project facilities to minimize the potential for sediment to be picked up and transported off-site by runoff.* *Construction equipment would not be rinsed off on-site, or in such a manner as to flow into the Mojave River.* *Construction materials would be covered and stored in contained areas away from any drainage areas.* With incorporation of these mitigation measures, impacts to drainage areas would be considered less than significant.				
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
The Proposed Project would contribute to storm runoff due to an increase in impervious surface area; however, this increase would be minimal (there is no stormwater drainage system in this area of the Lower Campus). Significant adverse operational impacts to surface water quality are not expected to occur. Impacts to stormwater drainage would be considered less than significant.				
f) Otherwise substantially degrade water quality?				X
The Proposed Project would not result in any other effects that could substantially degrade water quality. The Proposed Project would not violate any water quality standards or waste discharge requirements. No significant impacts to water quality are expected to occur as a result of the Proposed Project.				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
The Proposed Project would not result in the placement of housing in the 100-year flood hazard area.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?			X	
The proposed wind turbine would be constructed approximately 213 ft (65 m) from a levee on the west side of the Mojave River and not within the 100-year floodplain. The proposed site lies within a designated Flood Hazard Area "Zone X", which may be an area of 500-year flood, or 100-year flood with average depths less than 1 foot or with drainage areas less than one square mile, or areas protected by levees from the 100-year flood. The site may be in an area where sheet flooding and erosion could occur (ESSW, 2007). The transmission line would be buried underground at a depth of approximately 5 ft and would not be directly exposed to flood hazards. The proposed wind turbine and access road would not impede or redirect flow within any drainage areas. Therefore, impacts to the 100-year flood hazard area would be considered less than significant.				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
The Proposed Project would not expose people or property to flood-related hazards. The net drainage from the area would not change with implementation of the Proposed Project. Therefore, no significant impacts would be expected to occur.				
j) Inundation by seiche, tsunami, or mudflow?				X
Flooding associated with seiches (wave-like oscillations of water in an enclosed basin caused by earthquakes, high winds or other atmospheric conditions) is not anticipated at the project site due to its distance from enclosed bodies of water. The project site is located approximately 70 miles northeast of the coast. The potential for inundation by a tsunami is expected to be a rare occurrence. The Proposed Project would not result in any increased risk for inundation by mudflow. Impacts from seiche, tsunami or mudflow would not be expected.				
IX. Land Use and Planning. Would the project:				
a) Physically divide an established community?				X
The Proposed Project would consist of construction of a wind turbine on the campus of Victor Valley Community College. Other than the visual effect of this structure, nearby residential properties would not be adversely impacted by construction or operations. The Proposed Project would be located on land owned by the college. Construction of the project facilities would not result in any physical division of the community.				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The proposed wind turbine would be located in the Spring Valley Lake Planning Area of the City of Victorville General Plan. The City of Victorville designates land use on the proposed wind turbine site and its associated transmission line corridor as Public/Institutional. The site would be on the Lower Campus at Victor Valley Community College, near the eastern boundary of the campus adjacent to recreational fields and the Mojave River to the east. The proposed wind turbine is identified in the Campus Plan of the Draft 2007 Facilities Master Plan. The future land use at the site would continue to have adjacent recreational use. The proposed site is zoned P-C (Public and Civic District) in accordance with the Title 18, Chapter 18.48 of the City of Victorville Municipal Code. This zoning designation, intended for public buildings and other government uses, restricts building heights to a maximum of 50 ft. Although Victor Valley Community College is physically located within the City of Victorville, it is not subject to City zoning or permitting requirements. Conflicts with local land use and zoning would not occur. The land use east of the proposed site in the town of Apple Valley across the Mojave River is Residential-Equestrian. These homes are characterized by equestrian trails along the backyards and throughout the neighborhood.				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?			X	
The proposed wind turbine would be located in the planning area of the West Mojave Plan (Habitat Conservation Plan and California Desert Conservation Area Plan). The proposed wind turbine site, however, is not located within any conservation areas designated in this plan. The County of San Bernardino Open Space Plan identifies a wildlife corridor along the Mojave River from Adelanto to Devore. The City of Victorville is participating in development of the West Mojave Coordinated Management Plan, a habitat conservation plan initiated by the U.S. Bureau of Land Management. This plan has not yet been finalized or adopted at this time (City of Victorville, 2007). Therefore, there the Proposed Project would not conflict with the any applicable habitat conservation plan or natural community conservation plan.				
X. Mineral Resources. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?			X	
The project site is located in Mineral Resource Zone (MRZ)-2b, which are areas where geologic information indicates that significant inferred resources are present. Areas classified as MRZ-2b contain discovered mineral deposits that are significant inferred resources as determined by their lateral extension from proven deposits of their similarity to proven deposits. Further exploration work could result in upgrading these areas to MRZ-2a (City of Victorville, 2007). No loss of known mineral resources would result from implementation of the Proposed Project. The impact of construction of the proposed project facilities at this location on mineral resources is considered to be less than significant.				
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?			X	

