GOLDEN HILLS NORTH WIND ENERGY REPOWERING PROJECT

ENVIRONMENTAL CHECKLIST

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1. Implementation Checklist

Attachments

- Attachment 1: Golden Hills North Wind Energy Center Repowering Project Project Description and Affected Environment Analysis
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Introduction

The proposed project is consistent with the Altamont Pass Wind Resource Area (APWRA) Repowering Program, and the Final Program Environmental Impact Report (PEIR), which was certified by the East County Board of Zoning Adjustments on November 12, 2014 (SCH# 2010082063). The project is therefore being reviewed as a tiered project with a checklist pursuant to Section 15168(c) of the California Environmental Quality Act (CEQA) Guidelines. The checklist is intended to inform public agency decision-makers and the public generally of the significant environmental effects of the specific project and identify possible ways to minimize such effects.

Mitigation measures that were identified in the Program EIR will be required for the current project as applicable, and as discussed in the Implementation Checklist that follows. A Mitigation Monitoring and Reporting Program (MMRP) will be required as a condition of approval of the requested Condiitonal Use Permit to construct and operate the repowered wind energy facility.

The checklist has been designed in tabular format. The first column under the heading, Impact, identifies each impact by number and name as it appears in the PEIR (although impact suffixes used to distinguish program and project alternatives in the PEIR have been removed). The second column (with two subsidiary columns) with the heading, Discussion in Text, provides the page numbers in the PEIR where the relevant discussion for both setting (existing conditions) and impacts appear for each numbered impact. The third main column, identified as *APWRA Issues to Consider*, provides a focused yes or no question to indicate if the proposed project would result in the subject impact. The yes column and those further to the right are shaded as sections to be completed if the project is expected to have the subject impact, while the second to last column provides for discussion of other impacts that may not have been identified or fully described in the PEIR.

The fifth column, *Mitigation Measures and Notes*, lists mitigation measures identified in the PEIR, with checkboxes that indicate if the mitigation measures apply to the proposed project. This column also summarizes the requirements of the mitigation measures. The full text of the mitigation measures is found in the MMRP, which is included in Attachment 1. The sixth main column (also with two subsidiary no and yes columns) indicates if the project would have impacts not identified in the PEIR. The seventh and last column, *Summary of Documentation*, indicates what if any relevant documentation is required either as part of the application package or associated with mitigation to address each impact, and provides space for a summary of the documentation that supports the County's findings for a determination for a specific project.

It is important to note that the checklist is a summary of the information contained in the PEIR and is not a replacement for the PEIR. The reader will therefore need to consult the PEIR for detailed information. The PEIR is available for online reference and downloads at the following website:

http://www.acgov.org/cda/planning/landuseprojects/apwraprog.htm

More detailed information and plans are included in Attachment 1, the Project Description and Affected Environment Analysis.

	Discussi	on in Text					Woul projec mitiga have in not ide in the	d the t, with ation, npacts ntified PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation	
Aesthetics										
Impact AES-1: Temporary visual impacts caused by construction activities (less than significant with mitigation)	3.1-3-4 3.1-8-10	3.1-12-13	Would construction or heavy equipment be visible from residences or recreation areas and trails?			 Mitigation Measure AES-1: Limit construction to daylight hours Do not allow construction between sunset and sunrise or on weekends Do not use high-wattage lighting sources 			Require the application to include mapping or photo simulations to show areas visible from recreation areas or trails. See Attachment 1, Section 3.1.1; Construction or heavy equipment may be visible per KOP 4, 5, & 6 [Bethany Reservoir, Dyer Road, & Brushy Peak Loop Trail]. With implementation of AES-1, impacts would be less than significant.	
Impact AES-2: Have a substantial adverse effect on a scenic vista (less than significant)	3.1-6-7 3.1-8-10	3.1-15-16	Would new turbines be placed in areas where no turbines currently exist? (See Policies 105 and 106 for list of sensitive ridgelines, pg 3.1-6)			 Mitigation Measure AES-2a: Require site development review prior to approval of site plans ○ County to require, review, and approve Site Development Review prior to approval of site plans for new turbines along ridgelines that have not previously been developed with wind turbine strings Mitigation Measure AES-2b: Maintain site free of debris and restore abandoned roadways ○ Clear all derelict equipment, debris, and litter away from construction sites ○ Restore and hydroseed abandoned roads (unless otherwise recommended by USFWS or CDFW) ○ Maintain site in such a manner through the life of project operations Mitigation Measure AES-2c: Screen surplus parts and materials ○ Maintain sites where surplus parts and materials are kept in a neat and orderly fashion ○ Screen sites from view			Require the application to include mapping to show locations of existing turbines in relation to new proposed turbines. See Attachment 1, Figures 3,1-1. See Attachment 1, Section 3.1.2. The project is located within an large area already developed with wind energy facilities and would be within the vicinity of Vasco Road, as well as other designated scenic roadways. Because new wind turbines would not be placed in any location adjacent to, or in close proximity to, locations from which scenic vistas have been designated, or where wind turbines are not already prominent features of the landscape, effects on scenic vistas would be limited. However, the project would place several new turbines on ridges and hills that are not presently developed with turbines, and therefore the impact on views from designated scenic roadways would be potentially significant, and the PEIR- identified mitigation measures are required, to reduce the impact to a less than significant level.	
Impact AES-3: Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings along a scenic highway (less than significant with mitigation)	3.1-6 3.1-8-10	3.1-19-20	Would turbines be located along a state- or county-designated scenic highway? (See Attachment B for list)			Mitigation Measure AES-2a: Require site development review prior to approval of site plans			Require the application to include locations of proposed turbines in relation to state- or county-designated scenic highways. See Attachment 2, Figure 1, Designated Scenic Routes. See Attachment 1, Section 3.1.2; Turbines will be located adjacent to the state-designated highway 1-580 per KOP 2 & 3 [westbound lane of 1-580 & Altamont Pass Road]. Numerous turbines will be located on ridges and hills that have not been or are currently developed with wind turbines. With implementation of AES-2a, AES-2b, and AES-2c, impacts would be less than significant.	

	Discussio	on in Text					Woul projec mitiga have ir not ide in the	d the t, with ation, npacts ntified PEIR?	
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact AES-4: Substantially degrade the existing visual character or quality of the site and its surroundings (less than significant with mitigation)	3.1-6 3.1-8-10	3.1-23-24	Would new turbines be placed in the southern portion of the program area, starting approximately 2.5 miles south of Patterson Pass Road, or in other areas where no turbines currently exist?			Same as Impact AES-3.			See Attachment 1, Section 3.1.2; No turbines would be placed in the southern portion of the program area., south of Patterson Pass Road. However, turbines will be visible in views where turbines are currently not visible under existing conditions, per KOP 1 [north of Flynn Road]. With implementation of AES-2a, AES-2b, and AES-2c, impacts would be less than significant.
Impact AES-5: Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area (less than significant with mitigation)	3.1-6 3.1-10-11	3.1-27-28	Would turbine be located in a setback area? Are there residents nearby - i.e., within 500 meters [1,640 feet] in a generally east or west direction to account for all seasons? Could blades cause shadow flicker that would disturb sensitive viewers, especially residents?			 Mitigation Measure AES-5: Analyze shadow flicker distance and mitigate effects or incorporate changes into project design to address shadow flicker During project design, the project applicant will prepare a graphic model and study to evaluate shadow flicker impacts on nearby residences. (see mitigation measure for details on thresholds) If it is determined that existing setback requirements as established by the County are not sufficient to prevent shadow flicker impacts on residences, Alameda County will require an increase in the required setback distances to ensure that residences are not affected. If any residence is nonetheless affected implement measures to minimize impact, such as relocating the turbine; providing opaque window coverings, window awnings, landscape buffers, or a combination of these features to reduce flicker to acceptable limits; or shutting down the turbine during the period shadow flicker would occur Relocate turbine if property owner is not amenable to other mitigation measures (window coverings, etc.) 			Require the application to include mapping to show the locations of residences in relation to proposed turbine locations. See Attachment 1, Figure 3.7-1. See Attachment 1, Section 3.1.2; A new source of substantial light or glare that would affect daytime or nighttime views in the area could be created in locations where new turbines would be installed and no turbines currently exist. With implementation of AES-5, impacts would be less than significant. If the distance from residential uses or intervening topography prevents any potential for disturbance, there would be no impact or requirement for mitigation. There are no residential uses within 500 meters (1,640 feet) of the proposed turbine sites, and therefore there is no potential for shadow flicker from the project, and no requirement for Mitigation Measure AES-5.
Impact AES-6: Consistency with state and local policies (less than significant with mitigation)	3.1-3-7	3.1-30	Would the project comply with measures set forth to protect visual resources along scenic roadways and open space areas identified for protection (Alameda County 1966) and comply with measures set forth in the ECAP to protect visual resources such as sensitive viewsheds, streets and highways, scenic highways, and areas affected by windfarms (Alameda County 2000)?			 Mitigation Measure AES-2a: Require site development review prior to approval of site plans County to require, review, and approve Site Development Review prior to approval of site plans for new turbines along ridgelines that have not previously been developed with wind turbine strings a separate Site Development Review Mitigation Measure AES-2b: Maintain site free of debris and restore abandoned roadways Clear all derelict equipment, debris, and litter away from construction sites Restore and hydroseed abandoned roads (unless otherwise recommended by USFWS or CDFW) Maintain site in such a manner through the life of project operations Mitigation Measure AES-2c: Screen surplus parts and materials Maintain sites where surplus parts and materials are kept in a neat and orderly fashion Screen sites from view Mitigation Measure AES-5: Analyze shadow flicker distance and mitigate effects or incorporate changes into project design to address shadow flicker During project design, the project applicant will prepare a graphic model and study to evaluate shadow flicker impacts on nearby residences. (see mitigation measure for details on thresholds) If it is determined that existing setback requirements as established by the County are not sufficient to prevent shadow flicker impacts on residences, Alameda County will 			Require the application to include mapping to show the locations of residences in relation to proposed turbine locations. <i>See Attachment 1, Figure 3.7-1.</i> Require the application to include mapping to show locations of existing turbines in relation to new proposed turbines. <i>See Attachment 1, Figures 3,1-1.</i> Require the application to include mapping or photo simulations to show areas visible from recreation areas or trails. <i>See Attachment 1, Figures 3-5 and 3-7.</i> <i>See Attachment 1, Section 3.1.2; The Project would be</i> <i>consistent with state and local policies. With</i> <i>implementation of AES-2a, AES-2b, AES-2c, and AES-5,</i> <i>impacts would be less than significant.</i>

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	N
(AES-6, cont.)						 require an increase in the required setback distances to ensure that residences are not affected. If any residence is nonetheless affected implement measures to minimize impact, such as relocating the turbine; providing opaque window coverings, window awnings, landscape buffers, or a combination of these features to reduce flicker to acceptable limits; or shutting down the turbine during the period shadow flicker would occur Relocate turbine if property owner is not amenable to other mitigation measures (window coverings, etc.) 	
Agricultural Resources							
Impact AG-1: Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to nonagricultural use (no impact)	3.2-1-4 3.24-6	3.2-7-8	Would project components be built on Prime Farmland?			 Mitigation Measure AG-1: Avoid conversion of Prime Farmland Do not place wind turbines or other related facilities/infrastructure in locations that would result in the permanent conversion of land that is Prime Farmland or Farmland of State Importance 	
Impact AG-2: Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract (no impact)	3.2-1-4 3.24-6	3.2-9	Would the project conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?			Note: Wind turbines are a conditionally permitted use in the agricultural zone applied to the program area and are a compatible use, allowed under the Williamson Act contracts for grazing land covering the program area. Therefore, repowering projects would result in no impact.	Þ
Impact AG-3: Conflict with existing zoning for, or cause rezoning of forest land, timberland, or timberland zoned Timberland Production (no impact)	3.2-3 3.2-6	3.2-10	Would project features be built in forest or timber land?			Note: There is no forest land in the program area. Therefore, repowering projects would result in no impact.	D
Impact AG-4: Result in the loss of forest land or conversion of forest land to non-forest use (no impact)	Same as previous	Same as previous	Same as previous			Note: There is no forest land in the program area. Therefore, repowering projects would result in no impact.	
Impact AG-5: Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forest land to non-forest use (no impact)	3.2-1-4 3.24-6	3.2-11	Would project features be built on Prime Farmland, Farmland of Statewide Importance, or forest land?			 Mitigation Measure AG-1: Avoid conversion of Prime Farmland Do not place wind turbines or other related facilities/infrastructure in locations that would result in the permanent conversion of land that is Prime Farmland or Farmland of State Importance 	Σ

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ide the	ntified PEIR?	
D	Yes	Summary of Documentation
]		There is no designated prime farmland in the project boundary.
]		The Project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contact.
]		There is no forest land in the project boundary.
		There is no forest land in the project boundary.
]		See Figure 3.2-1 of the PEIR for the location of prime farmland in the program area. There is no designated prime farmland in the project boundary.

