ALTA MESA WIND PROJECT EA-IS
Responses to Comments

February 2021

1. Introduction

This document contains a list of the agencies and persons that submitted comments on the Alta Mesa Wind Project Environmental Assessment/Initial Study (EA/IS) (see Table 1) and the County's responses to comments received (see Table 2). In Table 2, the specific comments have been excerpted from the letter and are presented as "Comment" with each response directly following as "Response." Copies of the actual letters and emails submitted to the County are attached to this document (see Attachment A).

Table 1: Commenters on the Alta Mesa Wind Project EA/IS

Table 2: Alta Mesa EA-IS Responses to Comments		
Commenter	**Comment**	**Response**
ORGANIZATIONS		
ADAMS BROADWELL JOSEPH & CARDOZO, on behalf of Citizens for Responsible Wind Energy, including Riverside County residents and California Unions for Reliable Energy ("CURE")	**CURE-1: General Comment:** EIR should be prepared instead of an MND.	Pursuant to the California Environmental Quality Act (CEQA), Riverside County (County) must prepare an Initial Study (IS) for the proposed Project to determine if any significant adverse effects on the environment would result from project implementation. The Environmental Assessment/IS (EA/IS) prepared by the County uses the significance criteria outlined in Appendix G of the CEQA *Guidelines*. If the EA/IS for the project indicates that a significant adverse impact could occur, the County would be required to prepare an Environmental Impact Report (EIR). According to Article 6 (Negative Declaration Process) and Section 15070 (Decision to Prepare a Negative Declaration or Mitigated Negative Declaration) of the CEQA *Guidelines*, a public agency shall prepare or have prepared a proposed negative declaration or mitigated negative declaration for a project subject to CEQA when: *(a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment, or* *(b) The initial study identified potentially significant effects, but:* *(1) Revisions in the project plans or proposals made by or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur, and* *(2) There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.* Based on the analysis in the EA/IS, and AM Wind Report LLC's agreement to the mitigation measures incorporated therein, it has been determined that all project-related environmental impacts would be less than significant or reduced to a less than significant level with the incorporation of feasible mitigation measures. Therefore, adoption of a Mitigated Negative Declaration (MND) will satisfy the requirements of CEQA. The mitigation measures included in this EA/IS are designed to reduce or eliminate the potentially significant environmental impacts described in the Initial Study. Where a measure described in this document has been previously incorporated into the project, either as a specific project design

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		feature or as an Applicant-Proposed Measure, this is noted in the discussion. Mitigation measures are structured in accordance with the criteria in Section 15370 of the CEQA *Guidelines*. For the proposed Project, the Draft EA/IS demonstrates that all project-related environmental impacts would be less than significant or reduced to a less than significant level with the incorporation of feasible mitigation measures (see Section V, Environmental Issues Assessment). As such, no EIR is required.
	CURE-2A: Piecemealing (starting on Page 4). Here, the Project is immediately adjacent to the Mesa Wind Repower Project ("Mesa Wind"), also proposed by the Applicant. Both the Project and Mesa Wind would share a main access road and construction yard, located with the Mesa Wind right-of-way.24 Both this Project and Mesa Wind are being considered and approved within a year. As such, the Project and Mesa Wind are clearly related to each other and are a coordinated endeavor. The County is currently undergoing internal review and preparing a CEQA document for approvals associated Mesa Wind while this DEA/IS is available for public review.25 The whole of the action, for CEQA purposes, includes the decommissioning of existing turbines on both BLM and County land and the construction, operation, and decommissioning of the new turbines on BLM and County land, regardless whether this Project and Mesa Wind could be implemented independently.	The comment is incorrect. The proposed Project is separate and independent from the Mesa Wind Repower Project, as it has been since their original permitting and operation. Moreover, the EA/IS fully analyzes the cumulative effects of both repower projects being constructed and operated. Accordingly, the EA/IS's analysis does not constitute improper piecemealing under CEQA. Mesa Wind is an existing stand-alone 30 megawatt wind project that is located on 401 acres of Bureau of Land Management (BLM)-administered public land and has been operating under right-of-way (ROW) grants from the BLM since 1983. The facility consists of its own wind turbines (460), interconnection lines and Mesa Wind substation, which ultimately feeds into SCE's Panaero substation. Mesa Wind was developed by Panaero in 1983 and was acquired by the applicant in 2013 from Western Wind. The Mesa Wind Repower Project required BLM-approval of a ROW grant amendment to repower the existing facility with 8 new wind turbines. BLM analyzed the potential environmental impacts of the Mesa Wind Repower Project in a detailed Environmental Assessment, which included the analysis of the proposed Project in its cumulative analysis and on September 30, 2020, BLM found that there were no significant impacts, and approved the Mesa Wind Project Repower. Alta Mesa is an existing stand-alone 27 megawatt wind project that is located on 640 acres of private land in the County and has been operating since 1989. The facility is a separate and distinct facility from Mesa Wind Power project, consisting of its own wind turbines (159), interconnection lines and Alta Mesa Wind substation, which ultimately feeds into SCE's switchyard (within a different switching station than the Mesa Wind Power project). The project was developed in 1989 and purchased by the applicant from Alta Mesa 640 LLC. The proposed Project requires County approval of a Commercial WECS Permit Variance to repower the existing facility with 7 new wind turbines.

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		The local area is comprised of numerous wind farms and wind farm repower projects located within the San Gorgonio Pass Wind Energy Policy Area and Wind Resource Zone. (See e.g., the EA/IS cumulative projects list.) And while the proposed Project is located adjacent to the Mesa Wind Repower project, it neither presumes nor requires completion of the Mesa Wind Repower project in order to operate; it uses separate infrastructure facilities on separate property located in a different jurisdiction to produce its own wind energy that is then purchased and distributed pursuant to a project-specific power purchase agreement. The shared use of a temporary construction yard and existing access road does not render the proposed Project and Mesa Wind Project Repower a single project under CEQA. The proposed Project would modify and use the access road and temporary construction yard, even if the Mesa Wind Repower Project did not go forward. The owners of the Alta Mesa facilities have always secured separate ROW Grants with BLM for the main access road. As such, while the existing access road and temporary construction yard are to be utilized by the proposed Alta Mesa Wind Project, it is an implausible stretch to suggest that this somehow renders the proposed Project a consequence of the Mesa Wind Project Repower. Moreover, consistent with CEQA requirements, the EA/IS fully describes the shared used of these facilities in Section 1, Project Information and as shown on Figures 2 and 3, and analyzes the environmental impacts associated with the construction and shared use of these facilities in Section V, Environmental Issues Assessment. Further, while separate and distinct projects, the EA/IS addresses the comment's stated concern by including the Mesa Wind Project Repower in its cumulative projects list (see EA/IS Section V, Table 7) and fully analyzes the collective impacts of both projects, including, but not limited to: - Aesthetics (page 107 and Appendix A Figures 10a -10c [cumulative visual simulations]), - Air quality (pages 29-31,107 [Tables 3 and 4 calculate construction emissions for both repower projects (Mesa and Alta Mesa), which collectively do not exceed thresholds set by the SCAQMD or the federal general conformity di minimis levels, with implementation of mitigation], - Biological resources (pages 108 [compliance with the CVMSHCP and implementation of mitigation measures like the Bird and Bat Conservation

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		Strategy ensure Project would not contribute considerably to any existing cumulative impacts], - Noise (page 109 [given distances greater than 3,000 feet from receptors, the Alta and Mesa Wind projects would not likely create a cumulative noise impact at the receptors and other impact areas]). Finally, with respect to cumulative impacts, the overlapping or concurrent construction timeline of the two projects resulting in the shared use of these facilities minimizes total ground disturbance, traffic, and temporary impacts on environmental resources, as described in the EA/IS.
	CURE-2B: Piecemealing. This piecemealing of the Project along jurisdictional lines causes the DEA/IS to underestimate the scope of potential impacts, particularly to special-status species that cannot distinguish between County and BLM land.26 Ms. Owens explains that the piecemealing results in the DEA/IS improperly reducing the likelihood of species being present on site and the impacts to those species, and limits the effectiveness of discussed mitigation measures.27 Thus, the piecemealing of the Project results in the DEA/IS misinforming the public and decisionmakers as to the true impacts of the whole action before them and will have real world harms to protected resources.	The comment generally asserts that the purported piecemealing of the Project improperly reduces the likelihood of species being present on site and the impacts to those species, and limits the effectiveness of discussed mitigation measures. The comment; however, does not substantiate its argument that there are project-specific or cumulative impacts or otherwise explains or demonstrates how the EA/IS analysis and mitigation is otherwise deficient. Wildlife may be affected by land uses, regardless of jurisdictional boundaries. This is true not only for adjacent land uses, but throughout their geographic ranges. CEQA takes this into account in its requirement for an analysis of cumulative impacts. The separate Mesa Wind Project Repower is properly included in the analysis of cumulative impacts, including potential cumulative impacts to biological resources. The EA/IS accurately describes Alta Mesa's project-specific impacts to special-status wildlife under Impact b of the Biological Resources analysis. All special-status wildlife potentially occurring on the Alta Mesa site are assessed for their occurrence probability in the BRTR (EA/IS Appendix C) and potential impacts are identified and described for those species that may be present (at any time of year for any reason such as foraging, migration, nesting, etc.). For clarification, the analysis of cumulative risk to birds and bats has been edited to note potential cumulative risk of the two projects to individual birds or bats. Additionally, consistent with CEQA requirements, the EA/IS addresses those potential impacts in the cumulative context, including the adjacent Mesa Wind Project Repower, under Biological Resources in the Cumulative Analysis (see Mandatory Findings of Significance section). The comment asserts that these cumulative impacts affect the stated likelihood that species could occur on the site, could be impacted by the project, or limit the effectiveness of proposed

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		mitigation. Nothing in the comment's speculations explain how these cumulative impacts could affect the Alta Mesa Wind Project's biological resource impacts or mitigation. Cumulative impacts of land use projects to special-status wildlife in the Coachella Valley area are mitigated through participation in the Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP) and the proposed Project has been found consistent with the CVMSHCP by the Coachella Valley Conservation Commission (see EA/IS Appendix E), as described in the EA/IS. Separately, for birds or bats that may be at risk of collision with WTGs, the project does not have a considerable contribution to any cumulative impacts. The EA/IS accurately informs the public and decision makers of the expected biological resource impacts, in both the project-specific and cumulative contexts.
	CURE-3: Decommmissioning (Page 6). Further, the DEA/IS excludes the impacts from removal of old turbines on the site from calculation of criteria pollutants.28 The presumed justification is that these actions are proceeding under existing permits.29 This is insufficient under CEQA. These permits were secured only months ago and are clearly related to, and necessary for, the Project to proceed. The County must withdraw this DEA/IS and prepare an EIR that properly considers the whole of the action, as required by CEQA.	The comment asserts that the EA/IS improperly omits quantifying air emissions associated with removal of the existing turbines on site as part of the Project's construction emissions. The construction, operation, and decommissioning of the original Alta Mesa Wind Project was previously permitted by Riverside County under Commercial Wind Energy Conversion System (WECS) Permit Nos. 71 through 71R9. The decommissioning of the 159 original turbines is occurring under these permits, and thus, it is appropriate to exclude this activity from the proposed Project's construction emissions. The EA/IS has been revised to clarify that decommissioning of original facilities is occurring under WECS Permit Nos 71 through 71R9 and not just the recent demolition and hazardous material permits issued by Riverside County as interpreted by the commenter.
	CURE-4: Environmental Setting (Starting on Page 7). In several areas, the DEA/IS deducts impacts from the older turbines on the Project site, despite the County's issuance of permits to remove these turbines two months prior to the issuance of the DEA/IS. Because it is highly likely that the turbines on the site are already undergoing removal, given that County records show that the Applicant wanted to begin work immediately and the permits were issued two months ago, the County lacks substantial evidence to support the inclusion of the older turbines as if they exist and/or are operating in the existing environmental setting.37 Further, decommissioning of the old turbines will occur without approval of the new turbines analyzed in the DEA/IS, meaning the decision before the	The comment contends that the existing turbines on the Project site should not be included as part of the existing environmental baseline because their future anticipated decommissioning was previously permitted and will occur without approval of the Project. The comment is incorrect. Under CEQA activities occurring at a project site around the time CEQA review commences may be treated as a component of the existing conditions baseline. (See CEQA Guidelines Section 15125(a)(1), ["generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective"].) Here, the Notice of Availability was accepted by State Clearinghouse on December 24, 2020 for 30-day review purposes to obtain comments on the Draft EA/IS, at which time the original 157 turbines were

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	County is to permit seven new turbines or have the site remain undeveloped. In cases like this Project, it is appropriate for the County to describe the existing environmental setting to account for the removal of the existing turbines.38 By not doing so, the DEA/IS is misleading when it deducts impacts from the old turbines from the new turbines and masks the true impacts of the Project. Substantial evidence demonstrates that the factual circumstances of this Project support not including the old turbines in the existing environmental setting for the DEA/IS because doing so misinforms the public and decisionmakers about the true impacts of the Project.	onsite. The comment cites to *Neighbors for Smart Rail v. Exposition Metro Line Construction Authority* (2013 57 Cal.4th,439), which is inapposite. *Neighbors for Smart Rail* held that, while lead agencies have the discretion to "omit an analysis of the project's significant impacts on existing environmental conditions and substitute a baseline consisting of environmental conditions projected to exist in the future, the agency must justify its decision by showing an existing conditions analysis would be misleading or without informational value." Here, the EA/IS analyzes the proposed Project against existing and not future environmental conditions. Accordingly, assuming operation of the existing turbines as part of the existing baseline conditions complies with CEQA and is appropriate.
	CURE-5: Affected Botanical Environmental (Pages 7-8). The DEA/IS found that protected triple ribbed milk-vetch was located nearby the Project site and that there was suitable habitat for the Project on the site, but ultimately claimed that the possibility of triple ribbed milk-vetch occurring on site as low because no plants were found onsite.39 Ms. Owens explains that the presence of suitable habitat on site and nearby plants of a species normally would indicate that there is a high likelihood of a plant to be present.40 Further, while the DEA/IS claims that surveys complied with California Department of Fish and Wildlife ("CDFW") guidelines, Ms. Owens notes that the DEA/IS did not include sufficient information to verify how surveys were conducted.41 Data from botanical surveys was lumped together with data from desert tortoise surveys in such a way that it is not possible to determine which surveys for what species were conducted at what times.42 As such, the County lacks substantial evidence to support its claims that no triple ribbed milk-vetch occurs on the Project site and that the likelihood of the species being found is low. Instead, Ms. Owens' provides substantial evidence in the form of expert opinion that the likelihood of the species being present on the site is high.	The comment asserts that there is a high likelihood that the triple milk-vetch is present on the Project site. This comment lacks support and misstates the analysis in the EA/IS. The EA/IS and BRTR describe that the triple ribbed milk-vetch is covered under the CVMSHCP, and there is no CVMSHCP-modeled habitat on the site. Further, the triple-ribbed milk-vetch was not located during full-coverage field surveys conducted by Aspen Environmental Group and Leatherman Bioconsulting in May 2019 (see Appendix C, Biological Resources Technical Report [BRTR]). While potentially suitable habitat is present, there is a low potential for occurrence in the study area due to negative results of the comprehensive field surveys. Please also refer to Response to Comment CURE-44. The methods, dates, and results of the field surveys are described in the BRTR attached to the EA/IS (see Appendix C). The commenter disregards or misinterprets the habitat assessment and field survey results presented in the BRTR. Nonetheless, the entire proposed Project footprint was surveyed in the field by qualified biologists who conducted 100-percent coverage surveys for special-status plants and animals in the appropriate season, consistent with the CDFW guidelines. All biologists participating in the field surveys are deeply experienced in regional flora and fauna, including desert tortoise and special-status plants. The field data are presented separately (not lumped) in the BRTR, including complete lists of all plant and animal species observed, as well as detailed lists of observations of special-status wildlife or their sign, and extensive observation-based evaluation of the occurrence probability of each special-status species. The comment asserts that the attachment (Owens) provides substantial evidence in the form of expert opinion that the likelihood of occurrence is high. Yet the attachment presents no evidence whatsoever,

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		except to selectively repeat information from the EA/IS and BRTR out of context. The attachment's author (Owens) apparently has not surveyed the site and has no expertise with on-site conditions. Thus, the comment's assertion of a "high" likelihood of occurrence is unsupported and contrary to the substantial evidence in the EA/IS and BRTR, Moreover, the EA/IS describes that, as a covered species under the CVMSHCP, any potential impacts would be covered through the USFWS authorization and offset through regional habitat conservation and management, supported in part through the Project applicant's participation in the MSHCP, as required by Riverside County.
	CURE-6: Affected Environment for Special-Status Species (pages 9-10). The DEA/IS made assertions regarding the abundance of species that could use the Project site based on databases, literature review, and surveys for plants and desert tortoise.43 Ms. Owens explains that these desktop efforts are insufficient to adequately describe the potential for special-status species to be present on site. For example, no surveys were conducted for any invertebrates, birds, bats, or reptiles other than desert tortoise.44 Further, the DEA/IS based many species' potential to occur on the site based on its likelihood of nesting or roosting, which ignored species who would use the site for other activities, such as foraging, migrating, or any other behavior.45 By doing so, the affected environment for special-status species is incomplete and underestimates the potential for species to occur onsite and be affected by the Project. Ms. Owens notes that the focused surveys for botanicals and desert tortoise would not be sufficient to describe the usage of the site by other special-status species because by definition, those surveys are focused on only one species at a time.46 Ms. Owens describes how these surveys were absolutely insufficient to determine the use of the site by bats since they were conducted during the day.47 These surveys are insufficient to establish a baseline for species other than desert tortoise.	The BRTR (EA/IS Appendix C) evaluates probability of occurrence for every special-status species potentially occurring on the site based on the combination of on-site evaluation of habitat, on-site observations of plants and animals throughout 100 percent of the site, habitat requirements, and geographic range for each species. Contrary to the third sentence in the comment, the evaluations are not based on desktop analysis alone. Specialized or focused surveys for invertebrates, birds, bats, or reptiles (other than desert tortoise) are not necessary to properly characterize the site and evaluate impacts under CEQA. The analysis recognizes that some special-status wildlife may occur only at certain times of year or may not be observed for other reasons (daily or seasonal activity) yet the analysis fully acknowledges occurrence probability and potential impacts to for those species, as detailed in the BRTR. Evaluation of each species occurrence is based on applicable behavior and ecology. Where nesting, roosting, or foraging habitats are distinctly different, then those difference are taken into account. For migratory species, seasonal occurrence is taken into account. The occurrence likelihood as presented is accurate for each species and appropriately informs the public and decisionmakers of the proposed Project's affected environment. The comment asserts that the BRTR is "incomplete and underestimates the potential for species to occur," yet it provides no data to the contrary, nor does it identify occurrence probabilities in BRTR (Table 3) that should be revised. The commenter claims incorrectly that the desert tortoise and botanical field surveys are insufficient to evaluate usage by other species. Again, and contrary to the comment, occurrence likelihood and usage is based on the combination of on-site conditions documented in the field, as well as natural history, habitat needs, and geographic range for each species. Night-time surveys for bats

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	Further, Ms. Owens explains that the desktop review of databases relied on in the DEA/IS are inadequate to establish the existing environmental setting for special-status species. The DEA/IS often relies on the California Natural Diversity Database ("CNDDB") to predict likelihood of species to occur on the Project site. The CNDDB, at best, represents the bare minimum of which species may be found on the Project site and does not inform a user about the populations, movements, and breeding status of special-status species that may be present.48 Many species' observations are not included in the CNDDB and bird foraging or flyover is not included at all.49 The CNDDB is only voluntarily reported and cannot be relied on as a comprehensive evidence as to which species could be present on the Project site.50 Omission of a species in the CNDDB is not evidence that a species is not present on site.51 However, the DEA/IS erroneously treats omission as such.52 In sum, the DEA/IS fails to properly establish the existing environmental setting with substantial evidence because it relied on limited surveys for only a few species and desktop review of inadequate databases.	were not conducted; nonetheless, the BRTR provides an accurate assessment of occurrence probability for each special-status bat species of the vicinity, based on these same factors. Biological surveys were designed and conducted expressly to describe baseline conditions and support the analysis required by CEQA. For special-status plants and animals, occurrence likelihood (i.e., baseline) is identified in Table 3 of the BRTR, as evaluated by field surveys, habitat conditions, and geographic distribution of each species. Regarding bats, the BRTR and EA/IS provide sufficient information to evaluate potential impacts, recognizing that bats may fly over the site but that significant roosting and foraging areas that may support large numbers of bats are not present. The commenter believes the field surveys were insufficient, yet gives no indication how further field work would usefully inform the CEQA analysis. Contrary to the comment, the EA/IS does not treat absence of CNDDB species records as evidence the species is absent from the site, and nothing in the EA/IS or BRTR makes that claim. The comment correctly notes limitations of the CNDDB data (e.g., bird flyover); therefore, all special-status species of the area whose habitat may be present on the site are evaluated in the BRTR. Additionally, again contrary to the comment, evaluation of each species likely occurrence is not based on a desktop analysis alone, but on habitat conditions as documented by field surveys. The comment again selectively repeats information out of context, but nothing in the comment supports its assertion that the BRTR baseline data are less than substantial evidence. The field work, literature review, and professional interpretation presented in the BRTR all are substantial evidence in support of the EA/IS baseline conditions.
	CURE-7: Special-Status Species were Omitted and Underestimated (pages 10-11). Contrary to the misinformed assertions in the DEA/IS, Ms. Owens provides substantial evidence of numerous special-status species that have been identified on site or nearby the site, many of which are routinely impacted by wind energy projects.53 These species were omitted by the DEA/IS or listed as not likely to be present on the site, despite these sightings.54 Ms. Owens highlights yellow breasted chat, vermillion flycatcher, and summer tanager, which the DEA/IS considered absent because there was no riparian vegetation on site.55 Ms. Owens explains that this was in error because while these species need riparian habitat to breed, these species do not require riparian habitat	The comment provides an extensive list of special-status wildlife considered by the commenter to be potentially affected by the proposed Project, falsely claiming they were not addressed or improperly addressed. To the contrary, with three exceptions, every one of these species is addressed in the BRTR, as specified below. Note also that the CEQA guidelines require evaluation of potentially significant impacts for special-status species as those identified "in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U. S. Wildlife Service" (see impact b under Vegetation and Wildlife of the EA/IS). The comment cites multiple species due to agency designations such as "watch list" and status ranks by private conservation organizations, including Western Bat Working Group, which need not be addressed under CEQA.

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	for other activities, like foraging, and that they were identified less than two miles away from the Project site.56 Many specialstatus species were erroneously listed as having a low propensity to occur on site because they were not observed, despite the DEA/IS describing suitable habitat on site and observations of those species found nearby, which would normally indicate a high likelihood to occur.57 Thus, the County lacks substantial evidence to support its claims that many species are not likely to be present on the Project site.58 Rather, substantial evidence demonstrates that more special-status species are likely to use the site than disclosed in the DEA/IS.59 The DEA/IS must be withdrawn and the County must prepare an EIR with an accurately established environmental setting supported by substantial evidence.	Exceptions (not addressed in BRTR or EA/IS): • Mojave fringe-toed lizard - The proposed Project site is far outside its geographic range (east of the Coachella Valley, about 40 miles distant) and no suitable habitat (desert dunes and sandfields) is present. Please see the following web site: http://www.californiaherps.com/lizards/pages/u.scoparia.html There is no potential for occurrence or impact. • Cactus wren - The common and widespread desert cactus wren is not a sensitive species. The coastal California population ("San Diego cactus wren"), found well west of the proposed Project site, is the only recognized sensitive population. The site is far outside its geographic range and no suitable habitat is present. There is no potential for occurrence or impact. Please see the USFWS web site: https://ecos.fws.gov/ecp0/profile/speciesProfile.action?spcode=B08Y • California mountain lion - not a special-status species. It is protected from hunting; no mountain lion hunting is proposed. Species expressly covered by the BRTR in Table 2, Table 3, and/or in text sections 3.2 or 3.3 with conclusive evaluations of their occurrence likelihood, based on habitat and geographic range as specifically stated in the BRTR, and including seasonal or behavioral occurrence as applicable: • Vermillion flycatcher • Yellow-breasted chat • Purple martin • Los Angeles pocket mouse • Summer tanager • S grasshopper mouse • Silvery legless lizard • Red diamond rattlesnake • San Diego (=Blainville's or coast) horned lizard • Mojave (Aggasiz's) desert tortoise • White-faced ibis • Golden eagle • Bald eagle • Osprey • Merlin • Swainson's hawk

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		• Ferruginous hawk • Northern harrier • Sharp-shinned hawk • Cooper's hawk • Prairie falcon • Burrowing owl • Long-eared owl • Costa's hummingbird • Vaux's swift • Horned lark • Loggerhead shrike • California gnatcatcher • Black-tailed gnatcatcher • LeConte's thrasher • Southwestern willow flycatcher • Least Bell's vireo • Yellow warbler • Rufous-crowned sparrow • Lawrence's goldfinch • Pallid San Diego pocket mouse • Calif leaf-nosed bat • Western mastiff bat • Pocketed free-tailed bat • Big free-tailed bat • Pallid bat • Townsend's big-eared bat • Spotted bat • Western red bat • Western yellow bat • Fringed myotis • Long-eared myotis • Yuma myotis • Cave myotis • Desert kit fox • American badger • Nelson's bighorn sheep

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		Species are addressed in the BRTR and/or the EA/IS under the discussion of bird migration in the San Gorgonio Pass, and in the EA/IS regarding potential collision with WTGs. The EA/IS properly concludes that birds and bats are at risk of collision with the WTGs as described in potential impacts to listed birds, cross-referenced in the discussion of special-status birds (all migratory birds have special legal status under state and federal stature) and bats, and nesting or migratory birds (see Impact d regarding wildlife movement). The list below indicates all species listed in the comment's attachment (Owens) that are addressed in the BRTR and EA/IS by way of the discussions of migratory birds, and in the discussion of impacts to birds and bats in the EA/IS. These potential impacts apply to all birds and bats including those in the list below. The comment offers no information to contradict the BRTR and EA/IS analysis. • Brant • Redhead • Common loon • American white pelican • California brown pelican • Double-crested cormorant • California gull • Caspian tern • Turkey vulture • Red-tailed hawk • Red-shouldered hawk • White-tailed kite • American kestrel • Barn owl • Great horned owl • Western screech owl • Allen's hummingbird • Nuttall's woodpecker • Lewis's woodpecker • Olive-sided flycatcher • Oak titmouse • Bendire's thrasher • Black-chinned sparrow

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		• Bell's sage sparrow • Oregon vesper sparrow • Yellow-headed blackbird • Long-legged myotis • Big brown bat • Western small-footed myotis • Little brown myotis • Silver-haired bat • Hoary bat (not sensitive; ranked as "apparently secure" by CDFW https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline) Regarding birds nesting in riparian habitat (yellow breasted chat, vermillion flycatcher, and summer tanager), the nearest possible breeding habitat for these birds is about a mile away from the proposed Project site (Owens comments; see EA/IS Riparian Birds, under Biological Resources impact b). While they may forage occasionally in upland habitat, the proposed Project site itself is far too distant to be part of any nesting or foraging territory. Nonetheless, any potential occurrence or impact to these species is included in the BRTR and/or the EA/IS under the discussion of bird migration in the San Gorgonio Pass, and in the EA/IS regarding potential collision with WTGs. With mitigation identified in the EA/IS, potential impacts to all birds (including all birds identified by the comment's attachment) would be less than significant. The commenter disagrees that many of these species have a "low" probability of occurrence, based apparently on a selective interpretation of the BRTR and disregarding the on-site field work described in the BRTR. Again, the commenter and its consultant evidently have not surveyed the site, and their opinion is not supported by substantial evidence. Contrary to the comment, the BRTR provides the requisite substantial evidence to support the EA/IS analysis of potential impacts to biological resources under impact b. The comment provides no substantial evidence to the contrary. Regarding the recommendation to prepare an EIR, please refer to the response to Response to Comment CURE-1 above.
	SUBSTANTIAL EVIDENCE, AIR QUALITY (starting Page 11).	

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	CURE-8: 1) Criteria Pollutant Emissions are Underestimated (pages 14-15). SWAPE determines that the Project's CalEEMod files contain numerous unsubstantiated changes or changes that conflict with the DEA/IS that have the overall effect of underestimating total Project emissions.82 CalEEMod provides default emissions calculations for activities associated with a project and requires changes from default values to be justified.83 Without doing so, the County cannot rely on the CalEEMod as substantial evidence to support its conclusions regarding air quality impacts.	Emissions modeling with the CalEEMod software normally requires input files to be tailored for Project-specific circumstances. Wind energy project construction and operational activities do not precisely match any of the typical activities associated with CalEEMod's default land use development subtypes. CalEEMod default land use types are typically defined in terms of building square-footage and high numbers of employees. In contrast, a wind energy project does not involve substantial new building space construction or a large permanent operational workforce. Thus, user-entered data are necessary to tailor the model for this Project. Using CalEEMod requires Project-specific configuration for the calculation of for short-term construction-phase emissions, and all changes from default values are listed in the "User Entered Comments & Non-Default Data" portion of the CalEEMod reports. The user-entered data reflect the Project Application Materials submitted to the County and the NEPA process Plan of Development.
	CURE-9: *a.The CalEEMod Contains Unsubstantiated Changes in Construction Phase Lengths* The DEA/IS described Project pre-construction of three months, construction of new turbines of one year, and restoration of disturbance nine months.[84] However, the CalEEMod increases all of these times, overestimating the time that Project construction would occur.[85] The CalEEMod lacks justification for thisdeviation from the DEA/IS.86 SWAPE explains that this has the effect of underestimating total Project emissions by drawing out the time by which pollutant emissions would occur, lessening their severity.87 The County lacks substantial evidence to support these changes.	Construction emissions modeling uses the CalEEMod software, tailored for this Project with sufficient duration of activity to conservatively account for development of the Project in the County and also development of the adjacent Mesa Wind repowering project that is situated on BLM lands. By accounting for development of both projects, the duration of construction activity appropriately includes 12 months for Alta Mesa with an additional 3 months to allow for activity on BLM lands. By modeling 15 months (or 330 days at 22 workdays per month) the duration of Project construction has not been overestimated in CalEEMod. The comment is incorrect that a longer duration of construction activity in the model "underestimates" total Project emissions. The EA/IS describes CalEEMod results for the Maximum Daily Emissions; the daily maximum emissions rates are not averaged over the duration of activity, and thus, are not reduced by an increase in construction time. Because the peak-days of emissions are reported in Table 3 and Table 4, the severity of the emissions rates is accurately reported.
	CURE-10: *b. The CalEEMod Contains Unsubstantiated Reductions in Off-Road Equipment* SWAPE finds that the CalEEMod files manually reduce the amount of offroad equipment used for Project construction.88	The fleet of off-road equipment modeled for the Project is appropriate and the comment does not submit substantial evidence to the contrary. Construction emissions modeling with the CalEEMod software was tailored from the "Manufacturing" land use default characteristic. However, because new "Manufacturing" facilities would normally involve developing a new interior

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	SWAPE further finds that the DEA/IS did not adequately describe the construction equipment that would be used and that the CalEEMod did not include adequate justification that explains the departure from default values.89 Thus, the County lacks substantial evidence to support these changes.	building space, the default construction fleet does not precisely match the types of equipment necessary for the Project. Input files were tailored for this Project to include cranes, forklifts, and other unique equipment necessary to reflect the fleet of off-road equipment within the Project Description for each phase of activity. The count or number of pieces of equipment in each phase is listed in the "User Entered Comments & Non-Default Data" portion of the CalEEMod reports; and details on the fleet are itemized in the CalEEMod input files that were provided to the commenter.
	CURE-11: ***c. The CalEEMod Contains Unsubstantiated Changes in Road Types for Construction and Operation*** SWAPE finds that the CalEEMod files include changes in values for road type, decreasing the length of unpaved roads that would be utilized for Project construction and operation.90 The CalEEMod assumes that 98 percent of travel would be on paved roads, without any justification or explanation.91 The result is an underestimation of emissions from fugitive dust.92 The County must either explain or correct these errors in an EIR for the Project.	The comment asserts that the CalEEMod input for road type improperly assumes 98 percent of travel would be on paved roads, which results in an underestimate of fugitive dust emissions. The modeled road-type is appropriate, and the comment does not submit substantial evidence to the contrary. The hauling trip lengths entered into CalEEMod for the Project are substantially longer than the default, as shown in the "User Entered Comments & Non-Default Data" portion of the CalEEMod reports. The user-entered data show hauling trip lengths set for this Project to 60 or 140 miles, depending on the type of haul truck trip. This increase in trip lengths relative to the default requires a decrease in Project-specific unpaved road fraction because roughly the final mile would occur on unpaved surfaces. Accordingly, because nearly all of miles traveled within each trip would occur on the paved roads and highways of the region, the portion of travel on unpaved roads is accurately modeled.
	CURE-12: ***d. The CalEEMod Omits Waste Generation*** The DEA/IS notes that the Project will generate waste during construction.93 However, the CalEEMod files were manually reduced to zero tons per year.94 This change is unsubstantiated and conflicts with the DEA/IS and cannot be relied on by the County.	The comment asserts that using a non-default solid waste generation rate is not appropriate for this Project. The modeled solid-waste generation input is appropriate, and the comment does not submit substantial evidence to the contrary. The emissions estimates include heavy-duty hauling truck trips to account for the handling and transport of construction-and-demolition type debris during the construction phase. Construction-and-demolition debris has little degradable organic content and is not comparable to municipal solid waste. The 'solid waste' emissions estimating component within CalEEMod may be used for estimating GHG from new municipal solid waste streams during the operational life of a land use development. The long-term operation and maintenance activity for this Project would not be substantially different from the baseline conditions. Accordingly, the Project would not create emissions as a result of a new 'solid waste' stream.

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	CURE-13: *e. The CalEEMod Omits Water Use* The DEA/IS states that the Project will need 7,300 gallons of water annually to operate.95 Similar to waste generation, the CalEEMod reduces the Project's anticipated water use to zero gallons per year.96 This conflicting and unsubstantiated change cannot be relied on by the County.	The comment asserts that a non-default "indoor water use" rate is not appropriate for this Project. The modeled "indoor water use" rate is appropriate, and the comment does not submit substantial evidence to the contrary. The water detail component within CalEEMod may be used for estimating GHG from land use developments that create a new indoor water use and trigger a demand for new water supply and wastewater treatment services. This Project would use an on-site well for water supply and an on-site septic system and thus does not create emissions as a result of a new indoor water use. Further, no increase in operational staff will be required and therefore, no increase in water use over baseline conditions.
	CURE-14: *f. The CalEEMod Contains Unsubstantiated Reductions in Vendor Trips* The DEA/IS states that the Project would require approximately thirty daily truck deliveries during construction.97 Despite this, the CalEEMod reduces daily vendor trips to only ten per day.98 This underestimates vendor trips by twenty trips per day, underestimating the Project's air pollutant emissions.99 The County cannot rely on the results of the CalEEMod where it conflicts with the DEA/IS.	The comment asserts that non-default vendor trip numbers were input to CalEEMod and that vendor trip numbers are underestimated. This is incorrect because CalEEMod inputs were tailored for this Project to reflect non-default hauling trip numbers. The emissions estimates reflect the overall total truck deliveries through a combination of 'vendor' and 'hauling' trips. The number of hauling trips entered into CalEEMod for the Project are substantially greater than the default, as shown in the "User Entered Comments & Non-Default Data" portion of the CalEEMod reports. The emissions estimates reflect vendor trips at up to 10 per day plus hauling trips. During "Installing new WTGs" the hauling trips are modeled at 7,960 trips over 330 days, for 24 per day in addition to the vendor trips. Furthermore, the model also includes an additional 500 hauling trips over the same duration for "Delivering new WTGs components." Because the model includes at least 34 trips per day for vendor and hauling purposes, the daily truck deliveries are conservatively and accurately modeled.
	CURE-15: *g. The CalEEMod Contains Unsubstantiated Reductions in Vehicle Trip Rates* The CalEEMod reduces the operational vehicle trip rates. SWAPE finds that there was no explanation or justification for these changes within the CalEEMod files or DEA/IS, whatsoever.100 These impacts may be underestimated, without justification to support them, and cannot be relied on by the County.101	The comment asserts that non-default vehicle trip generation rates assumed in CalEEMod and associated emissions may be underestimated. The modeled operational vehicle trip rate is appropriate for this Project and the comment does not submit substantial evidence to the contrary. The Project would generate minimal daily traffic volumes during its operational life due to routine maintenance (as shown in the Project Description and Transportation impacts) and no increase in operational staff would be required. Because the emissions estimates reflect an average of 65 daily trips, the operational vehicle trips are conservatively and accurately modeled.
	CURE-16: *h. The CalEEMod Incorrectly Applies Construction-Related Mitigation Measures*	The comment is concerned about mitigation for construction emissions of dust. The emissions estimates reflect mitigation of dust at the level of effectiveness specified in SCAQMD rules and CEQA guideline documents, as described in the "User Entered Comments & Non-Default Data" portion of the CalEEMod

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	The County incorrectly applied Mitigation Measure AQ-1 into the Project's CalEEMod. Mitigation Measure AQ-1 proposes a fugitive dust plan, which lacks concrete requirements that the Applicant would be required to take.102 The DEA/IS suggests, but does not require, that the Applicant could require soil stabilizers, apply water, or limit speeds to 15 miles per hour.103 The CalEEMod for the mitigated Project includes both the use of soil stabilization and water application without mandating them.104 SWAPE also explains that the South Coast Air Quality Management District Rule 403 gives projects the option of either watering unpaved roads three times a day, watering unpaved roads once a day and limiting vehicle speeds to 15 miles per hour, or applying a soil stabilizer.105 SWAPE finds that the County included mitigation in its modelling of potentially significant air quality impacts beyond Mitigation Measure AQ-1 or Rule 403, without actually requiring that level of mitigation in the measures themselves.106 This misrepresents the amount of Project emissions after mitigation; therefore, the County lacks substantial evidence that the Project's impacts after mitigation will be less than significant.	reports. Limiting vehicle speeds would be optional and not mandatory (modeled as "WaterUnpavedRoadVehicleSpeed = 40 mph), as shown in the CalEEMod reports and the CalEEMod input files that were provided to the commenter. The emissions estimate thus reflect a level of mitigation that would become enforceable through compliance with SCAQMD Rule 403 and MM-AQ-1. Compliance with SCAQMD Rule 403 has been added to MM AQ-1.
	CURE-17: 2. Project Air Quality Impacts are Potentially Significant (page 17) SWAPE provides a recalculation of the Project's construction and operational emissions of criteria pollutants, correcting the numerous errors and unsupported or contradictory changes in the County's CalEEMod and found that Project impacts are potentially more significant than disclosed in the DEA/IS and would require further mitigation.107 SWAPE finds through corrected modelling that NOx, PM2.5, and PM10 emissions for both the Project's construction and operation are higher than the County's thresholds of significance in the DEA/IS. SWAPE's updated model is only for the construction and operation of the seven new turbines on County land. As noted above, the County must also consider the decommissioning of	The comment recalculates the Project's construction and operational air emissions and claims that Project impacts are potentially more significant than reported in the EA/IS and would require further mitigation. The comment's recalculation of Project air emissions is unsupported, as described above. Accordingly, the comment's assertion that additional mitigation is required is incorrect. The EA/IS's calculation of the Project air emissions is supported by substantial evidence and no further mitigation is required.

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	old turbines on County land and the repower activities on BLM land as the whole of the action before it, as required by State law. Given that the impacts from just this portion of the Project are potentially significant, the entirety of the Project would also likely result in potentially significant air quality impacts. These impacts must be properly disclosed, analyzed, and mitigated in an EIR for the Project.	
	CURE-18: 3. Feasible Mitigation Measures are Available to Further Reduce the Project's Potentially Significant Impacts (page 18) SWAPE provides a robust list of feasible mitigation measures that the County must require of the Applicant in order to further reduce Project emissions.108 These include measures from the Northeast Diesel Collaborative to reduce emission associated with diesel engines and measures suggested by the Sacramento Metropolitan Air Quality Management District to reduce exhaust emissions.109 The County must withdraw the DEA/IS and require these measures to further reduce Project impacts and disclose the analysis and require mitigation in an EIR for the Project.	No additional mitigation measures are necessary or required under CEQA. The EA/IS demonstrates with substantial evidence that maximum daily emissions would not exceed thresholds set by the SCAQMD with implementation of the proposed Mitigation Measures (see EA/IS Table 4).
	SUBSTANTIAL EVIDENCE, BIOLOGICAL RESOURCES (starting page 18)	
	CURE-19: 1. The County Underestimates Collision Risk to Birds and Bats (pages 18-19) The DEA/IS underestimates the total area whereby birds and bats would be placed at risk. As noted above, the County leaves out the eleven turbines that are on BLM that are part of the whole of the action before it.111 Also, as mentioned above, the DEA/IS impermissibly deducts the rotor-swept area as if the rotors are still operating and in place from the rotor-swept area of the new turbines, but in other respects assumes that the existing rotors are no longer in place.	The comment incorrectly contends that the proposed Project includes WTGs located outside the Project site, on BLM lands; rather this analysis is included in the EA/IS Cumulative Analysis (see Mandatory Findings of Significance section). Cumulative impacts of land use projects to special-status wildlife in the Coachella Valley area are mitigated through participation in the Coachella Valley Multiple-Species Habitat Conservation Plan (CVMSHCP), as described in the EA/IS. Separately, for birds or bats that may be at risk of collision with WTGs, the repower project's small increase in rotor swept area (3.6%) does not have a considerable contribution to any cumulative impacts. Please refer to Response to Comment CURE-2B above regarding the commenter's misunderstanding of the "piecemealing" issue.

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	Additionally, Ms. Owens notes that the new turbines must be considered an entirely new impact because the new turbines are a different impact.112 The new turbines are much larger and pose a different risk to birds and bats than the older turbines.113 The DEA/IS' simplistic analysis fails to capture the nuance associated with wind repower projects.114 For example, the taller turbines will reach altitudes that eleven percent of migratory birds fly at that the old turbines would not affect.115 Based on flight patterns through the San Gorgonio Pass, this represents 210 million migratory birds that could be potentially impacted by the Project throughout the Project's lifetime that are omitted from the DEA/IS' analysis.116 The DEA/IS fails as an informational document by failing to disclose the totality of potential impacts from collision with the new turbine blades. It must disclose the true extent of potential bird and bat mortality in an EIR for the Project.	The EA/IS properly addresses the baseline condition as consisting of 159 existing wind turbines, as authorized by the County under the existing Commercial WECS permit (see Response to Comment CURE-3 above). The comment's suggestion that the new turbines should be considered an entirely new impact is ambiguous and without support. Under CEQA, it is appropriate to analyze the Project against conditions as they exist at the time environmental analysis is commenced. Accordingly, it was appropriate to consider the elimination of the 159 existing wind turbines in analyzing the overall impact of the Project. Please also see Response to Comment CURE-4 above. Moreover, contrary to the comment's assertion, the EA/IS does analyze the potential impact of taller turbines. The comment purports to estimate the total number of birds that may fly through the proposed Project's rotor swept area, by incorrectly assuming that all birds migrating through the San Gorgonio Pass would actually fly through the Project site itself. In fact, the San Gorgonio Pass is about 22 miles-wide from peak to peak, and only a small proportion of the migrating birds would pass over the turbines on the proposed Project site. Additionally, the increased or decreased risk to any bird or bat species is related not just to differing turbine number and configuration but to the species' local and seasonal activity, abundance, and any differences in visual perception of the proposed repower WTGs compared with the legacy turbines, and resultant flight behavior such as avoidance around the WTGs. The EA/IS properly analyzes and discloses the proposed Project's potential impacts to birds and bats, and provides sufficient basis for the decision makers to take account of the impacts. Please also see clarification added to the EA/IS under Summary of Impacts to T&E Birds, addressing turbine height as well as other factors that may affect risk (the text is also cross-referenced and incorporated throughout, regarding impacts to all birds and bats).
	CURE-20: 2. The County Fails to Analyze Potentially Significant Project Impacts to Many Special-Status Species (page 19-20) As explained above, the County does not analyze impacts to many specialstatus species because it wrongly concludes that those species will not be impacted by the Project. In other instances, the DEA/IS simply claims, falsely, that repower	Please see Response to Comment CURE-7 above to the commenter's incorrect contention that the BRTR and EA/IS omit special-status species from the analysis. Please also refer to the Response to Comment CURE-19 above regarding hazards of WTG repower projects, such as turbine height. Potential impacts to Swainson's hawk and golden eagle are properly disclosed in the EA/IS; neither species is dismissed. The EA/IS indicates that both species have a high likelihood of occurring at the site during nesting, wintering,

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	projects are too new for the County to determine Project impacts.117 Ms. Owens finds that the DEA/IS also wrongly characterizes the behavior of species so as to minimize their risk of collision with the turbines. Ms. Owens explains that it is well-documented that tall turbines pose unique, measurable risks to birds and bats.118 Ms. Owens provides expert opinion that the County's defeated assertion that impacts cannot be evaluated is incorrect and is not the proper rigor for the analysis that CEQA requires.119 Studies from other wind projects demonstrate that high flying raptors, such as Swainson's hawk and golden eagle have increased collision risk from the taller reach of modern turbines.120 For example, the DEA/IS dismisses the likelihood of Swainson's hawk interacting with the turbines because it will migrate over the site.121 However, Ms. Owens provides expert evidence from direct observation that Swainson's hawk often forage along migratory routes, including in environments like the Project site.122 Despite this, the DEA/IS lacks any discussion of local raptor populations.123 Like birds, it is well-documented that taller wind turbines present an increased risk of mortality from collision to bats.124 The County does recognize that special-status bats are present and will be impacted by the Project but fails to describe their activity onsite and fails to draw a conclusion regarding the potential for impacts to bats.125 No effort is made to calculate the potential collision risk to these species. Any conclusions in the DEA/IS regarding impacts to special-status bird and bat species lacks substantial evidence and are unsupported because the County fails to actually analyze collision risk. Rather, evidence demonstrates that the Project will have an increased impact from collisions to birds and bats, particularly those that fly over 200 feet in altitude. These are potentially significant impacts that must be properly discussed in an EIR	or migratory season (as appropriate for each bird) and describes potential impacts including WTG collision in the Summary of Impacts to T&E Birds (cross-referenced to address others, including golden eagle). Contrary to the comment, nothing in the analysis mischaracterizes bird behavior. Regarding the relative risk of taller WTGs, please refer to Response to Comment CURE-19. Again, the EA/IS properly analyses and discloses the proposed Project's potential impacts to birds and bats and provides sufficient basis for the decision makers to take account of the impacts. Regarding special-status bats, potential turbine collision is acknowledged accurately addressed in the EA/IS by reference to the discussion of potential impacts to listed threatened and endangered birds. Potential for special-status bat occurrence on the site is addressed in the BRTR, including potential activity (see BRTR Table 3). No high-value foraging habitat (e.g., open water) is present and no likely bat roosting sites are present. Please refer to the more detailed discussion in Responses to Comments CURE-6 and -7. The comment incorrectly asserts that the EA/IS and supporting BRTR are not "substantial evidence." Collision risk is properly and adequately evaluated and disclosed in the analysis. In the absence of a methodology for calculating risk, no such calculation is provided. While the repower WTGs may present somewhat different hazards to some birds as compared with baseline conditions, the best available interpretation, based on total rotor swept area, is that net hazard to all birds is unchanged. Note that USFWS and CDFW use total rotor swept area in their consideration of avian impacts. Regarding the recommendation to prepare an EIR, please refer to Response to Comment CURE-1 above.

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	for the Project that includes collision risk by species, supported by substantial evidence.	
	CURE-21: 3. The County Fails to Properly Analyze Cumulative Impacts to Biological Resources (pages 20-21) The County fails to include an analysis of cumulative impacts to biological resources and instead states that compliance for all projects within the region with the Coachella Valley Multi Species Habitat Conservation Plan ("CVMSHCP") is sufficient to ensure that cumulative impacts are addressed.126 Ms. Owens finds that this is unsatisfactory to meet the requirements of mitigation under CEQA. First, the CVMSHCP is designed to meet the requirements of the Endangered Species Act through finding lands that can be conserved and managed as habitat.127 The CVMSHCP does not proscribe mitigation measures to lessen impacts from projects in the region, it only seeks to offset them.128 Further, courts have recently held that merely conserving land to offset impacts does not count as mitigation under CEQA because it only prevents impacts from future projects, not the project at hand, provided that more is not done to convert land that would not be habitat into habitat.129 Second, the effects of the CVMSHCP are still undefined, so its success cannot be measured.130 Third, the CVMSHCP only covers certain species, and not all species that could be impacted by the Project.131 Thus, compliance from projects with the CVMSHCP does not constitute substantial evidence that Project impacts are not cumulatively considerable. Further, assertions in the DEA/IS that mortality to birds and bats from wind turbines cannot be ascertained is false. Projects throughout the County include requirements to monitor and report mortality to the County.132 Potential cumulative impacts from wind turbines can and have been predicted for the Altamont Pass	The comment is incorrect and fails to produce substantial evidence of significant impacts. The CVMSHCP is explicitly a habitat conservation plan. It was designed not only to meet the requirements of state and federal ESAs, but to conserve habitats for the broad biodiversity of the Coachella Valley region as described on the Plan's home page and in further detail in the documents linked therein. [https://www.cvmshcp.org/]. The Plan identifies and protects dozens of covered species (please refer to EA/IS Appendix C, BRTR Table 3). The commenter wrongly asserts that the MSHCP "only seeks to offset" impacts. The CVMSHCP includes many conservation and management measures and specifically requires multiple measures for permitted projects. Please refer to the CVMSHCP itself which may be found at the link above. Regardless of this misunderstanding, the comment claims that offsetting impacts is not mitigation. In fact, CEQA defines mitigation specifically to include five strategies, including compensation (CEQA Guidelines Section 15370: "Compensating for the impact by replacing or providing substitute resources or environments**, including through permanent protection of such resources in the form of conservation easements."**). The comment wrongly claims that "the effects of the CVMSHCP are still undefined." In fact, the CVMSHCP reports annually to its participants and permitting agency on all aspects of its implementation including habitat acquisition and management. All relevant documents may be found at the web like above. Finally, the comment misunderstands the measure of a project's potential contribution to cumulative impacts. Regardless, whether or not there is a significant cumulative impact for most species (there is not), the proposed Project itself would not have a considerable contribution to any cumulative impacts for species and habitats, as the EA/IS states. Please also refer to Response to Comment CURE-65 below. The comment claims once again that the EA/IS incorrectly assesses impacts to birds and bats, citing the Owens attachment which in turn cites a comment from Smallwood regarding the separate Mesa Wind Project Repower. Comparing the proposed Project site to the Altamont Pass wind projects is entirely inappropriate. Smallwood never clarified how he purported to

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	Wind Resource Area and Ms. Owens includes an estimate for avian mortality rates guided by those numbers that were provided for Mesa Wind.133 Ms. Owens provides evidence that wind turbines are producing populationlevel impacts to special-status species like Swainson's hawk and golden eagle.134 The DEA/IS does not discuss these impacts or explain how the Project does not cumulatively contribute to these declines. The DEA/IS fails to include a proper disclosure and analysis of cumulative impacts for the Project, failing in its role as an informational document. The County lacks substantial evidence to demonstrate that Project impacts are not cumulatively significant. A proper analysis must be included in an EIR for the Project.	extrapolate data from Altamont to the Mesa Wind Project Repower and therefore it is impossible to evaluate their validity. The comment falsely claims availability of an analytical method that simply does not exist. Please also refer to Response to Comment CURE-57 below. Last, the comment falsely claims that its own attachment (Owens) "provides evidence" of population level impacts to golden eagle and Swainson's hawk. In fact, the attachment simply states that "[w]hether or not wind energy has population-level consequences for wildlife species is a critical issue…" with no evidence whatsoever (Owens p 30). In conclusion, the Alta Mesa Wind Project will have only a 3.6 percent increase (EA/IS Table 5) in total rotor swept area (the only quantifiable component of hazard to birds and bats), so the project itself would not have a considerable contribution to potentially cumulative impacts to birds and bats in the region.
	CURE-22: 4. Mitigation Measure AQ-1 will Create Additional Impacts to Species (page 21-22) Mitigation Measure AQ-1 requires dust control measures during Project construction that includes watering exposed soils.135 Ms. Owens notes that watering of soils has attracted special-status lizards to construction sites, where they can be crushed by trucks.136 The DEA/IS is silent on this potentially significant impact. This potentially significant impact must be considered and mitigated in an EIR for this Project.	Vehicle strikes and road watering are described as potential hazards to desert tortoises under "summary of impacts to threatened and endangered reptiles." For clarification, the potential hazard would also apply to other ground-dwelling wildlife including the sensitive species, coast horned lizard. This clarification has been added to EA/IS pages 36 and 41. Additionally, biological monitoring specified in Mitigation Measure (MM) BIO-2 and wildlife protection measures specified in MM BIO-5 will require pre-disturbance surveys, removal of wildlife from hazardous locations, and minimize potential road hazards and excess water. MM BIO-5 specifies 15 mph speed limits and that "[d]ust abatement will use the minimum amount of water on dirt roads and construction areas to meet safety and air quality standards."
	5. The DEA/IS Includes Ineffective or Impermissibly Deferred Mitigation	
	CURE-23: *a. Mitigation Measure BIO-1 is Ineffective* Mitigation Measure BIO-1 proposes to relocate wildlife outside of the Project's construction area before and during construction144 Ms. Owens explains that avoidance, rather than relocation, is a more effective at reducing harm to species.145 Relocation often results in failure to limit impacts and harasses animals, resulting in further impacts that were not analyzed in the DEA/IS.146 The DEA/IS lacks substantial evidence to	Contrary to the comment, relocation out of harm's way is obviously an effective way to minimize wildlife mortality - removing a small animal from a work site would prevent the potential mortality as described in the EA/IS for desert tortoise and other ground-dwelling animals. Mitigation Measure BIO-1 is a means of minimizing wildlife mortality. CEQA specifically includes minimization among the strategies defines as mitigation. Additionally, CEQA requires that mitigation must be feasible. Avoidance, as recommended by the comment, would prevent construction of the Project facilities where animals are present and therefore would be infeasible. The claim that "substantial evidence" is

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	demonstrate that Mitigation Measure BIO-1 is effective; rather, substantial evidence demonstrates that it will not be.	absent for the Mitigation Measure itself, but exists for the alternative, is simply false.
	CURE-24: ***b. Mitigation Measure BIO-5 is Ineffective at Limiting Impacts to Bats*** Mitigation Measure BIO-5 proposes to minimize impacts to bats due to attraction to lighting, while still complying with Federal Aviation Administration lighting standards.147 The DEA/IS lacks evidence or explanation as to how these two conflicting efforts could both succeed, and thus lacks evidence that it will be effective.148	Mitigation Measure BIO-2 is a means of minimizing potential bat mortality that could result from attraction to night lighting. CEQA specifically includes minimization among the strategies defines as mitigation. Elimination off FAA-required lighting could avoid this hazard for bats, but would be illegal and therefore infeasible. The Mitigation Measure as written minimizes the potential impact to the greatest extent feasible.
	CURE-25: ***c. Mitigation Measure BIO-12 is Ineffective*** Mitigation Measure BIO-12 proposes post-construction mortality monitoring for birds and bats.149 The DEA/IS does not propose to do anything with the information disclosed or explain how counting the number of dead limits impacts to species.150 The County lacks substantial evidence demonstrating how this mitigation measure is effective.	The comment disregards Mitigation Measure BIO-13, which requires a Bird and Bat Conservation Strategy including a "a format and schedule for reporting monitoring data." MM BIO-13 requires, among other performance standards, that "a format and schedule for reporting monitoring data and adaptive management actions to the County, USFWS, and CDFW." Please refer to the Response to Comment CURE-26, below. The comment does not recommend alternate mitigation or any revision of the measure and no further response is needed.
	CURE-26: ***d. Mitigation Measure BIO-13 is Impermissibly Deferred*** Mitigation Measure BIO-13 proposes to have the Applicant prepare a bird and bat conservation strategy that includes mortality levels for species and an adaptive management strategy to handle mortality over thresholds.151 This measure lacks necessary performance standards to ensure success. Ms. Owens explains that without timelines for action and public development of mortality thresholds, the public cannot be ensured of its success.152 Performance standards, in the form of mortality thresholds, must be included in an EIR for the Project.	Mitigation Measure BIO-13 does not defer mitigation. As required by CEQA, the measure includes specific performance standards, as follows: (1) pre-construction survey schedule and methodology to locate nesting birds, including burrowing owl, near planned construction activities; (2) minimization and avoidance measures to prevent project-related nest abandonment or other potential take of nesting birds; (3) passive relocation methods to be implemented if an active burrowing owl burrow is located near work activity areas; (4) pre- and post-operation monitoring protocol for bird and bat mortality; (5) mortality thresholds for listed or sensitive birds that will trigger adaptive management measures, (6) an adaptive management strategy to be implemented in the event mortality thresholds are exceeded, and (7) a format and schedule for reporting monitoring data and adaptive management actions to the County, USFWS, and CDFW.

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		Nonetheless, BIO-13 has been expanded to incorporate monitoring and reporting details, mortality thresholds, and further details of the required adaptive management strategy, including adaptive responses to fatalities documented during the monitoring. Please refer to revised text in the EA/IS. Regarding the claims regarding public involvement in the BBCS, mitigation plans such as this do not require a public review period. CEQA Guidelines Section 15126.4(a)(1)(B) states: "Formulation of mitigation measures shall not be deferred until some future time. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure." Mitigation Measure BIO-13 requires performance standards that support decisionmakers' needs, mitigate the potential impact, and disclose the planned mitigation to the public.
	SUBSTANTIAL EVIDENCE, WILDFIRE (page 24-25)	
	CURE-27: 1.The County Underestimates Wildfire Risk The Project is in a very high fire hazard severity zone, and a wildfire has occurred in the region as recently as September of 2020.154 The DEA/IS ignores the combined impacts from both the Mesa Wind and Alta Mesa portions of the Project. By not doing so, the County fails to consider the scope of activity from construction and operation of wind turbines that could cause a wildfire. As mentioned above, the County also improperly deducts the existing turbines from the new turbines in dismissing operational fire risk, despite those turbines being removed regardless of this Project. The DEA/IS should have analyzed the new turbines against an environmental setting without the old turbines.	As noted in Section V.44, Wildfire, the "Project is located in a region with high wildfires risk due to the presence of dense, dry fuels, paired with a warm and arid climate". In addition, "according to the Riverside County General Plan Figure S-11, the Project site is within both a state and federal moderate fire susceptibility zone". As previously noted, CEQA Guidelines Section 15125(a)(1) provides that "generally, the lead agency should describe physical environmental conditions as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, from both a local and regional perspective". The environmental analysis began in Spring 2020 at which time the original 159 turbines were onsite, as well as through calendar year 2020. Likewise, the appropriate baseline setting for the Mesa Wind Project Repower is the 460 legacy turbines. The Cumulative analysis provided in the EA/IS considers both construction and operations impacts. Regarding operations, the replacement of 619 1980's turbines with 15 WTGs, utilizing modern technologies, would reduce the operational fire risk.

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		For construction and operations, fire prevention best management practices (BMPs) will be implemented as reviewed, approved, and inspected by the Riverside County Fire Department (RCFD) (see Mitigation Measures FIRE-1 and FIRE-2).
	CURE-28: 2. Mitigation Measures FIRE 1 and 2 are Ineffective and Impermissibly Deferred Mitigation Measure FIRE-1 proposes that the Applicant prepare a construction fire prevention plan and Mitigation Measure FIRE-2 proposes that the Applicant update and expand the existing operational fire safety plan.155 Neither of these measures include a performance standard to ensure success. Further, it is not clear that a performance standard could be achieved. The DEA/IS admits that there is an inherent fire risk associated with operation of wind turbines and notes that the area is at high risk for wildfires.156 The only performance standard that could ensure that there would be no impacts would be to eliminate the risk of wildfires entirely. Since this is impossible for wind turbines, Mitigation Measures FIRE 1 and 2 are necessarily ineffective. Because appropriate mitigation cannot be imposed on the Project to reduce impacts below a level of significance, these impacts should have been found to be significant and unavoidable. The County must prepare an EIR that accurately discloses the extent of these impacts.	Mitigation Measures (MM) FIRE-1 requires that the Construction Fire Prevention Plan present the responsibilities of the Project Applicant, their contractor(s), and RCFD with respect to fire prevention and inspection of work areas, as well as fire prevention BMPs. Further, the Plan will describe weather conditions when limited or no construction activities are allowed. The Plan will be reviewed and approved by RCFD, who will also conduct inspections for Plan implementation during construction. Regarding MM FIRE-2, the existing Operational Fire Plan will be updated to include the regulatory vegetation clearing requirements around project facilities, availability of water sources, and emergency notification procedures. MM FIRE-2 has also been expanded to clarify responsibilities and include annual reporting to Riverside County Planning and Fire Departments. The Plan will also be reviewed and approved by RCFD, who will also conduct inspections for Plan implementation during operations. *Responsibilities of the Project Applicant, their contractor(s), and RCFD with respect to fire prevention and inspection of work areas.* *By December 31 of each operational year, the applicant shall provide a report to Riverside County Planning and Fire that summarizes ongoing fire abatement measures, results of RCFD inspections, any fires onsite, and any adaptive measures to further minimize fire risk.* With the implementation of MMs FIRE-1 and FIRE-2, the risk of wildfire will be less than significant under the oversight of RCFD.
	CURE-29: SUBSTANTIAL EVIDENCE, VALLEY FEVER (page 25) The DEA/IS does not include a discussion of the potential for the Project to expose workers or other members of the public to Valley Fever. SWAPE explains that spores that cause Valley Fever are present in Riverside County and that construction workers	The comment is concerned with health effects during construction, and the comment includes a copy of map that illustrates how the greatest incidence of reported human Valley Fever cases occur across Central California and in the San Joaquin Valley. Workers in Riverside County are less at risk than those across Central California's counties. This Project and all construction activities would be subject to stringent dust control requirements (including SCAQMD Rule 403), and these mandatory controls would avoid exposing construction

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	are particularly at-risk during earth-moving activities associated with construction.157 Valley Fever spores also travel hundreds of miles potentially affecting public health throughout the region. Valley Fever is a potentially fatal disease with symptoms that include fatigue, fever, cough, headaches, breathing difficulties, rash, muscle aches, joint pain, chronic pneumonia, meningitis, skin lesions, and bone or joint infection.158 SWAPE provides substantial evidence that the Project may have a Valley Fever impact from dust exposure. SWAPE provides a list of feasible mitigation measures that could reduce the potential for Valley Fever exposure to a less-than-significant level.159 These include cleaning equipment of dust, conducting earth-moving activities downwind of workers, watering areas, using vehicles with closed-cabs and HEPA-filtered air systems, worker training, and providing respirators to workers.160 These measures must be considered in an EIR for the Project that properly discloses and analyzes the potentially significant public health impacts from the risk of Valley Fever exposure.	workers and the off-site population to substantial concentrations of dust, thus minimizing the potential for adverse health effects.
	CURE-30: Exhibit A, Valley Fever Potential has not been Evaluated	See Response to Comment CURE-29.
	CURE-31: Exhibit A, *Unsubstantiated Input Parameters Used to Estimate Project Emission; Incorrect Changes to Individual Construction Phase Lengths*	See Response to Comment CURE-9.
	CURE-32: Exhibit A, *Unsubstantiated Reductions to Off-Road Construction Equipment Unit Amount*	See Response to Comment CURE-10.
	CURE-33: Exhibit A, *Unsubstantiated Changes to On Hauling, Vendor, and Worker Percent Paved Values; Unsubstantiated Change to the Road Percent Paved Value*	See Response to Comment CURE-11.
	CURE-34: Exhibit A, *Unsubstantiated Reduction to Solid Waste Generation Rate*	See Response to Comment CURE-12.
	CURE-35: Exhibit A, *Incorrect Indoor Water Use Rate*	See Response to Comment CURE-13.

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	CURE-36: Exhibit A, *Underestimated Number of Vendor Trips*	See Response to Comment CURE-14.
	CURE-37: Exhibit A, *Unsubstantiated Operational Vehicle Trip Rates*	See Response to Comment CURE-15.
	CURE-38: Exhibit A, *Incorrect Application of Construction-Related Mitigation Measures*	See Response to Comment CURE-16.
	CURE-39: Exhibit A, *Updated Analysis Indicates a Potentially Significant Air Quality Impact*	See Response to Comment CURE-17.
	CURE-40: Exhibit A, *Feasible Mitigation Measures Available to Reduce Emissions*	See Response to Comment CURE-18.
	CURE-41: Exhibit B. This letter contains my comments on the biological resource impact analysis for the Draft Environmental Assessment / Initial Study (DEA/IS) for the Alta Mesa Wind Project. Alta Mesa 640 LLC is a subsidiary of Brookfield Renewable Energy (Applicant) who is owner of the Alta Mesa Wind Project (Project). They are proposing to repower the existing 27 megawatt (MW), 159 turbine wind project located roughly 11 miles northwest of the City of Palm Springs. Alta Mesa is an existing 27 megawatt (MW) wind project with 159 turbines located on land zoned Wind Energy (W-E). The existing turbines heights range from 114 to 145 feet. The existing 159 turbines will be removed, and the Applicant proposes to construct, operate, and decommission 7 new wind turbine generators (WTG). The County project abuts an additional section of the existing wind farm, 401 acres of land administered by the Bureau of Land Management (BLM) and referred to as the Mesa Wind Repower Project (BLM Segment). The BLM proposes to remove the existing 400 plus turbines and construct, operate, and decommission 11 new WTGs that will generate up to 30 MW. Local land uses include lands designated as Area of Critical Environmental Concern (ACEC), and federally	The comment summarizes the author's understanding of the project as an introduction to further comments. Note that the comment letter persistently mis-construes the "project" as though it consists of (1) the actual proposed Alta Mesa Wind Project analyzed in the EA/IS, referred to in this comment as "the County project" and (2) the Mesa Wind Project Repower, located on adjacent BLM lands. Please refer to the Response to Comment CURE-2A regarding piecemealing. This clarification is repeated as needed throughout responses below.

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	designated wilderness areas. The Pacific Crest Trail (PCT) runs north of and adjacent to the west side of the wind farm.	
	CURE-42: Exhibit B. The Biological Technical Report in the DEA/IS Appendix B (BTR) states, "One federally listed endangered plant, triple-ribbed milk-vetch, has been reported in Whitewater Canyon, just east of the survey area." The BLM Segment states that for this species there is "potentially suitable habitat present but not observed; known from within one mile to the east". In fact, the language used to describe the potential for this species to occur on site is verbatim what the BLM Segment states for what amounts to a different section(s) of the wind farm. This repetition of the BLM Segment EA discussion raises two important points: (1) Since the reporting analysis is exactly the same word for word as presented in the previously published final BLM EA for this wind farm that references an entirely different BTR with different studies, how can it be assured that it is inclusive of new data gathered from this Project site?	The comment misconstrues the proposed Project as including a "BLM segment." There is no BLM segment of the proposed Project. Also see Response to Comment CURE-2A. Regarding potential occurrence of triple-ribbed milk-vetch on the site, please refer to Response to Comment CURE-5, regarding the affected botanical environment. The commenter notes that the analysis regarding potential occurrence of triple-ribbed milkvetch on the proposed Project site is the same for the Alta Mesa Wind Project as for the adjacent Mesa Wind Project Repower on BLM lands, and asks if the text accurately incorporates surveys conducted for the Alta Mesa Wind Project. By way of reply, the statement is accurate and fully incorporates the results of field surveys on the site.
	CURE-43: Exhibit B. (2) The DEA/IS's repeated use of the BLM Segment's EA language verbatim for its analysis and discussion serves to support the fact that that the impacts to resources from this part of the site (i.e. Alta Mesa Wind) of the Project should not be separated and ignored for comprehensive analysis, as this DEA/IS has done, when the discussion of impacts and by default data informing these impacts if often deemed exactly the same as presented in both the County Project and the BLM Segment.	The comment misconstrues the proposed Project as including a "BLM segment." There is no BLM segment of the proposed Alta Mesa Wind Project. The comment notes the similarity of resources and analyses of two adjacent projects and states that the two projects (Alta Mesa and Mesa) should not "be separated and ignored for comprehensive analysis," asserting that the EA/IS has done so. Given that the two project sites are on adjacent lands, it can be expected that biological resources would be similar on the two sites. The Biological Resources Technical Reports (BRTRs) and environmental analyses for the two projects reflect this similarity. The EA/IS also provides a cumulative analysis of the two projects and other relevant development projects in the region (see EA/IS Table 7). Please also refer to Response to Comment CURE-2A regarding piecemealing.
	CURE-44: Exhibit B. The BTR claims that, "Triple-ribbed milk-vetch is found in arroyos, canyons, and hillsides between about 1,400 and 4,000 feet elevation. It grows in Whitewater Canyon just east of the AM Project site and in nearby canyons, hills, and mountains to the east (Baldwin et al. 2012) including Morongo Canyon and Mission Canyon…Triple-ribbed milk-	The comment claims it is "illogical" to say a species has a low potential to occur based on negative survey result and goes on to assert that the conclusion "must be revised" to report a "high" probability of occurrence. In fact, comprehensive field surveys are the proper means of determining species occurrence as a baseline for evaluating potential impacts. Please refer

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	vetch is covered under the Coachella Valley Multiple Species Habitat Conservation Plan…. Aspen did not locate triple-ribbed milk-vetch during our surveys. Habitat suitability is difficult to evaluate…[p]otentially suitable habitat is present but and there is a low potential that it may grow in the study area due to negative results of field surveys." To say a species has a low potential to occur because they weren't observed while acknowledging there are individuals present nearby and habitat where it can grow onsite is illogical and must be revised to denote the species having a high potential to occur.	to the CDFW Guidelines available online here: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline As stated in the BRTR, the field surveys were conducted by qualified biologists, and covered 100 percent of the site during the appropriate survey season, all in conformance with the CDFW Guidelines. The commenter has evidently never surveyed the proposed Project site, yet asserts a "high" probability of occurrence for a species that was the specific target of comprehensive surveys with negative results. The assertion is unsupported, contrary to the CDFW Guidelines, contrary to the survey results, and plainly unreasonable. Please also refer to Response to Comment CURE-5.
	CURE-45: Exhibit B. Also, the BTR claims that botanical surveys were conducted according to CDFW guidelines and appropriate times. However, it is not possible to confirm this from the minimal survey details presented. The only BTR table of botanical surveys shows survey dates and times (Table 1) where both desert tortoise surveys, and botanical surveys are lumped together in this one table with no identification of who conducted which survey when. Table 4 describes tortoise observations but does not assist in indicating when botanical surveys were conducted. Complete descriptions of each and every survey, with date, times, and which biologists conducted which type of surveys should be presented in the baseline discussion.	The comment seems to misunderstand Table 1. Field surveys were conducted on the dates and times, by the staff indicated in the table. All biologists noted botanical and wildlife observations throughout every field visit. Please also refer to Response to Comment CURE-5. The comment correctly identifies Table 4 of the BRTR, which reports desert tortoise observations. The comment states that survey dates and methods should be presented in the BRTR. Field survey methods are described in Section 2.2.1 of the BRTR.
	CURE-46: Exhibit B. B. Minimal Surveys Fail to Adequately Represent the Ecosystem Baseline. The DEA/IS concludes there will be no significant impacts to biological resources with mitigation, and that its analysis is based on the BTR and a wetland delineation. The BTR informs this determination with data from databases, a literature review, focused desert tortoise surveys, and botanical surveys. No on-site surveys of any kind were conducted for any invertebrates, birds, bats, or reptiles aside from tortoises. Without such survey data, essential details regarding impacts to such significant and diverse components of the ecosystem clearly cannot be adequately assessed.	The commenter believes the field surveys were inadequate for many species. Please refer to Response to Comment CURE-6 regarding the affected environment for special-status species.