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The project site is located within Aggregate Resource Area (ARA) – 9, an area considered to be compatible with and available for mining of mineral resources. The size of ARA-9 is 691 acres. The aggregate resources in this area are at least 100 ft thick, based on well logs in the area. ARA-9 is rated as Highly Significant, with the highest probably use of material from this deposit being concrete aggregate (City of Victorville, 2007). The Proposed Project would not require the removal of any locally important mineral resources, nor would it result in any interference with existing mining operations. Therefore, impacts to mineral resources would be considered less than significant.				
XI. Noise. Would the project result in:				
a) Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	

The primary noise source in the City of Victorville and on the Victor Valley Community College campus is motor vehicle traffic. The City has identified major roadways where traffic noise exceeds 65 dBA (A-weighted noise level measured in decibels). The nearest major roadway to the proposed wind turbine site is Bear Valley Road approximately 0.4 mile south. Based on the projected average daily traffic of 50,000 vehicles, the noise level associated with Bear Valley Road would be below 55 L_{dn} (average day-night noise level) (City of Victorville, 2007). The proposed site is approximately 4.25 miles from Interstate 15 which does not contribute to ambient noise levels on the campus.

The proposed site for the wind turbine is not within the 65 CNEL associated with the Southern California Logistics Airport in Adelanto, nor is it within the 60 CNEL associated with the Apple Valley Airport or Hesperia Airport. The nearest residences to the proposed wind turbine site are located approximately 1,500 ft east in the town of Apple Valley and 1,960 ft north (City of Victorville).

Noise impacts from the Proposed Project would be a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the duration of the noise-generating activities. The construction of proposed wind turbine would include demolition of the existing meteorological tower, clearing, grading and excavation. Heavy equipment that could be used during construction of the wind turbine would include: backhoe, blower, bulldozer, concrete truck, crane, dump truck, front-end loader, paver, roller, scraper, striper and 18-wheel truck. Operation of construction equipment may generate intermittent noise levels up to 80 dBA at approximately 150 ft from the source. During construction, temporary periods of increased noise levels could be expected in the immediate area on the campus. It is not expected that construction noise would be audible to residences to the north and east.

An average day-night sound level of 65 dBA is generally accepted as a standard for residential communities. The City of Victorville has adopted a noise control ordinance (Chapter 13.01 of the City of Victorville Municipal Code) that establishes an ambient noise level of 65 dBA for all residential zones from 7 a.m. to 10 p.m. Activities conducted on the grounds of a college are exempt from the provisions of this noise control ordinance. The City recognizes acceptable noise standards and assesses projects through the development review process in order to ensure noise compatibility.