	Discussion in Text					Woul projec mitiga have ir not ide in the	d the t, with ation, npacts entified PEIR?	
Impact	Existing Conditions Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Air Quality								
Impact AQ-1: Conflict with or obstruct implementation of the applicable air quality plan (less than significant)	3.3-1-7 3.3-19	Would the project include activities not covered in the PEIR?			Repowering projects and other related activities that would not result in substantial increase in employment would fall within the impact assessed in the PEIR under Impact AQ-1.			See Attachment 1, Section 3.2.2.1; The Project would not conflict with or obstruct implementation of the applicable air quality plan. The Project will not include activities not covered in the PEIR.
Impact AQ-2: Violate any air quality standard or contribute substantially to an existing or projected air quality violation (significant and unavoidable for construction and less than significant for operation)	3.3-1-7 3.3-21	Would project construction create air quality conditions that violate air quality standards? Would project operation create air quality conditions that violate air quality standards? Would the project include activities not covered in the PEIR?			 Mitigation Measure AQ-2a: Reduce construction-related air pollutant emissions by implementing applicable BAAQMD Basic Construction Mitigation Measures ☑ Implement mitigation measures shown in MMRP Mitigation Measure AQ-2b: Reduce construction-related air pollutant emissions by implementing measures based on BAAQMD's Additional Construction Mitigation Measures ☑ Implement mitigation measures shown in MMRP Note: Implementation of Mitigation Measures AQ-2a and AQ-2b would not reduce total construction-related ROG or NOX emissions of projects the Project such as those assessed in the PEIR to a less-than-significant level. This impact of total ROG and NOX emissions would be significant and unavoidable as identified in the PEIR. 			Because the analysis in the PEIR was based on a typical project, air quality modeling performed for a specific proposed project could show emissions levels below the standards. If air emissions modeling prepared for the proposed project and submitted with the application shows that the emissions levels for the specific project would not exceed the standards, the mitigation measures would not be required. Otherwise, the PEIR mitigation measures would be required and a project such as those assessed in the PEIR would be considered to have the significant and unavoidable impact as identified in the PEIR. See Attachment 1, Section 3.2.2; The Project's maximum daily unmitigated exhaust emissions of NO _x would exceed BAAQMD's significant threshold, resulting in a significant impact, for construction activities. However, construction of the Project would result in a lesser impact than the Golden Hills project analyzed in the APWRA PEIR. Implementation of AQ-2a and AQ-2b would reduce construction-related exhaust emissions in the SFBAAB, but NO _x emissions would remain in exceedance of the significant threshold. Note that ROG emission limits will not be exceeded by the Project.
Impact AQ-3: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)(significant and unavoidable for construction and less than significant for operation)	3.3-1-7 3.3-37	Would the project create new permanent stationary sources of criteria pollutants or increase criteria pollutant emissions from any existing stationary sources? Would the project result in an increase in ROG, NOX, PM10, or PM2.5? Would the project include activities not covered in the PEIR?			Mitigation Measure AQ-2a: Reduce construction-related air pollutant emissions by implementing applicable BAAQMD Basic Construction Mitigation Measures ☑ Implement mitigation measures shown in MMRP Mitigation Measure AQ-2b: Reduce construction-related air pollutant emissions by implementing measures based on BAAQMD's Additional Construction Mitigation Measures ☑ Implement mitigation measures shown in MMRP Mote: Implementation of Mitigation Measures AQ-2a and AQ-2b would not reduce total construction-related ROG or NOX emissions to a less-than-significant level. This impact of total ROG and NOX emissions would be significant and unavoidable.			Because the analysis in the PEIR was based on a typical project, air quality modeling performed for a specific proposed project could show emissions levels below the standards. If air emissions modeling prepared for the proposed project and submitted with the application shows that the emissions levels for the specific project would not exceed the standards, the mitigation measures would not be required. Otherwise, the PEIR mitigation measures would be required and a project such as those assessed in the PEIR would be considered to have the significant and unavoidable impact as identified in the PEIR. The Project would not create new permanent stationary sources of criteria pollutants or increase criteria pollutant emissions from any existing stationary sources. See Attachment 1, Section 3.2.2; The Project's maximum daily unmitigated exhaust emissions of NO _x would exceed BAAQMD's significant threshold, resulting in a significant

	Discussio	on in Text					Woul projec mitig have in not ide in the	ld the ct, with ation, mpacts entified PEIR?	
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(AQ-3, cont.)									 impact, for construction activities. However, construction of the Project would result in a lesser impact than the Golden Hills project analyzed in the APWRA PEIR. Implementation of AQ-2a and AQ-2b would reduce construction-related exhaust emissions in the SFBAAB, but NO_x emissions would remain in exceedance of the significant threshold. Note that ROG emission limits will not be exceeded by the Project. The Project would not include activities not covered in the PEIR.
Impact AQ-4: Expose sensitive receptors to substantial pollutant concentrations (less than significant with mitigation)	3.3-14	3.3-40	Would the project be located near sensi- tive receptors? The closest sensitive receptors to the project boundary is a small cluster of rural residential parcels on Dyer Road, about 4,200 feet north of the southwestern portion of the project area, and 4,000 feet west of the north- eastern portion of the project area. community of single-family residences in the city of Livermore located approximately 4,500 feet to the west of the program area boundary and the Mountain House community located approximately 5,000 feet to the east of the program area boundary.			Same as Impact AQ-3.			See Attachment 1, Section 3.2.2; The Project would not expose sensitive receptors to substantial pollutant concentrations. Construction activities are anticipated to last for only 10 months, and associated emissions would be spatially dispersed over the approximately 4,389-acre project area. With implementation of AQ-2a and AQ-2b, impacts would be less than significant.
Impact AQ-5: Create objectionable odors affecting a substantial number of people (less than significant)	3.3-14	3.3-41	Would the project include activities not covered in the PEIR? Would the project cause objectionable odors that would affect a substantial number of people?			Note: It is anticipated that "The program would result in the development of new wind turbine generators that would not result in objectionable odors. Although program construction would involve the use of diesel equipment and a temporary batch plant that could result in the creation of odors, the construction activities would be temporary (approximately 5 years), spatially dispersed over the 49,202-acre program area, and would take place in areas that are not in the vicinity of sensitive receptors. Therefore, the program would not affect a substantial number of people." Potential odors from repowering projects and other related activities as described in the PEIR would fall within the impact assessed in the PEIR and be less than significant. If the project includes activities not covered in the PEIR the impact could be significant and will need to be evaluated.			See Attachment 1, Section 3.2.2; The Project would not create objectionable odors affecting a substantial number of people. No mitigation is required.
Biological Resources									
Impact BIO-1: Potential for ground- disturbing activities to result in adverse effects on special-status plants or habitat occupied by special- status plants (less than significant with mitigation)	3.4-1-6 3.4-22-25	3.4-60	Would project construction affect special-status plants or habitat occupied by special-status plants?			 Mitigation Measure BIO-1a: Conduct surveys to determine the presence or absence of special-status plant species Conduct surveys for the special-status plant species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices to avoid and incorporate them into individual project design and construction documents 			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.1; The Project does have suitable annual grassland [Large-flowered fiddleneck, etc.] and alkali wetland habitat [Brittlescale, etc.] for these species to occur on the property. However, none of these species were found during the fall and spring rare plant surveys conducted in 2014-2015. With implementation of

	Discussion in Text					Woul projec mitiga have in not ide in the	d the t, with ation, npacts ntified PEIR?	5	
Impact	Existing Conditions Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation	
(BIO-1, cont.)					Mitigation Measure BIO-1c: Avoid and minimize impacts on special-status plant species by establishing activity exclusion zones Image: Stablish activity exclusion zones around special-status plant species if construction mill accumulation 250 feat of the accumied habitat			BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, and BIO-2, impacts would be less than significant.	
					 ☑ If exclusion zone is to be smaller, consult with qualified biologist and obtain concurrence from CDFW. 				
Impact BIO-2: Adverse effects on special-status plants and natural communities resulting from the introduction and spread of invasive plant species (less than significant with mitigation)	3.4-3-4 3.4-65	Would construction vehicles have the potential to introduce invasive plant species into the project area?			 Mitigation Measure BIO-1a: Conduct surveys to determine the presence or absence of special-status plant species Conduct surveys for the special-status plant species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1c: Avoid and minimize impacts on special-status plant species by establishing activity exclusion zones Establish activity exclusion zones around special-status plant species if construction will occur within 250 feet of the occupied habitat If exclusion zone is to be smaller, consult with qualified biologist and obtain concurrence from CDFW. Mitigation Measure BIO-1d: Compensate for impacts on special-status plant species Where avoidance of impacts on a special-status plant species is infeasible, compensate for through the acquisition, protection, and subsequent management in perpetuity of other existing occurrences at a 2:1 ratio (occurrences impacted: occurrences preserved). Provide detailed information to the County and CDFW on the location of the preserved nabitat, feasibility of protecting and managing the areas in-perpetuity, responsibility parties, and other pertinent information. Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas 			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.1; The Project does have potential for adverse effects on special-status plants and natural communities resulting from the introduction and spread of invasive plant species. With implementation of BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, and BIO-2, impacts would be less than significant.	
					 Mitigation Measure BIO-2: Prevent introduction, spread, and establishment of invasive plant species ☑ Construction vehicles and machinery will be cleaned prior to entering the construction area. Cleaning stations will be established at the perimeter of the construction area along all construction routes or immediately offsite. ☑ Vehicles will be washed only at approved areas. No washing of vehicles will occur at job sites. ☑ To discourage the introduction and establishment of invasive plant species, seed mixtures and straw used within natural vegetation will be either rice straw or weed-free straw, as allowed by state and federal regulation of stormwater runoff. Mitigation Measure BIO-5c: Restore disturbed annual grasslands ☑ Prepare a Grassland Restoration Plan in coordination with CDFW 				

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Impact	Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes					
(BIO-2, cont.)						 Receive CDFW approval of Grassland Restoration Plan Mitigation Measure WQ-1: Comply with NPDES requirements File NOI with the State Water Board Prepare SWPPP Receive approval by the San Francisco Bay Regional Water Board and the Central Valley Water Board Note: Erosion control reduces impacts related to invasive plants through erosion of soils in which they grow. 					
Impact BIO-3: Potential mortality of or loss of habitat for vernal pool branchiopods and curved-footed hygrotus diving beetle (less than significant with mitigation)	3.4-1-8 3.4-28-29	3.4-67	Would the project occur in or near vernal pool habitat or drainages? Would the project involve road construction or widening? Would the project alter the hydrology or sedimentation? Would herbicides be used during operation or maintenance near or upstream of suitable habitat for curved- footed hygrotus diving beetle? Would the project involve road or firebreak maintenance?			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-3b: Implement measures to avoid, minimize, and mitigate impacts on vernal pool branchiopods and curved-footed hygrotus diving beetle Implement best management measures Where impacts cannot be avoided or minimized, undertake compensatory mitigation in accordance with mitigation ratios and requirements developed under the EACCS (Appendix C of the Program EIR). If an incidental take permit is required, undertake compensatory mitigation in accordance with the terms of the permit in consultation with USFWS. 					
Impact BIO-4: Potential disturbance or mortality of and loss of suitable habitat for valley elderberry longhorn beetle (less than significant with mitigation)	3.4-1-8 3.4-25-28	3.4-71	Would the project cause the removal of elderberry shrubs during construction or operation? Would the project cause the trimming of elderberry shrubs during construction or operation? Would the project cause disturbance of elderberry roots within the shrub dripline? Would the project cause changes in topography or compaction of soil from construction in the vicinity of elderberry shrubs?			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species ☑ Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas ☑ Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species ☑ Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction 					

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)	Yes	Summary of Documentation
		Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project does have potential suitable seasonal wetland and pond habitats for vernal pool branchiopods and curved-footed hygrotus diving beetle. However, these species were not detected during wildlife surveys of the site conducted by CH2M HILL biologists in fall 2014 and winter 2015. With implementation of BIO-1b, BIO-1e, BIO-3a, and BIO-3b, impacts would be less than significant.
		Use biological resources study submitted with project application to determine if mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project does not have habitat for valley elderberry longhorn beetle on site as no presence of this species was found during the fall 2014 and winter 2015 wildlife surveys conducted by CH2M HILL biologists. With implementation of BIO-1b, BIO-1e, BIO-3a, BIO-4a, and BIO-4b, impacts would be less than significant.