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	CURE-47: Exhibit B. For instance, the DEA/IS describes potential for special-status species to occur based upon its estimation of likelihood of nesting or roosting. This is only one aspect of several essential types of information that inform baseline impact risk and level of significance. What should be included for all the special-status species are estimates of their likelihood to fly through the Rotor-Swept Area (RSA) per unit time, as well as information on other essential variables including their status and behavior during this time (e.g., if they are foraging, migrating, breeding; residents or migrants; what is known about their subpopulation status, etc.). Direct observations of such behavior go well beyond merely informative; they are an essential aspect of determining use of the site, and consequently significance and risk of indirect (i.e. loss of habitat) and direct (injury, harm, harassment) impacts from construction activities and new WTGs. Conducting protocol surveys for protected and rare species, and focused surveys for taxa (birds, reptiles, bats) is standard practice for impact analysis for industrial wind construction projects; and utilize methodologies established to detect species and their regional status beyond anecdotal data. A review of standard technical reports analyzing biological resource impacts for CEQA and other analyses of wind and other industrial development projects reveals that focused surveys are common and conducted literally as such, where the biologist "focuses" on the species for which the protocol has been designated. A focused survey avoids the need to attempt to observe the ground, vegetation, underground (denning and fossorial species) and skies all at once for any vertebrate, invertebrate, and plant species that may also be present at any given time on and near the site. The demonstrated need for species-intensive focus is why agencies require protocol surveys to be conducted for one focal species at a time, to, for example, accepting anecdotal sighting of birds as conclusive while conducting a survey for a fossorial species. By definition, a focused protocol survey serves the purpose of detecting	The commenter believes the impact analysis was inadequate for many species. The comment comprises a lengthy narrative apparently recommending a separate focused survey for each special-status wildlife species known from the vicinity. The comment notes that focused surveys are often included in BRTRs. Yet it misleadingly implies, without evidence, that these surveys are normally conducted for many wildlife species. To the contrary, conducting separate focused surveys for dozens of special-status wildlife is not standard practice. The Alta Mesa Wind Project BRTR is consistent with standard practice, including focused surveys for desert tortoise, triple-ribbed milk-vetch, and burrowing owl. These species (1) potentially occur on the site, and (2) could reasonably be found during a focused survey. For most listed threatened or endangered species in the region, there are agency guidelines for focused surveys. For dozens of others there are no agency guidelines. For example, see the list of species provided by the same commenter, addressed above in Response to Comment CURE-7 regarding special-status species that were omitted and underestimated. There are no agency survey guidelines that could be applicable to the Alta Mesa Wind Project site for any species in that list except the surveys actually conducted for the project. In many cases, focused survey guidelines are directed to identifying species only during one aspect of its life history (usually breeding). Focused surveys for riparian birds at the Alta Mesa Wind Project site would be meaningless because no suitable breeding habitat is present. Nonetheless, as stated in the EA/IS, several riparian birds could fly over the site. Potential occurrence of these species are properly disclosed in the BRTR and potential impacts are properly evaluated in the EA/IS. More important, expanding the level of field data collection and analysis to develop and implement focused surveys, including their status and behavior during this time (e.g., if they are foraging, migrating, breeding; residents or migrants; what is known about their subpopulation status, etc.) to calculate the likelihood to fly through the Rotor-Swept Area (RSA) per unit time for the dozens of special-status species identified in the BRTR would expand the scope of the analysis beyond what is required by CEQA and far beyond standard practice. It is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108).

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	elusive, cryptic, rare or endangered species and requires a particular degree of species-specific search methodology. Not only is the search intensive, but concurrent detailed reporting is also required for certain species (like the desert tortoise) while in the field, reporting that is time-intensive and precludes adequate attention necessary for thorough detection of other animals (such as flying birds) at the same time.	Please also refer to Response to Comment CURE-6 regarding the affected environment for special-status species.
	CURE-48: Exhibit B. It is also assumed that all daytime surveys, like all surveys conducted by Aspen for the DEA/IS, would obviously completely preclude all but potential roost site data collection for all bat species. Obviously, I do not expect ground-truthing field data to be scientifically exhaustive or deemed fully comprehensive. However, the County has abundant access to experienced biologists, consultants, and related personnel with the expertise to conduct studies in a timely manner prior to release of any final impact analysis that would contribute significantly to the knowledge necessary for an adequately informed baseline and resultant accurate mitigation analysis. The impact to bats alone from this Project has been seriously underestimated, contributing to a flawed impact analysis and concurrent mitigation proposals, and must be rectified in part by conducting appropriate surveys.	The comment claims that impacts to bats are underestimated but provides no substantial evidence to support the assertion. Potential occurrence of all special-status bats in the area for roosting or foraging is evaluated in the BRTR (see Table 3), as well as known local occurrences reported elsewhere. The BRTR and the EA/IS state that special-status bats may fly over the site and the EA/IS properly identifies WRG collision as a risk to bats. Habitat conditions on the site don't support roosting or important forage areas for special-status bats. Additional field data would not meaningfully inform the EA/IS analysis or its conclusions. The comment's remark about "concurrent mitigation proposals" is unclear.
	CURE-49: Exhibit B. Databases and Literature Review Do Not Replace Surveys for Baseline Analysis. The over-reliance on databases in lieu of relevant site surveys is inadequate. Review of the literature and databases are an important subset of regional presence/absence data, but they cannot replace focused or protocol surveys in terms of site-specific accuracy and essential detail; even sophisticated models are known to consistently underestimate real world presence/ absence data. For instance, the DEA/IS relies heavily upon the California Natural Diversity Database (CNDDB) to make determinations about the potential for species to occur. However, the CNDDB is limited in its ability to predict species currently present at any given locale; instead it presents at best a conservative description of what may or may not be present onsite, and	The comment correctly notes limitations of the CNDDB data (e.g., bird flyover) but asserts without evidence that the baseline data are over-reliant on the CNDDB. The BRTR preparers and EA/IS preparers are aware of these limitations and therefore evaluate all special-status species reported in the surrounding area, and disclosed that others that could fly over the site (e.g., during migration) even if they have not been reported. Contrary to the comment, the EA/IS does not treat lack of CNDDB species records as evidence the species is absent from the site, and nothing in the EA/IS or BRTR makes or implies as much. All special-status species of the area whose habitat may be present on the proposed Project site are evaluated in the BRTR. Additionally, again contrary to the comment, evaluation of each species likely occurrence is not based on a desktop analysis alone, but on habitat conditions as documented by field surveys. Nothing in the comment supports its assertion that the BRTR baseline

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	reveals little to no detail related to populations, species movements, breeding status, etc. Many species sightings are not actually reported on the public CNDDB. According to the California Department of Fish and Wildlife's (CDFW) CNDDB coordinator, for most birds the CNDDB maps only those occurrences that can be associated with "evidence of nesting." Observations of flyovers or foraging are generally not mapped into CNDDB as an "Element Occurrence," the standard mapping unit based on NatureServe natural heritage program methodology. CNDDB biologists also state that the database represents summaries of species occurrences; not individual detections. "Given limited resources to map submissions, the CNDDB tries at best to map occurrences that relate to an important aspect of life history (pers. comm, P. McIntyre, CDFW, June 6, 2015)." As importantly, CNDDB records are voluntarily reported and only exist for locations that have been surveyed to a greater extent than others, therefore cannot be deemed comprehensive at all. Absence of a species listed in the CNDDB records - or records from any other database or report - does not indicate a species is absent. Simply put, lack of evidence is not evidence. To reinforce this fact the CDFW posts a disclaimer on its CNDDB website: "We work very hard to keep the CNDDB [...] as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers." I have personally observed the limitations of databases like the CNDDB and various habitat conservation plan lists. For example, prior to the construction of Ocotillo Wind, a 15,000 acre industrial wind project in the Sonoran Desert, I spent two years conducting protocol raptor, avian, reptile, and other special-status surveys for the project EIR/EIS.12 During this time I was able to compile a long list of observed resident and migratory avian species as well as reptile and mammal	data are less than substantial evidence. Please also refer to Response to Comment CURE-47. The comment closes with an anecdote regarding 2 years of field surveys an unrelated 15,000-acre project to support the earlier point about CNDDB limitations. As explained above, these limitations of the CNDDB are the reason for identifying and evaluating potential impacts to all special-status birds and bats potentially flying over the site and identifying mitigation for those impacts (i.e., MM BIO-13), even if not reported in the CNDDB. Nonetheless, the anecdote's implication that an additional 2-year field study is appropriate to document wildlife at the proposed Project site is unreasonable and not required under CEQA. It is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108).

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	species. Upon reviewing the current CNDDB records at the time I noted the absence of 14 special-status species, including two Fully Protected (FP) species (foraging American peregrine falcons, and migrating greater sandhill cranes).	
	CURE-50: Exhibit B. Protected and other Special-status Species are Omitted or Underestimated. Dr. Shawn Smallwood, an ecologist who has conducted extensive research on birds, bats, and other wildlife at industrial wind facilities in California, wrote an assessment in June 2020 13 of the biological resource impact analysis for the BLM Segment EA for this wind farm. In doing so he noted that even despite some focused surveys and database searches, the BLM's BTR significantly under-reported special-status species recorded to have occurred in the area and on the site. Since this is the same wind farm as the Project, his list of species (Table 1) is completely relevant and included again here. The omissions in this Project BTR as compared to the Smallwood list are important in demonstrating the need for greater rigor in the baseline data collection and analysis that is necessary to inform mitigation criteria for this DEA/IS. The comment also reproduces an extensive table of special-status species that Dr. Smallwood provided as commentary for the adjacent Mesa Wind Repower Project.	The comment provides an extensive list of special-status wildlife purportedly not addressed sufficiently in the BRTR and EA/IS. The comment again misconstrues the proposed Project as including a "BLM segment." There is no BLM segment of the proposed Project; see Response to Comment CURE-2A. Regarding the list of special-status species, please refer to the Response to Comment CURE-5. .
	CURE-51: Exhibit B. The DEA/IS lists several special-status species as "not addressed"15 by the DEA/IS analysis due what it considers a lack of potential to occur. This list includes the California Species of Special Concern (SSC) yellow-breasted chat (Icteria virens), vermillion flycatcher (Pyrocephalus rubinus), and Summer tanager (Piranga rubra), all considered having no potential to occur due to there being "no suitable riparian vegetation present". Riparian habitat is important for these species to breed, but not to migrate through or use as a stopover by individuals or pairs searching for new territory. This is reinforced by eBird observations of the yellow-breasted chat and Summer tanager (as well as other protected and special-status species including SSC loggerhead shrike, FP	The comment points out that birds whose habitat may not be present on site still may fly over the site, citing reports from the Whitewater River, about a mile east of the site. Please refer to the Response to Comment CURE-5, above. Any potential occurrence or impact to these species is included in the BRTR and/or the EA/IS under the discussion of bird migration in the San Gorgonio Pass, and in the EA/IS regarding potential collision with WTGs. Contrary to the comment, the BRTR provides the requisite substantial evidence needed to support the EA/IS analysis of potential impacts to biological resources under Impact b. The comment provides no substantial evidence to the contrary.

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	Peregrine falcon, FP golden eagle) in a birding hot spot in Whitewater Canyon within one mile of the proposed locations of new WTG 3A through 7A. At a birding hotspot less than 1.7 miles north of the wind farm, special-status species observed – many within the last year – include the vermillion flycatcher, yellow-breasted chat, and Summer tanager. Other SSC detected at this location - species not adequately discussed as having high potential to occur in the DEA/IS - include the SSC American white pelican, SSC yellow warbler, FP white-tailed kite, SSC Vaux's swift, SSC loggerhead shrike, SSC northern harrier, and SSC long-eared owl, among others.17 (See discussion below for details on importance of correctly assessing scope of avian migrants and potential risk posed by this Project). Smallwood's list also includes the Los Angeles Pocket mouse (Perognathus longimembris brevinasus) recorded nearby, another species "not addressed" by the DEA/IS.	
	CURE-52: Exhibit B. Included in the many species not surveyed are several special-status species deemed erroneously to have a "low" potential to occur because they were "not observed," and yet acknowledged to have "suitable habitat" onsite and to have been observed near the site. With no surveys conducted, the conclusion that any of these animals have a low potential to occur because they were not observed is unsupported by the evidence and must be rectified. Among others relevant to the discussion above, the following species' potential to occur must be addressed via surveys (i.e. for reptiles, and for resident and migrant birds) and discussed as part of the impact analysis and mitigation: Silvery legless lizard (Anniella pulchra pulchra), orange-throated whiptail (Aspidoscelis hyperythra), California glossy snake (Arizona elegans occidentalis), Flat-tailed horned lizard ((Phrynosoma mcallii), and Black swift (Cypseloides niger); I observed black swifts migrating through both the Sonoran desert and the Whitewater area when conducting raptor and other avian surveys between 2012 and 2016 for the Ocotillo Wind	The comment seems to address primarily wildlife, but the first sentence is ambiguous and possibly refers to plants. There are several special-status plants that were not found on the site, even though suitable habitat is present. Regarding all special-status species, occurrence probability as evaluated according to habitat conditions, local records, and the 100-percent coverage field surveys for special-status plants. Please refer to Response to Comment CURE-5 above. Like the special-status plants, above, the BRTR's conclusions regarding special-status wildlife are based on a combination of field surveys, habitat evaluations, and local occurrence records. The comment's assertion that the low occurrence probability is based only on field observations is false. Please refer to the Response to Comment CURE-6 above. Regarding silvery legless lizard, California glossy snake, orange-throated whiptail, please refer to BRTR Table 3. Suitable habitat for these three species was not observed on the site and occurrence probability is properly evaluated as low. Regarding flat-tailed horned lizard, which occurs in windblown sandfields and surrounding bajadas and washes, again, no suitable habitat is on the site and species is not addressed further in the BRTR or EA/IS. Please refer to BRTR Table 2. The comment offers no substantial evidence to contradict the analysis;

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	energy Project EIR/EIS, and the Los Angeles Regional Interoperable Communications System EIR/EIS.	instead the analysis itself is based on substantial evidence developed during field surveys of the site, reported in the BRTR. Regarding black swift, the BRTR properly reports that it has a low probability of occurring on the site even during migration. Clarification that it, among many other seasonal migrants, may briefly overfly the site or stop over on the site has been added to the EA/IS.
	CURE-53: Exhibit B. To conduct current, focused taxonomic surveys (i.e., birds, bats, reptiles) and protocol surveys for the special-status species that may be present is not onerous in time or cost compared to the cost of failed mitigation that may result from an incompletely presented and analyzed baseline. This type of mitigation failure is avoidable by requiring the Applicant to provide focused, thorough surveys that are the backbone of comprehensive CEQA biological resource impact analysis. For an example of the costs of mitigation failure to both wildlife and humans, see the discussion below regarding the flat-tailed horned lizard.	The comment makes reference to "failed mitigation" that may result from incomplete baseline data, referring to an anecdote described on page 32 of the comment letter. Regarding baseline conditions, please refer to Responses to Comments CURE-5, CURE-6, CURE-7, CURE-19, CURE-20, CURE-42, and CURE-43 through CURE-52. The remarks regarding "failed mitigation" seem to be based on an unrelated project and a species that does not occur on the Alta Mesa Wind Project site.
	CURE-54: Exhibit B. PROPOSED WGT INAPPROPRIATELY EXCLUDED FROM DEA/IS IMPACT ANALYSIS. The County presents an analysis of impacts to biological resources that is limited to WGT-related data collected from the segment of the wind farm that is located within County jurisdiction only. As a result, the County fails to consider the whole of the action in the DEA/IS by failing to consider the complete impact of new WTG from the Mesa Repower (BLM Segment). The WTG can and will impact individuals traversing the entire wind farm site throughout the (at least) 30-year life of the Project and need to be incorporated in the impact analysis. This omission results in several instances where the mitigation analysis is based on an incomplete baseline regarding direct and indirect impacts to wildlife. This is due to the fact that species that may be utilizing (foraging, breeding) and moving through the area (migrating, emigrating, using it as stopover) are subject to disturbance and increased risk of harm and death caused by the whole of the wind farm repowering project. In other words, wildlife's exposure to increased harm	The comment again misconstrues the proposed Alta Mesa Wind Project as including a "BLM segment." There is no BLM segment of the proposed Project. Please refer to Responses to Comments CURE-2A and CURE-2B above, regarding "piecemealing." Regarding sufficiency of the baseline conditions, please refer to responses to comments CURE-5, CURE-6, CURE-7, CURE-19, CURE-20, CURE-42, and CURE-43 through CURE-52. The comment asserts, without evidence, that risks to species are "underestimated" Please refer to Response to Comment CURE-2B regarding analysis of the proposed Alta Mesa Wind Project's potential impacts on both a project--specific level and in the cumulative context, which includes the adjacent Mesa Wind Project Repower. For clarification, the analysis of cumulative risk to birds and bats has been edited to note potential cumulative risk of the two projects to individual birds or bats. The comment describes a "significant impact" to individual birds or bats that may be at risk from the proposed Alta Mesa Wind Project and adjacent Mesa Wind WTGs. While the wording in the comment says "individual species," the risk is

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	over time does not follow invisible boundaries used for regulatory protocols. Therefore, a more comprehensive and thus accurate analysis of the significant impacts to individuals that may move throughout or across both jurisdictional sections of the wind farm should incorporate the risks imposed by the entire wind farm's repowering infrastructure, which includes the new WGT proposed for construction on the BLM Segment of the site. The risks to individual species that the DEA/IS indicates have a high potential to occur is underestimated in scope, as well as the variability of risk, caused by different WTG in different micro-sites. For instance, migrating California threatened Swainson's hawks, other migratory special status birds (i.e. Fully Protected American peregrine falcon, Fully Protected golden eagles), special-status foraging bats (i.e. SSC Pallid bat, SSC Townsend's big-eared bat, SSC Western mastiff bat, SSC Western red bat) and a host of other protected species with high potential to visit the site must encounter, avoid, and otherwise maneuver an entirely newly fragmented landscape comprised of 499 foot high wind turbines, as opposed to existing turbines of a much smaller scope and design. To exclude the WGT to be built on the BLM Segment from impact analysis for birds and bats is an erroneous omission based upon imaginary boundaries, not science, and serves to drastically underestimate real world impacts. As such the appropriate baseline for analysis of impacts to birds and bats must include construction and operation of not 7 but 18 new WTGs throughout the site. (See further discussion regarding RSA impacts to birds and bats below.)	clearly limited to individual birds or bats, not to entire species. This phrase uses the term "significant" outside the context of its definitions in the CEQA Guidelines and the biological resources analysis (for applicable significance criteria, please see the chart at the beginning of the Biological Resources section of the EA/IS). Instead, the analysis focuses properly on potential population or species-level impacts. The adjacency of the two projects does not affect the validity of the cumulative impact analysis.
	CURE-55: Exhibit B. Impact Incidence Risk to Birds from new WTG is Highly Underestimated. According to DEA/IS, the wind farm's old WTG will be removed followed by construction of new ones built that will be comprised of very different (much larger) size, scope, design, and material. As such the new turbines must be considered an entirely new impact altogether since the risks they pose to birds and bats are significantly different than those imposed by the old WTG, turbines that	Please refer to the Response to Comment CURE-19, above.

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	purportedly will be gone one once this Project's construction commences. The County asserts that the primary Project risk to threatened and endangered birds would be collision with the turbines or other infrastructure during operation of the Project, and that the San Gorgonio Pass just south of the Project area is also a high-use nocturnal flyway for migratory songbirds. It claims that about 11% of the birds from studies cited migrated at altitudes within what will be the rotor-swept areas (RSA) of the proposed turbines. In the DEA/IS Biological Technical Report (BTR), the authors (Aspen) state that the Project area's flight corridor, the San Gorgonio Pass, "is a high-use nocturnal flyway for migratory songbirds. McCrary et al. (1983) estimated 32 million birds flew through the Coachella Valley during spring of 1982, and recorded rates of 5,000–10,000 birds per hour through the Valley. A large proportion of these migratory birds would have migrated through the San Gorgonio Pass, at the northwest margin of the Coachella Valley. Most of these migratory birds flew higher than the existing or proposed turbines, but about 11 percent were at altitudes within the blade-swept areas of the proposed turbines. Special-status migratory birds reported in the CNDDB (including Vaux's swift, yellow warbler, white-faced Ibis, and least Bell's vireo) as well as many other common and special-status species may migrate over the site seasonally [emphasis added]." Based upon these numbers presented, the DEA/IS should conclude that 11% of 32 million is 3.52 million birds potentially moving through the windfarm in one spring migratory season. Over the thirty years of the purported life of the Project, this would amount to 105.6 million birds moving through the project with high potential to utilize altitudes at the high-risk RSA of the proposed turbines. Since birds migrate in fall as well as spring, these rates would be doubled, with over 7 million birds a year and over 210 million throughout the life of the Project that would be at significantly increased risk of injury and death from the proposed Project. These incredibly high numbers are not reflected adequately in the mitigation analysis.	

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	CURE-56: Exhibit B. The DEA/IS Fails to Adequately Present Impacts from New WTG. The IS/ EA has incorrectly presented the baseline and limited its analysis to deducting the amount of rotor swept area between existing and new turbines for the impact analysis. This is inadequate for several reasons: An estimate of risk or mortality that is based upon merely subtracting RSA is an incomplete comparison and ignores essential variables involved. It is not just the difference in RSA area that is significant - and different, based upon which old style of WTG is being discussed as there are two models of different sizes. It is the new, increased height of this RSA, as well as aspects of micro-siting, plus individual species variables that contribute to mortality and increased risk of harm overall. Finally, as discussed above, the DEA/IS leaves out over half of the new WTG to be installed on the wind farm in its discussion of impacts to birds and bats, resulting in a flawed and underestimated analysis that compromises the effectiveness of relevant mitigation measures. According to the DEA/IS, within this section of the windfarm 117 old WTG have a RSA diameter of 23 m, 42 have a 27 m diameter, and 7 new ones will be 117 m in diameter. The DEA/IS concludes that this will result in a 3.6% increase in RSA, though the County presents no analysis of what this percentage equates to, specifically, for bird and bat mortality estimates. It is important to note that even the estimates of the differences in RSA between old and new turbines has not been agreed upon. The BLM Segment Draft EA states that the project's 11 new turbines will increase the total authorized rotor swept area by 55 %, whereas in the Final EA it states that the same number of new turbines will increase the total rotor swept area by an 84 % increase. And yet in the U.S. Fish and Wildlife Biological Opinion for this segment of the project, they state that the RSA will increase by approximately 33.18%.	The comment claims again that baseline conditions are incorrect. Please refer to responses to comments CURE-5, CURE-6, CURE-7, CURE-19, CURE-20, CURE-42, and CURE-43 through CURE-52. The comment contends that the comparison of the existing rotor swept area to the Proposed Project's RSA is incomplete, pointing out differences in turbine blade height, microsite, and differences among avian and bat species. The comment again misconstrues the proposed Alta Mesa Wind Project as including a "BLM segment." There is no BLM segment of the Proposed Project. Please refer to Responses to Comments CURE-2A and CURE-2B above, regarding "piecemealing." In a related statement, the comment notes various RSA calculations reported for the adjacent Mesa Wind Project Repower. However, subsequent to BLMs Decision on the 9 WTG Alternative for Mesa Wind, the applicant changed the turbine design resulting in a project with 8 WTGs with rotor diameters of 117 meters (decreased from 132 meters). The decrease in the number of WTGs and reduced rotor diameter resulted in a 5.8% increase in cumulative rotor sweep in comparison of baseline conditions, instead of the 55% increase cited by the commenter. To clarify, the Proposed Project would result in a 3.6 percent increase in RSA, as stated in the EA/IS. Cumulatively, both projects would result in nominal increases in rotor sweep over baseline conditions. The comment notes, correctly, that the EA/IS does not quantify the risk to birds and bats. Please refer to Response to Comment CURE-57 (below) regarding quantification of fatalities. .
	CURE-57: Exhibit B. However, what is more relevant to mortality estimates is the additive difference in height of the new RSA, as mentioned above. According to the DEA/IS, the	The comment claims, without support or substantial evidence, that turbine height is more important to mortality estimates than RSA. The comment disregards

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	new WTG will be 499 feet high, compared to the old WTG with a height of 114 feet or 145 feet. As such the new WTG will result in an additional 385 feet or 354 feet vertical area of significantly increased mortality risk. This amounts to a 338% increase in risk for each of the new WTG based upon an analysis contrasting the shorter WTG with the proposed new ones. This drastic increase in mortality risk is underscored by Smallwoodâ€™s analysis of increased risk posed by the BLM section of this wind farm, specifically, â€œAccording to BLM (2020:49), the repowering would increase the projectâ€™s rotor-swept area from 92,460 m2 to about 143,695 m2, or by 55%. But it is not as simple as this. For bats, the old-generation wind turbines pose essentially no collision risk, whereas modern turbines are killing bats in very large numbers (Smallwood 2020). For bats, the repowered project would increase the rotor-swept airspace that is dangerous to bats by 100%. For golden eagles, for which no evidence yet exists that inoperative turbine pose a collision risk, the basis of the increase would be the 29,818 m2 of airspace swept by the 129 existing turbines that reportedly continue to operate. From that existing baseline, the project would increase rotor-swept area by 382%. For other birds, Smallwood and Bell (2020a) found no effect of turbine curtailment on bird collision fatalities, so the rotor-swept area that would be hazardous to birds as a group would increase by about 55%.â€25 Based on these factors discussed above, it is apparent that the DEA/IS fails to correctly analyze the nature, or scope, of the construction and operational impacts to volant species by the new WTG to be installed in place of the old turbines. Until this is done it is impossible to accurately analyze and pose effective, and adequate, mitigation strategies.	that the overall proposed change in RSA is only 3.6%. Part of the Alta Wind repower RSA will be higher above ground level than the existing legacy turbines, but there also will be a substantial decrease in RSA compared to baseline given that the legacy turbines were much shorter. The calculation presented by the commenter (“338% increase in risk”) makes no sense in terms of bird hazard; it simply reports the relative height of the shorter existing turbines vs. the proposed new WTGs, entirely disregarding the spatial area (i.e., RSA) where birds or bats are at risk of turbine collision. The comment quotes from Smallwood’s remarks on the adjacent Mesa Wind Project Repower (as proposed at the time of the BLM’s EA; see Response to Comment CURE-56 for a description of the current Mesa Wind design). Smallwood estimates increased hazard to bats and certain birds, apparently based on RSA changes at differing heights. While Smallwood’s quote pertains to a different project, it is instructive to note that his quote ends with the conclusion that “risk to birds as a group would increase by about 55%,” which is exactly the same percentage increase in RSA cited in the same quotation. With the Mesa Wind redesign as described above, this increase has been reduced from 55% to only 5.8%; likewise, the proposed Alta Mesa Wind Project increase over baseline is 3.6% The BLM (2020) response to Smallwood’s comment, includes the following: “These increases in rotor-swept area within airspace used by these species appear plausible, although it is not clear how they were calculated” (Final EA - Environmental Assessment: Mesa Wind Repower Project. DOI-BLM-CA-N060-2020-0024-EA. Palm Springs Field Office). If Smallwood’s estimates are accurate and if they are applicable to the proposed Alta Mesa WindProject, then it is a reasonable conclusion that relative risks to some birds would increase, others would decrease, and the risk to birds as a group would increase by the same amount as the RSA increase, or about 3.6%. The commenter’s claim of a 338% increase indicates a clear misunderstanding of the avian risk issue.
	CURE-58: Exhibit B. The DEA/IS Fails to Analyze Collision Mortality of Birds from New WTG. The DEA/IS repeatedly attempts to downplay risks of mortality to birds for the 30 years of operation of the project facility by describing special-status	The commenter believes the EA/IS language regarding “migration flyover or stopover” is “intentionally misleading,” and takes issue with the EA/IS, incorrectly claiming it refers to Swainson’s hawks as “…purely migrants.” The comment

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	species that are not known for nesting onsite as "not expected to occur on the site except during migration flyover or stopover." This is intentionally misleading, especially in light of the millions of migrants that move through the area as discussed above and in the DEA/IS. The DEA/IS states that the California Endangered Species Act (CESA) threatened Swainson's hawk is "known from the immediate vicinity" (indeed it has been recorded on Ebird within 1.6 miles of the Project). It is also incorrect in referring to Swainson's hawks as having the potential to use the site as purely migrants. They are known to forage during migration in various habitat types; the CDFW confirms this in their renewable energy project protocols for the species where they state, "Swainson's hawks may also forage in grasslands, Joshua tree woodlands, and other desert scrub habitats that support a suitable prey base. Gophers dominate the prey base of agriculturally based pairs while Swainson's hawks nesting in natural desert habitats consume a wider variety of prey species." This statement is reinforced by my observations while conducting raptors surveys throughout two years at the 15,000 acre Ocotillo Wind site, located in a Swainson's migratory flyway. I and my colleagues observed migrating Swainson's repeatedly stop and forage for insects including grasshoppers and ants. The 15,000-acre Ocotillo wind site was occupied by almost entirely natural desert scrub, as is the Project site.	goes on to describe foraging behavior by Swainson's hawks during their migration elsewhere in the desert. Nothing in the EA/IS states or implies that Swainson's hawks would not forage on the Project site. Instead, the language above ("migration flyover or stopover") was intended to convey that migratory birds may engage in other behavior during "stopover" periods. The EA/IS has been clarified to include forging among the stopover activities for Swainson's hawk and other bids.
	CURE-59: Exhibit B. Smallwood's extensive research as cited in his comments is one of various sources confirming that increased risk of mortality to birds and bats within a certain altitude of RSA, in other words from tall, "new generation" turbines. Although careful and data-reliant micro-siting has been demonstrated to reduce mortality of birds by from WTG – and thus an important aspect of mitigation strategy, the phenomenon regarding risk from taller turbines is established in the research literature, relevant, and measurable. The DEA/IS fails to analyze actual mortality rates to any avian species, this despite the fact such has been presented for other industrial wind proposed projects as well as described in	The comment cites Smallwood's work confirming the discussion above (see Response to Comment CURE-57), that relative risks to some birds would increase, while others would decrease. The comment cites studies from the Altamont Pass area regarding collision risk and WTG "micrositing." The cited literature addresses the Altamont Wind Resource Area which is well known for high numbers of golden eagles and other raptors, and WTGs in that area are known for high mortality rates of these birds. Those exceptionally high numbers are not applicable to the San Gorgonio Pass Wind Resource Area. As stated in the EA/IS, the net effect of the repower may increase or decrease the risk to protected birds and bats, but overall the net

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	peer reviewed research. Instead the DEA/IS attempts to justify this omission, and its resultant inadequate mitigation response to bird collision mortality, by reverting to the unsupported argument that can be summarized as the "we don't know enough due to limited information" and "based upon one peer reviewed article we conclude studies are not definitive" rationalization. Despite claiming there is a lack of consistent, region-specific information to make a detailed analysis about collision risk or mortality, the DEA/IS reverses this assertion by drawing the conclusion that, "Fatality rates due to increased turbine height may also vary by species; for raptors, repowering at Altamont Pass, where smaller turbines have been replaced by fewer, taller turbines, may decrease fatalities." This scientifically unsupported and inconsistent rationalization in lieu of a discussion of degree of species-specific impacts is inadequate for CEQA analysis, and incorrect. If the Applicant believes that assessing degree of significant impacts caused by a project is too difficult to determine, then the Applicant Is not prepared to present a completed CEQA analysis that poses successful mitigation.	increase in RSA is expected to increase the risk to birds and bats by only about 3.6%. The comment presents no substantial evidence that the Altamont Pass data is applicable for the proposed Alta Mesa Wind Project. The commenter invents distorted quotations to deride the EA/IS but presents no substantial evidence to support the actual substance. The commenter believes that the analysis is inadequate for CEQA purposes, and asserts it is incorrect. Nonetheless the EA/IS accurately depicts the state of science regarding WTG collision risk for birds. The commenter believes that the analysis is scientifically unsupported but offers no relevant data or analysis to improve the analysis, instead relying on the unrelated Altamont Pass work. Whereas the commenter believes the analysis is inadequate, the EA/IS preparers confirm that the level of available research in the San Gorgonio Pass Wind Resource Area (WRA) is simply lacking by comparison with the Altamont Pass WRA. It is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108). Regarding "successful mitigation," please refer to Responses to Comments CURE-23 through CURE-26 and CURE-71 through CURE-76. In support of the response above, the EA/IS preparers reviewed multiple Smallwood reports (for Altamont Pass), as well as the following publications evaluating WTG collision risk: • R. Miao, et al. 2019. Effect of wind turbines on bird abundance: A national scale analysis based on fixed effects models. Energy Policy. 132. 357-366. 10.1016/j.enpol.2019.04.040.. • A.T. Marques et al. 2014. Understanding bird collisions at wind farms: An updated review on the causes and possible mitigation strategies. Biological Conservation 179:40-52. • M. Ferrer et al. 2011. Weak relationship between risk assessment studies and recorded mortality in wind farms. Journal of Applied Ecology. doi: 10.1111/j.1365-2664.2011.02054.x.
	CURE-60: Exhibit B. Smallwood underscores this omission regarding the inadequacy of the BLM Segment EA as well, stating, "Proposed mitigation measures need predictions of	The comment quotes from Smallwood's remarks on the adjacent Mesa Wind Project Repower. Please refer to Response to Comment CURE-59 above.

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	collision fatalities per species of bird and bat – predictions that the EA does not provide. Appropriate mitigation cannot possibly be planned effectively without first knowing the potential impacts. Imagine trying to plan mitigation for impacts of a natural disaster on personal property without knowing the value of the personal property or the potential magnitude of damage caused by the disaster. The EA poses the same problem for birds and bats at Mesa Wind because the EA does not disclose how many of each species of bird and bat would be made vulnerable to wind turbine collisions, nor does it disclose how many might be killed by wind turbine collisions or other elements of the project. Potential impacts can be predicted, however, because impacts have been measured at other wind projects, providing an empirical basis for defining a range of possible outcomes (Smallwood 2013, 2020a)."	
	CURE-61: Exhibit B. Contrary to the inferences by the DEA/IS it is a documented phenomenon that higher, wider WTG blades are a larger accidental target for various species of high-flying migrants and raptors than smaller, shorter (and older) generation turbines, including protected species such as golden eagles and Swainson's hawks (a California state Threatened species).41,42 For instance, Hotker's research comparing turbine design concluded, "…in all cases repowering has a negative impact on birds – larger wind turbines have higher collision rates than smaller ones (see also chapter 4.2)" and that visiting birds showed a variable picture in which repowering had a negative effect on sensitive species.	The comment states, correctly, that individual larger turbines present greater risk than smaller ones but disregards that the proposed Alta Mesa Wind Project would remove159 smaller turbines, replacing them with only 7 larger ones, with a net 3.6 percent increase in RSA. The EA/IS has been clarified to state there would probably be a net increased risk to higher-flying birds, likely including Swainson's hawk and golden eagle (see Summary of impacts to T&E birds; the same text is cross-referenced elsewhere in the analysis for application to special-status birds and bats, migratory or nesting birds); however, the risk to lower flying birds would decrease. Even so, there is abundant published literature advocating repower projects expressly for the purpose of reducing WTG collision risk to birds. For example, see Smallwood 2010. Avian and Bat Fatality Rates at Old-Generation and Repowered Wind Turbines in California. Journal of Wildlife Management 73:1062-1071 https://wildlife.onlinelibrary.wiley.com/doi/10.2193/2008-464 , The comment quotes selectively from the Hotker report. The report confirms that individual larger turbines present greater risk than smaller ones but apparently does not consider the relative numbers of turbines in repower projects. Nonetheless, the EA/IS acknowledges the increased RSA (see Table 5) and the EA/IS text after Table 5 has been clarified to state the expected approximate 3.6 percent increase in hazards to birds. Again, the same text is cross-referenced elsewhere in the analysis for application to birds and bats.

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		The Hotker quotation regarding negative impacts of "all" repowering on birds does not contradict the EA/IS. The comment presents no substantial evidence that would contradict the WTG collision risk presented in the EA/IS.
	CURE-62: Exhibit B. According to the U.S. Fish and Wildlife Service's (USFWS) Final Environmental Assessment for the Shiloh IV Wind Repowering Project's Eagle Conservation Plan, "Because the Shiloh IV was largely a repowering project—that is, it entailed the removal of 230 old-generation wind turbines and their replacement with 50 new-generation turbines - the project resulted in vastly greater spacing between turbines and the removal of lattice towers that provided perches for eagles and other birds. However, the total risk area to eagles also increased because of the larger size of the turbine blades." Additionally, the Shiloh Wind Environmental Assessment states in respect to accuracy of impact analysis for Shiloh IV, "we believe that the number of eagle fatalities in the WRA could be higher than currently reported from post-construction monitoring or other incidental detections in view of limited search intervals, limited search areas, and existing land use /cropping patterns." USFWS eagle biologists go on to state, in respect to larger turbine-related golden eagle fatalities, "Direct mortality of golden eagles could adversely affect local survival and fecundity, and could thereby affect local and possibly regional populations. The biological impact of killing an eagle within the WRA on the overall population depends on the type of eagle killed: a breeding adult, a juvenile, or a floater."47 In other words, risk, take, and thus significant impacts from the Project are relevant to the details regarding individual eagle / pairs (i.e. where nesting, foraging, historical use, etc.). The DEA/IS has provided no analysis of the local eagle population - or any other avian species - relevant to the collision mortality risk posed by Project site, therefore no valid conclusions can be made regarding an unknown site baseline and successful mitigation for (a Fully Protected) species, for life of the Project. This project's status correlates with the current Project proposed actions, and thus the conclusions of USFWS apply as well.	The comment quotes from an analysis of a different wind repower project, located in Solano County, indicating that golden eagles may be at increased risk of collision with WTGs at that site, and that eagle fatalities in the Montezuma Hills WRA could affect "local and possibly regional populations." The comment indicates that the Alta Mesa Wind Project EA/IS does not analyze local bird populations, including golden eagle populations, implying that "successful mitigation" is dependent on such an analysis, and claims that the USFWS statements regarding the Shiloh IV repower and the Montezuma Hills WRA should also apply to the Alta Mesa Project and the San Gorgonio Pass WRA. The comment presents no substantial evidence that the EA/IS is deficient. Instead, the comment attempts to equate the USFWS NEPA analysis of an Eagle Conservation Plan for a northern California project, to the relevant Riverside County CEQA analysis. As a CEQA analysis, the EA/IS evaluates the proposed Project's environmental impacts as compared to the baseline conditions. As stated in the EA/IS (and expanded upon in multiple Responses to Comments above), the proposed Alta Mesa Wind Project would increase the RSA by 3.6 percent, resulting in a small increased risk to birds, including golden eagles. The EA/IS incorporates Mitigation Measures for this small increase and properly concludes that the impact would be less than significant with mitigation. A regional analysis of golden eagle populations, or any other bird populations is not warranted by the small increase in RSA. However, there are no active within 9-10 miles of the proposed Project site. Please see new figure illustrating regional golden eagle nesting that has been added to the EA/IS. Moreover, it is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108). Regarding baseline conditions please refer to responses to comments CURE-5, CURE-6, CURE-7, CURE-19, CURE-20, CURE-42, and CURE-43 through CURE-52.

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	Other studies of different wind turbine size configurations on industrial sites have established that change in size is a key variable in WTG bird collision mortalities, stating "We found support for an increase in mortality with increasing turbine hub height... Evaluation of risks to birds is warranted prior to continuing a widespread shift to taller wind turbines." and that "Bird collision probability depended on species, turbine height (taller = more victims)." This research is supported by my observations as a lead raptor biologist for two years on the Ocotillo Wind project site located in the seasonal migratory pathway of thousands of Swainson's hawks. Part of our data collection included recording the flight path of raptors, including altitude. Day-long raptor surveys, along with point count surveys, were conducted several times a week over the course two years. I observed that Swainson's hawks and golden eagles utilized migratory flight paths between 200 and 600 feet on 88% of recorded observations. If one is comparing impacts of from a structure with a RSA that reaches 499 feet compared to a structure where the top of the RSA is below 150 feet, as is the case with this Project, it does not require complex modeling to determine there will be an increase in impacts to a species that tends to fly through the area at heights over 200 feet and below 600. In short, common sense as well as available science indicate that without the correct assumptions and analysis regarding bird collision risk with the proposed WTG, the DEA/IS mitigation analysis is incompletely presented and must be revisited with species-specific information concurrent with a discussion regarding the potential deleterious impacts from the proposed WTG for the whole of the repowering project.	Regarding "successful mitigation," please refer to Responses to Comments CURE-23 through CURE-26 and CURE-71 through CURE-76. The comment summarizes field observations from the Ocotillo Wind Project site. Again, it is a reasonable conclusion that relative risks to some birds would increase, others would decrease, and the risk to birds as a group would increase by the same amount as the RSA increase, or about 3.6%. Further, the BRTR and EA/IS address potential Swainson's hawk occurrence at the proposed Alta Mesa Wind Project site. Please refer to clarifications added to the EA/IS after Table 5. Regarding turbine height and associated risk, please also refer to Response to Comment CURE-57 above. Nothing in the comment contradicts the EA/IS conclusion that the potential increase in WTG collision risk to these and other birds is small and would be less than significant with the mitigation identified.
	CURE-63: Exhibit B. Size matters not only to birds, but bats as well, as many bat species have been known to be killed by proximity to turbines. Extensive research on bats has demonstrated that activity of bats near turbines, and mortality of bats by turbines, can vary depending on species due to differences in behavior and typical zones of foraging and	The comment addresses potential bat mortalities due to WTG collision. It summarizes some background literature documenting potential hazards to bats in general, although special-status bats are not mentioned in the paraphrased material. CEQA requires analysis of potential impacts to special-status species (please see Impact b in the EA/IS) but not to others, including other bat species.

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	migrating height.50 However, the DEA/IS does not collect any protocol survey data for the entire taxa of bats when analyzing the Project's potential for significant impacts, despite the fact that is well established in the scientific literature that wind turbines kills bats, and that the taller turbines pose the most significant risk.51 As the U.S. Geological Survey (USGS) bat biologists state, "it's estimated that tens to hundreds of thousands of bats die at wind turbines each year in North America alone."52 USGS also reminds us that bats are not only an essential component of ecosystem biodiversity and function, they "provide pest control services worth billions of dollars to farmers annually."53 Smallwood confirms the high risk of this Project's taller WTG by stating that, "For bats, the repowered project would increase the rotor-swept airspace that is dangerous to bats by 100%." The DEA/IS states that, "There are ten special-status bats that could occur in the Project vicinity; six of these are ranked as CDFW Species of Special Concern: pallid bat (SC), Townsend's big-eared bat (SC), western mastiff bat (SC), western red bat (SC), California leaf-nosed bat, long-eared myotis, fringed myotis, Yuma myotis, pocketed free-tailed bat (SC), and big free-tailed bat (SC)… Some species feed mainly over open water where insect production is especially high, but others forage over open shrublands such as those found on the Project site. These special-status bats have moderate to high potential to forage over the Project site. Three special-status bats have potential to fly over the site en route to foraging habitat elsewhere, including spotted bat (SC), western yellow bat (SC), and cave myotis (SC)." These statements represent a flawed baseline description due in part to a lack of bat surveys for the Project and thus a significant lack of evidence for their analysis regarding what may be foraging, migrating, or for whatever reason what may or may not be detected onsite. The DEA/IS thus also fails to provide any other important data regarding frequency of occurrence, time, duration, behavior, height of flight, echolocation details, etc.; variables that have been studied and demonstrated as having the potential to better inform any	Nonetheless, all bats are included in the relevant discussion of potential WTG collisions. The comment quotes from Smallwood's comments on a different project (the Mesa Wind Project REpower, as was proposed at that time), claiming a 100% increase in rotor swept area in airspace that is dangerous to bats. The estimate may be plausible for the other project, but it does not apply to the Alta Mesa project for which the net proposed increase in RSA is 3.6%. Regarding baseline data and analysis of bat impacts please refer to Response to Comment CURE-48, above. The comment claims that impacts to bats are underestimated but provides no substantial evidence to support the assertion. Potential occurrence of all special-status bats in the area for roosting or foraging is evaluated in the BRTR (see Table 3), as well as known local occurrences reported elsewhere. The BRTR and the EA/IS state that special-status bats may fly over the site and the EA/IS properly identifies WRG collision as a risk to bats. Additional field data would not meaningfully inform the EA/IS analysis or its conclusions. Potential special-status bat WTG collision is accurately addressed in the EA/IS by reference to the discussion of potential impacts to listed threatened and endangered birds. Potential for special-status bat occurrence on the site is addressed in the BRTR, including potential activity (see BRTR Table 3). No high-value foraging habitat (e.g., open water) is present and no likely bat roosting sites are present. Please refer to the more detailed discussion in Responses to Comments CURE-6, -7, and -20. The commenter believes that further extensive field studies of bats, including "frequency of occurrence, time, duration, behavior, height of flight, echolocation details, etc." should be conducted. It is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108). The commenter apparently misunderstands the cross-references regarding WTG collisions for multiple special-status birds and bats, as well as other protected birds. To avoid redundancy. these potential collision hazards are

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	operational mitigation strategies such as curtailment and timing. The DEA/IS does acknowledge that "The primary Project risk to special-status birds and bats would be collision with the turbines or other infra-structure during operation of the Project,"59 however it reverts back to its minimalist description of mortality risks by noting these impacts to bats are "described under the summary of impacts to T&E birds" where, as indicated, it mentions impacts to only T&E birds in its erroneous rationalizations about impacts from turbines being too indeterminate to assess. Clearly the DEA/IS has not described or analyzed bats to any adequate degree in this report, therefore any discussion of the adequacy of their mitigation measures is unsupported by the evidence. However, for the sake of clarity, it should be noted there DEA/IS's mitigation measures for direct, indirect, and cumulative impacts to bats are comprised of [continued in the following comment]:	cross-referenced to the discussion of potential hazards to threatened or endangered birds. The comment presents no substantial evidence to contradict the EA/IS analysis of potential impacts to special-status bats.
	CURE-64: Exhibit B. [continued from the previous comment] 1. MM BIO-5 that proposes "minimizing" potential hazards of lighting to bats. This is inadequate to determine efficacy or success since no further information is provide as to how this will be achieved while concurrently satisfying FAA safety standards. 2. MM BIO-12 that states there will be post-construction mortality surveys as mitigation for birds and bats. As important as monitoring is for any such project, reporting dead bats does not mitigate for dead bats. As such this is not a strategy that serves to reduce any impacts to below significant. 3. BIO-13 that says a Bird and Bat Conservation Strategy will be prepared. Actions identified to be included in this plan for actual mitigation of impacts to bats is that there will be a "pre- and post-operation monitoring protocol for bird and bat mortality."60 Aside from the fact that this statement is unclear (What will pre-operating monitoring entail? What about during operation?), once again it must be noted that reporting does	The comment quotes from several of the EA/IS Mitigation Measures, with additional concerns or comments. Regarding MM BIO-5 and the FAA lighting, please refer to Response to Comment CURE-24. The Mitigation Measure as written minimizes the potential impact to the greatest extent feasible. Regarding MM BIO-12 (monitoring), please refer to Response to Comment CURE-25. Regarding MM BIO-13, please refer to Response to Comment CURE-26. The comment closes with a summary, reiterating the commenter's opinion that the baseline, analysis, and mitigation for "all species of bats" is inadequate. Please refer to Response to Comment CURE-63 above, as well as the additional responses cited therein.

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	not mitigate injury or death of any species, and therefore this is an ineffective mitigation measure. Also, much of this mitigation measure amounts to deferral of mitigation discussion to the future; without timelines, any performance or success criteria identified to any degree for mitigation strategies, the reviewer has no way of determining the measures' potential for success. In summary the DEA/IS has failed to adequately describe, analyze, and mitigate the significant impacts to all species of bats, special-status and otherwise, that will occur during construction and throughout the life of this Project. As such, operational impacts to bats remain unmitigated.	
	CURE-65: Exhibit B. THE DEA/IS FAILS TO CORRECTLY ANALYZE AND MITIGATE CUMULATIVE IMPACTS. The DEA/IS describes no effective mitigation measures to address cumulative impacts to biological resources. Instead they claim, "The cumulative analysis for Biological Resources uses the CVMSHCP coverage area as the geographic scope. The CVMSHCP boundaries include the Project and the species affected by the Project would be the same as those considered under the CVMSHCP. Under the CVMSHCP, private land use impacts to covered special status plant species and animal habitat throughout the Coachella Valley are offset through habitat acquisition and management to minimize or avoid the otherwise cumulative impacts of the development. For most biological resources within the CVMSHCP, the cumulative impacts are not substantial. The Project would offset habitat impacts through compensation and other measures, consistent with the MSHCP, and therefore would not contribute considerably to any existing cumulative impacts." This rationale is circular and incorrect in its conclusions. First, the CVMSHCP is a plan, a set of guidelines for a diverse region; one that assists in identifying and acquiring land and habitat to be protected. An example of its role in presenting general guidelines for implementation of compensatory mitigation areas can be seen here in the Plan's summary, "The Plan includes certain requirements to avoid, minimize, and mitigate impacts to bighorn sheep Habitat, Biological Corridors, burrowing owl, covered riparian bird species, crissal thrasher,	The comment quotes from the EA/IS cumulative impacts analysis. Please refer to Response to Comment CURE-21 regarding the CVMSHCP and its mitigation (including habitat compensation among other measures). Although the Coachella Valley Conservation Committee has no land use authority, its affirmative conclusion that the proposed Project is consistent with the MSHCP (see EA/IS Appendix E), as well as any recommended Conditions of Approval, is a requirement for County approval of the project. Moreover, rather than address contribution of any specific project to cumulative impacts, it mitigates the cumulative impacts of land development throughout the Coachella Valley. The project-specific impacts of the Alta Mesa Wind Project would be mitigated through measures identified in the EA/IS and MSHCP JPR approval (see Appendix E). Most valley-wide cumulative impacts are mitigated by the valley-wide implementation of the MSHCP. The comment notes that the CVMSHCP has little application to O&M activities. This is the reason for the additional analysis of the proposed Projects potential O&M impacts, namely, potential bird and bat WTG collisions. The comment goes on to conflate mitigation for project-specific impacts with cumulative impacts and appears to misunderstand the MSHCP's function. Again, please refer to Response to Comment CURE-21 regarding the CVMSHCP and its mitigation (including habitat compensation among other measures). Please refer to the definition of mitigation found in CEQA Guidelines Section 15370: "Compensating for the impact by replacing or providing substitute resources or environments, including through permanent protection of such resources in the form of conservation easements."). Conservation easements are the MSHCP's mechanism for habitat compensation.

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	desert tortoise, fluvial sand transport, Le Conte's thrasher, mesquite hummocks and mesquite bosque natural communities, triple-ribbed milkvetch, Palm Springs pocket mouse, and Little San Bernardino Mountains linanthus. The measures have limited application to O&M activities [emphasis added]." As its website states, "The Coachella Valley Conservation Commission (CVCC), a joint powers authority of elected representatives, will oversee and manage the [CVMSHCP]. The CVCC has no regulatory powers and no land use authority. Its primary purpose is to buy land from willing sellers in the conservation areas and to manage that land."63 The CVMSHCP does not pose a mitigation strategy for this Project, nor does it address degree or scope of cumulative impacts to any specific project that such land purchased may or may not offset as mitigation. However, the DEA/IS erroneously refers to the CVMSHCP as if it's a directive that will meet any mitigation requirements for cumulative impacts by saying it will "offset" them through "habitat acquisition and management" with no further detail on the what, where, or when this will happen, with what success for performance criteria specific to the habitats and species impacted by the Project, or how it will successfully mitigate the specific impacts caused by this particular project overall. The DEA/IS therefore presents a meaningless description of cumulative impact mitigation. Second, the DEA/IS asserts that "for most biological resources within the CVMSHCP, the cumulative impacts are not substantial." This statement is specious: as a complex management Plan for which many specific parcels have yet to be defined it is erroneous to refer to the CVMSHCP it as if it is one large land parcel or region where cumulative (or any other) impacts can be described with any accuracy. Even if this statement made sense there is no evidence provided to support it. Third, the CVMSHCP does not come close to covering all of the species, including special-status species, that will be impacted by the Project.64 Alternatively, some of the species that are covered under the Plan are not discussed at all by the	Once again, the commenter claims that flat-tailed horned lizard has a high potential to occur on the site. Please refer to Response to Comment CURE-52. The cumulative analysis for the proposed Alta Mesa Wind Project must address two questions: (1) Is there is a substantial cumulative impact from projects identified in EA/IS Table 7 to species and habitats that would be impacted? and (2) If so, would the Proposed Project have a considerable contribution to the impact? The EA/IS answers both these questions, concluding first that there is no substantial cumulative impact for most biological resources (i.e., those covered by the MSHCP) and second, the proposed Project's contribution would not be considerable due to its conformance with the MSHCP and other mitigation for biological resources. The comment contains no substantial evidence that the EA/IS analysis of cumulative impacts is flawed.

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	Project despite the fact they have a moderate to high potential to occur, such as the flat-tailed horned lizard (Phrynosoma mcallii).	
	CURE-66: Exhibit B. Fourth, the DEA/IS continues with its incorrect assumptions where it concludes that bird and bat mortality from wind turbine collisions "cannot be evaluated in terms of the overall importance to bird and bat populations. The Project would contribute to a new baseline and operational bird and bat mortality data, as part of the Bird and Bat Conservation Strategy. Additionally, the three other repower projects identified as cumulative projects (Mesa, Painted Hills, and Coachella Wind Holdings) are expected to contribute to an understanding of regional bird and bat mortality risks of wind repower projects. Both the Coachella Wind Holdings and the Painted Hills repower project include requirements for bird and bat mortality monitoring. The Mesa Wind Repower is expected to include a similar requirement, which combined with the other projects in the area, will contribute to improving the understanding of bird and bat mortality in the area. The Bird and Bat Conservation Strategy will include an adaptive management strategy that will help reduce the cumulative contribution of the Project if any effects are found to be less than cumulatively considerable." The DEA/IS claims there are minimal cumulative impacts, then infers above that there are such impacts because they are "expected to" be part of some undefined collective of monitoring information. How such cumulative impacts from the repowering facilities will be collected, analyzed, and addressed collectively is not discussed. Smallwood appropriately responds to a very similar and erroneous assertion by the BLM regarding the other segment of this repowering project, "It is not justifiable to build a project to learn how many bats and birds the project would kill. Once constructed, the level of mortality revealed by the project would either continue unabated for the duration of the project, or it would cost the project owner a lot of money to remove turbines or curtail	The comment addresses the analysis of potential cumulative impacts not covered by the CVMSHCP (i.e, potential bird and bat WTG collision). Regarding quantification of bird and bat mortality, as well as CEQA's approach to cumulative impact analysis, please refer to Responses to Comments CURE-21 and CURE -57 above. Again, the cumulative analysis must address (1) Whether there is a substantial cumulative impact from projects identified in EA/IS Table 7 to birds and bats, and (2) Whether the proposed Project would have a considerable contribution to the impact? The EA/IS cumulative impacts discussion for bird and bat collision has been expanded for clarification. It concludes first that there may be an increase in cumulative bird and bat WTG collision impacts from the projects, second, nonetheless, the proposed Project's contribution is not considerable given a 3.6% potential increase in risk and the Project would mitigate its contribution to any cumulative impact through monitoring and adaptive management as identified in Mitigation Measure BIO-13. The comment again misconstrues the proposed Alta Mesa Wind Project as including the adjacent Mesa Wind Project Repower. Please refer to responses to comments CURE-2A and CURE-2B above, regarding "piecemealing." The comment quotes from Smallwood's responses to a different wind repower project. Regarding Smallwood's remark about the purpose of building a wind energy project, please note the project's purpose is to generate electricity, not to lean about bird or bat mortality. Regarding Smallwood's predicted mortality rates (for another project), Smallwood's predictions are apparently based on his experience in the Altamont WRA and are inapplicable to the proposed Alta Mesa Wind Project for which there is a net increase in RSA of only 3.6 percent. Please refer to Responses to Comments CURE-21 and CURE-57 above. Regarding Smallwood's recommended analysis, it is neither reasonable nor practical for a lead agency to engage in new scientific study and research to develop the basis level of detail sought by the commenter, especially given the timeframe

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	operations. Contrary to the uncertainty BLM asserts around whether bird and bat mortality would increase or decrease, we already know how mortality changes with repowering…I provide predicted fatality rates based on what we have learned elsewhere."65 Indeed, "expectations" do not amount to mitigation strategies. f a project applicant truly finds it impossible to evaluate or predict impacts, then the applicant is not ready to provide a complete CEQA analysis for its project. As Smallwood indicates, potential impacts can be predicted and because they have been measured at other wind projects, providing an empirical basis for defining a range of possible outcomes. To proclaim that such is impossible because there is a lack of information generated from entire projects extremely similar in scope and located within the same location (i.e. the San Gorgonio Pass) is specious. Doing so denies what scientists do every day; collect and analyze data using the scientific method, statistics, and deductive reasoning for the purpose of drawing useful conclusions from samples in ways they can be discussed as representative of a whole without being duplicative or nearly so. It is possible to make collision risk assessments based upon existing data and information about variables such species present, species behavior, and micro-siting.66 For example, mortality estimates are provided by Smallwood for the new WTG in the BLM segment of this proposed project, "The weighted mean fatality rate in Smallwood (2020a) would predict 591 (95% CI: 345-870) bat fatalities per year at the proposed project. After a 30-year permit period (30 years has been typical for wind projects), this toll would come to 17,730 (95% CI: 10,350-26,100) bat fatalities. This toll would qualify as a substantial new impact caused by Mesa Wind."67 Smallwood is basing this estimate on 11 new WTG, such a prediction could be made for 7 additional new ones as proposed for this Project.	articulated in the State CEQA Guidelines for preparing an EIR. (State CEQA Guidelines § 15108). The comment wrongly claims that the EA/IS cumulative impacts analysis is flawed, without substantial evidence, . .
	CURE-67: Exhibit B. Smallwood also mentions a species whose population status could be drastically impacted by this repowering project, "One of the most vulnerable bat species to wind turbine collisions is hoary bat, a bat which is in sharp	The comment quotes from Smallwood's remarks for a different project regarding hoary bat. Hoary bat is not a special-status species as defined by CEQA Guidelines and need not be addressed in the IS/MND. Please see Biological

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	decline in the Pacific Northwest (Rodhouse et al. 2019). According to the weighted mean fatality rate in Smallwood (2020a), the project can be predicted to kill 159 (95% CI: 121-204) hoary bats per year, or 4,770 (95% CI: 3,630-6,120) after 30 years, assuming hoary bats are not extirpated sooner." In their recent research of hoary bat decline in the western U.S. Rodhouse and colleagues concluded, "Our discovery of hoary bat decline is consistent with the hypothesis that the longer duration and greater geographic extent of the wind energy stressor (collision and barotrauma) have impacted the species."68 It is unlikely this species has time for the Project to use it as some ill-defined monitoring experiment that will contribute to some unknown database in some undescribed manner in the future.	Resources Impact b in the EA/IS. The EA/IS does not specifically address hoary bat, but all bats are included in the relevant discussion of potential WTG collisions. The comment presents no new information that is relevant to the EA/IS and no substantial evidence that the IS/MND analysis of potential impacts to bats is incomplete.
	CURE-68: Exhibit B. The DEA/IS uses an oft-used catchphrase, "adaptive management" to erroneously imply that monitoring, via a nonexistent and thus far undescribed Bird and Bat Conservation Plan, will be appropriately and effectively morphed into applied action. However, this is improper deferral of mitigation, since the DEA/IS provides no description and no details; no success or performance criteria, no thresholds, no description even of species involved. As such this prevents the reviewing public from making any assessments or suggestions regarding its success. How will such "adaptive management" appropriately address each and every one of the many special status bird and bat species potentially impacted? How will the mitigation be implemented, what will it look like, how will it be enforced, who exactly will pay for its implementation at what cost; how will methods, success criteria be established and evaluated? Based upon what criteria or threshold can management be "adaptive" when the same DEA/IS claims it cannot even evaluate impacts to begin with? How will a complete lack of thresholds be "adapted" for efficacy at an indeterminate future, an undescribed timeline, and undescribed species? These are no small matters to address. The methodologies that may be appropriate, not to mention have a high probability of success, require specific expertise and	The comment again claims that Mitigation Measure BIO-13 represents "deferred mitigation." Please refer to Response to Comment CURE-26. The commenter asks a series of rhetorical questions, generally related to the contents of the Bird and Bat Conservation Strategy, as required by Mitigation Measure BIO-13. While the BBCS has not yet been prepared, mitigation plans such as this do not require a public review period. CEQA Guidelines Section 15126.4(a)(1)(B) states: "Formulation of mitigation measures shall not be deferred until some future time. The specific details of a mitigation measure, however, may be developed after project approval when it is impractical or infeasible to include those details during the project's environmental review provided that the agency (1) commits itself to the mitigation, (2) adopts specific performance standards the mitigation will achieve, and (3) identifies the type(s) of potential action(s) that can feasibly achieve that performance standard and that will considered, analyzed, and potentially incorporated in the mitigation measure." Mitigation Measure BIO-13 requires performance standards that support decisionmakers' needs, mitigate the potential impact, and disclose the planned mitigation to the public.

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	discussion, not to mention dedicated funds as of yet completely undetermined.	
	CURE-69: Exhibit B. For instance, in their recent research on hoary bats and impacts from development including wind facilities, the researchers state that, "with respect to apparent hoary bat decline, our study, as a fundamental baseline, could be a catalyst for increased mitigation of wind turbine collisions via curtailment at low wind speed (Arnett, Huso, Schirmacher, & Hayes, 2011) and other actions (e.g., acoustic deterrence, Arnett, Hein, Schirmacher, Huso, & Szewczak, 2013). If done in a strategic manner (e.g., using experimental design), this can become a way to inform collective learning and adaptive management (Hayes et al., 2019)."69 This underscores that real world mitigation for the cumulative impacts of 30 years of bird and bat deaths requires a serious commitment to inviting expertise and discussion via some semblance of a written plan, as opposed to the DEA/IS's deferral of all to a later post-permitted date.	The comment again refers to hoary bat. Please refer to Response to Comment CURE-67, above. Regarding the broad recommendations of the quoted material, please note the recommendation for adaptive management. Mitigation Measure BIO-13 specifically requires that the BBCS include an adaptive management component. Regarding commitment, expertise, and discussion of future adaptive management required in Mitigation Measure BIO-13, please refer to Response to Comment CURE-26, and the measure itself, including resource agency review and approval.
	CURE-70: Exhibit B. Aside from the omissions iterated above, this DEA/IS also fails to adequately address what may be population level impacts to special-status species in particular. It makes little attempt to describe how its Bird and Bat Conservation Plan will address cumulative or direct 30-year operational impacts in a way that will satisfy the regulatory directives in place to protect these species, including ESA, CESA, and Fully Protected status species for which take is not allowed without a Habitat Conservation Plan that directly addresses mitigation of impacts to each of the species in question as incurred by this Project. In regard to their research on population-level impacts by wind energy development, Beston et. al. conclude that, "Wind turbines displace and kill a variety of wildlife, which has made wind energy a major conservation and policy concern worldwide. Direct impacts of wind energy include bird and bat collisions with turbines whereas indirect impacts include changes in wildlife habitat and behavior...species that are long-lived with low rates of reproduction, have specialized habitat preferences, or are attracted to turbines may be more prone to	The comment addresses potential population-level impacts to special-status birds and bats. As stated in the EA/IS (and expanded upon in multiple Responses to Comments above), the proposed Alta Mesa Wind Project would increase the RSA by 3.6 percent, resulting in a small increased risk to birds and bats, including golden eagles, Swainson's hawk, and others. The EA/IS incorporates Mitigation Measures for this small increase and properly concludes that the impact would be less than significant with mitigation. The comment does not present substantial evidence that would contradict or invalidate the analysis and mitigation presented in the EA/IS. Likewise, the proposed Project's potential contribution to cumulative bird and bat WTG collisions are addressed in the EA/IS and in Responses to Comments CURE-21, -57, -65, and -66 above. Regarding regulatory directives, nothing in the EA/IS relieves the applicant from compliance with those requirements. The comment quotes from a publication regarding population-level impacts of wind projects nationwide. It does not purport to evaluate population level effects of this particular project, or any other individual project. The broader question whether electrical power generated by wind energy is worth the impacts to birds is beyond the scope of this EA/IS.

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	declines in population abundance. Several birds of prey, such as the long-eared owl, ferruginous hawk, Swainson's hawk, and golden eagle, were at relatively high risk of population decline across a wide variety of cutoff values. Whether or not wind energy has population-level consequences for wildlife species is a critical issue when developing strategies for avoiding, minimizing, and mitigating impacts of energy production."70 How exactly will take of CESA protected Swainson's hawks, Fully Protected golden eagles, or any of the other special status species be identified and mitigated via undescribed "adaptive management"? In short, there are means to inform true adaptive management, but they must at a minimum be described prior to permitting while allowing for public review and comment, including by experts who might contribute to how such management could actually be successful. Stating a plan will be created in the future that will adapt its findings to be somehow be successful in mitigating ill-defined impacts is in not an actual mitigation analysis or strategy. As such the operational direct, indirect, and cumulative impacts to birds and bats remain unmitigated for this Project as well as the other segment of this proposed facility under BLM jurisdiction.	The quoted passages correctly note that wind development can affect habitat, cause wildlife displacement, and can lead to WTG collisions for multiple species. These potential impacts are addressed throughout the Biological Resources section of the EA/IS. Regarding long-eared owl, ferruginous hawk, Swainson's hawk, and golden eagle, please refer to Response to Comment CURE-7 and the many other responses specifically addressing golden eagle and Swainson's hawk. The commenter again raises concerns regarding public review of the Bird and Bat Conservation Strategy. Please refer to Response to Comment CURE-26. The comment does not introduce substantial evidence to contradict the analysis and conclusions of the EA/IS regarding project-specific impacts or cumulative impacts to wildlife,
	CURE-71: Exhibit B. OTHER MITIGATION MEASURES PROPOSED BY THE DEA/IS ARE NOT SUPPORTED BY SUBSTANTIAL EVIDENCE DEMONSTRATING THAT THEY WILL BE EFFECTIVE. MM BIO-1 refers to the future creation of a wildlife relocation plan that is ill-defined and mostly undescribed regarding special-status species that may be encountered. It is a widely accepted ecological reality that avoidance is a preferred strategy to mitigate harm to wildlife when development of habitat is involved, yet this is not proposed as a primary mitigation strategy. Relocating wildlife is a last resort since it is often met with failure,71,72 and is a form of harassment by way of altering behavior as well as forcing individuals, breeding pairs, and entire families with young away from a site chosen by way of its evolutionary instincts and learning that maximize	The comment takes issue with Mitigation Measure (MM) BIO-1, claiming the wildlife relocation plan is undefined and mostly undescribed, and that relocation is an insufficient means of mitigating potential impacts. Wildlife would only be relocated out of harm's way when avoidance is infeasible per MM BIO-1. Regarding the validity of timing (i.e., specifying in the Mitigation Measure that a relocation plan must be prepared, with the specific contents of the plan to be developed in the future), please refer to the explanation in Response to Comment CURE-26 addressing mitigation plans such as this which do not require a public review period, per CEQA Guidelines Section 15126.4(a)(1)(B) Regarding the efficacy of the measure, please refer to Response to Comment CURE-23. The comment fails to demonstrate that the identified mitigation is infeasible nor that it would fail to mitigate the impact. The comment does not recommend

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	fitness, whereas relocation reduces it and increases mortality risk.73 Successful relocation that mitigates direct harm is never guaranteed, and indirect harm that may occur post-relocation of individuals for development projects is almost never measured for success. This is despite the fact that relocation can induce various stressors on individuals that would not be immediately noticed. As such, the MM BIO-1 does not provide substantial evidence as to how this strategy will be successful to the degree necessary to actually mitigate (mostly undescribed) impacts, including for species un-named and thus deferred to the future regarding species-specific plan creation and methodology.	feasible alternative mitigation, except note that wildlife avoidance is preferable to relocation. As stated in Response to Comment CURE-23, avoidance may sometimes be infeasible for the proposed Project.
	CURE-72: Exhibit B. Improper deferral of mitigation resulting in poor or incomplete analysis is costly to both wildlife and developers. I have witnessed this personally by way of an important and poorly reported phenomenon on solar and wind energy project construction sites in the Sonoran and Mojave Deserts. I and my colleagues first noticed this phenomenon during construction monitoring along roads and within construction zones, monitoring required only due to the presence of a special-status lizard's protected area bordering the site. Specifically, we observed that lizards of various species are attracted to roads on and around construction sites where trucks spraying water (and other erosion control liquids) several times a day are used to reduce airborne dust, as is the case with every desert development project's dust minimization protocols. This practice attracts lizards to higher moisture levels on the roads, resulting in increased mortality and injury from traffic on the roads subsequent to the water trucks passing. This phenomenon was reported on a solar construction site in desert scrub habitat during the summer of 2014. Within the course of one month, mortality of over 20 flat-tailed horned lizards (Phrynosoma mcallii) (FTHL); a CDFW protected species whose range overlaps with the Project region. (It	The comment implies the EA/IS mitigation is improperly deferred but offers no substantiation. Instead, the comment recalls a lengthy anecdote regarding a different project and a protected species that does not occur on the proposed Alta Mesa Wind Project site, reporting that flat-tailed horned lizards may be attracted to watered roads (a dust control requirement) where they are at risk of vehicle strikes. Please refer to Response to Comment CURE-22 regarding the road hazard and Response to Comments CURE-52 regarding potential occurrence of flat-tailed horned lizard on the site. The comment does not present substantial evidence that any potential impact is inadequately addressed, or that mitigation identified in the EA/IS is infeasible or ineffective. The comment also does not offer alternate mitigation to resolve the concern it raises,

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	should be noted here that FTHL have been observed within 2 miles of the proposed Project location of turbine 7A, and yet the DEA/IS provides no analysis of potential impacts to the species. This despite the fact it is a special-status species covered by the CVMSHC, the tames Plan that the DEA/IS refers to with the unsupported claim its existence will mitigate cumulative Project impacts.)74 Once mortalities were reported, over 100 FTHL were relocated to avoid mortality from vehicle impacts during several weeks of the construction phase.75 During the construction of the Sunrise Powerlink gen-tie line in the Sonoran Desert, between April and November, 25 FTHL mortalities were recorded and 103 flat-tailed horned lizards were relocated.76 The project developers failed to anticipate these significant impacts to lizards in their impact analysis and mitigation proposals, and as a result one facility had to completely stop work for two weeks. Because the relocation measure was an emergency response to an impact that the Applicant failed to recognize, and had designated no funds for, relocation protocols and results were not tested, measured, or evaluated for survival success. Therefore, the efficacy of these last-minute mitigation measures remains unknown. FTHL were not the only species killed by this phenomenon. Lizards of various species and sizes were opportunistically attracted to the added moisture on the roads from water trucks. When this phenomenon was officially noted as impacting sensitive species, additional on-site biologists and mitigation management practices were necessary to ensure complete coverage of all construction roadways and other areas where lizards were prone to death and injury from vehicle impacts.77 One independent contractor reported his company losing over $146,000 a week due to the unexpected delay, partly due to the developer's resistance to hiring the requisite number of additional biologists (three) needed to detect and relocate lizards at risk of mortality during the pre-construction phase. It must be noted that mortalities from even one Project such as this could have a population level effect, especially if a species	

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	sub-population is isolated or part of a Distinct Population Segment.	
	CURE-73: Exhibit B. MM BIO-3 proposes a reduction in construction impacts to below significant by hosting an Environmental Awareness Training Program (WEAP). However there exists no evidence that any WEAP actually served to significantly mitigate impacts. Employees are tasked with completing the program, upon which they sign a form or receive a sticker. Such training is common and may nicely enhance some ecological knowledge of some species for some workers. I have personally observed these trainings many times for various development projects in a variety of locations and working environments, including energy projects in desert habitats in California. However, I have not observed these presentations for enhanced worker awareness translate into measurable actions that have been determined to significantly reduce project impacts to wildlife. The BIO-3 Measure states that it will "describe worker's responsibilities regarding wildlife avoidance… provide contact information for the FCR and Authorized Biologist and instructions for notification of any threatened, endangered or sensitive wildlife discoveries…and place special emphasis on species that may occur on the Project site including special-status plants, desert tortoise, burrowing owl, golden eagle, nesting birds, desert kit fox, American badger, and Nelson's bighorn sheep." These trainings are helpful for employee awareness and safety. And yet there is no realistic mechanism or legal framework by which employees can be held responsible for unintentional impacts related to the WEAP. Workers cannot be expected to become naturalists after a lecture. Moreover, there is no structured way to enforce or guarantee learning, or resultant responsible action taken, to an educational program where learning and retention by definition are subjective and difficult to measure. Meanwhile the efficacy of this mitigation strategy is never measured for construction projects. If upon completion of training a worker unintentionally fails a mitigation action due to	The commenter believes that Worker Environmental Awareness Programs (WEAPs) are ineffective, citing some specific shortcomings and experiences. The comment goes on to recommend compensatory mitigation in place of the WEAP. The comment suggests that specific training and impact avoidance should be construction regulations rather than EA/IS mitigation measures. Implementation of the WEAP is not the only preventative mitigation during construction. For example, MM BIO-1 requires wildlife relocation measures, MM BIO-5 requires wildlife protection, and MM BIO-6 provides desert tortoise protection MM BIO-2 requires qualified biological monitors be on site, including an approved Authorized Biologist, to ensure that the various biological resource protection measures are implemented. Further, the EA/IS requires the WEAP training as a component of a larger mitigation strategy to minimize those impacts, including clearly marking authorized work areas, biological monitoring, and various wildlife protection measures identified throughout the Mitigation Measures BIO-1 through -13. The comment's recommendation of compensation is a requirement of the project through compliance with the CVMSHCP (see EA/IS Table 2). Please also refer to discussion of the CVMSHCP in Responses to Comments CURE-21 and -65. The on-site minimization measures, including WEAP training, do not replace compensation but supplement it and serve to minimize unnecessary wildlife impacts that might otherwise occur during project construction.