Although temporary noise increases in the surrounding area may result in annoyance to local residents during the construction period, adverse effects such as speech interference, sleep disturbance, and hearing loss would not be expected. Construction activities for the proposed project would not be expected to exceed the average day-night sound level of 65 dBA. Construction activities would be limited to daytime hours. Impacts from construction noise would be considered less than significant.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The wind turbine would be expected to generate a noise level of approximately 40 dBA at a distance of 1,083 ft (330 m) (Nordic Windpower, 2007). Noise generated by the proposed wind turbine would be inaudible to the nearest residences approximately 1,500 ft from the site. Modern wind turbines would not be expected to generate any significant amount of low frequency sound, and would generate a minimal level of infrasound[2] (ASU, 2007). Noise during operation of the wind turbine would be limited to vehicular activity by maintenance personnel working at the site. The Proposed Project would result in a minimal increase in the number of vehicles that visit the site. Impacts to noise from operations would be considered less than significant.				
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	
Construction activities may result in vibration from compacting and grading equipment, as well as from crane operation. Groundborne vibration is measured using the typical annoyance threshold of 72 VdBA (vibrational A-weighted decibel level). Excessive amounts of groundborne vibration or noise levels would not be expected from construction equipment to be used. For these reasons, impacts from groundborne vibration would be considered less than significant.				
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
No post construction noise-generating activities would result from the Proposed Project. The Proposed Project would result in short-term increases in noise levels during construction, but would not result in any permanent change to the existing ambient noise level once the wind turbine is operational. Impacts to ambient noise levels in the project vicinity would be considered less than significant.				
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
The Proposed Project would result in a temporary increase in ambient noise levels during construction activities as a result of the use of heavy construction equipment and cranes. The impact of the temporary increase in noise would be considered less than significant.				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?			X	
The Proposed Project is not located within any Airport Master Plan area or within two miles of any public airport or public use airport. The proposed wind turbine would not expose people who reside or work in the area to excessive noise levels. The expected noise level from the Proposed Project would not differ substantially from the existing noise environment on the campus. Impacts from noise would be considered less than significant.				

[2] Infrasound is sound with a frequency too low to be detected by the human ear.

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
The proposed wind turbine would be located approximately 1.8 miles from the SCE High Desert District Heliport, a private airstrip. The proposed wind turbine would not generate excessive noise levels in the area.				
XII. Population and Housing. Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
The Proposed Project would not have direct growth inducing effects, although it would support the energy requirements associated with student growth that is ongoing and planned at Victor Valley Community College. The Proposed Project would not result in the need for additional infrastructure. Impacts to population growth would be considered less than significant.				
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
The Proposed Project would not displace any housing. All proposed project facilities would be constructed with the boundaries of the Victor Valley Community College campus. Therefore, the project would not result in any impacts to housing.				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
The Proposed Project would not displace any people, or result in the need for replacement housing elsewhere. Therefore, the Proposed Project would not result in any impacts to housing.				
XIII. Public Services. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
a) Fire protection?				X