	Discussion in Text						Would project mitiga have in not ide in the	d the t, with ntion, npacts ntified PEIR?	
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(BIO-4, cont.)						 Mitigation Measure BIO-4a: Implement measures to avoid or protect habitat for valley elderberry longhorn beetle Avoid removal of elderberry shrubs. Protect elderberry shrubs/clusters within 100 feet of the construction area. (A qualified biologist will mark the elderberry shrubs and clusters and orange construction barrier fencing will be placed at the edge of the buffer areas.) Receive approval from USFWS for buffer areas. No construction activities will be permitted within the buffer zone. Post signs every 50 feet (15.2 meters) along the perimeter of the buffer area fencing Inspect buffer area fences around elderberry shrubs weekly by a qualified biological monitor during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed Submit biological inspection reports to USFWS. Mitigation Measure BIO-4b: Compensate for direct and indirect effects on valley elderberry longhorn beetle If elderberry shrubs cannot be avoided and protected as outlined in Mitigation Measure 4a, the project proponent will obtain an incidental take permit from USFWS. 			
Impact BIO-5: Potential disturbance or mortality of and loss of suitable habitat for California tiger salamander, western spadefoot, California red-legged frog, and foothill yellow-legged frog (less than significant with mitigation)	3.4-1-8 3.4-8-22 3.4-29-32	3.4-76	 Would the project include any of the following activities? Excavation, grading, or stockpiling of soil Removal or disturbance of upland habitat Installation of power collection and communication systems Turbine construction Road infrastructure construction/maintenance and upgrades Meteorological tower installation and removal Temporary staging area set-up Reclamation Operation and maintenance Travel on maintenance roads 			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-5a: Implement best management practices to avoid and minimize effects on special-status amphibians Implement best management practices shown in and incorporate them into individual project design and construction documents If implementation of some of these measures requires a take permit, obtain incidental take permits from USFWS (California red-legged frog and California tiger salamander) and from CDFW (California tiger salamander only) before construction begins. Implement additional conservation measures or conditions of approval in applicable project permits (e.g., ESA or CESA incidental take authorization). Comply with the State of California State Water Resources Control Board NPDES construction general requirements for stormwater. 			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project does have suitable seasonal wetlands and ponds for California tiger salamander, western spadefoot, California red-legged frog, and foothill yellow-legged frog on site. In addition, California tiger salamander and California red-legged frog were detected during wildlife surveys conducted by CH2M HILL biologists in fall 2014 and winter 2015. However, potential impacts to these species would be the same as those in the APWRA Repowering PEIR. With implementation of BIO-1b, BIO-1e, BIO-3a, BIO-5a, BIO-5b, and BIO-5c impacts would be less than significant.

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	Discussion in Text									
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes				
(BIO-5, cont.)						 Mitigation Measure BIO-5b: Compensate for loss of habitat for special-status amphibians ☑ If impacts on aquatic and upland habitat for special-status amphibians cannot be avoided or minimized, undertake compensatory mitigation in accordance with mitigation ratios and requirements developed under the EACCS (Appendix C of the PEIR). ☑ If take authorization is required, undertake compensatory mitigation in accordance with the terms of the authorization in consultation with USFWS and/or CDFW. Mitigation Measure BIO-5c: Restore disturbed annual grasslands ☑ Prepare and submit a Grasslands Restoration Plan within 30 days prior to any ground disturbance 				
Impact BIO-6: Potential disturbance or mortality of and loss of suitable habitat for western pond turtle (less than significant with mitigation)	3.4-1-8 3.4-32-33	3.4-82	Would the project involve construction activities in or near ponds, reservoirs, drainages, or surrounding riparian and grassland areas? Would the project involve road construction or widening activities?			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-6: Conduct preconstruction surveys for western pond turtle and monitor construction activities if turtles are observed Conduct surveys for western pond turtle one week before and within 24 hours of beginning work in suitable aquatic Have a biological monitor present during construction activities in the aquatic habitat where the turtle was observed Have a qualified biologist remove and relocate turtle to appropriate aquatic habitat outside and away from the construction area (relocation of western pond turtle requires a letter from CDFW authorizing this activity) 				
Impact BIO-7: Potential disturbance or mortality of and loss of suitable habitat for Blainville's horned lizard, Alameda whipsnake, and San Joaquin coachwhip (less than significant with mitigation)	3.4-1-8 3.4-32-34	3.4-85	Would the project involve construction activities in grassland, chaparral, oak woodland, or scrub? Would the project involve road and firebreak maintenance activities in grassland, chaparral, oak woodland, or scrub?			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species ☑ Implement best management practices shown in and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas ☑ Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species ☑ Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction 				

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0	Yes	Summary of Documentation
		Use biological resources study submitted with project application to determine if mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project does have suitable aquatic habitat for western pond turtle. However, this species was not detected during wildlife surveys conducted by CH2M HILL biologists in fall 2014 and winter 2015. With implementation of BIO-1b, BIO-1e, BIO-3a, and BIO-6 impacts would be less than significant.
]		Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project does have suitable annual grassland habitats for Blainsville's horned lizard and San Joaquin coachwhip. However, these species were not detected during wildlife surveys conducted by CH2M HILL biologists in fall 2014 and winter 2015. With implementation of BIO-1b, BIO-1e, BIO-3a, BIO-5c, BIO-7a, and BIO-7b impacts would be less than significant.

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider No	o Ye	6 Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact Co (BI0-7, cont.) (BI0-7, cont.) Impact BI0-8: Potential construction-related disturbance or mortality of special-status and non-special-status migratory birds (less than significant with mitigation) 3.4	3.4-1-8 3.4-34-42	3.4-89	APWRA Issues to Consider No Would construction occur during nesting season (generally February 1-August 31)?	o Ye	 Mitigation Measures (Details in MMRP) and Notes Mitigation Measure BIO-5c: Restore disturbed annual grasslands Prepare and submit a Grasslands Restoration Plan within 30 days prior to any ground disturbance Mitigation Measure BIO-7a: Implement best management practices to avoid and minimize effects on special-status reptiles Implement best management practices shown in and incorporate them into individual project design and construction documents If implementation of some of these measures requires a take permit, obtain incidental take permits from USFWS and CDFW (Alameda whipsnake) before construction begins. Implement additional conservation measures or conditions of approval in applicable project permits (i.e., ESA incidental take permit). Mitigation Measure BIO-7b: Compensate for loss of habitat for special-status reptiles If impacts on habitat for special-status reptiles cannot be avoided or minimized, compensatory mitigation will be undertaken in accordance with mitigation ratios and requirements developed under the EACCS (Appendix C of the EIR). If incidental take permits are required for Alameda whipsnake, compensatory mitigation will be undertaken in accordance with the terms of permits in consultation with USFWS and CDFW. Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status 	No	Yes	See Attachment 1, Section 3.3.2.2; The Project could result in construction-related disturbance or mortality of special- status and non-special-status migratory birds. The following species were detected during wildlife surveys conducted by CH2M HILL biologists in fall 2014 and winter 2015: white-tailed kite, northern harrier, bald eagle, red-tailed hawk, golden eagle, ferruginous hawk, western burrowing owl, tricolored blackbird, loggerhead shrike.
					 Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-5c: Restore disturbed annual grasslands Prepare and submit a Grasslands Restoration Plan within 30 days prior to any ground disturbance Mitigation Measure BIO-8a: Implement measures to avoid and minimize potential impacts on special-status and non-special-status nesting birds Implement best management practices, including: Preconstruction bird surveys Coordination with USFW on golden eagles Coordination with CDFW and USFWS on active nests 			than significant.

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider		Yes	Mitigation Measures (Details in MMRP) and Notes	r
(BIO-8, cont.)						Mitigation Measure BIO-8b: Implement measures to avoid and minimize potential impacts on western burrowing owl Implement best management practices, including: Preconstruction burrowing owl surveys Coordination with CDFW on active burrowing owl nests Ocoordination with CDFW on burrowing owl buffer Coordination with CDFW on burrowing owl exclusion plan	
Impact BIO-9: Permanent and temporary loss of occupied habitat for western burrowing owl and foraging habitat for tricolored blackbird and other special-status and non-special-status birds (less than significant with mitigation)	3.4-1-8 3.4-34-42	3.4-94	Would the project result in the temporary or permanent loss of grassland?			 Mitigation Measure BIO-5b: Compensate for loss of habitat for special-status amphibians If impacts on aquatic and upland habitat for special-status amphibians cannot be avoided or minimized, undertake compensatory mitigation in accordance with mitigation ratios and requirements developed under the EACCS (Appendix C of the EIR). If take authorization is required, undertake compensatory mitigation in accordance with the terms of the authorization in consultation with USFWS and/or CDFW. Mitigation Measure BIO-5c: Restore disturbed annual grasslands Prepare and submit a Grasslands Restoration Plan within 30 days prior to any ground disturbance Mitigation Measure BIO-9: Compensate for the permanent loss of occupied habitat for western burrowing owl If construction activities would result in the removal of occupied burrowing owl habitat, permanently protect mitigation land through a conservation easement or implement alternative mitigation Consult with CDFW, as described in its Staff Report on Burrowing Owl Mitigation (California Department of Fish and Game 2012:11–13), to develop the compensation plan 	
Impact BIO-10: Potential injury or mortality of and loss of habitat for San Joaquin kit fox and American badger (less than significant with mitigation)	3.4-1-8 3.4-45-46	3.4-96	Would the project result in temporary or permanent impacts on grassland? Would the project use vehicles that could hit San Joaquin kit fox or American badger? Would the project have exposed pipes, large excavated holes, or trenches that could entrap San Joaquin kit foxes or American badgers? Would the project have operation or maintenance activities, such as road and firebreak maintenance?			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species ☑ Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas ☑ Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species ☑ Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-5c: Restore disturbed annual grasslands ☑ Prepare and submit a Grasslands Restoration Plan within 30 days prior to any ground disturbance 	

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D	Yes	Summary of Documentation
		Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project will result in permanent and temporary loss of occupied habitat for western burrowing owl and foraging habitat for tricolored blackbird and other special-status and non-special-status birds. With implementation of BIO-5b, BIO-5c, and BIO-9 impacts would be less than significant.
]		Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.2; The Project has potential to injure or cause mortality and loss of habitat for the San Joaquin kit fox and American badger. With implementation of BIO-1b, BIO-1e, BIO-3a, BIO-5c, BIO- 10a, and BIO-10b impacts would be less than significant.