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	being unable to recall key regulations, remains unable to distinguish a protected species from others, or for whatever reason unintentionally harms wildlife, how will such a shortfall be tested, remedied, or enforced? I have observed many projects where workers in bulldozers unintentionally killed fossorial, cryptic, and burrowing special-species that the onsite biologist was unable to detect beforehand due to its being out of sight. No WEAP training can prevent this, therefore such impacts must be addressed in an effective, viable strategy, including compensatory mitigation for all habitat loss. Such compensatory land purchases should establish, pre-permitting, that the special-status species being mitigated for actually occur on the mitigation land parcel; something rarely done but important to ensure high potential of successful mitigation. There is no empirical evidence, and few anecdotes, that demonstrate that these "awareness" trainings about wildlife reliably reduce significant impacts to wildlife species to less than significant. Additionally, many measures described by a biological training program -a s well as other measures to reduce impacts during construction, including sensitive species -pre-construction surveys - rely on the absolute authority of onsite biologists who are (a) hired by and thus beholden to the project applicant, (b) are invariably required to sign highly restrictive nondisclosure agreements (of questionable legality) for employment that preclude most kinds of problem reporting or whistleblowing if rules are not followed by any parties involved, and (c) rarely given the necessary authority to oversee enforcement, including stopping work or removing a worker who may be deemed non-compliant.80, 81 I have observed construction workers with an abundance of training stickers on their hard hats avoid taking action to address or avoid a biological resource protection problem onsite when such a scenario was presented, where no remedial action was enforced, and certainly no criteria existed for measuring efficacy of the WEAP. If the Applicant requires the workers take specific actions to reduce potential construction impacts that relate directly to	

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	their job responsibilities (i.e. maintaining a speed limit, hazardous spill containment, fire prevention measures, maintaining garbage-free working spaces, keeping potential animal pitfalls covered, and avoiding harassment of any and all wildlife and vegetation), it is appropriate that each such action should be identified as a construction regulation necessary for safety, not mitigation. Otherwise, it is impossible to quantify the degree of mitigation, if any, such program contributes to reduce impacts to below significant, and thus this measure fails to present evidence of its efficacy.	
	CURE-74: Exhibit B. MM BIO- 5 mentions it will use dust abatement to meet safety and air quality standards. How does the Applicant propose to avoid the negative impacts of the dust abatement phenomenon described above that caused such a high mortality of flat-tailed horned and other lizards? It also states that "The Applicant will minimize noise to offsite habitat"82 with no other discussion. The noise crated by large trucks, cranes, and other machinery necessary to install 499 foot high turbines can be injurious to species in terms of overall decibel level, frequency, and duration,83 and is variable in its harm based upon many factors including species and topography.84 To present zero discussion about how noise disturbances will be minimized amounts to zero evidence provided that this impact to any species will be successfully mitigated.	The comment reiterates earlier concerns about dust control and lizard mortality on roads. Please refer to Response to Comment CURE-22. The comment also addresses potential wildlife impacts from construction noise. This potential impact is addressed throughout the Biological Resources section of the EA/IS. Please also refer to the noise analysis in the EA/IS. The analysis determines that short-term impacts of construction noise would be less than significant. Project works areas are consolidated to WTGs sites which are spaced a minimum of 500 feet apart and connected via access roads. Wildlife disturbed by temporary construction activities at any work site could readily leave the site into adjacent undisturbed habitat. The noise minimization clause in Mitigation Measure BIO-5 is retained in the EA/IS as a directive to the construction contractor. The comment does not identify any new impact otherwise not addressed in the EA/IS, nor does it recommend additional mitigation for any significant impact. No revisions to the EA/IS are needed.
	CURE-75: Exhibit B. MM BIO-12 states it will "conduct post construction mortality surveys for bird and bat populations"85 Aside from this being complete deferral of mitigation, as iterated above reporting dead birds and bats does not mitigate their deaths or loss from a breeding population. As such this measure fails in its intent.	The commenter once again takes issue with Mitigation Measure BIO-12. Please refer to Response to Comment CURE-25.
	CURE-76: Exhibit B. MM BIO-13 states it will create a Bird and Bat Conservation strategy. The failures of this strategy are discussed above in respect to cumulative impacts, and the same evidence for failure applies here. The Measure states it will include "(5) mortality thresholds for listed or sensitive birds	The commenter again states that Mitigation Measure BIO-13 defers mitigation until the preparation of the Bird and Bat Conservation Strategy, and that mortality thresholds should be included in the EA/IS. Please refer to Responses to Comments CURE-26, 66, and 68.

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	that will trigger adaptive management measures, (6) an adaptive management strategy to be implemented in the event mortality thresholds are exceeded." This is further impermissible deferral of mitigation, and problematic for reasons discussed above. If the Applicant is going to create mortality thresholds, they need to be part of the discussion and analysis within the DEA/IS for the purpose of public review and comment regarding potential efficacy.	
	CURE-77: Exhibit B. CONCLUSION. For the reasons outlined above, the Project DEA/IS fails to meet the requirements of impact analysis and mitigation under the California Environmental Quality Act (CEQA). Based on my responses in this letter, and my extensive experience as a biologist and environmental consultant, it is my professional opinion that the DEA/IS has not met the obligations of CEQA and that the Project would result in significant and unmitigated impacts to many sensitive biological resources. The impact analysis for biological resources must be revised and resubmitted to disclose, adequately analyze, and mitigate the significant impacts.	The commenter does not believe the Biological Resources section of the EA/IS adequately meets requirements of CEQA, for reasons specified in the early comments. Please refer to Responses to Comments CURE-41 through CURE-76.
California Wind Energy Association	**CWEA-1:** Letter of support.	This comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.
Desert Tortoise Council	**DTC:** We appreciate this opportunity to provide comments on the above-referenced project, and that Riverside County Planning Department (County) provided the project information in an email to the Council on January 4, 2021. Given the location of the proposed project in habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with "Agassiz's desert tortoise"), our comments pertain to	The comment notes that potential tortoise burrows were seen beneath existing concrete foundations and recommends that qualified tortoise biologist(s) perform preconstruction surveys before and during removal of these foundations, and recommends surveys should be done no longer than 48 hours before ground disturbance. Consistent with the comment's recommendations, Mitigation Measure BIO-6 specifies that "[a]ll ground-disturbing activities would avoid desert tortoise take by either exclusion fencing or on-site monitoring,"

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	enhancing protection of this species during activities authorized by the Planning Department. Given that the Proponent will participate in the Coachella Valley Multispecies Habitat Conservation Plan (MSHCP) and has identified numerous protective measures, and particularly the 11 Mitigation Measures identified on page 37, it appears that tortoises will be well protected so long as these measures are conscientiously implemented. As such, we have only a few additional recommendations. Unless otherwise noted, referenced page numbers refer to the December 2020 Environmental Assessment/Initial Study (EA/IS) (Aspen Environmental Group 2020). Alta Mesa 640 LLC (Alta Mesa), a subsidiary of Brookfield Renewable Energy (Brookfield), as owner of the Alta Mesa Wind Project (Alta Mesa Wind) (herein, "Proponent"), is planning "…to install up to seven (7) new commercial wind turbines up to 499 feet in height with a total project generating capacity of 27 MW. These 7 new turbines would replace the 159 turbines currently on the site which are scheduled for decommissioning Q1 2021 under existing permits, including demolition permits issued by the County. The project also includes associated equipment such as existing on-site substation, temporary construction yard, and existing 220 kV transmission line. No work is proposed on existing interconnection line, and the project would use an existing access road from Haugen-Lehmann Way" (page 1). The total estimated disturbed area for the Project would be a total of up to 67.3 acres, of which 18.8 acres is already disturbed and 48.5 acres would be new disturbance. Of the 67.3 acres, less than 25 acres would be permanent, and 42.3 would be temporary. Of the 42.3 acres of temporary impacts, 32.4 acres would be a buffer area where vegetation removal is not anticipated but there may be some need for drive and crush due to trucks backing up or other unanticipated construction work. Plus, an additional 13.2 acres of ground disturbance would occur along the main access road to the Project site and an additional 13 acres of ground disturbance would occur in the temporary construction yard, both within the	and that "for any work conducted in an area that is not fenced [this would generally include foundation removal] to exclude desert tortoises, the work area must be surveyed no more than two hours prior to any planned vehicle or equipment activities and monitored by a Desert Tortoise Monitor who will stop work if a tortoise enters the work area. The commenter provided a publication on best management practices for restoring desert tortoise habitats. The County and the Project Applicant will take it into consideration while planning revegetation work for the Project, as requested by the commenter. The comment recommends identifying a nearby veterinarian capable of treating and rehabilitating any injured tortoises, that any injured tortoises be transported immediately to that office, and that associated veterinary bills be paid by the Proponent. The recommended language has been added to Mitigation Measure BIO-6 (Desert Tortoise Protection).

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	Mesa Wind Project ROW project (page 2). The project would impact approximately 48.5 acres of suitable and potentially occupied desert tortoise habitat (unvegetated/ruderal, brittlebush scrub, California juniper woodland, California sagebrush-buckwheat scrub, Creosote bush–brittle bush scrub (page 36). As per page 10, "At the time of decommissioning of the new 7 WTGs [wind turbine generator], all remaining existing foundations would be removed to 3 feet below the ground surface." As per the footnote on page 36, Dr. Jeffrey Lovich has researched tortoises in this area for many years, and reports finding tortoises burrowed beneath wind turbine foundations, and the EA/IS reports finding two tortoise burrows under several of the 199 foundations inspected (page 36). So, it is essential that knowledgeable tortoise biologist(s) be enlisted to perform preconstruction surveys before and during removal of these foundations. This will presumably be required under MM BIO-2 referenced on page 37. We want emphasize the mobility of tortoises and that new clearance surveys of these foundations must be performed within a reasonable amount of time, judged to be within about 48 hours of ground disturbance. We could not find a time frame for preconstruction surveys where they are discussed on page 55 but the standard is typically 48 hours in advance. This is particularly important since surveys have not been performed since 2019 (as per Appendix B of the EA). As per MM BIO-11, a revegetation plan is required for the Project. The Proponents, and perhaps the County, may not be aware that the Council recently completed a best management practices document for restoring desert tortoise habitats. As, such we are attaching Abella and Berry (2016) for your consideration. We recommend that prior to any ground disturbance, the Authorized Biologist identify the nearest qualified veterinarian capable of treating and rehabilitating any injured tortoises, that any injured tortoises be transported immediately to that office,	

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	and that associated veterinary bills be paid by the Proponent. This measure should be added to those listed on pages 49 and 50. We appreciate this opportunity to provide input, the thoroughness of protective measures identified in the EA/IS, and trust that our comments will help protect tortoises during any authorized project activities. Herein, we ask that the Desert Tortoise Council continue to be identified as an Affected Interest for this and all other County projects that may desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above. We also ask that you acknowledge receipt of this letter as soon as possible so we can be sure our concerns have been received by the appropriate parties.	
Metropolitan Water District	**MWD-1:** Metropolitan requires a minimum setback for all buildings and structures of at least 500 feet from the edge of Metropolitan's rights-of-way (ROW). While the placement of the closest new turbine appears to be far enough away from the Colorado River Aqueduct (CRA) ROW as to not pose a hazard, Metropolitan is concerned with the potential impacts to the CRA pipeline from the resulting delivery of new commercial wind turbines and removal of approximately 159 existing wind turbines. Access to the site from the west includes travel on an unnamed access road that crosses the CRA at Station 9840+00 (see Location Map). Ingress and egress across the CRA are subject to load restrictions. If the project proponent plans to use any equipment or engage in any activity on the above referenced property which will impose loads greater than AASHTO H-10 for any reasons including non-routine maintenance or removal and replacement of wind turbine generators, project proponent shall submit the specifications of such equipment and associated additional pipeline protections for review and written approval by Metropolitan at least thirty working days prior to its use.	AM Wind Repower LLC has entered into discussions with MWD regarding their setback requirements with respect to the proposed Project. AM Wind will continue to work with MWD on identifying necessary requirements and such requirements shall be implemented prior to the start of construction, including heavy equipment travel, on the access to the proposed Project site that crosses the Colorado River Aqueduct.

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	Access to the site from the east on Whitewater Canyon Road also crosses the CRA, however this portion of the CRA is buried tunnel and thus weight restrictions do not apply. Development associated with the proposed project must not restrict any of Metropolitan's day-today operations and/or access to its facilities. Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities and properties at all times in order to repair and maintain its system. Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist in preparing plans that are compatible with Metropolitan's facilities, easements and properties, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way. In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, Metropolitan requires that detailed design plans for any activities within the vicinity of our facilities, fee property or rights-of way be submitted prior to construction for review and written approval. Approval of the proposed project where it could impact Metropolitan's property should be contingent on Metropolitan's approval of design plans for the proposed project.	
Pacific Crest Trail Association	**PCT-1:** *Project information, Page 2* "The nearest sensitive receptors to the new WTGs are rural residences in Bonnie Bell, the closest of which are 4,500 and 4,900 feet east of the Project." Using the map provided in Figure 1 of the Appendix, it appears that the PCT is within half a mile of some of the turbines and should be considered as sensitive receptors. *Maps Pages 4,6,8*	The Pacific Coast Trail (PCT) is illustrated on Figure 1 of Appendix A and has been added to Figures 1 and 2a. Section V.1.(c), Aesthetics, has been clarified by including a reference and description of KOP 4, PCT, (Figures 6a and 6b) of Appendix A. This section already notes that the massing and scale of the new wind turbines would be noticeably larger than the existing wind turbines; however, as noted by the commenter 159 existing Alta Mesa turbines would be replaced by 7 new turbines. For the adjacent Mesa Wind Project Repower, also viewable from the same PCT vantage point, the reduction would be from 460 existing turbines to 8 new turbines.

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	The PCT should be shown on these maps (and not just maps in the appendices) for proper context and for cursory understanding of analysis in the document. This is also necessary for the public to have an accurate understanding of the project's potential impacts on sensitive resources such as the PCT. *V. Environmental Issues Assessment Page* *Aesthetics-Scenic Resources Pages 23-24* The Less than Significant Impact finding for "b" and "c" does not seem accurate considering the substantial impact the change in tower height will have on the PCT viewshed. Although the number of towers decreases, page 23 indicates the current height range is 114-145 feet above ground level and the new towers would be up to 499 feet above ground level. The height of the towers results in a significant diminution of the PCT experience, as a National Scenic Trail, aesthetics is one of the primary purposes for the PCT.	
	PCT-2: We recommend using the Bureau of Land Management's Visual Resource System to comply with National Scenic Trail standards. Specifically, Chapter 4 Section E of the BLM Manual 6280 – Management of National Scenic and Historic Trails, states: "Designating visual resource management (VRM) classes based on the National Trail visual resource inventory and based on the desired future condition of the National Trail resources, qualities, values, and associated settings and the primary use or uses of the area through which such trails may pass. To retain or improve the integrity of the associated settings and scenic values for which the National Trail was designated, the BLM should consider establishing VRM classes at the most protective level practicable to meet National Trail scenery management objectives." The manual continues stating the management objective as "VRM Class I or II designation for National Scenic Trails." And "in assigning VRM classification, describe how activities managed to this scenic level support the nature and purposes	Because Riverside County is the lead agency for permitting of the Alta Mesa Wind Project, the County must comply with the California Environmental Quality Act (CEQA) which doesn't require compliance with the BLM visual resource management (VRM) standards. However, a VRM analysis was conducted by the BLM for the adjacent Mesa Wind Project Repower Environmental Assessment. This VRM assessment concluded the following for the PCT: *"The resulting overall visual change would be low-to-moderate. As a result of the existing developed context of the site, the existing character of the landscape would be retained and the WTGs would not substantially degrade the existing visual character and quality of the landscape as viewed from KOP 4 and similar locations along the PCT. Rather, the resulting visual effect would be somewhat beneficial in its reduction of the existing industrial character and built structural complexity. In this context, the low-to-moderate level of change would be*

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	of the National Trail and how uses are managed to avoid visual conflict." Alta Mesa should adopt the same requirements of VRM Class I or II for this projects interface with the PCT. BLM definitions of VRM Class Objectives are: • • **VRM Class I Objective**: To preserve the existing character of the landscape. Allowed Level of Change: This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention. • • **VRM Class II Objective**: To retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. Next, the analysis for "b" says "The original visual landscape throughout the Project vicinity has been extensively altered by the development of commercial wind facilities (including turbines on and near the Project site), substations, transmission lines, and roadways. As such, large wind turbines are a commonly occurring visual elements in the area and are part of the existing visual and recreational experience." This language seems to be justifying continued and increased impacts from this project to the landscape and recreation resources. Although there are existing infrastructure impacts, this does not inherently justify increasing impacts to public resources. The size of the turbines which will replace the old-style turbines are massive and will seriously impose on the landscape, degrading the viewshed and dominating the experience of recreational visitors to these lands. **The EA has failed to acknowledge that the replacement of these larger turbines is a Connected Action as defined in the National Environmental Protection Act and requires further**	*appropriate for VRM Class IV management objectives that apply to the footprint of the Proposed Action."* The referenced text from Aesthetics "b" is simply a statement of the existing setting.

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	analysis in the form of an EIS. The management direction below is excerpted from BLM Permanent Instruction Memorandum No. 2018-023: "Proposed actions are connected if they automatically trigger other actions that may require an environmental impact statement*; cannot or will not proceed unless other actions are taken previously or simultaneously* [emphasis added]; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1))." Also, from Section 6.5.2.1 of the BLM NEPA Handbook: "If the connected non-Federal action and its effects can be prevented by BLM decision-making, then the effects of the non-Federal action are properly considered indirect effects of the BLM action and must be analyzed as effects of the BLM action." *Land Use Planning Page 78* The No Impact finding for "a" is inaccurate as the proposal conflicts with the Bureau of Land Management's Visual Resource System specifically, Chapter 4 Section E of the BLM Manual 6280 – Management of National Scenic and Historic Trails (as detailed above). *Noise Effects by the Project Page 82*	
	In the Findings of Fact for "a" the concluding paragraph states "for locations near the site boundary, such as the PCT, the noise levels would not exceed 65 dBA at 150 meters from any WTG." It's not clear how far the PCT would be from the WTG's and what impact the noise might have at those distances. As above, the project map needs to include the PCT and detail the exact distances the new turbines will be sited from the Trail. *Parks and Recreation Page 88*	As noted above, the PCT has been added to Figures 1 and 2a. As required by CEQA Guidelines, the analysis of noise impacts is based on the "Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan, noise ordinance, or applicable standards of other agencies." In the case of Riverside County, the applicable regulation is Riverside County Ordinance 348, which requires that operational noise not exceed the 55 dBA standard for impacts caused by wind facilities (WECS) at habitable dwellings. The Ordinance does not address recreational facilities. Regardless, as noted in Section V.27, Noise, the noise levels would not exceed 65 dBA at 150 meters (500 feet) from any WTG. With respect to the PCT, the nearest Alta Mesa tower would be one-half mile away, approximately 2,600 feet. At this distance,

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		the noise generated would be approximately 50 dBA (this clarifier has been added to the EA/IS). The exact audible noise level would be a function of wind speed and direction, which under certain circumstances would shield the turbine noise, and intervening terrain. For reference sake, a noise level of 50 dBA is a quiet urban daytime noise level.
	PCT-3: In the Findings of Fact a-c: There are no parks within one mile of the Project. The PCT runs north and west of the Project site, and there are federal lands nearby that are used for recreation. It is unclear to me if you are saying the PCT is not within 1 mile of the project or if the PCT is not a park. A park is defined by Merriam-Webster as both "a piece of ground in or near a city or town kept for ornament and recreation and an area maintained in its natural state as a public property." The PCT is both and is considered a park. It is also considered a Special Recreation Management Area in the Desert Renewable Energy Conservation Plan. This paragraph should be corrected to reflect this, and the analysis should be updated as there is in fact an impact to recreation and parks in the area.	EA/IS Section V.35, Recreation, notes that "The Pacific Crest Trail (PCT) runs north and west of the Project site, and there are federal lands nearby that are used for recreation". The CEQA Guidelines focus on whether a proposed project would result in the construction or expansion of recreational facilities, or increased use. The proposed Alta Mesa Wind Project would not result in in the construction or expansion of PCT, or increased use.
	PCT-4: *Transportation Page 90* In the Findings of Fact analysis, there is no analysis of the impact the increase in traffic on the access road might have on PCT hikers and equestrians. The PCT is not on many of the maps, the visual impact of construction and road improvement has not been illustrated from a KOP from the PCT, and there has been no auditory analysis of the impact of increased traffic both during and after construction; with all these points, this analysis is incomplete and inaccurate.	The proposed Project construction would not utilize Gold Canyon Road, but rather the access road to the south. As shown on revised Figure 2a, the use of this southern access road would not interfere with the PCT.
	PCT-5: *Cumulative Projects Page 105* The Cumulative Analysis section indicates "the Project would have no impact to Agriculture and Forestry, Energy, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation so would not contribute to cumulative impacts on these resources." It has been demonstrated that the full impact has not been adequately analyzed and there is in fact impacts to the visual resources of the Pacific Crest Trail. The EA also has not analyzed the potential impact that the towers and associated	Please see response to visual impact concerns provided above. Section V.3, Other Lighting Issues, discusses nighttime lighting needs for the proposed Project because of FAA regulatory safety requirements. This section has been clarified to note that turbine lighting would be visible from the PCT; however, given the direction of viewing, the project lighting would have the backdrop of Coachella Valley lighting, including I-10 vehicle lights. The cumulative aesthetics analysis also discusses the combined lighting of the proposed Alta Mesa Wind Project and Mesa Wind Project Repower.

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	FAA lighting on the tops of towers will have on the night and early morning time scenic qualities of the PCT.	
	PCT-6: *Appendix A: Visual Simulations* *Figure 1. Viewshed Analysis* We appreciate the PCT being shown on this map. It is challenging to get a full understanding of the impacts to the viewshed from the PCT with such similar color gradients used to represent the number of visible turbines from all the different points on the PCT that are impacted. Please provide a more detailed, higher resolution map with easier to decipher color gradient so that a full analysis can be completed. *KOP4 Pacific Crest Trail* This one KOP shows a significant visual impact, and the towers are against a less contrasted backdrop. It is also critical to simulate and analyze the viewshed from a point on the PCT where the towers will have blue sky as a backdrop and analyze how this change in backdrop affects the scenic resources.	Appendix A Figure 1, Viewshed Analysis, is to be used in conjunction with the existing views and simulations of future conditions from each of the selected six key observation points (KOPs) (see Appendix A Figures 2 through 9b). Cumulative conditions are illustrated in Figures 10a/b/c. The existing conditions and resultant simulations are based on actual photography from each of the six KOPs and are reflective of typical conditions. Preparing simulations under different weather conditions would not further inform the aesthetic impacts analysis.
Sierra Club	**SC-1:** The County appears to be in violation of the Coachella Valley Multiple Species Habitat Conservation Plan/Natral Community Conservation Plan (MSHCP) and the associated Implementation Agreement (IA) in not having had a Joint Project Review (JPR) conducted by the Coachella Valley Conservation Commission (CVCC) for the above-referenced project.	The Final Joint Project Review for the Alta Mesa Wind Project was issued by CVCC on January 15, 2021, and has been added as Appendix D to the EA/IS.
PUBLIC		
Carrera, Isaac	**P-1:** Letter of support.	This comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.
King, Wayne	**P-2:** I have lived in Whitewater Canyon for over 10 years. It is an area of unspoiled, unique beauty. We are surrounded by non profit nature preserves and unfortunately BLM land.	Visual simulations for the various key observation points, including Whitewater Canyon, are provided in Appendix A. As noted within the EA/IS, the nearest sensitive receptors to the new WTGs are rural residences in Bonnie Bell, the closest of which are 4,500 and 4,900 feet east of the Project.

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	I say unfortunately because the BLM has reneged on a promise made in the 1990s to never allow wind turbines to be constructed on its land within sight line of the canyon residents. We have fought this project through all the channels that are available to the "little guy" but to no avail. I was thrilled to see that the county had not yet approved the project and there might still be some thread of hope that this horrible development on the western ridge of our canyon may not go through. The windmills they propose are nearly half the height of the Empire State building. They will look over the canyon with red flashing lights and gigantic whooshing blades creating a dreadful strobe effect. Disrupting avian flight patterns and animal migration. The pictures above are the actual images the developer provided of "before and after". The mills they would remove will end up in the landfill as they are not biodegradable. In an act of hubris and self entitlement by the Brookfield mega corporation that is trying to build them, the power they would generate has already been pre sold to Azusa, a city not even in Riverside County. They knew there would be resistance to their scheme but proceeded as if they had the right to do whatever they wished. Brookfield claims to be doing this as a green project but there is only one letter difference between green and greed, which is their true motivation. Shareholder payout. Please deny them the right to ruin one of the few natural environments left in our area. This is an area where hikers, birders, school children and nature enthusiasts of all ages come to replenish their spirit and	This comment does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.

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Commenter	**Comment**	**Response**
	enjoy nature as it used to be. Once it is lost it cannot be regained.	
Lee, Bong	**P-3:** Letter of support.	This comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.
Mansell, Eva	**P-4:** I live on the Whitewater Canyon Road and have attended Alta Mesa's meeting regarding this project, and commented to the BLM etc. and my comment remains: The area that they described just above the Whitewater Canyon has already been utilized, we here have fought further use and I am completely against this project for the following reasons. 1) At least one brush fire in the 9 years I've lived here was said to have been caused by sparking from one of the windmills. This is a canyon with only one exit. The fire was below where I and others live, and thousands of people come to visit the canyon and preserve. If it had been worse we could have been trapped. 2) I know for a fact that when windmills are torn down they are almost impossible to dispose of responsibly. I cannot accept that the existing windmills need to be destroyed and even bigger ones put in. I don't believe it can be done responsibly. There should be every effort to repair existing windmills through new technology, as I do totally support "green energy" generation, but feel certain Alta Mesa only cares about money generation. 3) The wind energy is being transmitted long distances, not serving the local community. And green energy should be used locally, as transmission of electricity always wastes certain amounts of the energy.	EA/IS Section V.44, Wildfire, presents that the replacement of 159 1980's turbines with 7 new wind turbine generators (WTGs), utilizing modern technologies, would reduce the operational fire risk. The replacement of the legacy turbines with new WTGs would also reduce the safety and other environmental risks (i.e., oil releases and associated ground contamination) associated with operating the legacy turbines. Decommissioning of the legacy turbines will include recycling of the blades, the steel poles have value as scrap metal so will be recycled, and the oil is also being taken for recycling. The proposed Project site and surrounding area are located in the San Gorgonio Wind Resource Area. This clarifier has been added to the EA/IS. Note that wind resource areas are limited throughout the State of California and are defined as such given average annual wind patterns. For wind turbine generation projects to be viable in terms of efficiency and cost, they must be located within a wind resource area. The remainder of this comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project. .

Table 2: Alta Mesa EA-IS Responses to Comments		
Commenter	**Comment**	**Response**
	4) Whitewater Canyon is at the base of one of the few pristine wilderness areas left in this Valley. I have volunteered at the Whitewater Preserve and personally seen how many children and adults are introduced to mostly untouched wilderness for the very first time when they visit the canyon and the Preserve. They then become more likely to be responsible about protecting the environment in general at a time when this is so important. If Azuza or whatever city wants green energy great! But they should do it at a scale that suits their local community and find the locations near it. Our beautiful and unique desert valley is becoming a tangle of wires and ugly transmission towers. Once lost, the wilderness cannot be replaced. Please do not let this project go forward in the Whitewater Canyon area. Enough has already constructed here.	
Scott, Alan	**P-5:** I'm in support of the approval of the new wind project on Alta Mesa. I have two questions: Is there a place we can see a map of the exact area and expanse of the project online? Why do the letter I received from your Riverside County office and the Brookfield Renewable page differ so much in the description of the project? Your letter says "up to seven (7) new" turbines and their website says up to 14. I'm just curious about how the discrepancy can be double. Also... Our home is just east of the newly completed project with the installation of 9 new turbines after decommissioning a bunch of old ones. We are on Ocotillo Road north of Painted Hills Road. Is there a plan to remove the field that is just south of 16th street at any point? They are unsightly and noisy, and clearly most of them are not functioning, as parts of them are strewn all over the hillside.	The proposed Project presented in the EA/IS is the latest project design. In response to community and avian concerns, AM Wind Repower LLC redesigned the project using state of the art wind turbine generators which allowed for a reduction in the number of turbines. The applicant's web site has been updated to reflect the latest design.

Table 2: Alta Mesa EA-IS Responses to Comments		
Commenter	**Comment**	**Response**
	You might recall approving us for WECS000127. Still making most of our own electricity.	
Starks, Les and Jeri Vogelsang, Jeri	**P-6:** This is to express our opposition to the proposed repowering of existing commercial wind project, the Alta Mesa Wind Project. The proposed Alta Mesa Wind Project will install seven, 500-feet-tall wind turbines with red blinking lights on the mountain ridgeline above Whitewater Canyon Road that will loom above an ancient Teshana Wanakik settlement at Bonnie Bell Lodge and some of the most beautiful land in the world: the Whitewater Preserve and the Sand to Snow National Monument. The Teshana Wanakik Band of Cahuilla Indians (relatives of the Morongo Indians) inhabited ancient Bonnie Bell Lodge and Snow Creek Canyon on opposite sides of the San Gorgonio Pass. All desert cities and local Indian Tribes should oppose this ill-conceived development because so many of our area's most important scenic views have already been sacrificed to industrial wind turbine and billboard development along the I-10 corridor, on Highway 62, in North Palm Springs, Indian Avenue and West Garnet. The Haugen-Lehmann exit of the I-10 Freeway leads to a desolate stretch of freeway frontage characterized by unbridled wind turbine development and an endless tangle of overhead power lines and billboards so harshly illuminated that they can be seen for miles. Behind this, in the San Bernardino Mountains above the I-10, stand 460 Mesa Wind turbines and 159 Alta Mesa Wind turbines, abandoned and inoperable, originally approved by the Riverside County Board of Supervisors in 1984, which are scheduled for demolition if this pending, profiteering development is approved by the Riverside County Planning Department.	Visual simulations for the various key observation points, including Whitewater Canyon, are provided in Appendix A. As noted within the EA/IS, the nearest sensitive receptors to the new WTGs are rural residences in Bonnie Bell, the closest of which are 4,500 and 4,900 feet east of the Project. The proposed Project site and surrounding area are located in the San Gorgonio Wind Resource Area. This clarifier has been added to the EA/IS. Note that wind resource areas are limited throughout the State of California and are defined as such given average annual wind patterns. For wind turbine generation projects to be viable in terms of efficiency and cost, they must be located within a wind resource area. As noted within the EA/IS, the existing 159 turbines on the project site are being decommissioned under Commercial WECS Permit Nos. 71 through 71R9, and AM Wind Repower LLC secured required demolition and hazardous material approvals from the Riverside County Building Department. The Alta Mesa Project will have only a 3.6 percent increase (EA/IS Table 5) in total rotor swept area (the only quantifiable component of hazard to birds and bats). The project itself would not have a considerable contribution to potentially cumulative impacts to birds and bats in the region. EA/IS Section V.44, Wildfire, presents that the replacement of 159 1980's turbines with 7 new wind turbine generators (WTGs), utilizing modern technologies, would reduce the operational fire risk. The remainder of this comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.

Table 2: Alta Mesa EA-IS Responses to Comments		
Commenter	**Comment**	**Response**
	In the early 1990s we witnessed firsthand the effect of wind turbine development in Whitewater Canyon. The Riverside County Board of Supervisors has given wind developers free rein over the San Gorgonio Pass, especially the area surrounding verdant, riparian Whitewater Canyon, which was once a haven for bird-watchers and an annual migratory stop for a large number of turkey vultures. Through 1990, the cottonwood trees at Bonnie Bell Lodge would appear almost black because of the vultures resting there. Their population, and that of other canyon birds, steadily decreased as Riverside County wind developments increased, because thousands were killed by the industrial camp of windmills that now dominates the ridgelines of this once astonishingly beautiful water canyon, now permanently defiled and degraded by gargantuan wind turbines. Both Whitewater Canyon Preserve and Snow Creek Village have suffered devastating wildfires as recently as last year (2020). Since industrial wind turbines can, and have, started fires, we request that no more fire risks be added by approval of the Alta Mesa Wind Project. We adamantly oppose this repowering project for the environmental and aesthetic damage they will inevitably cause	
Vang, Lenin	**P-7:** Letter of support.	This comment letter does not address issues associated with the scope or adequacy of the EA/IS. The EA/IS is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.
APPLICANT		
AM Wind Repower LLC (Alta Mesa), a subsidiary of Brookfield Renewable Energy	**AMWR-1: Page 1, Section I. PROJECT INFORMATION**: "Alta Mesa 640 LLC" has been updated to "AM Wind Repower LLC".	Requested change has been incorporated.
	AMWR-2: Page 16, Section C, Assessor's Parcel No(s): APN 516020003 is a dedicated Metropolitan Water District easement for which no development is proposed, so this APN should be deleted.	Requested change has been incorporated.

Table 2: Alta Mesa EA-IS Responses to Comments		
Commenter	**Comment**	**Response**
	AMWR-3: Use of Public Access Road to Project Site: Minor clearing of vegetation along existing public roadways, is required at the intersection of Cottonwood Drive and Rockview Drive, and along Rockview Drive, totally 0.21 acres of ruderal and brittle bush scrub that appears to have been disturbed in the past. Therefore, the following updates are recommended for the EA-IS (Page 2, Table 1, and Page 92). Biological survey results for the subject public roadways are attached.	Requested changes have been incorporated.

Appendix A

Comment Letters

ADAMS BROADWELL JOSEPH & CARDOZO, on behalf of Citizens for Responsible Wind Energy, including Riverside County residents and California Unions for Reliable Energy ("CURE")

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January 21, 2021

Via Email and Overnight Mail

Jay Olivas
Project Planner
Riverside County Planning Department
77588 El Duna Ct., Ste. H
Palm Desert, CA 92211
Email: JOlivas@rivco.org

Re: **Comments on Draft Environmental Assessment/Initial Study for Alta Mesa Wind Project (WCS00071R10/VAR200001, SCH 20200120489)**

Dear Mr. Olivas:

On behalf of Citizens for Responsible Wind Energy ("Citizens"), we submit these comments on the Draft Environmental Assessment/Initial Study ("DEA/IS") for the Alta Mesa Wind Project ("Project")[1], prepared pursuant to the California Environmental Quality Act ("CEQA")[2] by the Riverside County ("County"). The Project is proposed by Brookfield Renewables ("Applicant").

The Project is a proposed new 27-megawatt wind farm with seven new wind turbine generators, up to 499 feet tall. The Project seeks from the County the following discretionary approvals: a Wind Energy Conversion Systems ("WECS") Permit, variance, approval of the DEA/IS, approval of the proposed Project, among other permits. The County already issued building permits to remove the existing 159 wind turbine generators on the Project site on October 06, 2020.[3] The Project is located on 640 acres in rural Riverside County, 11 miles northwest of Palm Springs.

[1] Riverside County, Draft Environmental Assessment/Initial Study Alta Mesa Wind Project (Dec. 2020) (hereafter "DEA/IS").
[2] Pub. Resources Code § 21000 *et seq.*; 14 Cal. Code Regs. ("C.C.R.") §§ 15000 *et seq.*
[3] County of Riverside, Building and Safety Department, Demolition Permit# BDE2000066, (Oct. 06, 2020); County of Riverside, Building and Safety Department, Hourly Permit# BHR2000085, (Oct. 06, 2020).
4869-016j

The Project is immediately adjacent to Brookfield Renewable's Mesa Wind Repower Project for which the Bureau of Land Management ("BLM") issued an Environmental Assessment ("EA"), pursuant to the National Environmental Policy Act, in May and approved the Project on September 30, 2020.[4]

Based upon our review of the DEA/IS, we conclude that the DEA/IS fails to comply with CEQA in numerous aspects. As explained more fully below, the DEA/IS fails to accurately disclose the extent of the Project's potentially significant impacts on air quality, public health, biological resources, and wildfire; fails to support its findings with substantial evidence; and fails to properly mitigate the Project's potentially significant impacts. As explained in these comments, there is more than a fair argument that the Project will result in potentially significant, unmitigated impacts relating to air quality, public health, GHGs, and land use, which requires the County to withdraw the DEA/IS and prepare an environmental impact report ("EIR") for the Project that fully complies with CEQA.

The County may not approve the Project until it prepares an EIR that adequately analyzes the Project's potentially significant direct, indirect and cumulative impacts, and incorporates all feasible mitigation measures to avoid or minimize these impacts to the greatest extent feasible. CURE-1

We reviewed the DEA/IS and its technical appendices with the assistance of air quality and hazardous materials experts from SWAPE Matt Hagemann, P.G, C.Hg. and Paul E. Rosenfeld, Ph.D.[5] and expert conservation ecologist Renee Owens.[6] We also found that the County failed to provide the public with required reference documents cited in the DEA/IS, including CalEEMod files that were relied on by the DEA/IS to support its conclusions, in violation of CEQA.[7] County staff

[4] United States Department of the Interior, Bureau of Land Management, Environmental Assessment DOI-BLM-CA-N060-2020-0024-EA Mesa Wind Repower Project (May 2020) (hereafter "EA"); United States Department of Interior, Bureau of Land Management, News Release: BLM Approves Mesa Wind Repower Project Near Palm Springs, (Sept. 30, 2020).
[5] Letter from Matt Hagemann, P.G., C.Hg. and Paul E. Rosenfield, Ph.D. to Kyle C. Jones: Comments on Alta Mesa Wind Project (SCH No. 2020120489), (Jan. 20, 2021) (hereafter "SWAPE Comments") **Exhibit A**.
[6] Letter from Renee Owens, to Kyle C. Jones: Comments on the Draft Environmental Assessment/Initial Study for the Alta Mesa Wind Project SCH # 2020120489, (Jan. 19, 2021) (hereafter "Owens' Comments") **Exhibit B**.
[7] Letter from Kyle C. Jones to Jay Olivas, Request to Extend the Public Review and Comment Period for the Environmental Assessment/Initial Study for the Alta Mesa Wind Energy Project (WCS0007R10/VAR20001 SCH No. 2020120489), (Jan. 12, 2021) **Exhibit C**.
4869-016j

refused our timely request to extend the comment period to review and evaluate these materials that were required to be public the entirety of the comment period.[8] As such, we reserve the right to supplement these comments at a later date, and at any later proceedings related to this Project.[9]

I. STATEMENT OF INTEREST

Citizens for Responsible Wind Energy is an unincorporated association of individuals and labor organizations with members who may be adversely affected by the potential public and worker health and safety hazards and environmental and public service impacts of the Project. The association includes Riverside County residents and California Unions for Reliable Energy ("CURE") and its members and families and other individuals that live, recreate and/or work in Riverside County (collectively "Citizens").

Citizens supports the development of clean, renewable energy technology, including the use of wind power generation, where properly analyzed and carefully planned to minimize impacts on public health and the environment. Wind energy projects should avoid impacts to sensitive species and habitats, water resources, and public health, and should take all feasible steps to ensure unavoidable impacts are mitigated to the maximum extent feasible. Only by maintaining the highest standards can energy supply development truly be sustainable.

The individual members of Citizens and the members of the affiliated labor organizations live, work, recreate and raise their families in Riverside County. They would be directly affected by the Project's environmental and health and safety impacts. Individual members may also work constructing the Project itself. They will be first in line to be exposed to any health and safety hazards that may be present on the Project site. They each have a personal interest in protecting the Project area from unnecessary, adverse environmental and public health impacts.

The organizational members of Citizens and their members also have an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for the members that they represent.

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[8] Email from Ken Baez to Kyle C. Jones, Re: Request to Extend Public Review and Comment Period for EA/IS – Alta Mesa Wind Energy Project (4869), (Jan. 19, 2020) **Exhibit D**.
[9] Gov. Code § 65009(b); PRC § 21177(a); *Bakersfield Citizens for Local Control v. Bakersfield* ("*Bakersfield*") (2004) 124 Cal. App. 4th 1184, 1199-1203; see *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal. App. 4th 1109, 1121.
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Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for industry to expand in Riverside County, and by making it less desirable for businesses to locate and people to live and recreate in Riverside County, including the Project vicinity. Continued degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduces future employment opportunities.

Finally, the organizational members of Citizens are concerned with projects that can result in serious environmental harm without providing countervailing economic benefits. CEQA provides a balancing process whereby economic benefits are weighed against significant impacts to the environment. It is in this spirit we offer these comments.

II. THE DEA/IS IMPERMISSIBLY PIECEMEALS THE PROJECT FROM THE MESA WIND REPOWER PROJECT

CEQA prohibits a project proponent from seeking approval of a large project in smaller pieces in order to take advantage of environmental exemptions or lesser CEQA review for smaller projects.[10] California courts have repeatedly held that "an accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient [CEQA document]."[11] CEQA requires that a project be described with enough particularity that its impacts can be assessed.[12] As articulated by the court in *County of Inyo v. City of Los Angeles*, "a curtailed, enigmatic or unstable project description draws a red herring across the path of public input."[13] Without a complete project description, the environmental analysis under CEQA is impermissibly limited, thus minimizing the project's impacts and undermining meaningful public review.[14]

CEQA prohibits such a piecemeal approach and requires review of a Project's impacts as a whole.[15] "Project" is defined as "the whole of an action," which has the potential to result in a direct physical change in the environment, or a reasonably

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[10] *Arviv Enterprises, Inc. v. South Valley Area Planning Com.*, 101 Cal. App. 4th 1337, 1340 (2002).
[11] *County of Inyo v. City of Los Angeles* (3d Dist. 1977) 71 CalApp.3d 185, 193.
[12] *Id.* at 192.
[13] *Id.* at 197-198.
[14] *See, e.g., Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376.
[15] 14 Cal. Code Reg. § 15378, subd. (a); *Burbank- Glendale-Pasadena Airport Authority v. Hensler* (1991) 233 Cal.App.3d 577, 592.
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foreseeable indirect physical change in the environment.[16] CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones -- each with a minimal potential impact on the environment -- which cumulatively may have disastrous consequences."[17] Before undertaking a project, the lead agency must assess the environmental impacts of all reasonably foreseeable phases of a project.[18]

Courts have found improper piecemealing where a lead agency conducts separate CEQA reviews for related activities proposed by the same applicant in the same vicinity. In *Plan for Arcadia v. City Council of Arcadia*, a developer submitted two applications for developments on a 400-acre property, first a 72-acre shopping center and then a parking lot to serve a racetrack on the property.[19] A site plan showed that the owner had plans to redevelop the entire property.[20] Although both projects were exempt from CEQA because they predated CEQA's effective date, it was "clear" to the court that they were "related to each other and that in assessing their environmental impact they should be regarded as a single project under [CEQA]."[21]

In *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora,* the court articulated "general principles" for determining whether two actions are one CEQA project, including "how closely related the acts are to the overall objective of the project," and how closely related they are in *time, physical location*, and *the entity undertaking the action*.[22] The court rejected arguments that a shopping center and nearby road alignment were "separate and independent" projects, and held that (1) separate approvals do not sever the connections between two activities; (2) the broad definition of a CEQA "project" extends beyond situations where a future activity is "necessitated by" an earlier one (noting that when actions "actually will be taken," the appropriate inquiry is whether they are related to one another, i.e. they comprise the "whole of an action" or "coordinated endeavor"); and

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[16] 14 Cal. Code Reg., § 15378.
[17] *Bozung v. LAFCO* (1975) 13 Cal.3d 263, 283-84; *City of Santee v. County of San Diego*, (1989) 214 Cal.App.3d 1438, 1452.
[18] *Laurel Heights Improvement Assoc. v. Regents of the Univ. of Calif.* (1988) 47 Cal.3d 376, 396-97, 253 Cal.Rptr. 426) (EIR held inadequate for failure to assess impacts of second phase of pharmacy school's occupancy of a new medical research facility).
[19] *Plan for Arcadia v. City Council of Arcadia* (1974) 42 Cal.App.3d 712, 718, 721
[20] *Id.* at 719.
[21] *Id.* at 723, 726.
[22] *Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora* (2007) 155 Cal.App.4th 1214, 1226-1227 ("*Tuolumne*").
4869-016j

(3) the applicable standard is not always whether two actions "could be implemented independently of each other."[23]

Here, the Project is immediately adjacent to the Mesa Wind Repower Project ("Mesa Wind"), also proposed by the Applicant. Both the Project and Mesa Wind would share a main access road and construction yard, located with the Mesa Wind right-of-way.[24] Both this Project and Mesa Wind are being considered and approved within a year. As such, the Project and Mesa Wind are clearly related to each other and are a coordinated endeavor. The County is currently undergoing internal review and preparing a CEQA document for approvals associated Mesa Wind while this DEA/IS is available for public review.[25] The whole of the action, for CEQA purposes, includes the decommissioning of existing turbines on both BLM and County land and the construction, operation, and decommissioning of the new turbines on BLM and County land, regardless whether this Project and Mesa Wind could be implemented independently. CURE-2A

This piecemealing of the Project along jurisdictional lines causes the DEA/IS to underestimate the scope of potential impacts, particularly to special-status species that cannot distinguish between County and BLM land.[26] Ms. Owens explains that the piecemealing results in the DEA/IS improperly reducing the likelihood of species being present on site and the impacts to those species, and limits the effectiveness of discussed mitigation measures.[27] Thus, the piecemealing of the Project results in the DEA/IS misinforming the public and decisionmakers as to the true impacts of the whole action before them and will have real world harms to protected resources. CURE-2B

Further, the DEA/IS excludes the impacts from removal of old turbines on the site from calculation of criteria pollutants.[28] The presumed justification is that these actions are proceeding under existing permits.[29] This is insufficient under CEQA. These permits were secured only months ago and are clearly related to, and CURE-3

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[23] *Id.* at 1228-1230 (citing 14 Cal. Code Reg. § 15378(c) and analyzing *Sierra Club v. W. Side Irr. Dist.* (2005) 128 Cal.App.4th 690, 698-700).
[24] DEA/IS, p. 2.
[25] Email from Ken Baez, Riverside County Planning Department to Sheila Sannadan, ABJC, Re: Brookfield Renewables Mesa Wind Repower – Status, (Jan. 20, 2021) **Exhibit E**.
[26] Owens' Comments, pp. 11-12.
[27] Owens' Comments, pp. 11-12.
[28] DEA/IS, p. 1.
[29] DEA/IS, p. 1.
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necessary for, the Project to proceed. The County must withdraw this DEA/IS and prepare an EIR that properly considers the whole of the action, as required by CEQA.

CURE-3, cont.

III. THE DEA/IS FAILS TO ADEQUATELY DESCRIBE THE EXISTING ENVIRONMENTAL SETTING

The County describes the existing environmental setting incompletely, thereby skewing the County's impact analysis in the DEA/IS. The existing environmental setting is the starting point from which the lead agency must measure whether a proposed Project may cause a significant environmental impact.[30] CEQA defines the environmental setting as the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, from both a local and regional perspective.[31]

Describing the environmental setting accurately and completely for each environmental condition in the vicinity of the Project is critical to an accurate and meaningful evaluation of environmental impacts. The importance of having a stable, finite and fixed environmental setting for purposes of an environmental analysis was recognized decades ago.[32] Today, the courts are clear that "[b]efore the impacts of a Project can be assessed and mitigation measures considered, an [EIR] must describe the existing environment. It is only against this baseline that any significant environmental effects can be determined."[33]

An EIR must also describe the existing environmental setting in sufficient detail to enable a proper analysis of project impacts.[34] The CEQA Guidelines provide that "[k]nowledge of the regional setting is critical to the assessment of environmental impacts."[35] This level of detail is necessary to "permit the significant effects of the project to be considered in the full environmental context."[36]

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[30] *See, e.g., Communities for a Better Env't v. S. Coast Air Quality Mgmt. Dist.* (Mar 15, 2010) 48 Cal.4th 310, 316; *Fat v. City of Sacramento* (2002) 97 Cal.App.4th 1270, 1278, *citing* Remy, et al.; Guide to the Calif. Environmental Quality Act (1999) p. 165.
[31] CEQA Guidelines §15125(a)(1); *Riverwatch v. City of San Diego* (1999) 76 Cal.App.4th 1428, 1453.
[32] *City of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185.
[33] *City of Amador v. El Dorado City Water Agency* (1999) 76 Cal.App.4th 931, 952.
[34] CEQA Guidelines § 15125; *Galante Vineyards v. Monterey Peninsula Water Mgmt. Dist.* (1997) 60 Cal.App.4th 1109, 1121-22.
[35] CEQA Guidelines § 15125(c).
[36] *Id.*
4869-016j

An accurate description of the affected environment is an essential prerequisite for an adequate analysis of Project impacts. Here, however, some critical baseline information is incomplete, outdated, or was never provided.

A. The DEA/IS Improperly Includes the Operation of Decommissioned Turbines in the Affected Environment

CURE-4

In several areas, the DEA/IS deducts impacts from the older turbines on the Project site, despite the County's issuance of permits to remove these turbines two months prior to the issuance of the DEA/IS. Because it is highly likely that the turbines on the site are already undergoing removal, given that County records show that the Applicant wanted to begin work immediately and the permits were issued two months ago, the County lacks substantial evidence to support the inclusion of the older turbines as if they exist and/or are operating in the existing environmental setting.[37] Further, decommissioning of the old turbines will occur without approval of the new turbines analyzed in the DEA/IS, meaning the decision before the County is to permit seven new turbines or have the site remain undeveloped. In cases like this Project, it is appropriate for the County to describe the existing environmental setting to account for the removal of the existing turbines.[38] By not doing so, the DEA/IS is misleading when it deducts impacts from the old turbines from the new turbines and masks the true impacts of the Project. Substantial evidence demonstrates that the factual circumstances of this Project support not including the old turbines in the existing environmental setting for the DEA/IS because doing so misinforms the public and decisionmakers about the true impacts of the Project.

B. The County Lacks Substantial Evidence to Support its Description of the Affected Botanical Environment in the DEA/IS

CURE-5

The DEA/IS found that protected triple ribbed milk-vetch was located nearby the Project site and that there was suitable habitat for the Project on the site, but ultimately claimed that the possibility of triple ribbed milk-vetch occurring on site

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[37] *See* email from Jay Olivas, Riverside County Planning Department to Mark Abbott and Shantel Bacon, Riverside County, (Aug. 24, 2020), **Exhibit F**.

[38] *See Neighbors for Smart Rail v. Exposition Metro Line Construction Authority*, (2013) 57 Cal.4th 439, 452 (*citing Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 328).

was low because no plants were found onsite.[39] Ms. Owens explains that the presence of suitable habitat on site and nearby plants of a species normally would indicate that there is a high likelihood of a plant to be present.[40] Further, while the DEA/IS claims that surveys complied with California Department of Fish and Wildlife ("CDFW") guidelines, Ms. Owens notes that the DEA/IS did not include sufficient information to verify how surveys were conducted.[41] Data from botanical surveys was lumped together with data from desert tortoise surveys in such a way that it is not possible to determine which surveys for what species were conducted at what times.[42] As such, the County lacks substantial evidence to support its claims that no triple ribbed milk-vetch occurs on the Project site and that the likelihood of the species being found is low. Instead, Ms. Owens' provides substantial evidence in the form of expert opinion that the likelihood of the species being present on the site is high. CURE-5, cont.

C. The County Lacks Substantial Evidence to Support its Description of the Affected Environment for Special-Status Species in the DEA/IS CURE-6

The DEA/IS made assertions regarding the abundance of species that could use the Project site based on databases, literature review, and surveys for plants and desert tortoise.[43] Ms. Owens explains that these desktop efforts are insufficient to adequately describe the potential for special-status species to be present on site. For example, no surveys were conducted for any invertebrates, birds, bats, or reptiles other than desert tortoise.[44] Further, the DEA/IS based many species' potential to occur on the site based on its likelihood of nesting or roosting, which ignored species who would use the site for other activities, such as foraging, migrating, or any other behavior.[45] By doing so, the affected environment for special-status species is incomplete and underestimates the potential for species to occur onsite and be affected by the Project.

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[39] DEA/IS, p. 35.
[40] Owens' Comments, p. 3.
[41] Owens' Comments, p. 3.
[42] Owens' Comments, p. 3.
[43] Owens' Comments, pp. 3-4.
[44] Owens' Comments, p. 4.
[45] Owens' Comments, p. 4.
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Ms. Owens notes that the focused surveys for botanicals and desert tortoise would not be sufficient to describe the usage of the site by other special-status species because by definition, those surveys are focused on only one species at a time.[46] Ms. Owens describes how these surveys were absolutely insufficient to determine the use of the site by bats since they were conducted during the day.[47] These surveys are insufficient to establish a baseline for species other than desert tortoise. CURE-6, cont.

Further, Ms. Owens explains that the desktop review of databases relied on in the DEA/IS are inadequate to establish the existing environmental setting for special-status species. The DEA/IS often relies on the California Natural Diversity Database ("CNDDB") to predict likelihood of species to occur on the Project site. The CNDDB, at best, represents the bare minimum of which species may be found on the Project site and does not inform a user about the populations, movements, and breeding status of special-status species that may be present.[48] Many species' observations are not included in the CNDDB and bird foraging or flyover is not included at all.[49] The CNDDB is only voluntarily reported and cannot be relied on as a comprehensive evidence as to which species could be present on the Project site.[50] Omission of a species in the CNDDB is not evidence that a species is not present on site.[51] However, the DEA/IS erroneously treats omission as such.[52] In sum, the DEA/IS fails to properly establish the existing environmental setting with substantial evidence because it relied on limited surveys for only a few species and desktop review of inadequate databases.

D. Substantial Evidence Demonstrates that Special-Status Species were Omitted and Underestimated by the DEA/IS

CURE-7

Contrary to the misinformed assertions in the DEA/IS, Ms. Owens provides substantial evidence of numerous special-status species that have been identified on site or nearby the site, many of which are routinely impacted by wind energy projects.[53] These species were omitted by the DEA/IS or listed as not likely to be

[46] Owens' Comments, pp. 4-5.
[47] Owens' Comments, p. 5.
[48] Owens' Comments, pp. 5-6.
[49] Owens' Comments, p. 6.
[50] Owens' Comments, p. 6.
[51] Owens' Comments, p. 6.
[52] Owens' Comments, p. 6.
[53] Owens' Comments, pp. 8-9.
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present on the site, despite these sightings.[54] Ms. Owens highlights yellow breasted chat, vermillion flycatcher, and summer tanager, which the DEA/IS considered absent because there was no riparian vegetation on site.[55] Ms. Owens explains that this was in error because while these species need riparian habitat to breed, these species do not require riparian habitat for other activities, like foraging, and that they were identified less than two miles away from the Project site.[56] Many special-status species were erroneously listed as having a low propensity to occur on site because they were not observed, despite the DEA/IS describing suitable habitat on site and observations of those species found nearby, which would normally indicate a high likelihood to occur.[57] Thus, the County lacks substantial evidence to support its claims that many species are not likely to be present on the Project site.[58] Rather, substantial evidence demonstrates that more special-status species are likely to use the site than disclosed in the DEA/IS.[59] The DEA/IS must be withdrawn and the County must prepare an EIR with an accurately established environmental setting supported by substantial evidence. CURE-7, cont.

IV. SUBSTANTIAL EVIDENCE SUPPORTS A FAIR ARGUMENT THAT PROJECT CONSTRUCTION AND OPERATION MAY RESULT IN POTENTIALLY SIGNIFICANT IMPACTS THAT THE IS/MND FAILS TO DISCLOSE, ANALYZE AND MITIGATE

CEQA is intended to provide the fullest possible protection to the environment. CEQA requires that a lead agency prepare and certify an EIR for any discretionary project that may have a significant adverse effect on the environment and requires analysis of the "whole of an action," including the "direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment."[60]

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[54] Owens' Comments, pp. 7-9.
[55] Owens' Comments, p. 9.
[56] Owens' Comments, pp. 9-10.
[57] Owens' Comments, p. 10.
[58] Owens' Comments, p. 10.
[59] Owens' Comments, p. 10.
[60] Pub. Res. Code §§ 21002.1(a), 21100(a), 21065, 21151(a); 14 C.C.R. §§ 15064(a)(1), (f)(1), 15367, 15378(a).
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CEQA has two primary purposes. First, CEQA is designed to inform decisionmakers and the public about the potential, significant environmental effects of a project.[61] "Its purpose is to inform the public and its responsible officials of the environmental consequences of their decisions before they are made. Thus, the EIR "protects not only the environment but also informed self-government."[62] The EIR has been described as "an environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return."[63]

Second, CEQA requires public agencies to avoid or reduce environmental damage when "feasible" by requiring "environmentally superior" alternatives and all feasible mitigation measures.[64] The EIR serves to provide agencies and the public with information about the environmental impacts of a proposed project and to "identify ways that environmental damage can be avoided or significantly reduced."[65] If the project will have a significant effect on the environment, the agency may approve the project only if it finds that it has "eliminated or substantially lessened all significant effects on the environment where feasible" and that any unavoidable significant effects on the environment are "acceptable due to overriding concerns."[66]

"At the heart of CEQA is the requirement that public agencies prepare an EIR for any project that may have a significant effect on the environment."[67] A negative declaration is improper, and an EIR must be prepared, whenever it can be fairly argued on the basis of substantial evidence that the project may have a significant environmental impact.[68] "[S]ignificant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment."[69] An effect on the environment need not be "momentous" to meet the

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[61] 14 CCR § 15002(a)(1).
[62] *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564.
[63] *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm'rs.* (2001) 91 Cal. App. 4th 1344, 1354 ("*Berkeley Jets*"); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.
[64] 14 CCR§ 15002(a)(2) and (3); *see also Berkeley Jets*, 91 Cal.App.4th at 1354; *Citizens of Goleta Valley*, 52 Cal.3d at 564.
[65] 14 CCR §15002(a)(2).
[66] PRC § 21081; 14 CCR § 15092(b)(2)(A) & (B).
[67] *Friends of College of San Mateo Gardens v. San Mateo County Community College Dist.* (2016) 1 Cal.5th 937, 944 (internal citations and quotations omitted).
[68] *Id.* at 957.
[69] Pub. Resources Code § 21068; 14 C.C.R. § 15382; *County Sanitation Dist. No. 2 v. County of Kern* (2005) 127 Cal.App.4th 1544, 1581.
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CEQA test for significance—it is enough that the impacts are "not trivial."[70] Substantial evidence, for purposes of the fair argument standard, includes "fact, a reasonable assumption predicated upon fact, or expert opinion supported by fact."[71] The fair argument test therefore requires the preparation of an EIR whenever "there is substantial evidence that any aspect of the project, either individually or cumulatively, may cause a significant effect on the environment, regardless of whether the overall effect of the project is adverse or beneficial."[72]

Whether a fair argument exists is a question of law that the court reviews de novo, with a preference for resolving doubts in favor of environmental review.[73] In reviewing a decision to prepare a negative declaration rather than an EIR, courts "do not defer to the agency's determination."[74] Neither the lead agency nor a court may "weigh" conflicting substantial evidence to determine whether an EIR must be prepared in the first instance.[75] "The fair argument standard thus creates a low threshold for requiring an EIR, reflecting the legislative preference for resolving doubts in favor of environmental review."[76]

Where experts have presented conflicting evidence on the extent of the environmental effects of a project, the agency must consider the effects to be significant and prepare an EIR.[77] In short, when "expert opinions clash, an EIR should be done."[78] "It is the function of an EIR, not a negative declaration, to resolve conflicting claims, based on substantial evidence, as to the environmental effects of a project."[79] Where substantial evidence is presented, "evidence to the contrary is not sufficient to support a decision to dispense with preparation of an EIR and adopt a negative declaration, because it could be 'fairly argued' that the project might have a significant environmental impact."[80]

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[70] *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 83 fn. 16.
[71] Pub. Resources Code § 21080(e)(1) (emphasis added); *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal.App.4th 327, 331 ("*CREED*").
[72] 14 C.C.R. § 15063(b)(1) (emphasis added).
[73] *CREED*, 197 Cal.App.4th at 331; *Pocket Protectors*, 124 Cal.App.4th at 927.
[74] *Mejia v. City of Los Angeles* (2005) 130 Cal.App.4th 322, 332; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1318.
[75] *Id.* at *13.
[76] *Id.* at *4.
[77] *Pocket Protectors v. City of Sacramento* (2004) 124 Cal.App.4th 903, 935; *Sierra Club v. County of Sonoma* (1992) 6 Cal.App.4th 1307, 1317–1318; CEQA Guidelines § 15064(f)(5).
[78] *Pocket Protectors*, 124 Cal.App.4th at 928; *Sierra Club*, 6 Cal.App.4th at 1317–1318.
[79] *Pocket Protectors*, 124 Cal.App.4th at 935.
[80] *Sundstrom*, 202 Cal.App.3d at 310 (citation omitted).
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As described below substantial evidence is present here which demonstrates that the Project may cause significant effects on the environment which the IS/MND fails to disclose, analyze and mitigate.

A. The County Fails to Disclose, Analyze, and Mitigate the Project's Potentially Significant Air Quality Impacts

The County claims that the Project will not result in a significant impact to air quality from criteria pollutant emissions after incorporating mitigation.[81] Independent air quality experts from SWAPE reviewed the DEA/IS and the CalEEMod files recently provided by the County that allegedly support the County's findings and found several errors in the analysis. SWAPE estimated impacts from the Project and determined that they would be significant without further mitigation. The County must prepare an EIR that properly models impacts to air quality and imposes further mitigation.

1. Criteria Pollutant Emissions are Underestimated

CURE-8

SWAPE determines that the Project's CalEEMod files contain numerous unsubstantiated changes or changes that conflict with the DEA/IS that have the overall effect of underestimating total Project emissions.[82] CalEEMod provides default emissions calculations for activities associated with a project and requires changes from default values to be justified.[83] Without doing so, the County cannot rely on the CalEEMod as substantial evidence to support its conclusions regarding air quality impacts.

a. The CalEEMod Contains Unsubstantiated Changes in Construction Phase Lengths

CURE-9

The DEA/IS described Project pre-construction of three months, construction of new turbines of one year, and restoration of disturbance nine months.[84] However, the CalEEMod increases all of these times, overestimating the time that Project construction would occur.[85] The CalEEMod lacks justification for this

[81] DEA/IS, pp. 28-31.
[82] SWAPE Comments, p. 4.
[83] SWAPE Comments, p. 4.
[84] DEA/IS, p. 11.
[85] SWAPE Comments, p. 5.
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deviation from the DEA/IS.[86] SWAPE explains that this has the effect of underestimating total Project emissions by drawing out the time by which pollutant emissions would occur, lessening their severity.[87] The County lacks substantial evidence to support these changes. CURE-9, cont.

b. The CalEEMod Contains Unsubstantiated Reductions in Off-Road Equipment CURE-10

SWAPE finds that the CalEEMod files manually reduce the amount of off-road equipment used for Project construction.[88] SWAPE further finds that the DEA/IS did not adequately describe the construction equipment that would be used and that the CalEEMod did not include adequate justification that explains the departure from default values.[89] Thus, the County lacks substantial evidence to support these changes.

c. The CalEEMod Contains Unsubstantiated Changes in Road Types for Construction and Operation CURE-11

SWAPE finds that the CalEEMod files include changes in values for road type, decreasing the length of unpaved roads that would be utilized for Project construction and operation.[90] The CalEEMod assumes that 98 percent of travel would be on paved roads, without any justification or explanation.[91] The result is an underestimation of emissions from fugitive dust.[92] The County must either explain or correct these errors in an EIR for the Project.

d. The CalEEMod Omits Waste Generation CURE-12

The DEA/IS notes that the Project will generate waste during construction.[93] However, the CalEEMod files were manually reduced to zero tons per year.[94] This change is unsubstantiated and conflicts with the DEA/IS and cannot be relied on by the County.

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[86] SWAPE Comments, p. 5.
[87] SWAPE Comments, p. 6.
[88] SWAPE Comments, p. 6.
[89] SWAPE Comments, p. 6.
[90] SWAPE Comments, pp. 7-8.
[91] SWAPE Comments, pp. 7-8.
[92] SWAPE Comments, pp. 7-8.
[93] DEA/IS, p. 97.
[94] SWAPE Comments, p. 8.
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e. The CalEEMod Omits Water Use

CURE-13

The DEA/IS states that the Project will need 7,300 gallons of water annually to operate.[95] Similar to waste generation, the CalEEMod reduces the Project's anticipated water use to zero gallons per year.[96] This conflicting and unsubstantiated change cannot be relied on by the County.

f. The CalEEMod Contains Unsubstantiated Reductions in Vendor Trips

CURE-14

The DEA/IS states that the Project would require approximately thirty daily truck deliveries during construction.[97] Despite this, the CalEEMod reduces daily vendor trips to only ten per day.[98] This underestimates vendor trips by twenty trips per day, underestimating the Project's air pollutant emissions.[99] The County cannot rely on the results of the CalEEMod where it conflicts with the DEA/IS.

g. The CalEEMod Contains Unsubstantiated Reductions in Vehicle Trip Rates

CURE-15

The CalEEMod reduces the operational vehicle trip rates. SWAPE finds that there was no explanation or justification for these changes within the CalEEMod files or DEA/IS, whatsoever.[100] These impacts may be underestimated, without justification to support them, and cannot be relied on by the County.[101]

h. The CalEEMod Incorrectly Applies Construction-Related Mitigation Measures

CURE-16

The County incorrectly applied Mitigation Measure AQ-1 into the Project's CalEEMod. Mitigation Measure AQ-1 proposes a fugitive dust plan, which lacks concrete requirements that the Applicant would be required to take.[102] The DEA/IS suggests, but does not require, that the Applicant could require soil stabilizers,

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[95] DEA/IS, p. 9.
[96] SWAPE Comments, p. 9.
[97] DEA/IS, p. 90.
[98] SWAPE Comments, p. 9.
[99] SWAPE Comments, p. 10.
[100] SWAPE Comments, p. 10.
[101] SWAPE Comments, p. 10.
[102] *See* DEA/IS, p. 30.
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apply water, or limit speeds to 15 miles per hour.[103] The CalEEMod for the mitigated Project includes both the use of soil stabilization and water application without mandating them.[104] SWAPE also explains that the South Coast Air Quality Management District Rule 403 gives projects the option of either watering unpaved roads three times a day, watering unpaved roads once a day and limiting vehicle speeds to 15 miles per hour, or applying a soil stabilizer.[105] SWAPE finds that the County included mitigation in its modelling of potentially significant air quality impacts beyond Mitigation Measure AQ-1 or Rule 403, without actually requiring that level of mitigation in the measures themselves.[106] This misrepresents the amount of Project emissions after mitigation; therefore, the County lacks substantial evidence that the Project's impacts after mitigation will be less than significant.

CURE-16, cont.

2. Project Air Quality Impacts are Potentially Significant

CURE-17

SWAPE provides a recalculation of the Project's construction and operational emissions of criteria pollutants, correcting the numerous errors and unsupported or contradictory changes in the County's CalEEMod and found that Project impacts are potentially more significant than disclosed in the DEA/IS and would require further mitigation.[107] SWAPE finds through corrected modelling that NOx, PM2.5, and PM10 emissions for both the Project's construction and operation are higher than the County's thresholds of significance in the DEA/IS.

SWAPE's updated model is only for the construction and operation of the seven new turbines on County land. As noted above, the County must also consider the decommissioning of old turbines on County land and the repower activities on BLM land as the whole of the action before it, as required by State law. Given that the impacts from just this portion of the Project are potentially significant, the entirety of the Project would also likely result in potentially significant air quality impacts. These impacts must be properly disclosed, analyzed, and mitigated in an EIR for the Project.

[103] DEA/IS, p. 30.
[104] SWAPE Comments, p. 11.
[105] SWAPE Comments, p. 11.
[106] SWAPE Comments, pp. 11-12.
[107] SWAPE Comments, p. 12.
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3. Feasible Mitigation Measures are Available to Further Reduce the Project's Potentially Significant Impacts

CURE-18

SWAPE provides a robust list of feasible mitigation measures that the County must require of the Applicant in order to further reduce Project emissions.[108] These include measures from the Northeast Diesel Collaborative to reduce emission associated with diesel engines and measures suggested by the Sacramento Metropolitan Air Quality Management District to reduce exhaust emissions.[109] The County must withdraw the DEA/IS and require these measures to further reduce Project impacts and disclose the analysis and require mitigation in an EIR for the Project.

B. The County Fails to Disclose, Analyze, and Mitigate the Project's Potentially Significant Biological Resources Impacts

The DEA/IS ultimately concluded that the Project would have a less-than-significant impact on biological resources with mitigation measures included.[110] Ms. Owens has reviewed the DEA/IS and found that the County has failed to disclose all Project impacts, underestimated Project impacts, failed to support its conclusions with substantial evidence, and included mitigation measures that would be vague, ineffective, or impermissibly deferred, in violation of CEQA. Ms. Owens also provides substantial evidence to support a fair argument that impacts from the Project would remain significant after mitigation. The County must prepare an EIR that discloses, analyzes, and mitigates all Project impacts.

1. The County Underestimates Collision Risk to Birds and Bats

CURE-19

The DEA/IS underestimates the total area whereby birds and bats would be placed at risk. As noted above, the County leaves out the eleven turbines that are on BLM that are part of the whole of the action before it.[111] Also, as mentioned above, the DEA/IS impermissibly deducts the rotor-swept area as if the rotors are still operating and in place from the rotor-swept area of the new turbines, but in other respects assumes that the existing rotors are no longer in place.

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[108] SWAPE Comments, pp. 12-16.
[109] SWAPE Comments, pp. 12-16.
[110] DEA/IS, pp. 31-59.
[111] Owens' Comments, p. 14.
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Additionally, Ms. Owens notes that the new turbines must be considered an entirely new impact because the new turbines are a different impact.[112] The new turbines are much larger and pose a different risk to birds and bats than the older turbines.[113] The DEA/IS' simplistic analysis fails to capture the nuance associated with wind repower projects.[114] For example, the taller turbines will reach altitudes that eleven percent of migratory birds fly at that the old turbines would not affect.[115] Based on flight patterns through the San Gorgonio Pass, this represents 210 million migratory birds that could be potentially impacted by the Project throughout the Project's lifetime that are omitted from the DEA/IS' analysis.[116] The DEA/IS fails as an informational document by failing to disclose the totality of potential impacts from collision with the new turbine blades. It must disclose the true extent of potential bird and bat mortality in an EIR for the Project.

CURE-19, cont.

2. The County Fails to Analyze Potentially Significant Project Impacts to Many Special-Status Species

CURE-20

As explained above, the County does not analyze impacts to many special-status species because it wrongly concludes that those species will not be impacted by the Project. In other instances, the DEA/IS simply claims, falsely, that repower projects are too new for the County to determine Project impacts.[117] Ms. Owens finds that the DEA/IS also wrongly characterizes the behavior of species so as to minimize their risk of collision with the turbines. Ms. Owens explains that it is well-documented that tall turbines pose unique, measurable risks to birds and bats.[118] Ms. Owens provides expert opinion that the County's defeated assertion that impacts cannot be evaluated is incorrect and is not the proper rigor for the analysis that CEQA requires.[119] Studies from other wind projects demonstrate that high flying raptors, such as Swainson's hawk and golden eagle have increased collision risk from the taller reach of modern turbines.[120] For example, the DEA/IS dismisses the likelihood of Swainson's hawk interacting with the turbines because it

[112] Owens' Comments, p. 12.
[113] Owens' Comments, pp. 12-13.
[114] *See* Owens' Comments, pp. 12-13.
[115] Owens' Comments, p. 13.
[116] Owens' Comments, pp. 13-14.
[117] DEA/IS, p. 38.
[118] Owens' Comments, p. 17.
[119] Owens' Comments, pp. 17-18.
[120] Owens' Comments, pp. 18-19.
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will migrate over the site.[121] However, Ms. Owens provides expert evidence from direct observation that Swainson's hawk often forage along migratory routes, including in environments like the Project site.[122] Despite this, the DEA/IS lacks any discussion of local raptor populations.[123]

CURE-20, cont.

Like birds, it is well-documented that taller wind turbines present an increased risk of mortality from collision to bats.[124] The County does recognize that special-status bats are present and will be impacted by the Project but fails to describe their activity onsite and fails to draw a conclusion regarding the potential for impacts to bats.[125] No effort is made to calculate the potential collision risk to these species.

Any conclusions in the DEA/IS regarding impacts to special-status bird and bat species lacks substantial evidence and are unsupported because the County fails to actually analyze collision risk. Rather, evidence demonstrates that the Project will have an increased impact from collisions to birds and bats, particularly those that fly over 200 feet in altitude. These are potentially significant impacts that must be properly discussed in an EIR for the Project that includes collision risk by species, supported by substantial evidence.

3. <u>The County Fails to Properly Analyze Cumulative Impacts to Biological Resources</u>

CURE-21

The County fails to include an analysis of cumulative impacts to biological resources and instead states that compliance for all projects within the region with the Coachella Valley Multi Species Habitat Conservation Plan ("CVMSHCP") is sufficient to ensure that cumulative impacts are addressed.[126] Ms. Owens finds that this is unsatisfactory to meet the requirements of mitigation under CEQA.