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The Victorville Fire Department, with five stations in the city, provides fire protection services to Victor Valley Community College. The Proposed Project would not result in any increase in the demand for fire protection services, generate a need for new fire stations in the area or cause any significant impacts to existing fire protection services. Therefore, impacts to fire protection services are not expected.				
b) Police protection?				X
The Victor Valley Community College Campus Police Department, Victorville Police Department and the San Bernardino County Sheriff's Department provide police protection in the project area. The Proposed Project would not interfere with circulation for pedestrians, vehicles, and police patrols. It is not anticipated that the Proposed Project would result in the need for new police stations in the area, or otherwise impact existing police services.				
c) Schools?				X
The Proposed Project would not generate any additional population in the area, and therefore would not impact local school enrollments. The Proposed Project would not otherwise adversely impact existing and planned schools in the area. Therefore, no adverse impacts to schools would result from the Proposed Project.				
d) Parks?				X
The proposed project facilities would not result in any impacts to local parks. There would be no change to the planned recreational improvements on the Lower Campus and no interference with use of the public lake on the Upper Campus. The Proposed Project would not result in adverse impacts to existing or planned parks in the region.				
e) Other public facilities?				X
The proposed project facilities would be operated and maintained by Victor Valley Community College or its designated operator, and would not result in any impacts to other public facilities.				
XIV. Recreation.				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
The Old Spanish Santa Fe and Mormon Trail, running along the Mojave River, is a historic trail that connects Summit Valley with the cities of Victorville, Hesperia and Barstow ultimately traveling to Inyo County (San Bernardino County, 2006). There is a lake on the Upper Campus that is open to the public on weekends and holidays. The proposed wind turbine would be located between two recreational fields on the Lower Campus. The Victor Valley Community College soccer field, south of the proposed site, is used primarily by students. The Spring Valley Lake Little League (SVLLL) baseball and softball fields, north of the proposed site, are used by the community. The Proposed Project would not result in any increase in use of these recreational facilities although the access road to the proposed turbine would become a common access road to these fields. Therefore, impacts to existing or planned neighborhood and regional parks would be considered less than significant.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				X
The Proposed Project would not include any recreational facilities. The Victor Valley Community College Draft Facilities Master Plan identifies future recreational improvements on the Lower Campus, including additional facilities north and south of the proposed wind turbine site. No impacts to the environment from expansion of recreational facilities would be expected to occur.				
XV. Transportation/Traffic. Would the project:				
a) Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?			X	
During the construction period, construction workers would access the proposed wind turbine site on a daily basis. Assuming that all the workers travel in single occupant vehicles, this would result in additional inbound and outbound vehicle trips. These trips would occur before morning and evening peak hour traffic. Movement of the construction vehicles, including cranes for assembly of the wind turbine, would not be expected to result in any change to the volume-to-capacity ratio of roadways or congestion at intersections in the local area. Construction-related traffic would be a temporary, short-term condition and is not expected to result in any substantial effects on traffic. Operation of the Proposed Project is estimated to result in no net change in the number of personnel vehicles. For these reasons, impacts to traffic would be considered less than significant.				
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?			X	
Vehicular traffic would be expected to increase temporarily during the construction period as a result of the daily project-related vehicle trips. Traffic on Bear Valley Road, Spring Valley Road, Jacaranda Road and Mojave Fish Hatchery Road may be temporarily delayed during the delivery of equipment and materials as well as during construction of the wind turbine, transmission line and access road. Temporary lane closures may be required, however, closure of complete roads is not expected. These temporary and localized impacts would not be expected to result in a substantial change to the current level of service for affected roadways. For these reasons, construction impacts to traffic would be considered less than significant. During operations, the Proposed Project would not be expected to result in any change to the existing level of service on any roads or highways in the project area. Operation of the proposed wind turbine would require periodic maintenance which would result in a limited increase in vehicular traffic. Impacts to traffic levels of service on roads and highways would be considered less than significant.				
c) Results in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
The Proposed Project would not result in any changes to air traffic patterns that could result in any increases in safety risks.				
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
No alterations to area roadways outside the Victor Valley Community College campus are proposed. The only roadway modification would be from an existing parking lot (off Mojave Fish Hatchery Road) to the recreational fields on the Lower Campus. No change from the existing road alignment would result. No substantial increase in hazards or incompatible uses would be anticipated as a result of the Proposed Project.				
e) Result in inadequate emergency access?				X
No changes in access to emergency facilities or nearby land uses are expected to occur as a result of implementation of the project.				