	Discussion in Text					Woul projec mitiga have ir not ide in the	d the t, with ation, npacts entified PEIR?	
Impact	Existing Conditions Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(BIO-10, cont.)					 Mitigation Measure BIO-10a: Implement measures to avoid and minimize potential impacts on San Joaquin kit fox and American badger Implement BMPs, including: Preconstruction San Joaquin kit fox and American badger surveys Conducting preconstruction surveys no less than 14 days and no more than 30 days before the beginning of ground disturbance, or any activity likely to affect San Joaquin kit fox Submission of results of the preconstruction survey including the locations of any potential or known San Joaquin kit fox dens to USFWS If implementation of some of these BMPs requires a take permit, obtain incidental take permits from USFWS and CDFW (San Joaquin kit fox) before construction begins. Mitigation Measure BIO-10b: Compensate for loss of suitable habitat for San Joaquin kit fox and American badger If permanent impacts on habitat for San Joaquin kit fox and American badger cannot be avoided or minimized, undertake compensatory mitigation in accordance with mitigation ratios and requirements developed under the EACCS (Appendix C in EIR). If incidental take permits are required for San Joaquin kit fox, undertake compensatory mitigation in accordance with the terms of permits in consultation with USFWS 			
Impact BIO-11: Avian mortality resulting from interaction with wind energy facilities (significant and unavoidable)	3.4-1-8 3.4-46-49	Would the project include turbines or powerlines?			Mitigation Measure BIO-11a: Prepare a project-specific avian protection plan			See Attachment 1, Section 3.3.2.2; The Project has significant and unavoidable impacts in relation to avian mortality that cannot be reduced to a less-than significant level through the incorporation of mitigation measures, consistent with the findings made under the Program EIR. Nonetheless, consistent with the PEIR and its findings, BIO-1b, BIO-1e, BIO-3a, BIO-5b, BIO-5c, BIO-8a, BIO-8b, BIO-9, BIO-11a, and BIO-11i will be implemented, in order to reduce and minimize the extent of the impact.

	Discussion in Text							
Impact	Existing Conditions	Impacts	APWRA Issues to Consider N	o Ye	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(BIO-11, cont.)					Mitigation Measure BIO-11d: Incorporate avian-safe practices into design of turbine- related infrastructure			
					M Implement avian-safe practices			
					Mitigation Measure BIO-11e: Retrofit existing infrastructure to minimize risk to raptors			
					Retrofit any existing power lines in a specific project area that are owned by the wind project operator and are associated with electrocution of an eagle or other raptor, within 30 days, to make them raptor-safe according to Avian Power Line Interaction Committee guidelines.			
					Retrofit all other existing structures to remain in a project area during repowering, as feasible, according to specifications of Mitigation Measure BIO-11c prior to repowered turbine operation.			
					Mitigation Measure BIO-11f: Discourage prey for raptors	\bowtie		
					Apply the following measures when designing and siting turbine-related infrastructure to minimize opportunities for fossorial mammals to become established			
					Do not use rodenticide on the project site to avoid the risk of raptors scavenging the remains of poisoned animals			
					Place boulders (rocks more than 12 inches in diameter) excavated during project construction in aboveground piles more than 500 meters (1,640 feet) from any turbine			
					Move existing rock piles created during construction of first- and second-generation turbines at least 500 meters (1,640 feet) from turbines			
					Place gravel around each tower foundation to discourage small mammals from burrowing near turbines			
					Mitigation Measure BIO-11g: Implement postconstruction avian fatality monitoring for all repowering projects			
					Implement the postconstruction monitoring program, including:			
					Conducting fatality monitoring for a minimum of 3 years			
					Forming a technical advisory committee (TAC)			
					Conducting carcass surveys			
					for a minimum of 30 minutes duration			
					Submitting raw data and annual reports to the County			
					Mitigation Measure BIO-11h: Compensate for the loss of raptors and other avian species, including golden eagles, by contributing to conservation efforts			
					Implement the compensation measures, including submitting to the County for approval specific conservation effort to be pursued as part of the avian conservation strategy review process			
					Mitigation Measure BIO-11i: Implement an avian adaptive management program			
					Implement the adaptive management program in MM BIO-11i if fatality monitoring described in Mitigation Measure BIO-11g results in an estimate that exceeds the preconstruction baseline fatality estimates (i.e., estimates at the nonrepowered			

	Discussio	on in Text					Wa pro mi hav not in t
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No
(BIO-11, cont.)						 turbines as described in this PEIR) for any focal species or species group (i.e., individual focal species, all focal species, all raptors, all non-raptors, all birds combined). This includes: Preparing a project-specific adaptive management plan within 2 months following the availability of the fatality monitoring results Implementing the project-specific adaptive management plans within 2 months of approval by the County 	
Impact BIO-12: Potential mortality or disturbance of bats from roost removal or disturbance (less than significant with mitigation)	3.4-1-8 3.4-42-45	3.4-127	 Would the project construction or decommissioning involve any of the following activities? Increased traffic, noise, lighting, or human access Removal or disturbance of trees, rock outcrops, debris piles, outbuildings, or other artificial structures Removal of special-status species' roost structures 			 Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-12a: Conduct bat roost surveys Prior to development of any repowering project, conduct a roost habitat assessment to identify potential colonial roost sites of special-status and common bat species within 750 feet of the construction area If suitable roost sites are to be removed or otherwise affected by the proposed project, conduct targeted roost surveys of all identified sites that would be affected (several separate survey visits may be required) At the completion of the roost surveys, submit a report documenting areas surveyed, methods, results, and mapping of high-quality habitat or confirmed roost locations Mitigation Measure BIO-12b: Avoid removing or disturbing bat roosts Do not disturb active bat roosts and provide a minimum buffer of 500 feet where preexisting disturbance is moderate or 750 feet where preexisting disturbance is minimal Confirm buffer distances and determination of the need for a biological monitor for active maternity roosts or hibernacula in consultation with CDFW. Wherever feasible, leave structures (natural or artificial) showing evidence of significant bat use within the past year in place as habitat Consult with CDFW should such a structure need to be removed or disturbed Provide environmental awareness training to construction personnel, establish buffers, and initiate consultation with CDFW if needed<td></td>	

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No	Yes	Summary of Documentation
		See Attachment 1, Section 3.3.2.2; The Project could result in mortality or disturbance of bats from roost removal or disturbance. With implementation of BIO-1b, BIO-3a, BIO- 12a, and BIO-12b impacts would be less than significant, consistent with the findings made under the Program EIR.

	Discussion in Text	_				Woul projec mitiga have ir not ide in the	d the ct, with ation, mpacts entified PEIR?	
Impact	Existing Conditions Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(BIO-12, cont.)					If a maternity roost or hibernaculum is present within 500 feet of the construction site where preexisting disturbance is moderate or within 750 feet where preexisting disturbance is minimal, have a qualified biological monitor onsite during groundbreaking activities			
Impact BIO-13: Potential for construction activities to temporarily remove or alter bat foraging habitat (less than significant)	3.4-1-8 3.4-42-45	Would project construction degrade bat foraging habitat by replacing vegetation with nonvegetated land cover types?			Note: Loss or degradation of bat foraging habitat by replacing vegetation with and by creating a temporary increase in traffic, noise, and artificial night lighting in the program area, reducing the extent of landscape available for foraging would fall within the impact assessed in the PEIR and be less than significant because the amount of landscape returned to foraging habitat in the process of decommissioning the first- and second-generation turbines would offset the amount of foraging habitat lost to repowering activities.			See Attachment 1, Section 3.3.2.2; The Project has potential for construction activities to temporarily remove or alter bat foraging habitat. However, consistent with the findings made under the Program EIR, the loss of habitat would be offset because the project would result in increased foraging habitat.
Impact BIO-14: Turbine-related fatalities of special-status and other bats (significant and unavoidable)	3.4-1-8 3.4-42-45	Would the project involve turbines?			 Note: These mitigation measures will not reduce the impact to a less than significant level Mitigation Measure BIO-14a: Site and select turbines to minimize potential mortality of bats Use the best information available to site turbines and to select from turbine models in such a manner as to reduce bat collision risk; measures include siting turbines the greatest distance feasible up to 500 meters (1,640) feet from still or flowing bodies of water, riparian habitat, known roosts, and tree stands (California Bat Working Group 2006:6). Conduct a bat habitat assessment and roost survey to identify and map habitat of potential significance to bats Incorporate relevant bat use survey data and bat fatality records published by other projects in the APWRA into turbine siting decisions Carry out roost surveys according to the methods described in Mitigation Measure-BIO-12a. Mitigation Measure BIO-14b: Implement postconstruction bat fatality monitoring program for all repowering projects Include on the TAC at least one biologist with significant expertise in bat research and wind energy impacts on bats Conduct bat acoustic surveys concurrently with fatality monitoring in the project area Modify the fatality search protocol will be implemented to obtain better information on the number and timing of bat fatalities Use bat carcasses in detection probability trials to develop bat-specific detection probabilities Mitigation Measure BIO-14c: Prepare and publish annual monitoring reports on the findings of bat use of the project area and fatality monitoring results Produce annual reports of bat use results and fatality monitoring within 3 months of the end of the last day of fatality monitoring Report special-status bat species records to CNDDB 			See Attachment 1, Section 3.3.2.2; The Project has significant and unavoidable impacts in relation to bat mortality that cannot be reduced to a less than significant level through the incorporation of mitigation measures, consistent with the findings made under the Program EIR. Nonetheless, consistent with the PEIR, BIO-1b, BIO-1e, BIO- 3a, BIO-5b, BIO-5c, BIO-12a, BIO-12b, BIO-14a, BIO-14b, BIO-14c, BIO-14d,BIO-14e will be implemented in order to minimize and reduce the extent of the impact.

	Discussion in Text						Woul projec mitiga have ir not ide in the	d the t, with ation, npacts ntified PEIR?	
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(BIO-14, cont.)						 Mitigation Measure BIO-14d: Develop and implement a bat adaptive management plan ☑ In concert with Mitigation Measure BIO-14b, develop adaptive management plans to ensure appropriate, feasible, and current incorporation of emerging information Mitigation Measure BIO-14e: Compensate for expenses incurred by rehabilitating injured bats ☑ Assume in full the cost of reasonable, licensed rehabilitation efforts for any injured bats taken to wildlife care facilities from the program area 			
Impact BIO-15: Potential for road infrastructure upgrades to result in adverse effects on alkali meadow (less than significant with mitigation)	3.4-1-8 3.4-10-11	3.4-141	Would the project involve grading, widening, or regravelling of existing roads or construction of new roads in alkali meadow habitat? Would existing culverts be upgraded or new culverts installed in alkali meadow habitat?			 Mitigation Measure BIO-15: Compensate for the loss of alkali meadow habitat ☑ If alkali meadow habitat is filled or disturbed, compensate for the loss of this habitat ☑ Determine compensation ratios through coordination with state and federal agencies (CDFW, USFWS, USACE) ☑ Develop and implement a restoration and monitoring plan 			Use biological resources study submitted with project application to determine if mitigation measures are required. See Attachment 1, Section 3.3.2.3; The Project's road infrastructure updates have potential to result in adverse effects on alkali meadow. With implementation of BIO-15 impacts would be less than significant.
Impact BIO-16: Potential for road infrastructure upgrades to result in adverse effects on riparian habitat (less than significant with mitigation)	3.4-1-8 3.4-14-15	3.4-142	Would the project involve grading, widening, or regravelling of existing roads or construction of new roads in riparian habitat? Would existing culverts be upgraded or new culverts installed in riparian habitat?			 Mitigation Measure BIO-16: Compensate for the loss of riparian habitat If riparian habitat is filled or removed as part of a project, compensate for the loss of riparian habitat Determine compensation ratios through coordination with state and federal agencies (CDFW, USFWS, USACE) Develop and implement a restoration and monitoring plan 			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.3; The Project's road infrastructure updates have potential to result in adverse effects on riparian habitat. With implementation of BIO- 16 impacts would be less than significant.
Impact BIO-17: Potential for ground- disturbing activities to result in direct adverse effects on common habitats (less than significant)	3.4-8-21	3.4-143	 Would the project cause ground disturbance in common habitats? Would the project not include the following measures, which are part of the project, as described in Chapter 2, <i>Program Description</i>, of the EIR? ☑ develop a reclamation plan in coordination with the County, USFWS, and CDFW ☑ ensure the reclamation plan is completed and approved by the County 6 months in advance of project decommissioning 			Note: No mitigation is required for projects as described in the PEIR because all lands disturbed by infrastructure installation or removal would be returned to preproject conditions per the County required reclamation plan. If the project does not include these measures, it would not fall within the impacts identified in the PEIR.			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.3; The Project has potential for ground disturbing activities to result in direct adverse effects on common habitats. However, per the notes, all disturbed land will be returned to pre-project conditions [County reclamation plan].
Impact BIO-18: Potential for road infrastructure upgrades to result in adverse effects on wetlands (less than significant with mitigation)	3.4-1-8 3.4-15-17	3.4-145	Would the project involve grading, widening, or regravelling of existing roads or construction of new roads in wetlands? Would existing culverts be upgraded or new culverts installed in wetlands?			 Mitigation Measure BIO-18: Compensate for the loss of wetlands ☑ If wetlands are filled or disturbed as part of a project, compensate for the loss of this habitat functions ☑ Determine compensation ratios through coordination with state and federal agencies (CDFW, USFWS, USACE) ☑ Develop and implement a restoration and monitoring plan 			Use biological resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Section 3.3.2.4; The Project has potential for road infrastructure upgrades to result in adverse effects on wetlands. With implementation of BIO- 18 impacts would be less than significant.