First, the CVMSHCP is designed to meet the requirements of the Endangered Species Act through finding lands that can be conserved and managed as habitat.[127] The CVMSHCP does not proscribe mitigation measures to lessen

[121] DEA/IS, p. 35.
[122] Owens' Comments, pp. 16-17.
[123] Owens' Comments, p. 19.
[124] Owens' Comments, p. 21.
[125] Owens' Comments, pp. 22-23.
[126] *See* DEA/IS, p. 106.
[127] Owens' Comments, pp. 24-25.
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impacts from projects in the region, it only seeks to offset them.[128] Further, courts have recently held that merely conserving land to offset impacts does not count as mitigation under CEQA because it only prevents impacts from future projects, not the project at hand, provided that more is not done to convert land that would not be habitat into habitat.[129] Second, the effects of the CVMSHCP are still undefined, so its success cannot be measured.[130] Third, the CVMSHCP only covers certain species, and not all species that could be impacted by the Project.[131] Thus, compliance from projects with the CVMSHCP does not constitute substantial evidence that Project impacts are not cumulatively considerable. CURE-21, cont.

Further, assertions in the DEA/IS that mortality to birds and bats from wind turbines cannot be ascertained is false. Projects throughout the County include requirements to monitor and report mortality to the County.[132] Potential cumulative impacts from wind turbines can and have been predicted for the Altamont Pass Wind Resource Area and Ms. Owens includes an estimate for avian mortality rates guided by those numbers that were provided for Mesa Wind.[133]

Ms. Owens provides evidence that wind turbines are producing population-level impacts to special-status species like Swainson's hawk and golden eagle.[134] The DEA/IS does not discuss these impacts or explain how the Project does not cumulatively contribute to these declines. The DEA/IS fails to include a proper disclosure and analysis of cumulative impacts for the Project, failing in its role as an informational document. The County lacks substantial evidence to demonstrate that Project impacts are not cumulatively significant. A proper analysis must be included in an EIR for the Project.

4. Mitigation Measure AQ-1 will Create Additional Impacts to Species CURE-22

Mitigation Measure AQ-1 requires dust control measures during Project construction that includes watering exposed soils.[135] Ms. Owens notes that

[128] Owens' Comments, pp. 24-25.
[129] *See King and Gardiner Farms, LLC v. County of Kern* (2020) 45 Cal.App.5th 814, 875-876.
[130] Owens' Comments, p. 25.
[131] Owens' Comments, p. 25.
[132] Owens' Comments, p. 25.
[133] Owens' Comments, pp. 25-27.
[134] Owens' Comments, pp. 28-29.
[135] DEA/IS, p. 30.
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watering of soils has attracted special-status lizards to construction sites, where they can be crushed by trucks.[136] The DEA/IS is silent on this potentially significant impact. This potentially significant impact must be considered and mitigated in an EIR for this Project.

CURE-22, cont.

5. The DEA/IS Includes Ineffective or Impermissibly Deferred Mitigation

The DEA/IS must propose mitigation measures that reduce or avoid a project's significant impacts.[137] Mitigation measures cannot be so undefined that it is impossible to judge their effectiveness.[138] Rather, they must identify the methods used to mitigate the impacts and set out standards that the agency will commit to meet.[139] Mitigation measures must be enforceable to ensure that they will not be adopted and simply ignored.[140]

Further, it is generally improper to defer the formulation of mitigation measures.[141] An exception to this general rule applies when the agency has committed itself to specific performance criteria for evaluating the efficacy of the measures to be implemented in the future, and the future mitigation measures are formulated and operational before the project activity that they regulate begins.[142] As the courts have explained, deferral of mitigation may be permitted only where the lead agency:

(1) undertakes a complete analysis of the significance of the environmental impact;

(2) proposes potential mitigation measures early in the planning process; and

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[136] Owens' Comments, pp. 30-32.
[137] Pub. Resources Code § 21100, subd. (b)(3).
[138] *Preserve Wild Santee v. City of Santee* (2012) 210 Cal.4th 260, 281.
[139] *North Coast Rivers Alliance v. Marin Mun. Water Dist.* (2013) 216 Cal.4th 614, 647.
[140] Pub. Res. Code § 21081.6, subd. (b); CEQA Guidelines § 15126.4, subd.(a)(2); *Anderson First Coalition v. City of Anderson* (2005) 130 Cal.4th 1173, 1186.
[141] CEQA Guidelines § 15126.4(a)(1)(B); *POET v. CARB*, 218 Cal.App.4th at 735.
[142] *POET*, 218 Cal.App.4th at 738.
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(3) articulates specific performance criteria that would ensure that adequate mitigation measures were eventually implemented.[143]

Numerous mitigation measures for biological resources fail to meet these standards.

a. Mitigation Measure BIO-1 is Ineffective

CURE-23

Mitigation Measure BIO-1 proposes to relocate wildlife outside of the Project's construction area before and during construction[144] Ms. Owens explains that avoidance, rather than relocation, is a more effective at reducing harm to species.[145] Relocation often results in failure to limit impacts and harasses animals, resulting in further impacts that were not analyzed in the DEA/IS.[146] The DEA/IS lacks substantial evidence to demonstrate that Mitigation Measure BIO-1 is effective; rather, substantial evidence demonstrates that it will not be.

b. Mitigation Measure BIO-5 is Ineffective at Limiting Impacts to Bats

CURE-24

Mitigation Measure BIO-5 proposes to minimize impacts to bats due to attraction to lighting, while still complying with Federal Aviation Administration lighting standards.[147] The DEA/IS lacks evidence or explanation as to how these two conflicting efforts could both succeed, and thus lacks evidence that it will be effective.[148]

c. Mitigation Measure BIO-12 is Ineffective

CURE-25

Mitigation Measure BIO-12 proposes post-construction mortality monitoring for birds and bats.[149] The DEA/IS does not propose to do anything with the information disclosed or explain how counting the number of dead limits impacts to

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[143] *Comtys. for a Better Env't v. City of Richmond* (2010) 184 Cal.App.4th 70, 95; *Cal. Native Plant Socy' v. City of Rancho Cordova* (2009) 172 Cal.App.4th 603, 621.
[144] DEA/IS, p. 49.
[145] Owens' Comments, pp. 29-30.
[146] Owens' Comments, pp. 29-30.
[147] DEA/IS, p. 53.
[148] Owens' Comments, p. 23.
[149] DEA/IS, p. 58.
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species.[150] The County lacks substantial evidence demonstrating how this mitigation measure is effective.

CURE-25, cont.

d. Mitigation Measure BIO-13 is Impermissibly Deferred

CURE-26

Mitigation Measure BIO-13 proposes to have the Applicant prepare a bird and bat conservation strategy that includes mortality levels for species and an adaptive management strategy to handle mortality over thresholds.[151] This measure lacks necessary performance standards to ensure success. Ms. Owens explains that without timelines for action and public development of mortality thresholds, the public cannot be ensured of its success.[152] Performance standards, in the form of mortality thresholds, must be included in an EIR for the Project.

C. The County Fails to Disclose, Analyze, and Mitigate the Project's Potentially Significant Wildfire Impacts

The DEA/IS concludes that the Project may cause wildfire impacts, but that impacts would be less than significant.[153] There are several errors with the analysis in the DEA/IS.

1. The County Underestimates Wildfire Risk

CURE-27

The Project is in a very high fire hazard severity zone, and a wildfire has occurred in the region as recently as September of 2020.[154] The DEA/IS ignores the combined impacts from both the Mesa Wind and Alta Mesa portions of the Project. By not doing so, the County fails to consider the scope of activity from construction and operation of wind turbines that could cause a wildfire. As mentioned above, the County also improperly deducts the existing turbines from the new turbines in dismissing operational fire risk, despite those turbines being removed regardless of this Project. The DEA/IS should have analyzed the new turbines against an environmental setting without the old turbines.

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[150] Owens' Comments, p. 23 and 34.
[151] DEA/IS, pp. 58-59.
[152] Owens' Comments, pp. 23 and 34.
[153] DEA/IS, pp. 98-102.
[154] DEA/IS, p. 99; San Francisco Chronicle, Fire Tracker: Snow Fire, *available at* https://www.sfchronicle.com/projects/california-fire-map/2020-snow-fire.

2. Mitigation Measures FIRE 1 and 2 are Ineffective and Impermissibly Deferred

CURE-28

Mitigation Measure FIRE-1 proposes that the Applicant prepare a construction fire prevention plan and Mitigation Measure FIRE-2 proposes that the Applicant update and expand the existing operational fire safety plan.[155] Neither of these measures include a performance standard to ensure success. Further, it is not clear that a performance standard could be achieved. The DEA/IS admits that there is an inherent fire risk associated with operation of wind turbines and notes that the area is at high risk for wildfires.[156] The only performance standard that could ensure that there would be no impacts would be to eliminate the risk of wildfires entirely. Since this is impossible for wind turbines, Mitigation Measures FIRE 1 and 2 are necessarily ineffective. Because appropriate mitigation cannot be imposed on the Project to reduce impacts below a level of significance, these impacts should have been found to be significant and unavoidable. The County must prepare an EIR that accurately discloses the extent of these impacts.

D. The County Fails to Disclose, Analyze, and Mitigate the Project's Potentially Significant Valley Fever Impacts

CURE-29

The DEA/IS does not include a discussion of the potential for the Project to expose workers or other members of the public to Valley Fever. SWAPE explains that spores that cause Valley Fever are present in Riverside County and that construction workers are particularly at-risk during earth-moving activities associated with construction.[157] Valley Fever spores also travel hundreds of miles potentially affecting public health throughout the region. Valley Fever is a potentially fatal disease with symptoms that include fatigue, fever, cough, headaches, breathing difficulties, rash, muscle aches, joint pain, chronic pneumonia, meningitis, skin lesions, and bone or joint infection.[158] SWAPE provides substantial evidence that the Project may have a Valley Fever impact from dust exposure.

SWAPE provides a list of feasible mitigation measures that could reduce the potential for Valley Fever exposure to a less-than-significant level.[159] These include cleaning equipment of dust, conducting earth-moving activities downwind of

[155] DEA/IS, pp. 101-102.
[156] DEA/IS, pp. 99-100.
[157] SWAPE Comments, pp. 1-3.
[158] SWAPE Comments, p. 2.
[159] SWAPE Comments, pp. 3-4.
4869-016j

workers, watering areas, using vehicles with closed-cabs and HEPA-filtered air systems, worker training, and providing respirators to workers.[160] These measures must be considered in an EIR for the Project that properly discloses and analyzes the potentially significant public health impacts from the risk of Valley Fever exposure.

CURE-29, cont.

V. CONCLUSION

The DEA/IS piecemeals the Project from the adjacent Mesa Wind Project proposed by the same Applicant, fails to adequately establish the existing environmental setting, and fails to properly disclose, analyze, and mitigate the Project's potentially significant impacts to air quality, biological resources, and wildfire. As such, the County lacks substantial evidence demonstrating that the Project will not have a significant environmental impact. On the contrary, substantial evidence supports more than a fair argument that the Project will have potentially significant impacts that are not disclosed or adequately mitigated in the DEA/IS. For each of these reasons, the County's DEA/IS fails to comply with the requirements of State law and the County may not approve the Project until a revised environmental review document is prepared and re-circulated for public review and comment. We urge the County to reject this Project until an EIR is prepared that corrects these deficiencies.

Sincerely,

Kyle C. Jones

KCJ:ljl
Attachments

[160] SWAPE Comments, pp. 3-4.

EXHIBIT A

SWAPE Technical Consultation, Data Analysis and Litigation Support for the Environment

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January 20, 2020

Kyle C. Jones
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Subject: Comments on Alta Mesa Wind Project (SCH No. 2020120489)

Dear Mr. Jones,

We have reviewed the December 2020 Draft Environmental Assessment/Initial Study ("IS") for the Alta Mesa Wind Project ("Project") located in the County of Riverside ("County"). The Project proposes to decommission 159 existing wind turbines, as well as construct, operate, maintain, and decommission 7 new Wind Turbine Generators ("WTGs") on the 640-acre site.

Our review concludes that the IS fails to adequately evaluate the Project's hazards and hazardous materials and air quality impacts. As a result, emissions impacts associated with construction and operation of the proposed Project are underestimated and inadequately addressed. An EIR should be prepared to adequately assess and mitigate the potential hazards and hazardous materials and air quality impacts that the Project may have on the surrounding environment.

Hazards and Hazardous Materials

Valley Fever Potential has not been Evaluated

The IS fails to consider the potential impact of Project construction on the incidence of Valley Fever, a disease that can be caused by inhalation of spores of a soil-dwelling fungus. An EIR must be prepared to evaluate Valley Fever impacts resulting from Project construction and to include any mitigation. CURE-30

Valley Fever is caused by inhaling the spores of a soil-dwelling fungus, *Coccidioides immitis.*[1] The spores may become airborne when infected soils are disturbed during construction. A 2012 study documented that more than 3,000 people in the United States, with approximately half in California, died from Valley

[1] http://www.cdc.gov/fungal/diseases/coccidioidomycosis/definition.html

Fever between 1990 and 2008.[2] In recent years, reported Valley Fever cases in southwestern Unites States have increased dramatically.[3] Valley Fever is known to exist in Riverside County as indicated in the map below.[4]

CURE-30, cont.

No known cure exists for the disease and there is no vaccine.[5] Common symptoms of Valley Fever include fatigue, fever, cough, headaches, breathing difficulties, rash, muscle aches, and joint pain. Advanced symptoms are marked by chronic pneumonia, meningitis, skin lesions and bone or joint infections. Pneumonia stemming from Valley Fever becomes evident 13 weeks after infection.[6] Project construction and operation will generate dust, which is one of the primary routes of exposure for contracting Valley Fever.[7] Construction workers are susceptible to contracting Valley Fever and are one of the most at-risk populations.[8]

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[2] Jennifer Y. Huang, Benjamin Bristow, Shira Shafir, and Frank Sorvillo, Coccidioidomycosis-associated Deaths, United States, 1990–2008; http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3559166/

[3] Center for Disease Control; Fungal Pneumonia: A Silent Epidemic, Coccidioidomycosis (Valley Fever); http://www.cdc.gov/fungal/pdf/cocci-fact-sheet-sw-us-508c.pdf

[4] https://www.capradio.org/media/1386177/0319%20Valley%20Fever_600x713.jpg

[5] http://www.cdc.gov/fungal/diseases/coccidioidomycosis/risk-prevention.html.

[6] *See, e.g.*, Lisa Valdivia, David Nix, Mark Wright, Elizabeth Lindberg, Timothy Fagan, Donald Lieberman, Prien Stoffer, Neil M. Ampel, and John N. Galgiani, Coccidioidomycosis as a Common Cause of Community-acquired Pneumonia, Emerging Infectious Diseases, v. 12, no. 6, June 2006; http://europepmc.org/articles/PMC3373055.

[7] Rafael Laniado-Laborin, Expanding Understanding of Epidemiology of Coccidioidomycosis in the Western Hemisphere, Ann. N.Y. Acad. Sci., v. 111, 2007, pp. 20-22;
Frederick S. Fisher, Mark W. Bultman, Suzanne M. Johnson, Demosthenes Pappagianis, and Erik Zaborsky Coccidioides Niches and Habitat Parameters in the Southwestern United States, a Matter of Scale, Ann. N.Y. Acad. Sci., No. 1111, 2007, pp. 47-72 ("All of the examined soil locations are noteworthy as generally 50% of the individuals who were exposed to the dust or were excavating dirt at the sites were infected.")

[8] Lawrence L. Schmelzer and R. Tabershaw, Exposure Factors in Occupational Coccidioidomycosis, Am. J. Public Health Nations Health, v. 58, no. 1, 1968, pp. 107-113, Table 3; http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1228046/?page=1

The disease is debilitating and prevents those who have contracted Valley Fever from working.[9] The longest period of disability from occupational exposure in California is to construction workers, with 62% of the reported cases resulting in over 60 days of lost work.[10] Another study estimated the average hospital stay for each (non-construction work) case of coccidioidomycosis at 35 days.[11]

CURE-30, cont.

The potentially exposed population is much larger than construction workers on or adjacent to the Project site because dust generated during Project construction will carry the small spores – 0.002-0.005 millimeters in diameter – into other areas, potentially exposing large segments of the public.[12,13]

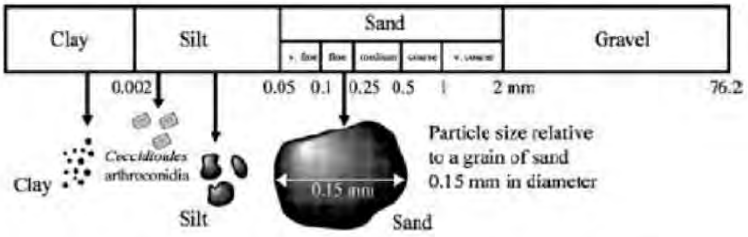

Figure 4: Size of cocci spores compared to soil particles (in mm)
(from: Fisher et al., 2007, Fig. 3)

Valley Fever spores have been documented to travel as far as 500 miles[14] and dust raised during construction has the potential to expose people located miles away.

An EIR should be prepared to consider the following mitigation measures that would be specific to Valley Fever:

1. Minimize Exposure to Potential Valley Fever–Containing Dust through:
    - Cleaning equipment and vehicles of dust
    - Conducting earth-moving activities downwind of worker when possible
    - Spraying areas to be graded with water
    - Ceasing work if water runs out until a water truck can return
    - Using earth-moving vehicles with closed-cabs and equipped with a HEPA-filtered air systems
    - Training workers about Valley Fever and proving informational handouts

[9] Frank E. Swatek, Ecology of *Coccidioides Immitis*, Mycopathologia et Mycologia Applicata, V. 40, Nos. 1-2, pp. 3-12, 1970.
[10] Schmelzer and Tabershaw, 1968, Table 4.
[11] Demosthenes Pappagianis and Hans Einstein, Tempest from Tehachapi Takes Toll or Coccidioides Conveyed Aloft and Afar, West J. Med., v. 129, Dec. 1978, pp. 527-530; http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1238466/pdf/westjmed00256-0079.pdf.
[12] Schmelzer and Tabershaw, 1968, p. 110; Pappagianis and Einstein, 1978.
[13] Pappagianis and Einstein, 1978, p. 527 ("The northern areas were not directly affected by the ground level windstorm that had struck Kern County but the dust was lifted to several thousand feet elevation and, borne on high currents, the soil and arthrospores along with some moisture were gently deposited on sidewalks and automobiles as "a mud storm" that vexed the residents of much of California." The storm originating in Kern County, for example, had major impacts in the San Francisco Bay Area and Sacramento).
[14] David Filip and Sharon Filip, Valley Fever Epidemic, Golden Phoenix Books, 2008, p. 24.

- Providing respirators to workers when requested and providing training on the proper use of personal protective equipment
- Payment of a monetary fee to Imperial County for implementation of Valley Fever public awareness programs
- To require a respiratory protection program that is compliant with California Code of Regulations, Title 8, Section 5144.[15]

CURE-30, cont.

Implementation of these mitigation measures is feasible and would significantly reduce public health impacts. An EIR should be prepared to include these mitigation measures and to adequately assess the potential impact of an increase in the incidence in Valley Fever caused by Project construction.

Air Quality

CURE-31

Unsubstantiated Input Parameters Used to Estimate Project Emission

The IS's air quality analysis relies on emissions calculated with CalEEMod.2016.3.2 (p. 29-30).[16] CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act ("CEQA") requires that such changes be justified by substantial evidence.[17] Once all of the values are inputted into the model, the Project's construction and operational emissions are calculated, and "output files" are generated. These output files disclose to the reader what parameters were utilized in calculating the Project's air pollutant emissions and make known which default values were changed as well as provide justification for the values selected.[18]

When reviewing the Project's CalEEMod output files, we found that several model inputs were not consistent with information disclosed in the IS. As a result, the Project's construction and operational emissions are underestimated. An EIR should be prepared to include an updated air quality analysis that adequately evaluates the impacts that construction and operation of the Project will have on local and regional air quality.

Incorrect Changes to Individual Construction Phase Lengths

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model includes several changes to the default individual construction phase lengths (see excerpt below) (pp. 4).

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[15] California Department of Public Health and California Department of Industrial Relations, Protection from Valley Fever https://www.dir.ca.gov/dosh/valley-fever-home.html

[16] CAPCOA (November 2017) CalEEMod User's Guide, http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4.

[17] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 1, 9.

[18] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 11, 12 – 13. A key feature of the CalEEMod program is the "remarks" feature, where the user explains why a default setting was replaced by a "user defined" value. These remarks are included in the report.

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	440.00	330.00
tblConstructionPhase	NumDays	440.00	330.00
tblConstructionPhase	NumDays	45.00	44.00
tblConstructionPhase	NumDays	20.00	198.00

CURE-31, cont.

As a result of these changes, the model includes a construction schedule as follows (pp. 10):

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days
1	1 Roadway Improvements	Grading	7/1/2021	8/31/2021	5	44
2	2 Installing New WTGs	Building Construction	7/1/2021	10/5/2022	5	330
3	2a Delivering New WTGs Components	Building Construction	7/1/2021	10/5/2022	5	330
4	3 Restoration	Site Preparation	7/1/2022	4/4/2023	5	198
5	4 Decommissioning New WTGs	Trenching	1/1/2053	12/30/2053	5	260

As you can see in the excerpt above, the "Installing New WTGs" and "Delivering New WTGs Components" building construction phases were each modeled to occur from July 1st, 2021 to October 5th, 2022. Furthermore, the "Restoration" site preparation phase was modeled to occur from July 1st, 2021 to April 5th, 2023. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[19] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Phasing approximate per POD dated October 2019, excluding removing legacy towers" (pp. 2). However, the IS states:

> "Construction of the new Project would take approximately 12 months, followed by restoration of temporary disturbance areas as provided in the timeline presented below:
>
> - Pre-construction activity: March 2021 to June 2021
> - *Construction of repowered plant: July 2021 to June 2022*
> - *Restoration of temporary disturbance: July 2022 to March 2023*" (emphasis added) (p. 11).

As the excerpt above demonstrates, the construction of the repowered plant is anticipated to occur from July 2021 to June 2022. As such, the model is incorrect in assuming that the "Installing New WTGs" and "Delivering New WTGs Components" building construction phases would last until October 2022. Furthermore, as the excerpt above demonstrates, the restoration of temporary disturbance is anticipated to occur from July 2022 to March 2023. As such, the model is incorrect in assuming the "Restoration" site preparation phase would last until April 2023. As such, the model *overestimates* the building construction and site preparation phase lengths.

These overestimations present an issue, as they improperly spread out building construction emissions over a longer period of time than is expected. Thus, by including overestimated individual construction

[19] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

phase lengths, the model *underestimates* the Project's daily construction-related emissions and should not be relied upon to determine the significance of the Project's air quality impacts.

CURE-31, cont.

Unsubstantiated Reductions to Off-Road Construction Equipment Unit Amount

CURE-32

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model includes several changes to the default off-road construction equipment unit amounts (see excerpt below) (pp. 2-3).

Table Name	Column Name	Default Value	New Value
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

As you can see in the excerpt above, the total number of off-road construction equipment pieces was manually reduced in the model. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[20] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for these changes are: "Roadway Improvements - Estd Offroad Equipment ct 5," "Install New WTGs - Estd Offroad Equipment ct 16 Off-road Equipment - Ph 2a for on-road only," "Restoration Revegetation - Estd Offroad Equipment ct 3," and "Future year decommissioning new WTGs - Estd Offroad Equipment ct 6" (pp. 2). Furthermore, the IS states:

> "A variety of construction equipment would be required during construction. This would include component trucks to transport the wind turbines and main erector crane, concrete trucks for pouring foundations, trucks used to transport aggregate and general construction and material delivery trucks. Additional construction equipment includes the main erector crane and RT cranes" (p. 14).

As the excerpt above demonstrates, the IS fails to mention or substantiate the *number of pieces* of off-road construction equipment. As such, we cannot verify the revised equipment unit amount values. By including unsubstantiated reductions to the Project's off-road construction equipment unit amounts, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

[20] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9.

CURE-33

Unsubstantiated Changes to On Hauling, Vendor, and Worker Percent Paved Values

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model includes several changes to the default hauling, vendor, and worker percent paved values (see excerpt below) (pp. 5).

Table Name	Column Name	Default Value	New Value
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	HaulingPercentPave	50.00	99.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	VendorPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00
tblOnRoadDust	WorkerPercentPave	50.00	90.00

As you can see in the excerpt above, the model assumes the Project hauling, vendor, and worker trips would travel on paved roads for 98% of the duration of travel. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[21] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for these changes are: "final fraction of average trip is unpaved" (pp. 2). However, the IS fails to mention hauling, vendor, and worker percent paved values or justify these changes whatsoever. As such, we cannot verify the revised percent paved values. This presents an issue as CalEEMod uses the percentage of paved roads to determine the construction-related fugitive dust emissions from on-road vehicles.[22] As a result, the Project's construction-related emissions may be underestimated, and the model should not be relied upon to determine Project significance.

Unsubstantiated Change to the Road Percent Paved Value

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model manually alters the default road percent paved value (see excerpt below) (pp. 5).

Table Name	Column Name	Default Value	New Value
tblRoadDust	RoadPercentPave	50	90

[21] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9.
[22] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 35.

As you can see in the excerpt above, the model assumes that operational vehicle trips would travel on paved roads for 98% of the duration of travel. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[23] According to the "User Entered Comments and Non-Default Data" table, the justifications provided for these changes are: "final fraction of worker trip is unpaved" (pp. 2). However, the IS fails to mention road percent paved values or justify these changes whatsoever. As such, we cannot verify the revised percent paved values. This presents an issue as CalEEMod uses the percentage of paved roads to determine the operational fugitive dust emissions from on-road vehicles.[24] As a result, the Project's operational emissions may be underestimated, and the model should not be relied upon to determine Project significance.

CURE-33, cont.

Unsubstantiated Reduction to Solid Waste Generation Rate

CURE-34

Review of the CalEEMod output files demonstrates that the solid waste generation rate was manually reduced from the default value of 1,612- to 0-tons per year ("tons/year") in the "Mesa Wind Repower - CEQA Tech Support" model (see excerpt below) (pp. 5).

Table Name	Column Name	Default Value	New Value
tblSolidWaste	SolidWasteGenerationRate	1,612.00	0.00

As you can see in the excerpt above, the model assumes the Project would not generate any solid waste. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[25] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "no solid waste applicable in operational phase" (pp. 2). However, the IS states:

> "Some waste generated during construction and maintenance would be green waste (vegetation) and recycled (plastic and aluminum trash, other metals, etc.)" (p. 97).

As the above excerpt demonstrates, operation of the Project would, in fact, generate green waste and recyclables. Thus, the assumption that the Project would not generate any solid waste is inconsistent with the information provided by the IS. This unsubstantiated reduction presents an issue, as CalEEMod uses the solid waste generation rate to calculate the Project's operation greenhouse gas ("GHG") emissions associated with the disposal of solid waste into landfills.[26] Thus, by including an unsubstantiated reduction to the Project's solid waste generation rate, the model may underestimate the Project's waste-related operational emissions and should not be relied upon to determine Project significance.

[23] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9.
[24] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 37.
[25] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9.
[26] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 46.

Incorrect Indoor Water Use Rate

CURE-35

Review of the CalEEMod output files demonstrates that the indoor water use rate was manually reduced from the default value of 300,625,000- to 0-gallons per year ("gpy") in the "Mesa Wind Repower - CEQA Tech Support" model (see excerpt below) (pp. 5).

Table Name	Column Name	Default Value	New Value
tblWater	IndoorWaterUseRate	300,625,000.00	0.00

As you can see in the excerpt above, the model assumes the Project would not use any water. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[27] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "no water use applicable in operational phase" (pp. 2). However, the IS states:

> "Following construction, the Project would use up to 7,300 gallons per year, primarily at the O&M building" (p. 18).

As the above excerpt demonstrates, the Project expects to use 7,300 gpy during operation. Thus, the model underestimates the Project's anticipated water use rate by 7,300 gpy. This underestimation presents an issue, as CalEEMod uses the indoor water use rate to estimate the amount of wastewater, which has direct emissions of greenhouse gases.[28] By including an underestimated water use rate, the model underestimates the Project's water-related operational emissions and should not be relied upon to determine Project significance.

Underestimated Number of Vendor Trips

CURE-36

According to the IS, "[i]t is estimated that there would be a maximum addition of... approximately *30 daily truck deliveries* during construction" (emphasis added) (p. 90). As such, the model should have included 30 vendor trips during construction. However, review of the CalEEMod output files demonstrate that the "Mesa Wind Repower - CEQA Tech Support" model only includes 10 vendor trips for during the building construction phases (see excerpt below) (pp. 11).

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
1 Roadway Improvements	5	50.00	10.00	2,888.00
2 Installing New WTGs	16	250.00	10.00	7,960.00
2a Delivering New WTGs Components	0	0.00	0.00	500.00
3 Restoration	3	50.00	2.00	792.00
4 Decommissioning New WTGs	6	50.00	2.00	3,120.00

[27] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[28] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 44, 45.

As you can see in the excerpt above, the model underestimates the number of vendor trips required for construction by 20 trips. As such, the vendor trip numbers inputted into the model are underestimated and inconsistent with the information provided in the IS. By including underestimated vendor trip numbers, the model underestimates the Project's construction-related emissions and should not be relied upon to determine Project significance.

CURE-36, cont.

Unsubstantiated Operational Vehicle Trip Rates

CURE-37

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model includes several unsubstantiated changes to the default operational vehicle trip rates (see excerpt below) (pp. 6).

Table Name	Column Name	Default Value	New Value
tblVehicleTrips	ST_TR	1.49	0.05
tblVehicleTrips	SU_TR	0.62	0.05
tblVehicleTrips	WD_TR	3.82	0.05

As you can see in the excerpt above, the default operational vehicle trip rates were manually reduced in the model. As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[29] According to the "User Entered Comments and Non-Default Data" table, the justification provided for these changes is: "Operational mobile sources under 100 trips daily" (pp. 2). However, the IS and associated documents fail to mention operational trips rates or justify these changes whatsoever. As such, we cannot verify the revised trip rates in the model. By including unsubstantiated reductions to the default operational vehicle trip rates, the model may underestimate the Project's mobile-source operational emissions and should not be relied upon to determine Project significance.

Incorrect Application of Construction-Related Mitigation Measures

CURE-38

Review of the CalEEMod output files demonstrates that the "Mesa Wind Repower - CEQA Tech Support" model includes the following construction-related mitigation measures: "Use Soil Stabilizer" and "Water Exposed Area" (pp. 13).

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Furthermore, the model includes a 50% moisture content (see excerpt below) (pp. 2).

[29] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5

CURE-38, cont.

As previously mentioned, the CalEEMod User's Guide requires any changes to model defaults be justified.[30] According to the "User Entered Comments and Non-Default Data" table, the justification provided for the inclusion of these measures is: "Mitigation includes offroad Tier 3 fleet or higher, stabilizer is 84% effective per Table XI-D, watering 2x daily is 55% effective PM10 control per Rule 403, unpaved travel speed limit 15 mph" (pp. 2). Furthermore, the IS implements MM-AQ-1, which states:

> "MM-AQ-1 Fugitive Dust Control Plan. The Project would mitigate the particulate matter impact caused by dust emissions during construction by implementing a suite of effective dust control practices, such as using soil stabilizers *or* watering exposed areas (2 times/day or as needed) throughout construction and by limiting vehicle travel speeds to no more than 15 miles per hour on unpaved areas within the construction site. Visible speed limit signs would be posted at site entrance" (emphasis added) (IS, pp. 34).

As you can see in the excerpt above, MM-AQ-1 fails to explicitly require but the use of soil stabilizers *and* watering exposed areas. As such, we cannot verify the inclusion of both mitigation measures in the model.

Furthermore, according to SCAQMD Rule 403, Projects can *either* water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph *or* apply a chemical stabilizer (see excerpt below).[31]

Table 2 (Continued)

FUGITIVE DUST SOURCE CATEGORY	CONTROL ACTIONS	
Unpaved Roads	(4a)	Water all roads used for any vehicular traffic at least once per every two hours of active operations [3 times per normal 8 hour work day]; OR
	(4b)	Water all roads used for any vehicular traffic once daily and restrict vehicle speeds to 15 miles per hour; OR
	(4c)	Apply a chemical stabilizer to all unpaved road surfaces in sufficient quantity and frequency to maintain a stabilized surface.

As you can see in the above excerpt, to simply comply with SCAQMD Rule 403, the Project may *either* water unpaved roads 3 times per day, water unpaved roads 1 time per day and limit vehicle speeds to 15 mph, *or* apply a chemical stabilizer. Thus, none of the measures included in the CalEEMod model are explicitly required by SCAQMD Rule 403, and we cannot verify their inclusion in the model. By including the above-mentioned construction-related mitigation measures without properly committing to their

[30] CalEEMod User Guide, *available at:* http://www.caleemod.com/, p. 2, 9
[31] "RULE 403. FUGITIVE DUST." SCAQMD, June 2005, *available at:* http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-403.pdf, p. 403-21, Table 2.

implementation, the model may underestimate the Project's construction-related emissions and should not be relied upon to determine Project significance.

CURE-38, cont.

Updated Analysis Indicates a Potentially Significant Air Quality Impact

CURE-39

In an effort to determine the Project's construction-related and operational emissions, we prepared an updated CalEEMod model, using the Project-specific information provided by the IS. In our updated model, we corrected the individual construction phase lengths, vendor trip numbers, and indoor water use rate; omitted the unsubstantiated reductions to the operational vehicle trip rates, off-road construction equipment unit amounts, and solid waste generation rate; and excluded the unsubstantiated construction-related mitigation measures. Our updated analysis demonstrates that the NO_X, PM_{10}, and $PM_{2.5}$ emissions associated with Project construction, and the NO_X, PM_{10}, and $PM_{2.5}$ emissions associated with Project operation, exceed the 100-, 150-, 55-, 55-, 150-, and 55-pounds per day ("lbs/day") thresholds set by the SCAQMD, respectively (see table below).[32]

Construction Model	NOX	PM10	PM2.5
IS	99.2563	141.5514	19.6069
SWAPE	134.0715	9,374.90	942.9132
% Increase	35%	6,523%	4,709%
SCAQMD Regional Threshold (lbs/day)	**100**	**150**	**55**
Threshold Exceeded?	***Yes***	***Yes***	***Yes***

Operational Model	NOX	PM10	PM2.5
IS	1.4188	48.682	4.9319
SWAPE	108.3054	18,439.73	1,840.71
% Increase	7,534%	37,778%	37,222%
SCAQMD Regional Threshold (lbs/day)	**55**	**150**	**55**
Threshold Exceeded?	***Yes***	***Yes***	***Yes***

As you can see in the excerpt above, when modeled correctly, the Project's construction-related NO_X, PM_{10}, and $PM_{2.5}$ emissions increase by approximately 35%, 6,523%, and 4,709%, respectively, and exceed the SCAQMD significance thresholds. Furthermore, the Project's operational NO_X, PM_{10}, and $PM_{2.5}$ emissions increase by approximately 7,534%, 37,778%, and 37,222%, respectively, and exceed the SCAQMD significance thresholds. Thus, our model demonstrates that the Project would result in a potentially significant air quality impact that was not previously identified or addressed in the IS. As a result, an EIR should be prepared to adequately assess and mitigate the potential air quality impacts that the Project may have on the surrounding environment.

Feasible Mitigation Measures Available to Reduce Emissions

CURE-40

Our analysis demonstrates that the Project would result in a potentially significant air quality impact that should be mitigated further before the Project is approved. In an effort to further reduce the

[32] "South Coast AQMD Air Quality Significance Thresholds." SCAQMD, April 2019, *available at*: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

Project's emissions, we identified several mitigation measures that are applicable to the proposed Project from NEDC's *Diesel Emission Controls in Construction Projects.*[33] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

CURE-40, cont.

NEDC's *Diesel Emission Controls in Construction Projects*[34]
Measures – Diesel Emission Control Technology
a. Diesel Onroad Vehicles All diesel nonroad vehicles on site for more than 10 total days must have either (1) engines that meet EPA onroad emissions standards or (2) emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
b. Diesel Generators All diesel generators on site for more than 10 total days must be equipped with emission control technology verified by EPA or CARB to reduce PM emissions by a minimum of 85%.
c. Upon confirming that the diesel vehicle, construction equipment, or generator has either an engine meeting Tier 4 non road emission standards or emission control technology, as specified above, installed and functioning, the developer will issue a compliance sticker. All diesel vehicles, construction equipment, and generators on site shall display the compliance sticker in a visible, external location as designated by the developer.
d. Emission control technology shall be operated, maintained, and serviced as recommended by the emission control technology manufacturer.
e. All diesel vehicles, construction equipment, and generators on site shall be fueled with ultra-low sulfur diesel fuel (ULSD) or a biodiesel blend[35] approved by the original engine manufacturer with sulfur content of 15 ppm or less.
Measures – Additional Diesel Requirements
a. Construction shall not proceed until the contractor submits a certified list of all diesel vehicles, construction equipment, and generators to be used on site. The list shall include the following: i. Contractor and subcontractor name and address, plus contact person responsible for the vehicles or equipment. ii. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, engine serial number, and expected fuel usage and hours of operation.

[33] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[34] "Diesel Emission Controls in Construction Projects." Northeast Diesel Collaborative (NEDC), December 2010, *available at:* https://www.epa.gov/sites/production/files/2015-09/documents/nedc-model-contract-sepcification.pdf.

[35] Biodiesel blends are only to be used in conjunction with the technologies which have been verified for use with biodiesel blends and are subject to the following requirements: http://www.arb.ca.gov/diesel/verdev/reg/biodieselcompliance.pdf.

	iii. For the emission control technology installed: technology type, serial number, make, model, manufacturer, EPA/CARB verification number/level, and installation date and hour-meter reading on installation date.
b.	If the contractor subsequently needs to bring on site equipment not on the list, the contractor shall submit written notification within 24 hours that attests the equipment complies with all contract conditions and provide information.
c.	All diesel equipment shall comply with all pertinent local, state, and federal regulations relative to exhaust emission controls and safety.
d.	The contractor shall establish generator sites and truck-staging zones for vehicles waiting to load or unload material on site. Such zones shall be located where diesel emissions have the least impact on abutters, the general public, and especially sensitive receptors such as hospitals, schools, daycare facilities, elderly housing, and convalescent facilities.
Reporting	
a.	For each onroad diesel vehicle, nonroad construction equipment, or generator, the contractor shall submit to the developer's representative a report prior to bringing said equipment on site that includes: i. Equipment type, equipment manufacturer, equipment serial number, engine manufacturer, engine model year, engine certification (Tier rating), horsepower, and engine serial number. ii. The type of emission control technology installed, serial number, make, model, manufacturer, and EPA/CARB verification number/level. iii. The Certification Statement signed and printed on the contractor's letterhead.
b.	The contractor shall submit to the developer's representative a monthly report that, for each onroad diesel vehicle, nonroad construction equipment, or generator onsite, includes: i. Hour-meter readings on arrival on-site, the first and last day of every month, and on off-site date. ii. Any problems with the equipment or emission controls. iii. Certified copies of fuel deliveries for the time period that identify: 1. Source of supply 2. Quantity of fuel 3. Quality of fuel, including sulfur content (percent by weight)

CURE-40, cont.

Furthermore, in an effort to reduce the Project's emissions, we identified several mitigation measures that are applicable to the Project from the SMAQMD's *Enhanced Exhaust Control Practices*, which attempt to reduce emissions.[36] Therefore, to reduce the Project's emissions, consideration of the following measures should be made:

[36] "Enhanced Exhaust Control Practices." Sacramento Metropolitan Air Quality Management District (SMAQMD)October 2013, *available at:* http://www.airquality.org/LandUseTransportation/Documents/Ch3EnhancedExhaustControlFINAL10-2013.pdf.

CURE-40, cont.

SMAQMD's *Enhanced Exhaust Control Practices*[37]
1. The project representative shall submit to the lead agency and District a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the construction project. • The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. • The project representative shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. • This information shall be submitted at least 4 business days prior to the use of subject heavy-duty off-road equipment. • The District's Equipment List Form can be used to submit this information. • The inventory shall be updated and submitted monthly throughout the duration of the project, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.
2. The project representative shall provide a plan for approval by the lead agency and District demonstrating that the heavy-duty off-road vehicles (50 horsepower or more) to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20% NOX reduction and 45% particulate reduction compared to the most recent California Air Resources Board (ARB) fleet average. • This plan shall be submitted in conjunction with the equipment inventory. • Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. • The District's Construction Mitigation Calculator can be used to identify an equipment fleet that achieves this reduction.
3. The project representative shall ensure that emissions from all off-road diesel powered equipment used on the project site do not exceed 40% opacity for more than three minutes in any one hour. • Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately. • Non-compliant equipment will be documented and a summary provided to the lead agency and District monthly. • A visual survey of all in-operation equipment shall be made at least weekly. • A monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey.

[37] "Enhanced Exhaust Control Practices." Sacramento Metropolitan Air Quality Management District (SMAQMD)October 2013, *available at:* http://www.airquality.org/LandUseTransportation/Documents/Ch3EnhancedExhaustControlFINAL10-2013.pdf.

4. The District and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this mitigation shall supersede other District, state or federal rules or regulations.

CURE-40, cont.

These measures offer a cost-effective, feasible way to incorporate lower-emitting design features into the proposed Project, which subsequently, reduce emissions released during Project construction. An EIR should be prepared to include all feasible mitigation measures to ensure that the necessary mitigation measures are implemented to reduce emissions to below thresholds. The EIR should also demonstrate a commitment to the implementation of these measures prior to Project approval, to ensure that the Project's significant emissions are reduced to the maximum extent possible.

Disclaimer

SWAPE has received limited discovery regarding this project. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

Matt Hagemann, P.G., C.Hg.

Paul E. Rosenfeld, Ph.D.

Alta Mesa Wind Repower

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	1,300.00	1000sqft	29.84	1,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS's model.

Land Use - Consistent with the IS's model.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Off-road Equipment -

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts. Equipment usage hours consistent with the IS's model.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Consistent with the IS's model. See SWAPE comment regarding number of vendor trips.

On-road Fugitive Dust - Consistent with the IS's model.

Grading - Consistent with the IS's model.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Road Dust - Consistent with the IS's model.

Consumer Products - Consistent with the IS's model.

Area Coating - Consistent with IS's model.

Energy Use - Consistent with IS's model.

Water And Wastewater - See SWAPE comment regarding water use rate.

Construction Off-road Equipment Mitigation - Consistent with the IS's model. See SWAPE comment regarding construction-related mitigation measures.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	45.00	44.00
tblConstructionPhase	NumDays	20.00	174.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	110.00	107.00
tblGrading	AcresOfGrading	0.00	107.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialExported	0.00	2,000.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00

tblTripsAndVMT	HaulingTripLength	20.00	140.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	250.00	2,888.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,960.00
tblTripsAndVMT	HaulingTripNumber	0.00	500.00
tblTripsAndVMT	HaulingTripNumber	250.00	792.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,120.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	213.00	30.00
tblTripsAndVMT	VendorTripNumber	213.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00
tblTripsAndVMT	WorkerTripNumber	546.00	250.00
tblTripsAndVMT	WorkerTripNumber	546.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	3.00	50.00
tblWater	IndoorWaterUseRate	300,625,000.00	7,300.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.5147	5.5075	4.1136	0.0153	439.3757	0.1909	439.5666	43.9562	0.1785	44.1347	0.0000	1,400.4067	1,400.4067	0.1485	0.0000	1,404.1190
2022	0.5263	5.1043	4.0523	0.0122	386.3307	0.2061	386.5368	39.1261	0.1916	39.3176	0.0000	1,110.4148	1,110.4148	0.1557	0.0000	1,114.3077
2023	0.0635	0.6191	0.4388	1.1100e-003	28.0883	0.0274	28.1157	2.9808	0.0252	3.0060	0.0000	99.4957	99.4957	0.0240	0.0000	100.0946
2053	0.0150	0.0949	0.2339	3.9000e-004	132.5468	9.7000e-004	132.5478	13.2355	9.7000e-004	13.2365	0.0000	33.3200	33.3200	1.1700e-003	0.0000	33.3493
Maximum	**0.5263**	**5.5075**	**4.1136**	**0.0153**	**439.3757**	**0.2061**	**439.5666**	**43.9562**	**0.1916**	**44.1347**	**0.0000**	**1,400.4067**	**1,400.4067**	**0.1557**	**0.0000**	**1,404.1190**

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.5147	5.5075	4.1136	0.0153	439.3757	0.1909	439.5666	43.9562	0.1785	44.1347	0.0000	1,400.4062	1,400.4062	0.1485	0.0000	1,404.1184
2022	0.5263	5.1043	4.0523	0.0122	386.3307	0.2061	386.5368	39.1261	0.1916	39.3176	0.0000	1,110.4142	1,110.4142	0.1557	0.0000	1,114.3071
2023	0.0635	0.6191	0.4388	1.1100e-003	28.0883	0.0274	28.1157	2.9808	0.0252	3.0060	0.0000	99.4956	99.4956	0.0240	0.0000	100.0945
2053	0.0150	0.0949	0.2339	3.9000e-004	132.5468	9.7000e-004	132.5478	13.2355	9.7000e-004	13.2365	0.0000	33.3199	33.3199	1.1700e-003	0.0000	33.3492
Maximum	**0.5263**	**5.5075**	**4.1136**	**0.0153**	**439.3757**	**0.2061**	**439.5666**	**43.9562**	**0.1916**	**44.1347**	**0.0000**	**1,400.4062**	**1,400.4062**	**0.1557**	**0.0000**	**1,404.1184**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	7-1-2021	9-30-2021	3.8588	3.8588
2	10-1-2021	12-31-2021	2.1128	2.1128
3	1-1-2022	3-31-2022	1.8451	1.8451
4	4-1-2022	6-30-2022	1.2608	1.2608
5	7-1-2022	9-30-2022	1.2694	1.2694
6	10-1-2022	12-31-2022	1.2706	1.2706
7	1-1-2023	3-31-2023	0.6803	0.6803
127	1-1-2053	3-31-2053	0.0271	0.0271

128	**4-1-2053**	**6-30-2053**	0.0274	0.0274
129	**7-1-2053**	**9-30-2053**	0.0277	0.0277
		Highest	3.8588	3.8588

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.7350	15.7382	21.2370	0.0851	2,661.8926	0.0563	2,661.9490	265.6651	0.0530	265.7181	0.0000	7,912.3064	7,912.3064	0.4717	0.0000	7,924.0981
Waste						0.0000	0.0000		0.0000	0.0000	327.2214	0.0000	327.2214	19.3382	0.0000	810.6773
Water						0.0000	0.0000		0.0000	0.0000	2.3200e-003	0.0000	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003
Total	**1.7361**	**15.7383**	**21.2490**	**0.0851**	**2,661.8926**	**0.0564**	**2,661.9490**	**265.6651**	**0.0530**	**265.7181**	**327.2238**	**7,912.3296**	**8,239.5534**	**19.8102**	**1.0000e-005**	**8,734.8101**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	1.7350	15.7382	21.2370	0.0851	2,661.8926	0.0563	2,661.9490	265.6651	0.0530	265.7181	0.0000	7,912.3064	7,912.3064	0.4717	0.0000	7,924.0981
Waste						0.0000	0.0000		0.0000	0.0000	327.2214	0.0000	327.2214	19.3382	0.0000	810.6773
Water						0.0000	0.0000		0.0000	0.0000	2.3200e-003	0.0000	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003
Total	**1.7361**	**15.7383**	**21.2490**	**0.0851**	**2,661.8926**	**0.0564**	**2,661.9490**	**265.6651**	**0.0530**	**265.7181**	**327.2238**	**7,912.3296**	**8,239.5534**	**19.8102**	**1.0000e-005**	**8,734.8101**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Roadway Improvements	Grading	7/1/2021	8/31/2021	5	44	
2	2 Installling New WTGs	Building Construction	7/1/2021	6/1/2022	5	240	
3	2a Delivering New WTGs Components	Building Construction	7/1/2021	6/1/2022	5	240	
4	3 Restoration	Site Preparation	7/1/2022	3/1/2023	5	174	
5	Decommissioning New WTGs	Trenching	1/1/2053	12/31/2053	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Alta Mesa Wind Repower - Salton Sea Air Basin, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Roadway Improvements	Excavators	2	8.00	158	0.38
1 Roadway Improvements	Graders	1	8.00	187	0.41
1 Roadway Improvements	Rubber Tired Dozers	1	8.00	247	0.40
1 Roadway Improvements	Scrapers	2	8.00	367	0.48
1 Roadway Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 Installing New WTGs	Cranes	1	10.00	231	0.29
2 Installing New WTGs	Forklifts	3	10.00	89	0.20
2 Installing New WTGs	Generator Sets	1	8.00	84	0.74
2 Installing New WTGs	Tractors/Loaders/Backhoes	3	8.00	97	0.37
2 Installing New WTGs	Welders	1	8.00	46	0.45
2a Delivering New WTGs Components	Cranes	1	7.00	231	0.29
2a Delivering New WTGs Components	Forklifts	3	8.00	89	0.20
2a Delivering New WTGs Components	Generator Sets	1	8.00	84	0.74
2a Delivering New WTGs Components	Pavers	0		130	0.42
2a Delivering New WTGs Components	Paving Equipment	0		132	0.36
2a Delivering New WTGs Components	Rollers	0		80	0.38
2a Delivering New WTGs Components	Tractors/Loaders/Backhoes	3	7.00	97	0.37
2a Delivering New WTGs Components	Welders	1	8.00	46	0.45
3 Restoration	Rubber Tired Dozers	3	8.00	247	0.40
3 Restoration	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Decommissioning New WTGs	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Roadway Improvements	8	50.00	10.00	2,888.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2 Installing New WTGs	9	250.00	30.00	7,960.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2a Delivering New WTGs Components	9	0.00	0.00	500.00	14.60	6.20	140.00	LD_Mix	HDT_Mix	HHDT
3 Restoration	7	50.00	2.00	792.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
Decommissioning New WTGs	1	50.00	2.00	3,120.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Reduce Vehicle Speed on Unpaved Roads

3.2 1 Roadway Improvements - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1894	0.0000	0.1894	0.0790	0.0000	0.0790	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0922	1.0208	0.6793	1.3600e-003		0.0437	0.0437		0.0402	0.0402	0.0000	119.8890	119.8890	0.0388	0.0000	120.8583
Total	**0.0922**	**1.0208**	**0.6793**	**1.3600e-003**	**0.1894**	**0.0437**	**0.2331**	**0.0790**	**0.0402**	**0.1192**	**0.0000**	**119.8890**	**119.8890**	**0.0388**	**0.0000**	**120.8583**

3.2 1 Roadway Improvements - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0154	0.6209	0.0959	2.8400e-003	60.3066	2.6800e-003	60.3093	6.0268	2.5600e-003	6.0294	0.0000	270.7431	270.7431	6.5200e-003	0.0000	270.9061
Vendor	6.4000e-004	0.0204	4.8900e-003	5.0000e-005	0.9495	4.0000e-005	0.9495	0.0949	4.0000e-005	0.0950	0.0000	5.2134	5.2134	4.0000e-004	0.0000	5.2233
Worker	6.3800e-003	4.8500e-003	0.0484	1.1000e-004	11.1769	7.0000e-005	11.1769	1.1166	7.0000e-005	1.1166	0.0000	9.8918	9.8918	4.0000e-004	0.0000	9.9017
Total	**0.0224**	**0.6461**	**0.1492**	**3.0000e-003**	**72.4330**	**2.7900e-003**	**72.4358**	**7.2383**	**2.6700e-003**	**7.2410**	**0.0000**	**285.8484**	**285.8484**	**7.3200e-003**	**0.0000**	**286.0312**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1894	0.0000	0.1894	0.0790	0.0000	0.0790	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0922	1.0208	0.6793	1.3600e-003		0.0437	0.0437		0.0402	0.0402	0.0000	119.8888	119.8888	0.0388	0.0000	120.8582
Total	**0.0922**	**1.0208**	**0.6793**	**1.3600e-003**	**0.1894**	**0.0437**	**0.2331**	**0.0790**	**0.0402**	**0.1192**	**0.0000**	**119.8888**	**119.8888**	**0.0388**	**0.0000**	**120.8582**

3.2 1 Roadway Improvements - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0154	0.6209	0.0959	2.8400e-003	60.3066	2.6800e-003	60.3093	6.0268	2.5600e-003	6.0294	0.0000	270.7431	270.7431	6.5200e-003	0.0000	270.9061
Vendor	6.4000e-004	0.0204	4.8900e-003	5.0000e-005	0.9495	4.0000e-005	0.9495	0.0949	4.0000e-005	0.0950	0.0000	5.2134	5.2134	4.0000e-004	0.0000	5.2233
Worker	6.3800e-003	4.8500e-003	0.0484	1.1000e-004	11.1769	7.0000e-005	11.1769	1.1166	7.0000e-005	1.1166	0.0000	9.8918	9.8918	4.0000e-004	0.0000	9.9017
Total	**0.0224**	**0.6461**	**0.1492**	**3.0000e-003**	**72.4330**	**2.7900e-003**	**72.4358**	**7.2383**	**2.6700e-003**	**7.2410**	**0.0000**	**285.8484**	**285.8484**	**7.3200e-003**	**0.0000**	**286.0312**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1467	1.3758	1.2568	2.0700e-003		0.0751	0.0751		0.0703	0.0703	0.0000	178.8293	178.8293	0.0453	0.0000	179.9612
Total	**0.1467**	**1.3758**	**1.2568**	**2.0700e-003**		**0.0751**	**0.0751**		**0.0703**	**0.0703**	**0.0000**	**178.8293**	**178.8293**	**0.0453**	**0.0000**	**179.9612**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0234	0.9412	0.1453	4.3000e-003	166.1960	4.0600e-003	166.2001	16.6030	3.8800e-003	16.6069	0.0000	410.4271	410.4271	9.8800e-003	0.0000	410.6742
Vendor	5.7500e-003	0.1831	0.0440	4.9000e-004	8.5455	3.6000e-004	8.5459	0.8543	3.4000e-004	0.8546	0.0000	46.9208	46.9208	3.5600e-003	0.0000	47.0098
Worker	0.0958	0.0727	0.7260	1.6400e-003	167.6531	1.0900e-003	167.6542	16.7482	1.0100e-003	16.7492	0.0000	148.3774	148.3774	5.9400e-003	0.0000	148.5258
Total	**0.1249**	**1.1971**	**0.9153**	**6.4300e-003**	**342.3946**	**5.5100e-003**	**342.4001**	**34.2055**	**5.2300e-003**	**34.2107**	**0.0000**	**605.7253**	**605.7253**	**0.0194**	**0.0000**	**606.2098**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1467	1.3758	1.2568	2.0700e-003		0.0751	0.0751		0.0703	0.0703	0.0000	178.8291	178.8291	0.0453	0.0000	179.9610
Total	**0.1467**	**1.3758**	**1.2568**	**2.0700e-003**		**0.0751**	**0.0751**		**0.0703**	**0.0703**	**0.0000**	**178.8291**	**178.8291**	**0.0453**	**0.0000**	**179.9610**

3.3 2 Installling New WTGs - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0234	0.9412	0.1453	4.3000e-003	166.1960	4.0600e-003	166.2001	16.6030	3.8800e-003	16.6069	0.0000	410.4271	410.4271	9.8800e-003	0.0000	410.6742
Vendor	5.7500e-003	0.1831	0.0440	4.9000e-004	8.5455	3.6000e-004	8.5459	0.8543	3.4000e-004	0.8546	0.0000	46.9208	46.9208	3.5600e-003	0.0000	47.0098
Worker	0.0958	0.0727	0.7260	1.6400e-003	167.6531	1.0900e-003	167.6542	16.7482	1.0100e-003	16.7492	0.0000	148.3774	148.3774	5.9400e-003	0.0000	148.5258
Total	**0.1249**	**1.1971**	**0.9153**	**6.4300e-003**	**342.3946**	**5.5100e-003**	**342.4001**	**34.2055**	**5.2300e-003**	**34.2107**	**0.0000**	**605.7253**	**605.7253**	**0.0194**	**0.0000**	**606.2098**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1076	1.0046	1.0140	1.7000e-003		0.0519	0.0519		0.0486	0.0486	0.0000	146.3703	146.3703	0.0369	0.0000	147.2915
Total	**0.1076**	**1.0046**	**1.0140**	**1.7000e-003**		**0.0519**	**0.0519**		**0.0486**	**0.0486**	**0.0000**	**146.3703**	**146.3703**	**0.0369**	**0.0000**	**147.2915**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0178	0.6745	0.1150	3.4800e-003	166.1909	2.7300e-003	166.1936	16.6012	2.6100e-003	16.6038	0.0000	331.8900	331.8900	7.6700e-003	0.0000	332.0817
Vendor	4.3700e-003	0.1413	0.0332	4.0000e-004	6.9918	2.5000e-004	6.9920	0.6990	2.4000e-004	0.6992	0.0000	38.0676	38.0676	2.7100e-003	0.0000	38.1352
Worker	0.0733	0.0542	0.5468	1.3000e-003	137.1707	8.7000e-004	137.1716	13.7031	8.0000e-004	13.7039	0.0000	116.9531	116.9531	4.4300e-003	0.0000	117.0638
Total	**0.0955**	**0.8700**	**0.6949**	**5.1800e-003**	**310.3534**	**3.8500e-003**	**310.3572**	**31.0032**	**3.6500e-003**	**31.0068**	**0.0000**	**486.9107**	**486.9107**	**0.0148**	**0.0000**	**487.2807**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1076	1.0046	1.0140	1.7000e-003		0.0519	0.0519		0.0486	0.0486	0.0000	146.3702	146.3702	0.0369	0.0000	147.2913
Total	**0.1076**	**1.0046**	**1.0140**	**1.7000e-003**		**0.0519**	**0.0519**		**0.0486**	**0.0486**	**0.0000**	**146.3702**	**146.3702**	**0.0369**	**0.0000**	**147.2913**

3.3 2 Installling New WTGs - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0178	0.6745	0.1150	3.4800e-003	166.1909	2.7300e-003	166.1936	16.6012	2.6100e-003	16.6038	0.0000	331.8900	331.8900	7.6700e-003	0.0000	332.0817
Vendor	4.3700e-003	0.1413	0.0332	4.0000e-004	6.9918	2.5000e-004	6.9920	0.6990	2.4000e-004	0.6992	0.0000	38.0676	38.0676	2.7100e-003	0.0000	38.1352
Worker	0.0733	0.0542	0.5468	1.3000e-003	137.1707	8.7000e-004	137.1716	13.7031	8.0000e-004	13.7039	0.0000	116.9531	116.9531	4.4300e-003	0.0000	117.0638
Total	**0.0955**	**0.8700**	**0.6949**	**5.1800e-003**	**310.3534**	**3.8500e-003**	**310.3572**	**31.0032**	**3.6500e-003**	**31.0068**	**0.0000**	**486.9107**	**486.9107**	**0.0148**	**0.0000**	**487.2807**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1255	1.1505	1.0940	1.7800e-003		0.0633	0.0633		0.0595	0.0595	0.0000	152.8806	152.8806	0.0369	0.0000	153.8027
Total	**0.1255**	**1.1505**	**1.0940**	**1.7800e-003**		**0.0633**	**0.0633**		**0.0595**	**0.0595**	**0.0000**	**152.8806**	**152.8806**	**0.0369**	**0.0000**	**153.8027**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9800e-003	0.1172	0.0191	6.0000e-004	24.3587	5.9000e-004	24.3593	2.4334	5.6000e-004	2.4340	0.0000	57.2341	57.2341	8.6000e-004	0.0000	57.2557
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9800e-003**	**0.1172**	**0.0191**	**6.0000e-004**	**24.3587**	**5.9000e-004**	**24.3593**	**2.4334**	**5.6000e-004**	**2.4340**	**0.0000**	**57.2341**	**57.2341**	**8.6000e-004**	**0.0000**	**57.2557**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1255	1.1505	1.0940	1.7800e-003		0.0633	0.0633		0.0595	0.0595	0.0000	152.8804	152.8804	0.0369	0.0000	153.8025
Total	**0.1255**	**1.1505**	**1.0940**	**1.7800e-003**		**0.0633**	**0.0633**		**0.0595**	**0.0595**	**0.0000**	**152.8804**	**152.8804**	**0.0369**	**0.0000**	**153.8025**

3.4 2a Delivering New WTGs Components - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9800e-003	0.1172	0.0191	6.0000e-004	24.3587	5.9000e-004	24.3593	2.4334	5.6000e-004	2.4340	0.0000	57.2341	57.2341	8.6000e-004	0.0000	57.2557
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.9800e-003**	**0.1172**	**0.0191**	**6.0000e-004**	**24.3587**	**5.9000e-004**	**24.3593**	**2.4334**	**5.6000e-004**	**2.4340**	**0.0000**	**57.2341**	**57.2341**	**8.6000e-004**	**0.0000**	**57.2557**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0921	0.8432	0.8836	1.4500e-003		0.0437	0.0437		0.0411	0.0411	0.0000	125.1316	125.1316	0.0300	0.0000	125.8811
Total	**0.0921**	**0.8432**	**0.8836**	**1.4500e-003**		**0.0437**	**0.0437**		**0.0411**	**0.0411**	**0.0000**	**125.1316**	**125.1316**	**0.0300**	**0.0000**	**125.8811**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2700e-003	0.0825	0.0151	4.9000e-004	24.3580	3.9000e-004	24.3584	2.4332	3.8000e-004	2.4335	0.0000	46.2760	46.2760	6.8000e-004	0.0000	46.2930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.2700e-003**	**0.0825**	**0.0151**	**4.9000e-004**	**24.3580**	**3.9000e-004**	**24.3584**	**2.4332**	**3.8000e-004**	**2.4335**	**0.0000**	**46.2760**	**46.2760**	**6.8000e-004**	**0.0000**	**46.2930**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0921	0.8432	0.8836	1.4500e-003		0.0437	0.0437		0.0411	0.0411	0.0000	125.1315	125.1315	0.0300	0.0000	125.8809
Total	**0.0921**	**0.8432**	**0.8836**	**1.4500e-003**		**0.0437**	**0.0437**		**0.0411**	**0.0411**	**0.0000**	**125.1315**	**125.1315**	**0.0300**	**0.0000**	**125.8809**

3.4 2a Delivering New WTGs Components - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.2700e-003	0.0825	0.0151	4.9000e-004	24.3580	3.9000e-004	24.3584	2.4332	3.8000e-004	2.4335	0.0000	46.2760	46.2760	6.8000e-004	0.0000	46.2930
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**2.2700e-003**	**0.0825**	**0.0151**	**4.9000e-004**	**24.3580**	**3.9000e-004**	**24.3584**	**2.4332**	**3.8000e-004**	**2.4335**	**0.0000**	**46.2760**	**46.2760**	**6.8000e-004**	**0.0000**	**46.2930**

3.5 3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2403	0.0000	1.2403	0.6566	0.0000	0.6566	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2076	2.1670	1.2902	2.4900e-003		0.1056	0.1056		0.0972	0.0972	0.0000	219.0280	219.0280	0.0708	0.0000	220.7990
Total	**0.2076**	**2.1670**	**1.2902**	**2.4900e-003**	**1.2403**	**0.1056**	**1.3459**	**0.6566**	**0.0972**	**0.7538**	**0.0000**	**219.0280**	**219.0280**	**0.0708**	**0.0000**	**220.7990**

3.5 3 Restoration - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9700e-003	0.1123	0.0191	5.8000e-004	16.5371	4.5000e-004	16.5376	1.6523	4.3000e-004	1.6528	0.0000	55.2479	55.2479	1.2800e-003	0.0000	55.2798
Vendor	3.5000e-004	0.0114	2.6800e-003	3.0000e-005	0.5654	2.0000e-005	0.5654	0.0565	2.0000e-005	0.0565	0.0000	3.0783	3.0783	2.2000e-004	0.0000	3.0838
Worker	0.0178	0.0132	0.1326	3.1000e-004	33.2766	2.1000e-004	33.2768	3.3243	1.9000e-004	3.3245	0.0000	28.3720	28.3720	1.0700e-003	0.0000	28.3988
Total	**0.0211**	**0.1369**	**0.1545**	**9.2000e-004**	**50.3791**	**6.8000e-004**	**50.3798**	**5.0331**	**6.4000e-004**	**5.0338**	**0.0000**	**86.6982**	**86.6982**	**2.5700e-003**	**0.0000**	**86.7624**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.2403	0.0000	1.2403	0.6566	0.0000	0.6566	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.2076	2.1670	1.2902	2.4900e-003		0.1056	0.1056		0.0972	0.0972	0.0000	219.0278	219.0278	0.0708	0.0000	220.7987
Total	**0.2076**	**2.1670**	**1.2902**	**2.4900e-003**	**1.2403**	**0.1056**	**1.3459**	**0.6566**	**0.0972**	**0.7538**	**0.0000**	**219.0278**	**219.0278**	**0.0708**	**0.0000**	**220.7987**

3.5 3 Restoration - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.9700e-003	0.1123	0.0191	5.8000e-004	16.5371	4.5000e-004	16.5376	1.6523	4.3000e-004	1.6528	0.0000	55.2479	55.2479	1.2800e-003	0.0000	55.2798
Vendor	3.5000e-004	0.0114	2.6800e-003	3.0000e-005	0.5654	2.0000e-005	0.5654	0.0565	2.0000e-005	0.0565	0.0000	3.0783	3.0783	2.2000e-004	0.0000	3.0838
Worker	0.0178	0.0132	0.1326	3.1000e-004	33.2766	2.1000e-004	33.2768	3.3243	1.9000e-004	3.3245	0.0000	28.3720	28.3720	1.0700e-003	0.0000	28.3988
Total	**0.0211**	**0.1369**	**0.1545**	**9.2000e-004**	**50.3791**	**6.8000e-004**	**50.3798**	**5.0331**	**6.4000e-004**	**5.0338**	**0.0000**	**86.6982**	**86.6982**	**2.5700e-003**	**0.0000**	**86.7624**

3.5 3 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4454	0.0000	0.4454	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0572	0.5918	0.3923	8.2000e-004		0.0272	0.0272		0.0250	0.0250	0.0000	71.9190	71.9190	0.0233	0.0000	72.5005
Total	**0.0572**	**0.5918**	**0.3923**	**8.2000e-004**	**0.4454**	**0.0272**	**0.4726**	**0.2197**	**0.0250**	**0.2447**	**0.0000**	**71.9190**	**71.9190**	**0.0233**	**0.0000**	**72.5005**

3.5 3 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-004	0.0205	5.5800e-003	1.8000e-004	16.5345	7.0000e-005	16.5346	1.6514	6.0000e-005	1.6515	0.0000	17.6296	17.6296	3.2000e-004	0.0000	17.6377
Vendor	9.0000e-005	2.8900e-003	7.7000e-004	1.0000e-005	0.1856	0.0000	0.1856	0.0186	0.0000	0.0186	0.0000	0.9880	0.9880	5.0000e-005	0.0000	0.9893
Worker	5.4800e-003	3.9500e-003	0.0402	1.0000e-004	10.9229	7.0000e-005	10.9229	1.0912	6.0000e-005	1.0912	0.0000	8.9591	8.9591	3.2000e-004	0.0000	8.9671
Total	**6.2700e-003**	**0.0273**	**0.0466**	**2.9000e-004**	**27.6430**	**1.4000e-004**	**27.6431**	**2.7611**	**1.2000e-004**	**2.7613**	**0.0000**	**27.5767**	**27.5767**	**6.9000e-004**	**0.0000**	**27.5941**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.4454	0.0000	0.4454	0.2197	0.0000	0.2197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0572	0.5918	0.3923	8.2000e-004		0.0272	0.0272		0.0250	0.0250	0.0000	71.9189	71.9189	0.0233	0.0000	72.5004
Total	**0.0572**	**0.5918**	**0.3923**	**8.2000e-004**	**0.4454**	**0.0272**	**0.4726**	**0.2197**	**0.0250**	**0.2447**	**0.0000**	**71.9189**	**71.9189**	**0.0233**	**0.0000**	**72.5004**

3.5 3 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	7.0000e-004	0.0205	5.5800e-003	1.8000e-004	16.5345	7.0000e-005	16.5346	1.6514	6.0000e-005	1.6515	0.0000	17.6296	17.6296	3.2000e-004	0.0000	17.6377
Vendor	9.0000e-005	2.8900e-003	7.7000e-004	1.0000e-005	0.1856	0.0000	0.1856	0.0186	0.0000	0.0186	0.0000	0.9880	0.9880	5.0000e-005	0.0000	0.9893
Worker	5.4800e-003	3.9500e-003	0.0402	1.0000e-004	10.9229	7.0000e-005	10.9229	1.0912	6.0000e-005	1.0912	0.0000	8.9591	8.9591	3.2000e-004	0.0000	8.9671
Total	**6.2700e-003**	**0.0273**	**0.0466**	**2.9000e-004**	**27.6430**	**1.4000e-004**	**27.6431**	**2.7611**	**1.2000e-004**	**2.7613**	**0.0000**	**27.5767**	**27.5767**	**6.9000e-004**	**0.0000**	**27.5941**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0150	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3200	33.3200	1.1700e-003	0.0000	33.3493
Total	**0.0150**	**0.0949**	**0.2339**	**3.9000e-004**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**	**0.0000**	**33.3200**	**33.3200**	**1.1700e-003**	**0.0000**	**33.3493**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					65.1311	0.0000	65.1311	6.5037	0.0000	6.5037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					1.1260	0.0000	1.1260	0.1124	0.0000	0.1124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					66.2897	0.0000	66.2897	6.6194	0.0000	6.6194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**132.5468**	**0.0000**	**132.5468**	**13.2355**	**0.0000**	**13.2355**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0150	0.0949	0.2339	3.9000e-004		9.7000e-004	9.7000e-004		9.7000e-004	9.7000e-004	0.0000	33.3199	33.3199	1.1700e-003	0.0000	33.3492
Total	**0.0150**	**0.0949**	**0.2339**	**3.9000e-004**		**9.7000e-004**	**9.7000e-004**		**9.7000e-004**	**9.7000e-004**	**0.0000**	**33.3199**	**33.3199**	**1.1700e-003**	**0.0000**	**33.3492**

3.6 Decommissioning New WTGs - 2053

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling					65.1311	0.0000	65.1311	6.5037	0.0000	6.5037	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor					1.1260	0.0000	1.1260	0.1124	0.0000	0.1124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker					66.2897	0.0000	66.2897	6.6194	0.0000	6.6194	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total					**132.5468**	**0.0000**	**132.5468**	**13.2355**	**0.0000**	**13.2355**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.7350	15.7382	21.2370	0.0851	2,661.8926	0.0563	2,661.9490	265.8651	0.0530	265.7181	0.0000	7,912.3064	7,912.3064	0.4717	0.0000	7,924.0981
Unmitigated	1.7350	15.7382	21.2370	0.0851	2,661.8926	0.0563	2,661.9490	265.8651	0.0530	265.7181	0.0000	7,912.3064	7,912.3064	0.4717	0.0000	7,924.0981

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	4,966.00	1,937.00	806.00	14,288,967	14,288,967
Total	4,966.00	1,937.00	806.00	14,288,967	14,288,967

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Manufacturing	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Manufacturing	0.490441	0.036099	0.183975	0.121725	0.015214	0.005252	0.022424	0.112230	0.002972	0.001873	0.006187	0.000783	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Manufacturing	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248
Unmitigated	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248
Total	**1.1100e-003**	**1.1000e-004**	**0.0120**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0232**	**0.0232**	**6.0000e-005**	**0.0000**	**0.0248**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.1100e-003	1.1000e-004	0.0120	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0232	0.0232	6.0000e-005	0.0000	0.0248
Total	**1.1100e-003**	**1.1000e-004**	**0.0120**	**0.0000**		**4.0000e-005**	**4.0000e-005**		**4.0000e-005**	**4.0000e-005**	**0.0000**	**0.0232**	**0.0232**	**6.0000e-005**	**0.0000**	**0.0248**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003
Unmitigated	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Manufacturing	0.0073 / 0	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003
Total		**2.3200e-003**	**2.4000e-004**	**1.0000e-005**	**9.9400e-003**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Manufacturing	0.0073 / 0	2.3200e-003	2.4000e-004	1.0000e-005	9.9400e-003
Total		**2.3200e-003**	**2.4000e-004**	**1.0000e-005**	**9.9400e-003**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	327.2214	19.3382	0.0000	810.6773
Unmitigated	327.2214	19.3382	0.0000	810.6773

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Manufacturing	1612	327.2214	19.3382	0.0000	810.6773
Total		**327.2214**	**19.3382**	**0.0000**	**810.6773**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Manufacturing	1612	327.2214	19.3382	0.0000	810.6773
Total		**327.2214**	**19.3382**	**0.0000**	**810.6773**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alta Mesa Wind Repower

Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	1,300.00	1000sqft	29.84	1,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS's model.