f) Result in inadequate parking capacity?			X	
The proposed wind turbine would not require employees. It is expected that approximately two maintenance vehicles would be required at the site twice per year. Maintenance vehicles would park in the existing parking or on unpaved ground at the site. The impact of the Proposed Project on parking is considered to be less than significant.				
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
The proposed site for the wind turbine is on the Lower Campus in an area typically used only during recreational events. No modifications to the area roadways or bikeways outside the campus are proposed. There would be no effects on existing facilities and structures (i.e., bus turnouts and bicycle racks) that support alternative transportation. Therefore, the Proposed Project would not result in any conflicts with policies that support alternative transportation.				
XVI. Utilities and Service Systems. Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?				X
The Proposed Project would not result in any discharges of wastewater. Construction of the wind turbine foundation would be above the vadose zone, and construction dewatering would not be required. As described in Section VI.(a)(iii), recommendations of the site-specific geotechnical investigation will be incorporated into project design and construction. Impacts to water quality standards or waste discharge requirements would not be expected.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
With the exception of site watering for dust control, the Proposed Project would not require the use of water or result in generation of wastewater. Impacts to water or wastewater treatment facilities from the Proposed Project would not be expected.				
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
The Proposed Project would not result in generation of additional stormwater runoff or require new storm water drainage facilities. The proposed wind turbine would not require any increase in water use. The Proposed Project would have no effect on storm water drainage in the area.				
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
Water for Victor Valley Community College is provided by active local wells within County Service Area 64. Adjudication of the water supplies in the Mojave River area was made in 1995 and relied upon a combination of water conservation, purchase of imported water and water transfers between producers to eliminate the groundwater overdraft (City of Victorville, 2007). The Proposed Project would use a limited amount of water during construction of the wind turbine and its associated transmission line and access road. Water would not be required for operation of the wind turbine. Therefore, impacts to water supply would be considered less than significant.				
e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
The Proposed Project would not result in any increase in wastewater generation or otherwise adversely impact the existing regional sewer system and local wastewater treatment plant. With the exception of periodic maintenance, the operation of the proposed wind turbine would result in no net change in the number of employees or residents in the project area. No impacts to wastewater treatment systems are expected.				
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Construction activities would generate solid waste, however the amount generated would be minimal and is not expected to significantly impact landfill capacities. Solid waste from the project would be disposed of in the Victorville Landfill located at 18600 Stoddard Wells Road in Victorville. The landfill is operated by Burrtec Waste Industries, Inc., a contractor to the County of San Bernardino. The Victorville Landfill has a planned capacity of 300,000 tons per year and an anticipated site life of 20 years (City of Victorville, 2007). Victor Valley Community College is in the solid waste disposal service area of Victorville Disposal, Inc. Operation of the proposed wind turbine would not generate solid waste. Impacts to solid waste disposal would be considered less than significant.				
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
All solid waste disposal would be managed in accordance with applicable federal, state and local statutes and regulations. Impacts to solid waste would be considered less than significant.				
XVII. Mandatory Findings of Significance.				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?		X		
The analysis conducted in this Initial Study results in a determination that the project, with implementation of mitigation measures, could result in a less than significant effect on the local environment. The construction activities associated with the Proposed Project would not be expected to substantially degrade fish, wildlife, and/or plant populations. Intrusion on any previously undiscovered cultural or historic resources would not be anticipated (mitigation for inadvertent discovery of cultural materials has been included in this analysis).				
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)			X	
The Proposed Project would not contribute to cumulative impacts to biological resources because the site represents marginal habitat. For these reasons, impacts from the Proposed Project would not be cumulatively considerable. The analysis in this Initial Study has determined that the project impacts would be considered less than significant.				

Potential Impacts	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?				X
Direct and indirect adverse effects on human beings would not be expected as a result of the project. The Proposed Project would result in a new capability to produce renewable energy on the campus of Victor Valley Community College, which is considered a beneficial impact.				
NOTE: Authority cited: Section 21083, Public Resources Code; Reference: Section 21001 and 21068, Public Resources Code.				

SECTION 3. SUPPORTING INFORMATION

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3.2 List of Preparers

William Paris, P.G., Vice President (Parsons)

Paul Farmanian P.E., Technical Advisor (Parsons)

John Wallin, Environmental Analyst, Technical Advisor (Parsons)

Rosemarie Crisologo, CEQA Task Manager (Parsons)

John Moeur, Ecologist/Principal Scientist (Parsons)

Angela Schnapp, Environmental Engineer (Parsons)

Kip Harper, Cultural Resource Specialist (Parsons)

Brynna McNulty, Associate Scientist (Parsons)