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	Discussion in Text					Woul projec mitiga have in not ide in the	d the t, with ation, npacts entified PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact BIO-19: Potential impact on the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors, and the use of native wildlife nursery sites (significant and unavoidable)	3.4-1-8 3.4-25-49	3.4-146	Would the project involve construction activities or fencing of work areas?			Note: These mitigation measures will not reduce the impact to less than significant Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Implement best management practices and incorporate them into individual project design and construction documents Mitigation Measure BIO-1e: Retain a biological monitor during ground-disturbing activities in environmentally sensitive areas Retain a qualified biologist to conduct monitoring Mitigation Measure BIO-3a: Conduct preconstruction surveys for habitat for special-status wildlife species Conduct surveys for the special-status wildlife species within and adjacent to all project sites no more than 3 years prior to construction Mitigation Measure BIO-4a: Implement measures to avoid or protect habitat for valley elderberry longhorn beetle Avoid removal of elderberry shrubs. Protect elderberry shrubs/clusters within 100 feet of the construction area. (A qualified biologist will mark the elderberry shrubs and clusters and orange construction barrier fencing will be placed at the edge of the buffer area fencing Inspect buffer area fences around elderberry shrubs weekly by a qualified biological monitor during ground-disturbing activities and monthly after ground-disturbing activities until project construction is complete or until the fences are removed Submit biological inspection reports to USFWS Mitigation Measure BIO-5a: Implement best management practices to avoid and minimize ground-disturbing activities and incorporate them into individual project design and			See Attachment 1, Section 3.3.2.5; The Project has potential for impacting the movement of any native resident or migratory wildlife species or established native resident or migratory wildlife corridors, and the use of native wildlife nursery sites. In terms of operation of the wind turbines, impacts are considered significant and unavoidable in relation to raptors, other birds, and bats and these impacts cannot be reduced to a less than significant level through the incorporation of mitigation measures, consistent with the findings made under the Program EIR. Nonetheless, BIO-1b, BIO-1e, BIO-3a, BIO- 4a, BIO-5a, BIO-5c, BIO-7a, BIO-8a, BIO-8b, BIO-10a, BIO- 11b, BIO-11c, BIO-11d, BIO-11e, BIO-11i, BIO-12a, BIO- 12b, BIO-14a, and BIO-14d will be implemented in order to reduce and minimize the extent of the impact.

	Discussion in Text						Woul projec mitig have in not ide in the	ld the ct, with ation, mpacts entified PEIR?	1 5 1
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact (BIO-19, cont.)	Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes Mitigation Measure BIO-7a: Implement best management practices to avoid and minimize effects on special-status reptiles Implement best management practices and incorporate them into individual project design and construction documents If implementation of some of these measures requires a take permit, obtain incidental take permits from USFWS and CDFW (Alameda whipsnake) before construction begins. Implement additional conservation measures or conditions of approval in applicable project permits (i.e., ESA incidental take permit). Mitigation Measure BIO-8a: Implement measures to avoid and minimize potential impacts on special-status and non-special-status nesting birds Implement best management practices, including: Preconstruction bird surveys Coordination with USFW on golden eagles Mitigation Measure BIO-8b: Implement measures to avoid and minimize potential impacts on western burrowing owl Implement best management practices, including: Preconstruction burrowing owl surveys Coordination with CDFW on active burrowing owl nests Coordination with CDFW on burrowing owl exclusion plan Mitigation Measure BIO-10a: Implement measures to avoid and minimize potential impacts on San Joaquin kit fox and American badger Preconstruction burrowing owl exclusion plan Mitigation Measure BIO-10a: Implement measures to avoid and minimize potential impacts on san Joaquin kit fox and American badger surveys	No	Yes	Summary of Documentation
						Include siting analysis and model results for each turbine in project-specific APP			

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes				
(BIO-19, cont.)						 Mitigation Measure BIO-11c: Use turbine designs that reduce avian impacts Implement the following design-related measures: Select designs that have been shown or that are suspected to reduce avian fatalities, based on the height, color, configuration, or other features of the turbines Limit or eliminate perching opportunities Limit or eliminate nesting or roosting opportunities Install lighting on the fewest number of turbines allowed by FAA regulations, and all pilot warning lights will fire synchronously. Use only red or dual red-and-white strobe, strobe-like, or flashing lights and operate at the minimum allowable intensity, flashing frequency, and quantity allowed by FAA Mitigation Measure BIO-11d: Incorporate avian-safe practices into design of turbine-related infrastructure Implement avian-safe practices Mitigation Measure BIO-11e: Retrofit existing infrastructure to minimize risk to raptors Retrofit any existing power lines in a specific project area that are owned by the wind project operator and are associated with electrocution of an eagle or other raptor, within 30 days, to make them raptor-safe according to Avian Power Line Interaction Committee guidelines. Retrofit all other existing structures to remain in a project area during repowering, as feasible, according to specifications of Mitigation Measure BIO-11c prior to repowered turbine operation. Mitigation Measure BIO-111: Implement an avian adaptive management program Implement the adaptive management program if fatality monitoring described in Mitigation Measure BIO-11g results in an estimate that exceeds the preconstruction baseline fatality estimates (i.e., estimates at the nonrepowered turbines as described in this PEIR) for any focal species or species group (i.e., individual focal species, all focal species, all raptors, all non-raptors, all birds combined). This includes: Preparing a project-specific adaptive mana				

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	d the t, with ation, npacts ntified PEIR? Yes

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	N
(BIO-19, cont)						 Mitigation Measure BIO-12b: Avoid removing or disturbing bat roosts ○ Confirm buffer distances and determination of the need for a biological monitor for active maternity roosts or hibernacula in consultation with CDFW. ○ Wherever feasible, leave structures (natural or artificial) showing evidence of significant bat use within the past year in place as habitat ○ Consult with CDFW should such a structure need to be removed or disturbed ○ Provide environmental awareness training to construction personnel, establish buffers, and initiate consultation with CDFW if needed ○ Shield and angle artificial night lighting within 500 feet of any roost in such that bats may enter and exit the roost without artificial illumination and the roost does not receive artificial exposure to visual predators ○ Conduct tree and vegetation removal outside the maternity season (April 1-September 15) ○ If a maternity roost or hibernaculum is present within 500 feet of the construction site where preexisting disturbance is moderate or within 750 feet where preexisting disturbance is moderate or within 750 feet where preexisting disturbance is moderate or within 760 feet from turbine models in such a manner as to reduce bat collision risk; measures include siting turbines the greatest distance feasible up to 500 meters (1,640) feet from still or flowing bodies of water, riparian habitat, known roosts, and tree stands (California Bat Working Group 2006:6). ○ Conduct a bat habitat assessment and roost survey to identify and map habitat of potential significance to bats ○ Incorporate relevant bat use survey data and bat fatality records published by other projects in the APWRA into turbine siting decisions ○ Carry out roost surveys according to the methods described in Mitigation Measure-BIO-12a. Mitigation Measure BIO-14d: Develop and implement a bat adaptive management plan <l< td=""><td></td></l<>	
Impact BIO-20: Conflict with local plans or policies (less than significant with mitigation)	3.4-6-8	3.4-153	Would project construction or operation cause the loss of special-status species or their habitat, loss of alkali meadow, loss of riparian habitat, or loss of existing wetlands?			 Note: The following mitigation measures are not fully described because they have are described in detail above. Mitigation Measure BIO-1a: Conduct surveys to determine the presence or absence of special-status species Mitigation Measure BIO-1b: Implement best management practices to avoid and minimize impacts on special-status species Mitigation Measure BIO-1c: Avoid and minimize impacts on special-status plant species by establishing activity exclusion zones Mitigation Measure BIO-1d: Compensate for impacts on special-status plant species 	×

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No	Yes	Summary of Documentation
		See Attachment 1, Section 3.3.2.6; The Project has potential for conflicting with local plans or policies. With implementation of BIO-1a, BIO-1b, BIO-1c, BIO-1d, BIO-1e, BIO-3a, BIO-4a, BIO-5a, BIO-5b, BIO-5c, BIO-7a, BIO-7b, BIO-8a, BIO-8b, BIO-9, BIO-10a, BIO-10b, BIO-15, BIO-16, and BIO-18 impacts would be less than significant.

Impact Discussion in Text Existing Conditions Impacts APWRA Issues to Consider No Yes Mitigation Measures (Details in MMRP) and Notes (BI0-20, cont.) Impacts APWRA Issues to Consider No Yes Mitigation Measures (Details in MMRP) and Notes (BI0-20, cont.) Impacts APWRA Issues to Consider No Yes Mitigation Measures (Details in MMRP) and Notes (BI0-20, cont.) Impacts APWRA Issues to Consider No Yes Mitigation Measure BI0-1e: Retain a biological monitor during group activities in environmentally sensitive areas Mitigation Measure BI0-3a: Implement measures to avoid, minimize, impacts on vernal pool branchiopods and curved-footed hygrous divident willigation Measure BI0-4a: Implement measures to avoid or protect valley elderberry longhorn beetle	1d-disturbing , and mitigate ving beetle habitat for	W pro m hav not in
Impact Existing Conditions Impacts APWRA Issues to Consider No Yes Mitigation Measures (Details in MMRP) and Notes (BI0-20, cont.) (BI0-20, cont.) Impacts Impacts APWRA Issues to Consider No Yes Mitigation Measures (Details in MMRP) and Notes (BI0-20, cont.) Impacts Impacts Impacts Impacts Mitigation Measure BIO-1e: Retain a biological monitor during groun activities in environmentally sensitive areas Mitigation Measure BIO-3a: Implement measures to avoid, minimize, impacts on vernal pool branchiopods and curved-footed hygrotus diverses on vernal pool branchiopods and curved-footed hygrotus diverses Mitigation Measure BIO-4a: Implement measures to avoid or protect valley elderberry longhorn beetle Mitigation Measure BIO-4b: Compensate for direct and indirect effect	1d-disturbing , and mitigate ving beetle habitat for	N
Image: Construction of the second	nd-disturbing , and mitigate ving beetle habitat for	N
Mitigation Measure BIO-3a: Implement measures to avoid, minimize impacts on vernal pool branchiopods and curved-footed hygrotus div Mitigation Measure BIO-4a: Implement measures to avoid or protect valley elderberry longhorn beetle Mitigation Measure BIO-4b: Compensate for direct and indirect effect	, and mitigate ving beetle habitat for	
Mitigation Measure BIO-4a: Implement measures to avoid or protect valley elderberry longhorn beetle Mitigation Measure BIO-4b: Compensate for direct and indirect effect	habitat for	
Mitigation Measure BIO-4h: Compensate for direct and indirect effect		
elderberry longhorn beetle	ts on valley	
Mitigation Measure BIO-5a: Implement best management practices to minimize effects on special-status amphibians	o avoid and	
Mitigation Measure BIO-5b: Compensate for loss of habitat for specia amphibians	ıl-status	
Mitigation Measure BIO-5c: Restore disturbed annual grasslands		
Mitigation Measure BIO-7a: Implement best management practices to minimize effects on special-status reptiles	o avoid and	
Mitigation Measure BIO-7b: Compensate for loss of habitat for specia	ıl-status reptile	s
Mitigation Measure BIO-8a: Implement measures to avoid and minim impacts on special-status and non-special-status nesting birds	nize potential	
Mitigation Measure BIO-8b: Implement measures to avoid and minim impacts on western burrowing owl	nize potential	
Mitigation Measure BIO-9: Compensate for the permanent loss of for for western burrowing owl	aging habitat	
Mitigation Measure BIO-10a: Implement measures to avoid and mini impacts on San Joaquin kit fox and American badger	mize potential	
Mitigation Measure BIO-10b: Compensate for loss of suitable habitat kit fox and American badger	for San Joaqui	1
Mitigation Measure BIO-15: Compensate for the loss of alkali meadow	w habitat	
Mitigation Measure BIO-16: Compensate for the loss of riparian habit	tat	
Mitigation Measure BIO-18: Compensate for the loss of wetlands		
Impact BIO-21: Conflict with provi- NA 3.4-158 Would the project include activities that 🛛 🗌 Note:		Þ
sions of an adopted HCP/NCCP or other approved local, regional, or state habitat conservation plan (no impact) are not within the scope of the project described in the PEIR? There are no adopted HCP/NCCPs for the program area. If the proposed pro- fall within the scope of activities described in the PEIR but the project work with the EACCS, there would be no impact.	roject does not uld not conflict	
Cultural		
Impact CUL-1: Cause a substantial adverse change in the significance of a historical resource (less than significant with mitigation) 3.5-1-3 3.5-15 Are any historic architectural resources located in the project area? Impact CUL-1a: Avoid historic resources in design and layout of a protect the program area Mitigation Measure CUL-1b: Appropriate recordation of historic resources in design and layout of a protect the program area Impact CUL-1b: Appropriate recordation of historic resources in design and layout of a protect the program area	posed project ir	