Land Use - Consistent with the IS's model.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Off-road Equipment -

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts. Equipment usage hours consistent with the IS's model.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Consistent with the IS's model. See SWAPE comment regarding number of vendor trips.

On-road Fugitive Dust - Consistent with the IS's model.

Grading - Consistent with the IS's model.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Road Dust - Consistent with the IS's model.

Consumer Products - Consistent with the IS's model.

Area Coating - Consistent with IS's model.

Energy Use - Consistent with IS's model.

Water And Wastewater - See SWAPE comment regarding water use rate.

Construction Off-road Equipment Mitigation - Consistent with the IS's model. See SWAPE comment regarding construction-related mitigation measures.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	45.00	44.00
tblConstructionPhase	NumDays	20.00	174.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	110.00	107.00
tblGrading	AcresOfGrading	0.00	107.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialExported	0.00	2,000.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00

tblTripsAndVMT	HaulingTripLength	20.00	140.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	250.00	2,888.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,960.00
tblTripsAndVMT	HaulingTripNumber	0.00	500.00
tblTripsAndVMT	HaulingTripNumber	250.00	792.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,120.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	213.00	30.00
tblTripsAndVMT	VendorTripNumber	213.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00
tblTripsAndVMT	WorkerTripNumber	546.00	250.00
tblTripsAndVMT	WorkerTripNumber	546.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	3.00	50.00
tblWater	IndoorWaterUseRate	300,625,000.00	7,300.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	11.2939	134.0715	86.2834	0.3598	9,370.5996	4.3013	9,374.9009	938.9099	4.0033	942.9132	0.0000	36,560.5022	36,560.5022	4.0410	0.0000	36,661.5288
2022	5.5223	51.8797	47.2505	0.1608	6,557.5025	1.8482	6,559.3506	655.0355	1.7364	656.7718	0.0000	16,185.7933	16,185.7933	1.6848	0.0000	16,227.9135
2023	2.9530	28.7957	20.1957	0.0514	1,378.9407	1.2724	1,380.2131	145.8610	1.1708	147.0318	0.0000	5,060.9794	5,060.9794	1.2277	0.0000	5,091.6713
2053	0.1149	0.7270	1.7923	2.9700e-003	1,074.5438	7.4300e-003	1,074.5512	107.2961	7.4300e-003	107.3036	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6957
Maximum	**11.2939**	**134.0715**	**86.2834**	**0.3598**	**9,370.5996**	**4.3013**	**9,374.9009**	**938.9099**	**4.0033**	**942.9132**	**0.0000**	**36,560.5022**	**36,560.5022**	**4.0410**	**0.0000**	**36,661.5288**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	11.2939	134.0715	86.2834	0.3598	9,370.5996	4.3013	9,374.9009	938.9099	4.0033	942.9132	0.0000	36,560.5022	36,560.5022	4.0410	0.0000	36,661.5287
2022	5.5223	51.8797	47.2505	0.1608	6,557.5025	1.8482	6,559.3506	655.0355	1.7364	656.7718	0.0000	16,185.7933	16,185.7933	1.6848	0.0000	16,227.9135
2023	2.9530	28.7957	20.1957	0.0514	1,378.9407	1.2724	1,380.2131	145.8610	1.1708	147.0318	0.0000	5,060.9794	5,060.9794	1.2277	0.0000	5,091.6713
2053	0.1149	0.7270	1.7923	2.9700e-003	1,074.5438	7.4300e-003	1,074.5512	107.2961	7.4300e-003	107.3036	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6957
Maximum	**11.2939**	**134.0715**	**86.2834**	**0.3598**	**9,370.5996**	**4.3013**	**9,374.9009**	**938.9099**	**4.0033**	**942.9132**	**0.0000**	**36,560.5022**	**36,560.5022**	**4.0410**	**0.0000**	**36,661.5287**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	10.9509	108.3042	137.1179	0.5626	18,439.3308	0.3948	18,439.7256	1,840.3346	0.3715	1,840.7060		57,682.4244	57,682.4244	3.6680		57,774.1242
Total	**10.9632**	**108.3054**	**137.2508**	**0.5626**	**18,439.3308**	**0.3953**	**18,439.7261**	**1,840.3346**	**0.3719**	**1,840.7065**		**57,682.7089**	**57,682.7089**	**3.6687**	**0.0000**	**57,774.4275**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	10.9509	108.3042	137.1179	0.5626	18,439.3308	0.3948	18,439.7256	1,840.3346	0.3715	1,840.7060		57,682.4244	57,682.4244	3.6680		57,774.1242
Total	**10.9632**	**108.3054**	**137.2508**	**0.5626**	**18,439.3308**	**0.3953**	**18,439.7261**	**1,840.3346**	**0.3719**	**1,840.7065**		**57,682.7089**	**57,682.7089**	**3.6687**	**0.0000**	**57,774.4275**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Roadway Improvements	Grading	7/1/2021	8/31/2021	5	44	
2	2 Installling New WTGs	Building Construction	7/1/2021	6/1/2022	5	240	
3	2a Delivering New WTGs Components	Building Construction	7/1/2021	6/1/2022	5	240	
4	3 Restoration	Site Preparation	7/1/2022	3/1/2023	5	174	
5	Decommissioning New WTGs	Trenching	1/1/2053	12/31/2053	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Alta Mesa Wind Repower - Salton Sea Air Basin, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Roadway Improvements	Excavators	2	8.00	158	0.38
1 Roadway Improvements	Graders	1	8.00	187	0.41
1 Roadway Improvements	Rubber Tired Dozers	1	8.00	247	0.40
1 Roadway Improvements	Scrapers	2	8.00	367	0.48
1 Roadway Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 Installling New WTGs	Cranes	1	10.00	231	0.29
2 Installling New WTGs	Forklifts	3	10.00	89	0.20
2 Installling New WTGs	Generator Sets	1	8.00	84	0.74
2 Installling New WTGs	Tractors/Loaders/Backhoes	3	8.00	97	0.37
2 Installling New WTGs	Welders	1	8.00	46	0.45
2a Delivering New WTGs Components	Cranes	1	7.00	231	0.29
2a Delivering New WTGs Components	Forklifts	3	8.00	89	0.20
2a Delivering New WTGs Components	Generator Sets	1	8.00	84	0.74
2a Delivering New WTGs Components	Pavers	0		130	0.42
2a Delivering New WTGs Components	Paving Equipment	0		132	0.36
2a Delivering New WTGs Components	Rollers	0		80	0.38
2a Delivering New WTGs Components	Tractors/Loaders/Backhoes	3	7.00	97	0.37
2a Delivering New WTGs Components	Welders	1	8.00	46	0.45
3 Restoration	Rubber Tired Dozers	3	8.00	247	0.40
3 Restoration	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Decommissioning New WTGs	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Roadway Improvements	8	50.00	10.00	2,888.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2 Installling New WTGs	9	250.00	30.00	7,960.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2a Delivering New WTGs Components	9	0.00	0.00	500.00	14.60	6.20	140.00	LD_Mix	HDT_Mix	HHDT
3 Restoration	7	50.00	2.00	792.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
Decommissioning New WTGs	1	50.00	2.00	3,120.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Reduce Vehicle Speed on Unpaved Roads

3.2 1 Roadway Improvements - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6101	0.0000	8.6101	3.5901	0.0000	3.5901			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6101**	**1.9853**	**10.5954**	**3.5901**	**1.8265**	**5.4166**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.2 1 Roadway Improvements - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7120	28.3004	4.5583	0.1281	2,900.0156	0.1222	2,900.1378	289.7968	0.1169	289.9137		13,473.4977	13,473.4977	0.3440		13,482.0975
Vendor	0.0303	0.9139	0.2463	2.4300e-003	45.6592	1.8500e-003	45.6610	4.5641	1.7700e-003	4.5658		254.0776	254.0776	0.0212		254.6074
Worker	0.2901	0.2245	1.9411	4.6300e-003	537.4764	3.3200e-003	537.4797	53.6900	3.0500e-003	53.6931		460.3781	460.3781	0.0181		460.8302
Total	**1.0323**	**29.4388**	**6.7457**	**0.1352**	**3,483.1512**	**0.1274**	**3,483.2786**	**348.0508**	**0.1218**	**348.1726**		**14,187.9533**	**14,187.9533**	**0.3833**		**14,197.5351**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6101	0.0000	8.6101	3.5901	0.0000	3.5901			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6101**	**1.9853**	**10.5954**	**3.5901**	**1.8265**	**5.4166**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.2 1 Roadway Improvements - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.7120	28.3004	4.5583	0.1281	2,900.0156	0.1222	2,900.1378	289.7968	0.1169	289.9137		13,473.4977	13,473.4977	0.3440		13,482.0975
Vendor	0.0303	0.9139	0.2463	2.4300e-003	45.6592	1.8500e-003	45.6610	4.5641	1.7700e-003	4.5658		254.0776	254.0776	0.0212		254.6074
Worker	0.2901	0.2245	1.9411	4.6300e-003	537.4764	3.3200e-003	537.4797	53.6900	3.0500e-003	53.6931		460.3781	460.3781	0.0181		460.8302
Total	**1.0323**	**29.4388**	**6.7457**	**0.1352**	**3,483.1512**	**0.1274**	**3,483.2786**	**348.0508**	**0.1218**	**348.1726**		**14,187.9533**	**14,187.9533**	**0.3833**		**14,197.5351**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2230	20.8459	19.0422	0.0314		1.1371	1.1371		1.0655	1.0655		2,986.7516	2,986.7516	0.7562		3,005.6561
Total	**2.2230**	**20.8459**	**19.0422**	**0.0314**		**1.1371**	**1.1371**		**1.0655**	**1.0655**		**2,986.7516**	**2,986.7516**	**0.7562**		**3,005.6561**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3598	14.3005	2.3033	0.0648	2,664.0231	0.0618	2,664.0849	266.1223	0.0591	266.1814		6,808.2840	6,808.2840	0.1738		6,812.6296
Vendor	0.0909	2.7417	0.7389	7.2800e-003	136.9775	5.5600e-003	136.9830	13.6922	5.3200e-003	13.6975		762.2328	762.2328	0.0636		763.8223
Worker	1.4503	1.1225	9.7054	0.0231	2,687.3821	0.0166	2,687.3987	268.4500	0.0153	268.4653		2,301.8904	2,301.8904	0.0904		2,304.1509
Total	**1.9009**	**18.1647**	**12.7476**	**0.0952**	**5,488.3827**	**0.0839**	**5,488.4666**	**548.2645**	**0.0797**	**548.3442**		**9,872.4072**	**9,872.4072**	**0.3278**		**9,880.6028**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2230	20.8459	19.0422	0.0314		1.1371	1.1371		1.0655	1.0655	0.0000	2,986.7516	2,986.7516	0.7562		3,005.6561
Total	**2.2230**	**20.8459**	**19.0422**	**0.0314**		**1.1371**	**1.1371**		**1.0655**	**1.0655**	**0.0000**	**2,986.7516**	**2,986.7516**	**0.7562**		**3,005.6561**

3.3 2 Installling New WTGs - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3598	14.3005	2.3033	0.0648	2,664.0231	0.0618	2,664.0849	266.1223	0.0591	266.1814		6,808.2840	6,808.2840	0.1738		6,812.6296
Vendor	0.0909	2.7417	0.7389	7.2800e-003	136.9775	5.5600e-003	136.9830	13.6922	5.3200e-003	13.6975		762.2328	762.2328	0.0636		763.8223
Worker	1.4503	1.1225	9.7054	0.0231	2,687.3821	0.0166	2,687.3987	268.4500	0.0153	268.4653		2,301.8904	2,301.8904	0.0904		2,304.1509
Total	**1.9009**	**18.1647**	**12.7476**	**0.0952**	**5,488.3827**	**0.0839**	**5,488.4666**	**548.2645**	**0.0797**	**548.3442**		**9,872.4072**	**9,872.4072**	**0.3278**		**9,880.6028**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9931	18.6043	18.7776	0.0314		0.9604	0.9604		0.9004	0.9004		2,987.8827	2,987.8827	0.7522		3,006.6868
Total	**1.9931**	**18.6043**	**18.7776**	**0.0314**		**0.9604**	**0.9604**		**0.9004**	**0.9004**		**2,987.8827**	**2,987.8827**	**0.7522**		**3,006.6868**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3359	12.5132	2.2256	0.0640	3,255.9333	0.0507	3,255.9840	325.2261	0.0486	325.2747		6,728.4774	6,728.4774	0.1648		6,732.5972
Vendor	0.0845	2.5853	0.6828	7.2200e-003	136.9775	4.6800e-003	136.9822	13.6922	4.4800e-003	13.6967		755.6936	755.6936	0.0591		757.1714
Worker	1.3601	1.0223	8.9164	0.0223	2,687.3821	0.0160	2,687.3982	268.4500	0.0148	268.4648		2,217.6834	2,217.6834	0.0824		2,219.7435
Total	**1.7805**	**16.1208**	**11.8248**	**0.0935**	**6,080.2929**	**0.0715**	**6,080.3643**	**607.3683**	**0.0678**	**607.4361**		**9,701.8544**	**9,701.8544**	**0.3063**		**9,709.5121**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9931	18.6043	18.7776	0.0314		0.9604	0.9604		0.9004	0.9004	0.0000	2,987.8827	2,987.8827	0.7522		3,006.6868
Total	**1.9931**	**18.6043**	**18.7776**	**0.0314**		**0.9604**	**0.9604**		**0.9004**	**0.9004**	**0.0000**	**2,987.8827**	**2,987.8827**	**0.7522**		**3,006.6868**

3.3 2 Installling New WTGs - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3359	12.5132	2.2256	0.0640	3,255.9333	0.0507	3,255.9840	325.2261	0.0486	325.2747		6,728.4774	6,728.4774	0.1648		6,732.5972
Vendor	0.0845	2.5853	0.6828	7.2200e-003	136.9775	4.6800e-003	136.9822	13.6922	4.4800e-003	13.6967		755.6936	755.6936	0.0591		757.1714
Worker	1.3601	1.0223	8.9164	0.0223	2,687.3821	0.0160	2,687.3982	268.4500	0.0148	268.4648		2,217.6834	2,217.6834	0.0824		2,219.7435
Total	**1.7805**	**16.1208**	**11.8248**	**0.0935**	**6,080.2929**	**0.0715**	**6,080.3643**	**607.3683**	**0.0678**	**607.4361**		**9,701.8544**	**9,701.8544**	**0.3063**		**9,709.5121**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0455	1.7903	0.2942	9.0600e-003	390.4556	8.9000e-003	390.4645	39.0045	8.5200e-003	39.0130		952.9828	952.9828	0.0150		953.3570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0455**	**1.7903**	**0.2942**	**9.0600e-003**	**390.4556**	**8.9000e-003**	**390.4645**	**39.0045**	**8.5200e-003**	**39.0130**		**952.9828**	**952.9828**	**0.0150**		**953.3570**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 2a Delivering New WTGs Components - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0455	1.7903	0.2942	9.0600e-003	390.4556	8.9000e-003	390.4645	39.0045	8.5200e-003	39.0130		952.9828	952.9828	0.0150		953.3570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0455**	**1.7903**	**0.2942**	**9.0600e-003**	**390.4556**	**8.9000e-003**	**390.4645**	**39.0045**	**8.5200e-003**	**39.0130**		**952.9828**	**952.9828**	**0.0150**		**953.3570**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0425	1.5390	0.2847	8.9500e-003	477.2096	7.3200e-003	477.2169	47.6671	7.0000e-003	47.6741		941.7227	941.7227	0.0144		942.0824
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0425**	**1.5390**	**0.2847**	**8.9500e-003**	**477.2096**	**7.3200e-003**	**477.2169**	**47.6671**	**7.0000e-003**	**47.6741**		**941.7227**	**941.7227**	**0.0144**		**942.0824**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 2a Delivering New WTGs Components - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0425	1.5390	0.2847	8.9500e-003	477.2096	7.3200e-003	477.2169	47.6671	7.0000e-003	47.6741		941.7227	941.7227	0.0144		942.0824
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0425**	**1.5390**	**0.2847**	**8.9500e-003**	**477.2096**	**7.3200e-003**	**477.2169**	**47.6671**	**7.0000e-003**	**47.6741**		**941.7227**	**941.7227**	**0.0144**		**942.0824**

3.5 3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.7207**	**1.6126**	**20.3333**	**10.0015**	**1.4836**	**11.4850**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.5 3 Restoration - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0461	1.7173	0.3054	8.7800e-003	267.1028	6.9600e-003	267.1097	26.6864	6.6600e-003	26.6930		923.4022	923.4022	0.0226		923.9676
Vendor	5.6400e-003	0.1724	0.0455	4.8000e-004	9.1318	3.1000e-004	9.1321	0.9128	3.0000e-004	0.9131		50.3796	50.3796	3.9400e-003		50.4781
Worker	0.2720	0.2045	1.7833	4.4600e-003	537.4764	3.2100e-003	537.4796	53.6900	2.9500e-003	53.6930		443.5367	443.5367	0.0165		443.9487
Total	**0.3238**	**2.0941**	**2.1342**	**0.0137**	**813.7110**	**0.0105**	**813.7215**	**81.2892**	**9.9100e-003**	**81.2991**		**1,417.3184**	**1,417.3184**	**0.0430**		**1,418.3944**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.7207**	**1.6126**	**20.3333**	**10.0015**	**1.4836**	**11.4850**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.5 3 Restoration - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0461	1.7173	0.3054	8.7800e-003	267.1028	6.9600e-003	267.1097	26.6864	6.6600e-003	26.6930		923.4022	923.4022	0.0226		923.9676
Vendor	5.6400e-003	0.1724	0.0455	4.8000e-004	9.1318	3.1000e-004	9.1321	0.9128	3.0000e-004	0.9131		50.3796	50.3796	3.9400e-003		50.4781
Worker	0.2720	0.2045	1.7833	4.4600e-003	537.4764	3.2100e-003	537.4796	53.6900	2.9500e-003	53.6930		443.5367	443.5367	0.0165		443.9487
Total	**0.3238**	**2.0941**	**2.1342**	**0.0137**	**813.7110**	**0.0105**	**813.7215**	**81.2892**	**9.9100e-003**	**81.2991**		**1,417.3184**	**1,417.3184**	**0.0430**		**1,418.3944**

3.5 3 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.7207**	**1.2660**	**19.9867**	**10.0015**	**1.1647**	**11.1662**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

3.5 3 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0331	0.9517	0.2684	8.5300e-003	813.6118	3.1600e-003	813.6149	81.2568	3.0200e-003	81.2598		897.6924	897.6924	0.0173		898.1239
Vendor	4.4300e-003	0.1328	0.0391	4.7000e-004	9.1318	1.2000e-004	9.1320	0.9128	1.2000e-004	0.9129		49.2733	49.2733	2.8000e-003		49.3433
Worker	0.2560	0.1870	1.6438	4.2900e-003	537.4764	3.1200e-003	537.4795	53.6900	2.8700e-003	53.6929		426.7056	426.7056	0.0151		427.0822
Total	**0.2936**	**1.2715**	**1.9514**	**0.0133**	**1,360.2200**	**6.4000e-003**	**1,360.2264**	**135.8596**	**6.0100e-003**	**135.8656**		**1,373.6713**	**1,373.6713**	**0.0351**		**1,374.5494**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.7207**	**1.2660**	**19.9867**	**10.0015**	**1.1647**	**11.1662**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

3.5 3 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0331	0.9517	0.2684	8.5300e-003	813.6118	3.1600e-003	813.6149	81.2568	3.0200e-003	81.2598		897.6924	897.6924	0.0173		898.1239
Vendor	4.4300e-003	0.1328	0.0391	4.7000e-004	9.1318	1.2000e-004	9.1320	0.9128	1.2000e-004	0.9129		49.2733	49.2733	2.8000e-003		49.3433
Worker	0.2560	0.1870	1.6438	4.2900e-003	537.4764	3.1200e-003	537.4795	53.6900	2.8700e-003	53.6929		426.7056	426.7056	0.0151		427.0822
Total	**0.2936**	**1.2715**	**1.9514**	**0.0133**	**1,360.2200**	**6.4000e-003**	**1,360.2264**	**135.8596**	**6.0100e-003**	**135.8656**		**1,373.6713**	**1,373.6713**	**0.0351**		**1,374.5494**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
Total	**0.1149**	**0.7270**	**1.7923**	**2.9700e-003**		**7.4300e-003**	**7.4300e-003**		**7.4300e-003**	**7.4300e-003**		**281.4481**	**281.4481**	**9.9000e-003**		**281.6957**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					528.0114	0.0000	528.0114	52.7234	0.0000	52.7234			0.0000			0.0000
Vendor					9.1285	0.0000	9.1285	0.9115	0.0000	0.9115			0.0000			0.0000
Worker					537.4039	0.0000	537.4039	53.6612	0.0000	53.6612			0.0000			0.0000
Total					**1,074.5438**	**0.0000**	**1,074.5438**	**107.2961**	**0.0000**	**107.2961**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
Total	**0.1149**	**0.7270**	**1.7923**	**2.9700e-003**		**7.4300e-003**	**7.4300e-003**		**7.4300e-003**	**7.4300e-003**	**0.0000**	**281.4481**	**281.4481**	**9.9000e-003**		**281.6957**

3.6 Decommissioning New WTGs - 2053

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					528.0114	0.0000	528.0114	52.7234	0.0000	52.7234			0.0000			0.0000
Vendor					9.1285	0.0000	9.1285	0.9115	0.0000	0.9115			0.0000			0.0000
Worker					537.4039	0.0000	537.4039	53.6612	0.0000	53.6612			0.0000			0.0000
Total					**1,074.5438**	**0.0000**	**1,074.5438**	**107.2961**	**0.0000**	**107.2961**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	10.9509	108.3042	137.1179	0.5626	18,439.3308	0.3948	18,439.7256	1,840.3346	0.3715	1,840.7060		57,682.4244	57,682.4244	3.6680		57,774.1242
Unmitigated	10.9509	108.3042	137.1179	0.5626	18,439.3308	0.3948	18,439.7256	1,840.3346	0.3715	1,840.7060		57,682.4244	57,682.4244	3.6680		57,774.1242

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	4,966.00	1,937.00	806.00	14,288,967	14,288,967
Total	4,966.00	1,937.00	806.00	14,288,967	14,288,967

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Manufacturing	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Manufacturing	0.490441	0.036099	0.183975	0.121725	0.015214	0.005252	0.022424	0.112230	0.002972	0.001873	0.006187	0.000783	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Unmitigated	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Total	**0.0124**	**1.2100e-003**	**0.1329**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**		**0.2845**	**0.2845**	**7.5000e-004**		**0.3033**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Total	**0.0124**	**1.2100e-003**	**0.1329**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**		**0.2845**	**0.2845**	**7.5000e-004**		**0.3033**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Alta Mesa Wind Repower

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Manufacturing	1,300.00	1000sqft	29.84	1,300,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2022
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Consistent with the IS's model.

Land Use - Consistent with the IS's model.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Off-road Equipment -

Off-road Equipment - See SWAPE comment regarding construction equipment unit amounts. Equipment usage hours consistent with the IS's model.

Off-road Equipment -

Off-road Equipment -

Trips and VMT - Consistent with the IS's model. See SWAPE comment regarding number of vendor trips.

On-road Fugitive Dust - Consistent with the IS's model.

Grading - Consistent with the IS's model.

Vehicle Trips - See SWAPE comment regarding operational vehicle trip rates.

Road Dust - Consistent with the IS's model.

Consumer Products - Consistent with the IS's model.

Area Coating - Consistent with IS's model.

Energy Use - Consistent with IS's model.

Water And Wastewater - See SWAPE comment regarding water use rate.

Construction Off-road Equipment Mitigation - Consistent with the IS's model. See SWAPE comment regarding construction-related mitigation measures.

Table Name	Column Name	Default Value	New Value
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	40
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	440.00	240.00
tblConstructionPhase	NumDays	45.00	44.00
tblConstructionPhase	NumDays	20.00	174.00
tblConsumerProducts	ROG_EF	2.14E-05	0
tblEnergyUse	LightingElect	2.93	0.00
tblEnergyUse	NT24E	5.02	0.00
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24E	2.20	0.00
tblEnergyUse	T24NG	15.36	0.00
tblGrading	AcresOfGrading	110.00	107.00
tblGrading	AcresOfGrading	0.00	107.00
tblGrading	MaterialExported	0.00	2,000.00
tblGrading	MaterialExported	0.00	2,000.00
tblOffRoadEquipment	UsageHours	7.00	10.00
tblOffRoadEquipment	UsageHours	8.00	10.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00

tblTripsAndVMT	HaulingTripLength	20.00	140.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripLength	20.00	60.00
tblTripsAndVMT	HaulingTripNumber	250.00	2,888.00
tblTripsAndVMT	HaulingTripNumber	0.00	7,960.00
tblTripsAndVMT	HaulingTripNumber	0.00	500.00
tblTripsAndVMT	HaulingTripNumber	250.00	792.00
tblTripsAndVMT	HaulingTripNumber	0.00	3,120.00
tblTripsAndVMT	VendorTripNumber	0.00	10.00
tblTripsAndVMT	VendorTripNumber	213.00	30.00
tblTripsAndVMT	VendorTripNumber	213.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	20.00	50.00
tblTripsAndVMT	WorkerTripNumber	546.00	250.00
tblTripsAndVMT	WorkerTripNumber	546.00	0.00
tblTripsAndVMT	WorkerTripNumber	18.00	50.00
tblTripsAndVMT	WorkerTripNumber	3.00	50.00
tblWater	IndoorWaterUseRate	300,625,000.00	7,300.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	11.5509	131.8888	90.6027	0.3679	9,370.5996	4.2997	9,374.8993	938.9099	4.0017	942.9116	0.0000	37,381.7546	37,381.7546	4.0164	0.0000	37,482.1655
2022	5.7290	51.2116	50.8266	0.1662	6,557.5025	1.8475	6,559.3500	655.0355	1.7357	656.7712	0.0000	16,731.3617	16,731.3617	1.6858	0.0000	16,773.5066
2023	2.9921	28.7636	20.8921	0.0523	1,378.9407	1.2724	1,380.2131	145.8610	1.1707	147.0318	0.0000	5,155.4726	5,155.4726	1.2301	0.0000	5,186.2256
2053	0.1149	0.7270	1.7923	2.9700e-003	1,074.5438	7.4300e-003	1,074.5512	107.2961	7.4300e-003	107.3036	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6957
Maximum	**11.5509**	**131.8888**	**90.6027**	**0.3679**	**9,370.5996**	**4.2997**	**9,374.8993**	**938.9099**	**4.0017**	**942.9116**	**0.0000**	**37,381.7546**	**37,381.7546**	**4.0164**	**0.0000**	**37,482.1655**

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	11.5509	131.8888	90.6027	0.3679	9,370.5996	4.2997	9,374.8993	938.9099	4.0017	942.9116	0.0000	37,381.7546	37,381.7546	4.0164	0.0000	37,482.1655
2022	5.7290	51.2116	50.8266	0.1662	6,557.5025	1.8475	6,559.3500	655.0355	1.7357	656.7712	0.0000	16,731.3617	16,731.3617	1.6858	0.0000	16,773.5066
2023	2.9921	28.7636	20.8921	0.0523	1,378.9407	1.2724	1,380.2131	145.8610	1.1707	147.0318	0.0000	5,155.4726	5,155.4726	1.2301	0.0000	5,186.2256
2053	0.1149	0.7270	1.7923	2.9700e-003	1,074.5438	7.4300e-003	1,074.5512	107.2961	7.4300e-003	107.3036	0.0000	281.4481	281.4481	9.9000e-003	0.0000	281.6957
Maximum	**11.5509**	**131.8888**	**90.6027**	**0.3679**	**9,370.5996**	**4.2997**	**9,374.8993**	**938.9099**	**4.0017**	**942.9116**	**0.0000**	**37,381.7546**	**37,381.7546**	**4.0164**	**0.0000**	**37,482.1655**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	14.5801	107.8341	176.4298	0.6265	18,439.3308	0.3878	18,439.7187	1,840.3346	0.3648	1,840.6994		64,078.6993	64,078.6993	3.6696		64,170.4403
Total	**14.5925**	**107.8353**	**176.5627**	**0.6265**	**18,439.3308**	**0.3883**	**18,439.7191**	**1,840.3346**	**0.3653**	**1,840.6999**		**64,078.9838**	**64,078.9838**	**3.6704**	**0.0000**	**64,170.7436**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	14.5801	107.8341	176.4298	0.6265	18,439.3308	0.3878	18,439.7187	1,840.3346	0.3648	1,840.6994		64,078.6993	64,078.6993	3.6696		64,170.4403
Total	**14.5925**	**107.8353**	**176.5627**	**0.6265**	**18,439.3308**	**0.3883**	**18,439.7191**	**1,840.3346**	**0.3653**	**1,840.6999**		**64,078.9838**	**64,078.9838**	**3.6704**	**0.0000**	**64,170.7436**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	1 Roadway Improvements	Grading	7/1/2021	8/31/2021	5	44	
2	2 Installling New WTGs	Building Construction	7/1/2021	6/1/2022	5	240	
3	2a Delivering New WTGs Components	Building Construction	7/1/2021	6/1/2022	5	240	
4	3 Restoration	Site Preparation	7/1/2022	3/1/2023	5	174	
5	Decommissioning New WTGs	Trenching	1/1/2053	12/31/2053	5	261	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Alta Mesa Wind Repower - Salton Sea Air Basin, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
1 Roadway Improvements	Excavators	2	8.00	158	0.38
1 Roadway Improvements	Graders	1	8.00	187	0.41
1 Roadway Improvements	Rubber Tired Dozers	1	8.00	247	0.40
1 Roadway Improvements	Scrapers	2	8.00	367	0.48
1 Roadway Improvements	Tractors/Loaders/Backhoes	2	8.00	97	0.37
2 Installling New WTGs	Cranes	1	10.00	231	0.29
2 Installling New WTGs	Forklifts	3	10.00	89	0.20
2 Installling New WTGs	Generator Sets	1	8.00	84	0.74
2 Installling New WTGs	Tractors/Loaders/Backhoes	3	8.00	97	0.37
2 Installling New WTGs	Welders	1	8.00	46	0.45
2a Delivering New WTGs Components	Cranes	1	7.00	231	0.29
2a Delivering New WTGs Components	Forklifts	3	8.00	89	0.20
2a Delivering New WTGs Components	Generator Sets	1	8.00	84	0.74
2a Delivering New WTGs Components	Pavers	0		130	0.42
2a Delivering New WTGs Components	Paving Equipment	0		132	0.36
2a Delivering New WTGs Components	Rollers	0		80	0.38
2a Delivering New WTGs Components	Tractors/Loaders/Backhoes	3	7.00	97	0.37
2a Delivering New WTGs Components	Welders	1	8.00	46	0.45
3 Restoration	Rubber Tired Dozers	3	8.00	247	0.40
3 Restoration	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Decommissioning New WTGs	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
1 Roadway Improvements	8	50.00	10.00	2,888.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2 Installling New WTGs	9	250.00	30.00	7,960.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
2a Delivering New WTGs Components	9	0.00	0.00	500.00	14.60	6.20	140.00	LD_Mix	HDT_Mix	HHDT
3 Restoration	7	50.00	2.00	792.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT
Decommissioning New WTGs	1	50.00	2.00	3,120.00	14.60	6.20	60.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Reduce Vehicle Speed on Unpaved Roads

3.2 1 Roadway Improvements - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6101	0.0000	8.6101	3.5901	0.0000	3.5901			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6101**	**1.9853**	**10.5954**	**3.5901**	**1.8265**	**5.4166**		**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.2 1 Roadway Improvements - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6924	26.9404	4.2125	0.1297	2,900.0156	0.1214	2,900.1370	289.7968	0.1161	289.9129		13,632.2967	13,632.2967	0.3144		13,640.1571
Vendor	0.0287	0.9187	0.2070	2.5400e-003	45.6592	1.7800e-003	45.6609	4.5641	1.7000e-003	4.5658		266.3903	266.3903	0.0189		266.8617
Worker	0.3390	0.2179	2.7755	5.5200e-003	537.4764	3.3200e-003	537.4797	53.6900	3.0500e-003	53.6931		548.3647	548.3647	0.0231		548.9425
Total	**1.0600**	**28.0769**	**7.1950**	**0.1377**	**3,483.1512**	**0.1265**	**3,483.2776**	**348.0508**	**0.1209**	**348.1717**		**14,447.0517**	**14,447.0517**	**0.3564**		**14,455.9613**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6101	0.0000	8.6101	3.5901	0.0000	3.5901			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	**4.1912**	**46.3998**	**30.8785**	**0.0620**	**8.6101**	**1.9853**	**10.5954**	**3.5901**	**1.8265**	**5.4166**	**0.0000**	**6,007.0434**	**6,007.0434**	**1.9428**		**6,055.6134**

3.2 1 Roadway Improvements - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6924	26.9404	4.2125	0.1297	2,900.0156	0.1214	2,900.1370	289.7968	0.1161	289.9129		13,632.2967	13,632.2967	0.3144		13,640.1571
Vendor	0.0287	0.9187	0.2070	2.5400e-003	45.6592	1.7800e-003	45.6609	4.5641	1.7000e-003	4.5658		266.3903	266.3903	0.0189		266.8617
Worker	0.3390	0.2179	2.7755	5.5200e-003	537.4764	3.3200e-003	537.4797	53.6900	3.0500e-003	53.6931		548.3647	548.3647	0.0231		548.9425
Total	**1.0600**	**28.0769**	**7.1950**	**0.1377**	**3,483.1512**	**0.1265**	**3,483.2776**	**348.0508**	**0.1209**	**348.1717**		**14,447.0517**	**14,447.0517**	**0.3564**		**14,455.9613**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2230	20.8459	19.0422	0.0314		1.1371	1.1371		1.0655	1.0655		2,986.7516	2,986.7516	0.7562		3,005.6561
Total	**2.2230**	**20.8459**	**19.0422**	**0.0314**		**1.1371**	**1.1371**		**1.0655**	**1.0655**		**2,986.7516**	**2,986.7516**	**0.7562**		**3,005.6561**

3.3 2 Installling New WTGs - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3499	13.6132	2.1286	0.0655	2,664.0231	0.0613	2,664.0845	266.1223	0.0587	266.1810		6,888.5267	6,888.5267	0.1589		6,892.4986
Vendor	0.0862	2.7561	0.6209	7.6300e-003	136.9775	5.3300e-003	136.9828	13.6922	5.1000e-003	13.6973		799.1709	799.1709	0.0566		800.5851
Worker	1.6948	1.0893	13.8776	0.0276	2,687.3821	0.0166	2,687.3987	268.4500	0.0153	268.4653		2,741.8233	2,741.8233	0.1156		2,744.7126
Total	**2.1308**	**17.4585**	**16.6271**	**0.1008**	**5,488.3827**	**0.0832**	**5,488.4660**	**548.2645**	**0.0790**	**548.3436**		**10,429.5209**	**10,429.5209**	**0.3310**		**10,437.7962**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2230	20.8459	19.0422	0.0314		1.1371	1.1371		1.0655	1.0655	0.0000	2,986.7516	2,986.7516	0.7562		3,005.6561
Total	**2.2230**	**20.8459**	**19.0422**	**0.0314**		**1.1371**	**1.1371**		**1.0655**	**1.0655**	**0.0000**	**2,986.7516**	**2,986.7516**	**0.7562**		**3,005.6561**

3.3 2 Installling New WTGs - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3499	13.6132	2.1286	0.0655	2,664.0231	0.0613	2,664.0845	266.1223	0.0587	266.1810		6,888.5267	6,888.5267	0.1589		6,892.4986
Vendor	0.0862	2.7561	0.6209	7.6300e-003	136.9775	5.3300e-003	136.9828	13.6922	5.1000e-003	13.6973		799.1709	799.1709	0.0566		800.5851
Worker	1.6948	1.0893	13.8776	0.0276	2,687.3821	0.0166	2,687.3987	268.4500	0.0153	268.4653		2,741.8233	2,741.8233	0.1156		2,744.7126
Total	**2.1308**	**17.4585**	**16.6271**	**0.1008**	**5,488.3827**	**0.0832**	**5,488.4660**	**548.2645**	**0.0790**	**548.3436**		**10,429.5209**	**10,429.5209**	**0.3310**		**10,437.7962**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9931	18.6043	18.7776	0.0314		0.9604	0.9604		0.9004	0.9004		2,987.8827	2,987.8827	0.7522		3,006.6868
Total	**1.9931**	**18.6043**	**18.7776**	**0.0314**		**0.9604**	**0.9604**		**0.9004**	**0.9004**		**2,987.8827**	**2,987.8827**	**0.7522**		**3,006.6868**

3.3 2 Installling New WTGs - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3264	11.9507	2.0591	0.0647	3,255.9333	0.0504	3,255.9836	325.2261	0.0482	325.2743		6,808.5625	6,808.5625	0.1507		6,812.3300
Vendor	0.0800	2.6047	0.5708	7.5700e-003	136.9775	4.4700e-003	136.9819	13.6922	4.2800e-003	13.6965		792.5671	792.5671	0.0525		793.8794
Worker	1.5815	0.9931	12.7799	0.0266	2,687.3821	0.0160	2,687.3982	268.4500	0.0148	268.4648		2,641.2627	2,641.2627	0.1050		2,643.8873
Total	**1.9878**	**15.5485**	**15.4098**	**0.0989**	**6,080.2929**	**0.0709**	**6,080.3637**	**607.3683**	**0.0672**	**607.4355**		**10,242.3923**	**10,242.3923**	**0.3082**		**10,250.0967**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9931	18.6043	18.7776	0.0314		0.9604	0.9604		0.9004	0.9004	0.0000	2,987.8827	2,987.8827	0.7522		3,006.6868
Total	**1.9931**	**18.6043**	**18.7776**	**0.0314**		**0.9604**	**0.9604**		**0.9004**	**0.9004**	**0.0000**	**2,987.8827**	**2,987.8827**	**0.7522**		**3,006.6868**

3.3 2 Installling New WTGs - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.3264	11.9507	2.0591	0.0647	3,255.9333	0.0504	3,255.9836	325.2261	0.0482	325.2743		6,808.5625	6,808.5625	0.1507		6,812.3300
Vendor	0.0800	2.6047	0.5708	7.5700e-003	136.9775	4.4700e-003	136.9819	13.6922	4.2800e-003	13.6965		792.5671	792.5671	0.0525		793.8794
Worker	1.5815	0.9931	12.7799	0.0266	2,687.3821	0.0160	2,687.3982	268.4500	0.0148	268.4648		2,641.2627	2,641.2627	0.1050		2,643.8873
Total	**1.9878**	**15.5485**	**15.4098**	**0.0989**	**6,080.2929**	**0.0709**	**6,080.3637**	**607.3683**	**0.0672**	**607.4355**		**10,242.3923**	**10,242.3923**	**0.3082**		**10,250.0967**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**		**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 2a Delivering New WTGs Components - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0449	1.6755	0.2848	9.1100e-003	390.4556	8.8700e-003	390.4645	39.0045	8.4900e-003	39.0130		958.0232	958.0232	0.0140		958.3742
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0449**	**1.6755**	**0.2848**	**9.1100e-003**	**390.4556**	**8.8700e-003**	**390.4645**	**39.0045**	**8.4900e-003**	**39.0130**		**958.0232**	**958.0232**	**0.0140**		**958.3742**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.3639	2,553.3639	0.6160		2,568.7643
Total	**1.9009**	**17.4321**	**16.5752**	**0.0269**		**0.9586**	**0.9586**		**0.9013**	**0.9013**	**0.0000**	**2,553.3639**	**2,553.3639**	**0.6160**		**2,568.7643**

3.4 2a Delivering New WTGs Components - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0449	1.6755	0.2848	9.1100e-003	390.4556	8.8700e-003	390.4645	39.0045	8.4900e-003	39.0130		958.0232	958.0232	0.0140		958.3742
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0449**	**1.6755**	**0.2848**	**9.1100e-003**	**390.4556**	**8.8700e-003**	**390.4645**	**39.0045**	**8.4900e-003**	**39.0130**		**958.0232**	**958.0232**	**0.0140**		**958.3742**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**		**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 2a Delivering New WTGs Components - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0419	1.4432	0.2758	9.0000e-003	477.2096	7.2900e-003	477.2169	47.6671	6.9800e-003	47.6741		946.7531	946.7531	0.0135		947.0910
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0419**	**1.4432**	**0.2758**	**9.0000e-003**	**477.2096**	**7.2900e-003**	**477.2169**	**47.6671**	**6.9800e-003**	**47.6741**		**946.7531**	**946.7531**	**0.0135**		**947.0910**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	**1.7062**	**15.6156**	**16.3634**	**0.0269**		**0.8090**	**0.8090**		**0.7612**	**0.7612**	**0.0000**	**2,554.3336**	**2,554.3336**	**0.6120**		**2,569.6322**

3.4 2a Delivering New WTGs Components - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0419	1.4432	0.2758	9.0000e-003	477.2096	7.2900e-003	477.2169	47.6671	6.9800e-003	47.6741		946.7531	946.7531	0.0135		947.0910
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0419**	**1.4432**	**0.2758**	**9.0000e-003**	**477.2096**	**7.2900e-003**	**477.2169**	**47.6671**	**6.9800e-003**	**47.6741**		**946.7531**	**946.7531**	**0.0135**		**947.0910**

3.5 3 Restoration - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.7207**	**1.6126**	**20.3333**	**10.0015**	**1.4836**	**11.4850**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.5 3 Restoration - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0448	1.6401	0.2826	8.8900e-003	267.1028	6.9100e-003	267.1097	26.6864	6.6100e-003	26.6930		934.3929	934.3929	0.0207		934.9100
Vendor	5.3300e-003	0.1737	0.0381	5.0000e-004	9.1318	3.0000e-004	9.1321	0.9128	2.9000e-004	0.9131		52.8378	52.8378	3.5000e-003		52.9253
Worker	0.3163	0.1986	2.5560	5.3100e-003	537.4764	3.2100e-003	537.4796	53.6900	2.9500e-003	53.6930		528.2525	528.2525	0.0210		528.7775
Total	**0.3664**	**2.0124**	**2.8766**	**0.0147**	**813.7110**	**0.0104**	**813.7215**	**81.2892**	**9.8500e-003**	**81.2990**		**1,515.4833**	**1,515.4833**	**0.0452**		**1,516.6127**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**18.7207**	**1.6126**	**20.3333**	**10.0015**	**1.4836**	**11.4850**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

3.5 3 Restoration - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0448	1.6401	0.2826	8.8900e-003	267.1028	6.9100e-003	267.1097	26.6864	6.6100e-003	26.6930		934.3929	934.3929	0.0207		934.9100
Vendor	5.3300e-003	0.1737	0.0381	5.0000e-004	9.1318	3.0000e-004	9.1321	0.9128	2.9000e-004	0.9131		52.8378	52.8378	3.5000e-003		52.9253
Worker	0.3163	0.1986	2.5560	5.3100e-003	537.4764	3.2100e-003	537.4796	53.6900	2.9500e-003	53.6930		528.2525	528.2525	0.0210		528.7775
Total	**0.3664**	**2.0124**	**2.8766**	**0.0147**	**813.7110**	**0.0104**	**813.7215**	**81.2892**	**9.8500e-003**	**81.2990**		**1,515.4833**	**1,515.4833**	**0.0452**		**1,516.6127**

3.5 3 Restoration - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.7207**	**1.2660**	**19.9867**	**10.0015**	**1.1647**	**11.1662**		**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

3.5 3 Restoration - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	0.9231	0.2533	8.6400e-003	813.6118	3.1400e-003	813.6149	81.2568	3.0100e-003	81.2598		908.3547	908.3547	0.0160		908.7534
Vendor	4.2200e-003	0.1345	0.0335	4.9000e-004	9.1318	1.2000e-004	9.1320	0.9128	1.1000e-004	0.9129		51.6584	51.6584	2.5000e-003		51.7209
Worker	0.2962	0.1819	2.3610	5.1100e-003	537.4764	3.1200e-003	537.4795	53.6900	2.8700e-003	53.6929		508.1514	508.1514	0.0191		508.6296
Total	**0.3327**	**1.2394**	**2.6478**	**0.0142**	**1,360.2200**	**6.3800e-003**	**1,360.2264**	**135.8596**	**5.9900e-003**	**135.8656**		**1,468.1645**	**1,468.1645**	**0.0376**		**1,469.1038**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.7207	0.0000	18.7207	10.0015	0.0000	10.0015			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	**2.6595**	**27.5242**	**18.2443**	**0.0381**	**18.7207**	**1.2660**	**19.9867**	**10.0015**	**1.1647**	**11.1662**	**0.0000**	**3,687.3081**	**3,687.3081**	**1.1926**		**3,717.1219**

3.5 3 Restoration - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0322	0.9231	0.2533	8.6400e-003	813.6118	3.1400e-003	813.6149	81.2568	3.0100e-003	81.2598		908.3547	908.3547	0.0160		908.7534
Vendor	4.2200e-003	0.1345	0.0335	4.9000e-004	9.1318	1.2000e-004	9.1320	0.9128	1.1000e-004	0.9129		51.6584	51.6584	2.5000e-003		51.7209
Worker	0.2962	0.1819	2.3610	5.1100e-003	537.4764	3.1200e-003	537.4795	53.6900	2.8700e-003	53.6929		508.1514	508.1514	0.0191		508.6296
Total	**0.3327**	**1.2394**	**2.6478**	**0.0142**	**1,360.2200**	**6.3800e-003**	**1,360.2264**	**135.8596**	**5.9900e-003**	**135.8656**		**1,468.1645**	**1,468.1645**	**0.0376**		**1,469.1038**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003		281.4481	281.4481	9.9000e-003		281.6957
Total	**0.1149**	**0.7270**	**1.7923**	**2.9700e-003**		**7.4300e-003**	**7.4300e-003**		**7.4300e-003**	**7.4300e-003**		**281.4481**	**281.4481**	**9.9000e-003**		**281.6957**

3.6 Decommissioning New WTGs - 2053

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					528.0114	0.0000	528.0114	52.7234	0.0000	52.7234			0.0000			0.0000
Vendor					9.1285	0.0000	9.1285	0.9115	0.0000	0.9115			0.0000			0.0000
Worker					537.4039	0.0000	537.4039	53.6612	0.0000	53.6612			0.0000			0.0000
Total					**1,074.5438**	**0.0000**	**1,074.5438**	**107.2961**	**0.0000**	**107.2961**			**0.0000**			**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.1149	0.7270	1.7923	2.9700e-003		7.4300e-003	7.4300e-003		7.4300e-003	7.4300e-003	0.0000	281.4481	281.4481	9.9000e-003		281.6957
Total	**0.1149**	**0.7270**	**1.7923**	**2.9700e-003**		**7.4300e-003**	**7.4300e-003**		**7.4300e-003**	**7.4300e-003**	**0.0000**	**281.4481**	**281.4481**	**9.9000e-003**		**281.6957**

3.6 Decommissioning New WTGs - 2053

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling					528.0114	0.0000	528.0114	52.7234	0.0000	52.7234			0.0000			0.0000
Vendor					9.1285	0.0000	9.1285	0.9115	0.0000	0.9115			0.0000			0.0000
Worker					537.4039	0.0000	537.4039	53.6612	0.0000	53.6612			0.0000			0.0000
Total					**1,074.5438**	**0.0000**	**1,074.5438**	**107.2961**	**0.0000**	**107.2961**			**0.0000**			**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	14.5801	107.8341	176.4298	0.6265	18,439.3308	0.3878	18,439.7187	1,840.3346	0.3648	1,840.6994		64,078.6993	64,078.6993	3.6696		64,170.4403
Unmitigated	14.5801	107.8341	176.4298	0.6265	18,439.3308	0.3878	18,439.7187	1,840.3346	0.3648	1,840.6994		64,078.6993	64,078.6993	3.6696		64,170.4403

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Manufacturing	4,966.00	1,937.00	806.00	14,288,967	14,288,967
Total	4,966.00	1,937.00	806.00	14,288,967	14,288,967

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Manufacturing	13.80	6.20	6.20	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Manufacturing	0.490441	0.036099	0.183975	0.121725	0.015214	0.005252	0.022424	0.112230	0.002972	0.001873	0.006187	0.000783	0.000825

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Manufacturing	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Unmitigated	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Total	**0.0124**	**1.2100e-003**	**0.1329**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**		**0.2845**	**0.2845**	**7.5000e-004**		**0.3033**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0124	1.2100e-003	0.1329	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.2845	0.2845	7.5000e-004		0.3033
Total	**0.0124**	**1.2100e-003**	**0.1329**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**		**0.2845**	**0.2845**	**7.5000e-004**		**0.3033**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EXHIBIT B

January 20, 2021

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Subject: Comments on the Draft Environmental Assessment / Initial Study for the Alta Mesa Wind Project SCH # 2020120489

Dear Mr. Jones,

This letter contains my comments on the biological resource impact analysis for the Draft Environmental Assessment / Initial Study (DEA/IS) for the Alta Mesa Wind Project.

CURE-41

Alta Mesa 640 LLC is a subsidiary of Brookfield Renewable Energy (Applicant) who is owner of the Alta Mesa Wind Project (Project). They are proposing to repower the existing 27 megawatt (MW), 159 turbine wind project located roughly 11 miles northwest of the City of Palm Springs. Alta Mesa is an existing 27 megawatt (MW) wind project with 159 turbines located on land zoned Wind Energy (W-E). The existing turbines heights range from 114 to 145 feet. The existing 159 turbines will be removed, and the Applicant proposes to construct, operate, and decommission 7 new wind turbine generators (WTG).

The County project abuts an additional section of the existing wind farm, 401 acres of land administered by the Bureau of Land Management (BLM) and referred to as the Mesa Wind Repower Project (BLM Segment). The BLM proposes to remove the existing 400 plus turbines and construct, operate, and decommission 11 new WTGs that will generate up to 30 MW. Local land uses include lands designated as Area of Critical Environmental Concern (ACEC), and

federally designated wilderness areas. The Pacific Crest Trail (PCT) runs north of and adjacent to the west side of the wind farm.

CURE-41, cont.

The County asserts that all wildlife and vegetation impacts will be less than significant with their proposed mitigation.[1] However, there are multiple erroneous conclusions and omissions made by the DEA/IS regarding the Project, its degree of impacts on biological resources, and how those impacts may be mitigated. The discussion below addresses some such errors and omissions.

I. THE DEA/IS FAILS TO ADEQUATELY DESCRIBE AND ANALYZE THE BIOLOGICAL BASELINE

A. Incomplete Botanical Survey Reporting and Analysis

The Biological Technical Report in the DEA/IS Appendix B (BTR) states, "One federally listed endangered plant, triple-ribbed milk-vetch, has been reported in Whitewater Canyon, just east of the survey area."[2] The BLM Segment states that for this species there is "potentially suitable habitat present but not observed; known from within one mile to the east".[3] In fact, the language used to describe the potential for this species to occur *on site* is verbatim what the BLM Segment states for what amounts to a different section(s) of the wind farm. This repetition of the BLM Segment EA discussion raises two important points: (1) Since the reporting analysis is exactly the same word for word as presented in the previously published final BLM EA[4] for this wind farm that references an entirely different BTR with different studies, how can it be assured that it is inclusive of new data gathered from this Project site? and (2) The DEA/IS's repeated use of the BLM Segment's EA language verbatim for its analysis and discussion serves to support the fact that that the impacts to resources from this part of the site (i.e. Alta Mesa Wind) of the Project should not be separated and ignored for comprehensive analysis, as this

CURE-42

CURE-43

[1] DEA/IS p. 32
[2] *Ibid*. p. 14
[3] Mesa Wind EA Appendix G p. 10
[4] Mesa Wind Final EA Sept. 2020 https://eplanning.blm.gov/public_projects/1504648/200364317/20027243/250033445/1.%20Mesa%20Wind%20Repower%20Final%20EA%20(508).pdf

DEA/IS has done, when the the discussion of impacts and by default data informing these impacts if often deemed exactly the same as presented in both the County Project and the BLM Segment. (See PROPOSED WGT INAPPROPRIATELY EXCLUDED FROM DEA/IS IMPACT ANALYSIS below for further discussion).

CURE-43, cont.

The BTR claims that, "Triple-ribbed milk-vetch is found in arroyos, canyons, and hillsides between about 1,400 and 4,000 feet elevation. It grows in Whitewater Canyon just east of the AM Project site and in nearby canyons, hills, and mountains to the east (Baldwin et al. 2012) including Morongo Canyon and Mission Canyon...Triple-ribbed milk-vetch is covered under the Coachella Valley Multiple Species Habitat Conservation Plan.... Aspen did not locate triple-ribbed milk-vetch during our surveys. Habitat suitability is difficult to evaluate...[p]otentially suitable habitat is present but and there is a low potential that it may grow in the study area due to negative results of field surveys."[5]

CURE-44

To say a species has a low potential to occur because they weren't observed while acknowledging there are individuals present nearby and habitat where it can grow onsite is illogical and must be revised to denote the species having a high potential to occur. Also, the BTR claims that botanical surveys were conducted according to CDFW guidelines and appropriate times. However, it is not possible to confirm this from the minimal survey details presented. The only BTR table of botanical surveys shows survey dates and times (Table 1),[6] where both desert tortoise surveys, and botanical surveys are lumped together in this one table with no identification of who conducted which survey when. Table 4 describes tortoise observations but does not assist in indicating when botanical surveys were conducted. Complete descriptions of each and every survey, with date, times, and which biologists conducted which type of surveys should be presented in the baseline discussion.

CURE-45

B. Minimal Surveys Fail to Adequately Represent the Ecosystem Baseline

CURE-46

[5] BTR p. 15 (DEA/IS Appendix B)
[6] BTR p. 2

The DEA/IS concludes there will be no significant impacts to biological resources with mitigation, and that its analysis is based on the BTR and a wetland delineation. The BTR informs this determination with data from databases, a literature review, focused desert tortoise surveys, and botanical surveys. No on-site surveys of any kind were conducted for any invertebrates, birds, bats, or reptiles aside from tortoises. Without such survey data, essential details regarding impacts to such significant and diverse components of the ecosystem clearly cannot be adequately assessed.

CURE-46, cont.

For instance, the DEA/IS describes potential for special-status species to occur based upon its estimation of likelihood of nesting or roosting. This is only one aspect of several essential types of information that inform baseline impact risk and level of significance. What should be included for all the special-status species are estimates of their likelihood to fly through the Rotor-Swept Area (RSA) per unit time, as well as information on other essential variables including their status and behavior during this time (e.g., if they are foraging, migrating, breeding; residents or migrants; what is known about their subpopulation status, etc.). Direct observations of such behavior go well beyond merely informative; they are an essential aspect of determining use of the site, and consequently significance and risk of indirect (i.e. loss of habitat) and direct (injury, harm, harassment) impacts from construction activities and new WTGs.

CURE-47

Conducting protocol surveys for protected and rare species, and focused surveys for taxa (birds, reptiles, bats) is standard practice for impact analysis for industrial wind construction projects; and utilize methodologies established to detect species and their regional status beyond anecdotal data. A review of standard technical reports analyzing biological resource impacts for CEQA and other analyses of wind and other industrial development projects reveals that focused surveys are common and conducted literally as such, where the biologist "focuses" on the species for which the protocol has been designated. A focused survey avoids the need to attempt to observe the ground, vegetation, underground (denning and fossorial species) and skies all at once for any vertebrate, invertebrate, and plant species that may also be present at any given time on and near the site. The demonstrated need for species-intensive focus is why agencies require protocol surveys to be conducted for one focal species at a time, as opposed

to, for example, accepting anecdotal sighting of birds as conclusive while conducting a survey for a fossorial species.[7] By definition, a focused protocol survey serves the purpose of detecting elusive, cryptic, rare or endangered species and requires a particular degree of species-specific search methodology. Not only is the search intensive, but concurrent detailed reporting is also required for certain species (like the desert tortoise) while in the field, reporting that is time-intensive and precludes adequate attention necessary for thorough detection of other animals (such as flying birds) at the same time.[8]

CURE-47, cont.

It is also assumed that all daytime surveys, like all surveys conducted by Aspen for the DEA/IS, would obviously completely preclude all but potential roost site data collection for all bat species. Obviously, I do not expect ground-truthing field data to be scientifically exhaustive or deemed fully comprehensive. However, the County has abundant access to experienced biologists, consultants, and related personnel with the expertise to conduct studies in a timely manner prior to release of any final impact analysis that would contribute significantly to the knowledge necessary for an adequately informed baseline and resultant accurate mitigation analysis. The impact to bats alone from this Project has been seriously underestimated, contributing to a flawed impact analysis and concurrent mitigation proposals, and must be rectified in part by conducting appropriate surveys.

CURE-48

C. Databases and Literature Review Do Not Replace Surveys for Baseline Analysis

CURE-49

The over-reliance on databases in lieu of relevant site surveys is inadequate. Review of the literature and databases are an important subset of regional presence/absence data, but they cannot replace focused or protocol surveys in terms of site-specific accuracy and essential detail; even sophisticated models are known to consistently underestimate real world presence/ absence data.[9] For instance, the DEA/IS relies heavily upon the California Natural

[7] USFWS. 2017. Preparing for Any Action That May Occur Within the Range of The Mojave Desert Tortoise (*Gopherus agassizii).* https://www.fws.gov/nevada/desert_tortoise/documents/manuals/Mojave%20Desert%20Tortoise_Pre-project%20Survey%20Protocol_2017.pdf

[8] *Ibid.*

[9] MacKenzie, Darryl. (2009). What are the issues with Presence-Absence data for wildlife managers?. *Journal of Wildlife Management*. 69. 849-860. 10.2193/0022-541X(2005)069[0849:WATIWP]2.0.CO;2.

Diversity Database (CNDDB) to make determinations about the potential for species to occur. However, the CNDDB is limited in its ability to predict species currently present at any given locale; instead it presents at best a conservative description of what may or may not be present onsite, and reveals little to no detail related to populations, species movements, breeding status, etc. Many species sightings are not actually reported on the public CNDDB. According to the California Department of Fish and Wildlife's (CDFW) CNDDB coordinator, for most birds the CNDDB maps only those occurrences that can be associated with "evidence of nesting." Observations of flyovers or foraging are generally not mapped into CNDDB as an "Element Occurrence," the standard mapping unit based on NatureServe natural heritage program methodology.[10] CNDDB biologists also state that the database represents summaries of species occurrences; not individual detections. "Given limited resources to map submissions, the CNDDB tries at best to map occurrences that relate to an important aspect of life history (*pers. comm,* P. McIntyre, CDFW, June 6, 2015)."

CURE-49, cont.

As importantly, CNDDB records are voluntarily reported and only exist for locations that have been surveyed to a greater extent than others, therefore cannot be deemed comprehensive at all. Absence of a species listed in the CNDDB records - or records from any other database or report - does not indicate a species is absent. Simply put, lack of evidence is not evidence. To reinforce this fact the CDFW posts a disclaimer on its CNDDB website: "We work very hard to keep the CNDDB [...] as current and up-to-date as possible given our capabilities and resources. However, we cannot and do not portray the CNDDB as an exhaustive and comprehensive inventory of all rare species and natural communities statewide. Field verification for the presence or absence of sensitive species will always be an important obligation of our customers."[11]

I have personally observed the limitations of databases like the CNDDB and various habitat conservation plan lists. For example, prior to the construction of Ocotillo Wind, a 15,000 acre

[10] http://www.natureserve.org/conservation-tools/standards-methods.
[11] https://www.wildlife.ca.gov/Data/CNDDB/About.

industrial wind project in the Sonoran Desert, I spent two years conducting protocol raptor, avian, reptile, and other special-status surveys for the project EIR/EIS.[12] During this time I was able to compile a long list of observed resident and migratory avian species as well as reptile and mammal species. Upon reviewing the current CNDDB records at the time I noted the absence of 14 special-status species, including two Fully Protected (FP) species (foraging American peregrine falcons, and migrating greater sandhill cranes).

CURE-49, cont.

D. Protected and other Special-status Species are Omitted or Underestimated

CURE-50

Dr. Shawn Smallwood, an ecologist who has conducted extensive research on birds, bats, and other wildlife at industrial wind facilities in California, wrote an assessment in June 2020 [13] of the biological resource impact analysis for the BLM Segment EA for this wind farm. In doing so he noted that even despite some focused surveys and database searches, the BLM's BTR significantly under-reported special-status species recorded to have occurred in the area and on the site. [14] Since this is the same wind farm as the Project, his list of species (Table 1) is completely relevant and included again here. The omissions in this Project BTR as compared to the Smallwood list are important in demonstrating the need for greater rigor in the baseline data collection and analysis that is necessary to inform mitigation criteria for this DEA/IS.

[12] Ocotillo Wind Energy Project EIR https://ceqanet.opr.ca.gov/2010121055/2
[13] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind EA. https://eplanning.blm.gov/eplanning-ui/project/1504648/570
[14] Aspen Environmental. 2019. Biological Resources Technical Report: Mesa Wind Project Repower. Prepared for Brookfield, Mojave, California. https://eplanning.blm.gov/public_projects/1504648/200364317/20027206/250033408/Appendix%20G%20Biological%20Resources%20Technical%20Report%20508.pdf

CURE-50, cont.

Table 1. Occurrence likelihoods of wildlife species at the project site, where under eBird/iNaturalist, presence means the species was documented on site by Aspen (2019), and other characterizations represent records in eBird or iNaturalist. Known wind energy impacts were informed by my integration of fatality monitoring studies at North American wind projects through 2014.

Common name	*Species name*	Status[1]	eBird/ iNaturalist	Wind energy impacts
Silvery legless lizard	*Anniella pulchra pulchra*	SSC	Nearby	
Red diamond rattlesnake	*Crotalus ruber*	SSC	On site	
Mojave fringe-toed lizard	*Uma scoparia*	SSC	Nearby	
Blainville's horned lizard	*Phrynosoma blainvillii*	SSC	Present	
Agassiz's desert tortoise	*Gopherus agassizii*	FT, CT	Present	
Brant	*Branta bernicla*	SSC2	Nearby	
Redhead	*Aythya americana*	SSC3	Nearby	
Common loon	*Gavia immer*	SSC	nearby	
American white pelican	*Pelecanus erythrorhynchos*	SSC1	Nearby	
California brown pelican	*Pelecanus occicentalis californicus*	FE, CE, CFP	In region	Yes
Double-crested cormorant	*Phalacrocorax auritus*	TWL	Nearby	Yes
White-faced ibis	*Plegadis chihi*	TWL	Nearby	
California gull	*Larus californicus*	TWL	Nearby	Yes
Caspian tern	*Hydropogne caspia*	TWL	Nearby	
Turkey vulture	*Cathartes aura*	FGC 3503.5	Nearby	Yes
Golden eagle	*Aquila chrysaetos*	BGEPA, CFP	On site	High
Bald eagle	*Haliaeetus leucocephalus*	BGEPA, BCC, CE	Nearby	Yes
Osprey	*Pandion haliaetus*	FGC 3503.5, TWL	Nearby	Yes
Red-tailed hawk	*Buteo jamaicensis*	FGC 3503.5	On site	High
Swainson's hawk	*Buteo swainsoni*	CT, FGC 3503.5	Nearby	Yes
Red-shouldered hawk	*Buteo lineatus*	FGC 3503.5	Nearby	Yes
Ferruginous hawk	*Buteo regalis*	TWL, FGC 3503.5	Nearby	High
Northern harrier	*Circus cyaneus*	SSC3, FGC 3503.5	Nearby	Yes
White-tailed kite	*Elanus leucurus*	CFP, FGC 3503.5	Nearby	Yes
Sharp-shinned hawk	*Accipiter striatus*	FGC 3503.5	Nearby	Yes
Cooper's hawk	*Accipiter cooperi*	FGC 3503.5	Nearby	Yes
American kestrel	*Falco sparverius*	FGC 3503.5	On site	High
Merlin	*Falco columbarius*	FGC 3503.5	Nearby	Yes
Prairie falcon	*Falco mexicanus*	BCC, FGC 3503.5	On site	High
Peregrine falcon	*Falco peregrinus*	BCC, CE, CFP	Nearby	Yes
Barn owl	*Tyto alba*	FGC 3503.5	Nearby	High
Great-horned owl	*Bubo virginianus*	FGC 3503.5	Nearby	High
Long-eared owl	*Asio otus*	SSC	Nearby	Yes
Western screech-owl	*Megascops kennicotti*	FGC 3503.5	Nearby	Yes
Burrowing owl	*Athene cunicularia*	BCC, SSC2, FGC 3503.5	Nearby	High
Vaux's swift	*Chaetura vauxi*	SSC2	Nearby	Yes
Costa's hummingbird	*Calypte costae*	BCC	On site	
Allen's hummingbird	*Selasphorus sasin*	BCC	In region	
Nuttall's woodpecker	*Picoides nuttallii*	BCC	Nearby	
Lewis's woodpecker	*Melanerpes lewis*	BCC	Nearby	Yes
Cactus wren	*Campylorhynchus brunneicapillus*	BCC	On site	
Horned lark	*Eremophila alpestris actia*	TWL	Nearby	High
Southwestern willow flycatcher	*Empidonax traillii extimus*	FE, CE	Nearby	
Olive-sided flycatcher	*Contopus cooperi*	SSC2	Nearby	
Vermilion flycatcher	*Pyrocephalus rubinus*	SSC2	Nearby	
Purple martin	*Progne subis*	SSC2	Nearby	Yes
Loggerhead shrike	*Lanius ludovicianus*	BCC, SSC2	On site	High
Oak titmouse	*Baeolophus inornatus*	BCC	Nearby	Yes
California gnatcatcher	*Polioptila c. californica*	FT, SSC	On site	
Black-tailed gnatcatcher	*Polioptila nigriceps*	TWL	On site	
LeConte's thrasher	*Toxostoma leconte*	BCC, SSC1	Nearby	
Bendire's thrasher	*Toxostoma bendirei*	BCC, SSC3	In region	
Least Bell' vireo	*Vireo belli pusillus*	FE, CE	Nearby	
Yellow warbler	*Dendroica petachia*	BCC, SSC2	Nearby	Yes
Yellow-breasted chat	*Icteria virens*	SSC3	Nearby	Yes
Summer tanager	*Piranga rubra*	SSC1	Nearby	

CURE-50, cont.

Common name	*Species name*	Status[1]	eBird/ iNaturalist	Wind energy impacts
Black-chinned sparrow	*Spizella atrogularis*	BCC	Nearby	
Southern California rufous-crowned sparrow	*Aimophila ruficeps canescens*	FSC, SSC	On site	
Bell's sage sparrow	*Amphispiza b. belli*	TWL	In region	
Oregon vesper sparrow	*Pooecetes gramineus affinis*	SSC_2	Nearby	Yes
Yellow-headed blackbird	*Xanthocephalus xanthocephalus*	SSC_3	Nearby	
Lawrence's goldfinch	*Carduelis lawrencei*	BCC	Nearby	
California leaf-nosed bat	*Macrotus californicus*	BLM, WBWG:H	In range	
Western mastiff bat	*Eumops perotis californicus*	BLM, SSC, WBWG:H	In range	
Pocketed free-tailed bat	*Nyctinomops femorosaccus*	SSC, WBWG:M	Present	
Big free-tailed bat	*Nyctinomops macrotis*	SSC, WBWG:MH	In region	
Pallid bat	*Antrozous pallidus*	BLM, SSC, WBWG:H	Present	
Townsend's big-eared bat	*Corynorhinus townsendii*	BLM, SSC, WBWG:H	Present	
Big brown bat	*Epistieus fuscus*		Nearby	High
Spotted bat	*Euderma maculatum*	BLM, SSC, WBWG:H	In region	
Silver-haired bat	*Lasionycteris noctivagans*	WBWG:M	In region	High
Western red bat	*Lasiurus blossevillii*	SSC, WBWG:H	Present	High
Hoary bat	*Lasiurus cinereus*	WBWG:M	Nearby	High
Western yellow bat	*Lasiurus xanthinus*	SSC, WBWG:H	Nearby	Yes
Western small-footed myotis	*Myotisciliolabrum*	BLM, WBWG:M	Nearby	Yes
Little brown myotis	*Myotis lucifugus*	WBWG:M	In range	High
Fringed myotis	*Myotis thysanodes*	BLM, WBWG:H	Present	
Long-eared myotis	*Myotis evotis*	WBWG:M	Nearby	Yes
Long-legged myotis	*Myotis volans*	BLM, WBWG;H	Nearby	Yes
Yuma myotis	*Myotis yumanensis*	BLM, SSC, WBWG:LM	Present	
Cave myotis	*Myotis velifer*	BLM, SSC, WBWG:M	Near range	
California mountain lion	*Puma concolor californicus*	CSP	Nearby	
Desert kit fox	*Vulpes macrotis arsipus*	CFP	In region	
American badger	*Taxidea taxus*	SSC	Present	
Southern grasshopper mouse	*Onychomys torridus ramona*	SSC	Nearby	

Common name	*Species name*	Status[1]	eBird/ iNaturalist	Wind energy impacts
Pallid San Diego pocket mouse	*Chaetodipus fallax pallidus*	SSC	Nearby	
Los Angeles pocket mouse	*Perognathus longimembris brevinasus*	SSC	Nearby	
Nelson's bighorn sheep	*Ovis canadensis nelsoni*	BLM, CFP	Present	

1 Listed as FE and FT = federal endangered and threatened, BCC = U.S. Fish and Wildlife Service Bird Species of Conservation Concern, BLM = BLM Sensitive, CE and CT = California endangered and threatened, CFP = California Fully Protected (FGC Code 3511), CSP = California Specially Protected, SSC = California species of special concern, SSC_1, SSC_2 and SSC_3 = California Bird Species of Special Concern priorities 1, 2 and 3, respectively, and TWL = Taxa to Watch List (Shuford and Gardali 2008), FGC 3503.5 = California Fish and Game Code 3503.5 (Birds of prey), and WBWG = Western Bat Working Group with priority rankings, of low, moderate, and high.

CURE-51

The DEA/IS lists several special-status species as "not addressed"[15] by the DEA/IS analysis due what it considers a lack of potential to occur. This list includes the California Species of Special Concern (SSC) yellow-breasted chat (*Icteria virens*), vermillion flycatcher (*Pyrocephalus rubinus*), and Summer tanager (*Piranga rubra*), all considered having n potential to occur due to there being "no suitable riparian vegetation present". Riparian habitat is important for these species to breed, but not to migrate through or use as a stopover by individuals or pairs searching for

[15] BTR p. 6

new territory. This is reinforced by eBird observations of the yellow-breasted chat and Summer tanager (as well as other protected and special-status species including SSC loggerhead shrike, FP Peregrine falcon, FP golden eagle)[16] in a birding hot spot in Whitewater Canyon within one mile of the proposed locations of new WTG 3A through 7A. At a birding hotspot less than 1.7 miles north of the wind farm, special-status species observed – many within the last year – include the vermillion flycatcher, yellow-breasted chat, and Summer tanager. Other SSC detected at this location - species not adequately discussed as having high potential to occur in the DEA/IS - include the SSC American white pelican, SSC yellow warbler, FP white-tailed kite, SSC Vaux's swift, SSC loggerhead shrike, SSC northern harrier, and SSC long-eared owl, among others.[17] (See discussion below for details on importance of correctly assessing scope of avian migrants and potential risk posed by this Project). Smallwood's list also includes the Los Angeles Pocket mouse (*Perognathus longimembris brevinasus*) recorded nearby, another species "not addressed" by the DEA/IS.

CURE-51, cont.

Included in the many species not surveyed are several special-status species deemed erroneously to have a "low" potential to occur because they were "not observed," and yet acknowledged to have "suitable habitat" onsite and to have been observed near the site. With no surveys conducted, the conclusion that any of these animals have a low potential to occur because they were not observed is unsupported by the evidence and must be rectified. Among others relevant to the discussion above, the following species' potential to occur must be addressed via surveys (i.e. for reptiles, and for resident and migrant birds) and discussed as part of the impact analysis and mitigation: Silvery legless lizard (*Anniella pulchra pulchra)*, orange-throated whiptail (*Aspidoscelis hyperythra*), California glossy snake (*Arizona elegans occidentalis*), Flat-tailed horned lizard ((*Phrynosoma mcallii*), and Black swift (*Cypseloides niger)*; I observed black swifts migrating through both the Sonoran desert and the Whitewater area when conducting raptor and other avian surveys between 2012 and 2016 for the Ocotillo Wind

CURE-52

[16] EBird Whitewater Canyon https://ebird.org/hotspot/L553157
[17] EBird Whitewater Preserve https://ebird.org/hotspot/L423815

energy Project EIR/EIS, and the Los Angeles Regional Interoperable Communications System EIR/EIS.[18]

CURE-52, cont.

To conduct current, focused taxonomic surveys (i.e., birds, bats, reptiles) and protocol surveys for the special-status species that may be present is not onerous in time or cost compared to the cost of failed mitigation that may result from an incompletely presented and analyzed baseline. This type of mitigation failure is avoidable by requiring the Applicant to provide focused, thorough surveys that are the backbone of comprehensive CEQA biological resource impact analysis. For an example of the costs of mitigation failure to both wildlife and humans, see the discussion below regarding the flat-tailed horned lizard.

CURE-53

II. PROPOSED WGT INAPPROPRIATELY EXCLUDED FROM DEA/IS IMPACT ANALYSIS

CURE-54

The County presents an analysis of impacts to biological resources that is limited to WGT-related data collected from the segment of the wind farm that is located within County jurisdiction only. As a result, the County fails to consider the whole of the action in the DEA/IS by failing to consider the complete impact of new WTG from the Mesa Repower (BLM Segment). The WTG can and will impact individuals traversing the entire wind farm site throughout the (at least) 30-year life of the Project and need to be incorporated in the impact analysis.

This omission results in several instances where the mitigation analysis is based on an incomplete baseline regarding direct and indirect impacts to wildlife. This is due to the fact that species that may be utilizing (foraging, breeding) and moving through the area (migrating, emigrating, using it as stopover) are subject to disturbance and increased risk of harm and death caused by the whole of the wind farm repowering project. In other words, wildlife's exposure to increased harm over time does not follow invisible boundaries used for regulatory protocols. Therefore, a more comprehensive and thus accurate analysis of the significant

[18] See: L.A. RICS EIR/EIS https://www.la-rics.org/documents/environmental-documents/environmental-documents-lmr/

impacts to individuals that may move throughout or across both jurisdictional sections of the wind farm should incorporate the risks imposed by the entire wind farm's repowering infrastructure, which includes the new WGT proposed for construction on the BLM Segment of the site.

CURE-54, cont.

The risks to individual species that the DEA/IS indicates have a high potential to occur is underestimated in scope, as well as the variability of risk, caused by different WTG in different micro-sites. For instance, migrating California threatened Swainson's hawks, other migratory special status birds (i.e. Fully Protected American peregrine falcon, Fully Protected golden eagles), special-status foraging bats (i.e. SSC Pallid bat, SSC Townsend's big-eared bat, SSC Western mastiff bat, SSC Western red bat) and a host of other protected species with high potential to visit the site must encounter, avoid, and otherwise maneuver an entirely newly fragmented landscape comprised of 499 foot high wind turbines, as opposed to existing turbines of a much smaller scope and design. To exclude the WGT to be built on the BLM Segment from impact analysis for birds and bats is an erroneous omission based upon imaginary boundaries, not science, and serves to drastically underestimate real world impacts. As such the appropriate baseline for analysis of impacts to birds and bats must include construction and operation of not 7 but 18 new WTGs throughout the site. (See further discussion regarding RSA impacts to birds and bats below.)

III. THE DEA/IS PRESENTS AN INCOMPLETE RSA ANALYSIS OF IMPACTS TO BIRDS AND BATS

A. Impact Incidence Risk to Birds from new WTG is Highly Underestimated

CURE-55

According to DEA/IS, the wind farm's old WTG will be removed followed by construction of new ones built that will be comprised of very different (much larger) size, scope, design, and material. As such the new turbines must be considered an entirely new impact altogether since the risks they pose to birds and bats are significantly different than those imposed by the old WTG, turbines that purportedly will be gone one once this Project's construction commences.

The County asserts that the primary Project risk to threatened and endangered birds would be collision with the turbines or other infrastructure during operation of the Project, and that the San Gorgonio Pass just south of the Project area is also a high-use nocturnal flyway for migratory songbirds. It claims that about 11% of the birds from studies cited migrated at altitudes within what will be the rotor-swept areas (RSA) of the proposed turbines.[19]

CURE-55, cont.

In the DEA/IS Biological Technical Report (BTR), the authors (Aspen) state that the Project area's flight corridor, the San Gorgonio Pass, "is a high-use nocturnal flyway for migratory songbirds. McCrary et al. (1983) estimated 32 million birds flew through the Coachella Valley during spring of 1982, and recorded rates of 5,000–10,000 birds per hour through the Valley. A large proportion of these migratory birds would have migrated through the San Gorgonio Pass, at the northwest margin of the Coachella Valley. Most of these migratory birds flew higher than the existing or proposed turbines, but about **11 percent were at altitudes within the blade-swept areas of the proposed turbines. Special-status migratory birds reported in the CNDDB (including Vaux's swift, yellow warbler, white-faced Ibis, and least Bell's vireo) as well as many other common and special-status species may migrate over the site seasonally** [emphasis added]."[20]

Based upon these numbers presented, the DEA/IS should conclude that 11% of 32 million is 3.52 million birds potentially moving through the windfarm in one spring migratory season. Over the thirty years of the purported life of the Project, this would amount to 105.6 million birds moving through the project with high potential to utilize altitudes at the high-risk RSA of the proposed turbines. Since birds migrate in fall as well as spring, these rates would be doubled, with over 7 million birds a year and over 210 million throughout the life of the Project that would be at significantly increased risk of injury and death from the proposed Project. These incredibly high numbers are not reflected adequately in the mitigation analysis.

[19] DEA/IS p. 38
[20] BTR p. 22

B. The DEA/IS Fails to Adequately Present Impacts from New WTG

CURE-56

The IS/ EA has incorrectly presented the baseline and limited its analysis to deducting the amount of rotor swept area between existing and new turbines for the impact analysis. This is inadequate for several reasons:

An estimate of risk or mortality that is based upon merely subtracting RSA is an incomplete comparison and ignores essential variables involved. It is not just the difference in RSA area that is significant - and different, based upon which old style of WTG is being discussed as there are two models of different sizes. It is the new, increased height of this RSA, as well as aspects of micro-siting, plus individual species variables that contribute to mortality and increased risk of harm overall.[21] Finally, as discussed above, the DEA/IS leaves out over half of the new WTG to be installed on the wind farm in its discussion of impacts to birds and bats, resulting in a flawed and underestimated analysis that compromises the effectiveness of relevant mitigation measures.

According to the DEA/IS, within this section of the windfarm 117 old WTG have a RSA diameter of 23 m, 42 have a 27 m diameter, and 7 new ones will be 117 m in diameter. The DEA/IS concludes that this will result in a 3.6% increase in RSA, though the County presents no analysis of what this percentage equates to, specifically, for bird and bat mortality estimates. It is important to note that even the estimates of the differences in RSA between old and new turbines has not been agreed upon. The BLM Segment Draft EA states that the project's 11 new turbines will increase the total authorized rotor swept area by 55 %,[22] whereas in the Final EA it states that the same number of new turbines will increase the total rotor swept area by an 84 %

[21] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind DEA. https://eplanning.blm.gov/eplanning-ui/project/1504648/570

[22] Mesa Wind DEA 2020 p. 12 https://eplanning.blm.gov/eplanning-ui/project/1504648/570

increase.[23] And yet in the U.S. Fish and Wildlife Biological Opinion for this segment of the project, they state that the RSA will increase by approximately 33.18%.[24]

CURE-56, cont.

However, what is more relevant to mortality estimates is the additive difference in height of the new RSA, as mentioned above. According to the DEA/IS, the new WTG will be 499 feet high, compared to the old WTG with a height of 114 feet or 145 feet. As such the new WTG will result in an additional 385 feet or 354 feet vertical area of significantly increased mortality risk. This amounts to a 338% increase in risk for each of the new WTG based upon an analysis contrasting the shorter WTG with the proposed new ones. This drastic increase in mortality risk is underscored by Smallwood's analysis of increased risk posed by the BLM section of this wind farm, specifically,

CURE-57

"According to BLM (2020:49), the repowering would increase the project's rotor-swept area from 92,460 m2 to about 143,695 m2, or by 55%. But it is not as simple as this. For bats, the old-generation wind turbines pose essentially no collision risk, whereas modern turbines are killing bats in very large numbers (Smallwood 2020). For bats, the repowered project would increase the rotor-swept airspace that is dangerous to bats by 100%. For golden eagles, for which no evidence yet exists that inoperative turbine pose a collision risk, the basis of the increase would be the 29,818 m2 of airspace swept by the 129 existing turbines that reportedly continue to operate. From that existing baseline, the project would increase rotor-swept area by 382%. For other birds, Smallwood and Bell (2020a) found no effect of turbine curtailment on bird collision fatalities, so the rotor-swept area that would be hazardous to birds as a group would increase by about 55%."[25]

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[23] Mesa Wind FEA p.51 https://eplanning.blm.gov/public_projects/1504648/200364317/20027243/250033445/1.%20Mesa%20Wind%20Repower%20Final%20EA%20(508).pdf

[24] Mesa Wind BO p.2 https://eplanning.blm.gov/public_projects/1504648/200364317/20027197/250033399/Appendix%20K%20BO%20508.pdf

[25] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind DEA. https://eplanning.blm.gov/eplanning-ui/project/1504648/570 p. 9

Based on these factors discussed above, it is apparent that the DEA/IS fails to correctly analyze the nature, or scope, of the construction and operational impacts to volant species by the new WTG to be installed in place of the old turbines. Until this is done it is impossible to accurately analyze and pose effective, and adequate, mitigation strategies.

CURE-57, cont.

III. ANALYSIS AND RESULTANT MITIGATION MEASURES FAIL TO REDUCE IMPACTS TO BELOW SIGNIFICANT

A. The DEA/IS Fails to Analyze Collision Mortality of Birds from New WTG

CURE-58

The DEA/IS repeatedly attempts to downplay risks of mortality to birds for the 30 years of operation of the project facility by describing special-status species that are not known for nesting onsite as "not expected to occur on the site except during migration flyover or stopover."[26] This is intentionally misleading, especially in light of the millions of migrants that move through the area as discussed above and in the DEA/IS.

The DEA/IS states that the California Endangered Species Act (CESA) threatened Swainson's hawk is "known from the immediate vicinity"[27] (indeed it has been recorded on Ebird within 1.6 miles of the Project).[28] It is also incorrect in referring to Swainson's hawks as having the potential to use the site as purely migrants. They are known to forage during migration in various habitat types; the CDFW confirms this in their renewable energy project protocols for the species where they state, "Swainson's hawks may also forage in grasslands, Joshua tree woodlands, and other desert scrub habitats that support a suitable prey base. Gophers dominate the prey base of agriculturally based pairs while Swainson's hawks nesting in natural desert habitats consume a wider variety of prey species."[29] This statement is reinforced by my

[26] DEA/IS p. 35
[27] *Ibid.*
[28] EBird Whitewater Preserve https://ebird.org/hotspot/L423815
[29] CDFW and CEC. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California. p.1 https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83991&inline

observations while conducting raptors surveys throughout two years at the 15,000 acre Ocotillo Wind site, located in a Swainson's migratory flyway. I and my colleagues observed migrating Swainson's repeatedly stop and forage for insects including grasshoppers and ants. The 15,000-acre Ocotillo wind site was occupied by almost entirely natural desert scrub, as is the Project site.[30]

CURE-58, cont.

Smallwood's extensive research as cited in his comments is one of various sources confirming that increased risk of mortality to birds and bats within a certain altitude of RSA, in other words from tall, "new generation" turbines. Although careful and data-reliant micro-siting has been demonstrated to reduce mortality of birds by from WTG – and thus an important aspect of mitigation strategy,[31,32] the phenomenon regarding risk from taller turbines is established in the research literature, relevant, and measurable.[33,34]

CURE-59

The DEA/IS fails to analyze actual mortality rates to any avian species, this despite the fact such has been presented for other industrial wind proposed projects as well as described in peer

[30] See also: https://borregohawkwatch.blogspot.com/2017/03/march-5-8-2017-aerial-feeding-continues.html

[31] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind DEA. https://eplanning.blm.gov/eplanning-ui/project/1504648/570

[32] Smallwood, K. S., Neher, L., & Bell, D. A. (2009). Map-Based Repowering and Reorganization of a Wind Resource Area to Minimize Burrowing Owl and Other Bird Fatalities. *Energies, 2*(4), 915-943.

[33] Smallwood, K. S. 2013. Comparing bird and bat fatality-rate estimates among North American wind-energy projects. *Wildlife Society Bulletin 37*:19-33. ftp://nris.mt.gov/public/Maxell/Wind_Turbine_Bat_Impacts/Smallwood_2013_BirdBatMortalityNAComparison.pdf

[34] Smallwood, K. S., and L. Neher. 2009. Map-based repowering of the Altamont Pass Wind Resource Area based on burrowing owl burrows, raptor flights, and collisions with wind turbines. Final Report to the California Energy Commission, Public Interest Energy Research – Environmental Area, Contract No. CEC-500-2009-065. Sacramento, California. https://pdfs.semanticscholar.org/cc09/789ab3ef91628eb879ad8d5fcfb98ae848dc.pdf

reviewed research.[35,36,37,38] Instead the DEA/IS attempts to justify this omission, and its resultant inadequate mitigation response to bird collision mortality, by reverting to the unsupported argument that can be summarized as the "we don't know enough due to limited information" and "based upon one peer reviewed article we conclude studies are not definitive" rationalization. Despite claiming there is a lack of consistent, region-specific information to make a detailed analysis about collision risk or mortality, the DEA/IS reverses this assertion by drawing the conclusion that, "Fatality rates due to increased turbine height may also vary by species; for raptors, repowering at Altamont Pass, where smaller turbines have been replaced by fewer, taller turbines, may decrease fatalities."[39]

CURE-59, cont.

This scientifically unsupported and inconsistent rationalization in lieu of a discussion of degree of species-specific impacts is inadequate for CEQA analysis, and incorrect. If the Applicant believes that assessing degree of significant impacts caused by a project is too difficult to determine, then the Applicant Is not prepared to present a completed CEQA analysis that poses successful mitigation.

Smallwood underscores this omission regarding the inadequacy of the BLM Segment EA as well, stating, "Proposed mitigation measures need predictions of collision fatalities per species of bird and bat – predictions that the EA does not provide. Appropriate mitigation cannot possibly be planned effectively without first knowing the potential impacts. Imagine trying to plan mitigation for impacts of a natural disaster on personal property without knowing the value of

CURE-60

[35] Krijgsveld, Karen & Akershoek, Kirsten & Schenk, Femke & Dijk, Femke & Dirksen, Sjoerd. (2009). Collision Risk of Birds with Modern Large Wind Turbines. *Ardea*. 97. 357-366. 10.5253/078.097.0311.
[36] New L, Bjerre E, Millsap B, Otto MC, Runge MC (2015) A Collision Risk Model to Predict Avian Fatalities at Wind Facilities: An Example Using Golden Eagles, *Aquila chrysaetos*. *PLoS ONE* 10(7): e0130978. doi:10.1371/journal.pone.0130978
[37] Thaxter C.B. et al. 2017 Bird and bat species' global vulnerability to collision mortality at wind farms revealed through a trait-based assessment. *Proc. R. Soc. B* 284: 20170829. http://dx.doi.org/10.1098/rspb.2017.0829
[38] Erickson, W. P., Wolfe, M. M., Bay, K. J., Johnson, D. H., & Gehring, J. L. (2014). A Comprehensive Analysis of Small-Passerine Fatalities from Collision with Turbines at Wind Energy Facilities. *PLoS One, 9*(9)http://dx.doi.org.jerome.stjohns.edu:81/10.1371/journal.pone.0107491
[39] DEA/IS p. 38

the personal property or the potential magnitude of damage caused by the disaster. The EA poses the same problem for birds and bats at Mesa Wind because the EA does not disclose how many of each species of bird and bat would be made vulnerable to wind turbine collisions, nor does it disclose how many might be killed by wind turbine collisions or other elements of the project. Potential impacts can be predicted, however, because impacts have been measured at other wind projects, providing an empirical basis for defining a range of possible outcomes (Smallwood 2013, 2020a)."[40]

CURE-60, cont.

Contrary to the inferences by the DEA/IS it is a documented phenomenon that higher, wider WTG blades are a larger accidental target for various species of high-flying migrants and raptors than smaller, shorter (and older) generation turbines, including protected species such as golden eagles and Swainson's hawks (a California state Threatened species).[41,42] For instance, Hotker's research comparing turbine design concluded, "…in all cases repowering has a negative impact on birds – larger wind turbines have higher collision rates than smaller ones (see also chapter 4.2)"[43] and that visiting birds showed a variable picture in which repowering had a negative effect on sensitive species.[44]

CURE-61

According to the U.S. Fish and Wildlife Service's (USFWS) Final Environmental Assessment for the Shiloh IV Wind Repowering Project's Eagle Conservation Plan, "Because the Shiloh IV was largely a repowering project—that is, it entailed the removal of 230 old-generation wind

CURE-62

[40] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind DEA. https://eplanning.blm.gov/eplanning-ui/project/1504648/570 p. 19

[41] Smallwood, K. (2017). The Challenges of Addressing Wildlife Impacts When Repowering Wind Energy Projects *In Wind Energy and Wildlife Interactions* (pp. 175-187): Springer. https://tethys.pnnl.gov/publications/challenges-addressing-wildlife-impacts-when-repowering-wind-energy-projects

[42] Smallwood K.S. (2013). Comparing bird and bat fatality-rate estimates among North American wind-energy projects. Wildl Soc Bull 37:19–33. https://wildlife.onlinelibrary.wiley.com/doi/abs/10.1002/wsb.260

[43] Hotker, H. 2006. The Impact of Repowering of Wind Farms On Birds and Bats. Nature and Biodiversity Conservation Union. pp. 1-38. p. 24 https://bergenhusen.nabu.de/imperia/md/images/bergenhusen/impact_of_repowering.pdf

[44] *Ibid.*

turbines and their replacement with 50 new-generation turbines - the project resulted in vastly greater spacing between turbines and the removal of lattice towers that provided perches for eagles and other birds. However, the total risk area to eagles also increased because of the larger size of the turbine blades."[45] Additionally, the Shiloh Wind Environmental Assessment states in respect to accuracy of impact analysis for Shiloh IV, "we believe that the number of eagle fatalities in the WRA could be higher than currently reported from post-construction monitoring or other incidental detections in view of limited search intervals, limited search areas, and existing land use /cropping patterns."[46] USFWS eagle biologists go on to state, in respect to larger turbine-related golden eagle fatalities, "Direct mortality of golden eagles could adversely affect local survival and fecundity, and could thereby affect local and possibly regional populations. The biological impact of killing an eagle within the WRA on the overall population depends on the type of eagle killed: a breeding adult, a juvenile, or a floater."[47] In other words, risk, take, and thus significant impacts from the Project are relevant to the details regarding individual eagle / pairs (i.e. where nesting, foraging, historical use, etc.). The DEA/IS has provided no analysis of the local eagle population - or any other avian species - relevant to the collision mortality risk posed by Project site, therefore no valid conclusions can be made regarding an unknown site baseline and successful mitigation for (a Fully Protected) species, for life of the Project. This project's status correlates with the current Project proposed actions, and thus the conclusions of USFWS apply as well.

CURE-62, cont.

Other studies of different wind turbine size configurations on industrial sites have established that *change in size* is a key variable in WTG bird collision mortalities, stating "We found support for an increase in mortality with increasing turbine hub height... Evaluation of risks to birds is

[45] USFWS. June 2014. Final Environmental Assessment Shiloh IV Wind Project Eagle Conservation Plan. p. 33. https://www.fws.gov/cno/conservation/MigratoryBirds/ShiloIV-FONSI/Attachment1-FEA-ShilohIV-June2014.pdf

[46] *Ibid.*

[47] McKernan, R. Wagner, W., Landry, R. and McCrary, M. (1984). Utilization by Migrant and Resident Birds of the San Gorgonio Pass, Coachella Valley, and Southern Mojave Desert of California. Prepared for Research and Development Southern California Edison. p. 32

warranted prior to continuing a widespread shift to taller wind turbines."[48] and that "Bird collision probability depended on species, turbine height (taller = more victims)."[49]

CURE-62, cont.

This research is supported by my observations as a lead raptor biologist for two years on the Ocotillo Wind project site located in the seasonal migratory pathway of thousands of Swainson's hawks. Part of our data collection included recording the flight path of raptors, including altitude. Day-long raptor surveys, along with point count surveys, were conducted several times a week over the course two years. I observed that Swainson's hawks and golden eagles utilized migratory flight paths between 200 and 600 feet on 88% of recorded observations. If one is comparing impacts of from a structure with a RSA that reaches 499 feet compared to a structure where the top of the RSA is below 150 feet, as is the case with this Project, it does not require complex modeling to determine there will be an increase in impacts to a species that tends to fly through the area at heights over 200 feet and below 600. In short, common sense as well as available science indicate that without the correct assumptions and analysis regarding bird collision risk with the proposed WTG, the DEA/IS mitigation analysis is incompletely presented and must be revisited with species-specific information concurrent with a discussion regarding the potential deleterious impacts from the proposed WTG for the whole of the repowering project.

B. The DEA/IS Fails to Analyze Collision Mortality of Bats from New WTG

Size matters not only to birds, but bats as well, as many bat species have been known to be killed by proximity to turbines. Extensive research on bats has demonstrated that activity of bats near turbines, and mortality of bats by turbines, can vary depending on species due to

CURE-63

[48] Loss, S.R., Will, T., Marra, P.P. (2013). Estimates of bird collision mortality at wind facilities in the contiguous United States. *Biological Conservation*, 168: 201-209. https://doi.org/101016/j.biocon.2013.10.007.

[49] de Lucas, M., Janss, G. F. E., Whitfield, D. P., & Ferrer, M. (2008). Collision fatality of raptors in wind farms does not depend on raptor abundance. *Journal of Applied Ecology*, *45*(6), 1695–1703.

differences in behavior and typical zones of foraging and migrating height.[50] However, the DEA/IS does not collect any protocol survey data for the entire taxa of bats when analyzing the Project's potential for significant impacts, despite the fact that is well established in the scientific literature that wind turbines kills bats, and that the taller turbines pose the most significant risk.[51] As the U.S. Geological Survey (USGS) bat biologists state, "it's estimated that tens to hundreds of thousands of bats die at wind turbines each year in North America alone."[52] USGS also reminds us that bats are not only an essential component of ecosystem biodiversity and function, they "provide pest control services worth billions of dollars to farmers annually."[53] Smallwood confirms the high risk of this Project's taller WTG by stating that, "For bats, the repowered project would increase the rotor-swept airspace that is dangerous to bats by 100%."[54]

CURE-63, cont.

The DEA/IS states that, "There are ten special-status bats that could occur in the Project vicinity; six of these are ranked as CDFW Species of Special Concern: pallid bat (SC), Townsend's big-eared bat (SC), western mastiff bat (SC). There are ten special-status bats that could occur in the Project vicinity; six of these are ranked as CDFW Species of Special Concern: pallid bat (SC), Townsend's big-eared bat (SC), western mastiff bat (SC), western red bat (SC), California leaf-nosed bat, long-eared myotis, fringed myotis, Yuma myotis, pocketed free-tailed bat (SC), and big free-tailed bat (SC)... Some species feed mainly over open water where insect production is especially high, but others forage over open shrublands such as those found on the Project site. These special-status bats have moderate to high potential to forage over the

[50] Wellig, S. D., Nusslé, S., Miltner, D., Kohle, O., Glaizot, O., Braunisch, V., Obrist, M. K., Arlettaz, R. (2018). Mitigating the negative impacts of tall wind turbines on bats: Vertical activity profiles and relationships to wind speed. *PloS one*, 13(3), e0192493. doi: 10.1371/journal.pone.0192493

[51] Smallwood, K. S., & Bell, D. A. (2020). Effects of Wind Turbine Curtailment on Bird and Bat Fatalities. *Journal of Wildlife Management*, *84*(4), 685–696. https://doi-org.jerome.stjohns.edu/10.1002/jwmg.21844

[52] USGS See https://www.usgs.gov/faqs/how-are-bats-affected-wind-turbines?qt-news_science_products=0#qt-news_science_products

[53] Khalil, Mona, ed. (2017). U.S. Geological Survey: Energy and wildlife research annual report for 2017: U.S. Geological Survey Circular 1435, 91 p., https://doi.org/10.3133/cir1435.

[54] Smallwood, S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind EA. p. 9

Project site. Three special-status bats have potential to fly over the site en route to foraging habitat elsewhere, including spotted bat (SC), western yellow bat (SC), and cave myotis (SC)."[55]

CURE-63, cont.

These statements represent a flawed baseline description due in part to a lack of bat surveys for the Project and thus a significant lack of evidence for their analysis regarding what may be foraging, migrating, or for whatever reason what may or may not be detected onsite. The DEA/IS thus also fails to provide any other important data regarding frequency of occurrence, time, duration, behavior, height of flight, echolocation details, etc.; variables that have been studied and demonstrated as having the potential to better inform any operational mitigation strategies such as curtailment and timing.[56,57,58]

The DEA/IS does acknowledge that "The primary Project risk to special-status birds and bats would be collision with the turbines or other infra-structure during operation of the Project,"[59] however it reverts back to its minimalist description of mortality risks by noting these impacts to bats are "described under the summary of impacts to T&E birds" where, as indicated, it mentions impacts to only T&E *birds* in its erroneous rationalizations about impacts from turbines being too indeterminate to assess. Clearly the DEA/IS has not described or analyzed bats to any adequate degree in this report, therefore any discussion of the adequacy of their mitigation measures is unsupported by the evidence. However, for the sake of clarity, it should be noted there DEA/IS's mitigation measures for direct, indirect, and cumulative impacts to bats are comprised of:

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[55] DEA/IS p. 43

[56] Smallwood, K. S., & Bell, D. A. (2020). Effects of Wind Turbine Curtailment on Bird and Bat Fatalities. *Journal of Wildlife Management*, *84*(4), 685–696.

[57] Hayes, M. A., Hooton, L. A., Gilland, K. L., Grandgent, C., Smith, R. L., Lindsay, S. R., Collins, J. D., Schumacher, S. M., Rabie, P. A., Gruver, J. C., & Goodrich-Mahoney, J. (2019). A smart curtailment approach for reducing bat fatalities and curtailment time at wind energy facilities. *Ecological Applications: A Publication of the Ecological Society of America*, *29*(4), e.01881. 1

[58] Weller, T. J., & Baldwin, J. A. (2012). Using echolocation monitoring to model bat occupancy and inform mitigations at wind energy facilities. *Journal of Wildlife Management*, *76*(3), 619–631. https://www.fs.usda.gov/treesearch/pubs/39603

[59] DEA/IS p. 44

1. MM BIO-5 that proposes "minimizing" potential hazards of lighting to bats. This is inadequate to determine efficacy or success since no further information is provide as to how this will be achieved while concurrently satisfying FAA safety standards.

CURE-64

2. MM BIO-12 that states there will be post-construction mortality surveys as mitigation for birds and bats. As important as monitoring is for any such project, reporting dead bats does not mitigate for dead bats. As such this is not a strategy that serves to reduce any impacts to below significant.

3. BIO-13 that says a Bird and Bat Conservation Strategy will be prepared. Actions identified to be included in this plan for actual mitigation of impacts to bats is that there will be a "pre- and post-operation monitoring protocol for bird and bat mortality."[60] Aside from the fact that this statement is unclear (What will pre-operating monitoring entail? What about during operation?), once again it must be noted that reporting does not mitigate injury or death of any species, and therefore this is an ineffective mitigation measure. Also, much of this mitigation measure amounts to deferral of mitigation discussion to the future; without timelines, any performance or success criteria identified to any degree for mitigation strategies, the reviewer has no way of determining the measures' potential for success.

In summary the DEA/IS has failed to adequately describe, analyze, and mitigate the significant impacts to all species of bats, special-status and otherwise, that will occur during construction and throughout the life of this Project. As such, operational impacts to bats remain unmitigated.

IV. THE DEA/IS FAILS TO CORRECTLY ANALYZE AND MITIGATE CUMULATIVE IMPACTS

CURE-65

The DEA/IS describes no effective mitigation measures to address cumulative impacts to biological resources. Instead they claim, "The cumulative analysis for Biological Resources uses

[60] DEA/IS p. 59

the CVMSHCP coverage area as the geographic scope. The CVMSHCP boundaries include the Project and the species affected by the Project would be the same as those considered under the CVMSHCP. Under the CVMSHCP, private land use impacts to covered special status plant species and animal habitat throughout the Coachella Valley are offset through habitat acquisition and management to minimize or avoid the otherwise cumulative impacts of the development. For most biological resources within the CVMSHCP, the cumulative impacts are not substantial. The Project would offset habitat impacts through compensation and other measures, consistent with the MSHCP, and therefore would not contribute considerably to any existing cumulative impacts."[61]

CURE-65, cont.

This rationale is circular and incorrect in its conclusions. First, the CVMSHCP is a plan, a set of guidelines for a diverse region; one that assists in identifying and acquiring land and habitat to be protected. An example of its role in presenting *general* guidelines for implementation of compensatory mitigation areas can be seen here in the Plan's summary, "The Plan includes certain requirements to avoid, minimize, and mitigate impacts to bighorn sheep Habitat, Biological Corridors, burrowing owl, covered riparian bird species, crissal thrasher, desert tortoise, fluvial sand transport, Le Conte's thrasher, mesquite hummocks and mesquite bosque natural communities, triple-ribbed milkvetch, Palm Springs pocket mouse, and Little San Bernardino Mountains linanthus. **The measures have limited application to O&M activities** [emphasis added]."[62]

As its website states, "The Coachella Valley Conservation Commission (CVCC), a joint powers authority of elected representatives, will oversee and manage the [CVMSHCP]. The CVCC has no regulatory powers and no land use authority. Its primary purpose is to buy land from willing sellers in the conservation areas and to manage that land."[63] The CVMSHCP does not pose a

[61] DEA/IS p. 106

[62] https://www.cvmshcp.org/Plan%20Documents/07.%20CVAG%20MSHCP%20Plan%20Executive%20Summary.pdf

[63] https://www.cvmshcp.org/doc/cvmshcp_faq_11_30_16.pdf

mitigation strategy for this Project, nor does it address degree or scope of cumulative impacts to any specific project that such land purchased may or may not offset as mitigation. However, the DEA/IS erroneously refers to the CVMSHCP as if it's a directive that will meet any mitigation requirements for cumulative impacts by saying it will "offset" them through "habitat acquisition and management" with no further detail on the what, where, or when this will happen, with what success for performance criteria specific to the habitats and species impacted by the Project, or how it will successfully mitigate the specific impacts caused by this particular project overall. The DEA/IS therefore presents a meaningless description of cumulative impact mitigation.

CURE-65, cont.

Second, the DEA/IS asserts that "for most biological resources within the CVMSHCP, the cumulative impacts are not substantial." This statement is specious: as a complex management Plan for which many specific parcels have yet to be defined it is erroneous to refer to the CVMSHCP it as if it is one large land parcel or region where cumulative (or any other) impacts can be described with any accuracy. Even if this statement made sense there is no evidence provided to support it.

Third, the CVMSHCP does not come close to covering all of the species, including special-status species, that will be impacted by the Project.[64] Alternatively, some of the species that are covered under the Plan are not discussed at all by the Project despite the fact they have a moderate to high potential to occur, such as the flat-tailed horned lizard (*Phrynosoma mcallii).*

Fourth, the DEA/IS continues with its incorrect assumptions where it concludes that bird and bat mortality from wind turbine collisions "cannot be evaluated in terms of the overall importance to bird and bat populations. The Project would contribute to a new baseline and operational bird and bat mortality data, as part of the Bird and Bat Conservation Strategy. Additionally, the three other repower projects identified as cumulative projects (Mesa, Painted Hills, and Coachella Wind Holdings) are expected to contribute to an understanding of regional

CURE-66

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https://webcache.googleusercontent.com/search?q=cache:r9rqV5lLnxkJ:https://nrm.dfg.ca.gov/FileHandler.ashx%3FDocumentID%3D65725+&cd=1&hl=en&ct=clnk&gl=us&client=firefox-b-1-d

bird and bat mortality risks of wind repower projects. Both the Coachella Wind Holdings and the Painted Hills repower project include requirements for bird and bat mortality monitoring. The Mesa Wind Repower is expected to include a similar requirement, which combined with the other projects in the area, will contribute to improving the understanding of bird and bat mortality in the area. The Bird and Bat Conservation Strategy will include an adaptive management strategy that will help reduce the cumulative contribution of the Project if any effects are found to be less than cumulatively considerable."

CURE-66, cont.

The DEA/IS claims there are minimal cumulative impacts, then infers above that there are such impacts because they are "expected to" be part of some undefined collective of monitoring information. How such cumulative impacts from the repowering facilities will be collected, analyzed, and addressed collectively is not discussed. Smallwood appropriately responds to a very similar and erroneous assertion by the BLM regarding the other segment of this repowering project, "It is not justifiable to build a project to learn how many bats and birds the project would kill. Once constructed, the level of mortality revealed by the project would either continue unabated for the duration of the project, or it would cost the project owner a lot of money to remove turbines or curtail operations. Contrary to the uncertainty BLM asserts around whether bird and bat mortality would increase or decrease, we already know how mortality changes with repowering...I provide predicted fatality rates based on what we have learned elsewhere."[65] Indeed, "expectations" do not amount to mitigation strategies. If a project applicant truly finds it impossible to evaluate or predict impacts, then the applicant is not ready to provide a complete CEQA analysis for its project.

As Smallwood indicates, potential impacts can be predicted and because they have been measured at other wind projects, providing an empirical basis for defining a range of possible outcomes. To proclaim that such is impossible because there is a lack of information generated from entire projects extremely similar in scope and located within the same location (i.e. the

[65] Smallwood. S. June 16, 2020. Comments on Biological Resource Impact Analysis for Mesa Wind EA. p. 10

San Gorgonio Pass) is specious. Doing so denies what scientists do every day; collect and analyze data using the scientific method, statistics, and deductive reasoning for the purpose of drawing useful conclusions from samples in ways they can be discussed as representative of a whole without being duplicative or nearly so.

CURE-66, cont.

It is possible to make collision risk assessments based upon existing data and information about variables such species present, species behavior, and micro-siting.[66] For example, mortality estimates are provided by Smallwood for the new WTG in the BLM segment of this proposed project, "The weighted mean fatality rate in Smallwood (2020a) would predict 591 (95% CI: 345-870) bat fatalities per year at the proposed project. After a 30-year permit period (30 years has been typical for wind projects), this toll would come to 17,730 (95% CI: 10,350-26,100) bat fatalities. This toll would qualify as a substantial new impact caused by Mesa Wind."[67] Smallwood is basing this estimate on 11 new WTG, such a prediction could be made for 7 additional new ones as proposed for this Project.

Smallwood also mentions a species whose population status could be drastically impacted by this repowering project, "One of the most vulnerable bat species to wind turbine collisions is hoary bat, a bat which is in sharp decline in the Pacific Northwest (Rodhouse et al. 2019). According to the weighted mean fatality rate in Smallwood (2020a), the project can be predicted to kill 159 (95% CI: 121-204) hoary bats per year, or 4,770 (95% CI: 3,630-6,120) after 30 years, assuming hoary bats are not extirpated sooner." In their recent research of hoary bat decline in the western U.S. Rodhouse and colleagues concluded, "Our discovery of hoary bat decline is consistent with the hypothesis that the longer duration and greater geographic extent of the wind energy stressor (collision and barotrauma) have impacted the species."[68] It is unlikely this species has time for the Project to use it as some ill-defined monitoring experiment that will contribute to some unknown database in some undescribed manner in the future.

CURE-67

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[66] de Lucas, M., Janss, G. F. E., Whitfield, D. P., & Ferrer, M. (2008). Collision fatality of raptors in wind farms does not depend on raptor abundance. *Journal of Applied Ecology*, *45*(6), 1695–1703.

[67] *Ibid*. p. 20

[68] Rodhouse TJ, Rodriguez RM, Banner KM, Ormsbee PC, Barnett J, Irvine KM. 2019. Evidence of regionwide bat population decline from long-term monitoring and Bayesian occupancy models with empirically informed priors. *Ecol Evol*. 9:11078–11088. https ://doi.org/10.1002/ece3.5612

The DEA/IS uses an oft-used catchphrase, "adaptive management" to erroneously imply that monitoring, via a nonexistent and thus far undescribed Bird and Bat Conservation Plan, will be appropriately and effectively morphed into applied action. However, this is improper deferral of mitigation, since the DEA/IS provides no description and no details; no success or performance criteria, no thresholds, no description even of species involved. As such this prevents the reviewing public from making any assessments or suggestions regarding its success. How will such "adaptive management" appropriately address each and every one of the many special status bird and bat species potentially impacted? How will the mitigation be implemented, what will it look like, how will it be enforced, who exactly will pay for its implementation at what cost; how will methods, success criteria be established and evaluated? Based upon what criteria or threshold can management be "adaptive" when the same DEA/IS claims it cannot even evaluate impacts to begin with? How will a complete lack of thresholds be "adapted" for efficacy at an indeterminate future, an undescribed timeline, and undescribed species? These are no small matters to address. The methodologies that may be appropriate, not to mention have a high probability of success, require specific expertise and discussion, not to mention dedicated funds as of yet completely undetermined.

CURE-68

For instance, in their recent research on hoary bats and impacts from development including wind facilities, the researchers state that, "with respect to apparent hoary bat decline, our study, as a fundamental baseline, could be a catalyst for increased mitigation of wind turbine collisions via curtailment at low wind speed (Arnett, Huso, Schirmacher, & Hayes, 2011) and other actions (e.g., acoustic deterrence, Arnett, Hein, Schirmacher, Huso, & Szewczak, 2013). If done in a strategic manner (e.g., using experimental design), this can become a way to inform collective learning and adaptive management (Hayes et al., 2019)."[69] This underscores that real world mitigation for the cumulative impacts of 30 years of bird and bat deaths requires a

CURE-69

[69] Rodhouse TJ, Rodriguez RM, Banner KM, Ormsbee PC, Barnett J, Irvine KM. 2019. Evidence of regionwide bat population decline from long-term monitoring and Bayesian occupancy models with empirically informed priors. *Ecol Evol*. 9:11078–11088. https ://doi.org/10.1002/ece3.5612

serious commitment to inviting expertise and discussion via some semblance of a written plan, as opposed to the DEA/IS's deferral of all to a later post-permitted date.

CURE-69, cont.

Aside from the omissions iterated above, this DEA/IS also fails to adequately address what may be population level impacts to special-status species in particular. It makes little attempt to describe how its Bird and Bat Conservation Plan will address cumulative or direct 30-year operational impacts in a way that will satisfy the regulatory directives in place to protect these species, including ESA, CESA, and Fully Protected status species for which take is not allowed without a Habitat Conservation Plan that directly addresses mitigation of impacts to each of the species in question as incurred by this Project.

CURE-70

In regard to their research on population-level impacts by wind energy development, Beston *et. al*. conclude that, "Wind turbines displace and kill a variety of wildlife, which has made wind energy a major conservation and policy concern worldwide. Direct impacts of wind energy include bird and bat collisions with turbines whereas indirect impacts include changes in wildlife habitat and behavior...species that are long-lived with low rates of reproduction, have specialized habitat preferences, or are attracted to turbines may be more prone to declines in population abundance. Several birds of prey, such as the long-eared owl, ferruginous hawk, Swainson's hawk, and golden eagle, were at relatively high risk of population decline across a wide variety of cutoff values. Whether or not wind energy has population-level consequences for wildlife species is a critical issue when developing strategies for avoiding, minimizing, and mitigating impacts of energy production."[70] How exactly will take of CESA protected Swainson's hawks, Fully Protected golden eagles, or any of the other special status species be identified and mitigated via undescribed "adaptive management"?

In short, there are means to inform true adaptive management, but they must at a minimum be described prior to permitting while allowing for public review and comment, including by

[70] Beston, J. A., Diffendorfer, J. E., Loss, S. R., & Johnson, D. H. (2016). Prioritizing Avian Species for Their Risk of Population-Level Consequences from Wind Energy Development. PLoS One, 11(3) p. 1-2 https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0150813

experts who might contribute to how such management could actually be successful. Stating a plan will be created in the future that will adapt its findings to be somehow be successful in mitigating ill-defined impacts is in not an actual mitigation analysis or strategy. As such the operational direct, indirect, and cumulative impacts to birds and bats remain unmitigated for this Project as well as the other segment of this proposed facility under BLM jurisdiction.

CURE-70, cont.

V. OTHER MITIGATION MEASURES PROPOSED BY THE DEA/IS ARE NOT SUPPORTED BY SUBSTANTIAL EVIDENCE DEMONSTRATING THAT THEY WILL BE EFFECTIVE.

CURE-71

MM BIO-1 refers to the future creation of a wildlife relocation plan that is ill-defined and mostly undescribed regarding special-status species that may be encountered. It is a widely accepted ecological reality that avoidance is a preferred strategy to mitigate harm to wildlife when development of habitat is involved, yet this is not proposed as a primary mitigation strategy. Relocating wildlife is a last resort since it is often met with failure,[71,72] and is a form of harassment by way of altering behavior as well as forcing individuals, breeding pairs, and entire families with young away from a site chosen by way of its evolutionary instincts and learning that maximize fitness, whereas relocation reduces it and increases mortality risk.[73]

Successful relocation that mitigates direct harm is never guaranteed, and indirect harm that may occur post-relocation of individuals for development projects is almost never measured for success. This is despite the fact that relocation can induce various stressors on individuals that would not be immediately noticed. As such, the MM BIO-1 does not provide substantial evidence as to how this strategy will be successful to the degree necessary to actually mitigate

[71] Scrivner, J. H., O'Farrell, T.,P., Hammer, K., & Cypher, B. L. (2016). Translocation Of The Endangered San Joaquin Kit Fox, *Vulpes macrotis mutica*: A Retrospective Assessment. *Western North American Naturalist, 76*(1), 90-100.

[72] Eboni Griffin, Martha Desmond, & Dawn Vanleeuwen. (2017). Juvenile Burrowing Owl Movement and Survival in a Human-Altered Landscape. *Wildlife Society Bulletin (2011-), 41*(4), 649-658. doi:10.2307/90016784

[73] Nussear, K., Tracy, C., Medica, P., Wilson, D., Marlow, R., & Corn, P. (2012). Translocation as a Conservation Tool for Agassiz's Desert Tortoises: Survivorship, Reproduction, and Movements. *The Journal of Wildlife Management, 76*(7), 1341-1353.

(mostly undescribed) impacts, including for species un-named and thus deferred to the future regarding species-specific plan creation and methodology.

CURE-71, cont.

Improper deferral of mitigation resulting in poor or incomplete analysis is costly to both wildlife and developers. I have witnessed this personally by way of an important and poorly reported phenomenon on solar and wind energy project construction sites in the Sonoran and Mojave Deserts. I and my colleagues first noticed this phenomenon during construction monitoring along roads and within construction zones, monitoring required only due to the presence of a special-status lizard's protected area bordering the site. Specifically, we observed that lizards of various species are attracted to roads on and around construction sites where trucks spraying water (and other erosion control liquids) several times a day are used to reduce airborne dust, as is the case with every desert development project's dust minimization protocols. This practice attracts lizards to higher moisture levels on the roads, resulting in increased mortality and injury from traffic on the roads subsequent to the water trucks passing.

CURE-72

This phenomenon was reported on a solar construction site in desert scrub habitat during the summer of 2014. Within the course of one month, mortality of over 20 flat-tailed horned lizards (*Phrynosoma mcallii*) (FTHL); a CDFW protected species whose range overlaps with the Project region. (**It should be noted here that FTHL have been observed within 2 miles of the proposed Project location of turbine 7A, and yet the DEA/IS provides no analysis of potential impacts to the species**. This despite the fact it is a special-status species covered by the CVMSHC, the tames Plan that the DEA/IS refers to with the unsupported claim its existence will mitigate cumulative Project impacts.)[74] Once mortalities were reported, over 100 FTHL were relocated to avoid mortality from vehicle impacts during several weeks of the construction phase.[75] During the construction of the Sunrise Powerlink gen-tie line in the Sonoran Desert, between

[74] CDFW FTHL species profile https://wildlife.ca.gov/Regions/6/Flat-Tailed-Horned-Lizard
[75] Wilton, Ben. Tenaska, Personal communication, March 19, 2015; Hord, P. pers. comm., Aug 27, 2017.

April and November, 25 FTHL mortalities were recorded and 103 flat-tailed horned lizards were relocated.[76]

CURE-72, cont.

The project developers failed to anticipate these significant impacts to lizards in their impact analysis and mitigation proposals, and as a result one facility had to completely stop work for two weeks. Because the relocation measure was an emergency response to an impact that the Applicant failed to recognize, and had designated no funds for, relocation protocols and results were not tested, measured, or evaluated for survival success. Therefore, the efficacy of these last-minute mitigation measures remains unknown. FTHL were not the only species killed by this phenomenon. Lizards of various species and sizes were opportunistically attracted to the added moisture on the roads from water trucks. When this phenomenon was officially noted as impacting sensitive species, additional on-site biologists and mitigation management practices were necessary to ensure complete coverage of all construction roadways and other areas where lizards were prone to death and injury from vehicle impacts.[77] One independent contractor reported his company losing over $146,000 a week due to the unexpected delay, partly due to the developer's resistance to hiring the requisite number of additional biologists (three) needed to detect and relocate lizards at risk of mortality during the pre-construction phase.[78] It must be noted that mortalities from even one Project such as this could have a population level effect, especially if a species sub-population is isolated or part of a Distinct Population Segment.[79]

MM BIO-3 proposes a reduction in construction impacts to below significant by hosting an Environmental Awareness Training Program (WEAP). However there exists no evidence that any

CURE-73

[76] Flat-tailed Horned Lizard Interagency Coordinating Committee. 2011. Annual Progress Report: Implementation of the Flat-tailed Horned Lizard Rangewide Management Strategy, January 1, 2010 to December 31, 2010.
[77] P. Hord, pers. comm., Sage Wildlife Biology. Aug 27, 2017.
[78] Clarke, C. March 2015. Work on Solar Project Halted to Protect Lizard. KCET: http://www.kcet.org/news/redefine/rewire/solar/work-on-solar-project-halted-to-protect-lizard.html
[79] Murphy, R., Trepanier, T., Morafka, D. Conservation genetics, evolution and distinct population segments of the Mojave fringe-toed lizard, *Uma scoparia*. *Journal of Arid Environments.* Volume 67, Supplement, 2006, pp 226-247. https://doi.org/10.1016/j.jaridenv.2006.09.023

WEAP actually served to significantly mitigate impacts. Employees are tasked with completing the program, upon which they sign a form or receive a sticker. Such training is common and may nicely enhance some ecological knowledge of some species for some workers. I have personally observed these trainings many times for various development projects in a variety of locations and working environments, including energy projects in desert habitats in California. However, I have not observed these presentations for enhanced worker awareness translate into measurable actions that have been determined to significantly reduce project impacts to wildlife.

CURE-73, cont.

The BIO-3 Measure states that it will "describe worker's responsibilities regarding wildlife avoidance... provide contact information for the FCR and Authorized Biologist and instructions for notification of any threatened, endangered or sensitive wildlife discoveries...and place special emphasis on species that may occur on the Project site including special-status plants, desert tortoise, burrowing owl, golden eagle, nesting birds, desert kit fox, American badger, and Nelson's bighorn sheep." These trainings are helpful for employee awareness and safety. And yet there is no realistic mechanism or legal framework by which employees can be held responsible for unintentional impacts related to the WEAP. Workers cannot be expected to become naturalists after a lecture. Moreover, there is no structured way to enforce or guarantee learning, or resultant responsible action taken, to an educational program where learning and retention by definition are subjective and difficult to measure.

Meanwhile the efficacy of this mitigation strategy is never measured for construction projects. If upon completion of training a worker unintentionally fails a mitigation action due to being unable to recall key regulations, remains unable to distinguish a protected species from others, or for whatever reason unintentionally harms wildlife, how will such a shortfall be tested, remedied, or enforced? I have observed many projects where workers in bulldozers unintentionally killed fossorial, cryptic, and burrowing special-species that the onsite biologist was unable to detect beforehand due to its being out of sight. No WEAP training can prevent this, therefore such impacts must be addressed in an effective, viable strategy, including

compensatory mitigation for all habitat loss. Such compensatory land purchases should establish, pre-permitting, that the special-status species being mitigated for actually occur on the mitigation land parcel; something rarely done but important to ensure high potential of successful mitigation.

CURE-73, cont.

There is no empirical evidence, and few anecdotes, that demonstrate that these "awareness" trainings about wildlife reliably reduce significant impacts to wildlife species to less than significant. Additionally, many measures described by a biological training program -a s well as other measures to reduce impacts during construction, including sensitive species -pre-construction surveys - rely on the absolute authority of onsite biologists who are (a) hired by and thus beholden to the project applicant, (b) are invariably required to sign highly restrictive nondisclosure agreements (of questionable legality) for employment that preclude most kinds of problem reporting or whistleblowing if rules are not followed by any parties involved, and (c) rarely given the necessary authority to oversee enforcement, including stopping work or removing a worker who may be deemed non-compliant.[80, 81] I have observed construction workers with an abundance of training stickers on their hard hats avoid taking action to address or avoid a biological resource protection problem onsite when such a scenario was presented, where no remedial action was enforced, and certainly no criteria existed for measuring efficacy of the WEAP.

If the Applicant requires the workers take specific actions to reduce potential construction impacts that relate directly to their job responsibilities (i.e. maintaining a speed limit, hazardous spill containment, fire prevention measures, maintaining garbage-free working spaces, keeping potential animal pitfalls covered, and avoiding harassment of any and all wildlife and vegetation), it is appropriate that each such action should be identified as a **construction regulation** necessary for safety, not mitigation. Otherwise, it is impossible to quantify the

[80] Clarke, C. Feb 8, 2013. Ocotillo Wind Employee Arrested After Alleged Threat. *KECT Rewire*. https://www.kcet.org/redefine/ocotillo-wind-employee-arrested-after-alleged-threat
[81] Raftery, M. April 6, 2011. SDG&E Removes Pilot for Flying Too Close to Eagle Nests. *East County Magazine*. https://www.eastcountymagazine.org/sdge-removes-pilot-flying-too-close-eagle-nests

degree of mitigation, if any, such program contributes to reduce impacts to below significant, and thus this measure fails to present evidence of its efficacy.

CURE-73, cont.

MM BIO- 5 mentions it will use dust abatement to meet safety and air quality standards. How does the Applicant propose to avoid the negative impacts of the dust abatement phenomenon described above that caused such a high mortality of flat-tailed horned and other lizards?

CURE-74

It also states that "The Applicant will minimize noise to offsite habitat"[82] with no other discussion. The noise crated by large trucks, cranes, and other machinery necessary to install 499 foot high turbines can be injurious to species in terms of overall decibel level, frequency, and duration,[83] and is variable in its harm based upon many factors including species and topography.[84] To present zero discussion about how noise disturbances will be minimized amounts to zero evidence provided that this impact to any species will be successfully mitigated.

MM BIO-12 states it will "conduct post construction mortality surveys for bird and bat populations"[85] Aside from this being complete deferral of mitigation, as iterated above reporting dead birds and bats does not mitigate their deaths or loss from a breeding population. As such this measure fails in its intent.

CURE-75

MM BIO-13 states it will create a Bird and Bat Conservation strategy. The failures of this strategy are discussed above in respect to cumulative impacts, and the same evidence for failure applies here. The Measure states it will include "(5) mortality thresholds for listed or sensitive birds that will trigger adaptive management measures, (6) an adaptive management strategy to be implemented in the event mortality thresholds are exceeded." This is further impermissible deferral of mitigation, and problematic for reasons discussed above. If the

CURE-76

[82] DEA/IS p. 53
[83] Lovich, J. E., & Ennen, J. R. (2013). Assessing the state of knowledge of utility-scale wind energy development and operation on non-volant terrestrial and marine wildlife. *Applied Energy*, *103*, 52–60. https://pubs.er.usgs.gov/publication/70041727
[84] Rabin, L. A., Coss, R. G., & Owings, D. H. (2006). The effects of wind turbines on antipredator behavior in California ground squirrels (*Spermophilus beecheyi*). Biological Conservation, 131(3), 410–420.
[85] DEA/IS p.58

Applicant is going to create mortality thresholds, they need to be part of the discussion and analysis within the DEA/IS for the purpose of public review and comment regarding potential efficacy.

CURE-76, cont.

CONCLUSION

CURE-77

For the reasons outlined above, the Project DEA/IS fails to meet the requirements of impact analysis and mitigation under the California Environmental Quality Act (CEQA). Based on my responses in this letter, and my extensive experience as a biologist and environmental consultant, it is my professional opinion that the DEA/IS has not met the obligations of CEQA and that the Project would result in significant and unmitigated impacts to many sensitive biological resources. The impact analysis for biological resources must be revised and resubmitted to disclose, adequately analyze, and mitigate the significant impacts.

Sincerely,

Renée Owens

Conservation Ecologist

M.S. Ecology, M.S. Environmental Science

Professional Background

I am a conservation biologist and environmental consultant with over 27 years of professional experience in wildlife ecology and natural resource management. I hold a M.S. degree in Environmental Science and a M.S. degree in Ecology; my teaching experience includes college instruction since 1991 at various colleges and universities. I taught field courses in Tropical Ecology in Ecuador and the Galapagos for Boston University, and was a Visiting Full Time Professor in Environmental Science and Biology at Imperial Valley College.

I have managed an independent environmental consultancy I founded in 1993, contracted for work in the U.S. and Latin America, including in California, Tennessee, Oregon, New York, and Massachusetts. Since 1994 have and currently maintain U.S. Fish and Wildlife (FWS) Recovery permits for listed species under the federal Endangered Species Act (ESA). I hold several state and federal certifications for surveys and monitoring of protected and special status species. I have extensive experience monitoring and studying many species across several taxa, including herpetofauna, terrestrial invertebrates, passerines and raptors, and marine and terrestrial mammals. I have served as a biological resource expert on over 150 projects involving pipelines, water, urban and rural residential developments, mines, and industrial scale energy projects; on private, public, and military lands. I have experience observing the species and habitats discussed in the DEIR.

The scope of work I have conducted as an independent environmental contractor, supervisor, and employee has included assisting clients to evaluate and achieve environmental compliance, restoration, mitigation, and research as related to biological resources; as well as submitting analytical reports and comments for such work to oversight agencies. This work includes analyzing actions pursuant to the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), the Endangered Species Act, the Clean Water Act (CWA), the Migratory Bird Treaty Act (MBTA), and other regulations, along with surveying for and preparing Biological Technical Reports and Assessments. I have been contracted as an environmental consultant by the FWS, the USDA Forest Service, Ultrasystems, ICF, Helix Environmental, URS, AECOM, AMEC, GeomorphIS, Dudek, ESA, Tetra Tech, among others.

My conservation and natural history research on endangered species in Latin America has received awards including the National Geographic Research and Exploration Award and the National

Commission for Scientific and Technological Research Award. My research has been featured on National Geographic Television and Discovery Channel documentaries, and I have served as technical consultant for wildlife documentaries filmed by National Geographic Television, Discovery Channel, BBC, and Animal Planet. In 2017 I received a Special Commendation for contributions to environmental conservation from the City of San Diego.

I have gained particular knowledge of the biological resource issues associated with the Project through my extensive work on numerous renewable energy projects throughout California. Such projects include years of surveys before, during, and after construction of industrial wind and solar facilities in southern and northern California. My experience includes research, surveys, data collection for impact analysis, CEQA and NEPA document preparation, mitigation and monitoring, and consultation with stakeholders and agencies. Comments are based upon first-hand observations, review of the environmental documents prepared for the Project, review of scientific literature pertaining to biological resources known to occur in and near the Project area, consultation with other biological resource experts, and the knowledge and experience I have acquired throughout almost 30 years of working in the field of natural resources research and management.

- College Instruction in Biology and Environmental Science; Boston U, SDSU, Palomar College, Imperial Valley College
- Non-profit management
- National Geographic Research and Exploration Award
- Wildlife Conservation Society International Research Grant
- Endangered species Federal Recovery permits
- ESA, CEQA, NEPA, MMPA impact analyses
- Mitigation, Restoration, Project monitoring, HCP planning / implementation
- San Diego City, County, USFWS, BLM approved biologist
- U.S. National Championships Olympic Distance Triathlon
- Special Commendation for Contributions to Environmental Conservation, City of San Diego

Ms. Owens has been a college instructor, environmental consultant and biologist, non-profit manager, writer, and public speaker for over 30 years. Her experience includes work and research in the United States, Venezuela, Ecuador, Belize, Panama, and Honduras.

College Instruction of various courses includes teaching in the broad fields of Environmental Science and Biology at Boston University, Palomar College, Imperial Valley College, and San Diego State University. She has certification in Community College Instruction from the University of California San Diego.

Award winning conservation research by Ms. Owens has been featured by National Geographic, Discovery, BBC, Dateline NBC, Animal Planet, Sierra, and TIME magazine.

Sage Wildlife Biology consultancy co-founded by Ms. Owens in 1993 has provided services for projects involving endangered species, ethology, ecology, and conservation research, mitigation management, impact analysis, Habitat Conservation Plan design and implementation, and analytical reporting. Projects incorporate monitoring and regulatory compliance from the local to federal level with clients in the private, public, and government sectors, and include energy, housing, transportation projects. Contracts encompass many species, including but not limited to carnivores, passerines, raptors, shorebirds, herpetofauna, cetaceans, butterflies, and pinnipeds, and their associated habitats. She is an approved biologist for San Diego City and County, USFWS, and BLM.

The Wild Zone Conservation League is a wildlife conservation, education, and research non-profit. As Executive Director Ms. Owens applies her non-profit experience acquired over 30 years of volunteering to management of citizen science, environmental education, wildlife rescue, and advocacy training to promote conservation, stewardship, and land preserve acquisition.

Ms. Owens gives lectures enhanced by her nature photography and international experiences on endangered species conservation, advocacy, predator co-existence, animal behavior, ornithology, and the cognitive science of environmental leadership and communication.

EDUCATION

- MS Environmental Science, Concentration in Education. Green Mountain College, Poulsbo, VT.
- Community College Instruction Certification. University of California San Diego, La Jolla, CA.
- Advanced Statistical Programming Certification. U of Tennessee, Knoxville.
- MS Biology, Concentration in Ecology and Evolution. SDSU, San Diego, CA.
- BS Biology, Minor in Environmental Studies. State University of New York, Geneseo, NY.

LANGUAGE SKILLS Native English speaker, fluent in Spanish

WORK EXPERIENCE

TEACHING

Adjunct Professor, Instructor in Environmental Science, Biology. Department of Math, Science, and Engineering, Imperial Valley College, Imperial, CA. 2012 – 2018.

Director/Instructor, Wildlife Conservationist Certification Training Program, created by Ms. Owens with a San Diego Foundation Environmental Vision Fund grant. Provided education and training of adult volunteers for naturalist interpretive and conservation organizations. Wild Zone Conservation League, San Diego, CA. 2009-2011.

Visiting Assistant Professor, Department of Math, Science, and Engineering. Lecture, laboratory, and field trip instruction in Biology, Environmental Science, Botany. Imperial Valley College, Imperial, CA. 2008-2009.

Environmental Education Instructor, Outdoor instructor for educational youth program "Outdoor Explore" investigating Nearby Nature, grades k – 12. San Diego Audubon Society, CA. 2009 - 2010.

Teaching Fellow, Tropical Ecology Program, based at Universidad de San Francisco, Ecuador. Lecture and field instruction in advanced coursework on tropical habitats included cloud and mangrove forest, Pacific intertidal zones, inland rainforest, Galapagos Islands, and high elevation paramo. Boston University. 1999 –2000.

Adjunct, Instructor in General Biology lecture and laboratory. Palomar College, San Marcos, CA. 1994 - 1996.

Teaching Assistant, Instruction for laboratories in General Biology, Zoology, and Invertebrate Biology included creation of additions and updates to General Biology laboratory (with live marine specimens), adopted by the Biology Department for all General Biology laboratories. San Diego State University, San Diego, CA. 1990 – 1992.

Instructional Tutor, for classes in psychology, biology, ecology, anthropology, oceanography, and human fertility. SUNY Geneseo, Geneseo, NY. 1983 – 1987.

PROFESSIONAL CONSULTING

Co-Founder, Sage Wildlife Biology LLC. Biological consultant for over 200 hundred projects, specializing in wildlife biology of for environmental compliance, impact analysis, research, and conservation in California and South America. 1993 – present.

Representative Projects:

Wind Turbine System Research. Created and implemented a Bird and Bat Monitoring program and analysis for patent-pending turbine system, Primo Wind renewable energy design. San Diego Naval Base, CA. 2016-2017.

Endangered Species. Protocol surveys, monitoring, and reporting for federally threatened and endangered species, HELIX Environmental Planning Inc., San Diego, CA.

CEQA/NEPA/ESA Consultant. Provide expert biological testimony regarding impact analyses (i.e. MND/EIR/EIS) on conventional energy, renewable energy, residential development, and coastal development projects in California.

Satellite Communications System LA-RICS. Los Angeles Regional Interoperable Communications System county-wide project, federally funded to create broadband wireless network using Long-Term Evolution (LTE) technology while minimizing impacts to native habitats and ecosystems. Contributed to Biological Assessment for PEIR/ PEIS, 218-site project with coastal, mountain, and desert habitats. Management recommendations included maximizing use of existing structures while avoiding impacts to watersheds and other sensitive biological resources. Los Angeles County, CA.

Habitat Conservation Planning. Included federally permitted surveys and reporting for various endangered species; Migratory Bird Treaty Act nesting bird surveys; herptile surveys; population assessments; and concurrent development of Critical Habitat components of Habitat Conservation Plans including the San Diego Multiple Species Conservation Plan. San Diego, Los Angeles, Riverside, San Bernardino Counties, CA.

Mitigation and Restoration. Principal biologist, prepared biological Assessment plus mitigation and monitoring plan for Black Mountain Open Space Park development project; supervised biological components of mitigation management, including coordination with the City of San Diego to implement restoration efforts within the MHCP. San Diego, CA.

Wildfire Habitat Management. Principal investigator for California Fire Safe Council responsible for habitat management projects in areas adjacent to U.S. Forest Service land. Included habitat mapping, sensitive species surveys, GIS, management of work teams (5 to 50 individuals), and preparation of the Biological Assessment for the Bureau of Land Management. Project development included consultation and coordination with private landowners, scientists, San Diego County Fire Authority, Homeowners Associations, USDA Forest Service and BLM. San Diego County, CA.

Wind Energy Project. Year-round monitoring and research contributed to Biological and Environmental Assessments, incorporating focused wildlife surveys throughout 15,000 acres of Bureau of Land Management land in Imperial County. Provided management recommendations for avoidance of impacts to sensitive habitats and species including golden eagles, Peninsular bighorn sheep, burrowing owls, and flat-tailed horned lizards, and post-construction monitoring and mortality surveys. Ocotillo, CA.

Mitigation Land Trust Management. Lead biologist for two Perpetual Land Management Habitat Conservation Plans managed by The Escondido Creek Land Conservancy. The Preserves incorporate 110 acres of riparian wetland, oak woodland, coastal sage scrub, and chaparral habitats; created in compliance with California Environmental Quality Act and Multiple Habitat Conservation Plan requirements, coordinated with third party trustees U.S. Fish & Wildlife Service (USFWS) and California Department of Fish and Wildlife 9CDFW). Escondido and San Marcos, CA.

California Wild Heritage Campaign. Wilderness Society contracted biologist and campaign organizer included biological surveys and mapping of proposed wilderness as well as coordination of volunteers, educational materials, and outreach with National Forest stakeholders. San Diego County, CA.

Endangered Species Biologist. Principal biologist, participated in a long-term research of the California gnatcatcher for Camp Pendleton Marine Base, including monitoring and Critical Habitat Assessment for

USFWS and data collection for 40 + pairs spanning several thousand acres of habitat. Prepared reports on habitat suitability and contributed to critical habitat assessments and recovery planning. Oceanside, CA.

Least Bell's Vireo Endangered Species Recovery Plan. Conducted breeding season nest monitoring and invasive species management as part of the USFWS Species Recovery Plan for the Least Bell's Vireo; included monitoring, banding, and reporting monthly on 30 - 70 nesting pairs while providing reports for Critical Habitat evaluation and population recovery analysis. San Diego County, CA.

Biologist, HELIX Environmental Planning Inc., San Diego, CA. Responsible for terrestrial and aquatic fauna and flora surveys, monitoring, reporting, and research; Habitat Conservation Plans for private and government entities, mitigation and restoration implementation. 2000-2001.

Biologist, Sweetwater Biological, San Diego, CA. Conducted mammalian, ornithological, and herptile surveys and monitoring; mitigation and restoration monitoring, reporting, and management; included contributions to Habitat Conservation Plans for private and government entities. 1994-1996.

RESEARCH

Representative Projects:

Pinniped Natural History, breeding research and impact analysis of human interaction on Harbor seal and sea lion rookeries in San Diego, CA. 2010 – present.

Endangered Species Conservation, South American project funded by the National Geographic Research Foundation, CITES, Wildlife Conservation Society, The Venezuelan National Council for Scientific and Technological Research (CONICIT), and PROFAUNA of Venezuela; co-lead in multi-year study of the green anaconda; the first of its kind in the wild. Research incorporated radio telemetry, mark and recapture, natural history, and mating system analysis; findings contributed to various documentaries and a conservation and ecotourism program for 175,000 acres of Llanos in Apure State, Venezuela. 1996 – 2002.

Avian Breeding System and Conservation, research included manakin lekking behavior (Tiputini Tropical Research Station, Ecuador), California gnatcatcher, least Bells' vireo nesting success, cowbird parasitism (San Diego county), passerine and *Polybia* nesting associations in flooded wetlands, resource partitioning in 5 species of Ibis. Apure State, Venezuela. 1994 – 1997, 2000 – 2007.

Predator Conservation and Ethology, natural history and conservation research for the jaguar, mountain lion, endangered giant otter, included recommendations for management and co-existence on cattle ranches in the Llanos and Orinoco tributaries. Included observations of genetically distinct giant otter population where previously considered extinct. Apure State, Venezuela. 1996-1997.

Endangered Species Reintroduction Programs, of the Orinoco crocodile, Arrau turtle, Red-footed tortoise, funded by Wildlife conservation society, Venezuelan Profauna. Research in highly remote regions to assess long term species survival post-reintroduction and related influence of local indigenous tribes. Apure State, Venezuela. 1996 – 1998.

Cetacean Bioacoustics, research of the Commerson's dolphin included audiogram data collection on hearing thresholds and related recommendations for conservation management of this species and related genera. Hubbs Research Institute, San Diego, CA. 1991 – 1992.

Primate Research, Study of social and mating behavior dynamics of Pygmy chimpanzees (Bonobos). San Diego Wild Animal Park, Escondido, CA. 1990-1991.

Avian Research Internship, research of waterbird and passerine nesting predation and parasitism; included monitoring, banding, and mapping 250 nest boxes. Genesee Country Nature Center, Mumford, NY. 1987.

Independent Study, conducted undergraduate research on navigation and orientation of long distance avian migrant passerines using a planetarium equipped with an adjustable magnetic field. Principal investigator Dr. Robert Beason. SUNY Geneseo, Geneseo, NY. 1985-1987

NON-PROFIT MANAGEMENT

Executive Director, Wild Zone Conservation League. International wildlife non-profit focused on citizen science, education, research, and community collaboration for wildlife conservation. Long term mission of land acquisition in the U.S. and Central America for preservation and educational field study programs. 2015 - present.

Latin America Assistant Director, World Society for the Protection of Animals. Responsible for project development and campaign coordination for human-wildlife interface campaigns in Latin America. Included creation and implementation of training workshops, direction of campaigns for species in biodiversity hotspots including watersheds, coral reef, Pacific coastal rainforest and coasts. Coordinated emergency disaster relief with veterinary triage, organizational and material support, rescue training and oiled network response. Boston, MA. 1998-1999.

LABORATORY

Laboratory Technician, Palomar College, San Marcos, CA. Responsible for provisioning, preparation, and maintenance of biology and chemistry laboratories and equipment. 1994.

Laboratory Assistant, Toxicology and Physiology Departments. Included research in environmental toxicology, Muscular Sclerosis, Parkinson's disease. University of Rochester Medical Center, Rochester, NY. 1988 – 1990.

AWARDS / HONORS

- San Diego Sierra Club Silver Cup Conservation Award for Lifetime Achievement, 2017.
- Special Commendation for Contributions to Environmental Conservation, City of San Diego, 2017.
- San Diego County Democrats for Environmental Action Volunteer of the Year, 2017.
- Photo display, San Diego Museum of Natural History's "Best of Nature" Exhibit, 2016.
- San Diego Foundation Vision Fund Environmental Education and Conservation Grant, 2010.
- NOAA Environmental Hero Award, 2000.
- Photo, "TIME Great Images of the 20th Century", TIME Magazine Publications, 2000.
- CONICIT Award for the Novel Researcher, 1998.
- CITES and Profauna Joint Research Grant, 1996.
- National Geographic Film and Research Grant, 1996.

- National Geographic Research and Exploration Award, 1996.
- Wildlife Conservation Society Research Grant, 1996.
- Sierra Club Emily Durbin Leadership in Conservation Award, 1995.
- SDSU Harry Hamber Academic Graduate Scholarship, 1991.
- U.S. National Triathlon Championships, 1989.
- New York State Regents Academic Scholarship, 1983.

CERTIFICATIONS

- U.S. Fish and Wildlife Recovery Permit for the endangered Coastal California gnatcatcher, Least Bell's Vireo, Quino checkerspot butterfly. 1994 – present.
- Acoustic Monitoring of Bats, Field Techniques. Sonobat Workshop, Wildlife Society, 2012.
- Desert Tortoise Council, Survey Techniques Workshop, Certificate of Completion November 2010.
- Flat-tailed Horned Lizard BLM Survey Techniques Workshop, Certificate of Completion, 2010.
- Desert Tortoise Council, Survey Techniques Workshop, Certificate of Completion, 2006.
- USFWS Arroyo Toad Workshop, Certificate of Completion, Camp Pendleton Marine Base, 1999.
- Willow Flycatcher Workshop, SD Natural History Museum, Certificate of Completion, 1995.

VOLUNTEERING

- National Sierra Club Marine Team Committee, 2013- present.
- National Sierra Club Wildlife and Endangered Species Committee, 2010 – 2019.
- San Diego Audubon Society Conservation Committee, 2010 – 2014.
- San Diego Sierra Club (SDSC) Executive Committee, 2008 – 2010.
- SDSC Conservation Committee, 2007 – 2010; 2014 – 2018.
- SDSC Wildlife Committee Chair 2001 – 2008, 2015 – 2018.
- Wildlife Research Institute Scientific Advisory Committee, 2005 – 2008.
- Lakeside Emergency Wildlife Rehabilitation Center, 2000 – 2005.

SOCIETY CONFERENCE PRESENTATIONS

- "From Education to Stewardship: The Cognitive Science of Environmental Communication", Environmental Summit, San Diego, 2019.
- "The Cost of Mismanagement at a Pinniped Rookery and Coastal Urban Wildlife Interface", International Urban Wildlife Conference, San Diego, CA. June 2017.
- "Consorting with Coastal Wildlife: Conservation and Advocacy in the Real World", West Coast Ocean Forum, La Jolla, CA. 2016.
- "Conservation of the Green Anaconda in Venezuela", Annual Conference of the Society for the Study of Ichthyology and Herpetology, La Paz, Baja California, Mexico, 2000.
- "Trends in the International Reptile Pet Trade", Annual Conference for the Humane Society International, Boston, MA, 1998.
- "Bioacoustics and Conservation Implications for the Commerson's Dolphin", Biennial Conference for the Society for Marine Mammalogy, Orlando, FL, 1995.

- "Navigation and Orientation of Long-Distance Migrants: How Bobolinks use Stellar and Magnetic Cues for Migration", Annual Conference for the Society of Behavioral Ecology, Albany, NY, 1987.

WORKSHOPS

- Organized CEQA and NEPA Training Workshops, San Diego, CA. Presented instructional seminar regarding biological impact assessments. 2000, 2007, 2010, 2017.
- Organized the first annual West Coast Marine Environmental Forum, La Jolla. Held seminars on the National Ocean Policy, Ecosystem Based Management, critically endangered cetacean conservation, sustainable fishery science, and coastal wildlife conservation advocacy. 2017.