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0	Yes	Summary of Documentation
		See Attachment 1, Section 3.3.2.7; The Project area does not have adopted HPC/NCCPs and would not conflict with the EACCS. No mitigation is required.
		Use cultural resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Appendix B. See Attachment 1, Section 3.4.2; The Project area does have cultural resources present. However, the Project is not expected to result in new significant impacts or substantially more adverse significant impacts to cultural

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
						the documentation to NPS, the SHPO, and local repositories as determined by Alameda County			resources related to a substantial adverse change in the significance of a historical resource. This conclusion is based on the results of the pedestrian surveys, record searches of the Project area, and the fact that all resources will be avoided. With implementation of CUL-1a and CUL- 1b, impacts would be less than significant.
Impact CUL-2: Cause a substantial adverse change in the significance of an archaeological resource(less than significant with mitigation)	3.5-1-12	3.5-17	Would the project involve ground- disturbing activities?			 Mitigation Measure CUL-2a: Conduct a preconstruction cultural field survey and cultural resources inventory and evaluation Conduct an archaeological field survey of the program area and include the documentation and result of these efforts, the evaluation of any cultural resources identified during the survey, and cultural resources monitoring Mitigation Measure CUL-2b: Develop a treatment plan for any identified significant cultural resources If any significant resources are identified through the preconstruction survey, develop and implement a treatment plan that could include site avoidance, capping, or data recovery Mitigation Measure CUL-2c: Conduct worker awareness training for archaeological resources prior to construction Prior to the initiation of any site preparation and/or the start of construction, ensure that all construction workers receive training overseen by a qualified professional archaeologist who is experienced in teaching nonspecialists, to ensure that forepersons and field supervisors can recognize archaeological resources Mitigation Measure CUL-2d: Stop work if cultural resources are encountered during ground-disturbing activities In the construction specifications, include a stop-work order if prehistoric or historic-era cultural resources are unearthed during ground-disturbing activities If such resources are encountered, immediately halt all activity within 100 feet of the find until a qualified archaeologist can assess the significance of the find. If the find is determined to be potentially develop a treatment plan that could include site avoidance, capping, or data recovery			Use cultural resources study submitted with project application to determine which mitigation measures are required. See Attachment 1, Appendix B. See Attachment 1, Section 3.4.2; The Project area includes four resources (recommended as eligible by the NRHP) which will be avoided during project implementation. In the event that a resource is unexpectedly encountered, implementation of CUL-1a, CUL-1b, CUL-2a, CUL-2b, CUL- 2c, CUL-2d, CUL-2e and CUL-3 will reduce impacts to less than significant. The Project is not expected to result in a substantial adverse change in the significant of an archaeological resource. This conclusion is based on the results of the pedestrian surveys, record searches of the Project area, and the fact that all resources will be avoided.
Impact CUL-3: Disturb any human remains, including those interred outside of formal cemeteries (less than significant with mitigation)	3.5-1-3	3.5-20	Would the project involve ground- disturbing activities?			operation Mitigation Measure CUL-3: Stop work if human remains are encountered during ground-disturbing activities In the construction specifications, include a stop-work order if human remains are discovered Do not excavate or disturb the site within a 100-foot radius of the location of such discovery, or any nearby area reasonably suspected to overlie adjacent remains Notify the Alameda County Coroner			See Attachment 1, Section 3.4.2; Based on record searches, the Project area does not have any human remains known to exist on site. With implementation of CUL-3, impacts would be less than significant.

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Impact	Existing Conditions	Impacts APWRA Issues to Consider		No	Yes	Mitigation Measures (Details in MMRP) and Notes	N
Geology, Soils, Mineral Resources, and Paleontological Resources							
Impact GEO-1: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, as a result of rupture of a known earthquake fault (less than significant with mitigation)	3.6-1-9 3.6-9-13	3.6-19	Would the project involve construction activities?			 Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report Prior to construction activities at any site, retain a geotechnical firm with local expertise in geotechnical investigation and design to prepare a site-specific geotechnical report Submit site-specific geotechnical report to the County building department Incorporate geotechnical recommendations into project design 	
Impact GEO-2: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, as a result of strong seismic ground shaking (less than significant with mitigation)	3.6-1-9 3.6-9-13	3.6-21	Would the project involve construction activities?			Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report See Impact Geo-1	×
Impact GEO-3: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, as a result of seismic-related ground failure, including landsliding and liquefaction (less than significant with mitigation)	3.6-1–9 3.6-9–13	3.6-24	Would the project involve construction activities?			Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report Image: See Impact Geo-1	
Impact GEO-4: Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death, as a result of landsliding (less than significant with mitigation)	3.6-1-9 3.6-9-13	3.6-26	Would the project involve construction activities?			Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report See Impact Geo-1	
Impact GEO-5: Result in substantial soil erosion or the loss of topsoil (less than significant)	3.6-1-9 3.6-14-15	3.6-28	 Would the project not include the following measures, which are part of the project, as described in Chapter 2, <i>Program Description</i>, of the EIR? Prepare a SWPPP develop a reclamation plan in coordination with the County, USFWS, and CDFW ensure the reclamation plan is completed and approved by the County 6 months in advance of project decommissioning 			Note: If the project does not include these measures, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact GEO-6: Be located on expansive soil, creating substantial risks to life or property (less than significant with mitigation)	3.6-1-9 3.6-14-15	3.6-31	Would the project involve construction activities?			Mitigation Measure GEO-1: Conduct site-specific geotechnical investigation and implement design recommendations in subsequent geotechnical report Image: See Impact Geo-1	

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0	Yes	Summary of Documentation
3		The Project will involve construction activities. With implementation of GEO-1, impacts would be less than significant.
3		The Project will involve construction activities. With implementation of GEO-1, impacts would be less than significant.
3		The Project will involve construction activities. With implementation of GEO-1, impacts would be less than significant.
3		The Project will involve construction activities. With implementation of GEO-1, impacts would be less than significant.
		The Project will involve a SWPPP and reclamation plan and therefore impacts will be less than significant.
3		The Project will involve construction activities. With implementation of GEO-1, impacts would be less than significant.

Discussion in Text						Would projec mitiga have ir not ide in the	d the t, with ation, npacts ntified PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact GEO-7: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (less than significant with mitigation)	3.6-4 3.6-15-17	3.6-32	Would the project involve ground- disturbing earthwork associated with construction?			 Mitigation Measure GEO-7a: Retain a qualified professional paleontologist to monitor significant ground-disturbing activities Retain a qualified professional paleontologist as defined by the SVP's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources (2010) to monitor activities with the potential to disturb sensitive paleontological resources Monitor ground-disturbing activities as determined by the professional paleontologist (in general, these activities include any ground-disturbing activities involving excavation deeper than 3 feet in areas with high potential to contain sensitive paleontological resources) Prepare recovered fossils so that they can be properly documented and ensure they are curated at an appropriate facility Mitigation Measure GEO-7b: Educate construction personnel in recognizing fossil material Ensure that all construction personnel receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that they can recognize fossil materials in the event any are discovered during construction. Mitigation Measure GEO-7c: Stop work if substantial fossil remains are encountered during construction If substantial fossil remains (particularly vertebrate remains) are discovered during earth disturbing activities, stop activities within 100 feet of the find immediately until a state-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can assess the nature and importance of the find and a qualified professiona			The Project will involve ground-disturbing earthwork on moderate-sensitive geologic units. However, since there are no high-sensitivity geologic units underlying the project, and previous excavations in the area have not yielded significant fossils, there is a low probability of encountering significant paleontological resources. With implementation of GEO-7b, and GEO-7c impacts would be less than significant.
Greenhouse Gas Emissions									
Impact GHG-1: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (less than significant)	3.7-1–7 3.7-7–11	3.7-16	Would the project include activities that are not within the scope of the project described in the PEIR?			Note: If the project would include activities unrelated to wind power generation, the GHG impacts generated by the project would not be offset by the wind power generation related reduction in GHGs described in Impact GHG-1. However, if the project itself would result in a net reduction of CO _{2e} per year, the impact is less than significant.			See Attachment 1, Section 3.5.2.1; The Project will not include activities that are not within the scope of the project described in the PEIR. Thus the Project will not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.
Impact GHG-2: Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases (less than significant with mitigation)	3.7-1–7 3.7-7–11	3.7-24	Would the project use vehicles that emit greenhouse gases?			 Mitigation Measure GHG-2a: Implement best available control technology for heavy- duty vehicles ☑ Document that the vehicles used for project construction meet the specified requirements Mitigation Measure GHG-2b: Install low SF6 leak rate circuit breakers and monitoring ☑ Ensure that any new circuit breaker installed at a substation has a guaranteed SF6 leak rate of 0.5% by volume or less ☑ Provide Alameda County with documentation of compliance, such as specification sheets, prior to installation of the circuit breaker 			See Attachment 1, Section 3.5.2.1; The Project would use vehicles that emit greenhouse gases. However, the Project will not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases above and beyond what is disclosed in the certified APWRA Repowering PEIR. With implementation of GHG-2a, GHG-2c, and GHG-2d impacts would be less than significant.

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider		Yes	Mitigation Measures (Details in MMRP) and Notes	N
(GHG-2, cont.)						 Monitor the SF6-containing circuit breakers at the substation consistent with Scoping Plan Measure H-6 for the detection and repair of leaks Mitigation Measure GHG-2c: Require new construction to use building materials containing recycled content In the construction of all new substation and other permanent buildings, incorporate materials for which the sum of post-consumer recycled content plus one-half of the post-industrial content constitutes at least 10% of the total value of the materials in the project Mitigation Measure GHG-2d: Comply with construction and demolition debris management ordinance Comply with the County's revised Green Building Ordinance regarding construction and demolition debris as follows: (1) 100% of inert waste and 50% 	
Hazards and Hazardous Materials						wood/vegetative/scrap metal not including Alternative Daily Cover (ADC) and unsalvageable material will be put to other beneficial uses at landfills, and (2) 100% of inert materials (concrete and asphalt) will be recycled or put to beneficial reuse.	
Impact HAZ-1: Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (less than significant)	3.8-1-6 3.8-6-9	3.8-10	 Would the project <u>NOT</u> implement the following BMPs and procedures? Standard construction BMPs to reduce pollutant emissions during construction BMPs to reduce the potential for or exposure to accidental spills involving the use of hazardous materials Procedures to carefully disassemble and remove wind turbines in a manner consistent with recycling and/or reselling the units 			Note: If the project does not include these measures, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact HAZ-2a-1: 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 (less than significant)	3.8-1-6 3.8-6-9	3.8-13	Would the project involve activities or materials beyond those described in the PEIR?			Note: If the project includes activities not covered in the PEIR the impact could be significant and will need to be evaluated.	
Impact HAZ-3: Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school (no impact)	3.8-1-6 3.8-7	3.8-15	Is a public or private K–12 school located within 0.25 mile of the project area?			Note: There are no public or private K–12 schools within 0.25 mile of the program area. The nearest school is approximately 0.48 mile east of proposed wind facilities and it is unlikely that hazardous materials would be emitted or released within 0.25 mile of any schools. Also, implementation of the SWPPP by contractors would reduce the potential of a hazardous spill incident. Should the project be located within 0.25 mile of a public or private K–12 school, it would not fall within the impacts assessed in the PEIR and the impact will need to be evaluated.	

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		The Project would not create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Appropriate construction BMPs will be instead per the required SWPPP. Impacts would be less than significant.
3		The Project would not involve activities or materials beyond those described in the PEIR. Furthermore, the Project will not 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. Impacts would be less than significant.
		The Project area is not within 0.25 miles of any public or private K-12 school. See the notes section for more information. There will be no impacts.

	Discussion in Text					Woul projec mitiga have in not ide in the	d the t, with ation, npacts entified PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact HAZ-4: Location on a hazardous materials site, creating a significant hazard to the public or the environment (less than significant with mitigation)	3.8-1-6 3.8-6-9	3.8-16	Would the project involve soil disturbance?			 Mitigation Measure HAZ-4: Perform a Phase I Environmental Site Assessment prior to construction activities and remediate if necessary ⊠ Conduct a Phase I environmental site assessment prior to construction and in conformance with the American Society for Testing and Materials Standard Practice E1527-05 ⊠ Conduct all environmental investigation, sampling, and remediation activities associated with properties in the project area under a work plan approved by the regulatory oversight agency ⊠ Include results of any investigation and/or remediation activities conducted in the project area in the project-level EIR 			The Project will involve soil disturbance. However, a Phase 1 ESA will be performed prior to construction. With implementation of HAZ-4 impacts would be less than significant.
Impact HAZ-5: Location within an airport land use plan area or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, resulting in a safety hazard for people residing or working in the project area (less than significant with mitigation)	3.8-1–6 3.8-7	3.8-19	Would the project be located in the Byron Airport influence area?			 Mitigation Measure HAZ-5: Coordinate with the Contra Costa ALUC prior to final design If wind turbines are proposed to be constructed within the Byron Airport influence area zones, coordinate and consult with the Contra Costa County Airport Land Use Commission and request review and obtain approval of the final design and placement of wind turbines Incorporate any ALUC recommendations in to the final design 			Require the application to include mapping to show locations of proposed turbines in relation to the Byron Airport influence areas or any private airstrips, including distances. See Attachment 3, Figure 2, Airport Area of Influence; The Project will not be located in the Byron Airport influence area, and therefore no impacts are anticipated.
Impact HAZ-6: Location within the vicinity of a private airstrip, resulting in a safety hazard for people residing or working in the project area (less than significant)	3.8-1-6 3.8-7	3.8-21	Would the project be located within 2 miles of a private airstrip?	\boxtimes		Note: Should the project be located within 2 miles of a private airstrip, it would not fall within the impacts assessed in the PEIR and the impact will need to be evaluated.			Require the application to include mapping to show locations of proposed turbines in relation to the Byron Airport influence areas or any private airstrips, including distances. See Attachment 3, Figure 2, Airport Area of Influence; The Project will not be located within 2 miles of a private airstrip, and therefore no impacts are anticipated.
Impact HAZ-7: Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (less than significant with mitigation)	3.8-1-6	3.8-22	Would the project increase vehicular traffic?			Mitigation Measure TRA-1: Develop and implement a construction traffic control plan (<i>see Traffic</i>)			The Project will increase vehicular traffic during construction only. With implementation of TRA-1 impacts would be less than significant.
Impact HAZ-8: 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 (less than significant)	3.8-1-6 3.8-7-9	3.8-24	Would the project alter the Altamont Pass Wind Farms Fire Requirements as described in Exhibit C of the 2005 CUPs?			Note: If the project does not include these measures, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			The Project will not alter the Altamont Pass Wind Farms Fire Requirements as described in Exhibit C of the 2005 CUPs. Impacts are less than significant.
Impact HAZ-9: During normal operation, the effects of bending and stress on rotor blades over time could lead to blade failure and become a potential blade throw hazard (less than significant)	3.8-1-6	3.8-26	Is there potential for blade throw to occur outside windfarm boundaries? Would overall site access <u>NOT</u> be limit- ed to persons approved for entry by the windfarm operators or landowners?			Note: If the project does not include such restriction, a standard County requirement, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			The Project does not have potential for blade through to occur outside windfarm boundaries. Furthermore, NextEra strictly controls access to the existing wind energy facilities, and overall site access is limited to persons approved for entry. Impacts would be less than significant.

	Discussion in Text					Woul projec mitiga have in not ide in the	d the t, with ation, npacts entified PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Hydrology and Water Quality									
Impact WQ-1a-1: Violate any water quality standards or waste discharge requirements—program Alternative 1: 417 MW (less than significant with mitigation)	3.9-1–5 3.9-5–6	3.9-7	Would the project involve earth- disturbing activities?			Mitigation Measure WQ-1: Comply with NPDES requirements			See Attachment 1, Section 3.6.2; The Project would involve earth-disturbing activities. However, doing so would not violate any water quality standards or waste water requirements due to the implementation of a SWPPP and adopt the Mitigation Monitoring and Reporting Program. With implementation of WQ-1 impacts would be less than significant.
Impact WQ-2: Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted) (less than significant)	3.9-1-5 3.9-6	3.9-10	Would the project involve very large areas of disturbance or involve a substantial use of water beyond that described in the PEIR?			Note: If the project has a larger footprint, or a larger water use than that described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			See Attachment 1, Section 3.6.2; The Project's water usage would be minimal, even during peak construction. In addition, the footprint of the turbine installations would be small and not cause an effect on groundwater recharge. Impacts would be less than significant.
Impact WQ-3: 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 onsite or offsite (less than significant with mitigation)	3.9-1-5 3.9-5-6	3.9-11	Would the project involve construction activities?			Mitigation Measure WQ-1: Comply with NPDES requirements (see Impact WQ-1)			See Attachment 1, Section 3.6.2; The Project would involve construction activities, but such activities will require a grading permit from the County of Alameda. Overall, the Project would not create new or substantially more adverse significant impacts to hydrology and water quality in relation to alteration of a stream or river. Suitable erosion control BMPs would be implemented through the Project SWPPP. With implementation of WQ-1 impacts would be less than significant.
Impact WQ-4: Substantially alter the existing drainage pattern of the site or area, including through 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 onsite or offsite (less than significant with mitigation)	3.9-1-5 3.9-5-6	3.9-12	Would the project involve construction activities?			Mitigation Measure WQ-1: Comply with NPDES requirements (see Impact WQ-1)			See Attachment 1, Section 3.6.2; The Project would involve limited improvements and construction that might alter the existing drainage pattern of the site, specifically at access roads and crossings. Suitable erosion control BMPs would be implemented through the Project SWPPP to decrease erosion and runoff. With implementation of WQ- 1 impacts would be less than significant.
Impact WQ-5: Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff (less than significant with mitigation)	3.9-1–5 3.9-5–6	3.9-14	Would the project be constructed in an area with stormwater drainage facilities? Would the project involve construction activities?			Mitigation Measure WQ-1: Comply with NPDES requirements (see Impact WQ-1) Note: The program area does not currently have existing or planned stormwater drainage facilities.			See Attachment 1, Section 3.6.2; The Project would involve the use of imported water for dust suppression but this need will not increase stormwater runoff. Furthermore, the Project area is drained by natural stream channels and does not rely on constructed stormwater drainage systems. With implementation of WQ-1 impacts would be less than significant.

	Discussion in Text						Woul projec mitiga have ir not ide in the	d the t, with ation, npacts ntified PEIR?	
Impact	Existing Conditions In	mpacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
Impact WQ-6a-1: Otherwise substantially degrade water quality— program Alternative 1: 417 MW	3.9-1-5 3. 3.9-5-6	.9-15	Would the project involve construction activities?			Mitigation Measure WQ-1: Comply with NPDES requirements (see Impact WQ-1)			See Attachment 1, Section 3.6.2; The Project would involve construction activities but it will not substantially degrade water quality over what was disclosed in the APWRA Repowering PEIR. The Project will be consistent with federal, state, and local policies. BMPs of the required NPDES permit will be implemented. With implementation of WQ-1 impacts would be less than significant.
Impact WQ-7: 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 (no impact)	3.9-1-5 3. 3.9-6	.9-17	Would the project involve construction of housing or be constructed within the 100-year floodplain?			Note: If the project would involve construction of housing or be constructed within the 100-year floodplain, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			See Attachment 1, Section 3.6.2; The Project does not include the construction of housing or result in the redirection of flood flows toward residential areas within the 100-year floodplain.
Impact WQ-8: Place within a 100- year flood hazard area structures that would impede or redirect flood flows (no impact)	3.9-1-5 3. 3.9-6	.9-17	Would the project involve construction of housing or be constructed within the 100-year floodplain?			Note: If the project would involve construction of housing or be constructed within the 100-year floodplain, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			See Attachment 1, Section 3.6.2; Project construction will comply with the requirements and construction design specifications of the Alameda County Grading Code and Stormwater Management Program. Activities are not expected to impede or redirect flood flows. With implementation of WQ-1 impacts would be less than significant.
Impact WQ-9: 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 (no impact)	3.9-1-5 3. 3.9-6	.9-17	Would the project involve construction of housing or be constructed within the 100-year floodplain?			Note: If the project would involve construction of housing or be constructed within the 100-year floodplain, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			See Attachment 1, Section 3.6.2; The Project would not involve construction of housing and would not be constructed within the 100-year floodplain. Furthermore, all construction would be in accordance with applicable Alameda County requirements.
Impact WQ-10: Contribute to inundation by seiche, tsunami, or mudflow (less than significant with mitigation)	3.9-1-5 3. 3.9-5-6	.9-18	Would the project involve construction activities?			Mitigation Measure WQ-1: Comply with NPDES requirements (see Impact WQ-1)			See Attachment 1, Section 3.6.2; The Project is in rolling hills and far from the ocean so the possibility of a seiche or tsunami is unlikely. Proper BMPs would remedy any mudflow issues. With implementation of WQ-1 impacts would be less than significant.
Land Use and Planning									
Impact LU-1: Physically divide an established community (no impact)	3.10-1-2 3. 3.10-3	.10-4	Would the project divide an established community?			Note: There are no established communities in the program area that could be divided by any development associated with a wind project. If the project involves locations or activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			The Project would not divide an established community. See note.
Impact LU-2: Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect (no impact)	3.10-1-2 3.10-3		Would the project involve activities or materials beyond those described in the PEIR?			Note: If the project involves locations beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			The Project would not involve activities or materials beyond those described in the PEIR.