PROFESSIONAL AFFILIATIONS

- Association of Field Ornithologists
- Citizen Science League
- Marine Mammal Society
- National Association of Biology Teachers
- Society for the Study of Amphibians and Reptiles
- Wildlife Society
- Wildlife and Habitat Conservation Coalition

SELECT PUBLICATIONS

- Owens, R. Y. The Unpleasant Secrets of Clean Solar Energy: The Impacts to Wildlife in the Desert. *The Desert Report,* Dec 2016: pp 1, 8-9.
- Owens, R. Y. 2014. The USDA's Dirty Secret: A Century-Old Wildlife Killing Machine, *The EcoReport* (January). http://www.theecoreport.com/green-blogs/sustainability/conservation/wildzone/the-usdas-dirty-secret-a-century-old-wildlife-killing-machine/
- Owens, R. Y. and Hord. P. L. In revision. *Conservation Biology*. Economic and costs and ecological implications of "joint use" policy management of a Harbor seal rookery in an urban wildlife interface.
- Owens, R. Y. In revision. *Journal of Field Ornithology.* Nesting associations between wasps of the genus *Polybia* and passerine birds of the Venezuelan Llanos.
- Owens, R. Y. 2012. Rebirth of Green: Resolution for 2013. *San Diego Loves Green: The Wild Zone* (December).
- Owens, R. Y. 2012. Coyotes: The Media's Modern Bogeyman. *San Diego Loves Green*: *The Wild Zone* (October).
- Rivas, J.A. and Owens, R.Y. 1999. Teaching conservation effectively: a lesson from life history strategies. *Conservation Biology*, 13 (2): 453-454.
- Rivas, J.A. and Owens, R.Y. 2002. Orinoco crocodile (*Crocodylus intermedius*): Age at First Reproduction. *Herpetological Review*. 33 (3): 203.
- Rivas, J. A., R. Y. and S. A. Aktay, 2001. *Paleosuchus trigonatus* (Schneider's Smooth fronted Caiman): Nesting and hatching. *Herpetological Review*. 32: 251.
- Rivas, J. A., Owens R. Y. and Calle, P.P. 2001. *Eunectes murinus*: Juvenile predation. *Herpetological Review*. 32 (2): 107-108.

- Rivas, J. A. and R. Y. Owens. 2000. *Eunectes murinus* (green anaconda): cannibalism. *Herpetological Review.* 31(1):44-45
- Rivas, J. A., Thorbjarnarson, J. B., Owens, R. Y and M. C, Muñoz, 1999. *Eunectes murinus*: caiman predation. *Herpetological Review*. 30 (2): 101
- Owens, R.Y. Informe técnico al Servicio de Fauna de Venezuela: Regional population assessment of the endangered giant otter (*Pteronura brasiliensis*) in Apure State, Venezuela, and conservation recommendations for a highly endangered species. Dec 1997.
- Unpublished Master's Thesis, "Bioacoustics of the Commerson's Dolphin (*Cephalorhynchus commersonii*) with Recommendations for Applied Conservation" 1993.

EXHIBIT C

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
520 CAPITOL MALL, SUITE 350
SACRAMENTO, CA 95814-4721
TEL: (916) 444-6201
FAX: (916) 444-6209
kjones@adamsbroadwell.com

SO. SAN FRANCISCO OFFICE
601 GATEWAY BLVD., SUITE 1000
SO. SAN FRANCISCO, CA 94080
TEL: (650) 589-1660
FAX: (650) 589-5062

DANIEL L. CARDOZO
CHRISTINA M. CARO
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ANDREW J. GRAF
TANYA A. GULESSERIAN
KENDRA D. HARTMANN*
KYLE C. JONES
RACHAEL E. KOSS
NIRIT LOTAN
WILLIAM C. MUMBY

MARC D. JOSEPH
Of Counsel

Not admitted in California. Licensed in Colorado.

January 12, 2021

Via Email and U.S. Mail

Jay Olivas
Project Planner
Riverside County Planning Department
77588 El Duna Ct., Ste. H
Palm Desert, CA 92211
Email: JOlivas@rivco.org

Re: Request to Extend the Public Review and Comment Period for the Environmental Assessment/Initial Study for Alta Mesa Wind Energy Project (WCS0007R10/VAR20001 SCH No. 2020120489)

Dear Mr. Olivas:

On behalf of Citizens for Responsible Wind Energy ("Citizens"), we respectfully request that the County of Riverside ("County") extend the public review and comment period for the Environmental Assessment/Initial Study ("EA/IS") prepared for the Alta Mesa Wind Energy Project ("Project") proposed by Brookfield Renewables ("Applicant") due to the County's failure to provide timely access to documents referenced in the EA/IS to the public for the entire comment period. The County stated that the EA/IS is the County's name for its version of a Mitigated Negative Declaration, pursuant to the California Environmental Quality Act ("CEQA").

The California Environmental Quality Act ("CEQA") and the CEQA Guidelines require that "all documents referenced" and "all documents incorporated by reference" in an environmental review document shall be "readily accessible to the public during the lead agency's normal working hours" during the entire public comment period.[1] The County posted the EA/IS that references modeling outputs

[1] Pub. Resources Code § 21092(b)(1); 14 C.C.R. § 15072(g)(4); see *Ultramar v. South Coast Air Quality Man. Dist.* (1993) 17 Cal.App.4th 689, 699.

from CalEEMod, but the County failed to include the Project's CalEEMod files in the EA/IS' appendices posted on the Project's website. On December 24, 2020, we requested that the County provide "immediate access to any and all documents referenced or relied upon in the Mitigated Negative Declaration prepared for the Project.[2] We also emailed the County on January 7, 2021 specifically requesting the CalEEMod files.[3] On January 5, 2021, the County responded that it could not respond to our request for documents referenced in the EA/IS until February 8, 2021 and mischaracterized our request under CEQA as a Public Records Act request.[4]

The courts have held that the failure to provide even a few pages of a CEQA document for a portion of the review and comment period invalidates the entire CEQA process, and that such a failure must be remedied by permitting additional public comment.[5] It is also well settled that a CEQA document may not rely on hidden studies or documents that are not provided to the public.[6] By failing to make all documents referenced and incorporated by reference in the EA/IS "readily available" during the current comment period, the City is violating the clear procedural mandates of CEQA to the detriment of CURE and other members of the public who wish to meaningfully review and comment on the EA/IS.

Without access to all of the relevant documents relied upon and incorporated by reference by the City in its preparation of the EA/IS during the entire public comment period, CURE and other members of the public are precluded from having this meaningful opportunity to review the EA/IS. In particular, the public is unable to evaluate the accuracy of the analyses contained in the EA/IS and the significance of any impacts the Project may or may not have on the environment.

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[2] **Exhibit A**: Letter from Adams, Broadwell, Joseph & Cardozo ("ABJC") to the County of Riverside re: Request for Immediate Access to Documents Referenced in the Mitigated Negative Declaration – Alta Mesa Wind Project (SCH No. 2020120489) (Dec. 24, 2020).
[3] **Exhibit B**: Email from Sheila Sannadan, ABJC to Jay Olivas, re: Alta Mesa Wind Repower Project – CEQA SCH Number 2020120489 (Jan. 08, 2021).
[4] **Exhibit C**: Letter from Gregory P. Priamos and Aaron C. Gettis, Riverside County, to Sheila Sannadan, ABJC, re: California Public Records Act Request dated December 24, 2020; Mesa Wind Repower, (Jan. 05, 2021).
[5] *Ultramar*, 17 Cal.App.4th at 699.
[6] *Santiago Cty. Water Dist. v. Cty. of Orange* (1981) 118 Cal.App.3d 818, 831 ("Whatever is required to be considered in an EIR must be in that formal report; what any official might have known from other writings or oral presentations cannot supply what is lacking in the report.").
4869-015j

Accordingly, we request that:

(1) The City immediately provide us with access to the referenced CalEEMod files and other referenced documents; and

(2) The County extend the public review and comment period for the EA/IS by at least 30 days from the date on which the County releases these documents for public review. If the missing documents are provided today, we request an extension to February 11, 2021. If the missing documents are provided on February 8, 2021, as suggested by the County, we request an extension to March 10, 2021.

Given the shortness of time before the current comment deadline, please contact me as soon as possible with your response to this request, but no later than Friday, January 15, 2021.

Sincerely,

Kyle C. Jones

KCJ:ljl

Exhibits

4869-015j

EXHIBIT A

ADAMS BROADWELL JOSEPH & CARDOZO
A PROFESSIONAL CORPORATION
ATTORNEYS AT LAW
601 GATEWAY BOULEVARD, SUITE 1000
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NIRIT LOTAN
WILLIAM C. MUMBY

MARC D. JOSEPH
Of Counsel

*Not admitted in California. Licensed in Colorado.

December 24, 2020

VIA EMAIL AND U.S. MAIL

Charissa Leach, Assistant TLMA Director
Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
Email: cleach@rivco.org

Kecia Harper
Riverside County Clerk of the Board
County Administrative Center
4080 Lemon Street, 1st Floor
Riverside, CA 92501
Email: cob@rcbos.org

VIA EMAIL ONLY

Jay Olivas, Project Planner
Email: jolivas@rivco.org

Ken Baez, Principal Planner
Email: kbaez@rivco.org

Re: Request for Immediate Access to Documents Referenced in the Mitigated Negative Declaration – Alta Mesa Wind Project (SCH No. 2020120489)

Dear Ms. Leach, Ms. Harper, Mr. Olivas, and Mr. Baez:

We are writing on behalf of California Unions for Reliable Energy ("CURE") to request ***immediate access*** to any and all documents referenced, incorporated by reference, and relied upon in the Mitigated Negative Declaration ("MND") prepared for the Alta Mesa Wind Project (SCH No. 2020120489) ("Project"), proposed by Alta Mesa 640 LLC (a subsidiary of Brookfield Renewable Energy). This request excludes any documents that are otherwise available on the Riverside County Planning Department website.[1]

The Project proposes to install up to seven (7) new commercial wind turbines up to 499-feet in height with a total project generating capacity of 27 megawatts (MW) on 640 acres in Riverside County, 11 miles northwest of the City of Palm

[1] https://planning.rctlma.org; accessed December 24, 2020.

Springs in southern California. The 7 new turbines would replace the 159 turbines currently on the site which are scheduled for decommissioning in Q1 2021 under existing permits, including demolition permits issued by the County of Riverside. The Project also includes associated equipment such as an existing on-site substation, a temporary construction yard, and an existing 220 kilovolt (kV) transmission line. The Project will be constructed in tandem with the adjacent Mesa Wind Repower Project that is situated on BLM lands and is currently going through a separate but similar permitting process.

Our request for immediate access to all documents referenced in the MND is made pursuant to the California Environmental Quality Act ("CEQA"), which requires that all documents referenced, incorporated by reference, and relied upon in an environmental review document be made available to the public for the entire comment period.[2]

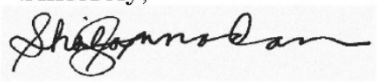
I will be contacting you to arrange for the review/duplication/transmission of the requested records soon. In the interim, if you have any questions or concerns regarding this request, my contact information is:

U.S. Mail
Sheila Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080-7037

Email
ssannadan@adamsbroadwell.com

Please call me at (650) 589-1660 if you have any questions. Thank you for your assistance with this matter.

Sincerely,



Sheila M. Sannadan
Legal Assistant

SMS:ljl

[2] *See* Pub. Resources Code, § 21092, subd. (b)(1); 14 Cal. Code Regs. § 15072(g)(4).
4869-012j

EXHIBIT B

Lorrie J. LeLe

From: Sheila M. Sannadan
Sent: Thursday, January 7, 2021 3:41 PM
To: Baez, Ken; Olivas, Jay; Gettis, Aaron
Subject: Re: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Good Afternoon,

Thank you for your responses. Could you please provide the CalEEMod files for the Alta Mesa Wind Repower Project?

Thank you.

Regards,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Baez, Ken <KBAEZ@RIVCO.ORG>
Sent: Wednesday, January 6, 2021 8:47 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Sheila

Those permits are applications that are through the building and safety department. Did you ask for the applications from the building and safety department?

The entitlement that they are associated with is as Jay indicated previously, WCS00071R9, which can also be obtained through the records. These requests for information are ongoing, and perhaps a conversation regarding your needs could be more efficient to get what you are looking for.

Call me to better assist with your ongoing requests.

Ken Baez

Principal Planner

5th Supervisorial District, and MSHCP Consistency

Planning Department, County Of Riverside

4080 Lemon Street, 12th Floor

Riverside, California 92501

(951) 955-2009

kbaez@rivco.org

How are we doing? Click the link to tell us

www.IECounts.org

From: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Sent: Tuesday, January 5, 2021 5:38 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Baez, Ken <KBAEZ@RIVCO.ORG>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Hello Jay,

I spoke with Kim at Records Division of the Department of Building & Safety. The Records Division only has a copy of the summary of the permits BHR2000085 and BDE2000066, which she said are also posted online (see attached). She said that the Planning Department would have actual records regarding those 2 permits since the permits are still active. Would you be able to email me a copy of the permit applications of BHR2000085 and BDE2000066, or do I need to request for that through a PRA request to the Planning Department?

Thank you.

Regards,

Sheila

Sheila Sannadan

Legal Assistant

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062

ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Tuesday, January 5, 2021 2:54 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Baez, Ken <KBAEZ@RIVCO.ORG>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Sheila,

There were 2-related permits related to removal of 159 turbines existing issued late in 2020, known as BHR2000085 / BDE2000066 currently valid for 1-year, these turbines were previously entitled under WCS00071R9. Bldg. Records can be reached at 951-955-2017 for additional bldg. permit information.

Regards,

Jay T. Olivas

Urban Regional Planner -

Riverside County

77-588 El Duna Court, Suite H

Palm Desert, CA 92211

Ph: (760) 863-7050

RIVERSIDE COUNTY
PLANNING DEPARTMENT

Email: jolivas@rivco.org

Website: http://planning.rctlma.org/

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From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, December 31, 2020 3:52 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Baez, Ken <KBAEZ@RIVCO.ORG>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Good Afternoon,

Could you please tell me if a building permit has been issued for the demolition of the existing 159 turbines of the Alta Mesa Wind Repower Project?

Thank you.

Regards,

Sheila

Sheila Sannadan

Legal Assistant

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062

ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Thursday, December 24, 2020 11:06 AM
To: Baez, Ken <KBAEZ@RIVCO.ORG>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA SCH Number 2020120489

Hi Sheila,

Please note the Draft EA-IS has now been posted on the CEQA Net website for review purposes, review period ends January 22, 2021. No PC hearing date at this time.

Kind regards,

Jay T. Olivas

Urban Regional Planner -

Riverside County

77-588 El Duna Court, Suite H

Palm Desert, CA 92211

Ph: (760) 863-7050

Email: jolivas@rivco.org

Website: http://planning.rctlma.org/

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From: Meng Heu <Meng.Heu@OPR.CA.GOV>
Sent: Thursday, December 24, 2020 8:10:29 AM
To: Edgington, Darren <DEdgingt@rivco.org>
Subject: SCH Number 2020120489

Your project is published and the review period has begun. Please use the "navigation" and select "published document" to view your project with attachments on CEQAnet.

Closing Letters: The State Clearinghouse (SCH) would like to inform you that our office will transition from providing close of review period acknowledgement on your CEQA environmental document, at this time. During the phase of not receiving notice on the close of review period, comments submitted by State Agencies at the close of review period (and after) are available on CEQAnet.
Please visit: https://ceqanet.opr.ca.gov/Search/Advanced

- Filter for the SCH# of your project **OR** your "Lead Agency"
  - If filtering by "Lead Agency"
    - Select the correct project

- Only State Agency comments will be available in the "attachments" section: **bold and highlighted**

Thank you for using CEQA Submit.

Meng Heu
Office of Planning and Research (OPR)
State Clearing House

To view your submission, use the following link.
https://ceqasubmit.opr.ca.gov/Document/Index/266816/2

From: Olivas, Jay
Sent: Thursday, December 17, 2020 2:16 PM
To: Baez, Ken <KBAEZ@RIVCO.ORG>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Flores, Robert <rflores@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Hi Sheila,

The Draft IS is being finalized soon for Alta Mesa, will keep informed when its distributed in the coming days or week.

Kind regards,

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050

RIVERSIDE COUNTY
PLANNING DEPARTMENT

Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

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click the link to tell us How are we doing?

From: Baez, Ken
Sent: Thursday, December 17, 2020 1:06 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Flores, Robert <rflores@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Yes, and please coordinate with Jay Olivas to be included in the mailout for the NOA.

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, December 16, 2020 5:18 PM
To: Baez, Ken <KBAEZ@RIVCO.ORG>; Flores, Robert <rflores@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Good Afternoon,

Is the MND for the Alta Mesa Wind Repower Project still anticipated to be released sometime after 1/1/2021?

Also, are there any hearings scheduled for this project at this time? I submitted a request for mailed notice of actions and hearings for this project on 6/11/20, so I should already be on the interested parties list for this project. But I am also instructed to check when hearings are *anticipated* to be held for the project.

Thank you.

Regards,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Baez, Ken <KBAEZ@RIVCO.ORG>
Sent: Wednesday, December 2, 2020 3:50 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Flores, Robert <rflores@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Sheila
For the Alta Mesa Wind Energy Repower project, known as WCS 71 Revision No. 10 , the anticipated release of the environmental document is anticipated to be a Mitigated Negative Declaration and is not expected to be release until the after the 1st of the year. Jay Olivas is our Planner assigned to prepare the case for Public Hearing and get the necessary CEQA document ready for review. The County has your contact information and would be happy to add you to the mailing list if you would like to be notified when it is available.

The hearing date has not been selected.

Ken Baez
Principal Planner
For 2nd, 4th and 5th Supervisorial Districts, and MSHCP Consistency
Planning Department, County Of Riverside
4080 Lemon Street, 12th Floor

Riverside, California 92501
(951) 955-2009
kbaez@rivco.org

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From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, December 2, 2020 3:36 PM
To: Baez, Ken <KBAEZ@RIVCO.ORG>; Flores, Robert <rflores@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Good Afternoon,

Is the environmental review document for the Alta Mesa Wind Repower Project still anticipated to be released this month of December 2020 at the earliest? Do you know whether it will be an MND or DEIR? Also, are there any hearings scheduled for this project at this time?

Thank you.

Regards,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Baez, Ken <KBAEZ@RIVCO.ORG>
Sent: Tuesday, November 24, 2020 9:02 AM
To: Flores, Robert <rflores@RIVCO.ORG>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Ms Sannadan
Yes we are processing an application for the repower of the wind energy project known as Alta Mesa. The project is still under review and not expected to have the environmental documents available until later next month at the earliest. Public hearing is not expected until early 2021.

Ken Baez
Principal Planner
For 2nd, 4th and 5th Supervisorial Districts, and MSHCP Consistency
Planning Department, County Of Riverside
4080 Lemon Street, 12th Floor
Riverside, California 92501
(951) 955-2009
kbaez@rivco.org

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www.IECounts.org

From: Flores, Robert
Sent: Saturday, November 21, 2020 8:55 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Edgington, Darren <DEdgingt@rivco.org>; Baez, Ken <KBAEZ@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Re: Alta Mesa Wind Repower Project - CEQA

Good morning Ms. Sannadan:

The draft environmental document is under review, and no public hearings have been scheduled yet.

I've also copied Ken Baez, who is the Principal Planner that oversees this project. If you have any further questions, Ken or I can assist.

Kind regards,

Robert Flores, Principal Planner
Advance Planning & Fourth Supervisorial District
TLMA - Planning Department
County of Riverside
(951) 955-1195

From: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Sent: Friday, November 20, 2020, 10:48 PM
To: Flores, Robert; Olivas, Jay
Cc: Edgington, Darren
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Hello Mr. Flores and Mr. Olivas,

I would like to follow up on my email below.

Thank you for your previous response. Is there an estimate timeline for the preparation of the Initial Study for the Alta Mesa Wind Repower Project at this time? Is there a CEQA determination for this project yet?

Also, are there any hearings planned/scheduled for this project at this time?

Thank you.

Regards,
Sheila

Sheila Sannadan
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Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Sheila M. Sannadan
Sent: Monday, November 16, 2020 3:07 PM
To: Flores, Robert <rflores@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Good Afternoon Mr. Flores and Mr. Olivas,

Thank you for your previous response. Is there an estimate timeline for the preparation of the Initial Study for the Alta Mesa Wind Repower Project at this time? Is there a CEQA determination for this project yet?

Also, are there any hearings planned/scheduled for this project at this time?

Thank you.

Regards,
Sheila

Sheila Sannadan
Legal Assistant

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Flores, Robert <rflores@RIVCO.ORG>
Sent: Friday, October 23, 2020 10:30 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Edgington, Darren <DEdgingt@rivco.org>
Subject: Re: Alta Mesa Wind Repower Project - CEQA

Hi Ms. Sannadan:

To add to Jay's response, the County's case name for initial studies is "Environmental Assessment (EA)," which is why there is and EA no. for the project – nothing related to NEPA. This case type is being phased out, and a CEQA case type has taken effect for any initial studies and EIRs.

Additionally, the type of environmental document that will be prepared will be determined by the results of the initial study that is in progress. Thank you.

Kind regards,

Robert Flores
Principal Planner | Fourth Supervisorial District
Riverside County Planning Department | 4080 Lemon Street, 12th Floor, Riverside, CA 92501
Direct (951) 955-1195 | Main (951) 955-3200 | Fax (951) 955-1811
RFlores@RivCo.org | http://planning.rctlma.org/| Follow us on Twitter!

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From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Friday, October 16, 2020, 11:29 AM
To: Sheila M. Sannadan
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Sheila, to clarify we are preparing/reviewing the Draft Initial Study (IS) checklist, thanks

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, October 15, 2020 5:39 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Re: Alta Mesa Wind Repower Project - CEQA

I was told that an EA is a NEPA document.

What will be the CEQA document for this project? Will it be an MND or DEIR?

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Thursday, October 15, 2020 5:30 PM
To: Sheila M. Sannadan
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Please note our team is reviewing the Draft EA, obtaining remaining dept. clearances for WCS00071R10, no hearing has been set.

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, October 14, 2020 7:16 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Re: Alta Mesa Wind Repower Project - CEQA

Hello Jay,

Is the County preparing an MND, or DEIR?

Thank you.

Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Wednesday, September 30, 2020 3:01 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Sheila, please note we are still reviewing the Draft EA with our team over next 15-30 days, there are several dept. clearances still required, and there are no scheduled hearings at this time.

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, September 30, 2020 2:29 PM

To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Good Afternoon Jay,

Is there ow an estimate/anticipated release date of the Draft IS/EA for the Alta Mesa Wind Repower Project? Also, are there any hearings scheduled for this project at this time?

Thank you,
Sheila

Sheila Sannadan
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Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Monday, August 31, 2020 2:06 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Sheila, we just received Amended Exhibits on 8/26/2020, and Draft EA, which we will be reviewing, no anticipated hearing at this time.

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050
Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

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From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Monday, August 31, 2020 11:20 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>; Gettis, Aaron <AGettis@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Good Morning Jay,

Is there an estimate/anticipated release date of the Draft IS/EA for the Alta Mesa Wind Repower Project? Also, are there any hearings scheduled for this project at this time?

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Tuesday, July 28, 2020 1:48 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Gettis, Aaron <AGettis@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Sheila,

In speaking with our environmental consultant today, the Screen Check Draft EA is expected to be submitted by end of next month, along with additional WECS Exhibits including geology review and paleontology report.

Regards,

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050
Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

From: Olivas, Jay
Sent: Thursday, July 23, 2020 4:03 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Gettis, Aaron <AGettis@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

We've left messages to the applicant's team for a project update and will hear back shortly, we spoke recently with them and they are working on amended Exhibits was last communication, no Draft IS yet or planned hearings at this time, will send further update early next week if possible, thanks

---

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, July 23, 2020 2:21 PM
To: Gettis, Aaron <AGettis@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Alta Mesa Wind Repower Project - CEQA

Thank you Aaron.

Jay - Could you please confirm if a CEQA determination been made yet on the Alta Mesa Wind Repower Project? If so, is there an estimate release date for the environmental review document? Also, are there any hearings scheduled for this project at this time?

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Gettis, Aaron <AGettis@RIVCO.ORG>
Sent: Tuesday, July 21, 2020 2:49 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Brady, Russell <rbrady@RIVCO.ORG>
Subject: Re: Alta Mesa Wind Repower Project - CEQA

Hi Sheila - i will let planning answer apart from just adding that nothing has crossed to me at this point.

Also this is a good chance to give you an update on the emails for the PRA request. As I understand it, IT has completed their run for the emails and now planning is going through them and trying to organize the emails before planning sends them to me. I will update you as I know more details on that aspect of the project.

Aaron

Sent from my iPhone

> On Jul 21, 2020, at 2:40 PM, Sheila M. Sannadan <ssannadan@adamsbroadwell.com> wrote:
>
> Good Afternoon,

Could you please update me on the environmental review status of the Alta Mesa Wind Repower Project? Has a CEQA determination been made yet on this project? If so, Is there an estimate release date for the environmental review document? Also, are there any hearings scheduled for this project at this time?

Thank you for your assistance.

Regards,
Sheila

Sheila Sannadan
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Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Gettis, Aaron <AGettis@RIVCO.ORG>
Sent: Thursday, June 11, 2020 2:58 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Thanks Sheila – I am sure we will be speaking soon!!

AARON C. GETTIS
Supervising Deputy County Counsel
County of Riverside
Phone: (951) 955-6306
Fax: (951) 955-6363
Email: agettis@rivco.org

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, June 11, 2020 2:57 PM
To: Gettis, Aaron <AGettis@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hello Aaron and Jay,

We decided to send out our PRA request today. We will go through the PRA process to obtain the documents.

We are also sending out our CEQA notice request today to get on the notification list for this project.

Thank you for all your help.

Regards,
Sheila

Sheila Sannadan
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Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Gettis, Aaron <AGettis@RIVCO.ORG>
Sent: Thursday, June 11, 2020 12:49 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Thanks Sheila. Ok maybe just wait until Jay can send you the documents he discussed below and after you have some of them you can more appropriately tailor your PRA for your needs – would that be helpful?

AARON C. GETTIS
Supervising Deputy County Counsel
County of Riverside
Phone: (951) 955-6306
Fax: (951) 955-6363
Email: agettis@rivco.org

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, June 11, 2020 12:41 PM
To: Gettis, Aaron <AGettis@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hello Aaron,

I understand. Yes, I'm preparing a PRA request for the Alta Mesa Wind Energy Project. I was hoping to receive the project description so that I can accurately describe the project in

the letter. If not, I will use the project description below which I had gathered from a couple online news articles.

Alta Mesa Wind Repower Project, proposed by Brookfield Renewable
The Project proposes to repower the existing 27 megawatt (MW) Alta Mesa Wind Project for up to 39 MW. The Alta Mesa Wind Project is an existing wind project with 159 turbines and is located in Riverside County, 11 miles northwest of the City of Palm Springs, on land zoned as Wind Energy (W-E). The original project was approved in 1986 and was installed in three phases between 1987 and 1997. The proposed Project would remove the legacy turbines and install up to 14 new wind turbine generators. The proposed Project would remain within the existing boundaries of the existing Alta Mesa Wind Project.

We would also like to get on the interested parties list for this project to receive notices, and I will prepare a separate letter for that.

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Gettis, Aaron <AGettis@RIVCO.ORG>
Sent: Thursday, June 11, 2020 12:23 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hi Sheila –

Can you send me the actual request for these documents so we can make sure we get everything to you in a timely manner and in compliance with the Public Record Act request? I know we have had issues in the past with the PRA requests for some of these wind projects and would prefer to make sure we follow the protocols under the PRA process.

Aaron

AARON C. GETTIS
Supervising Deputy County Counsel
County of Riverside
Phone: (951) 955-6306
Fax: (951) 955-6363
Email: agettis@rivco.org

From: Gettis, Aaron
Sent: Thursday, June 11, 2020 12:19 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hi Jay and Russ –

Ok before we do this I think you should instead put them into the regulatory box and we should draft the PRA letter etc before moving on with simply forwarding documents to this law firm.

Thoughts?

Aaron

AARON C. GETTIS
Supervising Deputy County Counsel
County of Riverside
Phone: (951) 955-6306
Fax: (951) 955-6363
Email: agettis@rivco.org

NOTICE: This communication is intended for the use of the individual or entity to which it is addressed and may contain attorney/client information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this communication is not the intended recipient or the employee or agent responsible for delivering this communication to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by reply email or by telephone and immediately delete this communication and all its attachments.

From: Olivas, Jay
Sent: Thursday, June 11, 2020 11:52 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Yes, need a day or so, we also use Bluebeam software which is way to view basic plan documents instead of emails, we could send invite which may be faster way to see initial application materials, thanks

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, June 11, 2020 11:41 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: Re: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Jay,

Thank you for all your responses. Would you be able to email me a copy of the application and project overview/description for the Alta Mesa Wind Energy Project?

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Thursday, June 11, 2020 11:11 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Please see responses, thanks

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, June 11, 2020 10:58 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: Re: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hello Jay,

When was the application for the **Alta Mesa** Wind Energy Project ("Alta Mesa Wind Repower Project") filed with the County? Is there an estimate timeline for the release of the Draft IS at this time? Application filed 1/22/2020; will obtain current time estimate from applicant's team regarding Draft IS.

I have already contacted the BLM regarding the **Mesa** Wind Repower Project (DOI-BLM-CA-D060-2020-0024-EA). But we would like to know if the County also received an application for this project. Has the County also received an application for the Mesa Wind Repower Project? No applications or related cases aware of at this time submitted to the county for this project.

Thank you,
Sheila

ThaT
MeM

Sheila Sannadan
Legal Assistant

Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Thursday, June 11, 2020 10:48 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Please see responses, thanks

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Thursday, June 11, 2020 10:17 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Thank you Jay.

When was the application for the **Alta Mesa** Wind Energy Project ("Alta Mesa Wind Repower Project") filed with the County? What is the status of the application and environmental review for that project? Under project review by the county, pending Draft IS, Amended Exhibits, and required Studies.

Has the County also received an application for the **Mesa** Wind Repower Project? If so, what is the status of that application? Please contact BLM for further information.

Please see the project descriptions below of the 2 wind repower projects.

Alta Mesa Wind Repower Project, proposed by Brookfield Renewable
The Project proposes to repower the existing 27 megawatt (MW) Alta Mesa Wind Project for up to 39 MW. The Alta Mesa Wind Project is an existing wind project with 159 turbines and is located in Riverside County, 11 miles northwest of the City of Palm Springs, on land zoned as Wind Energy (W-E). The original project
was approved in 1986 and was installed in three phases between 1987 and 1997. The proposed Project would remove the legacy turbines and install up to 14 new wind turbine generators. The proposed Project would remain within the existing boundaries of the existing Alta Mesa Wind Project.

, proposed by Mesa Wind Power Corporation (subsidiary of Brookfield Renewable
Energy)
The Project proposes to repower the existing 30-megawatt (MW) wind project, which was built in 1983. The repowering of the Project would involve the removal of 460 older generation turbines ranging in height from 85 to 140-foot tall lattice towers, most of which are no longer operational, and the installation of up to 11 new wind turbine generators. The repower project would remain within the existing right-of-way boundaries. The existing

wind farm is located on 401 acres of BLM-administered lands in Riverside County, 11 miles northwest of the City of Palm Springs, in southern California.

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Thursday, June 11, 2020 10:01 AM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Brady, Russell <rbrady@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Alta Mesa Wind Energy Project WCS 71R10 was recently filed with county, thanks

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050
Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

<image001.png>

To help us better serve you please
click the link to tell us How are we doing?

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, June 10, 2020 12:13 PM
To: Brady, Russell <rbrady@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Jay – Could you please let me know if the County has any involvement with the Mesa Wind Repower Project, and the Alta Mesa Wind Repower Project? Thank you.

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000

South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Brady, Russell <rbrady@RIVCO.ORG>
Sent: Wednesday, June 10, 2020 12:07 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Cc: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

None that I am aware of and again if it is a BLM project primarily as the County we may not be involved on any entitlement or CEQA analysis. I've cc'd Jay Olivas here since he handles most of the wind energy projects and he may be aware if there is any County involvement on these projects

Russell Brady
Riverside County Planning
4080 Lemon Street 12th Floor
Riverside, CA 92501
951-955-3025
<image002.png>

How are we doing? Click the Link and tell us

<image003.png>
www.IECounts.org

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, June 10, 2020 11:24 AM
To: Brady, Russell <rbrady@RIVCO.ORG>
Subject: Mesa Wind Repower Project and Alta Mesa Wind Repower Project - CEQA

Hello Russell,

Are there CEQA documents prepared for the Mesa Wind Repower Project, and the Alta Mesa Wind Repower Project?

Here is the weblink to the Environmental Assessment for the Mesa Wind Repower Project on the BLM website:
https://eplanning.blm.gov/eplanning-ui/project/1504648/570

Thank you,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000

South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

EXHIBIT C

OFFICE OF COUNTY COUNSEL
COUNTY OF RIVERSIDE

3960 ORANGE STREET, SUITE 500
RIVERSIDE, CA 92501-3674
TELEPHONE: 951/955-6300
FAX: 951/955-6322 & 951/955-6363

January 5, 2021

Via email to: ssannadan@adamsbroadwell.com

Sheila Sannadan
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 10000
South San Francisco, CA 94080-7037

Re: California Public Records Act Request dated December 24, 2020; Mesa Wind Repower Project

Dear Ms. Sannadan,

This letter is intended to provide you with the County's response regarding the above-referenced request for records made under the California Public Records Act, Government Code Section 6250 et seq. Your request was sent to the County of Riverside Planning Department and Office of County Counsel via electronic mail, and was received by our office on or around December 29, 2020. This response relates to records for the Riverside County Planning Department (Responding Department).

December 24th Public Record Act Request

The documents requested include any and all documents referenced, incorporated by reference, and relied upon in the Mitigated Negative Declaration ("MND") prepared for the Alta Mesa Wind Project (SCH No. 2020120489) ("Project"), proposed by Alta Mesa 640 LLC (a subsidiary of Brookfield Renewable Energy). This request excludes any documents that are otherwise available on the Riverside County Planning Department website.

Response to December 24th Request

The Responding Department has determined that your request "reasonably describes an identifiable record or records" pursuant to Government Code section 6253(b). As such, the Responding Department will produce non-exempt public records responsive to your request for your review, which includes any documents from October 15, 2020 to the date of this Public Records Act Request. However, the Responding Department will not disclose the following records in response to your request:

(1) To the extent that your request seeks preliminary drafts, notes, or interagency or

intra-agency memoranda that are not retained by the public agency in the ordinary course of business. (Gov. Code Section 6254(a))

(2) To the extent that your request seeks records pertaining to pending litigation to which the County of Riverside is a party, or to claims made pursuant to Division 3.6 (commencing with Section 810), until the pending litigation or claim has been finally adjudicated or otherwise settled. (Gov. Code Section 6254(b))

(3) To the extent that your request seeks records, the disclosure of which is exempted or prohibited pursuant to federal or state law, including, but not limited to, provisions of the Evidence Code relating to privilege. This includes, but is not limited to, documents that are subject to the Attorney-Client, Attorney-Work Product, and Official Information privileges. (Gov. Code Section 6254(k))

(4) To the extent that your request seeks records exempted as being part of the deliberative process of local government. (Gov. Code Sections 6254(k) and 6255)

In regards to the above requests, they require the Responding Department to search for, collect, and examine a large amount of records that may be located at different offices and locations. Due to limited staffing and resources, it will take additional time to gather the non-exempt records responsive to your request. Also, the responsive records will be limited to that particular agency or department's retention period of records. We regret any inconvenience this may cause.

We anticipate the non-exempt records will be ready for review by February 8, 2021; however, documents may be forwarded to your office at the identified location as they become available in order to further accommodate your request. Please continue to advise me or Jay Olivas as to how you would like to coordinate your review of the non-exempt records once they are compiled.

As always, your courtesy and cooperation in this regard is appreciated.

Sincerely,

GREGORY P. PRIAMOS
County Counsel

AARON C. GETTIS
Supervising Deputy County Counsel

cc: Charissa Leach, Assistant TLMA Director

EXHIBIT D

Lorrie J. LeLe

From: Baez, Ken <KBAEZ@RIVCO.ORG>
Sent: Tuesday, January 19, 2021 12:51 PM
To: Olivas, Jay; Kyle C. Jones; Lorrie J. LeLe
Cc: Gettis, Aaron
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

The information is available the MND in the Technical Appendices, review provide comments prior to January 21, 2021. No extension has been granted.

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Tuesday, January 19, 2021 11:56 AM
To: Kyle C. Jones <kjones@adamsbroadwell.com>; Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

Will confer with our team further, our Environmental Programs Division can also be reached at 951-955-6892.

From: Kyle C. Jones <kjones@adamsbroadwell.com>
Sent: Sunday, January 17, 2021 9:59 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

Could I also request you provide:

Jericho Systems, Inc. 2018. Biological Resources Assessment, Focused Burrowing Owl Survey, Desert Tortoise Protocol Survey, Jurisdictional Delineation, and CVMSHCP Consistency Analysis for the Alta Mesa 640 Windfarm, Whitewater, Riverside County, California.

Thank you,
Kyle

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Wednesday, January 13, 2021 3:00 PM
To: Kyle C. Jones <kjones@adamsbroadwell.com>; Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

Will confer with our team, kind regards, Jay

From: Kyle C. Jones <kjones@adamsbroadwell.com>
Sent: Wednesday, January 13, 2021 2:42 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

Is there a response to a request to extend the comment deadline?

Thanks,
Kyle Jones

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Wednesday, January 13, 2021 1:18 PM
To: Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Cc: Kyle C. Jones <kjones@adamsbroadwell.com>
Subject: RE: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

The CalEEMod information requested in your letter has been provided, will forward separately via email, kind regards, Jay

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050

RIVERSIDE COUNTY
PLANNING DEPARTMENT

Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

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From: Lorrie J. LeLe <ljlele@adamsbroadwell.com>
Sent: Tuesday, January 12, 2021 2:35 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Kyle C. Jones <kjones@adamsbroadwell.com>
Subject: Request to Extend Public Review and Comment Period for EA/IS - Alta Mesa Wind Energy Project (4869)

Please find attached our request to extend.

If you have any questions, please contact Kyle Jones directly.

Thank you,

Lorrie LeLe
Legal Assistant
Adams Broadwell Joseph & Cardozo
520 Capitol Mall, Suite 350
Sacramento, CA 95814
ljlele@adamsbroadwell.com | Phone: 916. 444.6201 Ext. 10 | Fax: 916.444.6209 |

EXHIBIT E

Sheila M. Sannadan

From: Baez, Ken <KBAEZ@RIVCO.ORG>
Sent: Wednesday, January 20, 2021 2:15 PM
To: Sheila M. Sannadan; Edgington, Darren; Flores, Robert; Olivas, Jay
Subject: RE: Brookfield Renewables Mesa Wind Repower Project - Status

The project is still undergoing internal review and once the CEQA Document is out for public review we shall notify you. Jay Olivas has your contact information and will add it to our notification list.

Ken Baez
Principal Planner

From: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>
Sent: Tuesday, January 19, 2021 5:03 PM
To: Edgington, Darren <DEdgingt@rivco.org>; Flores, Robert <rflores@RIVCO.ORG>; Baez, Ken <KBAEZ@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Brookfield Renewables Mesa Wind Repower Project - Status

Good Afternoon,

Has the County received an application for the Mesa Wind Repower Project since December 2, 2020? If so, what is the status of the application and environmental review? Also, are there any hearings scheduled for this project at this time?

Project Description: The Mesa Wind Repower Project proposes to repower the existing 30-megawatt (MW) wind project, which was built in 1983. The repowering of the Project would involve the removal of 460 older generation turbines ranging in height from 85 to 140-foot tall lattice towers, most of which are no longer operational, and the installation of up to 11 new wind turbine generators. The repower project would remain within the existing right-of-way boundaries. The existing wind farm is located on 401 acres of BLM-administered lands in Riverside County, 11 miles northwest of the City of Palm Springs, in southern California.

Thank you.

Regards,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Edgington, Darren <DEdgingt@rivco.org>
Sent: Wednesday, December 2, 2020 2:53 PM
To: Sheila M. Sannadan <ssannadan@adamsbroadwell.com>; Flores, Robert <rflores@RIVCO.ORG>; Baez, Ken <KBAEZ@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: RE: Brookfield Renewables Mesa Wind Repower Project - Status

Greetings Sheila,
I have not come across an application for a project from Mesa Wind Power Corporation at this time.
Not sure what the future holds, or if such an application is pending, so please feel free to inquire again at a later date.
Regards,

Darren Edgington
Environmental Project Manager
Riverside County Planning
4080 Lemon Street 12th Floor
Riverside, CA 92501
951-955-2459

From: Sheila M. Sannadan [mailto:ssannadan@adamsbroadwell.com]
Sent: Wednesday, December 2, 2020 11:01 AM
To: Flores, Robert <rflores@RIVCO.ORG>; Baez, Ken <KBAEZ@RIVCO.ORG>; Olivas, Jay <JOLIVAS@RIVCO.ORG>
Cc: Edgington, Darren <DEdgingt@rivco.org>
Subject: RE: Brookfield Renewables Mesa Wind Repower Project - Status

Good Morning,

I would like to follow up on my email below.

I am inquiring about the Mesa Wind Repower Project, proposed by Mesa Wind Power Corporation (a subsidiary of Brookfield Renewable Energy). This project is different from the "Alta" Mesa Wind Repower Project that I have been inquiring about.

Could you please tell me if the County has received an application for the Mesa Wind Repower Project? If so, what is the status of the application and environmental review? Also, are there any hearings scheduled for this project at this time?

Project Description: The Mesa Wind Repower Project proposes to repower the existing 30-megawatt (MW) wind project, which was built in 1983. The repowering of the Project would involve the removal of 460 older generation turbines ranging in height from 85 to 140-foot tall lattice towers, most of which are no longer operational, and the installation of up to 11 new wind turbine generators. The repower project would remain within the existing right-of-way boundaries. The existing wind farm is located on 401 acres of BLM-administered lands in Riverside County, 11 miles northwest of the City of Palm Springs, in southern California.

Thank you for your assistance.

Regards,

Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

From: Sheila M. Sannadan
Sent: Monday, November 23, 2020 1:26 PM
To: rflores@RIVCO.ORG; KBAEZ@RIVCO.ORG; JOLIVAS@RIVCO.ORG
Cc: DEdgingt@rivco.org
Subject: Brookfield Renewables Mesa Wind Repower Project - Status

Good Afternoon,

I am inquiring about the Mesa Wind Repower Project, proposed by Mesa Wind Power Corporation (a subsidiary of Brookfield Renewable Energy). This project is different from the "Alta" Mesa Wind Repower Project that I have been inquiring about.

Could you please tell me if the County has received an application for the Mesa Wind Repower Project? If so, what is the status of the application and environmental review? Also, are there any hearings scheduled for this project at this time?

Project Description: The Mesa Wind Repower Project proposes to repower the existing 30-megawatt (MW) wind project, which was built in 1983. The repowering of the Project would involve the removal of 460 older generation turbines ranging in height from 85 to 140-foot tall lattice towers, most of which are no longer operational, and the installation of up to 11 new wind turbine generators. The repower project would remain within the existing right-of-way boundaries. The existing wind farm is located on 401 acres of BLM-administered lands in Riverside County, 11 miles northwest of the City of Palm Springs, in southern California.

Thank you for your assistance.

Regards,
Sheila

Sheila Sannadan
Legal Assistant
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080
Phone (650) 589-1660
Fax (650) 589-5062
ssannadan@adamsbroadwell.com

EXHIBIT F

Lorrie J. LeLe

From: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Sent: Monday, August 24, 2020 11:40 AM
To: Abbott, Mark; Bacon, Shantel
Subject: FW: Alta Mesa Wind Project (WCS00071R10)
Attachments: Project Description- Alta Mesa Decommissioning 8-20-20.pdf; WCS00071R10 Fig2a. Site Plan.pdf; TRANSMITTAL.pdf

Would there any comments/requirements from E Health regarding Decommissioning Plan since they wish to begin the work now?

From: Emily Capello [mailto:Ecapello@aspeneg.com]
Sent: Thursday, August 20, 2020 9:56 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>; Baez, Ken <KBAEZ@RIVCO.ORG>
Cc: Saidov,Robin <Robin.Saidov@brookfieldrenewable.com>; Kirby, Jonathan <Jonathan.Kirby@brookfieldrenewable.com>
Subject: Alta Mesa Wind Project (WCS00071R10) Decommissioning

Hi Jay and Ken –

Per our call last Thursday, attached is a brief description of the decommissioning work needed for the Alta Mesa Wind Project. As mentioned on that call, Brookfield would like to get started on this work asap and is working with the Building Department to on a demolition permit.

Please let us know if you have any questions,

Thank you –

Emily

Aspen environmental group

Emily Capello
Senior Associate
www.aspeneg.com

235 Montgomery, Suite 640
San Francisco, CA 94104
Office: 415-696-5312

California Wind Energy Association

California Wind Energy Association

January 22, 2021

Riverside County Planning Department
Attention: Jay Olivas
77588 El Duna Ct, Ste. H
Palm Desert, CA 92211
jolivas@rivco.org

Subject: Support of the Approval of Alta Mesa Wind Re-Power Project (Permit #10)

To Whom It May Concern:

When considering the Alta Mesa Wind Re-Power Project, the California Wind Energy Association (CalWEA)[1] urges the Planning Department to consider the critical role that wind energy will play in meeting California's climate change mitigation goals, while bringing economic benefits to Riverside County. Wind energy is particularly valuable because it complements the production profile of solar energy. A study performed for the California Energy Commission looking at means of achieving California's ambitious energy-decarbonization goal[2] shows that California's existing wind fleet must not only be maintained but dramatically grown to achieve that goal most affordably while ensuring the reliability of the grid.[3]

CWEA-1

[1] CalWEA is a 20-year-old trade association representing wind energy and related companies focused on the California market, primarily including owners, operators and developers of wind energy projects located in California.

[2] SB 100, signed into law in September 2018, establishes as state policy that zero-carbon resources are to supply 100% of California retail sales by December 31, 2045.

[3] California Energy Commission, "Deep Decarbonization in a High Renewables Future," at Figure 14. CEC-500-2018-012. June 2018. (Available at: https://www.energy.ca.gov/2018publications/CEC-500-2018-012/CEC-500-2018-012.pdf.) This study shows that, absent a large amount of wind energy from within or outside of the state to balance solar resources, decarbonization will come at an added cost of nearly $20 billion per year. Also see: California Public Utilities Commission, Ruling Seeking Comments on Portfolios to Be Used in the 2021-22 Transmission Planning Process, Attachment B, Figures 2 and 4. October 20, 2020. (Available at https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M348/K821/348821204.PDF.)

1700 Shattuck Ave. #17 ▲ Berkeley, California 94709 ▲ (510) 845-5077 ▲ info@calwea.org

Realizing the state's clean energy goals, of which in-state wind energy is a critical component, will require counties to recognize in their permitting decisions that wind energy projects must be part of the solution to the most pressing environmental problem of our time.

The 27-MW Alta Mesa project will maintain and improve the efficiency of a portion of California's existing wind energy fleet and therefore represents an essential part of achieving the state's clean energy goals. The project will do so while significantly reducing its footprint by removing 159 turbines and replacing them with seven new, more efficient ones. Amazingly, the major technology advancements that have occurred since the project was originally built will enable these seven new turbines to generate the same amount of clean, renewable energy as the previous 159.

As the technology and efficiencies of renewable energy generation continue to progress, it is tremendously exciting to see companies embrace these changes and make the financial investments necessary to maintain and enhance their assets' productivity. The Alta Mesa project will bring tremendous economic benefits to Riverside County, including the creation of both direct and indirect jobs during the construction phase, which will benefit local small businesses, as well as on ongoing tax base for the county.

The Alta Mesa Wind Re-Power is a win-win for everyone involved and I urge you to move it forward.

Sincerely,

Nancy Rader
Executive Director

CWEA-1, cont.

Desert Tortoise Council

DESERT TORTOISE COUNCIL
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
eac@deserttortoise.org

Via email only

24 January 2021

Mr. Jay Olivas, Project Planner
Riverside County Planning Department
77588 El Duna Ct., Ste. H
Palm Desert, CA 92211
JOlivas@rivco.org

RE: Draft Initial Study and Mitigated Negative Declaration for the Alta Mesa Wind Energy Project which includes Commercial WECS Permit No. 71R10 / Variance Case No. 200001 (WCS00071R10 / VAR200001)

Dear Mr. Olivas,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project, and that Riverside County Planning Department (County) provided the project information in an email to the Council on January 4, 2021. Given the location of the proposed project in habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with "Agassiz's desert tortoise"), our comments pertain to enhancing protection of this species during activities authorized by the Planning Department. Given that the Proponent will participate in the Coachella Valley Multispecies Habitat Conservation Plan (MSHCP) and has identified numerous protective measures, and particularly the 11 Mitigation Measures identified on page 37, it appears that tortoises will be well protected so long as these measures are conscientiously implemented. As such, we have only a few additional recommendations.

DTC-1

Unless otherwise noted, referenced page numbers refer to the December 2020 Environmental Assessment/Initial Study (EA/IS) (Aspen Environmental Group 2020). Alta Mesa 640 LLC (Alta Mesa), a subsidiary of Brookfield Renewable Energy (Brookfield), as owner of the Alta Mesa Wind Project (Alta Mesa Wind) (herein, "Proponent"), is planning "...to install up to seven (7) new commercial wind turbines up to 499 feet in height with a total project generating capacity of 27 MW. These 7 new turbines would replace the 159 turbines currently on the site which are scheduled for decommissioning Q1 2021 under existing permits, including demolition permits issued by the County. The project also includes associated equipment such as existing on-site substation, temporary construction yard, and existing 220 kV transmission line. No work is proposed on existing interconnection line, and the project would use an existing access road from Haugen-Lehmann Way" (page 1). DTC-1

The total estimated disturbed area for the Project would be a total of up to 67.3 acres, of which 18.8 acres is already disturbed and 48.5 acres would be new disturbance. Of the 67.3 acres, less than 25 acres would be permanent, and 42.3 would be temporary. Of the 42.3 acres of temporary impacts, 32.4 acres would be a buffer area where vegetation removal is not anticipated but there may be some need for drive and crush due to trucks backing up or other unanticipated construction work. Plus, an additional 13.2 acres of ground disturbance would occur along the main access road to the Project site and an additional 13 acres of ground disturbance would occur in the temporary construction yard, both within the Mesa Wind Project ROW project (page 2). The project would impact approximately 48.5 acres of suitable and potentially occupied desert tortoise habitat (unvegetated/ruderal, brittlebush scrub, California juniper woodland, California sagebrush-buckwheat scrub, Creosote bush–brittle bush scrub (page 36).

As per page 10, "At the time of decommissioning of the new 7 WTGs [wind turbine generator], all remaining existing foundations would be removed to 3 feet below the ground surface." As per the footnote on page 36, Dr. Jeffrey Lovich has researched tortoises in this area for many years, and reports finding tortoises burrowed beneath wind turbine foundations, and the EA/IS reports finding two tortoise burrows under several of the 199 foundations inspected (page 36). So, it is essential that knowledgeable tortoise biologist(s) be enlisted to perform preconstruction surveys before and during removal of these foundations. This will presumably be required under MM BIO-2 referenced on page 37.

We want emphasize the mobility of tortoises and that new clearance surveys of these foundations must be performed within a reasonable amount of time, judged to be within about 48 hours of ground disturbance. We could not find a time frame for preconstruction surveys where they are discussed on page 55 but the standard is typically 48 hours in advance. This is particularly important since surveys have not been performed since 2019 (as per Appendix B of the EA).

As per MM BIO-11, a revegetation plan is required for the Project. The Proponents, and perhaps the County, may not be aware that the Council recently completed a best management practices document for restoring desert tortoise habitats. As, such we are attaching Abella and Berry (2016) for your consideration.

We recommend that prior to any ground disturbance, the Authorized Biologist identify the nearest qualified veterinarian capable of treating and rehabilitating any injured tortoises, that any injured tortoises be transported immediately to that office, and that associated veterinary bills be paid by the Proponent. This measure should be added to those listed on pages 49 and 50. DTC-1

We appreciate this opportunity to provide input, the thoroughness of protective measures identified in the EA/IS, and trust that our comments will help protect tortoises during any authorized project activities. Herein, we ask that the Desert Tortoise Council continue to be identified as an Affected Interest for this and all other County projects that may desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above. We also ask that you acknowledge receipt of this letter as soon as possible so we can be sure our concerns have been received by the appropriate parties.

Regards,

Edward L. LaRue, Jr., M.S.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

Aspen Environmental Group. 2020. Environmental Assessment/Initial Study, Alta Mesa Wind Project. Unpublished report prepared for County of Riverside.

Attachments

Abella S.R. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). Journal of Fish and Wildlife Management 7(1):xx–xx; e1944-687X. doi: 10.3996/052015-JFWM-046.

Metropolitan Water District

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

January 21, 2021 **VIA EMAIL AND USPS**

Mr. Jay Olivas
Riverside County Planning Department
77-588 El Duna Court, Suite H
Palm Desert, CA 92211

Dear Mr. Olivas:

Commercial WECS Permit No. 71, Revised Permit No. 10 / Variance
Case No. 200001, Alta Mesa Wind Project Mitigated Negative Declaration (SCH# 2020120489)

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Commercial WECS Permit No. 71, Revised Permit No. 10 / Variance Case No. 200001, Alta Mesa Wind Project Mitigated Negative Declaration (MND). The County of Riverside is taking comments through January 24, 2021 on the proposed decommissioning and removal of approximately 159 existing commercial wind turbines and installation of up to 7 new commercial wind turbines up to 499 feet in height with a total generating capacity of 27 megawatts (MW) under an existing permit beginning in the first quarter of 2021. The project also proposes upgrades to the Alta Mesa Substation, new underground or overhead collector lines that would connect to the existing substation, and improvements to access roads used to access the project site. The project proposes access to the site through two existing main access roads, an unnamed access road that enters from the west and crosses the Alta Mesa Wind Project right-of-way and a second unnamed access road that enters into the site from the east off of Whitewater Canyon Road, the second of which will not likely be used as access. This letter contains Metropolitan's response to the Notice of Availability as a potentially affected public agency.

Metropolitan requires a minimum setback for all buildings and structures of at least 500 feet from the edge of Metropolitan's rights-of-way (ROW). While the placement of the closest new turbine appears to be far enough away from the Colorado River Aqueduct (CRA) ROW as to not pose a hazard, Metropolitan is concerned with the potential impacts to the CRA pipeline from the resulting delivery of new commercial wind turbines and removal of approximately 159 existing wind turbines. Access to the site from the west includes travel on an unnamed access road that crosses the CRA at Station 9840+00 (see Location Map). Ingress and egress across the CRA are subject to load restrictions. If the project proponent plans to use any equipment or engage in any activity on the above referenced property which will impose loads greater than AASHTO H-10 for any reasons including non-routine maintenance or removal and replacement of wind turbine generators, project proponent shall submit the specifications of such equipment and associated additional pipeline protections for review and written approval by Metropolitan at least thirty working days prior to its use.

MWD-1

Access to the site from the east on Whitewater Canyon Road also crosses the CRA, however this portion of the CRA is buried tunnel and thus weight restrictions do not apply.

MWD-1, cont.

Development associated with the proposed project must not restrict any of Metropolitan's day-to-day operations and/or access to its facilities. Metropolitan must be allowed to maintain its rights-of-way and requires unobstructed access to its facilities and properties at all times in order to repair and maintain its system. Detailed prints of drawings of Metropolitan's pipelines and rights-of-way may be obtained by calling Metropolitan's Substructures Information Line at (213) 217-6564. To assist in preparing plans that are compatible with Metropolitan's facilities, easements and properties, we have enclosed a copy of the "Guidelines for Developments in the Area of Facilities, Fee Properties, and/or Easements of The Metropolitan Water District of Southern California." Please note that all submitted designs or plans must clearly identify Metropolitan's facilities and rights-of-way.

In order to avoid potential conflicts with Metropolitan's facilities and rights-of-way, Metropolitan requires that detailed design plans for any activities within the vicinity of our facilities, fee property or rights-of way be submitted prior to construction for review and written approval. Approval of the proposed project where it could impact Metropolitan's property should be contingent on Metropolitan's approval of design plans for the proposed project.

We appreciate the opportunity to provide input to your planning process. If we can be of further assistance, please contact Malinda Stalvey at (213) 217-5545.

Very truly yours,

Digitally signed by Jennifer Harriger
DN: cn=Jennifer Harriger, o, ou, email=jharriger@mwdh2o.com, c=US
Date: 2021.01.22 09:52:20 -08'00'

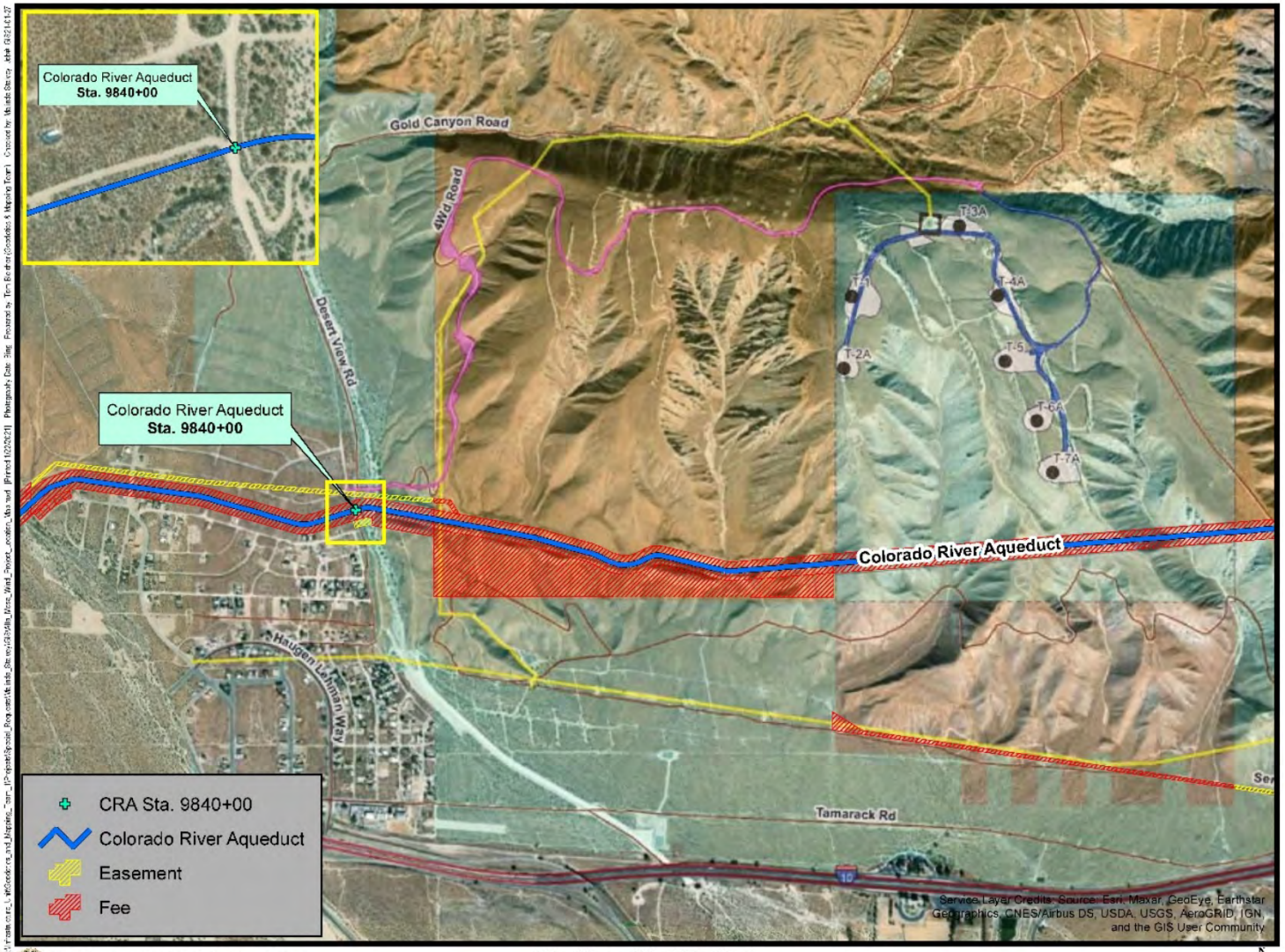
Jennifer Harriger
Unit Manager, Environmental Planning Section

MS:ms
SharePoint\Alta Mesa Wind Project MND

Enclosure:

(1) Location Map
(2) Substructures Guidelines

cc: S. Zareh



The Metropolitan Water District of Southern California
Engineering Services Group

Alta Mesa Wind Project
Location Map

Guidelines for Improvements and Construction Projects Proposed in the Area of Metropolitan's Facilities and Rights-of-Way

July 2018

Prepared By:
The Metropolitan Water District of Southern California
Substructures Team, Engineering Services
700 North Alameda Street
Los Angeles, California 90012

Additional Copies: To obtain a copy of this document, please contact the Engineering Services Group, Substructures Team.

Disclaimer

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as deemed prudent, to assure that project plans are correct. The appropriate representative from Metropolitan must be contacted at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

PUBLICATION HISTORY:

Initial Release	*July 2018*

Issue Date: July 2018

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Issue Date: July 2018

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1.0 GENERAL INFORMATION

Note: Underground Service Alert at 811 must be notified at least two working days before excavating in proximity to Metropolitan's facilities.

1.1 Introduction

These guidelines provide minimum design and construction requirements for any utilities, facilities, developments, and improvements, or any other projects or activities, proposed in or near Metropolitan Water District of Southern California (Metropolitan) facilities and rights-of-way. Additional conditions and stipulations may also be required depending on project and site specific conditions. Any adverse impacts to Metropolitan's conveyance system, as determined by Metropolitan, will need to be mitigated to its satisfaction.

All improvements and activities must be designed so as to allow for removal or relocation at builder or developer expense, as set forth in the paramount rights provisions of Section 20.0. Metropolitan shall not be responsible for repair or replacement of improvements, landscaping or vegetation in the event Metropolitan exercises its paramount rights powers.

1.2 Submittal and Review of Project Plans/Utilities and Maps

Metropolitan requires project plans/utilities be submitted for all proposed activities that may impact Metropolitan's facilities or rights-of-way. Project plans shall include copies of all pertinent utilities, sewer line, storm drain, street improvement, grading, site development, landscaping, irrigation and other plans, all tract and parcel maps, and all necessary state and federal environmental documentation. Metropolitan will review the project plans and provide written approval, as it pertains to Metropolitan's facilities and rights-of-way. Written approval from Metropolitan must be obtained, prior to the start of any activity or construction in the area of Metropolitan's facilities or rights-of-way. Once complete project plans and supporting documents are submitted to Metropolitan, it generally takes 30 days to review and to prepare a detailed written response. Complex engineering plans that have the potential for significant impacts on Metropolitan's facilities or rights-of-way may require a longer review time.

Project plans, maps, or any other information should be submitted to Metropolitan's Substructures Team at the following mailing address:

Attn: Substructures Team
The Metropolitan Water District of Southern California
700 North Alameda St.
Los Angeles, CA 90012

General Mailing Address: **P.O. Box 54153**
Los Angeles, CA 90054-0153

Email: EngineeringSubstructures@mwdh2o.com

For additional information, or to request prints of detailed drawings for Metropolitan's facilities and rights-of-way, please contact Metropolitan's Substructures Team at 213-217-7663 or EngineeringSubstructures@mwdh2o.com.

1.3 Identification of Metropolitan's Facilities and Rights-of-Way

Metropolitan's facilities and rights-of-way must be fully shown and identified as Metropolitan's, with official recording data, on the following:

A. All applicable plans

B. All applicable tract and parcel maps

Metropolitan's rights-of-ways and existing survey monuments must be tied dimensionally to the tract or parcel boundaries. Metropolitan's Records of Survey must be referenced on the tract and parcel maps with the appropriate Book and Page.

2.0 General Requirements

2.1 Vehicular Access

Metropolitan must have vehicular access along its rights-of-way at all times for routine inspection, patrolling, operations, and maintenance of its facilities and construction activities. All proposed improvements and activities must be designed so as to accommodate such vehicular access.

2.2 Fences

Fences installed across Metropolitan's rights-of-way must include a 16-foot-wide gate to accommodate vehicular access by Metropolitan. Additionally, gates may be required at other specified locations to prevent unauthorized entry into Metropolitan's rights-of-way.

All gates must accommodate a Metropolitan lock or Knox-Box with override switch to allow Metropolitan unrestricted access. There should be a minimum 20-foot setback for gates from the street at the driveway approach. The setback is necessary to allow Metropolitan vehicles to safely pull off the road prior to opening the gate.

2.3 Driveways and Ramps

Construction of 16-foot-wide commercial-type driveway approaches is required on both sides of all streets that cross Metropolitan's rights-of-way. Access ramps, if necessary, must be a minimum of 16 feet wide.

There should be a minimum 20-foot setback for gates from the street at the driveway approach. Grades of ramps and access roads must not exceed 10 percent; if the slope of an access ramp or road must exceed 10 percent due to topography, then the ramp or road must be paved.

2.4 Walks, Bike Paths, and Trails

All walkways, bike paths, and trails along Metropolitan's rights-of-way must be a minimum 12-foot wide and have a 50-foot or greater radius on all horizontal curves if also used as Metropolitan's access roads. Metropolitan's access routes, including all walks and drainage facilities crossing the access routes, must be constructed to American Association of State Highway and Transportation Officials (AASHTO) H-20 loading standards (see Figure 1). Additional requirements will be placed on equestrian trails to protect the water quality of Metropolitan's pipelines and facilities.

2.5 Clear Zones

A 20-foot-wide clear zone is required to be maintained around Metropolitan's manholes and other above-ground facilities to accommodate vehicular access and maintenance. The clear zone should slope away from Metropolitan's facilities on a grade not to exceed 2 percent.

2.6 Slopes

Cut or fill slopes proposed within Metropolitan's rights-of-way must not exceed 10 percent. The proposed grade must not worsen the existing condition. This restriction is required to facilitate Metropolitan use of construction and maintenance equipment and allow uninhibited access to above-ground and below-ground facilities.

2.7 Structures

Construction of structures of any type is not allowed within the limits of Metropolitan's rights-of-way to avoid interference with the operation and maintenance of Metropolitan's facilities and possible construction of future facilities.

Footings and roof eaves of any proposed buildings adjacent to Metropolitan's rights-of-way must meet the following criteria:

A. Footings and roof eaves must not encroach onto Metropolitan's rights-of-way.

B. Footings must not impose any additional loading on Metropolitan's facilities.

C. Roof eaves must not overhang onto Metropolitan's rights-of-way.

Detailed plans of footings and roof eaves adjacent to Metropolitan's rights-of-way must be submitted for Metropolitan's review and written approval, as pertains to Metropolitan's facilities.

2.8 Protection of Metropolitan Facilities

Metropolitan facilities within its rights-of-way, including pipelines, structures, manholes, survey monuments, etc., must be protected from damage by the project proponent or property owner, at no expense to Metropolitan. The exact location, description and method of protection must be shown on the project plans.

2.9 Potholing of Metropolitan Pipelines

Metropolitan's pipelines must be potholed in advance, if the vertical clearance between a proposed utility and Metropolitan's pipeline is indicated to be 4 feet or less. A Metropolitan representative must be present during the potholing operation and will assist in locating the pipeline. Notice is required, a minimum of three working days, prior to any potholing activity.

2.10 Jacked Casings or Tunnels

A. General Requirements

Utility crossings installed by jacking, or in a jacked casing or tunnel under/over a Metropolitan pipeline, must have at least 3 feet of vertical clearance between the outside diameter of the pipelines and the jacked pipe, casing, or tunnel. The actual

cover over Metropolitan's pipeline shall be determined by potholing, under Metropolitan's supervision.

Utilities installed in a jacked casing or tunnel must have the annular space between the utility and the jacked casing or tunnel filled with grout. Provisions must be made for grouting any voids around the exterior of the jacked pipe, casing, or tunnel.

B. Jacking or Tunneling Procedures

Detailed jacking, tunneling, or directional boring procedures must be submitted to Metropolitan for review and approval. The procedures must cover all aspects of operation, including, but not limited to, dewatering, ground control, alignment control, and grouting pressure. The submittal must also include procedures to be used to control sloughing, running, or wet ground, if encountered. A minimum 10-foot clearance must be maintained between the face of the tunneling or receiving pits and outside edges of Metropolitan's facility.

C. Shoring

Detailed drawings of shoring for jacking or receiving pits must be submitted to Metropolitan for review and written-approval. (See Section 10 for shoring requirements).

D. Temporary Support

Temporary support of Metropolitan's pipelines may be required when a utility crosses under a Metropolitan pipeline and is installed by means of an open trench. Plans for temporary support must be reviewed and approved in writing by Metropolitan. (See Section 11, Supports of Metropolitan Facilities).

3.0 Landscaping

3.1 Plans

All landscape plans must show the location and limits of Metropolitan's right-of-way and the location and size of Metropolitan's pipeline and related facilities therein. All landscaping and vegetation shall be subject to removal without notice, as may be required by Metropolitan for ongoing maintenance, access, repair, and construction activities. Metropolitan will not be financially responsible for the removal of any landscaping and vegetation.

3.2 Drought-Tolerant Native and California Friendly Plants

Metropolitan recommends use of drought-tolerant native and California Friendly® plants (excluding sensitive plants) on proposed projects. For more information regarding California Friendly® plants refer to www.bewaterwise.com.

3.3 Trees

Trees are generally prohibited within Metropolitan's rights-of-way as they restrict Metropolitan's ability to operate, maintain and/or install new pipeline(s) located within these rights-of-way. Metropolitan will not be financially responsible for the removal and replacement of any existing trees should they interfere with access and any current or future Metropolitan project located within the right-of-way.

3.4 Other Vegetation

Shrubs, bushes, vines, and groundcover are generally allowed within Metropolitan's rights-of-way. Larger shrubs are not allowed on Metropolitan fee properties; however, they may be allowed within its easements if planted no closer than 15 feet from the outside edges of existing or future Metropolitan facilities. Only groundcover is allowed to be planted directly over Metropolitan pipeline, turf blocks or similar is recommended to accommodate our utility vehicle access. Metropolitan will not be financially responsible for the removal and replacement of the vegetation should it interfere with access and any current or future Metropolitan project.

3.5 Irrigation

Irrigation systems are acceptable within Metropolitan's rights-of-way, provided valves and controllers are located near the edges of the right-of-way and do not interfere with Metropolitan vehicular access. A shutoff valve should also be located along the edge of the right-of-way that will allow the shutdown of the system within the right-of-way should Metropolitan need to do any excavation. No pooling or saturation of water above Metropolitan's pipeline and right-of-way is allowed. Additional restrictions apply to non-potable water such as Recycled Water and are covered on Table 3 of Page 20.

3.6 Metropolitan Vehicular Access

Landscape plans must show Metropolitan vehicular access to Metropolitan's facilities and rights-of-way and must be maintained by the property owner or manager or homeowners association at all times. Walkways, bike paths, and trails within Metropolitan's rights-of-way may be used as Metropolitan access routes. (See Section 2.4, Walks, Bike Paths, and Trails).

4.0 General Utilities

Note: For non-potable piping like sewer, hazardous fluid, storm drain, disinfected tertiary recycled water and recycled water irrigation see Table 1 through Table 3.

4.1 Utility Structures

Permanent utility structures (e.g., manholes, power poles, pull boxes, electrical vaults, etc.) are not allowed within Metropolitan's rights-of-way. Metropolitan requests that all permanent utility structures within public streets be placed as far from its pipelines and facilities as practical, but not closer than 5 feet from the outside edges of Metropolitan facilities.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation.

4.2 Utility Crossings

Metropolitan requests a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and any utility crossing the pipeline. Utility lines crossing Metropolitan's pipelines must be as perpendicular to the pipeline as possible. Cross-section drawings, showing proposed locations and elevations of utility lines and locations of Metropolitan's pipelines and limits of rights-of-way, must be submitted with utility plans, for all

crossings. Metropolitan's pipeline must be potholed under Metropolitan's supervision at the crossings (See Section 2.9).

4.3 Longitudinal Utilities

Installation of longitudinal utilities is generally not allowed along Metropolitan's rights-of-way. Within public streets, Metropolitan requests that all utilities parallel to Metropolitan's pipelines and appurtenant structures (facilities) be located as far from the facilities as possible, with a minimum clearance of 5 feet from the outside edges of the pipeline.

Note: Non-potable utility pipelines are an exception to the 5-foot minimum clearance. Non-potable utility pipelines should have 10 feet of separation (for more information See Table 1 on Page 18).

4.4 Underground Electrical Lines

Underground electrical conduits (110 volts or greater) which cross a Metropolitan's pipeline must have a minimum of 1 foot of vertical clearance between Metropolitan's pipeline and the electrical lines. Longitudinal electrical lines, including pull boxes and vaults, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipeline or structures.

4.5 Fiber Optic Lines

Fiber optic lines installed by directional boring require a minimum of 3 feet of vertical clearance when boring is over Metropolitan's pipelines and a minimum of 5 feet of vertical clearance when boring is under Metropolitan's pipelines. Longitudinal fiber optic lines, including pull boxes, in public streets should have a minimum separation of 5 feet from the edge of a Metropolitan pipelines or structures. Potholing must be performed, under Metropolitan's supervision, to verify the vertical clearances are maintained.

4.6 Overhead Electrical and Telephone Lines

Overhead electrical and telephone lines, where they cross Metropolitan's rights-of-way, must have a minimum 35 feet of clearance, as measured from the ground to the lowest point of the overhead line. Overhead electrical lines poles must be located at least 30 feet laterally from the edges of Metropolitan's facilities or outside Metropolitan's right-of-way, whichever is greater.

Longitudinal overhead electrical and or telephone lines in public streets should have a minimum separation of 10 feet from the edge of a Metropolitan pipelines or structures where possible.

4.7 Sewage Disposal Systems

Sewage disposal systems, including leach lines and septic tanks, must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or the edge of its facilities, whichever is greater. If soil conditions are poor, or other adverse site-specific conditions exist, a minimum distance of 150 feet is required. They must also comply with local and state health code requirements as they relate to sewage disposal systems in proximity to major drinking water supply pipelines.

4.8 Underground Tanks

Underground tanks containing hazardous materials must be a minimum of 100 feet from the outside limits of Metropolitan's rights-of-way or edge of its facilities, whichever is greater. In addition, groundwater flow should be considered with the placement of underground tanks down-gradient of Metropolitan's facilities.

5.0 Specific Utilities: Non-Potable Utility Pipelines

In addition to Metropolitan's general requirements, installation of non-potable utility pipelines (e.g., storm drains, sewers, and hazardous fluids pipelines) in Metropolitan's rights-of-way and public street rights-of-way must also conform to the State Water Resources Control Board's Division of Drinking Water (DDW) regulation (Waterworks Standards) and guidance for separation of water mains and non-potable pipelines and to applicable local county health code requirements. Written approval is required from DDW for the implementation of alternatives to the Waterworks Standards and, effective December 14, 2017, requests for alternatives to the Waterworks Standards must include information consistent with: DDW's Waterworks Standards Main Separation Alternative Request Checklist.

In addition to the following general guidelines, further review of the proposed project must be evaluated by Metropolitan and requirements may vary based on site specific conditions.

A. Sanitary Sewer and Hazardous Fluids (General Guideline See Table 1 on Page 18)

B. Storm Drain and Recycled Water (General Guideline See Table 2 on Page 19)

C. Irrigation with Recycled Water (General Guideline See Table 3 on Page 20)

D. Metropolitan generally does not allow Irrigation with recycled water to be applied directly above its treated water pipelines

E. Metropolitan requests copies of project correspondence with regulating agencies (e.g., Regional Water Quality Control Board, DDW); regarding the application of recycled water for all projects located on Metropolitan's rights-of-way

6.0 Cathodic Protection/Electrolysis Test Stations

6.1 Metropolitan Cathodic Protection

Metropolitan's existing cathodic protection facilities in the vicinity of any proposed work must be identified prior to any grading or excavation. The exact location, description, and type of protection must be shown on all project plans. Please contact Metropolitan for the location of its cathodic protection stations.

6.2 Review of Cathodic Protection Systems

Metropolitan must review any proposed installation of impressed-current cathodic protection systems on pipelines crossing or paralleling Metropolitan's pipelines to determine any potential conflicts with Metropolitan's existing cathodic protection system.

7.0 Drainage

7.1 Drainage Changes Affecting Metropolitan Rights-of-Way

Changes to existing drainage that could affect Metropolitan's rights-of-way require Metropolitan's approval. The project proponent must provide acceptable solutions to ensure Metropolitan's rights-of-way are not negatively affected by changes in the drainage conditions. Plans showing the changes, with a copy of a supporting hydrology report and hydraulic calculations, must be submitted to Metropolitan for review and approval. Long term maintenance of any proposed drainage facilities must be the responsibility of the project proponent, City, County, homeowner's association, etc., with a clear understanding of where this responsibility lies. If drainage must be discharged across Metropolitan's rights-of-way, it must be carried across by closed conduit or lined open channel and must be shown on the plans.

7.2 Metropolitan's Blowoff and Pumpwell Structures

Any changes to the existing local watercourse systems will need to be designed to accommodate Metropolitan's blowoff and pumpwell structures, which periodically convey discharged water from Metropolitan's blowoff and pumping well structures during pipeline dewatering. The project proponents' plans should include details of how these discharges are accommodated within the proposed development and must be submitted to Metropolitan for review and approval. Any blowoff discharge lines impacted must be modified accordingly at the expense of the project proponent.

8.0 Grading and Settlement

8.1 Changes in Cover over Metropolitan Pipelines

The existing cover over Metropolitan's pipelines must be maintained unless Metropolitan determines that proposed changes in grade and cover do not pose a hazard to the integrity of the pipeline or an impediment to its maintenance capability. Load and settlement or rebound due to change in cover over a Metropolitan pipeline or ground in the area of Metropolitan's rights-of-way will be factors considered by Metropolitan during project review.

In general, the minimum cover over a Metropolitan pipeline is 4 feet and the maximum cover varies per different pipeline. Any changes to the existing grade may require that Metropolitan's pipeline be potholed under Metropolitan's supervision to verify the existing cover.

8.2 Settlement

Any changes to the existing topography in the area of Metropolitan's pipeline or right-of-way that result in significant settlement or lateral displacement of Metropolitan's pipelines are not acceptable. Metropolitan may require submittal of a soils report showing the predicted settlement of the pipeline at 10-foot intervals for review. The data must be carried past the point of zero change in each direction and the actual size and varying depth of the fill must be considered when determining the settlement. Possible settlement due to soil collapse, rebound and lateral displacement must also be included.

In general, the typical maximum allowed deflection for Metropolitan's pipelines must not exceed a deflection of 1/4-inch for every 100 feet of pipe length. Metropolitan may require additional information per its Geotechnical Guidelines. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

9.0 Construction Equipment

9.1 Review of Proposed Equipment

Use of equipment across or adjacent to Metropolitan's facilities is subject to prior review and written approval by Metropolitan. Excavation, backfill, and other work in the vicinity of Metropolitan's facilities must be performed only by methods and with equipment approved by Metropolitan. A list of all equipment to be used must be submitted to Metropolitan a minimum of 30 days before the start of work.

A. For equipment operating within paved public roadways, equipment that imposes loads not greater than that of an AASHTO H-20 vehicle (see Figure 1 on Page 21) may operate across or adjacent to Metropolitan's pipelines provided the equipment operates in non-vibratory mode and the road remains continuously paved.

B. For equipment operating within unpaved public roadways, when the total cover over Metropolitan's pipeline is 10 feet or greater, equipment imposing loads no greater than those imposed by an AASHTO H-20 vehicle may operate over or adjacent to the pipeline provided the equipment is operated in non-vibratory mode. For crossings, vehicle path shall be maintained in a smooth condition, with no breaks in grade for 3 vehicle lengths on each side of the pipeline.

9.2 Equipment Restrictions

In general, no equipment may be used closer than 20 feet from all Metropolitan above-ground structures. The area around the structures should be flagged to prevent equipment encroaching into this zone.

9.3 Vibratory Compaction Equipment

Vibratory compaction equipment may not be used in vibratory mode within 20 feet of the edge of Metropolitan's pipelines.

9.4 Equipment Descriptions

The following information/specifications for each piece of equipment should be included on the list:

A. A description of the equipment, including the type, manufacturer, model year, and model number. For example, wheel tractor-scraper, 1990 Caterpillar 627E.

B. The empty and loaded total weight and the corresponding weight distribution. If equipment will be used empty only, it should be clearly stated.

C. The wheel base (for each axle), tread width (for each axle), and tire footprint (width and length) or the track ground contact (width and length), and track gauge (center to center of track).

10.0 Excavations Close to Metropolitan Facilities

10.1 Shoring Design Submittal

Excavation that impacts Metropolitan's facilities requires that the contractor submit an engineered shoring design to Metropolitan for review and acceptance a minimum of 30 days before the scheduled start of excavation. Excavation may not begin until the shoring design is accepted in writing by Metropolitan.

Shoring design submittals must include all required trenches, pits, and tunnel or jacking operations and related calculations. Before starting the shoring design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements, particularly as to any special procedures that may be required.

10.2 Shoring Design Requirements

Shoring design submittals must be stamped and signed by a California registered civil or structural engineer. The following requirements apply:

A. The submitted shoring must provide appropriate support for soil adjacent to and under Metropolitan's facilities.

B. Shoring submittals must include detailed procedures for the installation and removal of the shoring.

C. Design calculations must follow the Title 8, Chapter 4, Article 6 of the California Code of Regulations (CCR) guidelines. Accepted methods of analysis must be used.

D. Loads must be in accordance with the CCR guidelines or a soils report by a geotechnical consultant.

E. All members must be secured to prevent sliding, falling, or kickouts.

Metropolitan's pipelines must be located by potholing under Metropolitan's supervision before the beginning construction. Use of driven piles within 20 feet of the centerline of Metropolitan's pipeline is not allowed. Piles installed in drilled holes must have a minimum 2-foot clearance between Metropolitan's pipeline and the edge of the drilled hole, and a minimum of 1-foot clearance between any part of the shoring and Metropolitan's pipeline.

11.0 Support of Metropolitan Facilities

11.1 Support Design Submittal

If temporary support of a Metropolitan facility is required, the contractor shall submit a support design plan to Metropolitan for review and approval a minimum of 30 days before the scheduled start of work. Work may not begin until the support design is approved in writing by Metropolitan. Before starting design, the design engineer should consult with Metropolitan regarding Metropolitan's requirements.

11.2 Support Design Requirements

Support design submittals must be prepared, stamped, and signed by a California registered civil or structural engineer. The following requirements apply:

A. Support drawings must include detailed procedures for the installation and removal of the support system.

B. Design calculations must follow accepted practices, and accepted methods of analysis must be used.

C. Support designs must show uniform support of Metropolitan's facilities with minimal deflection.

D. The total weight of the facility must be transferred to the support system before supporting soil is fully excavated.

E. All members must be secured to prevent sliding, falling, or kickouts.

12.0 Backfill

12.1 Metropolitan Pipeline Not Supported

In areas where a portion of Metropolitan pipeline is not supported during construction, the backfill under and to an elevation of 6 inches above the top of the pipeline must be one-sack minimum cement sand slurry. To prevent adhesion of the slurry to Metropolitan's pipeline, a minimum 6-mil-thick layer of polyethylene sheeting or similar approved sheeting must be placed between the concrete support and the pipeline.

12.2 Metropolitan Pipeline Partially Exposed

In areas where a Metropolitan pipeline is partially exposed during construction, the backfill must be a minimum of 6 inches above the top of the pipeline with sand compacted to minimum 90 percent compaction.

12.3 Metropolitan Cut and Cover Conduit on Colorado River Aqueduct (CRA)

In areas where a Metropolitan cut and cover conduit is exposed, the following guidelines apply:

A. No vehicle or equipment shall operate over or cross the conduit when the cover is less than 3 feet.

B. Track-type dozer with a gross vehicle weight of 12,000 lbs or less may be used over the conduit when the cover is a minimum of 3 feet.

C. Wheeled vehicles with a gross vehicle weight of 8,000 lbs or less may operate over the conduit when the cover is a minimum of 4 feet.

D. Tracked dozer or wheeled vehicle should be used to push material over the conduit from the side.

E. Tracked dozer or wheeled vehicle should gradually increase cover on one side of the conduit and then cross the conduit and increase cover on the other side of the conduit. The cover should be increased on one side of the conduit until a maximum of 2 feet of fill has been placed. The cover over the conduit is not allowed to be more than 2 feet higher on one side of the conduit than on the other side.

F. The cover should be gradually increased over the conduit until the grade elevations have been restored.

13.0 Piles

13.1 Impacts on Metropolitan Pipelines

Pile support for structures could impose lateral, vertical and seismic loads on Metropolitan's pipelines. Since the installation of piles could also cause settlement of Metropolitan pipelines, a settlement and/or lateral deformation study may be required for pile installations within 50 feet of Metropolitan's pipelines. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

13.2 Permanent Cast-in-place Piles

Permanent cast-in-place piles must be constructed so that down drag forces of the pile do not act on Metropolitan's pipeline. The pile must be designed so that down drag forces are not developed from the ground surface to springline of Metropolitan's pipeline.

Permanent cast-in-place piles shall not be placed closer than 5 feet from the edge of Metropolitan's pipeline. Metropolitan may require additional information per its Geo-technical Guidelines for pile installation. Please contact Metropolitan's Substructures Team for a copy of the Geotechnical Guidelines.

14.0 Protective Slabs for Road Crossings Over Metropolitan Pipelines

Protective slabs must be permanent cast-in-place concrete protective slabs configured in accordance with Drawing SK-1 (See Figure 2 on Page 22).

The moments and shear for the protective slab may be derived from the American Association of State Highway and Transportation Officials (AASHTO). The following requirements apply:

A. The concrete must be designed to meet the requirements of AASHTO

B. Load and impact factors must be in accordance with AASHTO. Accepted methods of analysis must be used.

C. The protective slab design must be stamped and signed by a California registered civil or structural engineer and submitted to Metropolitan with supporting calculations for review and approval.

Existing protective slabs that need to be lengthened can be lengthened without modification, provided the cover and other loading have not been increased.

15.0 Blasting

At least 90 days prior to the start of any drilling for rock excavation blasting, or any blasting in the vicinity of Metropolitan's facilities, a site-specific blasting plan must be submitted to Metropolitan for review and approval. The plan must consist of, but not be limited to, hole diameters, timing sequences, explosive weights, peak particle velocities (PPV) at Metropolitan pipelines/structures, and their distances to blast locations. The PPV must be estimated based on a site-specific power law equation. The power law equation provides the peak particle velocity versus the scaled distance and must be calibrated based on measured values at the site.

16.0 Metropolitan Plan Review Costs, Construction Costs and Billing

16.1 Plan Review Costs

Metropolitan plan reviews requiring 8 labor hours or less are generally performed at no cost to the project proponent. Metropolitan plan reviews requiring more than 8 labor hours must be paid by the project proponent, unless the project proponent has superior rights at the project area. The plan review will include a written response detailing Metropolitan's comments, requirements, and/or approval.

A deposit of funds in the amount of the estimated cost and a signed letter agreement will be required from the project proponent before Metropolitan begins or continues a detailed engineering plan review that exceeds 8 labor hours.

16.2 Cost of Modification of Facilities Performed by Metropolitan

Cost of modification work conducted by Metropolitan will be borne by the project proponent, when Metropolitan has paramount/prior rights at the subject location.

Metropolitan will transmit a cost estimate for the modification work to be performed (when it has paramount/prior rights) and will require that a deposit, in the amount of the estimate, be received before the work will be performed.

16.3 Final Billing

Final billing will be based on the actual costs incurred, including engineering plan review, inspection, materials, construction, and administrative overhead charges calculated in accordance with Metropolitan's standard accounting practices. If the total cost is less than the deposit, a refund will be made; however, if the cost exceeds the deposit, an invoice for the additional amount will be forwarded for payment.

17.0 Street Vacations and Reservation of Easements for Metropolitan

A reservation of an easement is required when all or a portion of a public street where Metropolitan facilities are located is to be vacated. The easement must be equal to the street width being vacated or a minimum 40 feet. The reservation must identify Metropolitan as a "public entity" and not a "public utility," prior to recordation of the vacation or tract map. The reservation of an easement must be submitted to Metropolitan for review prior to final approval.

18.0 Metropolitan Land Use Guidelines

If you are interested in obtaining permission to use Metropolitan land (temporary or long term), a Land Use Form must be completed and submitted to Metropolitan for review and consideration. A nonrefundable processing fee is required to cover Metropolitan's costs for reviewing your request. Land Use Request Forms can be found at:

http://mwdh2o.com/PDF_Doing_Your_Business/4.7.1_Land_Use_Request_form_revised.pdf

The request should be emailed to RealEstateServices@mwdh2o.com,or contact the Real Property Development and Management (RPDM) Group at (213) 217-7750.

After the initial application form has been submitted, Metropolitan may require the following in order to process your request:

A. A map indicating the location(s) where access is needed, and the location & size (height, width and depth) of any invasive subsurface activity (boreholes, trenches, etc.).

B. The California Environmental Quality Act (CEQA) document(s) or studies that have been prepared for the project (e.g., initial study, notice of exemption, Environmental Impact Report (EIR), Mitigated Negative Declaration (MND), etc.).

C. A copy of an ACORD insurance certification naming Metropolitan as an additional insured, or a current copy of a statement of self-insurance.

D. Confirmation of the legal name of the person(s) or entity(ies) that are to be named as the permittee(s) in the entry permit.

E. Confirmation of the purpose of the land use.

F. The name of the person(s) with the authority to sign the documents and any specific signature title block requirements for that person or any other persons required to sign the document (i.e., legal counsel, Board Secretary/Clerk, etc.).

G. A description of any vehicles that will have access to the property. The exact make or model information is not necessary; however, the general vehicle type, expected maximum dimensions (height, length, width), and a specific maximum weight must be provided.

Land use applications and proposed use of the property must be compatible with Metropolitan's present and/or future use of the property. Any preliminary review of your request by Metropolitan shall not be construed as a promise to grant any property rights for the use of Metropolitan's property.

19.0 Compliance with Environmental Laws and Regulations

As a public agency, Metropolitan is required to comply with all applicable environmental laws and regulations related to the activities it carries out or approves. Consequently, project plans, maps, and other information must be reviewed to determine Metropolitan's obligations pursuant to state and federal environmental laws and regulations, including, but not limited to:

A. California Environmental Quality Act (CEQA) (Public Resources Code 21000-21177) and the State CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 1500-15387)

B. Federal Endangered Species Act (ESA) of 1973, 16 U.S.C. §§ 1531, et seq.

C. California Fish and Game Code Sections 2050-2069 (California ESA)

D. California Fish and Game Code Section 1602

E. California Fish and Game Code Sections 3511, 4700, 5050 and 5515 (California fully protected species)

F. Federal Migratory Bird Treaty Act (MBTA), 16 U.S.C. §§ 703-712

G. Federal Clean Water Act (including but not limited to Sections 404 and 401) 33 U.S.C. §§ 1342, 1344)

H. Porter Cologne Water Quality Control Act of 1969, California Water Code §§ 13000-14076.

I. Title 22, California Code of Regulations, Chapter 16 (California Waterworks Standards), Section 64572 (Water Main Separation)

Metropolitan may require the project applicant to pay for any environmental review, compliance and/or mitigation costs incurred to satisfy such legal obligations.

20.0 Paramount Rights / Metropolitan's Rights within Existing Rights-of-Way

Facilities constructed within Metropolitan's rights-of-way shall be subject to the paramount right of Metropolitan to use its rights-of-way for the purpose for which they were acquired. If at any time Metropolitan or its assigns should, in the exercise of their rights, find it necessary to remove or relocate any facilities from its rights-of-way, such removal and replacement or relocation shall be at the expense of the owner of the facility.

21.0 Disclaimer and Information Accuracy

Metropolitan assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations before excavating and assumes all liability for damage to Metropolitan's facilities as a result of such excavation. Additionally, the user is cautioned to conduct surveys and other field investigations as you may deem prudent, to assure that your project plans are correct. The relevant representative from Metropolitan must be called at least two working days, before any work activity in proximity to Metropolitan's facilities.

It generally takes 30 days to review project plans and provide written responses. Metropolitan reserves the right to modify requirements based on case-specific issues and regulatory developments.

Table 1: General Guidelines for Pipeline Separation between Metropolitan's Pipeline[1] and Sanitary Sewer[2] or Hazardous Fluid Pipeline[3]

Pipeline Crossings	Metropolitan requires that sanitary sewer and hazardous fluid pipelines that cross Metropolitan's pipelines have special pipe construction (no joints) **and** secondary containment[4]. This is required for the full width of Metropolitan's rights-of-way or within 10 feet tangent to the outer edges of Metropolitan's pipeline within public streets. Additionally, sanitary sewer and hazardous fluid pipelines crossing Metropolitan's pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance between the top and the bottom of Metropolitan's pipeline and the pipe casing. These requirements apply to all sanitary sewer crossings regardless if the sanitary sewer main is located below or above Metropolitan's pipeline.
Parallel Pipeline	Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requires that all parallel sanitary sewer, hazardous fluid pipelines and/or non-potable utilities be located a minimum of 10 feet from the outside edges of Metropolitan's pipelines. When 10-foot horizontal separation criteria cannot be met, longitudinal pipelines require special pipe construction (no joints) **and** secondary containment[4].
Sewer Manhole	Sanitary sewer manholes are not allowed within Metropolitan's rights-of-way. Within public streets, Metropolitan requests manholes parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment[5].

Notes:

[1] *Separation distances are measured from the outer edges of each pipe.*

[2] *Sanitary sewer requirements apply to all recycled water treated to less than disinfected tertiary recycled water (disinfected secondary recycled water or less).* Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (Water Recycling Criteria), Section 60301.

[3] *Hazardous fluids include e.g., oil, fuels, chemicals, industrial wastes, wastewater sludge, etc.*

[4] *Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.*

[5] *Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.*

Table 2: General Guidelines for Pipeline Separation between Metropolitan's Pipeline[1] and Storm Drain and/or Disinfected Tertiary Recycled Water[2]

Pipeline Crossings	Metropolitan requires crossing pipelines to be special pipe construction (no joints) or have secondary containment[3] within 10-feet tangent to the outer edges of Metropolitan's pipeline. Additionally, pipelines crossing Metropolitan's pipelines must be perpendicular and maintain a minimum 1-foot vertical clearance.
Parallel Pipeline	Metropolitan generally does not permit the installation of longitudinal pipelines along its rights-of-way. Within public streets, Metropolitan requests that all parallel pipelines be located a minimum of 10 feet from the outside edges of Metropolitan's pipelines. When 10-foot horizontal separation criteria cannot be met, special pipe construction (no joints) or secondary containment[3] are required.
Storm Drain Manhole	Permanent utility structures (e.g., manhole. catch basin, inlets) are not allowed within Metropolitan's rights-of-way. Within public streets, Metropolitan requests all structures parallel to its pipeline be located a minimum of 10 feet from the outside edges of its pipelines. When 10 foot horizontal separation criteria cannot be met, the structure must have secondary containment[4].

Notes:

[1] *Separation distances are measured from the outer edges of each pipe.*

[2] *Disinfected tertiary recycled water as defined* in Title 22, California Code of Regulations, Chapter 3 (*Water Recycling Criteria*), Section 60301.

[3] *Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.*

[4] *Secondary Containment for Structures – Secondary containment consists of external HDPE liner or other approved method.*

Table 3: General Guidelines for Pipeline Separation[1] between Metropolitan's Pipeline and Recycled Water[2,4] Irrigations

Pressurized recycled irrigation mainlines	• Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing pressurized recycled irrigation mainlines must be special pipe construction (no joints) or have secondary containment[3] within 10-feet tangent to the outer edges of Metropolitan's pipeline. • Longitudinal - must maintain a minimum 10-foot horizontal separation and route along the perimeter of Metropolitan's rights-of-way where possible.
Intermittently Energized Recycled Water Irrigation System Components	• Crossings - must be perpendicular and maintain a minimum 1-foot vertical clearance. Crossing irrigation laterals within 5-feet tangent to the outer edges of Metropolitan's pipeline must be special pipe construction (no joints) or have secondary containment[3]. • Longitudinal – must maintain a minimum 5-foot horizontal separation between all intermittently energized recycled water irrigation system components (e.g. irrigation lateral lines, control valves, rotors) and the outer edges of Metropolitan's pipeline. Longitudinal irrigation laterals within 5-feet tangent to the outer edges of Metropolitan's pipeline must be special pipe construction (no joints) or have secondary containment[3].
Irrigation Structures	Irrigation structures such as meters, pumps, control valves, etc. must be located outside of Metropolitan's rights-of-way.
Irrigation spray rotors near Metropolitan's aboveground facilities	Irrigation spray rotors must be located a minimum of 20-foot from any Metropolitan above ground structures with the spray direction away from these structures. These rotors should be routinely maintained and adjusted as necessary to ensure no over-spray into 20-foot clear zones.
Irrigations near open canals and aqueducts	Irrigation with recycled water near open canals and aqueducts will require a setback distance to be determined based on site-specific conditions. Runoff of recycled water must be contained within an approved use area and not impact Metropolitan facilities. Appropriate setbacks must also be in place to prevent overspray of recycled water impacting Metropolitan's facilities.

Notes:

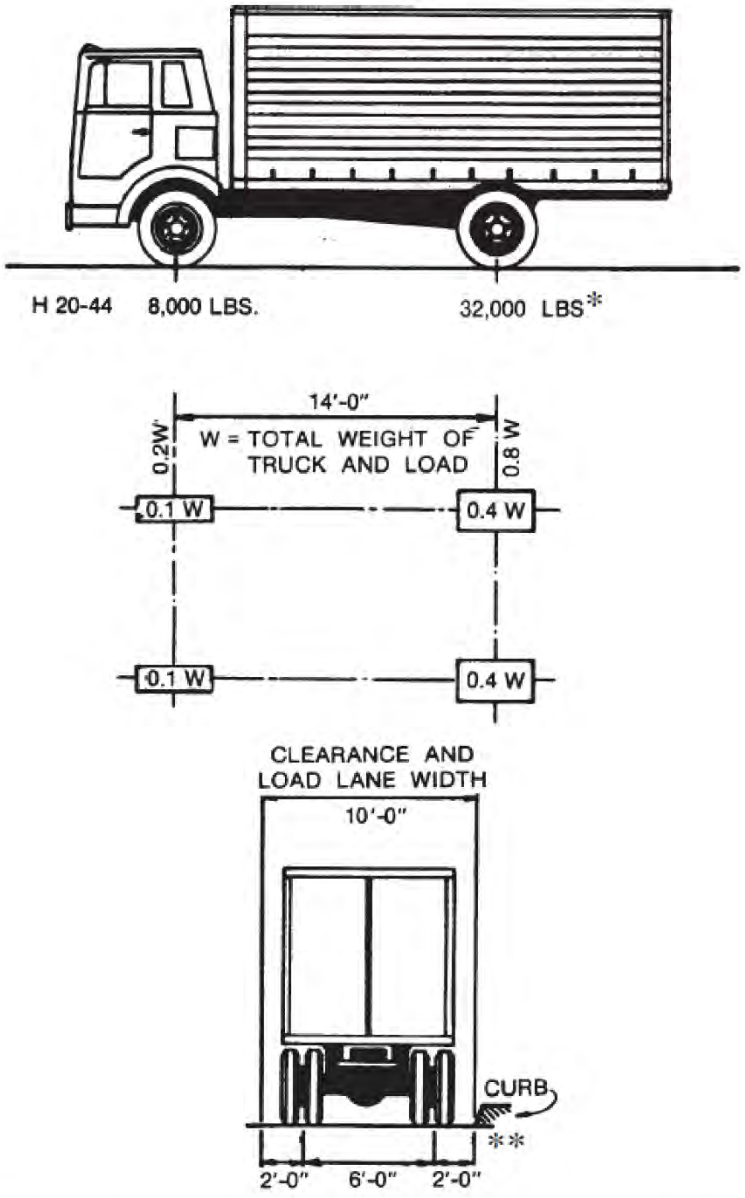
[1] *Separation distances are measured from the outer edges of each pipe.*

[2] *Requirements for recycled water irrigation apply to all levels of treatment of recycled water for non-potable uses.* Recycled water definitions are included in Title 22, California Code of Regulations, Chapter 3 (*Water Recycling Criteria*), Section 60301.

[3] *Secondary Containment for Pipeline - Secondary containment consists of a continuous pipeline sleeve (no joints). Examples acceptable to Metropolitan include welded steel pipe with grout in annular space and cathodic protection (unless coated with non-conductive material) and High Density Polyethylene (HDPE) pipe with fusion-welded joints.*

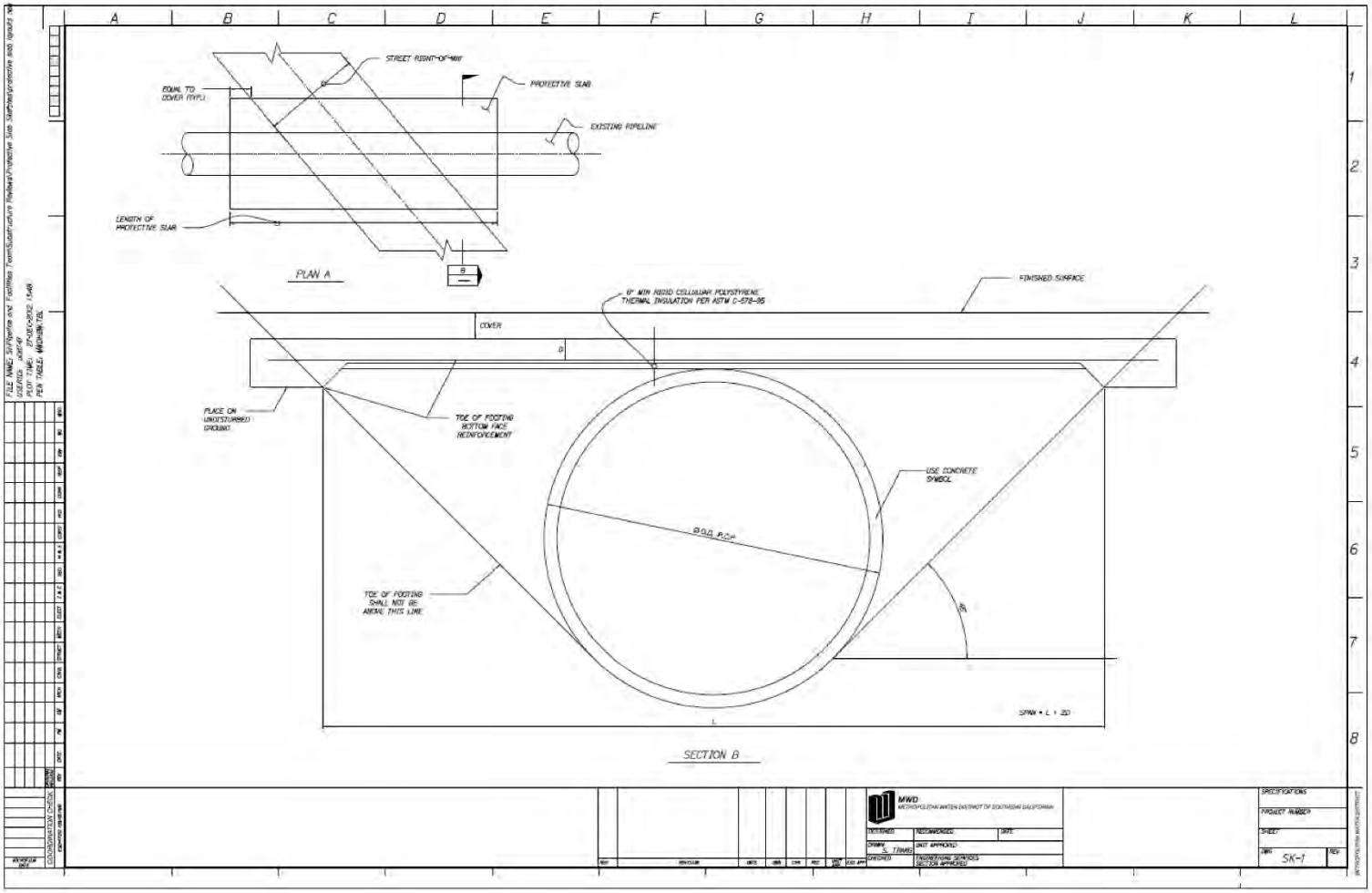
[4] *Irrigation with recycled water shall not be applied directly above Metropolitan's treated water pipelines.*

Figure 1: AASHTO H-20 Loading



Note: The H loadings consist of a two-axle truck or the corresponding lane loadings as illustrated above. The H loadings are designated "H" followed by a number indicating the gross weight in tons of the standard truck.

Figure 2: Drawing SK-1



Pacific Crest Trail Association

Pacific Crest Trail Association

Southern California Regional Office

January 24, 2021

Riverside County Planning Department
Attn: Mr. Jay Olivas
77588 El Duna Ct.
Ste. H
Palm Desert, CA 92211
jolivas@rivco.org

Re: Alta Mesa Wind Project Draft EA
Environmental Assessment No: CEQ 200004
Project No. and Name: Commercial WECS Permit no. 71, Revised Permit no.10/Variance Case No. 200001, Alta Mesa Wind Project

Dear Mr. Olivas:

Thank you for the opportunity to comment on the Alta Mesa Wind Project Draft EA. I am writing on behalf of the 14,300 member Pacific Crest Trail Association (PCTA). PCTA is the Forest Service, Bureau of Land Management and California State Park's primary partner in the management, maintenance, and protection of the Pacific Crest National Scenic Trail (PCT). This private/public partnership with the PCT is rooted in the 1968 National Trails System Act that specifically calls out the role of private organizations in the maintenance and management of National Trails. As such, it is PCTA's role to support our agency partners with planning efforts and management projects that provide the PCT with the appropriate management intended with the trail's designation as a National Scenic Trail.

There are a few points in the Environmental Assessment (EA) that need clarification, additional information, or pose concern. They are detailed below using page numbers from the actual document (not the pages of the PDF).

Project information, Page 2
"The nearest sensitive receptors to the new WTGs are rural residences in Bonnie Bell, the closest of which are 4,500 and 4,900 feet east of the Project."

PCT-1

Using the map provided in Figure 1 of the Appendix, it appears that the PCT is within half a mile of some of the turbines and should be considered as sensitive receptors.

Maps Pages 4,6,8
The PCT should be shown on these maps (and not just maps in the appendices) for proper context and for cursory understanding of analysis in the document. This is also necessary for the public to have an accurate understanding of the project's potential impacts on sensitive resources such as the PCT.

1331 Garden Highway, Suite 230
Sacramento, CA 95833
916-285-1846 (Main Office)
www.pcta.org

V. Environmental Issues Assessment Page
Aesthetics-Scenic Resources Pages 23-24
The Less than Significant Impact finding for "b" and "c" does not seem accurate considering the substantial impact the change in tower height will have on the PCT viewshed. Although the number of towers decreases, page 23 indicates the current height range is 114-145 feet above ground level and the new towers would be up to 499 feet above ground level. The height of the towers results in a significant diminution of the PCT experience, as a National Scenic Trail, aesthetics is one of the primary purposes for the PCT.

PCT-1, cont.

We recommend using the Bureau of Land Management's Visual Resource System to comply with National Scenic Trail standards. Specifically, Chapter 4 Section E of the BLM Manual 6280 – Management of National Scenic and Historic Trails, states:

> "Designating visual resource management (VRM) classes based on the National Trail visual resource inventory and based on the desired future condition of the National Trail resources, qualities, values, and associated settings and the primary use or uses of the area through which such trails may pass. To retain or improve the integrity of the associated settings and scenic values for which the National Trail was designated, the BLM should consider establishing VRM classes at the most protective level practicable to meet National Trail scenery management objectives."

PCT-2

The manual continues stating the management objective as "VRM Class I or II designation for National Scenic Trails." And "in assigning VRM classification, describe how activities managed to this scenic level support the nature and purposes of the National Trail and how uses are managed to avoid visual conflict." Alta Mesa should adopt the same requirements of VRM Class I or II for this projects interface with the PCT.

BLM definitions of VRM Class Objectives are:

- **VRM Class I Objective**: To preserve the existing character of the landscape. Allowed Level of Change: This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **VRM Class II Objective**: To retain the existing character of the landscape. Allowed Level of Change: The level of change to the characteristic landscape should be low. Management activities may be seen but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.

Next, the analysis for "b" says "The original visual landscape throughout the Project vicinity has been extensively altered by the development of commercial wind facilities

(including turbines on and near the Project site), substations, transmission lines, and roadways. As such, large wind turbines are a commonly occurring visual elements in the area and are part of the existing visual and recreational experience." This language seems to be justifying continued and increased impacts from this project to the landscape and recreation resources. Although there are existing infrastructure impacts, this does not inherently justify increasing impacts to public resources.

PCT-2, cont.

The size of the turbines which will replace the old-style turbines are massive and will seriously impose on the landscape, degrading the viewshed and dominating the experience of recreational visitors to these lands. **The EA has failed to acknowledge that the replacement of these larger turbines is a Connected Action as defined in the National Environmental Protection Act and requires further analysis in the form of an EIS**. The management direction below is excerpted from BLM Permanent Instruction Memorandum No. 2018-023:

> "Proposed actions are connected if they automatically trigger other actions that may require an environmental impact statement; *cannot or will not proceed unless other actions are taken previously or simultaneously* [emphasis added]; or if the actions are interdependent parts of a larger action and depend upon the larger action for their justification (40 CFR 1508.25 (a)(1))."

Also, from Section 6.5.2.1 of the BLM NEPA Handbook:

> "If the connected non-Federal action and its effects can be prevented by BLM decision-making, then the effects of the non-Federal action are properly considered indirect effects of the BLM action and must be analyzed as effects of the BLM action."

Land Use Planning Page 78
The No Impact finding for "a" is inaccurate as the proposal conflicts with the Bureau of Land Management's Visual Resource System specifically, Chapter 4 Section E of the BLM Manual 6280 – Management of National Scenic and Historic Trails (as detailed above).

Noise Effects by the Project Page 82
In the Findings of Fact for "a" the concluding paragraph states "for locations near the site boundary, such as the PCT, the noise levels would not exceed 65 dBA at 150 meters from any WTG." It's not clear how far the PCT would be from the WTG's and what impact the noise might have at those distances. As above, the project map needs to include the PCT and detail the exact distances the new turbines will be sited from the Trail.

Parks and Recreation Page 88
In the Findings of Fact a-c: There are no parks within one mile of the Project. The PCT runs north and west of the Project site, and there are federal lands nearby that are used for recreation. It is unclear to me if you are saying the PCT is not within 1 mile of the

PCT-3

project or if the PCT is not a park. A park is defined by Merriam-Webster as both "a piece of ground in or near a city or town kept for ornament and recreation and an area maintained in its natural state as a public property." The PCT is both and is considered a park. It is also considered a Special Recreation Management Area in the Desert Renewable Energy Conservation Plan. This paragraph should be corrected to reflect this, and the analysis should be updated as there is in fact an impact to recreation and parks in the area. PCT-3, cont.

Transportation Page 90

In the Findings of Fact analysis, there is no analysis of the impact the increase in traffic on the access road might have on PCT hikers and equestrians. The PCT is not on many of the maps, the visual impact of construction and road improvement has not been illustrated from a KOP from the PCT, and there has been no auditory analysis of the impact of increased traffic both during and after construction; with all these points, this analysis is incomplete and inaccurate. PCT-4

Cumulative Projects Page 105

The Cumulative Analysis section indicates "the Project would have no impact to Agriculture and Forestry, Energy, Land Use and Planning, Mineral Resources, Population and Housing, and Recreation so would not contribute to cumulative impacts on these resources." PCT-5

It has been demonstrated that the full impact has not been adequately analyzed and there is in fact impacts to the visual resources of the Pacific Crest Trail. The EA also has not analyzed the potential impact that the towers and associated FAA lighting on the tops of towers will have on the night and early morning time scenic qualities of the PCT.

Appendix A: Visual Simulations

Figure 1. Viewshed Analysis

We appreciate the PCT being shown on this map. It is challenging to get a full understanding of the impacts to the viewshed from the PCT with such similar color gradients used to represent the number of visible turbines from all the different points on the PCT that are impacted. Please provide a more detailed, higher resolution map with easier to decipher color gradient so that a full analysis can be completed. PCT-6

KOP4 Pacific Crest Trail

This one KOP shows a significant visual impact, and the towers are against a less contrasted backdrop. It is also critical to simulate and analyze the viewshed from a point on the PCT where the towers will have blue sky as a backdrop and analyze how this change in backdrop affects the scenic resources.

Although PCTA is critical of the project as it is currently proposed, we are ready and willing to work in partnership to find ways for the project to occur in a manner to ensure that impacts to the Pacific Crest National Scenic Trail are avoided and minimized, so the trail provides the best experience possible. Please do not hesitate to contact me with any questions.

Sincerely,

Anitra I. Kass
Southern California Regional Representative

CC: Justin Kooyman, Associate Director-Pacific Crest Trail Association
Beth Boyst, PCT Administrator, US Forest Service

Sierra Club

Via email: jolivas@rivco.com

January 22, 2021

Riverside County Planning Department
Attention: Jay Olivas
77588 El Duna Ct., Ste. H
Palm Desert, CA 92211

Re: Commercial WECS Permit No. 71, Revised Permit No. 10/Variance Case No. 200001, Alta Mesa Wind Project; Draft Initial Study and Mitigated Negative Declaration

Dear Mr. Olivas:

This comment letter is being submitted on behalf of Sierra Club and the Center for Biological Diversity regarding draft EA for the Mesa Wind re-power project (Project).

Increasing efficiencies of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting emission reductions. However, like all projects, wind power repowering projects should be thoughtfully planned to minimize impacts to the environment. In particular, repower projects should avoid impacts to sensitive species and habitat. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

The Sierra Club and the Center for Biological Diversity strongly support re-powering wind farms as highly preferable to new projects on pristine lands. However, we do believe that re-powers (in addition to new renewable projects) should be properly analyzed under environmental laws.

As a Permittee under the Coachella Valley Multiple Species Habitat Conservation Plan/Natral Community Conservation Plan (MSHCP), the County has erred in not having completed the Joint Project Review (JPR) for the proposed project prior to the project's draft EA. Further the EA failed to adequately analyze, fully disclose and/or evaluate the potentially significant impacts of the project and required avoidance, minimization, and mitigation for same.

The County is in Violation of the MSHCP

SC-1

The County appears to be in violation of the Coachella Valley Multiple Species Habitat Conservation Plan/Natral Community Conservation Plan (MSHCP) and the associated Implementation Agreement (IA) in not having had a Joint Project Review (JPR) conducted by the Coachella Valley Conservation Commission (CVCC) for the above-referenced project. On page 16, the Draft EA/IS states "Because the Project is within the Coachella Valley MSHCP permit area, it would require a Joint Project Review for any potential impacts to endangered species. The Joint Project Review would ensure that the project complies with the MSHCP." Again, on page 33, the Draft EA/IS states, "The Project, including the 0.43 acres of disturbance along the access road, would undergo a CVCC Joint Project Review and would conform to any conditions specified in CVCC's authorization." On page 49, the Draft EA/IS states, "The Alta Mesa Wind site is within the CVMSHCP boundaries and would offset the potential disturbance through the MSHCP process, including filing a Joint Project Review." All of these statements clearly imply that a JPR will eventually be conducted but that one has not yet been conducted. If this is the case, the County has violated the MSHCP. The County is a Permitee under the MSHCP and a signatory to the IA, and as such is fully aware of the requirement in Section 6.6.1.1 of the MSHCP: "The application will not be deemed complete by the Permittee prior to completion of the Joint Project Review Process." Further, Section 6.6.1.1 stipulates that "Within thirty (30) calendar days of receipt of an application for a project in a Conservation Area, the Local Permittee shall provide CVCC with a copy of the project application." Section 6.6.1.1 further states, "Consultation with CVCC is needed at this early stage to ensure that alternatives are fully evaluated to achieve Conservation Area Conservation Objectives prior to public release of environmental documents prepared pursuant to CEQA."

Further, on page 31, the Draft EA/IS asserts that there will be no "Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan." The determination of consistency with the MSHCP, however, requires a JPR, absent which no such determination can be made as it is factually unsupported; thus, again, rendering the Draft EA/IS inaccurate and invalid.

If the County has not complied with the MSHCP requirement that a JPR be conducted prior to deeming an application complete and prior to preparation of any CEQA document, then the County is in violation of the MSHCP and IA and the County cannot make use of any of the provisions of the MSHCP nor rely on the Incidental Take Permit issued by USFWS through the MSHCP. The County must now invalidate the Draft EA/IS and submit the application to CVCC for a JPR. Following that JPR, the County will know if the project is consistent with the MSHCP, and, if it is, the County can then – and only then - prepare the appropriate CEQA document.

The JPR must show that the project is consistent with the Conservation Objectives in Section 4.3.2 as well as the species conservation goals and objectives in Section 9 for desert tortoise and other affected species as determined by the JPR.

If the County maintains that it is in compliance with the MSHCP and IA, the County must identify the date the application was received, the date the project was submitted to CVCC for a JPR, and provide a copy of the JPR conducted by CVCC.

Thank you for the opportunity to comment and please accept these comments for the record. Please keep us on the list to receive all notices for this project. Feel free to reach out to us with any questions.

Very truly yours,

Joan Taylor
Sierra Club - San Gorgonio Chapter
Tahquitz Group Chair
tahquitz@sangorgonio.sierraclub.org

Ileene Anderson
Senior Scientist
Center for Biological Diversity
ianderson@biologicaldiversity.org
323-490-0223

Carrera, Isaac

January 22, 2021

Riverside County Planning Department
Attention: Jay Olivas
77588 El Duna Ct, Ste. H
Palm Desert, CA 92211
jolivas@rivco.com

Subject: Support of the Approval of Alta Mesa Wind Re-Power Project (Permit No. 10)

P-1

To Whom It May Concern:

The proposed Alta Mesa Wind Re-Power project is great for Riverside County.

The project brings jobs during construction, which will also benefit local small businesses, and ensures that the clean, renewable assets that are vital to our green future are updated to reflect the progress we've made in the renewable industry.

This progress means that we can now replace 159 dated turbines with 7 newer, effective and efficient turbines. This will significantly reduce the footprint on the site.

This project makes sense for Riverside County and I ask that you strongly consider moving it forward.

Best Regards,

Isaac Carrera

King, Wayne

From: Olivas, Jay
To: Wayne King
Subject: RE: Whitewater Canyon Windmills
Date: Wednesday, January 13, 2021 11:41:09 AM
Attachments: image001.jpg

Wayne,

We will forward your comments to our team.

Kind regards,

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050

RIVERSIDE COUNTY PLANNING DEPARTMENT

Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

To help us better serve you please
click the link to tell us How are we doing?

From: Wayne King <kingal11940@gmail.com>
Sent: Saturday, January 2, 2021 11:32 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Whitewater Canyon Windmills

Mr. Olivia's,
I am writing about Commercial WECS Permit No.71, Revised Permit No.10/Variance Case No.200001, Alta Mesa Wind Project

I have lived in Whitewater Canyon for over 10 years. It is an area of unspoiled, unique beauty.
We are surrounded by non profit nature preserves and unfortunately BLM land.
I say unfortunately because the BLM has reneged on a promise made in the 1990s to never allow wind turbines to be constructed on its land within sight line of the canyon residents.
We have fought this project through all the channels that are available to the "little guy" but to no avail.
I was thrilled to see that the county had not yet approved the project and there might still be some thread of hope that this horrible development on the western ridge of our canyon may not go through.
The windmills they propose are nearly half the height of the Empire State building. They will look over the canyon with red flashing lights and gigantic whooshing blades creating a dreadful strobe effect. Disrupting

P-2

avian flight patterns and animal migration. The pictures above are the actual images the developer provided of "before and after".
The mills they would remove will end up in the landfill as they are not biodegradable.
In an act of hubris and self entitlement by the Brookfield mega corporation that is trying to build them, the power they would generate has already been pre sold to Azusa, a city not even in Riverside County. They knew there would be resistance to their scheme but proceeded as if they had the right to do whatever they wished.
Brookfield claims to be doing this as a green project but there is only one letter difference between green and greed, which is their true motivation. Shareholder payout.
Please deny them the right to ruin one of the few natural environments left in our area.
This is an area where hikers, birders, school children and nature enthusiasts of all ages come to replenish their spirit and enjoy nature as it used to be. Once it is lost it cannot be regained.
Thank you for your consideration.
Wayne King
Whitewater Canyon

P-2, cont.

Lee, Bong

January 15, 2021

Riverside County Planning Department
Attention: Jay Olivas
77588 El Duna Ct, Ste. H
Palm Desert, CA 92211
jolivas@rivco.com

Subject: Support of the Approval of Alta Mesa Wind Re-Power Project (Permit No. 10)

P-3

To Whom It May Concern:

I am writing to support approval of the Alta Mesa wind re-power project.

This project is clearly a win for Riverside County.

There are clear economic benefits, such as the jobs created during construction and the small local businesses that will benefit from it, as well as other significant positives such as a reduced footprint at the site itself. This is due to the removal of 159 turbines during the project, that will be replaced with only 7 more efficient turbines.

I ask that you strongly consider moving this project forward.

Best Regards,

Bong Lee

Mansell, Eva

From: Olivas, Jay
To: eva mansell
Subject: RE: comment on Commercial WECS Permit No.71, Revised Permit No. 10/ Variance Case
Date: Wednesday, January 13, 2021 11:37:26 AM
Attachments: image001.jpg

Eva,

Will forward your comments to our team, no PC hearing date currently.

Kind regards,

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050

RIVERSIDE COUNTY PLANNING DEPARTMENT

Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

To help us better serve you please
click the link to tell us How are we doing?

From: eva mansell <evayogi@yahoo.com>
Sent: Wednesday, December 30, 2020 6:52 AM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Fw: comment on Commercial WECS Permit No.71, Revised Permit No. 10/ Variance Case

NOTE: the email on your mailing was incorrect, I had to call and now resend. Doesn't bode well for getting comments---
But please read mine below, resent.
Thanks

----- Forwarded Message -----
From: eva mansell <evayogi@yahoo.com>
To: jolivas@rivco.com <jolivas@rivco.com>
Sent: Mon Dec 28 2020 14:49:18 GMT-0800 (PST)
Subject: comment on Commercial WECS Permit No.71, Revised Permit No. 10/ Variance Case

Dear Mr. Olivas,

I live on the Whitewater Canyon Road and have attended Alta Mesa's meeting regarding this project, and commented to the BLM etc. and my comment remains: P-4

The area that they described just above the Whitewater Canyon has already been utilized, we here have fought further use and I am completely against this project for the following reasons.

1) At least one brush fire in the 9 years I've lived here was said to have been caused by sparking from one of the windmills. This is a canyon with only one exit. The fire was below where I and others live, and thousands of people come to visit the canyon and preserve. If it had been worse we could have been trapped.

2) I know for a fact that when windmills are torn down they are almost impossible to dispose of responsibly. I cannot accept that the existing windmills need to be destroyed and even bigger ones put in. I don't believe it can be done responsibly. There should be every effort to repair existing windmills through new technology, as I do totally support "green energy" generation, but feel certain Alta Mesa only cares about money generation.

3) The wind energy is being transmitted long distances, not serving the local community. And green energy should be used locally, as transmission of electricity always wastes certain amounts of the energy.

4) Whitewater Canyon is at the base of one of the few pristine wilderness areas left in this Valley. I have volunteered at the Whitewater Preserve and personally seen how many children and adults are introduced to mostly untouched wilderness for the very first time when they visit the canyon and the Preserve. They then become more likely to be responsible about protecting the environment in general at a time when this is so important.

If Azuza or whatever city wants green energy great! But they should do it at a scale that suits their local community and find the locations near it.
Our beautiful and unique desert valley is becoming a tangle of wires and ugly transmission towers. Once lost, the wilderness cannot be replaced.

Please do not let this project go forward in the Whitewater Canyon area. Enough has already constructed here.

Sincerely,
Eva Mansell
11834 Cecil Dr.
Whitewater, CA

P-4, cont.

Scott, Alan

From: Olivas, Jay
To: Alan Scott
Subject: RE: Alta Mesa question
Date: Wednesday, January 13, 2021 11:44:36 AM
Attachments: image001.jpg
image002.png
image003.jpg

Hi Alan,

Our website has maps will forward separately.

Kind regards,

Jay T. Olivas
Urban Regional Planner -
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211
Ph: (760) 863-7050

RIVERSIDE COUNTY
PLANNING DEPARTMENT

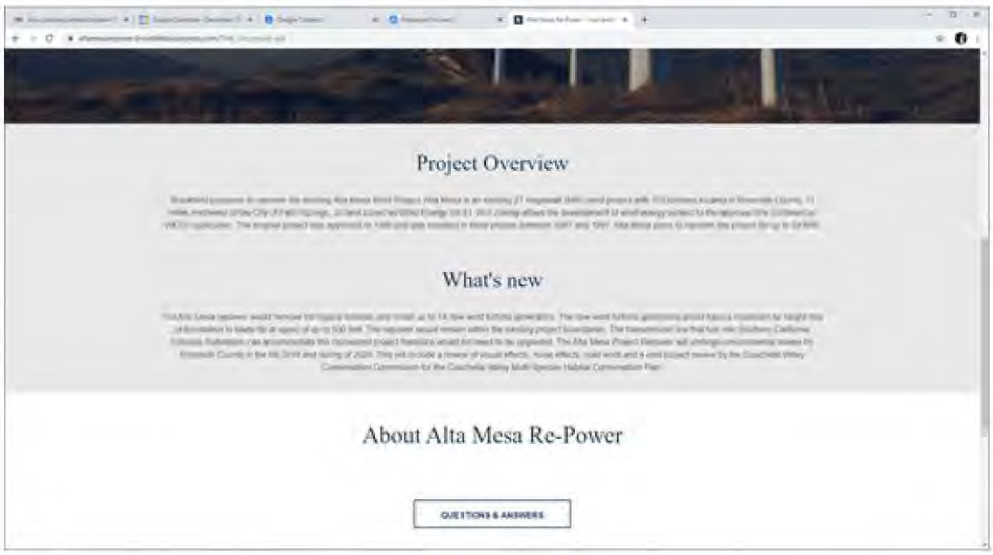
Email: jolivas@rivco.org
Website: http://planning.rctlma.org/

To help us better serve you please
click the link to tell us How are we doing?

From: Alan Scott <scott2sing@gmail.com>
Sent: Saturday, January 2, 2021 2:13 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Fwd: Alta Mesa question

Hi Jay.

I'm in support of the approval of the new wind project on Alta Mesa. I have two questions Is there a place we can see a map of the exact area and expanse of the project online? Why do the letter I received from your Riverside County office and the Brookfield Renewable page differ so much in the description of the project? Your letter says "up to seven (7) new" turbines and their website says up to 14. P-5



P-5, cont.

I'm just curious about how the discrepancy can be double.

Also... Our home is just east of the newly completed project with the installation of 9 new turbines after decommissioning a bunch of old ones. We are on Ocotillo Road north of Painted Hills Road. Is there a plan to remove the field that is just south of 16th street at any point? They are unsightly and noisy, and clearly most of them are not functioning, as parts of them are strewn all over the hillside.

You might recall approving us for WECS000127. Still making most of our own electricity.

Thanks,
Scott Agron
760/880-3334

--

Alan Scott
Cantorial Soloist
Sun City Jewish Services
Sun City - Palm Desert

Director
Image removed by sender.
Sweet Adelines Chorus

Starks, Les and Vogelsang, Jeri

From:	Olivas, Jay
To:	Vida Strong; Kirby, Jonathan; Baez, Ken
Subject:	FW: Comments on Alta Mesa Wind Project, Commercial WECS Permit No. 71, Revised Permit No. 10/Variance Case No. 200001
Date:	Tuesday, January 26, 2021 4:58:28 PM

From: Jeriyn Vogelsang <jerivog@aol.com>
Sent: Saturday, January 23, 2021 5:05 PM
To: Olivas, Jay <JOLIVAS@RIVCO.ORG>
Subject: Fwd: Comments on Alta Mesa Wind Project, Commercial WECS Permit No. 71, Revised Permit No. 10/Variance Case No. 200001

-----Original Message-----
From: Jeriyn Vogelsang <jerivog@aol.com>
To: jolivas@rivco.com <jolivas@rivco.com>
Sent: Sat, Jan 23, 2021 1:07 pm
Subject: Comments on Alta Mesa Wind Project, Commercial WECS Permit No. 71, Revised Permit No. 10/Variance Case No. 200001

Riverside County Planning Department
Attention: Jay Olivas

RE: Commercial WECS Permit No. 71, Revised Permit No. 10/Variance Case No. 200001, Alta Mesa Wind Project

January 23, 2021

Dear Riverside County Planning Department:

This is to express our opposition to the proposed repowering of existing commercial wind project, the Alta Mesa Wind Project. The proposed Alta Mesa Wind Project will install seven, 500-feet-tall wind turbines with red blinking lights on the mountain ridgeline above Whitewater Canyon Road that will loom above an ancient Teshana Wanakik settlement at Bonnie Bell Lodge and some of the most beautiful land in the world: the Whitewater Preserve and the Sand to Snow National Monument. The Teshana Wanakik Band of Cahuilla Indians (relatives of the Morongo Indians) inhabited ancient Bonnie Bell Lodge and Snow Creek Canyon on opposite sides of the San Gorgonio Pass. P-6

All desert cities and local Indian Tribes should oppose this ill-conceived development because so many of our area's most important scenic views have already been sacrificed to industrial wind turbine and billboard development along the I-10 corridor, on Highway 62, in North Palm Springs, Indian Avenue and West Garnet.

The Haugen-Lehmann exit of the I-10 Freeway leads to a desolate stretch of freeway frontage characterized by unbridled wind turbine development and an endless tangle of overhead power lines and billboards so harshly illuminated that they can be seen for miles.

Behind this, in the San Bernardino Mountains above the I-10, stand 460 Mesa Wind turbines and 159 Alta Mesa Wind turbines, abandoned and inoperable, originally approved by the Riverside

County Board of Supervisors in 1984, which are scheduled for demolition if this pending, profiteering development is approved by the Riverside County Planning Department.

In the early 1990s we witnessed firsthand the effect of wind turbine development in Whitewater Canyon. The Riverside County Board of Supervisors has given wind developers free rein over the San Gorgonio Pass, especially the area surrounding verdant, riparian Whitewater Canyon, which was once a haven for bird-watchers and an annual migratory stop for a large number of turkey vultures. Through 1990, the cottonwood trees at Bonnie Bell Lodge would appear almost black because of the vultures resting there. Their population, and that of other canyon birds, steadily decreased as Riverside County wind developments increased, because thousands were killed by the industrial camp of windmills that now dominates the ridgelines of this once astonishingly beautiful water canyon, now permanently defiled and degraded by gargantuan wind turbines.

Both Whitewater Canyon Preserve and Snow Creek Village have suffered devastating wildfires as recently as last year (2020). Since industrial wind turbines can, and have, started fires, we request that no more fire risks be added by approval of the Alta Mesa Wind Project.

We adamantly oppose this repowering project for the environmental and aesthetic damage they will inevitably cause.

P-6, cont.

Les Starks and Jeri Vogelsang
(760) 285-4670
Whitewater, CA

Vang, Lenin

January 22, 2021

Riverside County Planning Department
Attention: Jay Olivas
77588 El Duna Ct, Ste. H
Palm Desert, CA 92211
jolivas@rivco.com

Subject: Support of the Approval of Alta Mesa Wind Re-Power Project (Permit No. 10)

P-7

To Whom It May Concern:

The proposed Alta Mesa Wind Re-Power project is great for Riverside County.

The project brings jobs during construction, which will also benefit local small businesses, and ensures that the clean, renewable assets that are vital to our green future are updated to reflect the progress we've made in the renewable industry.

This progress means that we can now replace 159 dated turbines with 7 newer, effective and efficient turbines. This will significantly reduce the footprint on the site.

This project makes sense for Riverside County and I ask that you strongly consider moving it forward.

Best Regards,

Lenin Vang

AM Wind Repower LLC (Alta Mesa), a subsidiary of Brookfield Renewable Energy

Brookfield
Renewable U.S.

January 21, 2021

Jay Olivas
Riverside County
77-588 El Duna Court, Suite H
Palm Desert, CA 92211

Dear Mr. Olivas,

The Draft Environmental Assessment/ Initial Study Alta Mesa Wind Project was released by Riverside County for public review on December 24, 2020. Since that time, the following minor updates have occurred, and we recommend incorporation of the following into the Final EA/IS:

Page 1, Section I. PROJECT INFORMATION: "Alta Mesa 640 LLC" has been updated to "AM Wind Repower LLC" AMWR-1

Page 16, Section C, Assessor's Parcel No(s): APN 516020003 is a dedicated Metropolitan Water District easement for which no development is proposed, so this APN should be deleted. AMWR-2

Use of Public Access Road to Project Site: Minor clearing of vegetation along existing public roadways, is required at the intersection of Cottonwood Drive and Rockview Drive, and along Rockview Drive, totally 0.21 acres of ruderal and brittle bush scrub that appears to have been disturbed in the past. Therefore, the following updates are recommended for the EA-IS. Biological survey results for the subject public roadways are attached. AMWR-3

Page 2, Section I. PROJECT INFORMATION

The Project will necessitate ground disturbance for access roads and WTG construction pads (see Figure 2b). In most cases the new access roads will follow existing roads and new disturbance will be kept to a minimum. However, some roads will need to be widened, and some of the new turbines will be located away from existing disturbances. The total estimated disturbed area for the Project would be a total of up to 67.3 acres, of which 18.8 acres is already disturbed and 48.5 acres would be new disturbance. Of the 67.3 acres, less than 25 acres would be permanent, and 42.3 would be temporary. Of the 42.3 acres of temporary impacts, 32.4 acres would be a buffer area where vegetation removal is not anticipated but there may be some need for drive and crush due to trucks backing up or other unanticipated construction work. Plus, an additional 13.2 acres of ground disturbance would occur along the main access road to the Project site, an additional 0.2 acres of vegetation clearing along public access roads, and an additional 13 acres of ground disturbance would occur in the temporary construction yard, both within the Mesa Wind Project ROW project area (see Figure 2b). ~~Both t~~The main access road, public access roads, and construction yard would be shared by the Alta Mesa Wind Project and the Mesa Wind Project Repower which are being permitted concurrently. Ground disturbance is associated with turbine siting, cut/fill, temporary construction yards, and widening of access roads. The Project would use existing disturbed areas and would avoid steep slopes whenever possible. The estimated ground disturbance is shown in Table 1.

BROOKFIELD RENEWABLE U.S.
200 Liberty Street, 14th Fl., New York, NY 10281
T +1 646.992.2400 F +1 646.992.2470 brookfieldrenewableUS.com

Table 1. Alta Mesa Wind Project Estimated Disturbance (acres)

	New Disturbance (acres)	Existing Disturbance (acres)	Total (acres)
Onsite Components			
Turbines, turbine pads, grading and fill	18.5	6.1	24.6
Access roads within Alta Mesa Wind site	5.3	3.7	9.0
Temporary laydown yard	0.9	0.4	1.3
Buffer area	23.8	8.6	32.4
Onsite Subtotal	**48.5**	**18.8**	**67.3**
Offsite Components			
Main access road within Mesa Wind Project Repower	13.2	-	13.2
Temporary laydown yard within Mesa Wind Project Repower	13.0	-	13.0
Public access roads	0.2	-	0.2
Offsite Subtotal	**26. 42**	**-**	**26. 42**
Total Disturbance	**74.97**	**18.8**	**93. 75**

Page 92, Transportation:

d) Because of the large-scale vehicles needed to bring the equipment to the site, the Project would require additional maintenance of public roadsway rights-of-way, including the intersection of Cottonwood Drive and Rockview Drive, and along Rockview Drive. All heavy equipment travel would occur within the public roadway right-of-way boundaries within an approved subdivision where the roadways have been developed. In areas where vegetation has encroached within the rights-of-ways, it will be cleared to a width of 16 feet to allow safe vehicle travel. For all locations where the blade tips would extend beyond the public roadway right-of-way boundaries due to roadway turning radius, easements will be executed with the applicable property owners (blade tips would only traverse airspace and not come into contact with the ground). Off-site, workers commuting and transportation of equipment would be short term, and not cause a need for new maintenance. Consistent with MM-TRA-1, the Applicant will prepare a construction management plan that will include measures to ensure the advanced notice to local departments, residents, and businesses, and use of signage before and during construction to ensure roads are accessible, and that public roads are restored to the same or better conditions after completion of the construction. On-site, maintenance of roads is included in the Operations and Maintenance of the Project, such as periodic grading or replacement of gravel to maintain road quality.

Regards,

Jonathan Kirby

Aspen environmental group
615 N. Benson Ave., Suite E
Upland, CA 91786
(909) 480-4124
www.aspeneg.com

PROJECT MEMORANDUM
MESA/ALTA MESA DELIVERY ACCESS ROUTE

Date: January 13, 2021
To: Berk Gursoy and Jonathan Kirby
From: Vida Strong and Scott White
Subject: Biological Survey Results for Proposed Access Route

Introduction

Brookfield Renewable Energy (Brookfield) retained Aspen Environmental Group (Aspen) to conduct a biological survey of the proposed Mesa/Alta Mesa Delivery Access Route (project) along Rockview Drive, located in the community accessed from Haugen-Lehmann Way in the San Gorgonio Pass in Riverside County, California (Figure 1, Attachment 1).

Project Description

The survey area is approximately 4.6 acres and contains a portion of Rockview Drive, starting at the intersection of Cottonwood Avenue and Rockview Drive, and ending at Pomander Place road. It consists of the roadway right-of-way which primarily includes an existing dirt road with vegetation along its margins. The project would widen Rockview Drive to a width of 16 feet by removing vegetation along the pre-existing road margins. The survey area is shown on the White Water USGS 7.5-minute Quad (USGS 1951). The elevation ranges from 1,580 to 1,594 feet above mean sea level. With the exception of Cottonwood Canyon Wash to the east and natural open space to the west, all lands surrounding the survey area are predominantly open space land reserved for housing with few developed land plots. Representative photos of the survey area are provided in Attachment 2.

Survey Methodology

Aspen biologist Jacob Aragon completed the biological survey on January 4, 2021. Prior to conducting the survey, Mr. Aragon reviewed the California Natural Diversity Database (CNDDB) to search for all known occurrences of special-status plant and wildlife species from the survey area (CDFW 2021). There are no desert tortoise records within the survey area and the nearest desert tortoise record is 1.6 miles to the northeast. There are recorded occurrences of burrowing owls in the vicinity of the survey area and the nearest record is 0.43 miles to the east. There are very few special-status plant records within 1.5 miles of the survey area. Although a focused special-status plant survey was not conducted, Mr. Aragon assessed habitat for special-status plants such as yellow hairy sand verbena (*Abronia villosa* var. *aurita*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), white bracted spineflower (*Chorizanthe xanti* var. *leucotheca*) which are known from within about 3 miles of the survey area.

The field assessment consisted of reconnaissance-level biological surveys for special-status wildlife and plants and was conducted by walking linear along the vegetation margins on each side of the road. The field survey specifically targeted Mojave Desert tortoise sign (e.g., live tortoises, scat, burrows, carcasses, courtship rings, drinking depressions, tracks, or other indication of current or previous tortoise occurrence), burrowing owl sign (e.g., live owls, pellets, burrows, feathers, or other indication at burrows), and general special-status wildlife and plant species (CBOC 1993, CDFW 2018, USFW 2019). The assessment occurred outside the active season for desert tortoise, outside the breeding season for burrowing owl, and outside the flowering season. All plant and wildlife species identified were recorded

in field notes. Plants of uncertain identity were collected and identified later using keys, descriptions, and illustrations in Baldwin et al. (2012) and other regional references.

Results

No desert tortoise, burrowing owl, or other special-status wildlife and plant species were observed during the survey. Vegetation and habitat within the survey area can be described and named based on alliance level nomenclature in A Manual of California Vegetation (Sawyer et al. 2009) and Holland (1986) and are as follows:

Brittle bush scrub (*Encelia farinosa* Shrubland Alliance). This vegetation community is characterized by a dominance of brittle bush (*Encelia farinosa*). The brittle bush forms a dense nearly monotypic stand of shrubs with very little diversity. Burrobrush (*Ambrosia Salsola*), creosote bush (*Larrea tridentata*), and silver cholla (*Cylindropuntia echinocarpa*) are present in very low numbers. Brittle bush scrub is present in areas that appear to have been disturbed in the past. This vegetation best matches the descriptions of Riversidean desert scrub (Holland 1986).

Developed/Ruderal. The remainder of the survey area are occupied by unpaved dirt roads and immediate roadside vegetation. These areas are primarily unvegetated but there are some ruderal species present, including brome grasses (*Bromus* spp.) and schismus grass (*Schismus barbatus*). These areas do not match published vegetation descriptions.

In addition, there was moderate to heavy trash and dump sites progressing when travelling eastward. All wildlife and plant species observed during the surveys are listed in Attachment 3.

References

Baldwin, B.G., D.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, D.H. Wilken, eds. 2012. The Jepson Manual: Vascular Plants of California, 2nd ed. University Press, Berkeley, California.

CBOC (California Burrowing Owl Consortium). 1993. Burrowing owl survey protocol and mitigation guidelines. Alviso, California. 13 pp.

CDFW (California Department of Fish & Wildlife). 2021. California Natural Diversity Database (CNDDB), Rarefind, Version 3.1.1. Heritage section, CDFW, Sacramento.

_____. 2018. Protocols for surveying and evaluating impacts to special-status native plant populations and sensitive natural communities. CDFW, Sacramento, CA, 12 pp. Online: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

Holland, R.F. 1986. Preliminary descriptions of the terrestrial natural communities of California. Unpublished report, Non-game Heritage Program, California Department of Fish and Game, Sacramento. 156 pp.

Sawyer, J.O., T. Keeler-Wolf, and J.M. Evans. 2009. Manual of California Vegetation, 2nd ed. California Native Plant Society, Sacramento, California. 1300 pp.

USFWS (U.S. Fish and Wildlife Service). 2019. Preparing for any action that may occur within the range of the Mojave Desert tortoise (*Gopherus Agassizii*).

USGS (U.S. Geological Survey). 1951. White Water, California 7.5-minute Topographic Quadrangle.

Attachment 1 – Figures

FIgure 1

Delivery Route Survey Area

Attachment 2 – Photo Exhibit

Photo 1: Intersection of Cottonwood Rd and Rockview Dr, facing east.

Photo 2: Brittlebush scrub vegetation through-out site, Rockview Dr. facing northeast.

Photo 3: North vegetation margin along Rockview Dr., facing east.

Photo 4: South vegetation margin and developed land plot along Rockview Dr., facing west.

Photo 5: Rockview Dr. facing west near eastern-most land plot.

Photo 6: Intersection of Pomander Pl. and Rockview Dr., facing west.

Attachment 3 – Species Observed

Latin Name	Common Name
VASCULAR PLANTS	
Dicotyledons	
EPHEDRACEAE	EPHEDRA FAMILY
Ephedra nevadensis	Nevada ephedra, desert tea
ASTERACEAE	ASTER FAMILY
Ambrosia salsola	Common burrobrush, cheesebush
Bebbia juncea var. *aspera*	Sweetbush
Encelia farinosa	Brittlebush
Ericameria paniculata	Black-banded rabbitbrush, punctate rabbitbrush
BRASSICACEAE	MUSTARD FAMILY
* *Brassica tournefortii*	Sahara mustard, wild turnip
CACTACEAE	CACTUS FAMILY
Cylindropuntia echinocarpa	Silver cholla
Opuntia basilaris var. *basilaris*	Beavertail cactus
CLEOMACEAE	SPIDERFLOWER FAMILY
Peritoma arborea	Bladderpod
ZYGOPHYLLACEAE	CALTROP FAMILY
Larrea tridentata	Creosote bush
Monocotyledons	
AGAVACEAE	CENTURY PLANT FAMILY, AGAVE FAMILY
Yucca schidigera	Mojave yucca
POACEAE	GRASS FAMILY
* *Bromus* sp.	Unid. annual brome grass
* *Schismus* sp.	Mediterranean grass
VERTEBRATE ANIMALS	
REPTILIA	**REPTILES**
IGUANIDAE	IGUANID LIZARDS
Uta stansburiana	Side-blotched lizard
AVES	**BIRDS**
CATHARTIDAE	VULTURES
Cathartes aura	Turkey vulture
ACCIPITRIDAE	HAWKS, EAGLES, HARRIERS
Buteo jamaicensis	Red-tailed hawk
PHASIANIDAE	GROUSE AND QUAIL
Callipepla californica	California quail
COLUMBIDAE	PIGEONS AND DOVES
Zenaida macroura	Mourning dove
TYRANNIDAE	TYRANT FLYCATCHERS
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
CORVIDAE	CROWS AND JAYS
Corvus corax	Common raven
TROGLODYTIDAE	WRENS
Thryomanes bewickii	Bewick's wren
MUSCICAPIDAE	THRUSHES AND ALLIES
Polioptila caerula	Blue-gray gnatcatcher
MIMIDAE	MOCKINGBIRDS AND THRASHERS

Latin Name	Common Name
Toxostoma redivivum	California thrasher
EMBERIZIDAE	SPARROWS, WARBLERS, TANAGERS
Zonotrichia leucophrys	White-crowned sparrow
FRINGILLIDAE	FINCHES
Haemorhous mexicanus	House finch
MAMMALIA	**MAMMALS**
LEPORIDAE	HARES AND RABBITS
Lepus californicus deserticola	Black-tailed jackrabbit
Sylvilagus sp.	Cottontail
CANIDAE	FOXES, WOLVES AND COYOTES
Canis familiaris	Domestic dog

Species introduced to California are indicated by an asterisk. This list includes only species observed on the site. Invertebrate species observed throughout the site were not included in this list. Other species may have been overlooked or unidentifiable due to season (amphibians are active during rains, reptiles during summer, some birds (and bats) migrate out of the area for summer or winter, some mammals hibernate, many plants are identifiable only in spring). Plants were identified using keys, descriptions, and illustrations in Baldwin et al (2012). Plant taxonomy and nomenclature generally follow Baldwin et al. (2012). Wildlife taxonomy and nomenclature generally follow Stebbins (2003) for amphibians and reptiles, AOU (1998) for birds, and Wilson and Ruff (1999) for mammals.