	Discussio	on in Text					W pro m hav not in
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	N
Impact LU-3: Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact)	3.10-1-2 3.10-3	3.10-6	Would the project include activities that are not within the scope of the project described in the PEIR?			Note: There are no adopted HCP/NCCPs for the program area.	
Noise							
Impact NOI-1: Exposure of residences to noise from new wind turbines—	3.11-5-8 3.11-8-9	3.11-11	Would the project be located with approximately 2,000 feet of residences?			Mitigation Measure NOI-1: Perform project-specific noise studies and implement measures to comply with County noise standards	
program Alternative 1 (less than significant with mitigation)						Retain a qualified acoustic consultant to prepare a report that evaluates noise impacts associated with operation of the proposed wind turbines	
						Include a noise monitoring survey to quantify existing noise conditions at noise sensitive receptors located within 2,000 feet of any proposed turbine location	
						Include measurement of the daily A-weighted L _{dn} values over a 1-week period and concurrent logging of wind speeds at the nearest meteorological station	
						Include a site-specific evaluation of predicted operational noise levels at nearby noise sensitive uses.	
						Modify project if operation of the project is predicted to result in noise in excess of 55 dBA (L _{dn}) where noise is currently less than 55 dBA (L _{dn}) or result in a 5 dB increase where noise is currently greater than 55 dBA(L _{dn})	
						Submit a report to the County demonstrating how the project will comply with these performance standards	
						After review and approval of the report by County staff, incorporate measures as necessary into the project to ensure compliance with these performance standards	
Impact NOI-2: Exposure of residences to noise during decommissioning and	3.11-5-8	3.11-15	Would construction equipment be used within 800 feet of residences?	\boxtimes		Mitigation Measure NOI-2: Employ noise-reducing practices during decommissioning and new turbine construction	
new turbine construction (less than significant with mitigation)	5.11 0 9					Employ noise-reducing construction practices , which may include:	
						Prohibit noise-generating activities before 7 a.m. and after 7 p.m. on any day except Saturday or Sunday, and before 8 a.m. and after 5 p.m. on Saturday or Sunday	
						☑ Locate equipment as far as practical from noise sensitive uses	
						Require that all construction equipment powered by gasoline or diesel engines have sound-control devices	
						Use noise-reducing enclosures around noise-generating equipment where practicable	
						Do not use gasoline or diesel engines without muffled exhausts	

ould the ject, with tigation, e impacts identified the PEIR?		
D	Yes	Summary of Documentation
]		The Project would not involve activities or materials beyond those described in the PEIR.
]		Require the application to include mapping to show locations of proposed turbines in relation to residences, including distances. See Attachment 1, Figure 3.7-1. See Attachment 1, Section 3.7.2; The Project's closest residence is 1,800 feet away from the nearest WTG. However, given the residence's proximity to 1-580, the WTG is not expected to produce significant noise over what is already present from 1-580. With implementation of NOI-1 impacts would be less than significant.
]		Require the application to include mapping to show locations of proposed turbines in relation to residences, including distances. See Attachment 1, Figure 3.7-1. See Attachment 1, Section 3.7.2; The Project's construction equipment would be greater than 800 feet from any residences. With implementation of NOI-1 impacts would be less than significant.

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	Discussio	on in Text					pro mi hav not in t
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No
Population and Housing							
Impact POP-1: Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure) (no impact)	3.12-1-2 3.12-2-4	3.12-5	Would the project create any housing?			Note: If the project includes housing, the impact of the project would not be covered by the Program EIR.	
Impact POP-2: Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere (no impact)	3.12-1-2 3.12-2-4	3.12-9	Would the project result in the demolition or displacement of existing housing?			Note: If the project results in the demolition or displacement of housing, the impacts of the project would fall outside of those identified in the Program EIR, and additional impacts could occur.	
Impact POP-3: Displace a substantial number of people, necessitating the construction of replacement housing elsewhere (no impact)	3.12-1-2 3.12-2-4	3.12-9	Would the project result in the demolition or displacement of existing housing?			Note: If the project results in the demolition or displacement of housing, the impacts of the project would fall outside of those identified in the Program EIR, and additional impacts could occur.	
Public Services							
Impact PS-1: Result in substantial adverse physical impacts associated with the provision of new or physical- ly altered governmental facilities or a need for new or physically altered governmental facilities, the construc- tion of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: fire protection; police protection; schools; parks; other public facilities (no impact)	3.13-1 3.13-1-2	3.13-3	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Recreation							
Impact REC-1: 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 (no impact)	3.14-1-2	3.14-3	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (no impact)	3.14-1-2	3.14-4	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	

Yould the oject, with itigation, ve impacts identified the PEIR?		
0	Yes	Summary of Documentation
		The Project would not create any housing.
]		The Project would not result in the demolition or displacement of existing housing.
]		The Project would not result in the demolition or displacement of existing housing.
		The Project would not involve activities beyond those described in the PEIR.
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		<i>The Project would not involve activities beyond those described in the PEIR.</i>
3		The Project would not involve activities beyond those described in the PEIR.

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	N
Recreation							
Impact REC-1: 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 (no impact)	3.14-1-2	3.14-3	Would the project involve activities beyond those described in the PEIR?	\boxtimes		Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact REC-2: Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment (no impact)	3.14-1-2	3.14-4	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Transportation/Traffic							
Impact TRA-1: Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation, including mass transit and non- motorized travel and relevant components of the circulation system, including, but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit or conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways (less than significant with mitigation)	3.15-1-5 3.15-5-7	3.15-10	Would the project construction or operation increase traffic? Would the project involve activities beyond those described in the PEIR?			 Mitigation Measure TRA-1: Develop and implement a construction traffic control plan Prepare and implement a Traffic Control Plan (TCP) that adheres to Alameda County and Caltrans requirements Submit the TCP for review and approval of the County Public Works Department prior to implementation Include any additional elements required by the County or Caltrans during their review and approval of the TCP Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts. 	
Impact TRA-2: Conflict with an applicable congestion management program, including, but not limited to, level-of-service standards and travel demand measures or other standards established by the county congestion management agency for designated roads or highways (less than significant)	3.15-1-5 3.15-5-7	3.15-16	Would the project maintenance needs be substantially greater than currently required? Would post-construction traffic generated by the maintenance activities exceed the capacity of the CMP roadway system and differ materially from the current maintenance traffic level?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	

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0	Yes	Summary of Documentation
		<i>The Project would not involve activities beyond those described in the PEIR.</i>
3		<i>The Project would not involve activities beyond those described in the PEIR.</i>
		See Attachment 1, Section 3.8.2; The Project's construction will occur in 2016, and therefore would not overlap with construction activities from the Golden Hills Project in 2015. Temporary and short-term increases in local traffic would occur but construction-related truck trips for the Project would be approximately half of those anticipated for the Golden Hills Project. A Traffic Control Plan will be implemented through TRA-1 and with implementation impacts would be less than significant.
		See Attachment 1, Section 3.8.2; The Project's construction will occur in 2016, and therefore would not overlap with construction activities from the Golden Hills Project in 2015. Significant long-term exceedences in LOS standards are not expected to occur and would therefore be in compliance with the establish Alameda County General Plan LOS Standards. In addition, construction traffic produced from the Project is not expected to result in a substantial increase in congestion that would affect existing LOS on state highways. Construction-related

	Discussio	on in Text					Would the project, with mitigation, have impacts not identified in the PEIR?		
Impact	Existing Conditions	Impacts	APWRA Issues to Consider	No	Yes	Mitigation Measures (Details in MMRP) and Notes	No	Yes	Summary of Documentation
(TRA-2-cont.)			Would the increase in construction traffic be substantial? Would the increase in construction traffic degrade the traffic operation of the CMP roadway segments that already exceed the LOS standard E or cause a CMP roadway segment to exceed the LOS standard?						truck trips for the Project would be approximately half of those anticipated for the Golden Hills Project.
Impact TRA-3: Result 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 (less than significant)	3.15-1–5 3.15-5–7	3.15-17	Would the project affect air traffic patterns of the public or private airports in the vicinity of the program area? Would the project result in substantial safety risks associated with airport operations?			Note: If the project involves activities or locations beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			See Attachment 1, Section 3.8.2; The Project area is more than 2 miles from all public or private airports and is therefore not expected to change air traffic patterns. Furthermore, the Project will comply with FAA lighting requirements.
Impact TRA-4: Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) due to construction-generated traffic (less than significant with mitigation)	3.15-1–5 3.15-5–7	3.15-18	Would the project involve large, slow- moving construction-related vehicles and equipment among the general- purpose traffic on roadways?			Mitigation Measure TRA-1: Develop and implement a construction traffic control plan (see Impact TRA-1)			See Attachment 1, Section 3.8.2; During construction, the Project would involve the use of large, slow moving construction-related vehicles and equipment. Caltrans District 4 and Alameda County permits will be required in order to move oversized or overweight materials and comply with limitations on vehicle sizes and weights. With implementation of TRA-1 impacts would be less than significant.
Impact TRA-5: Result in inadequate emergency access due to construction-generated traffic (less than significant with mitigation)	3.15-1–5 3.15-5–7	3.15-20	Would the project involve large, slow- moving construction-related vehicles and equipment among the general- purpose traffic on roadways? Would the project involve lane/road closures occurring during delivery of oversized loads?			Mitigation Measure TRA-1: Develop and implement a construction traffic control plan (see Impact TRA-1)			See Attachment 1, Section 3.8.2; During construction, the Project would involve the use of large, slow moving construction-related vehicles and equipment. However, the Project will not change any existing emergency access routes, modify existing patterns of emergency access, or require closures of public roads. With implementation of TRA-1 impacts would be less than significant.
Impact TRA-6: Conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities (less than significant with mitigation)	3.15-1–5 3.15-5–7	3.15-21	Would the project involve large, slow- moving construction-related vehicles and equipment among the general- purpose traffic on roadways? Would the project involve lane/road closures occurring during delivery of oversized loads?			Mitigation Measure TRA-1: Develop and implement a construction traffic control plan (see Impact TRA-1)			See Attachment 1, Section 3.8.2; During construction, the Project would involve the use of large, slow moving construction-related vehicles and equipment. There are no public transportation or pedestrian facilities available within the Project area. The nearest public transportation system is 7 miles away. Lane and road closures occurring during distribution of oversized loads near WTG access points could temporarily interrupt the bicycle access along the 0.85 miles of Class III C Rural bike route along Altamont Pass Road. With implementation of TRA-1 impacts would be less than significant.
Utilities and Service Systems									
Impact UT-1: Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (less than significant)	3.16-1-3	3.16-3	Would the project generate a significant amount of wastewater?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.			There are no changes to the wastewater or sewer/septic system proposed by the project.

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Impact	Existing Conditions	Impacts	APWRA Issues to Consider		Yes	Mitigation Measures (Details in MMRP) and Notes	N
Impact UT-2: 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 (no impact)	3.16-1-3	3.16-4	Would the project generate a significant amount of wastewater? Would new water or wastewater treatment facilities be required?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact UT-3: Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (less than significant)	3.16-1-3	3.16-5	Would the project substantially modify the existing stormwater drainage patterns? Would the project increase impermeable surfaces onsite beyond the tower foundations? Would the project disturb less than 1 acre and therefore <u>NOT</u> be required to have coverage under the state's Construction General Permit?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact UT-4: Require new or expanded entitlements to water resources (less than significant)	3.16-1-3	3.16-6	Would the project require more than minimal water use? Would the project require new or expanded entitlements to supply the program during construction or operation?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact UT-5: Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the program's projected demand in addition to the provider's existing commitments (no impact)	3.16-1-3	3.16-7	Would the project involve the construction or expansion of wastewater systems? Would the project require an offsite wastewater treatment provider?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact UT-6: Generate solid waste that would exceed the permitted capacity of landfills to accommodate the program's solid waste disposal needs—program Alternative 1: 417 MW (less than significant)	3.16-1-3	3.16-8	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	
Impact UT-7: Not comply with federal, state, and local statutes and regulations related to solid waste (no impact)	3.16-1-3	3.16-9	Would the project involve activities beyond those described in the PEIR?			Note: If the project involves activities beyond those described in the PEIR, it would not fall within the impacts identified in the PEIR and could result in additional impacts.	

ould the oject, with itigation, re impacts identified the PEIR?		
D	Yes	Summary of Documentation
]		New water or wastewater treatment facilities would not be required.
]		The Project would not require or result in the construction of new stormwater drainage facilities or expansion of existing facilities.
]		<i>The Project would not require new or expanded entitlements to water resources.</i>
]		The Project would not involve the construction or expansion of wastewater systems, nor would it require an offsite wastewater treatment provider.
]		The Project will not generate solid waste that would exceed the permitted capacity of landfills, nor would it involve an impact greater than that described in the PEIR.
]		The Project will comply with federal, state, and local statutes/regulations related to solid waste. Impacts will not be greater than those described in the PEIR.

References Cited

Aesthetics

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Biological Resources

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